final acts

of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3)

Geneva, 1975

Published by the International Telecommunication Union
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General Secretariat of the
International Telecommunication Union

Geneva, 9 September 1977

FINAL ACTS OF THE REGIONAL ADMINISTRATIVE LF/MF BROADCASTING CONFERENCE (REGIONS 1 AND 3) GENEVA, 1975

The following amendments, dictated either by editorial considerations or resulting from printing errors, should be introduced into the Final Acts:

1. Page 12B, column 13, *replace* the current text by the following:
   Ground conductivity. The numbers 1 to 9 appearing in this column refer to Figures 1 to 9 in Chapter 2 of Annex 2 to the Regional Agreement (page 341 of the Final Acts of the Conference). The number 1 denotes Figure 1, 2 denotes Figure 2, etc.
2. Page 28, lines 9 and 10, IRL, column 10, *read*: 20.0
3. Page 49, lines 7 and 11, CHN, column 11, *read*: B
4. Page 52, line 50, IND, column 7, *read*: 26.9
   columns 8, 9 and 10, *delete* current entries
   column 11, *read*: A
   column 12, *read*: 240
5. Page 59, line 53, URS, column 11, *read*: B
6. Page 67, line 41, TGK, column 11, *read*: B
7. Page 87, line 1, AND, column 15, *replace* the current entry *by*: 11/F 20
8. Page 107, line 3, ARS, column 11, *read*: B
   column 12, *delete*: 161
9. Page 127, line 8, ISR, column 11, *read*: B
10. Page 160, line 54, URS, column 11, *read*: B
11. Page 169, line 38, YUG, column 11, *read*: B
12. Page 204, line 51, TGK, column 11, *read*: B
13. Page 230B, column 9, *replace* the current text by the following:
    Ground conductivity. The numbers 1 to 9 appearing in this column refer to Figures 1 to 9 in Chapter 2 of Annex 2 to the Regional Agreement (page 341 of the Final Acts of the Conference). The number 1 denotes Figure 1, 2 denotes Figure 2, etc.

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Geneva, 1975**

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REGIONAL AGREEMENT

Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1

Preamble

With the object of facilitating relations, mutual understanding and cooperation in the field of LF/MF broadcasting;

with a view to improving the use of the frequency bands allocated to the broadcasting service in order to ensure satisfactory reception of the broadcasting service for all countries;

recognizing that all countries large and small have equal rights and that the needs of all countries and in particular the needs of the developing countries shall be fulfilled as far as possible in the implementation of this Agreement;

the delegates of the following Members of the International Telecommunication Union, meeting in Geneva for a regional administrative conference convened under the provisions of the International Telecommunication Convention (Malaga-Torremolinos, 1973), have adopted, subject to the approval of their respective competent authorities, the following provisions relating to the broadcasting service in Regions 1 and 3 for the medium frequency bands and in Region 1 for the low frequency bands:

Republic of Afghanistan, Algeria (Algerian Democratic and Popular Republic), Federal Republic of Germany, Kingdom of Saudi Arabia, Australia, Austria, People's Republic of Bangladesh, Belgium, Byelorussian Soviet Socialist Republic, Republic of Botswana, People's Republic of Bulgaria, Republic of Burundi, United Republic of Cameroon, Central African Republic, People's Republic of China, Republic of Cyprus, Vatican City State, People's Republic of the Congo, Republic of Korea, Republic of the Ivory Coast, Republic of Dahomey, Denmark, Arab Republic of Egypt, United Arab Emirates, Spain, Ethiopia, Fiji, Finland, France, Gabon Republic, Republic of the Gambia, Ghana, Greece, Republic of Guinea, Republic of Upper Volta, Hungarian People's Republic, Republic of India, Republic of Indonesia, Iran, Ireland, Iceland, State of Israel, Italy, Japan, Hashemite Kingdom of Jordan, Republic of Kenya, State of Kuwait, Kingdom of Lesotho, Lebanon, Republic of Liberia, Libyan Arab Republic, Principality of Liechtenstein, Luxembourg, Malaysia, Malawi, Malagasy Republic, Republic of Mali, Kingdom of Morocco, Mauritius, Islamic Republic of Mauritania, Monaco, Mongolian People's Republic, People's Republic of Mozambique, Nepal, Republic of the Niger, Federal Republic of Nigeria, Norway, New Zealand, Republic of Uganda, Pakistan, Papua New Guinea, Kingdom of the Netherlands, Republic of the Philippines, People's Republic of

Poland, Portugal, State of Qatar, Syrian Arab Republic, German Democratic Republic, Ukrainian Soviet Socialist Republic, Socialist Republic of Roumania, United Kingdom of Great Britain and Northern Ireland, Republic of the Senegal, Republic of Singapore, Democratic Republic of the Sudan, Republic of Sri Lanka (Ceylon), Sweden, Confederation of Switzerland, United Republic of Tanzania, Republic of the Chad, Czechoslovak Socialist Republic, Thailand, Togolese Republic, Tunisia, Turkey, Union of Soviet Socialist Republics, Yemen Arab Republic, People's Democratic Republic of Yemen, Socialist Federal Republic of Yugoslavia, Republic of Zaire, Republic of Zambia.

ARTICLE 1

Definitions

For the purposes of this Agreement, the following terms shall have the meanings defined below:

Union: The International Telecommunication Union;

Secretary-General: The Secretary-General of the Union;

I.F.R.B.: The International Frequency Registration Board;

C.C.I.R.: The International Radio Consultative Committee;

Convention: The International Telecommunication Convention;

Radio Regulations: The Radio Regulations annexed to the Convention;

Regions 1 and 3: The geographical areas defined in Nos. 126 and 128 to 132 of the Radio Regulations, Geneva, 1959;

Agreement: The whole of this Agreement including its annexes;

Plan: The Plan and its appendices forming Annex 1 to this Agreement;

Contracting Member: Any Member of the Union which has approved or acceded to the Agreement;

Administration: Any governmental department or service responsible for discharging the obligations undertaken in the Convention and the Radio Regulations.

ARTICLE 2

Frequency Bands

The provisions of this Agreement apply to the frequency bands between 150 and 285 kHz and between 525 and 1 605 kHz allocated to the broadcasting service under Article 5 of the Radio Regulations, Geneva, 1959.

ARTICLE 3

Execution of the Agreement

1. The Contracting Members shall adopt, for their broadcasting stations operating in Regions 1 and 3 in the frequency bands referred to in the Agreement, the characteristics specified in the Plan.

2. The Contracting Members shall not bring assignments complying with the Plan into use, change the technical characteristics of stations specified in the Plan, or bring new stations into use, except under the conditions set out in Articles 4 and 5 of this Agreement (see also Resolution No. 7).

3. The Contracting Members shall endeavour to agree on the action required to reduce any harmful interference caused by the application of this Agreement.

ARTICLE 4

Procedure for Modifications to the Plan

1. When a Contracting Member proposes to make a modification to the Plan, i.e. either:

- to change the characteristics of a frequency assignment to a broadcasting station shown in the Plan, whether or not the station has been brought into use, or
- to bring into use an assignment to a broadcasting station not appearing in the Plan, or
- to change the characteristics of a frequency assignment to a broadcasting station for which the procedure in this Article has been successfully applied, whether or not the station has been brought into use, or
- to cancel a frequency assignment to a broadcasting station,

the following procedure shall be applied before any notification is made under the provisions of Article 9* of the Radio Regulations (see Article 5 of this Agreement).

2. In the remainder of the present Article, the term "assignment in accordance with the Agreement" means any frequency assignment appearing in the Plan or for which the procedure of this Article has been successfully applied.

3. *Proposed Changes in the Characteristics of an Assignment or the Bringing into Use of a new Assignment*

3.1 Any administration proposing a change in the characteristics of an assignment or the bringing into use of a new assignment shall seek the agreement of all the administrations having an assignment in accordance with the Agreement, in the same channel or an adjacent channel, which is considered to be affected (see 3.2.5 and 3.3.1).

3.2 *Channels other than Low-Power Channels*

3.2.1 An administration proposing to change the characteristics of an assignment or to bring a new assignment into use shall so inform the I.F.R.B. and furnish the characteristics of the modification or addition in the form adopted in the Plan and its appendices.

3.2.1.1 Where the proposed modification is within the limits defined in 3.2.9, the information shall contain a reference to that paragraph.

3.2.1.2 In all other cases, in order to arrive at the agreement referred to in 3.1, the administration shall notify to the I.F.R.B. the names of the administrations whose agreement it considers should be sought and of those with which agreement has been reached.

3.2.2 The I.F.R.B. shall determine on the basis of Annex 2 to the Agreement the administrations having frequency assignments in accordance with the Agreement which are considered to be affected within the meaning of 3.2.5. The results of these calculations shall be sent immediately by the I.F.R.B. to the administration proposing the modification to the Plan. The I.F.R.B. shall include the names of these administrations in the information received and shall publish the complete information in a special section of its weekly circular.

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* or the corresponding article of the Radio Regulations currently in force.

3.2.3 The I.F.R.B. shall send a telegram to the administrations listed in the special section of the weekly circular drawing their attention to the information it contains and shall also send to them the results of its calculations.

3.2.4 Any administration which considers that it should have been included in the list of administrations whose frequency assignments are considered to be affected may, giving its reasons for so doing, request the I.F.R.B. to include its name. A copy of the request shall be sent to the administration proposing the modifications to the Plan.

3.2.5 Any assignment may be considered affected when its usable field strength is increased by a value equal to or greater than 0.5 dB as a consequence of the proposed modification to the Plan. The usable field strength is calculated at any point on the boundary of the service area resulting from the first recording of the assignment in the Plan. When the original assignment in the Plan has been modified in accordance with the Agreement, the calculation shall take account of this modification. The increase in the usable field strength is calculated in accordance with Annex 2 to the Agreement.

3.2.6 An administration seeking agreement under 3.1 for daytime operation of a station may, by agreement with the affected administrations, use the simplified method of calculation defined in 3.3.4.3 or 3.4.3.3, as appropriate, of Annex 2 to the Agreement.

3.2.7 An administration may ask the administration proposing the modification for the additional information it considers necessary to calculate the increase of the usable field strength. Similarly, the administration proposing the modification may ask any administration whose agreement it seeks for the additional information it considers necessary. The administrations shall inform the I.F.R.B. of such requests.

3.2.8 Comments from administrations on information published pursuant to 3.2.2 should be sent either directly to the administration proposing the modification or through the I.F.R.B. In any event the I.F.R.B. shall be informed that comments have been made.

3.2.9 The agreement mentioned in 3.1 is not required if the proposed modification either:

- entails no increase in effective monopole radiated power in any direction, or
- relates to a change in the site of the station, within the tolerances specified in 4.9 of Annex 2 to the Agreement.

In either case, the administration intending to modify the Plan may put its project into effect, subject to the application of the provisions of Article 9* of the Radio Regulations.

3.2.10 An administration which has not notified its comments either to the administration concerned or to the I.F.R.B. within a period of sixteen weeks following the date of the weekly circular referred to in 3.2.2 shall be understood to have agreed to the proposed change. This time limit may be extended by eight weeks in the case of an administration which has requested additional information pursuant to paragraph 3.2.7.

3.2.11 If in seeking agreement an administration makes changes in its initial proposal, it shall again apply the provisions of 3.2.1 and the consequent procedure.

3.2.12 If no comments have been received on expiry of the periods specified in 3.2.10, or if agreement has been reached with the administrations which have made comments, the administration proposing the modification may proceed with its project and shall inform the I.F.R.B. indicating the final characteristics of the assignment together with the names of the administrations with which agreement has been reached.

3.2.13 When the proposed modification to the Plan involves a developing country, administrations shall seek a solution conducive to economical development of the broadcasting system of the developing country, giving due consideration to the principles enunciated to this effect in the Preamble to this Agreement.

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* or the corresponding article of the Radio Regulations currently in force.

3.2.14 The I.F.R.B. shall publish in a special section of its weekly circular the information received under 3.2.12, together with the names of any administrations with which the provisions of this article have been successfully applied. With respect to Contracting Members, the assignment concerned shall enjoy the same status as those appearing in the Plan.

3.3 *Low-Power Channels*

3.3.1 Any administration proposing a change in the characteristics of a frequency assignment in a low-power channel or the bringing into use of a new station in such a channel shall seek the agreement of any other administration when the distance between the proposed station and the nearest point on the boundary of the territory of that other administration is less than the corresponding values given in 4.8.3 of Annex 2 to the Agreement.

3.3.2 After having obtained the agreement of the administrations concerned, the administration proposing the modification shall inform the I.F.R.B. indicating the characteristics of the station together with the names of the administrations with which agreement has been reached.

3.3.3 The I.F.R.B. shall publish this information in a special section of its weekly circular. With respect to Contracting Members the assignment concerned shall enjoy the same status as those appearing in the Plan.

3.3.4 The administration may then proceed with its project.

3.4 *Additional Provisions for Channels in shared Bands*

The provisions of this Article apply also to frequency assignments to broadcasting stations in frequency bands shared with other radiocommunication services. However, the special sections of the I.F.R.B. weekly circular mentioned in 3.2.2 and 3.2.3 which concern the proposed modifications shall be considered by these other services to be for information only (see also Resolution No. 7).

3.5 *Provisions common to all Channels*

3.5.1 If no agreement is reached between the administrations concerned, the I.F.R.B. shall make any study that may be requested by these administrations; the Board shall inform them of the result of the study and shall make such recommendations it may be able to offer for the solution of the problem.

3.5.2 Any administration may at any stage in the procedure described, or before applying it, request the assistance of the I.F.R.B., particularly in seeking the agreement of another administration.

3.5.3 If, after application of the procedure described in this Article, the administrations concerned have been unable to reach agreement, they may resort to the procedure described in Article 50 of the Convention. Administrations may also agree to apply the Optional Additional Protocol to the Convention.

3.5.4 In any case, the relevant provisions of Article 9* of the Radio Regulations shall be applied when assignments are notified. When, no agreement having been reached, the I.F.R.B., following the notification of an assignment, records it in the Master International Frequency Register, the entry shall be accompanied by a symbol indicating that the entry has been made subject to the reservation that no harmful interference will be caused to frequency assignments in conformity with the Agreement.

3.5.5 The I.F.R.B. shall maintain an up-to-date master copy of the Plan, and of Appendix 1 relating to low-power channels, taking account of the application of the procedure specified in this Article; to this end the I.F.R.B. shall prepare a document listing the amendments to be made to the Plan and Appendix 1 as a result of modifications made in accordance with the procedure of this Article and of the addition of new assignments in conformity with the Agreement.

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* or the corresponding article of the Radio Regulations currently in force.

3.5.6 The Secretary-General shall be informed by the I.F.R.B. of these changes made in the Plan and shall publish an up-to-date version of the Plan in an appropriate form as and when the circumstances justify and in any case every three years.

4. *Cancellation of Assignments*

When an assignment in accordance with the Agreement is released, whether or not as a result of a modification (for instance a change of frequency), the administration concerned shall immediately so inform the I.F.R.B. The I.F.R.B. shall publish this information in a special section of its weekly circular.

ARTICLE 5

Notification of Frequency Assignments

1. Whenever an administration intends to put into use an assignment in conformity with the Agreement it shall notify this assignment to the I.F.R.B. in accordance with the provisions of Article 9* of the Radio Regulations. Any such assignment recorded in the Master Register as a result of the application of the provisions of Article 9* of the Radio Regulations, shall, in addition to a date in Column 2a or Column 2b, bear a special symbol in the Remarks column.

2. In relations between Contracting Members, all frequency assignments brought into use in conformity with the Agreement and recorded in the Master Register shall be considered to have the same status, irrespective of the dates entered in Column 2a or Column 2b for such assignments.

ARTICLE 6

Special Arrangements

In addition to the procedures provided for in Article 4 of the Agreement and to facilitate their application with a view to improving the utilization of the Plan, Contracting Members may conclude special arrangements in accordance with the pertinent provisions of the Convention and of the Radio Regulations.

ARTICLE 7

Scope of Application of the Agreement

1. This Agreement shall bind Contracting Members in their relations with one another but does not bind those Members with respect to non-Contracting countries.

2. If a Member makes reservations with regard to any provision of this Agreement, other Members shall be free to disregard that provision in their relations with the Member which has made such reservations.

ARTICLE 8

Approval of the Agreement

Members shall notify their approval of this Agreement, as promptly as possible, to the Secretary-General, who shall at once inform the other Members of the Union.

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* or the corresponding article of the Radio Regulations currently in force.

ARTICLE 9

Accession to the Agreement

1. Any Member of the Union in Regions 1 and 3 which has not signed this Agreement may accede thereto at any time. Such accession shall extend to the Plan as amended at the time of the accession and shall be made without reservation. The Secretary-General shall be notified thereof and he shall inform the other Members of the Union.

2. Accession to the Agreement shall take effect on the date on which the notification of accession is received by the Secretary-General.

3. Any Member of the Union party to the Regional Agreement for the African Broadcasting Area (Geneva, 1966) which accedes to the present Agreement in conformity with paragraphs 1 and 2 of this Article, shall by this act of accession terminate its participation in the Regional Agreement for the African Broadcasting Area and the Plan annexed thereto.

ARTICLE 10

Termination of Participation in the Agreement

1. Any Contracting Member shall have the right at any time to terminate its participation in the Agreement by a notification sent to the Secretary-General who shall inform the other Members of the Union.

2. Such termination of participation shall take effect after a period of one year from the date of receipt, by the Secretary-General, of the said notification.

ARTICLE 11

Abrogation of the European Broadcasting Convention (Copenhagen, 1948) and annexed Copenhagen Plan

Additional Protocol I to the Final Acts of the Conference provides for the abrogation of the European Broadcasting Convention (Copenhagen, 1948) and the annexed Copenhagen Plan.

ARTICLE 12

Abrogation of the Regional Agreement for the African Broadcasting Area (Geneva, 1966) and the Plan annexed thereto

Additional Protocol II to the Final Acts of the Conference provides for the abrogation of the Regional Agreement for the African Broadcasting Area (Geneva, 1966) and the Plan annexed thereto.

ARTICLE 13

Effective Date of the Agreement

The Agreement shall enter into force on twenty-three November, one thousand nine hundred and seventy-eight at 0001 hours GMT.

ARTICLE 14

Duration of the Agreement

1. The Agreement and the annexed Plan have been established with a view to meeting the requirements of the broadcasting services in the bands concerned for a period of eleven years from the date of entry into force of the Agreement.

2. The Agreement shall remain in force until it is revised by a competent conference of the Members of the Union in Regions 1 and 3.

IN WITNESS WHEREOF, the Delegates of the Members of the Union mentioned above have, on behalf of their respective competent authorities, signed this Agreement in a single copy in the Chinese, English, French, Russian and Spanish languages, in which, in case of dispute, the French text shall prevail. This copy shall remain deposited in the archives of the Union. The Secretary-General shall forward one certified true copy to each Member in Regions 1 and 3.

Done at Geneva, 22 November 1975.

For the Republic of Afghanistan:

S. M. N. ALAWI
K. D. KAMRAN

For Algeria (Algerian Democratic and Popular Republic):

HARBI
SAÏD
BELAKHDAR
ABOUDI
BENACER

For the Federal Republic of Germany:

KUPPER
VENHAUS

For the Kingdom of Saudi Arabia:

ABDUL RAHMAN DAGHISTANI
ALI MOHAMED ALBABTAIN

For Australia:

D. M. ROWELL
C. G. ELWORTHY
F. M. SHEPHERD
V. F. KENNA
J. SANDHAM
H. F. HAAGENSEN

For Austria:

Dr ALFRED BÖNISCH

For the People's Republic of Bangladesh:

B. M. ADHIKARI
SAIF UDDIN MALLIK

For Belgium:

P. BOUCHIER
M. GEWILLIG

For the Byelorussian Soviet Socialist Republic:

P. V. AFANASIEV

For the Republic of Botswana:

POTLAKO MOLEFHE
S. M. NKWE

For the People's Republic of Bulgaria:

IGNATOV

For the Republic of Burundi:

NZOBAKENGA ROMAIN

For the United Republic of Cameroon:

MAURICE KAMDEM
FISSOSSOE A KEEDI ISAAC

For the Central African Republic:

JACQUES M'BILO
MBAYE MARTIN

For the People's Republic of China:

LU KE-CHIN
HO TA-CHUNG

For the Republic of Cyprus:

CHRISTOFIDES ANDREAS
ASTREOS PAUL
MICHAELIDES ANDREAS

For the Vatican City State:

SABINO MAFFEO
PIER VINCENZO GIUDICI

For the People's Republic of the Congo:

KOUBATIKA DENIS
POUEBA PAUL ALBERT

For the Republic of Korea:

EUN MO SHIM
NAI SUNG KIM
YOUNG HAN LEE

For the Republic of the Ivory Coast:

CHRISTOPHE NOGBOU
FRANÇOIS KACOU
GASTON BLÉ YAO

For the Republic of Dahomey:

A. D'OLIVEIRA
M. DETIEN-HONVO
L. MARTIN

For Denmark:

I. LØNBERG
P. V. LARSEN
J. A. HEEGAARD
H. C. JØRGENSEN

For the Arab Republic of Egypt:

M. ARAFA ZAYAN
A. H. ANTAR

For the United Arab Emirates:

ALY A. M. ABU-KANDEEL

For Spain:

JOSÉ MARIA ARTO MADRAZO

For Ethiopia:

TESFATSION SEBHATU
GESSESE ABAI

For Fiji:

EMORI NAQOVA

For Finland:

K. TERÄSVUO
R. SVENSSON

For France:

JEAN DE LA GRANDVILLE
MARIE HUET
HENRI BERTHOD
STEPHANE LACHARNAY
HENRI DE FRANCE

For the Gabon Republic:

N'GUEMA SAMUEL PARFAIT

For the Republic of the Gambia:

AMADOU DODOU JOBE
EMMANUEL ALEXANDER NYING

For Ghana:

Dr B. A. OPPONG
R. E. APPIAH
O. A. KWAWUKUME

For Greece:

ANDREAS METAXAS
APOSTOLOS CASMAS
GEORGES KASTANAS
THEOFANIS KOKKOSSIS
Prof. MICHEL ANASTASSIADES

For the Republic of Guinea:

MAMADOU SALIOU DIALLO
SIDIKI TOURE

For the Republic of Upper Volta:

PIERRE CLAVER SONGRÉ
KABA YOUSSOUF

For the Hungarian People's Republic:

HORN DEZSÖ

For the Republic of India:

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S. N. MITRA
M. K. RAO
C. S. R. RAO
O. P. KHUSHU

For the Republic of Indonesia:

TH. A. PRATOMO
ISKANDAR ARFAN

For Iran:

N. MADANI

For Ireland:

ITA MEEHAN
J. MALONE

For Iceland:

G. ARNAR

For the State of Israel:

M. SHAKKÉD
J. NITSAN

For Italy:

A. PETTI

For Japan:

TERUO ISHIKAWA
SHINZABURO TANAKA
MASAKI SEO

For the Hashemite Kingdom of Jordan:

SALEH KABARITI

For the Republic of Kenya:

SIMEON NDIRITU MACHARIA
JAMES PETER KIMANI

For the State of Kuwait:

JAWAD A. ALMAZEEDI

For the Kingdom of Lesotho:

F. L. LETELE

For Lebanon:

JOSEPH ROHAYEM

For the Republic of Liberia:

S. RICHELIEU WATKINS

For the Libyan Arab Republic:

AMER SALEM OUN
WALED ADEB OMAR
MUHAMMED SALEH ALSABEY

For the Principality of Liechtenstein:

MARIO COMTE DE LEDEBUR

For Luxembourg:

CHARLES REICHLING

For Malaysia:

D. S. VARIYAN
LAI WING HIN
MOHAMMAD ALI ISMAIL

For Malawi:

OVERTON CHRISTIE MANDALASI

For the Malagasy Republic:

RANDRIAMBOLOLONA PASCAL
RANDRIANARIVELO PAUL

For the Republic of Mali:

OUMAR SIDIBE

For the Kingdom of Morocco:

TANANE

For Mauritius:

RAMBERT J. M. H. N.
SODHOU G.

For the Islamic Republic of Mauritania:

LÔ MEDOUNE
MANGASSOUBA ALIOU

For Monaco:

SOLAMITO CÉSAR CHARLES
AUVRAY G. G.

For the Mongolian People's Republic:

D. GARAM-OTCHIR

For the People's Republic of Mozambique:

VALERIANO FERRÃO

For Nepal:

KRISHNA BAHADUR KHATRY

For the Republic of the Niger:

DIALLO MOCTAR

For the Federal Republic of Nigeria:

O. O. KUFORIJI
R. O. IFIDON
N. A. NZE
D. J. AWONIYI

For Norway:

OLE J. HAGA
L. GRIMSTVEIT
KNUT N. STOKKE
TORE ØVENSEN

For New Zealand:

DEREK C. ROSE
ROBERT JOHN BUNDLE
JOHN PATERSON CARTER
GEORGE HUGH RAILTON

For the Republic of Uganda:

F. X. B. KATENDE

For Pakistan:

IRFAN ULLAH
IMAD UDDIN

For Papua New Guinea:

I. EDONI
R. T. PEARSON
S. KULUPI

For the Kingdom of the Netherlands:

DIRK VAN DEN BERG
F. R. NEUBAUER

For the Republic of the Philippines:

Z. C. CARLOS
L. B. QUINTOS
C. V. ESPEJO
G. P. ORDOÑA
R. N. DIZON JR.

For the People's Republic of Poland:

KONRAD KOZŁOWSKI
HALINA SMOLEŃSKA

For Portugal:

ADRIANO DE CARVALHO
DOMINGOS ANTÓNIO PIRES FRANCO
VITO RIBEIRO DE OLIVEIRA
CELSO JOÃO DE ALBUQUERQUE

For the State of Qatar:

ABDULRAHMAN HAMAD ALATTYIA
ABDUL MALIK MAQSOOD

For the Syrian Arab Republic:

BARA MICHEL

For the German Democratic Republic:

BRUNO CZERWINSKI

For the Ukrainian Soviet Socialist Republic:

SAVANTCHOUK V.

For the Socialist Republic of Roumania:

C. CEAUSESCU

For the United Kingdom of Great Britain and Northern Ireland:

JOLYON DROMGOOLE
THOMAS KILVINGTON
ARTHUR CARTER
ROBERT A. DILWORTH

For the Republic of the Senegal:

IBRAHIMA DIOP
ABOUBAKARY NDIONGUE

For the Republic of Singapore:

R. G. RAJASINGAM
SEBASTIAN C. H. TAN

For the Democratic Republic of the Sudan:

ABDULLA SIRAGELDIN HAGAHMED

For the Republic of Sri Lanka (Ceylon):

D. BUELL

For Sweden:

PER ÅKERLIND
NISSE UHLÉN

For the Confederation of Switzerland:

H. R. PROBST
W. EBERT
E. SCHWARZ

For the United Republic of Tanzania:

P. A. SOZIGWA
P. I. MHUMBIRA

For the Republic of the Chad:

HAMID KANTE

For the Czechoslovak Socialist Republic:

JÍRA JIŘÍ

For Thailand:

V. MENASVETA
C. KANCHANINDU
K. PORNSUTEE

For the Togolese Republic:

NENONENE SETH KOUMA

For Tunisia:

SLAHEDDINE BEN HAMIDA
SALAH HADIJI
TAÏEB BEN YOUSSEF

For Turkey:

D. ERDEN
Y. ERTEM
H. H. ESEN

For the Union of Soviet Socialist Republics:

V. CHAMCHINE

For the Yemen Arab Republic:

AL-NONO HUSSEIN

For the People's Democratic Republic of Yemen:

MOHAMED ALI AZZANI

For the Socialist Federal Republic of Yugoslavia:

ENVER HUMO

For the Republic of Zaire:

YEMBI NSAMPALA
YAMUSANGIE MAHUMBU

For the Republic of Zambia:

J. D. KALISILIRA
PETER LANDAN MUSUBA

ANNEX 1

Plan for the Assignment of Frequencies to Broadcasting Stations in the Medium Frequency Bands (other than to Stations using Low-Power Channels) in Regions 1 and 3 and in the Low Frequency Bands in Region 1

INFORMATION INCLUDED IN THE COLUMNS OF THE PLAN

Column 1 : *Assigned channel frequency* (kHz).
Channel number; this number is shown in brackets.

Column 2 : *Name of transmitting station.* The symbol S appearing to the left of the dotted line indicates that the station forms part of a synchronized network, the other stations of which bear the same symbol (see Definitions, Chapter 1 of Annex 2 to the Regional Agreement).

Column 3 : *Symbol designating the country* or the geographical area in which the station is located (see Table No. 1 of the Preface to the International Frequency List).

Column 4 : *Geographical coordinates of the transmitting station* in degrees and minutes.

Column 5 : *Necessary bandwidth* (kHz); the value in kHz is preceded by the symbol A, B, C or D indicating the adjacent channel protection ratio that is to be employed in calculating the usable field strength. The cases corresponding to these symbols are listed in 4.4.2 of Annex 2 to the Agreement.

Column 6 : *Carrier power* (kW).

Column 7 : *Maximum radiation* in dB relative to a c.m.f. of 300 V or an e.m.r.p. of 1 kW, determined from the nominal power of the transmitter and the theoretical gain of the antenna without allowing for miscellaneous losses.

Column 8 : *Azimuth of maximum radiation* in degrees (clockwise) from True North.

Column 9 : *Azimuths defining the sector of limited radiation* in degrees (clockwise) from True North.

Column 10: *Maximum agreed radiation in the sector,* in dB relative to a c.m.f. of 300 V or an e.m.r.p. of 1 kW determined from the nominal power of the transmitter and the theoretical gain of the antenna without allowing for miscellaneous losses.

Column 11: *Type of antenna.* The symbol A indicates a simple vertical base-fed antenna and the symbol B any other type of antenna described in Appendix 2 to the Plan.

Column 12: *Height of antenna* (metres) for a simple vertical antenna only.

Column 13: *Ground conductivity* in millisiemens/metre (mS/m).

Column 14: *Hours of operation* (GMT) in hours and minutes, e.g., 0730 – 1800, 0000 – 2400, 0500 – 0230.

Column 15: *Remarks* indicated by symbols which are explained in the following pages.

EXPLANATION OF SYMBOLS USED IN THE "REMARKS" COLUMN
(COLUMN 15 OF THE PLAN AND COLUMN 11 OF THE APPENDIX 1 TO THE PLAN)

1. (Not used)

2.* During the period of the year between the two dates following a symbol, the assignment is used as shown in the schedule in Column 14.

3. This assignment is to be coordinated.

4./... This assignment has been coordinated with /...
Coordination has still to be effected with other countries.

5./... This assignment is to be coordinated with /...

6. French assignment for a station operating in the Federal Republic of Germany.

7. This assignment is used within the daytime limits shown in Figure 20 of Annex 2 to this Agreement.

8. The azimuth of maximum radiation may be modified by agreement with the Administration of Czechoslovakia; the latter requests that the gain should be restricted to −8 dB in the sector 320° − 340°.

9. The Polish Administration will adopt additional technical measures to reduce the level of interference in the service area of the station Rhodos operating on 1 260 kHz so that the contribution of the Polish synchronized network to the usable field strength of that station does not exceed 85 dB (μV/m). Final coordination will be effected bilaterally between Greece and Poland.

10. The level of the transmitter power indicated in the Plan is subject to mutual agreement between the Administrations of Cyprus and of the United Kingdom.

11./... The entry of this assignment in the Plan has been requested by /...

12. This station will cease operation on this frequency when Osaka starts to operate on 1 179 kHz.

13. This station will not operate on this frequency before 14 May 1977.

14. (Not used)

15. Daytime hours of operation are based on the considerations in 3.3.4.2 of Annex 2 to the Agreement and shall not exceed 0900 − 1600 GMT in midwinter except by agreement between the administrations concerned.

16. If the administration considers it necessary, this assignment can be coordinated with those of the other administrations concerned in accordance with paragraph 3 of Resolution No. 3.

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* Followed by two groups of four digits separated by an oblique stroke and each representing a date.

17./... Discussions concerning this assignment did not result in an agreement with the Administrations of/...

18./... Discussions concerning this assignment did not result in a satisfactory agreement with the Administrations of/...
However, the administrations concerned agreed to continue the discussions with a view to reaching a satisfactory agreement.

19. The audio-frequency bandwidth is fixed at 4·5 kHz using, in addition, a high degree of modulation compression (Case D in paragraph 4.4.2.1 of Chapter 4 of Annex 2) provided that the transmitters of other countries operating in adjacent channels which may produce interference also use the technique indicated in Case D.

20. The French Administration, in conjunction with the competent administration for Andorra, will seek practical means of installing a directional antenna at the Sud-Radio station to reduce the radiation from that station in the directions of Warsaw (sector between azimuths 45° and 55°) and Rabat (sector between azimuths 210° and 225°). The administrations concerned will study possible arrangements with a view to reaching agreement.

21. (Not used)

22. 1 467 kHz night-time;
594 kHz day-time.

23./... It was not possible for one reason or another to coordinate this assignment during the Conference with the Administrations of/...
However, the administrations concerned propose jointly to seek the basis for a satisfactory agreement.

24. Discussions about this assignment could not take place with the Administration of Israel because the administration which requested this assignment does not recognize that Administration. The provisions of Article 9 of the Radio Regulations shall therefore be applied to this assignment with respect to the assignments of the other administration.

25. This assignment is used in the day-time within the operational limits shown in the dotted lines in Figure 21 of Annex 2 to the Agreement.

26./... The hours of operation of this assignment are to be coordinated with the Administration of/... on the basis of Figure 20 of Annex 2 to the Agreement.

27. The Administrations of the Kingdom of Saudi Arabia and the Socialist Federal Republic of Yugoslavia have agreed on the following hours of operation of the transmitter Guriat (612 kHz):

1 April to 31 October from 0300–1600 GMT
1 November to 31 March from 0500–1400 GMT.

The two Administrations are willing to cooperate in seeking a better solution meeting the needs of both parties in a satisfactory manner.

28. After negotiation the Administrations of Greece and Libya have agreed that when the Libyan stations are brought into use their contribution to interference in Greece shall not exceed 79 dB.

29. Operation of this station will cease on 14 May 1977.

30. The Polish delegation has expressed a reservation concerning the undesirable interference caused to reception of the Polish synchronized network, operating on the frequency 1 206 kHz, on the territory of the People's Republic of Poland by the station München-Ismaning, and considers it necessary to effect further coordination on a bilateral basis.

31. This assignment will no longer be used within the day-time limits shown in Figure 20 of Annex 2 to this Agreement when station Mocimboa (MOZ) is brought into service on frequency 1 224 kHz.

32. The values indicated in Columns 7, 8, 9 and 10 are provisional and subject to agreement between the Administrations of Syria and the Federal Republic of Germany.

33. Discussions about this assignment could not take place because the Administrations of Algeria, Saudi Arabia, Egypt, the United Arab Emirates, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Qatar, Sudan, Tunisia, the Yemen A.R., the P.D.R. of Yemen, do not recognize the Administration which requested this assignment. The provisions of Article 9 of the Radio Regulations shall therefore apply to this assignment with respect to assignments of the foregoing Administrations.

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	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

155 KHZ (1)

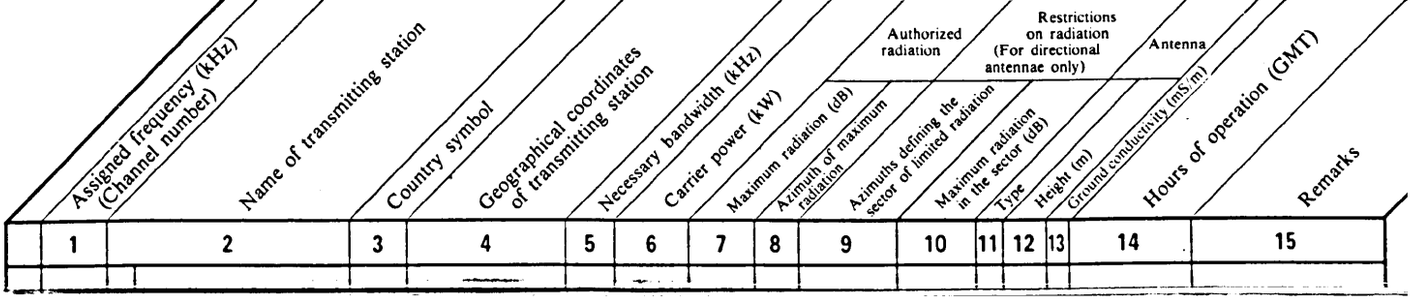
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	155		DONEBACH	D	09E11 49N34	D 9	500	29.0	20	90—130	24.0	B		4	0400—1800	
2	(1)		DONEBACH	D	09E11 49N34	D 9	500	29.0	200			B				
3			DONEBACH	D	09E11 49N34	D 9	250	26.0	235	90—130	14.0	B		4	1800—0400	
4			DONEBACH	D	09E11 49N34	D 9	250	26.0	355			B				
5			TROMSOE VANNA	NOR	19E54 70N11	D 9	1200	31.2				A	350	3	0000—2400	23/ROU
6			BRASOV 1	ROU	25E36 45N43	A20	1200	31.2				A	250	5	0000—2400	23/NOR
7		S	ENGELSK	URS	46E15 51N30	C 9	150	25.2	60	230—260	17.0	A			0000—2400	
8			KHABAROVSK	URS	135E10 48N33	C 9	1000	30.4				A	257	4	0000—2400	
9		S	KOLPACHEVO	URS	82E59 58N18	C 9	150	22.2				A	300	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

164 KHZ (2)

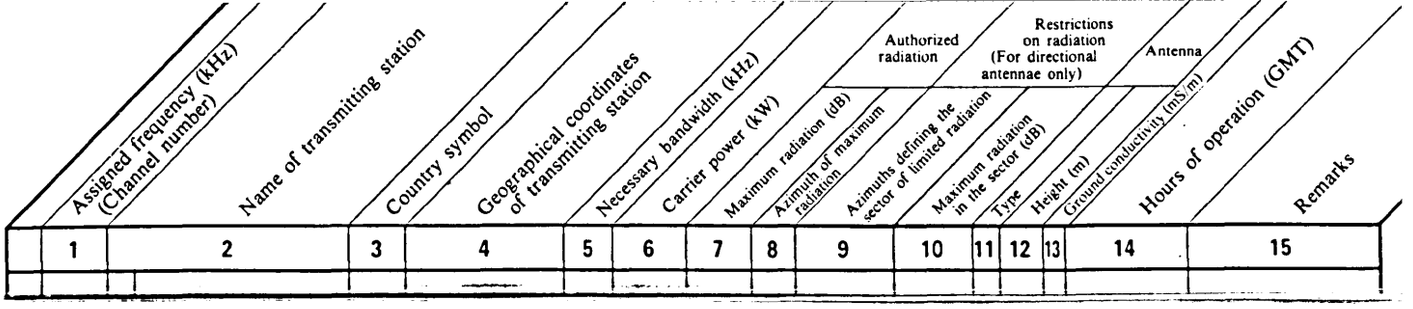
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	164		EL QUSIYA	EGY	30E44 27N29	D 9	2000	37.0	5	310—327	20.0	B		4	0500—1500	
2	(2)		EL QUSIYA	EGY	30E44 27N29	D 9	2000	37.0		50— 70	20.0	B				
3			EL QUSIYA	EGY	30E44 27N29	D 9	1000	34.0	5	310—327	17.0	B		4	1500—0500	
4			EL QUSIYA	EGY	30E44 27N29	D 9	1000	34.0		50— 70	17.0	B				
5			ALLOUIS	F	02E12 47N10	D 9	2000	35.0	180			B		4	0000—2400	
6		S	SAIN SHANDA	MNG	110E05 44N50	A18	75	19.2				A	200	4	2200—0800	
7		S	TSETSERLIG	MNG	101E10 47N30	A18	50	17.4				A	200	5	2200—0800	
8			ARDAHAN	TUR	42E42 41N07	D 9	200	26.0	215	10— 90	8.0	B		4	0200—2300	23/EGY F URS
9			ARDAHAN	TUR	42E42 41N07	D 9	200	26.0		105—115	16.0	B				
10		S	ACHKHABAD	URS	58E23 37N57	C 9	100	20.4				A	300	4	0000—2400	
11			BAIKIT	URS	96E10 61N55	A18	50	17.4				A	300	4	0000—2400	
12		S	TACHKENT	URS	69E15 41N19	A16	150	22.2				A	235	4	0000—2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	173	S	MINSK	BLR	27E34 53N56	A16	1000	30.4				A	257	4	0000–2400	
2	(3)		LOPIK	HOL	05E03 52N01	D 9	500	30.0	290	20– 20	27.0	B		4	0000–2400	
3			LOPIK	HOL	05E03 52N01	D 9	500	30.0		30– 30	24.0	B				
4			LOPIK	HOL	05E03 52N01	D 9	500	30.0		40– 40	21.0	B				
5			LOPIK	HOL	05E03 52N01	D 9	500	30.0		50– 50	18.0	B				
6			LOPIK	HOL	05E03 52N01	D 9	500	30.0		60– 80	14.0	B				
7			LOPIK	HOL	05E03 52N01	D 9	500	30.0		90–110	17.0	B				
8			LOPIK	HOL	05E03 52N01	D 9	500	30.0		120–210	22.0	B				
9			NADOR	MRC	02W55 34N58	C 9	1200	34.8	180	300– 60	26.8	B		4	0500–0300	
10			NADOR	MRC	02W55 34N58	C 9	1200	34.8		310– 50	22.8	B				
11			NADOR	MRC	02W55 34N58	C 9	1200	34.8		290– 70	27.8	B				
12		S	LVOV	UKR	24E00 49N50	A16	500	27.4				A	257	4	0000–2400	
13		S	BELEBEI	URS	54E07 54N05	A16	300	25.2				A	257	4	0000–2400	
14		S	BLAGOVECHTCHEN	URS	127E33 50N16	C 9	50	17.4				A	257	4	0000–2400	
15		S	IAKUTSK	URS	129E42 61N51	C 9	500	27.4				A	257	5	0000–2400	
16		S	KALININGRAD	URS	20E30 54N45	A16	1000	30.4				A	257	4	0000–2400	
17		S	KANDALAKCHA	URS	32E06 67N08	A18	150	22.2				A	257	4	0000–2400	
18		S	KARABOGAZ GOL	URS	52E56 41N05	C 9	15	12.2				A	257	4	0000–2400	
19		S	MAIKOP	URS	40E08 44N36	A16	1000	30.4				A	257	4	0000–2400	
20		S	MOSKVA	URS	37E38 55N45	A16	500	27.4				A	220	4	0000–2400	
21		S	SYKTYVKAR	URS	50E31 61N41	A16	300	25.2				A	257	4	0000–2400	



182 KHZ (4)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	182		SAARLOUIS	D	06E41 49N17	D 9	2000	38.0	222	30— 60	13.0	B		4	0000—2400	6
2	(4)		ORANIENBURG	DDR	13E24 52N48	D 9	750	29.2				A	350	4	0000—2400	
3			RAUFARHOEFN	ISL	15W57 66N30	A20	500	29.4	255	50— 70	24.4	B		5	0700—0200	
4			KIRUNA	S	20E55 67N38	D 9	600	30.0	175	270—290	22.0	B		6	0000—2400	
5			ANKARA	TUR	32E25 39N45	D 9	1200	31.2				A	250	4	0000—2400	
6		S	AIAGUZ	URS	79E59 47N50	A18	50	17.4				A	300	4	0000—1000	
7		S	AKTIUBINSK	URS	57E13 50N17	A16	150	22.2				A	300	4	0100—1100	
8		S	ALMA ATA	URS	76E58 43N07	C10	250	24.4				A	257	4	0000—2400	
9		S	BARNAUL	URS	83E48 53N21	C 9	50	17.4				A	257	4	0000—2400	
10		S	DJAMBUL	URS	71E22 42N55	A18	50	17.4				A	300	4	0000—1000	
11		S	KAMENSKOE	URS	165E10 62N30	A18	50	17.4				A	300	4	0000—2400	
12			NEMBAITO	URS	80E27 67N00	A18	50	17.4				A	300	4	0000—2400	
13		S	PETROPAVLO KAM	URS	158E40 53N00	C10	150	22.2				A	257	4	0000—2400	
14			TCHITA	URS	113E20 52N02	A16	150	22.2				A	257	4	0000—2400	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	191	MADRID	E	02W30 41N00	D 9	1000	33.0	255	70—110	11.0	B		4	0000—2400	19
2	(5)	MADRID	E	02W30 41N00	D 9	1000	33.0		20— 40	20.0	B				
3		S SEVERO	I	15E23 41N40	D 9	600	32.8	160	80	21.8	B		4	0000—2400	
4		S SEVERO	I	15E23 41N40	D 9	600	32.8		260	13.8	B				
5		S SEVERO	I	15E23 41N40	D 9	600	32.8		270—290	10.8	B				
6		S SEVERO	I	15E23 41N40	D 9	600	32.8		345— 20	11.8	B				
7		GOTLAND	S	18E42 57N55	D 9	600	30.0	295	100—130	23.0	B		4	0000—2400	
8		BIROBIDJAN	URS	133E00 49N16	A16	1000	30.4				A	257	4	0000—2400	
9		GORNO ALTAISK	URS	85E52 51N57	A16	50	17.4				A	257	4	0000—2400	
10		TBILISI	URS	44E30 41N40	A18	500	31.0	140	310—340	22.0	B		4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	200		EL GOLEA	ALG	02E52 30N34	C 9	1000	37.0	180	320— 30	17.0	B		5	0000—2400	
2	(6)		EL QUSIYA	EGY	30E44 27N29	D 9	500	32.0	170	290— 70	25.0	B		4	0400—2400	
3		S	BURGHEAD	G	03W28 57N42	C10	50	17.4				A	152	4	0000—2400	
4		S	DROITWICH	G	02W06 52N18	C10	400	26.4				A	213	3	0000—2400	
5			WARSZAWA 3	POL	20E53 52N04	C 9	200	23.4				A	335	4	0900—1600	15
6			ETIMESGUT	TUR	32E40 39N56	D 9	200	23.4				A	250	4	0200—2300	
7			ACHKHABAD	URS	58E23 37N57	C 9	75	19.2				A	257	4	0000—2400	
8			ALEKSANDROV SA	URS	142E18 50N58	A18	50	17.4				A	257	2	0200—2200	
9			FRUNZE	URS	74E37 42N54	A16	150	22.2				A	257	4	0000—1000	
10		S	KAZAN	URS	49E08 55N47	C 9	50	17.4				A	257	4	0000—2400	
11			KORF	URS	165E51 60N19	A18	50	17.4				A	300	5	0000—2400	
12		S	LENINGRAD	URS	30E00 59N44	A16	150	22.2				A	220	4	0300—1300	
13		S	MOSKVA	URS	37E08 55N54	A16	100	20.4				A	257	4	0300—1300	
14			ULAN UDE	URS	107E38 51N50	C 9	250	24.4				A	257	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	209		MUENCHEN ERCH	D	11E43 48N18	D 9	500	27.4				A	200		0400—1800	
2	(7)		MUENCHEN ERCH	D	11E43 48N18	D 9	250	27.0	320	115—160	21.0	B		4	1800—0400	
3			MUENCHEN ERCH	D	11E43 48N18	D 9	250	27.0	320	160—230	20.0	B				
4			MUENCHEN ERCH	D	11E43 48N18	D 9	250	27.0		72— 88	4.0	B				
5			CALTANISSETTA	I	14E05 37N30	D 9	60	18.2				A	284	4	0000—2400	
6		S	EIDAR	ISL	14W26 65N19	A20	50	17.4				A	100	6	0700—0200	
7		S	FLOINN	ISL	21W00 63N52	A20	500	27.4				A	300	5	0700—0200	
8		S	DALANTSZADAGAD	MNG	104E30 43N38	A18	150	22.2				A	257	4	2200—0800	
9		S	MUREN	MNG	100E10 49N28	A18	150	22.2				A	257	5	2200—0800	
10		S	TCHOIBOLSAN	MNG	114E30 48N05	A18	75	19.2				A	257	4	2200—0800	
11		S	ULGEI	MNG	89E48 49N00	A18	60	18.2				A	350	5	2200—1500	
12			AZILAL	MRC	06W33 31N54	C 9	800	29.4				A	300	4	0500—0300	
13			KIEV	UKR	30E38 50N27	A16	500	27.4				A	257	4	0000—2400	
14		S	BLAGOVECHTCHEN	URS	127E33 50N16	A16	30	15.2				A	220	4	0000—2400	
15		S	SKOVORODINO	URS	123E58 53N58	A16	30	15.2				A	257	4	0000—2400	
16			TACHKENT	URS	69E15 41N19	C 9	50	17.4				A	257	4	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	218	MONTE CARLO	MCO	07E25 43N47	D 9	1400	35.5	309	345– 15	25.5	B		6	0000–2400	
2	(8)	OSLO BASTOEY	NOR	10E32 59N23	D 9	1200	31.2				A	350	4	0000–2400	
3		BAKU	URS	49E45 40N24	C10	500	27.4				A	257	4	0000–2400	
4		CHABAROVSK	URS	135E15 48N33	C 9	100	20.4				A	257	4	0000–2400	
5		S ENISEISK	URS	92E05 58N27	A16	300	25.2				A	257	4	0000–2400	
6		S NOVOSIBIRSK	URS	82E58 55N04	C 9	50	17.4				A	257	4	0000–2400	

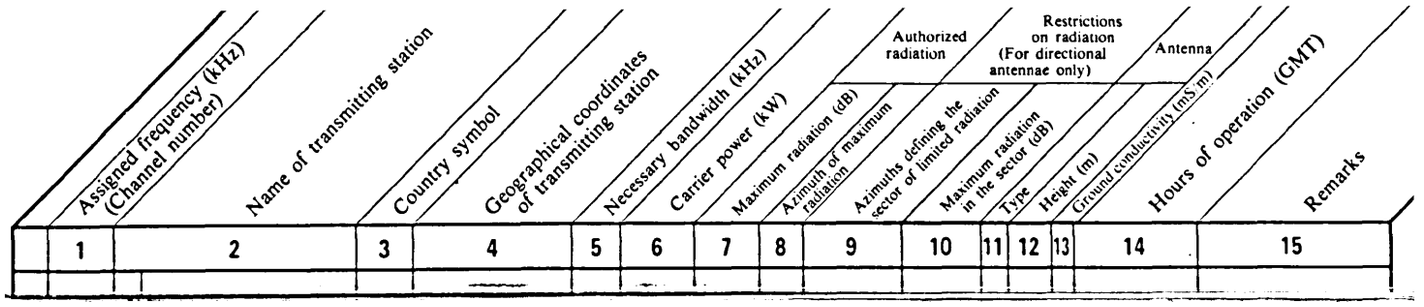
Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	227	S BARCELONA	E	02E15 41N40	D 9	800	34.0	230	30— 50	12.0	B		4	0000—2400	19
2	(9)	S BILBAO	E	02W45 43N25	D 9	400	30.0	230	40— 60	7.0	B		5	0000—2400	19
3		S LINARES	E	03W40 38N00	D 9	400	30.0	210	30— 50	15.0	B		4	0000—2400	19
4		S LUGO	E	07W45 43N02	D 9	200	27.0	220	40— 60	11.0	B		5	0000—2400	19
5		ABIS	EGY	30E05 31N10	D 9	200	27.0	140	290—350	12.0	B		4	0400—2400	
6		WESTERGLEN	G	03W50 55N58	C10	50	17.4				A	152	4	0000—2400	
7		S ALTAI	MNG	96E10 46N30	A18	150	22.2				A	257	5	2200—1500	
8		S ULAN BATOR	MNG	107E00 47N55	A18	150	22.2				A	257	4	2200—1500	
9		WARSZAWA 1	POL	19E48 52N22	C 9	2000	33.4				A	646	4	0000—2400	
10		VAN	TUR	43E22 38N30	D 9	600	31.0	265	340— 45	16.0	B		4	0000—2400	23/EGY POL URS
11		LENINABAD	URS	69E37 40N16	C 9	50	17.4				A	257	4	0000—2400	
12		NIJNII TAGHIL	URS	60E00 57N55	A16	50	17.4				A	257	4	0000—2400	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks

236 KHZ (10)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	236	JEFREN	LBY	12E31 32N03	D 9	1000	33.0	135	340— 70	22.0	B		4	0400—2000	
2	(10)	JUNGLINSTER	LUX	06E19 49N40	D 9	2000	38.0	227	7— 87	13.0	B		4	0000—2400	
3		S ARKHANGHELSK	URS	40E32 64N33	A16	150	22.2				A	257	4	0000—2400	
4		S EREVAN	URS	44E30 40N11	A16	500	27.4				A	257	4	0000—2400	
5		IRKUTSK	URS	104E20 52N17	A16	500	27.4				A	257	4	2200—0800	
6		S KICHINIOV	URS	28E52 47N00	C 9	1000	30.4				A	257	4	0000—2400	
7		S LENINGRAD	URS	30E21 59N59	A16	1000	30.4				A	257	4	0000—2400	
8		MAGADAN	URS	151E50 59N40	C10	1000	30.4				A	257	4	0000—2400	
9		S MARY	URS	61E50 37N35	A18	500	27.4				A	257	4	0000—2400	
10		S TOBOLSK	URS	68E16 58N16	C 9	50	17.4				A	257	4	0000—2400	
11		S ULIANOVSK	URS	48E20 54N19	C 9	1200	31.2				A	257	4	0000—2400	

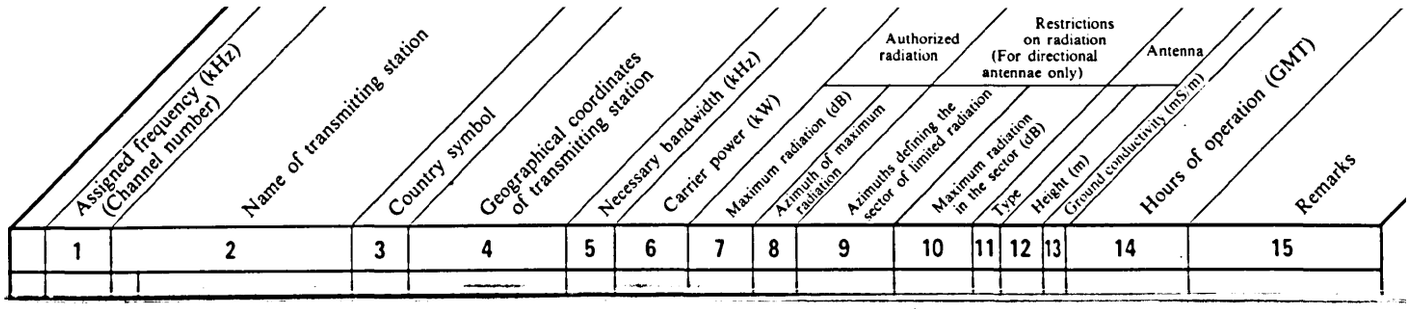


	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	245		KALUNDBORG	DNK	11E04 55N40	D 9	300	25.2				A		4	0000—2400	
2	(11)		TUSCANIA	I	11E53 42N26	D 9	300	28.8	185	80— 90	18.8	B		4	0000—2400	
3			TUSCANIA	I	11E53 42N26	D 9	300	28.8		330— 30	8.8	B				
4			ERZURUM	TUR	41E07 39N59	D 9	200	23.4				A	185	4	0200—2300	
5		S	KARAGANDA	URS	73E05 49N50	A18	100	20.4				A	257	4	0000—1000	
6		S	MUINAK	URS	59E00 43N41	A18	150	22.2				A	257	4	0100—1100	
7		S	SURGUT	URS	73E30 61N15	A18	500	27.4				A	257	4	0000—2400	
8		S	TALDY KURGAN	URS	78E00 45N34	A16	500	27.4				A	257	4	0000—2400	
9			VLADIVOSTOK	URS	131E53 43N07	A16	1000	30.4				A	257	4	0000—2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks

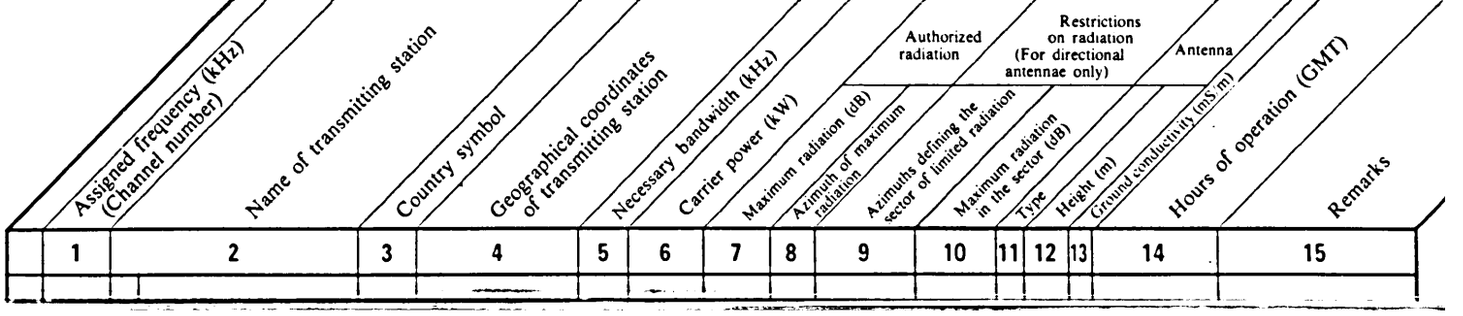
254 KHZ (12)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	254		TIPAZA	ALG	02E27 36N35	D 9	1500	32.2				A	354	3	0600—1800	
2	(12)		TIPAZA	ALG	02E27 36N35	D 9	750	29.2				A	354	3	1800—0600	
3		S	INARI	FNL	26E58 68N55	D 9	300	25.2				A	300	6	0000—2400	
4		S	OULU 1	FNL	25E32 65N00	D 9	300	25.2				A	400	5	0000—2400	
5		S	TURKU 1	FNL	22E35 60N04	D 9	1500	31.8	316	130—140	25.8	B		5	0000—2400	
6		S	TURKU 1	FNL	22E35 60N04	D 9	1500	31.8		210—230	27.8	B				
7		S	TURKU 1	FNL	22E35 60N04	D 9	1500	31.8		250—270	28.8	B				
8			TULLAMORE 2	IRL	07W22 53N17	C 9	500	27.4				A	300	4	0600—1800	7
9			TULLAMORE 2	IRL	07W22 53N17	C 9	500	29.0	290	40— 70	10.0	B		4	1800—0600	
10			TULLAMORE 2	IRL	07W22 53N17	C 9	500	29.0		140—190	10.0	B				
11			SARAKEB 2	SYR	36E49 35N50	A20	500	32.4	210			B		4	0300—2400	
12		S	DUCHANBE	URS	68E50 38N40	C10	300	25.2				A	220	4	0000—2400	
13			EREVAN	URS	44E30 40N11	C 9	150	22.2				A	220	4	0000—2400	
14			KASSAN	URS	48E48 55N47	A16	150	22.2				A	220	4	0200—1200	
15		S	KRASNOGORSK	URS	141E54 48N26	C 9	50	17.4				A	220	4	0000—2400	
16		S	KREST MAIOR	URS	144E55 67N40	A18	50	17.4				A	220	5	0000—2400	
17		S	NAKKANNO	URS	112E00 61N05	A18	50	17.4				A	220	5	0000—2400	
18		S	NIJNE KOLYMSK	URS	160E50 68N25	A18	50	17.4				A	220	5	0000—2400	
19		S	TCHIMKENT	URS	69E37 42N18	C 9	50	17.4				A	220	4	0000—2400	
20			ULAGAN	URS	88E00 50N38	C 9	50	17.4				A	220	4	0000—2400	



263 KHZ (13)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	263		PLOVDIV	BUL	24E41 42N04	A18	500	27.4				A	500	4	0000—2400	
2	(13)		BURG	DDR	11E54 52N17	D 9	200	23.4				A	355	4	0000—2400	
3		S	GURIEV	URS	51E55 47N03	A18	150	22.2				A	220	4	0100—1100	
4			IRKUTSK	URS	104E18 52N18	A16	1000	30.4				A	220	4	0000—2400	
5		S	KARAGANDA	URS	73E05 49N50	A16	150	22.2				A	257	4	0000—1000	
6		S	MOSKVA	URS	37E38 55N45	A16	2000	33.4				A	257	4	0000—2400	
7		S	TIUMEN	URS	65E30 57N02	A18	150	22.2				A	220	4	0000—2400	
8		S	VORKUTA	URS	63E12 67N16	A18	50	17.4				A	220	4	0000—2400	



272 KHZ (14)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	272		CESKOSLOVENSKO	TCH	17E30 49N10	C 9	1500	32.2				A	257	4	0000—2400	
2	(14)		BIROBIDJAN	URS	133E00 49N16	A16	30	15.2				A	220	4	0000—2400	
3		S	FT CHEVTCHENKO	URS	50E18 44N30	A18	150	22.2				A	220	4	0100—1100	
4			NOVOSIBIRSK	URS	82E58 55N04	C10	150	22.2				A	220	4	0000—2400	
5			SARANSK	URS	45E06 54N12	C 9	50	17.4				A	257	4	0000—2400	
6		S	TCHARDJOU	URS	63E35 39N02	C 9	500	27.4				A	220	4	0100—1100	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	281		MINSK	BLR	27E34 53N54	A16	500	27.4				A	220	4	0000—2400	
2	(15)		TEL AVIV 1	ISR	34E50 31N50	D 9	500	31.0		270—350	21.0	B		3	0600—1800	33
3			TEL AVIV 1	ISR	34E50 31N50	D 9	100	24.0		270—350	14.0	B		3	1800—0600	33
4			TUNIS DJEDEIDA	TUN	09E50 36N50	D 9	1200	33.8	200	20— 30	16.8	B		4	0000—2400	24
5			TUNIS DJEDEIDA	TUN	09E50 36N50	D 9	1200	33.8		30— 90	10.0	B				
6			ACHKHABAD	URS	58E23 37N57	A16	150	22.2				A	220	4	0000—2400	
7			IUJNSAKHALINSK	URS	143E00 47N00	A18	150	22.2				A	257	2	0000—2400	
8		S	PETROPAVLO KAM	URS	158E40 53N00	A18	25	14.4				A	220	4	0000—2400	
9			TCHITA	URS	113E29 52N03	C 9	150	22.2				A	220	5	0000—2400	
10		S	UST BELAIA	URS	173E15 65N31	A18	50	17.4				A	220	5	0000—2400	

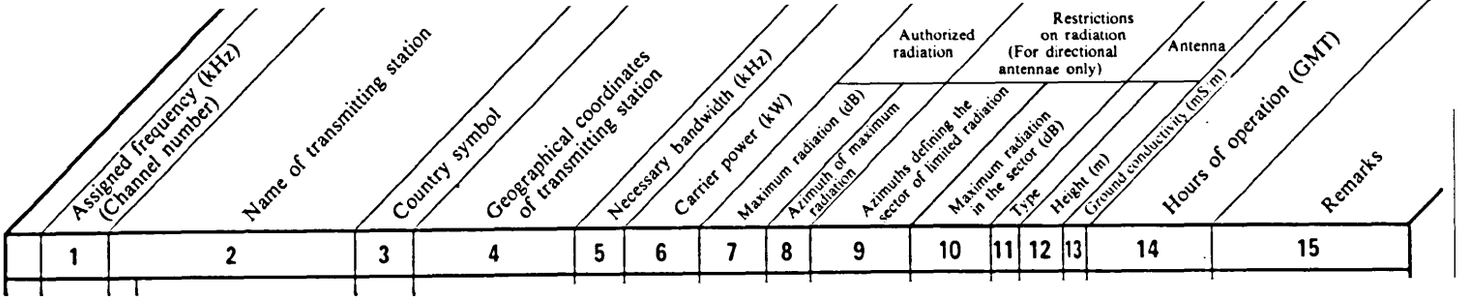
	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station		Necessary bandwidth (kHz)	Carrier power (kW)		Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	531		AIN BEIDA	ALG	07E19	35N49	D 9	600	29.9				A	278	4	0600–1800	24
2	(1)		AIN BEIDA	ALG	07E19	35N49	D 9	300	26.9				A	278	4	1800–0600	24
3			GIZAN	ARS	42E31	16N52	C 9	1000	35.0	150	250– 50	15.0	B		4	0000–2400	24
4			ADELAIDE SA	AUS	138E34	34S50	A20	0.5	–3.0				A	37	2	0800–1400	
5		S	DALWALLINU WA	AUS	116E36	30S17	A20	10	10.6				A	213	2	2100–1600	
6			INNISFAIL QLD	AUS	146E03	17S32	A20	5					B		4	1900–1400	
7			KEMPSEY NSW	AUS	152E50	31S06	A20	5					B		3	1900–1400	
8		S	PT HEDLAND WA	AUS	118E40	20S24	A20	50	17.0				A	41	3	2100–1600	
9			WARRAGUL VIC	AUS	145E56	38S06	A20	5					B		3	1900–1400	
10		S	FUHAI	CHN	87E45	47N00	A12	50	17.4				A	120	4	2000–1800	
11			JINMEN	CHN	118E24	24N36	A12	10	10.4				A	120	4	2000–1800	
12		S	KORLA	CHN	86E10	41N44	A12	50	17.4				A	120	4	2000–1800	
13		S	XINHE	CHN	82E40	41N25	A12	50	17.4				A	120	4	2000–1800	
14		S	YECHENG	CHN	77E22	37N55	A12	50	17.0	110	240–330	15.0	B		4	2000–1800	
15			WELIMADA	CLN	80E57	06N50	A10	50	17.4				A	140	7	0000–1800	
16			LEIPZIG	DDR	12E22	51N14	D 9	100	22.1				A	246	4	0000–2400	
17			TORSHAVN	DNK	06W46	62N01	D 9	200	23.0				A	30	4	0000–2400	
18			JOENSUU	FNL	29E49	62N37	D 9	100	22.1				A	300	5	0000–2400	
19			FRIA	GUI	13W17	10N45	C 9	50	17.0				A	60	4	0000–2400	
20			GULBARGA	IND	76E54	17N19	A20	300	25.4				A	225	3	0300–1000	25
21			JODHPUR	IND	72E58	26N20	A20	300	27.0	135	0– 20	18.0	B		4	0000–2400	
22			JODHPUR	IND	72E58	26N20	A20	300	27.0		330–340	21.0	B				
23			PATNA	IND	85E13	25N37	C 9	300	26.9				A	275	3	0300–0900	25
24			TRIVANDRUM	IND	76E59	08N29	A20	300	26.9				A	275	4	0300–1000	25
25			IRANSHAHR	IRN	60E42	27N12	A12	20	13.4				A	134	4	0100–2200	
26			JERUSALEM	ISR	35E13	31N46	D 9	200	25.0				A		3	0000–2400	33
27			MORIOKA	J	141E08	39N38	A15	10	10.4				A	138	5	0000–2400	
28			FUNCHAL 2	MDR	16W54	32N40	A20	10	10.4				A	90	4	0000–2400	
29		S	ILORIN	NIG	04E32	08N30	C 9	50	17.4				A	125	4	0500–2300	
30		S	ISANLUMAKUTU	NIG	05E45	08N12	C 9	10	10.4				A	125	4	0500–2300	
31			NIUE I	NIU	169W55	19S02	A20	0.3	–4.8				A	75	9	0000–2400	
32			ALEXANDRA	NZL	169E24	45S10	A20	2	3.4				A	107	5	0000–2400	
33			COTABATO CITY	PHL	124E14	07N13	C 9	10	10.4				A	136	3	0000–2400	
34			JEDRZEJOW	POL	20E17	50N39	A20	1	0.4				A	141	5	0000–2400	
35			KOZIENICE	POL	21E33	51N35	A20	1	0.4				A	141	5	0000–2400	
36			LESKO	POL	22E21	49N29	A20	1	0.4				A	141	5	0000–2400	
37			SANDOMIERZ	POL	21E45	50N41	A20	1	0.4				A	141	5	0000–2400	
38			SEJNY	POL	23E21	54N07	A20	1	0.4				A	141	5	0000–2400	
39			SUCHA	POL	19E36	49N44	A20	1	0.4				A	141	5	0000–2400	
40			TARNOW	POL	21E00	50N01	A20	1	0.4				A	141	5	0000–2400	
41			TOMASZOW LUBEL	POL	23E25	50N28	A20	1	0.4				A	141	5	0000–2400	
42			WEGORZEWO	POL	21E44	54N13	A20	1	0.4				A	141	5	0000–2400	
43			WLODAWA	POL	23E31	51N34	A20	1	0.4				A	141	5	0000–2400	
44			WODZISLAW	POL	18E26	50N01	A20	1	0.4				A	141	5	0000–2400	
45		S	CALARASI	ROU	27E18	44N15	A20	2	3.4				A	120	3	0300–2300	
46		S	PETROSANI	ROU	23E21	45N21	C 9	15	12.2				A	107	4	0000–2400	
47		S	SAVENI	ROU	26E49	47N55	C 9	15	12.2				A	120	2	0300–2300	
48			BEROMUENSTER	SUI	08E10	47N12	D 9	500	27.6				A	215	5	0500–1800	
49			GOTTWALDOV	TCH	17E40	49N13	A20	1	0.0				A	60	5	0000–2400	
50			DAR ES SALAAM	TGK	39E15	06S50	C 9	100	23.0	270	350–190	23.0	B		4	0300–1600	
51			DAR ES SALAAM	TGK	39E15	06S50	C 9	100					B		4	1600–2100	
52			KHON KAEN	THA	102E49	16N27	A20	50	17.4				A	88	3	0000–2400	
53			ALEKSANDROV SA	URS	142E18	50N58	A18	25	16.1				A	257		0000–2400	
54			TCHEBOKSARY	URS	47E05	56N10	A16	30	16.9				A	257	4	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

531 KHZ (1)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	531	URGHENTCH	URS	60E20 41N40	C10	150	26.7	310	80—180	16.7	B		4	0000—2400	
2	(1)	TITOVO UZICE	YUG	19E51 43N53	D 9	10	10.4				A	80	4	0500—1700	
3		KISANGANI	ZAI	25E11 00N03	C 9	2	3.4				A	135	6	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	540	S	DALBY QLD	AUS	151E18 27S08	A20	10	10.6				A	219	3	1900—1400	
2	(2)	S	LONGREACH QLD	AUS	144E13 23S23	A20	10	10.6				A	198	2	1900—1400	
3			SCOTTSDALE TAS	AUS	147E32 41S06	A20	5					B		4	1900—1400	
4			BRUXELLES VETM	BEL	04E37 50N54	D 9	150	23.9				A	280	4	0600—1800	
5			BRUXELLES VETM	BEL	04E37 50N54	D 9	50	19.1				A	280	4	1800—0600	
6		S	ANQING	CHN	117E00 30N30	A20	10	10.4				A	120	4	2000—1800	
7		S	ANXI	CHN	95E32 40N30	A20	5	7.4				A	120	4	2000—1800	
8		S	ANYUAN	CHN	115E24 25N09	A20	5	7.4				A	120	4	2000—1800	
9		S	AOHAN QI	CHN	119E42 42N20	A20	10	10.4				A	120	4	2000—1800	
10		S	BAOAN	CHN	114E05 22N38	A20	10	10.4				A	120	4	2000—1800	
11		S	BAQEN	CHN	93E43 32N01	A20	10	10.4				A	120	5	2000—1800	
12		S	CHALING	CHN	113E33 26N48	A20	10	10.4				A	120	4	2000—1800	
13		S	CHANGDE SHI	CHN	111E42 29N02	A20	20	13.4				A	120	4	2000—1800	
14		S	CHUNAN	CHN	118E58 29N36	A20	10	10.4				A	120	4	2000—1800	
15		S	CHUXIONG	CHN	101E28 25N02	A20	20	13.4				A	120	5	2000—1800	
16		S	COMA	CHN	91E28 28N28	A20	10	10.4				A	120	5	2000—1800	
17		S	DAMXUNG	CHN	91E10 30N35	A20	10	10.4				A	120	5	2000—1800	
18		S	DARLA	CHN	99E33 33N42	A20	10	10.4				A	120	5	2000—1800	
19		S	DENGKOU	CHN	106E43 40N10	A20	20	13.4				A	120	4	2000—1800	
20		S	DEZHOU	CHN	116E17 37N27	A20	20	13.4				A	120	4	2000—1800	
21		S	DINGHAI	CHN	122E06 30N01	A20	5	7.4				A	120	4	2000—1800	
22		S	EJENHORO QI	CHN	109E41 39N15	A20	10	10.4				A	120	4	2000—1800	
23		S	FUYUAN	CHN	134E15 48N17	A20	20	13.0	330	80—220	10.0	B		4	2000—1800	
24		S	GANGCA	CHN	100E10 37N20	A20	20	13.4				A	120	5	2000—1800	
25		S	GERZE	CHN	84E15 32N20	A20	50	17.4				A	120	5	2000—1800	
26		S	GUIYANG	CHN	106E36 26N25	A20	50	17.4				A	120	5	2000—1800	
27		S	HAIKOU	CHN	110E15 20N02	A20	50	17.4				A	120	4	2000—1800	
28		S	HAILAR	CHN	119E45 49N02	A20	20	13.4				A	120	4	2000—1800	
29		S	HEFEI	CHN	117E19 31N46	A20	20	13.4				A	120	4	2000—1800	
30		S	HENGCHUN	CHN	120E43 22N01	A20	10	12.1				A	240	5	2000—1800	
31		S	HEXIGTEN QI	CHN	117E22 43N12	A20	10	10.4				A	120	4	2000—1800	
32		S	HUMA	CHN	126E36 51N35	A20	20	13.4				A	120	4	2000—1800	
33		S	HUOQIU	CHN	116E15 32N20	A20	5	7.4				A	120	4	2000—1800	
34		S	JAGDAQI	CHN	124E05 50N25	A20	20	13.4				A	120	4	2000—1800	
35		S	JIANGHUA	CHN	111E46 24N57	A20	10	10.4				A	120	4	2000—1800	
36		S	JIAYIN	CHN	130E21 48N42	A20	20	13.4				A	120	4	2000—1800	
37		S	JIAYUGUAN	CHN	98E12 39N50	A20	5	7.4				A	120	4	2000—1800	
38		S	JINGDONG	CHN	100E45 24N24	A20	5	7.4				A	120	5	2000—1800	
39		S	JINGSHAN	CHN	113E06 31N02	A20	20	13.4				A	120	4	2000—1800	
40		S	JINING	CHN	113E05 41N02	A20	20	13.4				A	120	4	2000—1800	
41		S	JIUJIANG SHI	CHN	116E10 29N39	A20	10	10.4				A	120	4	2000—1800	
42		S	KUANDIAN	CHN	124E42 40N44	A20	10	10.4				A	120	4	2000—1800	
43		S	KUNMING	CHN	102E50 25N10	A20	50	17.4				A	120	5	2000—1800	
44		S	LANZHOU	CHN	103E50 36N02	A20	20	13.4				A	120	4	2000—1800	
45		S	LIAOCHENG	CHN	115E58 36N26	A20	10	10.4				A	120	4	2000—1800	
46		S	LINGLING	CHN	111E37 26N13	A20	10	10.4				A	120	4	2000—1800	
47		S	LINHAI	CHN	121E07 28N51	A20	20	13.4				A	120	4	2000—1800	
48		S	LINTAN	CHN	103E21 34N42	A20	5	7.4				A	120	4	2000—1800	
49		S	LONGJIANG	CHN	123E14 47N20	A20	1	0.4				A	120	4	2000—1800	
50		S	LONGQUAN	CHN	119E07 28N04	A20	10	10.4				A	120	4	2000—1800	
51		S	LUDA	CHN	121E30 38N54	A20	10	10.4				A	120	4	2000—1800	
52		S	LUFENG	CHN	115E38 22N57	A20	20	13.4				A	120	4	2000—1800	
53		S	MAOMING	CHN	110E51 21N56	A20	50	17.4				A	120	4	2000—1800	
54		S	MEDO	CHN	95E13 29N18	A20	10	10.4				A	120	5	2000—1800	



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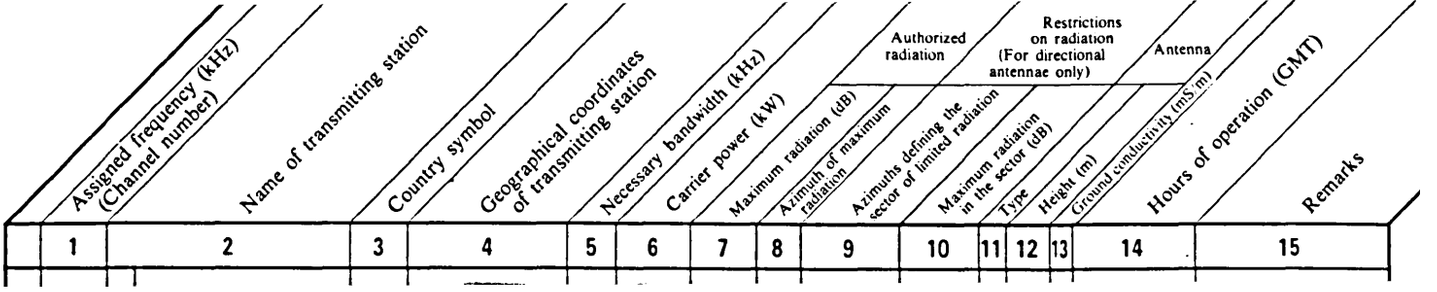
1	540	S	MINQIN	CHN	102E58 38N36	A20	20	13.4				A	120	4	2000—1800	
2	(2)	S	MUDANJIANG	CHN	129E36 44N36	A20	10	10.4				A	120	4	2000—1800	
3		S	NINGGANG	CHN	113E58 26N46	A20	5	7.4				A	120	4	2000—1800	
4		S	NINGGUO	CHN	118E58 30N38	A20	5	7.4				A	120	4	2000—1800	
5		S	PANSHAN	CHN	122E02 41N08	A20	5	7.4				A	120	4	2000—1800	
6		S	PENGHU	CHN	119E33 23N34	A20	20	13.4				A	120	5	2000—1800	
7		S	PUER	CHN	101E02 22N57	A20	20	13.4				A	120	5	2000—1800	
8		S	QABDO	CHN	97E05 31N11	A20	50	17.4				A	120	5	2000—1800	
9		S	RUSHAN	CHN	121E29 36N53	A20	20	13.4				A	120	4	2000—1800	
10		S	SAGA	CHN	85E18 29N25	A20	10	10.4				A	120	5	2000—1800	
11		S	SHAN XIAN	CHN	116E05 34N48	A20	5	7.4				A	120	4	2000—1800	
12		S	SHANGHAI	CHN	121E29 31N15	A20	50	17.4				A	120	3	2000—1800	
13		S	SHANGRAO SHI	CHN	118E15 28N20	A20	10	10.4				A	120	4	2000—1800	
14		S	SHAOGUAN	CHN	113E32 24N47	A20	10	10.4				A	120	4	2000—1800	
15		S	SHAOXING	CHN	120E34 30N00	A20	10	10.4				A	120	4	2000—1800	
16		S	SHENYANG	CHN	123E36 41N54	A20	20	13.4				A	120	4	2000—1800	
17		S	SHUANGFENG	CHN	112E11 27N27	A20	5	7.4				A	120	4	2000—1800	
18		S	SHUANGYASHAN	CHN	131E05 46N32	A20	5	7.4				A	120	4	2000—1800	
19		S	SU XIAN	CHN	116E58 33N39	A20	20	13.4				A	120	4	2000—1800	
20		S	SUIHUA	CHN	126E50 46N34	A20	20	13.4				A	120	4	2000—1800	
21		S	SUIZHONG	CHN	120E20 40N21	A20	5	7.4				A	120	4	2000—1800	
22		S	SUNID YOUQI	CHN	113E35 43N45	A20	10	10.4				A	120	4	2000—1800	
23		S	TENGCHONG	CHN	98E20 25N00	A20	20	13.4				A	120	5	2000—1800	
24		S	TIANJIN	CHN	117E09 39N09	A20	20	13.4				A	120	4	2000—1800	
25		S	TIANSHUI SHI	CHN	105E30 34N30	A20	10	10.4				A	120	4	2000—1800	
26		S	TONGREN 1	CHN	102E01 35N31	A20	10	10.4				A	120	5	2000—1800	
27		S	TONGREN 2	CHN	109E13 27N43	A20	20	13.4				A	120	5	2000—1800	
28		S	TONGZI	CHN	106E49 28N08	A20	5	7.4				A	120	5	2000—1800	
29		S	WEINING	CHN	104E17 26N52	A20	20	13.4				A	120	5	2000—1800	
30		S	WEIXI	CHN	99E12 27N10	A20	10	10.4				A	120	5	2000—1800	
31		S	WENSHAN	CHN	104E15 23N22	A20	5	7.4				A	120	5	2000—1800	
32		S	WUFENG	CHN	110E40 30N12	A20	25	14.4				A	120	4	2000—1800	
33		S	WUXING	CHN	120E07 30N51	A20	5	7.4				A	120	4	2000—1800	
34		S	XI UJUMQIN QI	CHN	117E33 44N38	A20	20	13.4				A	120	4	2000—1800	
35		S	XIANNING	CHN	114E17 29N52	A20	10	10.4				A	120	4	2000—1800	
36		S	XIAOYI	CHN	111E48 37N07	A20	10	10.4				A	120	4	2000—1800	
37		S	XIGAZE	CHN	89E00 29N20	A20	10	10.4				A	120	5	2000—1800	
38		S	XIN XIAN	CHN	112E40 38N25	A20	10	10.4				A	120	4	2000—1800	
39		S	XINGGUO	CHN	115E21 26N20	A20	5	7.4				A	120	4	2000—1800	
40		S	XINGYI	CHN	104E52 25N07	A20	10	10.4				A	120	5	2000—1800	
41		S	XINZHU	CHN	120E58 24N48	A20	10	12.1				A	240	5	2000—1800	
42		S	XUPU	CHN	110E35 27N55	A20	10	10.4				A	120	4	2000—1800	
43		S	YANGCHENG	CHN	112E25 35N29	A20	10	10.4				A	120	4	2000—1800	
44		S	YICHUN 1	CHN	114E25 27N48	A20	10	10.4				A	120	4	2000—1800	
45		S	YULI	CHN	121E19 23N20	A20	10	12.1				A	240	5	2000—1800	
46		S	YUNLONG	CHN	99E19 25N56	A20	5	7.4				A	120	5	2000—1800	
47		S	ZAMDA	CHN	79E46 31N28	A20	10	10.4				A	120	5	2000—1800	
48		S	ZHAOQING	CHN	112E27 23N03	A20	20	13.4				A	120	4	2000—1800	
49		S	ZHENGLAN QI	CHN	116E00 42N18	A20	10	10.4				A	120	4	2000—1800	
50		S	ZHONGDIAN	CHN	99E37 27N45	A20	5	7.4				A	120	5	2000—1800	
51		S	ZIBO	CHN	118E03 36N48	A20	5	7.4				A	120	4	2000—1800	
52		S	ZUOQUAN	CHN	113E22 37N05	A20	10	10.4				A	120	4	2000—1800	
53			RATNAPURA	CLN	80E22 06N40	A10	50	17.4				A	140	7	0000—1800	
54			PNT NOIRE	COG	12E01 04S51	A20	100	22.1				A	278	5	0000—2400	

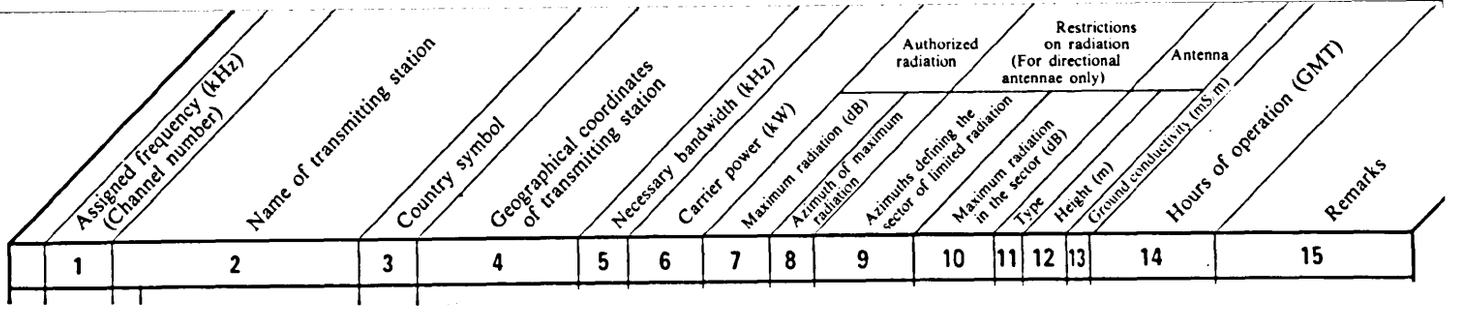
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station		Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	540		GHIMBI	ETH	35E49	09N11	A 9	10	10.4				A	140	3	0400—2100	
2	(2)	S	ENONTEKIO	FNL	23E38	68N24	D 9	45	16.9				A	150	6	0000—2400	
3		S	HAMEENLINNA	FNL	24E27	61N01	D 9	10	10.4				A	150	5	0000—2400	
4		S	KAJAANI	FNL	28E20	64N10	D 9	45	16.9				A	150	6	0000—2400	
5			SOLT	HNG	19E02	46N52	D 9	2000	35.1				A	298	4	0300—0100	
6			ANCONA	I	13E29	43N36	D 9	10	10.4				A	124	4	0400—1700	7
7			CAGLIARI	I	09E04	39N18	D 9	50	17.6				A	222	4	0400—1700	7
8			CATANIA	I	15E05	37N32	D 9	10	10.4				A	139	5	0400—1700	7
9			TORINO	I	07E44	45N02	D 9	50	17.6				A	202	4	0400—1700	7
10			AIJAL	IND	92E43	23N43	A20	20	14.0	160	330—350	10.0	B		4	0000—2400	
11			BANDUNG	INS	107E34	06S57	A18	5	7.4				A	139	4	2200—1700	
12			CARRAROE	IRL	09W35	53N16	A20	2	3.4				A	91	5	0000—2400	
13			MASHHAD	IRN	59E38	36N16	A20	100	22.1				A	259	3	0100—2200	
14			KITAKYUSHU	J	130E52	33N53	A15	1	0.0				A	52	5	0000—2400	
15			MATSUMOTO	J	137E57	36N13	A15	1	0.4				A	108	5	0000—2400	
16			MIYAZAKI	J	131E27	31N57	A15	5	7.4				A	106	4	0000—2400	
17			NANAO	J	137E00	37N02	A15	1	1.0	330			B		4	0000—2400	
18			YAMAGATA	J	140E20	38N17	A15	5	10.0	330			B		5	0000—2400	
19			VOI	KEN	38E35	03S20	C 9	50	17.4				A	130	4	0000—2400	
20			CHANGSU	KOR	127E35	35N43	C10	1	0.4				A	80	6	0000—2400	
21			HONGSEONG	KOR	126E39	36N35	C10	10	10.4				A	80	4	0000—2400	
22			JUMCHON	KOR	128E12	36N36	C10	1	0.4				A	120	6	0000—2400	
23			YEONGWEOL	KOR	128E28	37N10	C10	1	0.4				A	120		0000—2400	
24			SULAIBIYA	KWT	47E53	29N16	A20	1500	39.0	284	350—220	30.0	B		8	0000—2400	24
25			SIKASSO	MLI	05W40	11N19	C 9	100	22.1				A	278		0600—2400	
26			TSETSERLIG	MNG	101E10	47N30	A18	50	19.1		140—220	4.6	B		5	0800—1500	
27			MAGUDE	MOZ	32E39	25S02	C10	5	7.4				A	90	4	0400—2200	
28			SIDI BENNOUR	MRC	08W17	32N44	C 9	600	30.8	210	290—310	21.8	B		6	0600—2400	24
29			MANGOCHI	MWI	35E14	14S27	A20	10	10.4				A	92	3	0200—2300	
30			SOKOTO	NIG	05E20	13N10	C 9	50	17.4				A	100	4	0500—2400	
31			WAIMIHA	NZL	175E19	38S37	A20	30	18.0	90	250—300	10.0	B		4	0000—2400	
32			PANJGUR	PAK	65E00	27N00	A20	100	20.4				A	132	4	0000—2000	
33			CEBU CITY	PHL	123E52	10N17	C 9	5	7.4				A	139	3	2100—1600	
34			MT PROVINCE	PHL	120E37	16N26	C 9	10	10.4				A	139	3	2100—1500	
35			ISHIGAKI	RYU	124E08	24N22	A15	1	0.4				A	106	5	0000—2400	
36			NYALA	SDN	24E58	12N03	A20	250	24.6				A	221	4	0400—2200	24
37			BANGKOK	THA	100E31	13N48	A20	10	10.0				A	50	2	0000—2400	
38			AYDINCIK	TUR	33E12	36N20	D 9	600	31.0	80	140—210	13.0	B		4	0200—2300	
39			AYDINCIK	TUR	33E12	36N20	D 9	600	31.0		305— 40	18.0	B				
40			ENISEISK	URS	92E05	58N27	A16	50	17.4				A	130	4	0000—2400	
41			ORENBURG	URS	54E47	51N46	A16	100	22.1				A	257	4	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	549		LES TREMBLES	ALG	00W37 35N17	D 9	600	29.9				A	268	4	0000—2400	
2	(3)		DIRIYAH	ARS	46E37 24N39	C10	1	0.4				A	107	4	0300—2300	
3			DUBA	ARS	35E36 27N25	C 9	2000	41.0	296	350—250	25.0	B		4	0300—1600	
4			GIZAN	ARS	42E31 16N52	C 9	1000	35.0	120	220— 80	15.0	B		4	1500—0300	
5		S	CUMNOCK NSW	AUS	148E42 32S46	A20	50	17.6				A	198	4	1900—1400	
6		S	GRAFTON NSW	AUS	153E07 29S29	A20	50	17.4				A	152	3	1900—1400	
7		S	MINSK	BLR	27E34 53N56	A16	1000	32.1				A	257	4	0000—2400	
8		S	SANMING	CHN	117E36 26N14	A20	100	22.1				A	240	4	2000—1800	
9		S	ZHANGZHOU	CHN	117E40 24N30	A20	100	22.1				A	240	4	2000—1800	
10		S	BAYREUTH	D	11E30 50N00	D 9	200	23.6				A	200	4	0000—2400	
11		S	RECKLINGHAUSEN	D	07E25 51N45	D 9	100	20.4	55	200—270	12.0	B		4	0000—2400	
12		S	ALMANSA	E	01W06 38N52	D 9	0.3	—5.2				A	50	5	0000—2400	19
13		S	BAZA	E	02W46 37N29	D 9	0.3	—5.2				A	50	5	0000—2400	19
14		S	BEJAR	E	05W46 40N23	D 9	0.3	—5.2				A	50	5	0000—2400	19
15		S	CD REAL	E	03W56 38N59	D 9	0.5	—3.0				A	50	4	0000—2400	19
16		S	CUENCA	E	02W08 40N04	D 9	0.5	—3.0				A	50	5	0000—2400	19
17		S	LOGRONO	E	02W30 42N26	D 9	20	13.4				A	96	4	0000—2400	19
18		S	MALAGA	E	04W29 36N38	D 9	20	13.0				A	40	5	0000—2400	19
19		S	OVIEDO	E	05W52 43N23	D 9	100	20.4				A	127	5	0000—2400	19
20		S	POZOBLANCO	E	04W51 38N23	D 9	0.3	—5.2				A	50	5	0000—2400	19
21		S	TORTOSA	E	00E31 40N49	D 9	0.5	—3.0				A	50	4	0000—2400	19
22		S	VALLADOLID	E	04W43 41N39	D 9	1	0.0				A	50	4	0000—2400	19
23			ASSAB	ETH	42E46 13N01	C 9	50	17.4				A	137	3	0400—2300	
24			OYEM	GAB	11E36 01N40	C 9	20	13.4				A	100	5	0400—2400	
25			BIKANER	IND	73E22 28N01	A20	300	26.9				A	275	4	0300—0900	25
26			RANCHI	IND	85E23 23N23	C 9	200	25.1				A	275	3	0000—2400	
27			TINNEVELLY	IND	77E44 08N44	C 9	300	26.9				A	275	3	0300—1000	25
28			RAMALLAH	JOR	35E13 31N55	A20	20	13.6				A	220	5	0300—2300	
29			SEOUL	KOR	126E59 37N32	C10	5	7.4				A	90	4	0000—2400	
30			TELZNOUB	LBN	35E46 33N39	A20	100	25.0	210	297—352	1.0	B		4	0300—2400	16
31			BATU MELINTANG	MLA	101E44 05N43	A20	5	7.0				A	61	5	2200—1700	
32			KUCHING	MLA	110E20 01N33	A20	20	13.4				A	137	5	2200—1600	
33			UBURKHANGAI	MNG	102E20 46N20	A18	10	10.6				A	200	5	2200—1500	
34			KANO	NIG	08E33 12N03	C 9	50	17.4				A	125	4	0500—2300	
35			BASILAN CITY	PHL	121E58 06N42	C 9	5	7.4				A	136	3	2100—1600	
36			NAHA	RYU	127E42 26N10	A15	10	10.4				A	107	4	0000—2400	
37			KRABI	THA	98E55 08N33	A20	10	10.0				A	30	3	0000—2400	
38			LAMPANG	THA	99E31 18N17	A20	500	30.0	350			B		5	0000—2400	
39		S	ROVNO	UKR	26E14 50N39	A16	150	23.9				A	257	4	0000—2400	
40		S	SIMFEROPOL	UKR	34E03 44N58	A16	100	22.1				A	257	4	0000—2400	
41		S	ALMA ATA	URS	77E02 43N15	A16	1000	34.0	340	150—180	25.0	B		4	0000—2400	
42		S	DUCHANBE	URS	68E49 38N34	A16	50	19.1				A	257	4	0000—2400	
43		S	IAKUTSK	URS	129E42 61N51	A16	50	19.1				A	257	5	0000—2400	
44		S	KALININGRAD	URS	20E30 54N45	A16	25	16.1				A	257		0000—2400	
45		S	KICHINIOV	URS	28E52 47N00	A16	1000	33.0	90	200—210	24.0	B		4	0000—2400	
46		S	KIROVOBAD	URS	46E21 40N39	A16	65	20.2				A	257	4	0000—2400	
47		S	LENINGRAD	URS	30E00 59N44	A16	100	22.1				A	257	4	0000—2400	
48		S	MAGADAN	URS	151E50 59N40	A16	500	29.1				A	257	5	0000—2400	
49		S	MOSKVA	URS	37E08 55N54	A16	100	22.1				A	257	4	0000—2400	
50		S	NOVOKUZNETSK	URS	87E07 53N45	A18	150	23.9				A	257	4	0000—2400	
51		S	SVOBODNYI	URS	128E00 51N30	C 9	150	23.9				A	257	4	0000—2400	
52		S	TIUMEN	URS	65E30 57N02	A18	150	23.9				A	257	4	0000—2400	
53		S	UKHTA KAR	URS	31E09 65N11	A16	20	15.1				A	257	4	0000—2400	
54		S	URGHENTCH	URS	60E20 41N40	A18	150	23.9				A	257	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	549	S	VLADIVOSTOK	URS	131E58 43N09	C10	150	23.9				A	257	4	0000—2400	
2	(3)		LJUBLJANA GRAD	YUG	14E31 46N03	D 9	2	3.0				A	60	6	0000—2400	
3			KITWE	ZMB	28E12 12S46	A20	100	20.4				A	150	4	0200—2100	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	558		TOUGGOURT	ALG	06E04 33N05	A20	4	6.0				A	45	5	0600–2400	
2	(4)		UMMLAJJ	ARS	37E15 25N05	C 9	20	13.4				A	120	4	0400–1400	
3			ATHERTON QLD	AUS	145E29 17S01	A20	5					B		4	1900–1400	
4			BURNIE TAS	AUS	145E52 41S03	A20	5	7.0				A	64	3	1900–1400	
5		S	DERBY WA	AUS	123E40 17S21	A20	10	10.0				A	41	3	2100–1600	
6			MURWILLUMB NSW	AUS	153E29 28S15	A20	0.2	−7.0				A	52	4	1900–1400	
7			TOMERONG NSW	AUS	150E42 35S00	A20	1	0.4				A		3	0000–2400	
8		S	WAGIN WA	AUS	117E05 33S20	A20	50	19.1				A		3	2100–1600	
9			KHULNA	BGD	89E37 22N48	A20	100	20.4				A	122	3	0000–1800	
10		S	AKSU	CHN	80E19 41N03	A20	10	10.4				A	120	4	2000–1800	
11		S	ALTAY	CHN	88E18 47N50	A20	10	10.4				A	120	4	2000–1800	
12		S	BOLE	CHN	82E08 44N54	A20	10	10.4				A	120	4	2000–1800	
13			CHANGCHUN	CHN	125E24 43N48	A20	10	10.4				A	120	4	2000–1800	
14		S	CHANGTING	CHN	116E18 25N50	A20	10	10.4				A	120	4	2000–1800	
15		S	FUAN	CHN	119E33 27N11	A20	10	10.4				A	120	4	2000–1800	
16		S	HAMI	CHN	93E20 42N50	A20	10	10.4				A	120	4	2000–1800	
17		S	JIANYANG	CHN	118E08 27N20	A20	50	17.4				A	120	4	2000–1800	
18		S	KARAMAY	CHN	85E00 45N32	A20	10	10.4				A	120	4	2000–1800	
19		S	KORLA	CHN	86E10 41N44	A20	10	10.4				A	120	4	2000–1800	
20		S	QUANZHOU 1	CHN	118E33 24N53	A20	20	13.4				A	120	4	2000–1800	
21		S	YECHENG	CHN	77E22 37N55	A20	20	13.4				A	120	4	2000–1800	
22			DIYAGAMA	CLN	79E58 06N50	C10	50	17.0				A	60	5	0000–1800	
23			MAYOTTE 2	COM	45E14 12S45	A20	10	10.0				A	50	4	0000–2400	
24			PAPHOS	CYP	32E22 34N52	C 9	50	17.4				A	100	5	0000–2400	
25		S	NEUBRANDENBURG	DDR	13E05 53N30	D 9	10	10.0				A	50	4	0000–2400	
26		S	PUTBUS	DDR	13E39 54N32	D 9	10	10.0				A	20	3	0600–1700	
27		S	ROSTOCK	DDR	12E05 54N06	D 9	20	13.0				A	50	3	0000–2400	
28			ABU ZABAL	EGY	31E22 30N16	D 9	1000	30.6				A	205	3	0000–2400	
29			NAULU REWA	FJI	178E32 18S04	A20	10	10.0				A	60	5	1700–1200	
30			PORVOO	FNL	25E42 60N19	D 9	600	30.8	25	180–230	24.8	B		4	0000–2400	
31			BOMBAY	IND	72E54 18N53	A20	300	26.9				A	270	3	0300–1000	25
32			BOMBAY	IND	72E54 18N53	A20	100	22.1				A	270	3	1000–0300	
33			LEH	IND	77E35 34N09	A20	20	15.1				A	270	4	0300–0900	25
34			VIZAGAPATAM	IND	83E20 17N42	A20	300	26.9				A	270	4	0300–1000	25
35			QESHLAGH	IRN	50E25 36N02	A20	1000	32.1				A	258	3	0100–2200	
36			KOBE	J	135E00 34N36	A15	20	16.0	40			B		4	0000–2400	
37			NANDI HILLS	KEN	35E02 00N15	C 9	20	13.4				A	130	4	0000–2400	
38			POHANG	KOR	129E33 36N04	C10	250	28.0	280	90–110	4.0	B		5	0000–2400	
39			GBARNGA	LBR	09W28 07N28	A20	100	20.4				A	134	5	0500–2400	
40			TRIPOLI KM16	LBY	13E00 32N50	D 9	300	29.0	340	100–220	19.0	B		4	0500–1800	
41			INHAMBANE	MOZ	35E23 23S53	C10	5	7.4				A	90	4	0400–2200	
42			KARONGA	MWI	33E51 09S55	A20	10	10.4				A	92	3	0200–2300	
43			SOKOTO	NIG	05E18 12N57	C 9	250	24.4				A	115	4	0500–2300	
44			INVERCARGILL	NZL	168E37 46S19	A20	5	7.4				A	150	3	0000–2400	
45			ILOILO CITY	PHL	122E34 10N41	C 9	1	0.4				A	134	3	2100–1600	
46			QUEZON CITY	PHL	122E10 14N38	C 9	10	10.4				A	134	3	0000–2400	
47			TAGUM DAVAO	PHL	125E48 07N26	C 9	5	7.4				A	134	3	2100–1600	
48			FARO	POR	07W53 37N01	A20	10	10.4				A	90	3	0000–2400	
49		S	BORSA	ROU	24E50 47N34	A20	1	0.4				A	120	5	0300–2300	
50		S	CIMPENI	ROU	23E05 46N23	A20	1	0.4				A	120	5	0300–2300	
51		S	SINICOLAUL MAR	ROU	20E36 46N05	A20	2	3.4				A	135	2	0300–2300	
52		S	TARGU JIU	ROU	23E17 45N03	A20	200	26.0	145	270– 20	13.0	B		5	0000–2400	
53			EN NOHUD	SDN	28E23 12N40	A20	100	23.4				A	333	4	0400–1500	
54			MT CENERI	SUI	08E55 46N08	D 9	300	26.9				A	250	7	0500–2400	

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	558	CESKY KRUMLOV	TCH	14E19 48N48	A20	1	0.0				A	60	5	0000—2400	
2	(4)	MARTIN	TCH	18E55 49N04	A20	1	0.0				A	60	5	0000—2400	
3		PLZEN MESTO	TCH	13E23 49N45	A20	1	0.0				A	60	5	0000—2400	
4		USTI N ORLICI	TCH	16E24 49N58	A20	1	0.0				A	60	5	0000—2400	
5		CHAIYAPHUM	THA	102E04 15N51	A20	10	10.0				A	54	2	0000—2400	
6		SONGKHLA	THA	100E36 07N12	A20	100	23.0	220			B		3	0000—2400	
7		TAVAS	TUR	29E04 37N34	D 9	300	30.0	195	270—300	22.0	B		4	0200—2300	5/ROU
8		TAVAS	TUR	29E04 37N34	D 9	300	30.0	15	90—120	22.0	B				
9		UGLEGORSK	URS	142E10 48N59	A18	25	19.0	60	220—260	8.0	B		4	0000—2400	
10		MARIBOR	YUG	15E40 46N32	D 9	100	20.4				A	110	4	0400—1700	
11		MARIBOR	YUG	15E40 46N32	D 9	20	13.4				A	110	4	0000—2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	567		EL AAIUN	AOE	13W12 27N10	A20	5	7.0				A	30	4	0000—2400	11/E
2	(5)		JEDDAH	ARS	39E25 21N22	C10	50	17.4				A	107	3	0300—2300	24
3			BROKEN HLL NSW	AUS	141E26 32S03	A20	0.5	−3.0				A	61	2	1900—1400	
4		S	CHARLEVIL QLD	AUS	146E13 26S23	A20	10					B		2	1900—1400	
5		S	JULIA CK QLD	AUS	141E49 20S39	A20	10					B		2	1900—1400	
6			BOSSEMBELE	CAF	17E39 05N15	C 9	30	14.8				A	66	5	0400—2300	
7		S	CANGZHOU	CHN	116E51 38N18	A20	100	22.1				A	240	4	2000—1800	
8		S	QINHUANGDAO	CHN	119E32 39N55	A20	100	20.0	280	50—150	17.0	B		4	2000—1800	
9		S	ZHANGJIAKOU	CHN	114E51 40N49	A20	100	22.1				A	240	4	2000—1800	
10			SENKADAGALA	CLN	80E40 07N10	C10	20	13.4				A	116	6	0100—1800	
11			BERLIN 1	D	13E14 52N30	D 9	100	20.4				A	120	5	0000—2400	
12			HARRAR	ETH	42E08 09N18	C 9	10	10.4				A	133	3	0400—2100	
13			GOLDEN HILL	HKG	114E09 22N22	A20	20	13.4				A	92	5	2200—1800	
14		S	AOSTA	I	07E18 45N42	D 9	10	12.0	190	310	3.0	B		5	0000—2400	
15		S	AOSTA	I	07E18 45N42	D 9	10	12.0	70			B				
16		S	BOLZANO	I	11E17 46N24	D 9	25	16.0	120	290—315	11.0	B		5	0000—2400	
17		S	CALTANISSETTA	I	14E05 37N30	D 9	50	20.0	140	315—330	16.0	B		4	0000—2400	
18		S	FIRENZE	I	11E16 43N49	D 9	100	21.0	140	305—325	17.0	B		4	0000—2400	
19		S	FOGGIA	I	15E33 41N28	D 9	50	19.0	130	305—325	7.0	B		3	0000—2400	
20		S	SASSARI	I	08E27 40N45	D 9	10	13.0	70	315—330	7.0	B		4	0000—2400	
21			CUDDAPAH	IND	78E49 14N29	A20	300	26.9				A	265	3	0300—1000	25
22			DIBRUGARH	IND	94E58 27N29	A20	300	26.9				A	265	3	0000—2400	
23			GORAKHPUR	IND	83E28 26N52	C 9	100	22.1				A	265	3	0300—0900	25
24			JAISALMER	IND	70E57 26N55	A20	300	26.9				A	265	4	0300—0900	25
25			TULLAMORE 1	IRL	07W22 53N17	A20	500	29.1				A	296	4	0000—2400	
26			SAPPORO	J	141E37 43N05	A15	100	20.6				A	184	4	0000—2400	
27			NAIROBI	KEN	36E55 01S35	C 9	100	20.4				A	100	4	0000—2400	
28			CHONJU	KOR	126E52 35N49	C10	100	20.6				A	200	5	0000—2400	
29			TENOM	MLA	115E57 05N08	A20	10	10.6				A	150	5	0000—2400	
30			OUARZAZATE	MRC	06W50 30N55	C 9	100	20.6				A	200	4	0500—0300	24
31			UZALLA	NIG	05E43 06N32	C 9	100	20.4				A	140	4	0500—2300	
32			WELLINGTON	NZL	174E51 41S06	A20	100	22.1				A	218	4	0000—2400	
33			PESHAWAR	PAK	71E50 34N00	A20	300	25.2				A	121	4	0000—2000	
34			AGOO LA UNION	PHL	120E21 16N19	C 9	1	0.4				A	132	3	2100—1600	
35			BROOKES PT PAL	PHL	117E47 08N48	C 9	1	0.4				A	132	3	2100—1600	
36			TACLOBAN CITY	PHL	124E59 11N14	C 9	1	0.4				A	134	3	2100—1600	
37		S	BRASOV	ROU	25E36 45N43	A20	50	19.0	200	260—350	7.0	B		5	0300—2300	
38		S	BRASOV	ROU	25E36 45N43	A20	50	19.0	40	80—140	7.0	B				
39		S	SATU MARE	ROU	22E51 47N50	A20	50	20.0	120	240—360	7.0	B		5	0300—2300	
40			HOMS TERMALEY	SYR	36E42 34N47	C 9	300	29.8	145			B		3	0300—2400	
41			LUCENEC	TCH	19E40 48N20	A20	1	0.0				A	60	5	0000—2400	
42			POV BYSTRICA	TCH	18E28 49N26	A20	1	0.0				A	60	5	0000—2400	
43			SURIN	THA	103E31 14N54	A20	50	17.4				A	132	3	0000—2400	
44		S	ARKALYK	URS	66E30 50N30	A18	150	23.9				A	257	4	0100—1100	
45			KYZYL	URS	94E28 51N43	A18	150	22.2				A	130	4	0000—2400	
46		S	TURKESTAN	URS	68E17 43N17	A18	50	19.1				A	257	4	0000—1000	
47		S	USTKAMENOGORSK	URS	82E36 49N55	A18	150	23.9				A	257	4	0000—1000	
48			VOLGOGRAD	URS	44E28 48N42	C10	250	26.1				A	257	4	0000—2400	
49			STRUMICA	YUG	22E39 41N27	D 9	10	10.0				A	60	4	0800—1500	
50			STRUMICA	YUG	22E39 41N27	D 9	2	3.0				A	60	4	1500—0800	
51			LUBUMBASHI	ZAI	27E28 11S39	C 9	2	3.4				A	130	7	0000—2400	
52			KASAMA	ZMB	31E15 10S15	A20	50	17.6				A	185	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
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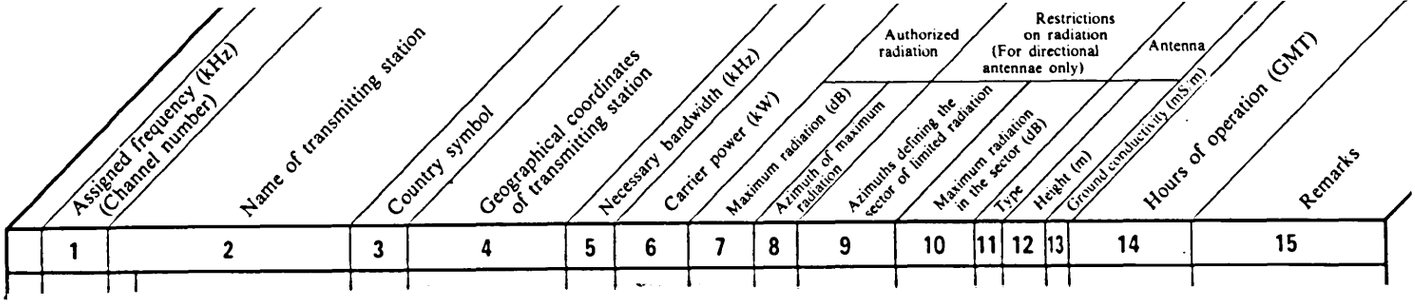
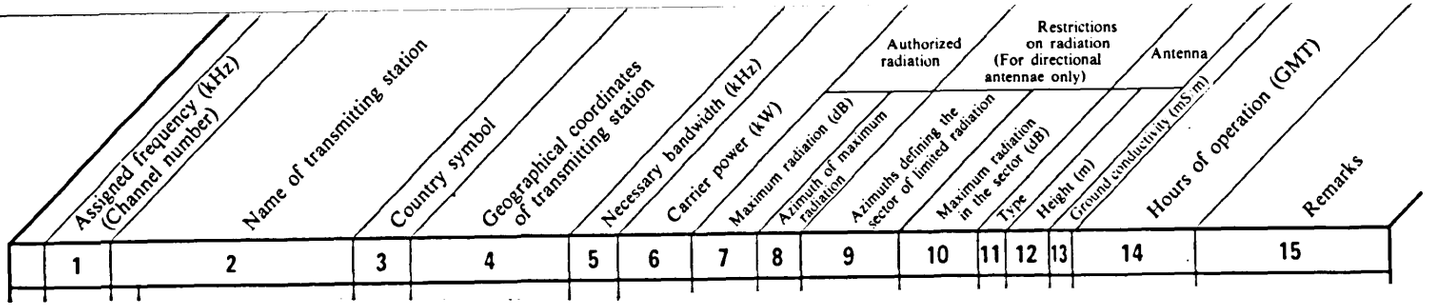
1	576		BECHAR	ALG	02W15 31N36	D 9	400	31.0	225	30— 60	21.0	B		5	0000—2400	24
2	(6)		GIZAN	ARS	42E31 16N52	C10	1	0.4				A	107	3	0300—2300	24
3			BRISBANE QLD	AUS	153E01 27S19	A20	50	17.6				A	198	3	1900—1400	
4			VIDIN	BUL	22E40 43N39	C 9	1000	35.0	125			B		4	0000—2400	5/ISR
5		S	DONGCHUAN	CHN	103E18 26N08	A20	10	10.4				A	120	5	2000—1800	
6		S	HEKOU	CHN	103E59 22N32	A20	20	13.4				A	120	5	2000—1800	
7		S	LIJIANG	CHN	100E15 26N55	A20	20	13.4				A	120	5	2000—1800	
8		S	LINCANG	CHN	100E02 23N52	A20	20	13.4				A	120	5	2000—1800	
9		S	LUCHUN	CHN	102E20 23N00	A20	10	10.4				A	120	5	2000—1800	
10		S	LUXI	CHN	98E34 24N27	A20	20	13.4				A	120	5	2000—1800	
11		S	QIUBEI	CHN	104E11 24N02	A20	50	17.4				A	120	5	2000—1800	
12		S	XIAGUAN	CHN	100E13 25N34	A20	10	10.4				A	120	5	2000—1800	
13			STUTTGART MLKR	D	08E51 48N57	D 9	300	26.9				A	273	4	0700—1600	
14			STUTTGART MLKR	D	08E51 48N57	D 9	300	26.8	222	20— 50	12.8	B		4	1600—0700	
15			STUTTGART MLKR	D	08E51 48N57	D 9	300	26.8		106—122	21.8	B				
16			SCHWERIN	DDR	11E31 53N23	D 9	250	26.0	140	40— 60	12.0	B		4	0000—2400	
17			SCHWERIN	DDR	11E31 53N23	D 9	250	26.0		230—240	12.0	B				
18			ALLEPPEY	IND	76E23 09N30	A20	200	25.1				A	260	4	0000—2400	
19			BHUJ	IND	69E43 23N15	A20	300	26.9				A	260	3	0300—0900	25
20			CUTTACK	IND	85E55 20N35	A20	300	26.9				A	260	3	0300—0900	25
21			ABADAN	IRN	48E15 30N22	A20	600	31.8	160	230— 80	25.8	B		2	0200—1500	
22			ABADAN	IRN	48E15 30N22	A20	10	10.4				A	130	2	1500—2200	
23			TEL AVIV 2	ISR	35E00 32N15	D 9	200	25.0				A	180	3	0000—2400	5/BUL 33
24			KAGOSHIMA	J	130E45 31N43	A15	10	10.4				A	103	4	0000—2400	
25			MUNSAN	KOR	126E47 37N50	C10	5	7.4				A	90	4	0000—2400	
26			SUAN	KRE	126E02 38N46	A16	10	10.4				A	110		2000—1800	
27			LUANG PRABANG	LAO	102E08 19N51	A20	10	10.4				A	100	5	2300—1400	16
28		S	JOHORE BAHRU	MLA	103E45 01N27	A20	50	17.6				A	150	5	0000—2400	
29			MIRI	MLA	113E59 04N23	A20	20	13.4				A	110	5	2200—1600	
30		S	TRONOH	MLA	100E59 04N23	A20	100	20.6				A	150	5	0000—2400	
31			IBADAN	NIG	03E55 07N32	C 9	50	17.4				A	115	4	0500—2300	
32			SURKHET	NPL	81E38 28N36	A20	100	20.4				A	120	4	2200—1900	
33			OBAN	NZL	168E08 46S52	A20	2	3.0				A	50	5	0000—2400	
34			CEBU CITY	PHL	123E53 10N18	C 9	10	10.4				A	130	3	2100—1600	
35			OLON GAPO CITY	PHL	120E16 14N49	C 9	1	0.4				A	132	3	2100—1600	
36			SOBA	SDN	32E40 15N30	A20	200	26.4				A	323	3	0400—2200	24
37			SOKONE	SEN	16W22 13N53	C10	10	10.0				A	50	4	0600—2400	
38			MAKENI	SRL	12W00 08N52	C 9	20	13.0				A	40	2	0500—2400	
39			BANGKOK	THA	100E33 13N41	A20	10	10.0				A	35	2	0000—2400	
40			MAWAGGA	UGA	32E09 00N23	C 9	100	20.4				A	130	4	0300—2100	
41		S	ACHKHABAD	URS	58E23 37N57	A18	150	23.9				A	257	4	0000—2400	
42		S	ASTRAKHAN	URS	47E42 46N55	A16	50	19.1				A	257	4	0000—2400	
43		S	DAUGAVPILS	URS	26E35 55N50	A16	5	9.1				A	257	4	0000—2400	
44		S	IAKUTSK	URS	129E42 61N51	A18	500	29.1				A	257	5	0000—2400	
45			IASNYI	URS	128E00 53N20	A18	50	19.1				A	220	4	0000—2400	
46		S	KHABAROVSK	URS	135E10 48N33	A16	150	23.9				A	257	4	0000—2400	
47		S	NALTCHIK	URS	43E35 43N28	A18	25	16.1				A	257	4	0000—2400	
48		S	OCH	URS	72E48 41N27	A16	50	19.1				A	257	4	0000—2400	
49		S	PETROPAVLO KAM	URS	158E07 53N00	A16	50	19.1				A	257	4	0000—2400	
50		S	RIGA	URS	24E05 56N51	A16	500	31.7	70	180—240	11.7	B			0000—2400	
51		S	SREDNE KOLYMSK	URS	153E33 67N28	A16	50	19.1				A	257	5	0000—2400	
52		S	SVERDLOVSK	URS	60E36 56N50	A16	100	22.1				A	257	4	0000—2400	
53		S	TCHITA	URS	113E20 52N05	A16	500	29.1				A	257	5	0000—2400	



585 KHZ (7)

	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	585		RIYADH	ARS	46E23	24N30	D10	1200	33.0	300	80—160	15.0	B		4	0300—2300	24
2	(7)		KATHERINE NT	AUS	132E15	14S28	A20	10	12.1				A		2	1900—1400	
3			MONARTO SA	AUS	139E00	35S00	A20	10	12.1				A		2	1900—1400	
4		S	DORNBIRNLAUTER	AUT	09E42	47N27	D 9	100	20.4				A	116	4	0000—2400	
5			HALLSTATT	AUT	13E40	47N33	D 9	0.1	−10.0				A	15	6	0000—2400	
6			HIEFLAU	AUT	14E45	47N36	D 9	0.1	−10.0				A	15	6	0000—2400	
7		S	KLAGENFURT SEE	AUT	14E16	46N37	D 9	100	20.4				A	105	5	0000—2400	
8			MATREI	AUT	12E33	47N00	D 9	0.1	−10.0				A	15	6	0000—2400	
9		S	SALZBURG MOOS	AUT	13E02	47N46	D 9	30	14.8				A	23	5	0000—2400	
10		S	WIEN BISAMBERG	AUT	16E23	48N19	D 9	1200	32.9				A	265	4	0000—2400	
11			LANZHOU	CHN	103E50	36N02	A20	200	25.1				A	240	4	2000—1800	
12			YATIYANTOTA	CLN	80E17	07N02	C10	20	13.4				A	130	7	0000—1800	
13			S M DI GALERIA	CVA	12E19	42N03	D 9	5	7.4				A	128	4	0630—1500	2/0110/3103
14			S M DI GALERIA	CVA	12E19	42N03	D 9	5	7.4				A	128		0530—1700	2/0104/3009
15			MADRID	E	03W52	40N28	D 9	500	29.1				A	264	4	0000—2400	19
16		S	MARSEILLE	F	05E18	43N16	D 9	10	10.0				A	50	5	0700—1500	
17		S	PARIS	F	02E25	48N53	D 9	10	10.0				A	65	3	0700—1500	
18			LIBREVILLE	GAB	09E28	00N25	C 9	100	22.1				A		4	0400—2400	
19			NAGPUR 1	IND	79E03	21N06	A20	300	26.9				A	255	3	0300—0900	25
20			NAGPUR 2	IND	79E03	21N06	A20	100	22.1				A	255	3	0900—0300	
21			SURABAJA	INS	112E45	07S14	A18	100	22.1				A	256	4	2200—1700	
22			KUSHIRO	J	144E25	42N59	A15	10	10.6				A	152	4	0000—2400	
23			DAEGU	KOR	128E35	35N50	C10	5	7.4				A	90	6	0000—2400	
24			ROBERTSPORT	LBR	11W22	06N45	A20	10	10.4				A	90	5	0500—2400	
25			ULIASUTAI	MNG	96E50	47N40	A18	10	10.6				A	200	5	2200—1500	
26			ABAKALIKI	NIG	08E05	06N17	C 9	10	10.4				A	112	4	0500—2300	
27			MAHIA	NZL	177E51	39S05	A20	10	10.6				A	150	3	0000—2400	
28			ISLAMABAD	PAK	72E30	33N51	A20	1000	32.1				A	258	3	0000—2000	
29			VIGAN ILOCO SO	PHL	120E22	17N34	C 9	1	0.4				A	128	3	2100—1600	
30		S	C BEECHEY	PNG	151E12	05S58	B10	10	10.4				A	80	6	1900—1400	
31		S	GOROKA	PNG	145E23	06S05	B10	10	10.4				A	80	5	1900—1400	
32		S	KEREMA	PNG	145E46	07S59	B10	2	3.0				A	30	3	1900—1400	
33		S	LORENGAU	PNG	147E16	02S02	B10	10	10.4				A	80	3	1900—1400	
34		S	PT MORESBY	PNG	147E12	09S26	B10	10	10.4				A	80	3	1900—1400	
35		S	WABAG	PNG	143E44	05S19	B10	10	10.4				A	80	5	1900—1400	
36			CHUMPHON	THA	99E10	10N29	A20	10	10.4				A	127	3	0000—2400	
37			PRACHINBURI	THA	101E25	14N05	A20	20	13.4				A	117	3	0000—2400	
38			GAFSA	TUN	08E48	34N25	D 9	350	27.5				A	265	6	0000—2400	24
39			PERM	URS	56E18	57N59	A16	30	16.9				A	257	4	0000—2400	
40			SVOBODNYI	URS	128E00	51N30	A16	500	31.7	50	120—220	14.7	B		4	0000—2400	
41			NHATRANG	VTN	109E11	12N07	C10	50	20.0	270			B		4	2100—1600	
42			CHUMBUNI	ZAN	39E12	06S09	C 9	50	17.4				A	128	4	0300—2100	

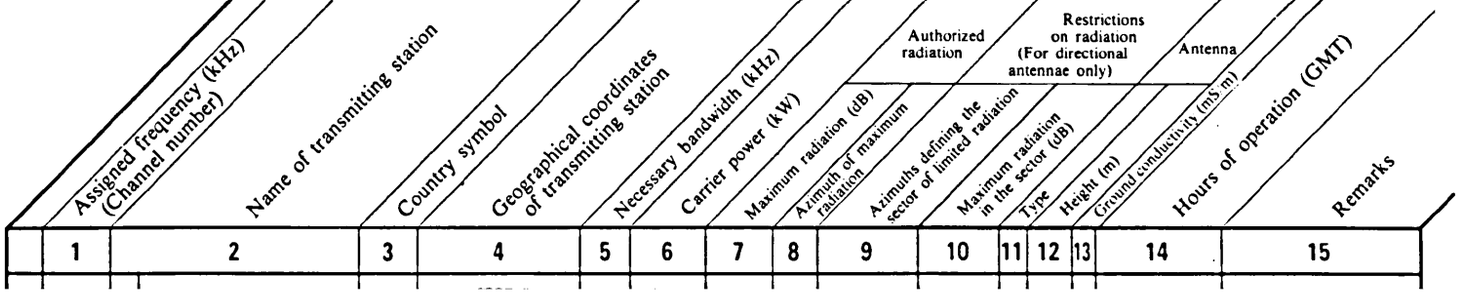


	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	594		MAIMANA	AFG	64E45	35N55	C 9	10	10.0				A	60	4	0100—2000	
2	(8)	S	DOOEN VIC	AUS	142E15	36S38	A20	50	17.6				A	201	2	1900—1400	
3		S	SALE VIC	AUS	147E06	38S11	A20	10	10.6				A	152	2	1900—1400	
4			BUKIT PUAN	BRU	114E27	04N32	A20	200	26.0	170			B		5	2200—1500	
5			PLEVEN	BUL	24E35	43N24	A18	250	26.0	185			B		4	0000—2400	
6		S	HEZE	CHN	115E27	35N15	A20	10	10.4				A	120	4	2000—1800	
7			JILONG	CHN	121E42	25N12	A20	1	0.4				A	120	5	2000—1800	
8		S	JIMO	CHN	120E28	36N23	A20	20	13.4				A	120	4	2000—1800	
9		S	JINAN	CHN	116E57	36N43	A20	100	22.1				A	240	4	2000—1800	
10		S	KENLI	CHN	118E35	37N38	A20	20	13.4				A	120	4	2000—1800	
11			LHASA	CHN	90E59	29N30	A20	300	27.0	330	180—240	22.0	B		5	2000—1800	
12			WENCHENG	CHN	120E06	27N47	A20	200	26.0	164	310— 10	2.0	B		4	2000—1800	
13		S	WULIAN	CHN	119E12	35N45	A20	10	10.4				A	120	4	2000—1800	
14		S	YANTAI	CHN	121E18	37N36	A20	10	10.4				A	120	4	2000—1800	
15		S	ZAOZHUANG	CHN	117E34	34N52	A20	10	10.4				A	120	4	2000—1800	
16			WEERAKETIYA	CLN	80E48	06N10	C10	50	20.0	250			B		5	0000—1800	
17		S	FRANKFURT MAIN	D	08E52	50N04	D 9	800	33.0	180	10— 20	18.0	B		4	0000—2400	
18		S	FRANKFURT MAIN	D	08E52	50N04	D 9	800	33.0	310	110—130	18.0	B				
19		S	HOHER MEISSNER	D	09E51	51N12	D 9	100	24.0	200	0— 50	14.0	B		4	0000—2400	
20			GHINNIR	ETH	40E15	06N30	C 9	100	20.4				A	126	3	0400—2300	
21			BOLZANO	I	11E17	46N24	D 9	10	10.4				A	124	5	0400—1700	7
22			REGGIO CALABR	I	15E39	38N06	D 9	10	10.4				A	124	5	0400—1700	7
23			VENEZIA	I	12E18	45N29	D 9	20	13.4				A	127	4	0400—1700	7
24			CALCUTTA	IND	88E21	23N01	A20	1000	30.6				A	152	3	0300—0900	25
25			MADRAS 1	IND	80E17	13N04	A20	300	26.9				A	255	3	0300—1000	25
26			MADRAS 2	IND	80E17	13N04	A20	100	23.0	0	150—210	2.0	B		3	1000—0300	
27			RAJKOT	IND	70E41	22N22	A20	300	26.9				A	255	3	0300—0900	25
28			ZAHEDAN	IRN	60E53	29N28	A20	100	20.0				A	60	4	0100—2200	
29			TOKYO	J	139E25	36N05	A15	300	26.9				A	272	4	0000—2400	
30			AJLUN	JOR	35E47	32N25	C 9	100	22.1				A	270	6	0300—2300	
31			YEONGJU	KOR	128E36	36N49	C10	10	10.4				A	120	6	0000—2400	
32			UNGGI	KRE	130E21	42N22	A16	20	13.4				A	105		2000—1800	
33			KAJANG	MLA	101E46	02N59	A20	200	23.6				A	175	5	0000—2400	
34			UNDERHAN	MNG	102E55	46N10	A18	10	10.6				A	200	5	2200—1500	
35			OUJDA	MRC	01W51	34N40	C 9	600	28.4				A	202	4	0500—2400	
36			LILONGWE	MWI	33E45	14S00	A20	50	17.4				A	92	3	0200—2300	
37			JAJI	NIG	07E23	10N50	C 9	250	24.6				A	155	4	0400—2400	
38			KHORIXAS	NMB	14E56	20S22	A20	100	23.0	240			B		3	0000—2400	
39			TIMARU	NZL	171E16	44S21	A20	5	7.0				A	53	4	0000—2400	
40			MALAYBALAY BUK	PHL	125E07	08N08	C 9	2.5	4.4				A	126	3	2100—1600	
41			MALOLOS BUL	PHL	120E57	14N41	D 9	10	13.0	155	65—245	3.0	B		3	2100—1600	
42		S	BRAGA 2	POR	08W10	41N37	A20	10	10.4				A	90	5	0000—2400	
43		S	CHAVES 2	POR	07W25	41N45	A20	1	0.4				A	90	5	0000—2400	
44		S	EVORA 2	POR	07W54	38N32	A20	1	0.4				A	90	3	0000—2400	
45		S	MIRANDA DOURO2	POR	06W16	41N29	A20	1	0.4				A	90	6	0000—2400	
46		S	MONTEMORVELHO2	POR	08W38	40N12	A20	100	20.6				A	180	5	0000—2400	
47		S	PORTALEGRE 2	POR	07W25	39N18	A20	1	0.4				A	90	5	0000—2400	
48			LULEAA PITEAA	S	21E35	65N18	D 9	600	30.0				A	250	5	0000—2400	
49			KHON KAEN	THA	102E50	16N25	A20	10	10.4				A	127	3	0000—2400	
50			MALATYA	TUR	38E00	38N30	D 9	300	28.0	260	295—315	15.0	B		4	0200—2300	
51			MALATYA	TUR	38E00	38N30	D 9	300	28.0	100	180—210	10.0	B				
52			MALATYA	TUR	38E00	38N30	D 9	300	25.0	0	45— 55	10.0	B				
53			KIEV	UKR	30E49	50N30	A16	300	26.9				A	220	4	0200—1500	21

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

594 KHZ (8)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	594	S	ENISEISK	URS	92E05 58N21	A16	150	23.9				A	257	4	0000–2400	
2	(8)	S	IJEVSK	URS	53E14 56N49	C10	150	26.7	120	260–340	16.7	B		4	0000–2400	
3			KIROV	URS	49E41 58N36	A18	150	23.9				A	257	4	0200–1000	
4		S	ORDJONIKIDZE	URS	44E21 43N01	A16	25	16.1				A	257	4	0000–2400	
5		S	SURGUT	URS	73E30 61N15	A18	500	29.1				A	257	4	0000–2400	
6		S	USTKAMENOGORSK	URS	82E36 49N55	A18	50	19.1				A	257	4	0000–2400	
7			CERKNO	YUG	13E59 46N08	D 9	1	0.0				A	60	8	0800–1500	
8			MWINILUNGA	ZMB	24E27 11S43	A20	10	10.4				A	112	4	0200–2100	

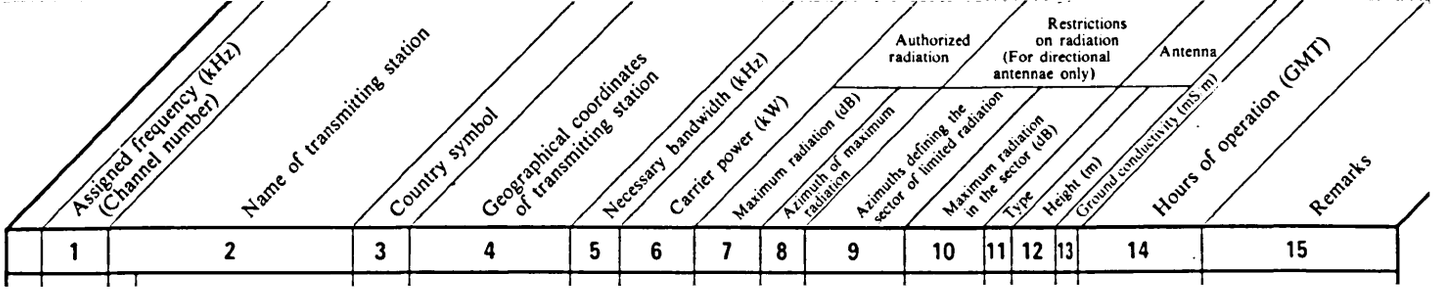


	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	603		BURAIDA	ARS	44E00	26N20	C 9	20	13.4				A	120	7	0400—1400	24
2	(9)	S	CAIRNS QLD	AUS	145E47	17S03	A20	2	3.0				A	43	5	1900—1400	
3		S	DALWALLINU WA	AUS	116E36	30S17	A20	10	12.1				A	213	2	2100—1600	
4			GYMPIE QLD	AUS	152E49	26S10	A20	5					B		4	1900—1400	
5			HOBART TAS	AUS	147E30	42S55	A20	10	10.6				A	201	5	2000—1500	
6		S	MOSSMAN QLD	AUS	145E23	16S25	A20	1	0.0				A	61	4	1900—1400	
7		S	PT HEDLAND WA	AUS	118E40	20S24	A20	50	17.0				A	41	3	2100—1600	
8		S	DEQING	CHN	111E46	23N09	A20	20	13.4				A	120	4	2000—1800	
9		S	JIANGMEN	CHN	113E07	22N32	A20	30	15.2				A	120	4	2000—1800	
10		S	MEI XIAN	CHN	116E00	24N20	A20	100	22.1				A	240	4	2000—1800	
11			WUHAN	CHN	114E20	30N36	A20	10	10.4				A	120	4	2000—1800	
12		S	YA XIAN	CHN	109E28	18N17	A20	50	17.4				A	120	4	2000—1800	
13			WELIMADA	CLN	80E57	06N50	C10	50	17.6				A	140	7	0000—1800	
14			BRAZZAVILLE	COG	15E18	04S16	A20	100	22.1				A	249	5	0000—2400	
15			NICOSIA	CYP	33E23	35N09	C 9	600	28.2				A	100	4	0000—2400	18/ROU
16			KOENIGSWUSTERH	DDR	13E37	52N18	D 9	30	15.2				A	85	4	0000—2400	
17			RAS BANAS	EGY	35E45	23N55	D 9	1000	36.0	70	150—170	20.0	B		3	0400—2400	24
18			LYON	F	04E57	45N52	D 9	300	26.9				A	220	3	0000—2400	
19			MARIEHAMN 1	FNL	19E51	60N07	D 9	300	26.8	20	160—240	20.8	B		3	0000—2400	
20			KANKAN	GUI	09W17	10N20	C 9	100	20.4				A	132	4	0000—2400	
21			PALERMO	I	13E21	38N10	D 9	20	13.6				A	152	4	0400—1700	26/F
22			POTENZA	I	15E48	40N38	D 9	20	13.4				A	128	5	0400—1700	26/F
23			AJMER	IND	74E42	26N27	A20	200	25.1				A	250	4	0000—2400	
24			LUCKNOW	IND	80E52	26N45	A20	300	26.9				A	235	3	0300—0900	25
25			RAIPUR	IND	81E41	21N15	A20	300	26.9				A	250	3	0300—0900	25
26			ZABOL	IRN	61E29	31N02	A20	20	13.4				A	125	2	0100—2200	
27			NAYORO	J	142E28	44N22	A15	1	0.4				A	67	5	0000—2400	
28			OKAYAMA	J	133E54	34N37	A15	5	7.4				A	110	4	0000—2400	
29			NAM YANG	KOR	126E45	37N15	C10	500	29.0	350	140—200	20.0	B		5	0000—2400	
30			FUNCHAL 1	MDR	16W55	32N43	A20	10	10.4				A	90	4	0000—2400	
31			BATU PAHAT	MLA	102E55	01N51	A20	10	10.0				A	61	5	2200—1700	
32			TUARAN	MLA	116E11	06N11	A20	10	10.6				A	150	5	0000—2400	
33		S	BAIANHONGOR	MNG	100E40	46N10	A18	25	14.6				A	200	5	2200—1500	
34		S	MUREN	MNG	100E10	49N30	A18	25	14.6				A	200	5	2200—1500	
35		S	ULAN GOM	MNG	92E00	50N00	A18	25	14.6				A	200	5	2200—1500	
36			ABAFON	NIG	03E31	06N41	C 9	50	21.0	285			B		4	0400—2300	
37		S	AUCKLAND	NZL	174E38	36S51	A20	5	7.6				A	150	3	0000—2400	
38		S	PAENGAROA	NZL	176E25	37S49	A20	5	7.6				A	150	3	0000—2400	
39			ZAMBOANGA CITY	PHL	122E04	06N56	C 9	10	10.4				A	124	3	2100—1600	
40		S	AITAPE	PNG	142E20	03S08	D10	10	10.4				A	80	3	1900—1400	
41		S	BUIN	PNG	155E42	06S47	D10	10	10.4				A	80	5	1900—1400	
42		S	MT HAGEN	PNG	144E18	05S50	D10	10	10.4				A	80	5	1900—1400	
43		S	SOHANO	PNG	153E41	05S26	D10	2	3.0				A	30	5	1900—1400	
44		S	TALASEA	PNG	150E03	05S19	D10	10	10.4				A	80	6	1900—1400	
45		S	WANIGELA	PNG	149E11	09S51	D10	10	10.4				A	80	3	1900—1400	
46			S ANDRE 1	REU	55E40	20S55	A20	300	26.9				A	220	5	0000—2400	
47		S	BUCURESTI	ROU	26E06	44N28	A20	30	16.9				A	240	8	0000—2400	18/CYP
48		S	ORADEA	ROU	21E58	47N03	A20	50	17.4				A	120	4	0000—2400	
49		S	TURNU SEVERIN	ROU	22E42	44N36	A20	15	11.8				A	40	5	0300—2300	
50			RUMBEK	SDN	29E38	06N48	A20	50	20.4				A	313	3	0600—1600	24
51			BELET WEYN	SOM	45E10	04N40	A18	25	14.4				A	120	4	0300—2100	16
52			DETVA	TCH	19E24	48N35	A20	1	0.0				A	60	5	0000—2400	
53			KOSICE MESTO	TCH	21E15	48N43	A20	1	0.0				A	60	5	0000—2400	
54			PRAHA MESTO	TCH	14E25	50N05	A20	1	0.0				A	60	5	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	603	VSETIN	TCH	18E00 49N21	A20	1	0.0				A	60	5	0000—2400	
2	(9)	DODOMA	TGK	35E30 06S10	C 9	100	20.4				A	125	4	0300—2100	
3		BANGKOK	THA	100E31 13N48	A20	20	13.4				A	125	2	0000—2400	
4		SOUSSE	TUN	10E40 35N50	D 9	10	12.1				A		4	0000—2400	24
5		ANDIJAN	URS	72E27 40N47	A18	50	19.1				A	220	4	0000—2400	
6		SPASSK DALNII	URS	132E47 44N38	A18	10	12.1				A	220	4	0000—2400	
7		DANANG	VTN	108E17 16N04	C10	50	20.0	225			B		4	2100—1600	16
8		HIZYAZ	YEM	44E11 15N22	C 9	300	25.2				B		3	0300—1400	24
9		GEMENA	ZAI	19E46 03N17	C 9	10	10.0				A	60	8	0000—2400	
10		GOMA	ZAI	29E14 01S41	C 9	10	10.0				A	60	8	0000—2400	
11		TSHIKAPA	ZAI	20E48 06S28	C 9	10	10.0				A	60	8	0000—2400	
12		MONGU	ZMB	23E08 15S15	A20	50	17.6				A	174	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	612		LUANDA	AGL	13E49 08S48	A20	5	7.4				A	120	3	0000—2400	
2	(10)		GURIAT	ARS	37E25 31N25	C 9	2000	41.0	328	20—270	25.0	B		4	0300—1600	24 27
3			BYROCK NSW	AUS	146E25 30S39	A20	10	12.1				A		3	1900—1400	
4			NORTHAM WA	AUS	116E40 31S39	A20	1	0.4				A	86	4	2100—1600	
5			SYDNEY NSW	AUS	150E53 33S56	A20	50	19.1				A	226	4	2000—1500	
6		S	JIAMUSI	CHN	130E30 46N40	A20	50	17.4				A	120	4	2000—1800	
7		S	JIXI	CHN	130E58 45N18	A20	50	18.0	320	130—190	11.0	A		4	2000—1800	
8		S	MOHE	CHN	122E10 53N21	A20	50	17.4				A	120	4	2000—1800	
9		S	PUTIAN	CHN	119E01 25N25	A20	10	10.4				A	120	4	2000—1800	
10		S	RAOHE	CHN	134E00 46N40	A20	50	17.4				A	120	4	2000—1800	
11		S	SANMING	CHN	117E36 26N14	A20	100	23.0	220	10— 70	16.0	A		4	2000—1800	
12		S	SONGZHENG	CHN	118E45 27N32	A20	10	10.4				A	120	4	2000—1800	
13		S	WUPING	CHN	116E06 25N05	A20	10	10.4				A	120	4	2000—1800	
14		S	ZHANGZHOU	CHN	117E40 24N30	A20	50	17.4				A	120	4	2000—1800	
15			DEBRA MARKOS	ETH	37E44 10N20	C 9	10	10.4				A	122	3	0400—1500	
16			AGANA	GUM	144E45 13N27	C10	10	10.4				A	98	3	0000—2400	
17			BANGALORE	IND	77E38 12N58	C 9	300	27.0	195	300—340	19.0	B		3	0000—2400	
18			IMPHAL	IND	93E58 24N44	A20	300	26.9				A	245	3	0300—0900	25
19			SRINAGAR	IND	74E49 34N04	A20	300	28.2				A	275	3	0300—0900	25
20			TULLAMORE 3	IRL	07W22 53N17	A20	200	26.4				A	300	4	0000—2400	
21			QASR SHIRIN	IRN	45E35 34N31	A20	400	30.0	270	40	6.0	B		3	0200—1600	
22			QASR SHIRIN	IRN	45E35 34N31	A20	200	27.0	270	40	3.0	B		3	1600—2200	
23			EZYON	ISR	34E57 29N35	D 9	30	20.0	200			B		1	0000—2400	33
24			FUKUOKA	J	130E27 33N32	A15	100	20.6				A	157	4	0000—2400	
25			KALLIA	JOR	35E30 31N46	A20	20	13.6				A	200	5	0300—2300	24
26			NAIROBI	KEN	36E55 01S35	C 9	100	20.4				A	122	4	0000—2400	
27			KANGAR	MLA	100E13 06N29	A20	10	10.0				A	61	5	2200—1700	
28			SEBAA AIOUN	MRC	05W23 33N53	A20	300	26.9				A	220	4	0500—0300	24
29			ABA	NIG	07E22 05N07	C 9	50	17.4				A	80	4	0500—2300	
30			GWADAR	PAK	62E30 25N10	A20	1000	34.0	240	0	24.0	B		4	0200—1300	
31			GWADAR	PAK	62E30 25N10	A20	500	31.0	240	0	21.0	B		4	1300—0200	
32			BAGUIO CITY	PHL	120E35 16N24	C 9	10	10.4				A	122	3	2100—1600	
33			CEBU CITY	PHL	123E51 10N15	C 9	5	7.4				A	122	3	2100—1600	
34			BAKEL	SEN	12W35 14N58	C 9	20	13.4				A	100	4	0600—2400	
35			BONGOR	TCD	15E22 10N17	C 9	30	16.9				A			0400—2300	
36			LOPBURI	THA	100E54 14N53	A20	20	13.4				A	114	5	0000—2400	
37		S	BAKU	URS	49E45 40N24	A16	25	19.0	330	160—220	7.0	B		4	0000—2400	
38		S	ELISTA	URS	44E15 46N19	A18	50	19.1				A	220	4	0000—2400	
39		S	FRUNZE	URS	74E30 42N54	C10	300	26.9				A	220	4	0000—2400	
40		S	KAVATCHA	URS	169E30 60N20	A18	50	19.1				A	220	5	0000—2400	
41		S	KRASNOGORSKMOS	URS	37E54 56N05	A16	100	22.1				A	220	4	0000—2400	
42		S	MURMANSK	URS	32E46 68N48	A16	30	16.9				A	220	5	0000—2400	
43		S	PAVLODAR	URS	76E57 52N18	A18	150	23.9				A	220	4	0000—2400	
44		S	PETROZAVODSK	URS	34E20 61N48	A16	100	22.1				A	220	4	0000—2400	
45		S	TARTU	URS	26E35 58N23	A16	100	22.1				A	220	4	0000—2400	
46		S	TOBOLSK	URS	68E17 58N12	A18	150	23.9				A	220	4	0000—2400	
47		S	VILNIUS	URS	25E18 54N40	A16	25	16.1				A	220	4	0200—2200	
48			SAIGON	VTN	106E38 10N51	A10	20	13.4				A	85	3	2200—1600	
49		S	BIHAC	YUG	15E53 44N48	D 9	100	20.4				A	125	4	0000—2400	
50		S	SARAJEVO	YUG	18E09 44N01	D 9	600	29.9				A	250	4	0000—2400	
51		S	TREBINJE	YUG	18E23 42N44	D 9	100	20.4				A	125	5	0000—2400	



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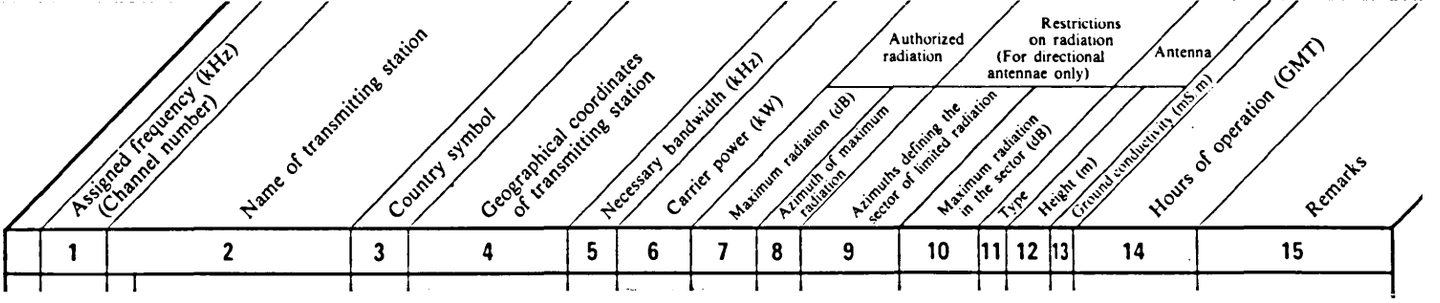
1	621		GHAZNI	AFG	68E20 33N32	C 9	10	10.0				A	60	4	0100—2000	
2	(11)		MELBOURNE VIC	AUS	144E47 37S43	A20	50	19.1				A	216	2	2000—1500	
3			BRUXELLES WAVR	BEL	04E35 50N45	D 9	600	29.9				A	245	4	0000—2400	
4			ORAPA	BOT	25E20 21S15	A20	50	17.4				A	100	4	0300—2100	
5		S	AIHUI	CHN	127E20 50N18	A20	50	17.4				A	120	4	2000—1800	
6		S	DARLA	CHN	99E33 33N42	A20	10	10.4				A	120	5	2000—1800	
7		S	ERGUNE ZUOQI	CHN	121E30 50N50	A20	20	13.4				A	120	4	2000—1800	
8		S	GANGCA	CHN	100E10 37N20	A20	20	13.4				A	120	5	2000—1800	
9		S	HARBIN	CHN	126E52 45N49	A20	100	22.1				A	240	4	2000—1800	
10		S	MANZHOULI	CHN	117E30 49N28	A20	50	17.4				A	120	4	2000—1800	
11		S	QIQIHAR	CHN	123E58 47N18	A20	20	13.4				A	120	4	2000—1800	
12		S	TONGREN 1	CHN	102E01 35N31	A20	10	10.4				A	120	5	2000—1800	
13			DIYAGAMA	CLN	79E58 06N50	C10	20	13.4				A	100	5	0000—1800	
14			S CRUZ TENERIF	CNR	16W16 28N28	A20	200	23.4				A	110	4	0000—2400	
15			BATRA	EGY	31E27 31N09	D 9	1000	36.0	110	320—330	26.0	B		3	0000—2400	24
16			HONG KONG 6	HKG	114E02 22N17	A20	10	10.4				A	91	5	0000—2400	
17		S	C SPULICO	I	16E35 39N59	D 9	50	21.0	40	115—145	7.0	B		4	0000—2400	
18		S	C SPULICO	I	16E35 39N59	D 9	50	21.0	220	310—320	7.0	B				
19		S	CITTA CASTELLO	I	12E16 43N27	D 9	25	14.0	145	320—330	4.0	B		5	0000—2400	
20		S	S REMO	I	07E47 43N49	D 9	2	3.4				A	75	5	0000—2400	
21			JAIPUR	IND	75E50 26N54	A20	300	26.9				A	245	4	0300—0900	25
22			PATNA	IND	85E13 25N37	A20	200	26.0	130	35— 45	16.0	B		3	0000—2400	
23			PATNA	IND	85E13 25N37	A20	200	26.0		205—235	17.0	B				
24			BIRJAND	IRN	59E12 32N52	A20	20	13.4				A	120	3	0200—2100	
25			ASAHIKAWA	J	142E25 43N46	A15	3	6.8	20			B		5	0000—2400	
26			IIDA	J	137E51 35N30	A15	1	0.4				A	102	5	0000—2400	
27			KYOTO	J	135E45 35N01	A15	1	0.0				A	52	5	0000—2400	
28			NOBEOKA	J	131E41 32N34	A15	1	0.4				A	102	5	0000—2400	
29			HWANG JI	KOR	128E59 37N10	C10	1	0.4				A	100	6	0000—2400	
30			SUGWIPO	KOR	126E34 33N14	C10	10	10.0				A	60	4	0000—2400	
31			YEONGDONG	KOR	127E46 36N10	C10	1	0.0				A	60	6	0000—2400	
32			SEGAMAT	MLA	102E52 02N29	A20	100	20.6				A	150	5	2200—1700	
33			SIBU	MLA	111E49 02N18	A20	20	13.4				A	135	5	2200—1600	
34			ENUGU 9TH MILE	NIG	07E21 06N27	C 9	50	19.1				A	242	4	0500—2300	
35			HAAST	NZL	169E02 43S49	A20	2	3.0				A	50	6	0000—2400	
36			DAVAO CITY	PHL	125E35 07N03	C 9	5	7.4				A	120	3	2100—1600	
37			NAGA CITY	PHL	123E11 13N37	C 9	5	7.4				A	120	3	2100—1600	
38			TUGUEGARAO CAG	PHL	121E45 17N36	C 9	1	0.4				A	120	3	2100—1600	
39			RASHAD	SDN	31E31 11N39	A20	100	23.4				A	304	4	0600—1600	24
40			ZVOLEN	TCH	19E17 48N35	A20	1	0.0				A	60	5	0000—2400	
41			MBEYA	TGK	33E30 09S00	C 9	50	17.4				A	121	4	0300—2100	
42			UDON THANI	THA	102E48 17N24	A20	100	23.0	70			B		3	0000—2400	
43			FUNAFUTI	TUV	179E12 08S30	A20	2	3.0				A	31	1	1800—1000	
44			KEMEROVO	URS	86E00 55N22	C10	150	26.7	310	100—150	18.7	B		4	0000—2400	
45			MAKHATCHKALA	URS	47E12 42N50	A16	50	21.7	270	50—120	11.7	B		4	0000—2400	
46			UKHTA	URS	53E07 63N06	A16	150	23.9				A	220	4	0000—2400	



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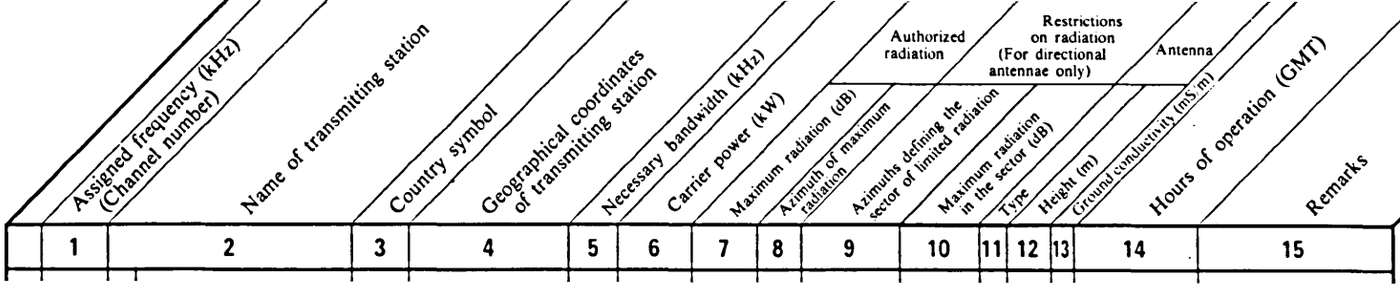
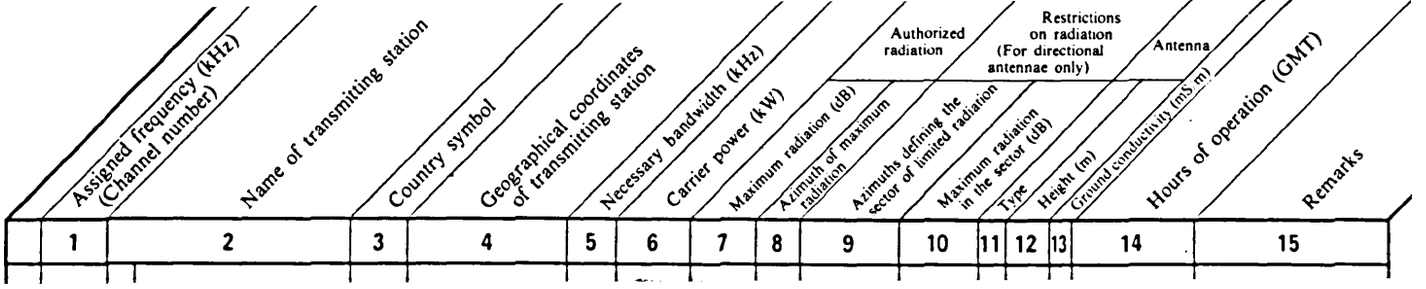
1	630		HERAT	AFG	62E12 34N20	C 9	20	13.0				A	60	4	0100—2000	
2	(12)		QUEENSTOWN TAS	AUS	145E31 42S03	A20	0.4	—4.0				A	53	5	1900—1400	
3		S	ROCKHAMPTON QL	AUS	150E27 23S27	A20	10	10.4				A	128	3	1900—1400	
4		S	TOWNSVILLE QLD	AUS	147E20 19S31	A20	50	19.1				A	198	4	1900—1400	
5		S	GRAZ DOBL	AUT	15E23 46N57	D 9	100	20.6				A	156	4	0700—1500	2/0110/3103
6		S	GRAZ DOBL	AUT	15E23 46N57	D 9	100	20.6				A	156		0500—1700	2/0104/3009
7		S	GRAZ DOBL	AUT	15E23 46N57	D 9	50	17.6				A	156	4	1500—0700	2/0110/3103
8		S	GRAZ DOBL	AUT	15E23 46N57	D 9	50	17.6				A	156		1700—0500	2/0104/3009
9		S	INNSBRUCK ALDR	AUT	11E27 47N15	D 9	30	15.4				A	151	6	0700—1500	2/0110/3103
10		S	INNSBRUCK ALDR	AUT	11E27 47N15	D 9	30	15.4				A	151		0500—1700	2/0104/3009
11		S	INNSBRUCK ALDR	AUT	11E27 47N15	D 9	30	15.4				A	151	6	1500—0700	2/0110/3103
12		S	INNSBRUCK ALDR	AUT	11E27 47N15	D 9	30	15.4				A	151		1700—0500	2/0104/3009
13		S	LIENZ OSTTIROL	AUT	12E47 46N49	D 9	30	15.2				A	104	7	0700—1500	2/0110/3103
14		S	LIENZ OSTTIROL	AUT	12E47 46N49	D 9	30	15.2				A	104		0500—1700	2/0104/3009
15		S	LIENZ OSTTIROL	AUT	12E47 46N49	D 9	10	10.4				A	104	7	1500—0700	2/0110/3103
16		S	LIENZ OSTTIROL	AUT	12E47 46N49	D 9	10	10.4				A	104		1700—0500	2/0104/3009
17			RADENTHEIN	AUT	13E40 46N49	D 9	0.1	—10.0				A	15	6	0000—2400	
18			DACCA	BGD	90E26 23N43	A20	100	20.4				A	122	3	0000—1800	
19		S	ANDA SHI	CHN	125E20 46N30	A20	20	13.4				A	120	4	2000—1800	
20		S	ANSHUN SHI	CHN	105E55 26N15	A20	10	10.4				A	120	5	2000—1800	
21		S	BAIRIN ZUOQI	CHN	119E12 43N58	A20	20	13.4				A	120	4	2000—1800	
22		S	BARKAM	CHN	102E27 31N42	A20	5	7.4				A	120	4	2000—1800	
23		S	BENXI SHI	CHN	123E38 41N10	A20	10	10.4				A	120	4	2000—1800	
24		S	BIJIE	CHN	105E16 27N18	A20	5	7.4				A	120	5	2000—1800	
25		S	BIN XIAN	CHN	118E02 37N22	A20	5	7.4				A	120	4	2000—1800	
26		S	CHANGZHI SHI	CHN	113E06 36N10	A20	20	13.4				A	120	4	2000—1800	
27		S	CHEN XIAN	CHN	113E02 25N48	A20	20	13.4				A	120	4	2000—1800	
28		S	CHIFENG SHI	CHN	118E52 42N18	A20	30	15.2				A	120	4	2000—1800	
29		S	CHONGQING	CHN	106E30 29N45	A20	20	13.4				A	120	4	2000—1800	
30		S	DANBA	CHN	101E53 30N53	A20	2	3.4				A	120	4	2000—1800	
31		S	DANGSHAN	CHN	116E21 34N26	A20	5	7.4				A	120	4	2000—1800	
32		S	DATONG SHI	CHN	113E10 40N05	A20	20	13.4				A	120	4	2000—1800	
33		S	DEGE	CHN	98E37 31N46	A20	5	7.4				A	120	4	2000—1800	
34		S	DEJIANG	CHN	108E08 28N10	A20	20	13.4				A	120	5	2000—1800	
35		S	DINGXI	CHN	104E30 35N20	A20	5	7.4				A	120	4	2000—1800	
36		S	DUKOU	CHN	101E43 26N35	A20	5	7.4				A	120	4	2000—1800	
37		S	ENPING	CHN	112E18 22N11	A20	10	10.4				A	120	4	2000—1800	
38		S	FUJIN	CHN	132E01 47N20	A20	50	17.4				A	120	4	2000—1800	
39		S	FUYANG	CHN	115E51 32N54	A20	5	7.4				A	120	4	2000—1800	
40		S	GANZHOU	CHN	114E54 25N48	A20	20	13.4				A	120	4	2000—1800	
41		S	GAOXIONG SHI	CHN	120E18 22N36	A20	50	17.4				A	120	5	2000—1800	
42		S	GUANGCHANG	CHN	116E16 26N52	A20	5	7.4				A	120	4	2000—1800	
43		S	GUANGZHOU	CHN	113E14 23N11	A20	100	22.1				A	240	4	2000—1800	
44		S	HANGZHOU	CHN	120E08 30N16	A20	50	17.4				A	120	4	2000—1800	
45		S	HUANREN	CHN	125E21 41N15	A20	5	7.4				A	120	4	2000—1800	
46		S	HULIN	CHN	132E58 45N45	A20	20	13.4				A	120	4	2000—1800	
47		S	HUZHONG	CHN	123E32 52N05	A20	20	13.4				A	120	4	2000—1800	
48		S	JINGTAI	CHN	104E08 37N06	A20	10	10.4				A	120	4	2000—1800	
49		S	JINING SHI	CHN	116E35 35N28	A20	20	13.4				A	120	4	2000—1800	
50		S	JISHOU	CHN	109E43 28N19	A20	20	13.4				A	120	4	2000—1800	
51		S	LENGSHUIJIANG	CHN	111E23 27N44	A20	10	10.4				A	120	4	2000—1800	
52		S	LIAN XIAN	CHN	112E23 24N47	A20	20	13.4				A	120	4	2000—1800	
53		S	LINYI	CHN	118E20 35N04	A20	10	10.4				A	120	4	2000—1800	
54		S	LISHUI	CHN	119E54 28N28	A20	10	10.4				A	120	4	2000—1800	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	630	S	LONGCHUAN	CHN	115E11 24N04	A20	20	13.4				A	120	4	2000—1800	
2	(12)	S	LUAN	CHN	116E30 31N45	A20	10	10.4				A	120	4	2000—1800	
3		S	LUODIAN	CHN	106E40 25N29	A20	20	13.4				A	120	5	2000—1800	
4		S	MIANYANG	CHN	113E13 30N11	A20	10	10.4				A	120	4	2000—1800	
5		S	MULAN	CHN	128E02 45N57	A20	10	10.4				A	120	4	2000—1800	
6		S	NANCHANG SHI	CHN	115E54 28N42	A20	50	17.4				A	120	4	2000—1800	
7		S	NEIJIANG SHI	CHN	105E15 29N39	A20	2	3.4				A	120	4	2000—1800	
8		S	NENJIANG	CHN	125E02 49N05	A20	20	13.4				A	120	4	2000—1800	
9		S	PINGLIANG	CHN	106E38 35N18	A20	5	7.4				A	120	4	2000—1800	
10		S	PINGXIANG 2	CHN	113E52 27N37	A20	10	10.4				A	120	4	2000—1800	
11		S	QICHUN	CHN	115E20 30N04	A20	10	10.4				A	120	4	2000—1800	
12		S	QINGLONG	CHN	105E13 25N51	A20	5	7.4				A	120	5	2000—1800	
13		S	RONGJIANG	CHN	108E31 25N55	A20	10	10.4				A	120	5	2000—1800	
14		S	SHANTOU	CHN	116E36 23N30	A20	20	13.4				A	120	4	2000—1800	
15		S	SHENGSI	CHN	122E27 30N44	A20	5	7.4				A	120	4	2000—1800	
16		S	SHIBING	CHN	108E07 27N03	A20	10	10.4				A	120	5	2000—1800	
17		S	SHIMIAN	CHN	102E27 29N12	A20	1	0.4				A	120	4	2000—1800	
18		S	TAIYUAN	CHN	112E33 37N45	A20	50	17.4				A	120	4	2000—1800	
19		S	TAIZHONG SHI	CHN	120E41 24N09	A20	50	17.4				A	120	5	2000—1800	
20		S	TIANJIN	CHN	117E09 39N09	A20	20	13.4				A	120	4	2000—1800	
21		S	WANXIAN SHI	CHN	108E33 30N52	A20	20	13.4				A	120	4	2000—1800	
22		S	WEIFANG	CHN	119E06 36N43	A20	50	17.4				A	120	4	2000—1800	
23		S	WEIHAI	CHN	122E07 37N31	A20	5	7.4				A	120	4	2000—1800	
24		S	WUDU	CHN	104E55 33N24	A20	5	7.4				A	120	4	2000—1800	
25		S	WUGANG	CHN	110E38 26N43	A20	20	13.4				A	120	4	2000—1800	
26		S	WUHE	CHN	117E53 33N09	A20	10	10.4				A	120	4	2000—1800	
27		S	WUHU SHI	CHN	118E24 31N18	A20	5	7.4				A	120	4	2000—1800	
28		S	XIANGSHAN	CHN	121E52 29N28	A20	5	7.4				A	120	4	2000—1800	
29		S	XIUNING	CHN	118E10 29N47	A20	5	7.4				A	120	4	2000—1800	
30		S	YAAN	CHN	103E01 29N59	A20	5	7.4				A	120	4	2000—1800	
31		S	YAJIANG	CHN	100E57 30N05	A20	5	7.4				A	120	4	2000—1800	
32		S	YIBIN SHI	CHN	104E37 28N46	A20	5	7.4				A	120	4	2000—1800	
33		S	YICHANG SHI	CHN	111E12 30N48	A20	50	17.4				A	120	4	2000—1800	
34		S	YICHUN 2	CHN	128E45 47N40	A20	50	17.4				A	120	4	2000—1800	
35		S	YILAN	CHN	121E45 24N45	A20	50	17.4				A	120	5	2000—1800	
36		S	YINGKOU SHI	CHN	122E12 40N41	A20	20	13.4				A	120	4	2000—1800	
37		S	YIYANG SHI	CHN	112E21 28N36	A20	10	10.4				A	120	4	2000—1800	
38		S	YONGCHANG	CHN	101E58 38N16	A20	10	10.4				A	120	4	2000—1800	
39		S	YOUYANG	CHN	108E46 28N51	A20	10	10.4				A	120	4	2000—1800	
40		S	YUEYANG	CHN	113E10 29N17	A20	10	10.4				A	120	4	2000—1800	
41		S	YUMEN SHI	CHN	97E20 39N42	A20	50	17.4				A	120	4	2000—1800	
42		S	YUNCHENG	CHN	111E00 34N57	A20	20	13.4				A	120	4	2000—1800	
43		S	ZUNYI SHI	CHN	106E50 27N32	A20	5	7.4				A	120	5	2000—1800	
44			BLACK ROCK	CKH	159W50 21S12	A20	10	10.0				A	40	5	1600—0900	
45			BRAUNSCHW GEIT	D	10E28 52N13	D 9	100	20.4				A	120	4	0500—1700	
46			ARBA	ETH	40E10 09N00	C 9	50	17.4				A	119	3	0400—2300	
47			MOUILA	GAB	11E00 02S00	C 9	30	16.9				A		5	0400—2400	
48			AGANA	GUM	144E44 13N16	C10	100	20.4				A	119	3	0000—2400	
49			POONA	IND	73E55 18N31	A20	300	26.9				A	245	3	0300—1000	25
50			TRICHUR	IND	76E15 10N35	A20	300	22.0	100	325—355	13.0	B		4	0300—1000	25
51			TRICHUR	IND	76E15 10N35	A20	100	22.0	100	325—355	13.0	B		4	1000—0300	
52			UJUNGPANDANG	INS	119E28 05S09	A18	100	22.1				A	234	4	2100—1600	
53			IMJE	KOR	128E10 38N03	C10	5	7.4				A	120	6	0000—2400	
54			YEOSU	KOR	127E44 34N44	C10	10	10.4				A	102	4	0000—2400	

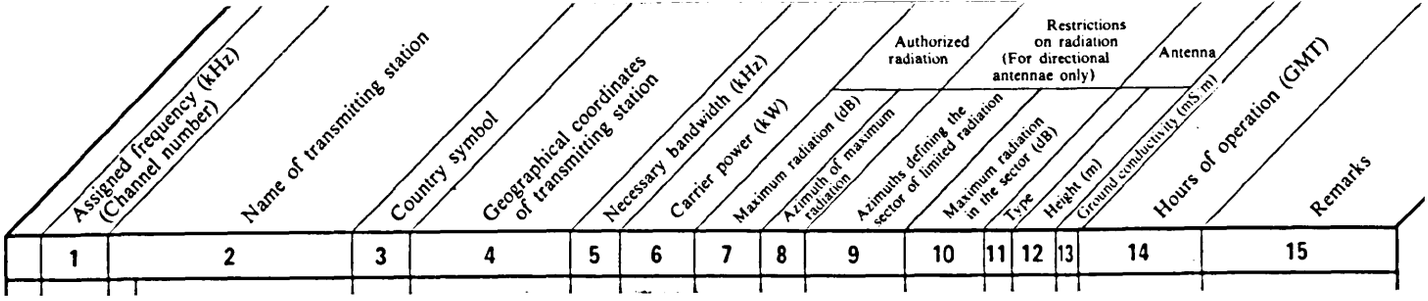
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	630	KUWAIT	KWT	48E20 29N34	A20	10	10.4				A	100	8	0000—2400	
2	(12)	MONROVIA	LBR	10W40 06N12	A20	50	17.4				A	119	5	0500—2400	
3		TAMATAVE	MDG	49E25 18S09	C 9	20	15.1				A	196	4	0300—2000	
4		MAIDUGURI	NIG	13E55 11N53	C 9	50	17.4				A	125	4	0500—2300	
5		SMOELA	NOR	07E56 63N22	D 9	1200	33.8				A	290	3	0000—2400	
6		OPAPA	NZL	176E40 39S48	A20	20	13.0	40	80—180	10.0	B		4	0000—2400	
7		OPAPA	NZL	176E40 39S48	A20	20	13.0		260—360	10.0	B				
8		LAHORE	PAK	74E20 31N35	A20	100	20.4				A	121	3	0000—2000	
9		MEYC BULACAN	PHL	120E57 14N44	C 9	50	17.4				A	119	3	0000—2400	
10		OZAMIS CITY	PHL	123E49 08N08	C 9	5	7.4				A	119	3	2100—1600	
11		TIMISOARA	ROU	21E14 45N45	A20	400	29.0	130	250— 10	16.0	B		4	0000—2400	5/TUR
12		SINGAPORE 1	SNG	103E42 01N20	A20	50	17.4				A	120	4	0000—2400	
13		BANGKOK	THA	100E34 13N45	A20	10	10.0				A	45	2	0000—2400	
14		TUNIS DJEDEIDA	TUN	09E56 36N50	D 9	600	29.9				A	250	4	0000—2400	
15		CUKUROVA	TUR	34E44 36N49	D 9	300	31.0	255			B		4	0200—2300	5/ROU
16		KHABAROVSK	URS	135E04 48N29	C 9	1000	35.0	80	210—310	19.0	B		4	0000—2400	
17		KUIBYCHEV	URS	49E46 53N11	A16	150	23.9				A	220	4	0000—2400	
18		MINUSINSK	URS	91E40 53N43	A18	50	19.1				A	220	4	0000—2400	
19		LUSAKA	ZMB	28E15 15S30	A20	200	23.4				A	100	3	0200—2100	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	639	S	CRYSTAL BRK SA	AUS	138E15 33S21	A20	10	10.6				A	183	2	1900—1400	
2	(13)	S	NARACOORTE SA	AUS	140E40 36S57	A20	10	12.1				A		2	1400—1900	
3		S	BEIHAI	CHN	109E07 21N29	A20	10	10.4				A	120	4	2000—1800	
4		S	BEIJING	CHN	116E27 39N57	A20	150	23.9				A	240	4	2000—1800	
5		S	BIYANG	CHN	113E18 32N43	A20	5	7.4				A	120	4	2000—1800	
6		S	BOSE	CHN	106E37 23N54	A20	20	13.4				A	120	4	2000—1800	
7		S	BUSHENG	CHN	81E09 30N17	A20	10	10.4				A	120	5	2000—1800	
8		S	DONGCHUAN	CHN	103E18 26N08	A20	10	10.4				A	120	5	2000—1800	
9		S	GEGYA	CHN	80E58 32N30	A20	10	10.4				A	120	5	2000—1800	
10		S	HABAHE	CHN	87E03 48N04	A20	10	10.4				A	120	4	2000—1800	
11		S	HANDAN SHI	CHN	114E28 36N36	A20	5	7.4				A	120	4	2000—1800	
12		S	HECHI	CHN	108E03 24N42	A20	10	10.4				A	120	4	2000—1800	
13		S	HEKOU	CHN	103E59 22N32	A20	10	10.4				A	120	5	2000—1800	
14		S	HENGSHUI	CHN	115E42 37N44	A20	10	10.4				A	120	4	2000—1800	
15		S	HORQIN YQ QI	CHN	122E04 46N04	A20	10	10.4				A	120	4	2000—1800	
16		S	LHASA	CHN	90E59 29N30	A20	100	22.1				A	240	5	2000—1800	
17		S	LIANYUNGANG	CHN	119E10 34N36	A20	20	13.4				A	120	3	2000—1800	
18		S	LIAOYUAN	CHN	125E10 42N52	A20	5	7.4				A	120	4	2000—1800	
19		S	LIJIANG	CHN	100E15 26N55	A20	20	13.4				A	120	5	2000—1800	
20		S	LINCANG	CHN	100E02 23N52	A20	20	13.4				A	120	5	2000—1800	
21		S	LONGHUA	CHN	117E43 41N19	A20	10	10.4				A	120	4	2000—1800	
22		S	LUCHUN	CHN	102E20 23N00	A20	10	10.4				A	120	5	2000—1800	
23		S	LUOYANG	CHN	112E24 34N42	A20	20	13.4				A	120	4	2000—1800	
24		S	LUXI	CHN	98E34 24N27	A20	20	13.4				A	120	5	2000—1800	
25		S	NANJING	CHN	118E54 32N06	A20	100	22.1				A	240	3	2000—1800	
26		S	NANNING	CHN	108E18 22N48	A20	50	17.4				A	120	4	2000—1800	
27		S	PINGDINGSHAN	CHN	113E17 33N42	A20	10	10.4				A	120	4	2000—1800	
28		S	PINGLE	CHN	110E38 24N38	A20	10	10.4				A	120	4	2000—1800	
29		S	PINGYU	CHN	114E38 32N58	A20	5	7.4				A	120	4	2000—1800	
30		S	QIUBEI	CHN	104E11 24N02	A20	20	13.4				A	120	5	2000—1800	
31		S	RUTO	CHN	79E44 33N25	A20	10	10.4				A	120	5	2000—1800	
32		S	SHANGSHUI	CHN	114E38 33N38	A20	5	7.4				A	120	4	2000—1800	
33		S	SHIZUISHAN	CHN	106E40 39N09	A20	10	10.4				A	120	4	2000—1800	
34		S	SHUANGLIAO	CHN	123E30 43N31	A20	10	10.4				A	120	4	2000—1800	
35		S	SUZHOU	CHN	120E41 31N18	A20	5	7.4				A	120	3	2000—1800	
36		S	TAIZHOU	CHN	119E55 32N30	A20	5	7.4				A	120	3	2000—1800	
37		S	TAXKORGAN	CHN	75E08 37N42	A20	10	10.4				A	120	4	2000—1800	
38		S	TONGCHUAN	CHN	109E09 35N06	A20	10	10.4				A	120	4	2000—1800	
39		S	TONGYU	CHN	123E05 44N49	A20	20	13.4				A	120	4	2000—1800	
40		S	URUMQI SHI	CHN	87E30 43N35	A20	100	22.1				A	240	4	2000—1800	
41		S	WUQI	CHN	108E11 36N55	A20	10	10.4				A	120	4	2000—1800	
42		S	XIAGUAN	CHN	100E13 25N34	A20	10	10.4				A	120	5	2000—1800	
43		S	XINXIANG SHI	CHN	113E52 35N18	A20	10	10.4				A	120	4	2000—1800	
44		S	XIXIA	CHN	111E26 33N24	A20	5	7.4				A	120	4	2000—1800	
45		S	YANAN	CHN	109E29 36N37	A20	10	10.4				A	120	4	2000—1800	
46		S	YANCHI	CHN	107E30 37N47	A20	50	17.4				A	120	4	2000—1800	
47		S	YANJI SHI	CHN	129E30 42N54	A20	5	7.4				A	120	4	2000—1800	
48		S	YONGSHOU	CHN	108E08 34N41	A20	10	10.4				A	120	4	2000—1800	
49		S	YULIN 1	CHN	110E08 22N37	A20	10	10.4				A	120	4	2000—1800	
50		S	YULIN 2	CHN	109E36 38N18	A20	20	13.4				A	120	4	2000—1800	
51		S	YUSHU 1	CHN	126E32 44N50	A20	20	13.4				A	120	4	2000—1800	
52		S	ZHENAN	CHN	109E10 33N27	A20	10	10.4				A	120	4	2000—1800	
53			MAHO	CLN	80E15 07N44	C10	50	17.4				A	117	5	0000—1800	
54			ZYYI	CYP	33E19 34N43	A20	500	35.0	180	70— 80	16.0	B		4	0000—2400	10 11/G 18/LSO

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	639		ZYYI	CYP	33E19 34N43	A20	500	35.0		228–232	24.0	B				SDN UGA
2	(13)		ZYYI	CYP	33E19 34N43	A20	500	35.0		315–335	14.0	B				
3			NATITINGOU	DAH	01E23 10N18	C10	1	0.0				A	47	4	0500–2400	
4		S	ALBACETE	E	01W51 39N00	D 9	1	0.0				A	50	4	0000–2400	19
5		S	ALCOY	E	00W28 38N42	D 9	1	0.0				A	50	5	0000–2400	19
6		S	ALMADEN	E	04W50 38N47	D 9	0.3	−5.2				A	50	5	0000–2400	19
7		S	ALMERIA	E	02W38 36N43	D 9	20	13.4				A	96	5	0000–2400	19
8		S	BADAJOZ	E	06W58 38N53	D 9	1	0.0				A	50	4	0000–2400	19
9		S	BEAS DE SEGURA	E	02W53 38N15	D 9	0.3	−5.2				A	50	5	0000–2400	19
10		S	BENAVENTE	E	05W41 42N00	D 9	0.3	−5.2				A	50	5	0000–2400	19
11		S	BILBAO	E	02W51 43N15	D 9	20	13.4				A	95	5	0000–2400	19
12		S	BURGOS	E	03W42 42N20	D 9	1	0.0				A	50	4	0000–2400	19
13		S	JAEN	E	03W47 37N47	D 9	1	0.0				A	50	4	0000–2400	19
14		S	LA CORUNA	E	08W23 43N09	D 9	200	23.4				A	108	5	0000–2400	19
15		S	OLOT	E	02E30 42N11	D 9	0.3	−5.2				A	50	5	0000–2400	19
16		S	PALMA MALLORCA	E	02E39 39N34	D 9	1	0.0				A	50	4	0000–2400	19
17		S	SALAMANCA	E	05W40 40N58	D 9	1	0.0				A	50	4	0000–2400	19
18		S	VILLABLINO	E	06W19 42N56	D 9	0.3	−5.2				A	50	5	0000–2400	19
19		S	ZARAGOZA	E	00W53 41N37	D 9	20	13.4				A	82	4	0000–2400	19
20			DRASA	FJI	177E31 17S35	A20	10	10.4				A	90	7	1700–1200	
21			GANGTOK	IND	88E40 27N20	C 9	50	19.1				A	200	4	0300–0900	25
22			KOHIMA	IND	94E03 25N43	A20	100	22.1				A	235	4	0300–0900	25
23			KOHIMA	IND	94E03 25N43	A20	50	19.1				A	235	4	0900–0300	
24			SLANE	IRL	06W30 53N40	A20	100	24.0	280	90–110	6.0	B		4	0000–2400	
25			BONAB	IRN	46E05 37N20	A20	400	26.4				A	117	3	0200–2100	
26			SHIZUOKA	J	138E25 34N57	A15	10	10.6				A	140	4	0000–2400	
27			MOMBASA	KEN	39E40 04S05	C 9	50	17.4	45			A	130	4	0000–2400	
28			SEOUL	KOR	126E52 37N29	C10	50	17.4				A	116	5	0000–2400	
29			VIENTIANE	LAO	102E38 17N59	A15	10	10.0				A	55	5	2300–1500	16
30			LANCERS GAP	LSO	27E32 29S19	A20	100	20.4				A	100	4	0400–2200	18/G SDN UGA
31			ENTRE RIOS	MOZ	37E25 14S58	C10	3	5.2				A	78	4	0400–2200	
32			NEMA	MTN	07W16 16N36	B20	20	13.6				A	135	5	0600–2400	
33			KADUNA	NIG	07E31 10N42	C 9	50	17.4				A	100	4	0500–2300	
34			ALEXANDRA	NZL	169E24 45S10	A20	2	3.4				A	107	5	0000–2400	
35			KARACHI	PAK	67E04 24N51	A20	1000	34.0	40	310	23.0	B		4	0000–2000	
36			BATAC ILOCOS N	PHL	120E37 18N12	C 9	1	0.4				A	117	3	2100–1600	
37			CADIZ NEGROS	PHL	123E18 10N50	C 9	5	7.4				A	117	3	2100–1600	
38			EL OBEID	SDN	30E14 13N12	A20	200	25.1				A	225	4	0400–2400	18/G LSO UGA
39			PRAHA	TCH	14E53 50N04	C 9	1500	35.2				A	276	4	0000–2400	
40		S	N SITHAMMARAT	THA	99E58 08N25	A20	10	10.0				A	30	3	0000–2400	
41		S	PHUKET	THA	98E24 07N58	A20	10	10.0				A	30	3	0000–2400	
42			PRACHINBURI	THA	101E22 14N02	A20	50	17.6				A	156	3	0000–2400	
43			KIBIRA RD KLA	UGA	32E36 00N16	C 9	50	17.4				A	100	4	0300–2100	18/G LSO SDN
44			KHANTYMANSIISK	URS	69E03 60N57	A16	50	19.1				A	220	4	0000–2400	
45			KIRENSK	URS	108E06 57N47	A18	50	19.1				A	220	4	0000–2400	
46			UST KAMTCHATSK	URS	162E28 56N13	A18	50	19.1				A	220	5	0000–2400	
47			QUINHON	VTN	109E07 13N53	C10	50	20.0	260			B		4	2100–1600	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation; Azimuths defining the sector of limited radiation; Maximum radiation in the sector (dB)			Antenna: Type	Height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	648		TALUQAN	AFG	69E30 36N45	C 9	10	10.0				A	60	4	0100—2000	
2	(14)		RROGOZHINA	ALB	19E39 41N05	A20	300	26.9				A	255	5	0400—2300	23/URS (24)
3			JEDDAH	ARS	39E09 21N14	C10	2000	38.0	130	230— 30	18.0	B		4	0000—2400	24
4			ALBANY WA	AUS	117E49 35S00	A20	0.4	−4.0				A	37	3	2100—1600	
5		S	BEGA NSW	AUS	149E50 36S42	A20	10	10.6				A	137	4	1900—1400	
6			DARWIN NT	AUS	130E51 12S25	A20	50	17.0				A	40	3	1900—1400	
7		S	MANILLA NSW	AUS	150E44 30S47	A20	10	10.6				A	172	4	1900—1400	
8			ORAPA	BOT	25E20 21S18	A20	50	17.4				A	100	4	0300—2100	
9		S	DONGFANG	CHN	108E36 19N06	A20	50	17.4				A	120	4	2000—1800	
10		S	HUIZHOU	CHN	114E24 23N05	A20	100	22.1				A	240	4	2000—1800	
11		S	JIEXI	CHN	115E50 23N26	A20	10	10.4				A	120	4	2000—1800	
12		S	QIONGHAI	CHN	110E26 19N15	A20	10	10.4				A	120	4	2000—1800	
13		S	SHAOGUAN	CHN	113E32 24N47	A20	10	10.4				A	120	4	2000—1800	
14			TONGLING	CHN	117E47 30N57	A20	5	7.4				A	120	4	2000—1800	
15		S	ZHAOQING	CHN	112E27 23N03	A20	20	13.4				A	120	4	2000—1800	
16			RATNAPURA	CLN	80E22 06N40	C10	50	17.6				A	140	7	0000—1800	
17		S	KEMIJARVI	FNL	27E23 66N43	D 9	10	10.6				A	150	6	0000—2400	
18		S	LIEKSA	FNL	30E02 63N19	D 9	10	10.6				A	150	6	0000—2400	
19		S	TAMPERE 1	FNL	23E46 61N48	D 9	100	22.1				A	250	5	0000—2400	
20		S	EDINBURGH	G	03W15 55N58	A20	2	3.0				A	38	4	0000—2400	
21		S	EXETER	G	03W31 50N41	A20	0.5	−3.0				A	36	4	0000—2400	
22		S	GLASGOW	G	04W19 55N50	A20	2	3.0				A	38	4	0000—2400	
23		S	NEWCASTLE	G	01W34 54N56	A20	2	3.0				A	38	4	0000—2400	
24		S	ORFORDNESS	G	01E35 52N06	A20	150	23.9				A	220	3	0000—2400	
25		S	PLYMOUTH	G	04W08 50N24	A20	0.5	−3.0				A	33	5	0000—2400	
26		S	REDMOSS	G	02W05 57N07	A20	2	3.4				A	76	5	0000—2400	
27		S	REDRUTH	G	05W13 50N13	A20	1	0.0				A	38	5	0000—2400	
28		S	SWANSEA	G	03W58 51N38	A20	1	0.0				A	24	4	0000—2400	
29			AJENA	GHA	00E10 06N20	C 9	50	17.6				A	150	4	0500—2300	
30			BONTO 1	GMB	16W33 13N18	C 9	20	16.0	78	210—310	6.0	B		4	0600—2400	
31			KOMOTINI	GRC	25E24 41N07	C 9	10	10.0				A	50	5	0400—2300	
32			INDORE	IND	75E50 22N44	A20	200	25.1				A	235	3	0000—2400	
33			MANGALORE	IND	74E48 12N48	A20	300	26.9				A	235	4	0300—1000	25
34			TOYAMA	J	137E14 36N43	A15	5	7.4				A	108	5	0000—2400	
35			BOSEONG	KOR	127E05 34N45	C10	1	0.4				A	120	4	0000—2400	
36			IMSIL	KOR	127E16 35N35	A10	1	0.4				A	120	6	0000—2400	
37			PUNGSAN	KRE	128E09 40N49	A16	10	10.4				A	105		2000—1800	
38		S	HUN	LBY	15E56 29N07	D 9	10	12.1				A	230	6	0400—2200	24
39		S	TOBRUK	LBY	23E58 32N05	D 9	300	26.9				A	230	4	0400—2200	24
40			KUALA LIPIS	MLA	102E00 04N03	A20	20	13.6				A	150	5	0000—2400	
41			LIMBANG	MLA	115E00 04N45	A20	20	13.4				A	113	5	2200—1600	
42			MISSOUR	MRC	04W10 33N05	A20	100	22.1				A	233	5	0500—2400	24
43			SELIBABY	MTN	12W11 15N14	B20	20	13.4				A	115		0600—2400	24
44			DHANKUTA	NPL	87E19 27N00	A20	100	20.4				A	120	4	2200—1900	
45			KERIKERI	NZL	173E59 35S12	A20	1	0.0				A	50	4	0000—2400	
46			LIPA BATANGAS	PHL	121E09 13N56	C 9	1	0.4				A	115	3	2100—1600	
47			MALAYBALAY BUK	PHL	125E07 08N07	C 9	5	7.4				A	115	3	2100—1600	
48			OKINAWA	RYU	127E42 26N15	A15	10	10.4				A	92	4	0000—2400	
49			NACHINGWEA	TGK	38E52 10S20	C 9	100	20.4				A	89	4	0300—1600	
50			NACHINGWEA	TGK	38E52 10S20	C 9	100	23.0	270			B		4	1600—2100	
51			KHON KAEN	THA	102E49 16N34	A20	55	19.5				A	205	3	0000—2400	
52			PHRAE	THA	100E11 18N15	A20	50	17.4				A	116	5	0000—2400	

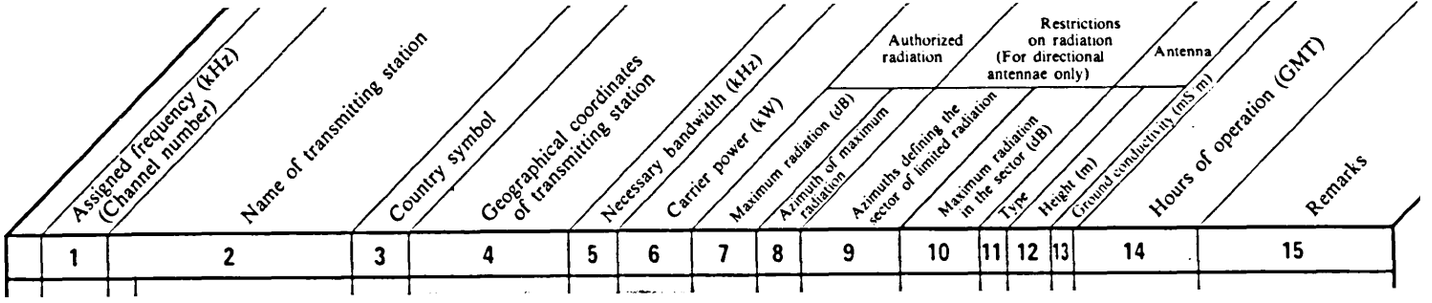


	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	648	S KHARKOV	UKR	36E17 50N00	A16	100	22.1				A	220	4	0000—2400	
2	(14)	S SIMFEROPOL	UKR	34E06 44N56	A16	150	23.9				A	220	4	0000—2400	
3		IMAN	URS	133E43 45N56	C 9	1000	35.0	10	160—220	16.0	B		4	0000—2400	
4		URGHENTCH	URS	60E20 41N40	A18	150	25.0	340	140—200	11.0	B		4	0000—2400	
5		MURSKA SOBOTA	YUG	16E11 46N41	D 9	10	10.0				A	60	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

657 KHZ (15)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	657		KABOUL YAKATUT	AFG	69E12 34N31	C 9	25	14.4				A	103	4	0100—2000	
2	(15)		N REDONDO	AGL	13E50 11S10	A20	5	7.4				A	110	3	0000—2400	
3			EL AAIUN	AOE	13W12 27N10	A20	50	17.0				A	50	4	0000—2400	11/E
4			GURIAT	ARS	37E25 31N25	C 9	500	27.4				A	120	4	0000—2400	24
5			BYROCK NSW	AUS	146E25 30S39	A20	10					B		3	1900—1400	
6		S	ESPERANCE WA	AUS	121E52 33S45	A20	2	3.4				A	62	2	2100—1600	
7		S	KALGOORLIE WA	AUS	121E24 30S47	A20	10	10.4				A	123	2	2100—1600	
8		S	HUANGCHUAN	CHN	115E02 32N07	A20	10	10.4				A	120	4	2000—1800	
9		S	LUOHE	CHN	114E01 33N32	A20	50	17.4				A	120	4	2000—1800	
10		S	QINGFENG	CHN	115E06 35N54	A20	10	10.4				A	120	4	2000—1800	
11		S	SHANGQIU SHI	CHN	115E39 34N27	A20	20	13.4				A	120	4	2000—1800	
12		S	ZHENGZHOU	CHN	113E42 34N42	A20	100	22.1				A	240	4	2000—1800	
13			YATIYANTOTA	CLN	80E17 07N02	C10	20	13.6				A	130	7	0000—1800	
14			NEUBRANDENBURG	DDR	13E05 53N30	D 9	2000	35.1				A	230	4	0400—1800	
15			NEUBRANDENBURG	DDR	13E05 53N30	D 9	20	15.1				A	230	4	1800—0400	
16			DESSIE	ETH	39E37 11N00	C 9	10	10.4				A	114	3	0400—1500	
17		S	NAPOLI	I	14E19 41N00	D 9	120	22.9				A	200	4	0000—2400	
18		S	SALENTO	I	18E17 39N55	D 9	10	10.4				A	117	4	0000—2400	
19		S	SONDRIO	I	09E50 46N10	D 9	2	3.4				A	61	5	0000—2400	
20		S	TORINO	I	07E44 45N02	D 9	50	17.4				A	80	4	0000—2400	
21		S	TRAPANI	I	12E34 37N55	D 9	2	3.4				A	110	5	0000—2400	
22		S	VENEZIA	I	12E27 45N36	D 9	300	26.9				A	228	4	0000—2400	
23			AHMEDABAD	IND	72E38 23N02	A20	300	26.9				A	230	3	0300—0900	25
24			CALCUTTA	IND	88E23 22N36	A20	300	27.0	130	295—325	22.0	B		3	0000—2400	
25			VIJAYAWADA	IND	80E39 16N31	A20	300	28.2				A	275	3	0300—1000	25
26			TEL AVIV 1	ISR	34E50 31N50	D 9	200	25.0				A	194	3	0000—2400	5/TUR 33
27			OBIHIRO	J	143E12 42N59	A15	5	7.4				A	108	4	0000—2400	
28			CHUNCHEON	KOR	127E43 37N55	C10	50	17.4				A	120	5	0000—2400	
29			GRIK	MLA	101E08 05N23	A20	20	13.6				A	150	5	2200—1700	
30			TANTAN	MRC	10W51 28N27	A12	20	13.6				A	180	5	0500—2400	24
31			IBADAN	NIG	03E57 07N24	C 9	50	21.0	305			B		4	0400—2300	
32			WELLINGTON	NZL	174E51 41S06	A20	60	19.9				A	218	4	0000—2400	
33			BORONGAN SAMAR	PHL	125E25 11N36	C 9	1	0.4				A	114	3	2100—1600	
34			S FERNANDO LU	PHL	120E18 16N37	C 9	1	0.4				A	114	3	2100—1600	
35		S	KARKAR I	PNG	145E53 04S44	B10	10	10.4				A	80	2	1900—1400	
36		S	KAVIENG	PNG	150E48 02S25	D10	10	10.4				A	80	3	1900—1400	
37		S	KIETA	PNG	155E40 06S20	D10	10	10.4				A	80	5	1900—1400	
38		S	POPONDETTA	PNG	148E17 08S49	D10	10	10.4				A	80	3	1900—1400	
39		S	TARI	PNG	142E57 05S51	D10	10	10.4				A	80	5	1900—1400	
40		S	ALBESTI	ROU	28E20 43N50	A20	2	3.4				A	105	3	0300—2300	
41		S	CHISINAU CRIS	ROU	21E30 46N32	A20	2	3.4				A	105	2	0300—2300	
42		S	HIRSOVA	ROU	27E59 44N42	A20	1	0.4				A	105	3	0300—2300	
43			DAR ES SALAAM	TGK	39E15 06S50	C 9	100	20.4				A	114	4	0300—1600	
44			DAR ES SALAAM	TGK	39E15 06S50	C 9	100	23.0	270	350—190	20.0	B		4	1600—2100	
45			BANGKOK	THA	100E31 13N47	A20	10	10.4				A	110	2	0000—2400	
46			URLA	TUR	27E25 39N00	D 9	600	32.0	180	270— 90	10.0	B		4	0200—2300	5/ISR
47			URLA	TUR	27E25 39N00	D 9	600	32.0		125—150	27.0	B				
48			AL AIN	UAE	55E57 24N30	C 9	100	23.0	180	290— 70	17.0	B		7	0200—2200	24
49			TCHERNOVTSY	UKR	25E55 48N20	A16	25	16.1				A	220	4	0000—2400	
50			GROZNYI	URS	45E40 43N20	C10	50	19.1				A	220	4	0000—2400	
51			MARY	URS	61E50 37N35	A18	50	19.1				A	220	4	0100—1100	
52			MURMANSK	URS	33E05 68N58	A16	150	23.9				A	220	5	0000—2400	
53			VERKHOIANSK	URS	133E10 67N36	A16	50	19.1				A	220	4	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	666		TINDOUF	ALG	08W07 27N38	D 9	100	24.0	230	0—100	9.0	B		5	0000—2400	24
2	(16)		BROOME WA	AUS	122E14 17S58	A20	0.1	—10.0				A	34	3	2100—1600	
3		S	COROWA NSW	AUS	146E25 35S57	A20	10	10.0				A	55	4	1900—1400	
4		S	GLEN INNES NSW	AUS	151E46 29S47	A20	10			50— 70	3.0	B		4	1900—1400	
5			KATHERINE NT	AUS	132E15 14S28	A20	0.1	—10.0				A	21	2	1900—1400	
6			DEHUA	CHN	118E15 25N30	A20	200	25.1				A	240	4	2000—1800	
7			JIAMUSI	CHN	130E30 46N40	A20	10	10.4				A	120	4	2000—1800	
8		S	MADO	CHN	98E14 34N50	A20	20	13.4				A	120	5	2000—1800	
9		S	XINING	CHN	101E50 36N35	A20	100	22.1				A	240	5	2000—1800	
10		S	YUSHU 2	CHN	97E00 33N00	A20	10	10.4				A	90	5	2000—1800	
11			SENKADAGALA	CLN	80E40 07N10	C10	20	13.4				A	116	6	0000—1800	
12			BODENSEESENDER	D	09E07 48N01	D 9	300	25.4				A	137	4	0500—1700	
13			BODENSEESENDER	D	09E07 48N01	D 9	300	24.8	280	30— 50	16.8	B		4	1700—0500	
14			BODENSEESENDER	D	09E07 48N01	D 9	300	24.8		80— 90	22.8	B				
15			BODENSEESENDER	D	09E07 48N01	D 9	300	24.8		120—140	16.8	B				
16			TRIKALA	GRC	21E47 39N32	C 9	250	26.1				A	225	5	0500—1700	
17			TRIKALA	GRC	21E47 39N32	C 9	250	26.0	170	310— 30	11.0	B		5	1700—0500	
18			NZEREKORE	GUI	08W58 07N54	C 9	100	20.4				A	113	4	0000—2400	
19			DELHI	IND	77E12 28N38	C 9	1000	32.1				A	225	3	0300—0900	25
20			DELHI	IND	77E12 28N38	C 9	500	30.0	220	355— 85	17.0	B		3	0900—0300	
21			DELHI	IND	77E12 28N38	C 9	500	30.0		335—355	22.0	B				
22			AHWAZ	IRN	48E40 31N20	A20	100	20.4				A	112	3	0100—2200	
23			HOEFN	ISL	15W42 64N13	A20	100	20.4				A	120	5	0700—0200	
24			MIKI	J	134E59 34N49	A15	0.1	—9.6				A		5	0000—2400	
25			OSAKA	J	135E34 34N33	A15	100	22.1				A	195	4	0000—2400	
26			KISUMU	KEN	34E45 00S05	C 9	20	13.4				A	100	4	0000—2400	
27			KOSAN	KRE	127E25 38N52	A16	1	0.0				A	50		2000—1800	16
28			PENANG	MLA	100E18 05N22	A20	20	13.4				A	95	5	0000—2400	
29			NOUMEA 1	NCL	166E29 22S18	A20	20	13.4				A	90	3	0000—2400	
30			EKU	NIG	05E59 05N45	C 9	100	20.4				A	108	4	0500—2300	
31			THAMES	NZL	175E35 37S08	A20	0.1	—10.0				A	50	4	0000—2400	
32			DAVAO CITY	PHL	125E30 07N01	C 9	10	10.4				A	112	3	2100—1600	
33			NAVOTAS RIZAL	PHL	120E57 14N38	C 9	10	10.4				A	112	3	2100—1600	
34		S	BRAGANCA	POR	06W45 41N47	A20	1	0.4				A	90	7	0000—2400	
35		S	COVILHA	POR	07W29 40N14	A20	10	10.4				A	90	5	0000—2400	
36		S	LISBOA	POR	08W57 38N58	A20	135	21.9				A	180	3	0000—2400	
37		S	PORTO	POR	08W35 41N06	A20	10	10.4				A	90	3	0000—2400	
38		S	V REAL	POR	07W43 41N16	A20	10	10.4				A	90	5	0000—2400	
39		S	VALENCA	POR	08W38 42N01	A20	10	10.4				A	90	5	0000—2400	
40		S	VISEU	POR	07W55 40N38	A20	10	10.4				A	90	5	0000—2400	
41			S PIERRE 1	REU	55E29 21S19	A20	20	13.4				A	60	4	0000—2400	
42			KASSALA	SDN	36E22 15N23	A20	200	27.0	250			B		4	0400—2400	24
43			BURAN	SOM	48E46 10N14	A18	10	10.4				A	110	4	0300—2100	
44			DAMAS SABBOURA	SYR	36E55 33N33	C 9	100	22.1				A	206	4	0300—2400	
45			UDON THANI	THA	102E48 17N24	A20	20	13.4				A	108	3	0000—2400	
46			BARNAUL	URS	83E48 53N21	A16	150	23.9				A	220	4	0000—2400	
47			DUDINKA	URS	86E07 69N37	A16	150	23.9				A	220	5	0000—2400	
48		S	KOMSOMOLSKAMUR	URS	137E15 50N55	C 9	100	23.0	50	210—240	10.0	B		4	0000—2400	
49			KRASNODAR	URS	39E07 45N01	A16	30	16.9				A	220	4	0000—2400	
50		S	SKOVORODINO	URS	123E58 53N58	A18	50	22.0	340	140—180	10.0	B		4	0000—2400	
51			TACHKENT	URS	69E13 41N19	A16	30	16.9				A	220	4	0000—2400	
52			VILNIUS	URS	25E15 54N40	A16	500	29.1				A	220	4	0400—1600	
53			VILNIUS	URS	25E15 54N40	A16	500	32.0	60	180—250	21.0	A		4	1600—0400	
54			SOMBOR	YUG	19E11 45N19	D 9	10	10.4				A	60	3	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

666 KHZ (16)

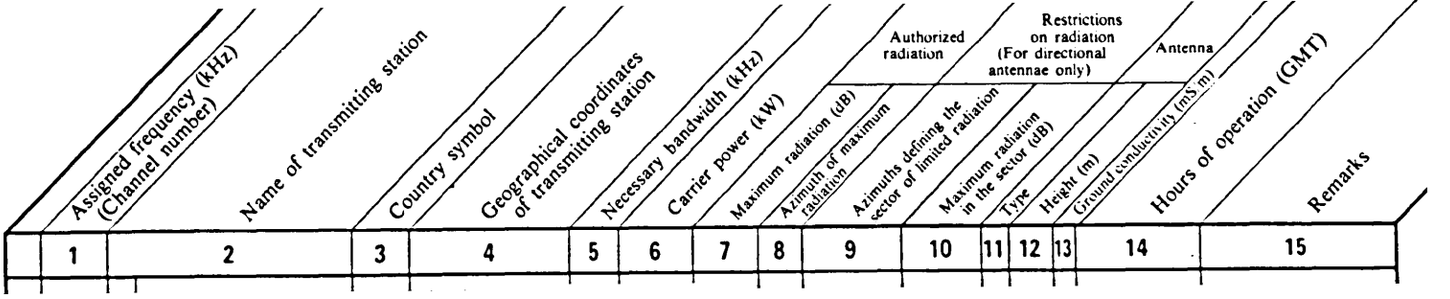
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	666	LODJA	ZAI	23E31 03S32	C 9	10	10.4				A	60	8	0000—2400	
2	(16)	CHIPATA	ZMB	32E43 13S22	A20	50	23.0	260	350— 50	15.0	B		4	0200—2100	
3		CHIPATA	ZMB	32E43 13S22	A20	50	17.0	80	110—170	15.0	B				

	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station		Necessary bandwidth (kHz)	Carrier power (kW)	Maximum radiation (dB)	Azimuth of maximum radiation	Azimuths defining the sector of limited radiation	Maximum radiation in the sector (dB)	Type	Height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
									Authorized radiation		Restrictions on radiation (For directional antennae only)		Antenna				
1	675		QAISOMAH	ARS	46E00	28N00	C 9	20	13.4				A	120	7	0400—1400	24
2	(17)		GOONYELLA QLD	AUS	148E00	21S40	A20	10	12.1				A		4	1900—1400	
3			PINNAROO SA	AUS	141E00	36S00	A20	10	12.1				A		2	1900—1400	
4			KG SERASA	BRU	115E03	05N00	A20	100	23.0	190			B		4	2200—1500	
5		S	HUHHOT	CHN	111E30	41N12	A20	100	22.1				A	240	4	2000—1800	
6		S	NUNGNIN SUM	CHN	118E58	45N40	A20	20	13.4				A	120	4	2000—1800	
7			WEERAKETIYA	CLN	80E48	06N10	C10	50	17.6				A	125	5	0000—1800	
8			PRAIA	CPV	23W30	14N55	A18	25	14.0				A	40	6	1900—2400	
9			MARSEILLE	F	05E20	43N28	D 9	600	29.9				A	220	5	0000—2400	
10			HELSINKI 1	FNL	24E49	60N11	D 9	45	17.1				A	150	5	0000—2400	
11			PENG CHAU	HKG	114E02	22N17	A20	10	10.4				A	91	5	0000—2400	
12			ROERMOND	HOL	05E44	51N11	D 9	120	21.2				A	110	4	0000—2400	
13			BANGALORE 1	IND	77E38	12N58	A20	20	15.1				A	220	3	0300—1000	25
14			BANGALORE 2	IND	77E38	12N58	A20	10	12.1				A	220	3	1000—0300	
15			BHUJ	IND	69E43	23N15	A20	300	26.9				A	225	3	0300—0900	25
16			ITANAGAR	IND	94E42	27N12	A20	200	26.0	330	100—200	13.0	B		4	0000—2400	
17			VARANASHI	IND	83E00	25N20	C 9	100	22.1				A	225	3	0300—0900	25
18			DUNGARVAN 2	IRL	07W46	52N05	A20	100	24.0	270	80—100	10.0	B		4	0000—2400	
19			BET HILEL	ISR	35E36	33N12	D 9	400	28.0				A	145	4	0000—2400	33
20			HAKODATE	J	140E46	41N49	A15	5	9.0	345			B		5	0000—2400	
21			YAMAGUCHI	J	131E31	34N02	A15	5	7.4				A	109	5	0000—2400	
22			JERUSALEM	JOR	35E12	31N53	C 9	200	25.1				A	195	5	0400—2200	24
23			NAIROBI	KEN	36E55	01S35	C 9	20	13.4				A	100	4	0000—2400	
24			KUNSAN	KOR	126E50	35N56	C10	10	10.6				A	132	4	0000—2400	
25			HUCHANG	KRE	127E09	41N24	A16	1	0.0				A	50		2000—1800	
26			BENGHAZI	LBY	20E04	32N02	D 9	100	22.1				A	220	4	0400—2200	24
27			FIANARANTSOA	MDG	47E05	21S18	C 9	5	9.1				A	222	4	0300—2000	
28			LAHAD DATU	MLA	118E21	05N02	A20	10	10.6				A	150	5	0000—2400	
29			MZUZU	MWI	33E58	11S27	A20	50	17.4				A	92	3	0200—2300	
30			AHA	NIG	03E30	08N34	C 9	10	10.4				A	90	4	0400—2300	
31			MARIENTAL	NMB	17E58	24S37	A20	50	17.6				A	157	2	0000—2400	
32			CHRISTCHURCH	NZL	172E39	43S42	A20	20	13.4				A	90	4	0000—2400	
33			CEBU CITY	PHL	123E53	10N18	C 9	5	7.4				A	111	3	2100—1600	
34			LAOAG ILOCOS S	PHL	120E35	18N11	C 9	5	7.4				A	111	3	2100—1600	
35		S	BEREINA	PNG	146E31	08S39	D10	2	3.0				A	30	3	1900—1400	
36		S	KUPIANO	PNG	146E59	10S04	D10	2	3.0				A	30	3	1900—1400	
37		S	LAE	PNG	147E00	06S44	D10	10	10.4				A	80	3	1900—1400	
38		S	MAPRIK	PNG	143E03	03S38	D10	10	10.4				A	80	3	1900—1400	
39		S	MENDI	PNG	143E51	06S10	D10	10	10.4				A	80	5	1900—1400	
40		S	RABAUL	PNG	152E10	04S15	D10	10	10.4				A	80	6	1900—1400	
41			DOHA	QAT	51E32	25N17	C 9	100	20.4				A	100	5	0300—2000	24
42			SINGAPORE 1	SNG	103E42	01N20	A20	50	17.4				A	100	4	0000—2400	
43			CHIANG MAI	THA	99E06	18N54	A20	20	13.4				A	108	5	0000—2400	
44		S	UJGOROD	UKR	22E20	48N38	C 9	50	19.1				A	220	4	0000—2400	
45		S	VOLOTCHISK	UKR	26E12	49N36	C 9	50	19.1				A	220	4	0000—2400	
46			ENISEISK	URS	92E05	58N27	A16	150	23.9				A	220	4	0000—2400	
47			KALEVALA	URS	31E11	65N13	A18	5	9.1				A	220	4	0000—2400	
48			MARY	URS	61E50	37N35	A16	150	23.9				A	220	4	0000—2400	
49		S	ROSTOV NA DONU	URS	39E44	47N15	A16	100	22.1				A	220	4	0000—2400	
50			NHATRANG	VTN	109E11	12N17	C10	50	20.0	270			B		4	2100—1600	

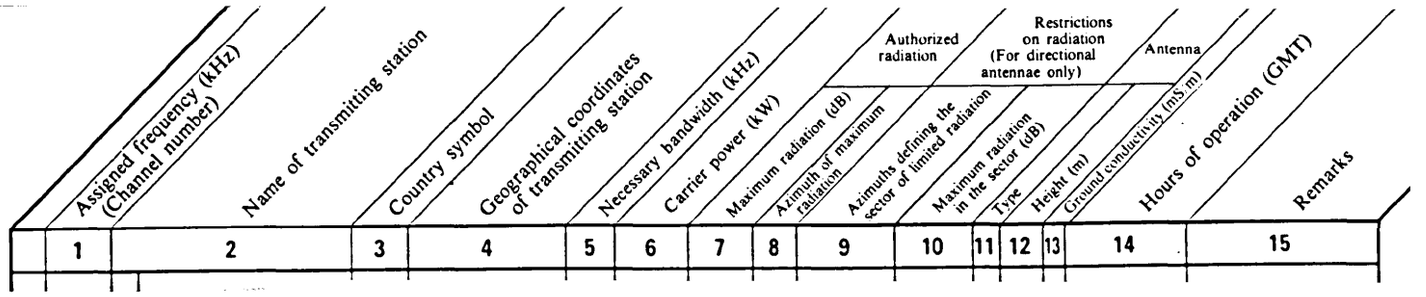
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

684 KHZ (18)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	684		KHOST MATON	AFG	70E00 33N20	A 9	10	10.4				A	60	4	0100—2000	
2	(18)	S	BUSSELTON WA	AUS	115E13 33S39	A20	4	8.1				A	183	2	2100—1600	
3		S	GERALDTON WA	AUS	114E37 28S44	A20	4	6.4				A	61	3	2100—1600	
4			SMITHTOWN NSW	AUS	152E57 31S00	A20	10	10.6				A	168	3	1900—1400	
5			TENNANT CK NT	AUS	134E11 19S39	A20	1	0.0				A	51	2	1900—1400	
6		S	DANGCHANG	CHN	104E25 33N55	A20	10	10.4				A	120	4	2000—1800	
7			DINGHAI	CHN	122E06 30N01	A20	10	10.4				A	120	4	2000—1800	
8		S	DUNHUANG	CHN	94E37 40N09	A20	10	10.4				A	120	4	2000—1800	
9			FUSHUN SHI	CHN	123E53 41N51	A20	10	10.4				A	120	4	2000—1800	
10			HAIKOU	CHN	110E15 20N02	A20	200	25.1				A	240	4	2000—1800	
11		S	LINXIA	CHN	102E55 35N19	A20	10	10.4				A	120	4	2000—1800	
12			MUDANJIANG	CHN	129E36 44N36	A20	10	10.4				A	120	4	2000—1800	
13			TANGSHAN	CHN	118E13 39N38	A20	10	10.4				A	120	4	2000—1800	
14		S	WUWEI	CHN	102E33 37N57	A20	10	10.4				A	120	4	2000—1800	
15		S	XIFENGZHEN	CHN	107E30 35N48	A20	10	10.4				A	120	4	2000—1800	
16		S	ZHANGYE	CHN	100E30 38N54	A20	20	13.4				A	120	4	2000—1800	
17			WELIMADA	CLN	80E57 06N50	A10	50	17.6				A	140	7	0000—1800	
18			HOF SAALE	D	11E54 50N19	D 9	100	20.4				A	100	4	0800—1500	
19			COTONOU	DAH	02E28 06N22	A10	100	20.4				A	110	4	0500—2400	
20			SEVILLA	E	05W55 37N12	D 9	500	29.1				A	232	3	0000—2400	19
21			GORE	ETH	35E32 08N09	A 9	200	23.4				A	110	3	0400—2300	
22			LABASA	FJI	179E22 16S25	A20	2.5	4.0				A	30	3	1700—1200	
23			BARNSTAPLE	G	04W07 51N03	C10	2	3.0				A	38	4	0000—2400	
24			BONTO 2	GMB	16W33 13N18	C 9	20	16.0	78	210—310	6.0	B		4	0600—2400	
25			BHAWANI PATNA	IND	83E18 19N54	A20	300	26.9				A	220	3	0300—1000	25
26			KARGIL 1	IND	76E00 34N50	A20	20	13.6				A	130	4	0300—0900	25
27			KARGIL 2	IND	76E00 34N50	A20	10	10.6				A	130	4	0900—0300	
28			KOZHIKODE 1	IND	75E50 11N15	A20	300	25.4				A	130	4	0300—1000	25
29			KOZHIKODE 2	IND	75E50 11N15	A20	100	20.6				A	130	4	1000—0300	
30			MATHURA	IND	77E40 27N30	A20	300	26.9				A	220	3	0300—0900	25
31			PT BLAIR 1	IND	92E43 11N41	A20	300	26.9				A	220	4	0300—1000	25
32			PT BLAIR 2	IND	92E43 11N41	A20	100	22.1				A	220	4	1000—0300	
33			MASHHAD	IRN	59E38 36N16	A14	100	20.0	220	25— 35	18.0	B		3	0100—2200	
34			MORIOKA	J	141E08 39N37	A15	5	11.0	10			B		5	0000—2400	
35			NAGASAKI	J	129E53 32N43	A15	5	7.4				A	110	5	0000—2400	
36			GOGSEONG	KOR	127E19 35N17	A10	1	0.4				A	80	4	0000—2400	
37			CUREPIPE	MAU	57E31 20S19	A20	300	24.8				A	50	4	0200—2000	
38			AIOUN ATROUSS	MTN	09W33 16N40	B20	20	13.4				A	109		0600—2400	24
39			POKHRA	NPL	83E58 28N16	C 9	100	20.4				A	120	4	2200—1900	
40			FAIRLIE	NZL	170E50 44S05	A20	1	0.0				A	50	4	0000—2400	
41			CABANATUAN NE	PHL	120E57 15N28	C 9	1	0.4				A	109	3	2100—1600	
42			COTABATO CITY	PHL	124E14 07N13	C 9	5	7.4				A	109	3	2100—1600	
43			LEGASPI CITY	PHL	123E44 13N08	C 9	1	0.4				A	109	3	2100—1600	
44			BANGKOK	THA	100E42 13N41	A20	10	10.4				A	105	2	0000—2400	
45			KAIROUAN	TUN	10E08 35N40	D 9	10	12.1				A		4	0700—1600	24
46			ABAKAN	URS	91E23 53N35	A16	30	16.9				A	220	4	0000—2400	
47			KEM	URS	34E36 64N57	A18	50	19.1				A	220	4	0000—2400	
48			NIKOLAEVSKAMUR	URS	140E42 53N10	A18	150	27.0	350	120—200	16.0	B		4	0000—2400	
49			TSELINOGRAD	URS	71E23 51N12	C10	300	30.0	0	140—220	19.0	B		4	0000—2400	
50			BEOGRAD	YUG	20E08 44N38	D 9	2000	35.1				A	235	3	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	693		ADRAR	ALG	00W18 27N48	D 9	20	13.4				A	100	5	0600—2400	
2	(19)		AIN EL HAMMAM	ALG	01E56 36N34	D 9	4	6.0				A	40		0600—2400	
3			V CISNEROS	AOE	16W00 23N40	A20	2	3.0				A	30	4	0000—2400	11/E
4			AFIF	ARS	43E00 24N00	C 9	20	13.4				A	120	4	0400—1400	
5			BRISBANE QLD	AUS	153E07 27S28	A20	5					B		3	0000—2400	
6			CAMPBELLTW NSW	AUS	150E47 34S00	A20	0.1	−10.0				A	43	4	1900—1400	
7		S	RENMARK SA	AUS	140E37 34S16	A20	2	3.0				A	37	2	1900—1400	
8		S	STREAKY BAY SA	AUS	134E11 32S45	A20	2					B		2	1900—1400	
9			ANGRA HEROISMO	AZR	27W11 38N42	A20	10	10.4				A	90	4	0000—2400	
10			DACCA	BGD	90E26 23N43	A20	1000	32.1				A	203	3	0000—1800	
11		S	ANKANG	CHN	109E05 32N44	A20	10	10.4				A	120	4	2000—1800	
12		S	DINGBIAN	CHN	107E35 37N35	A20	20	13.4				A	120	4	2000—1800	
13		S	LONG XIAN	CHN	106E51 34N49	A20	10	10.4				A	120	4	2000—1800	
14		S	MIAN XIAN	CHN	106E40 33N09	A20	10	10.4				A	120	4	2000—1800	
15		S	SHENMU	CHN	110E30 38N49	A20	20	13.4				A	120	4	2000—1800	
16		S	XIAN	CHN	108E54 34N12	A20	100	22.1				A	240	4	2000—1800	
17		S	ZHIDAN	CHN	108E46 36N50	A20	10	10.4				A	120	4	2000—1800	
18		S	ZIZHOU	CHN	110E02 37N37	A20	20	13.4				A	120	4	2000—1800	
19			AMPARAI	CLN	81E40 07N20	C10	50	17.4				A	108	5	0000—1800	
20			NICOSIA	CYP	33E23 35N09	C 9	600	28.2				A	100	4	0000—2400	
21			BERLIN	DDR	13E35 52N28	D 9	250	26.1				A	232	4	0000—2400	
22		S	BARTLEY	G	01W33 50N55	A20	10	10.4				A	70	4	0000—2400	
23		S	BRIGHTON	G	00W15 50N50	A20	10	10.4				A	82	4	0000—2400	
24		S	CROMER	G	01E08 52N54	A20	2	1.0	160			B		4	0000—2400	
25		S	MOORSIDE EDGE	G	01W54 53N38	A20	300	26.9				A	206	4	0000—2400	
26		S	RAMSGATE	G	01E24 51N20	A20	2	3.0				A	15	4	0000—2400	
27		S	WHITEHAVEN	G	03W35 54N32	A20	1.3	1.1				A	30	4	0000—2400	
28		S	CALTANISSETTA	I	14E04 37N29	D 9	50	17.6				A	173	4	0000—2400	
29		S	MILANO	I	09E11 45N19	D 9	100	20.6				A	145	4	0000—2400	
30		S	PISTICCI	I	16E34 40N23	D 9	25	14.6				A	130	4	0000—2400	
31		S	VITERBO	I	12E07 42N24	D 9	10	10.4				A	108	5	0000—2400	
32			JUBBULPORE	IND	79E59 23N10	A20	300	26.9				A	220	3	0300—0900	25
33			LEH	IND	77E35 34N09	A20	300	26.9				A	220	4	0300—0900	25
34			RAJKOT	IND	70E41 22N22	A20	300	26.9				A	220	3	0000—2400	
35			MADIUN	INS	111E31 07S36	A18	10	10.4				A	108	4	2200—1700	
36			PALEMBANG	INS	104E45 02S59	A18	50	17.4				A	110	3	2200—1700	
37			SORONG	INS	131E17 00S50	A18	2	3.4				A	108	5	2000—1500	
38			TOKYO	J	139E25 36N05	A15	500	29.1				A	185	4	0000—2400	
39			NYONGBYON	KRE	125E47 39N49	A16	.1	0.0				A	50		2000—1800	
40			TANANARIVE	MDG	47E31 18S54	C 9	100	22.1				A	234	4	0300—2000	
41			TUARAN	MLA	116E11 06N11	A20	10	10.6				A	150	5	0000—2400	
42			ULAN GOM	MNG	92E00 50N00	A18	5	7.4				A	120	5	2200—1500	
43			MAKURDI	NIG	08E31 07N44	C 9	50	17.4				A	100	4	0500—2300	
44			RUSSELL	NZL	174E08 35S14	A20	1	0.0				A	50	4	0000—2400	
45			GENERAL SANTOS	PHL	125E10 06N06	C 9	1	0.4				A	108	3	2100—1600	
46			ILOILO CITY	PHL	122E34 10N42	C 9	5	7.4				A	108	3	2100—1600	
47			TUGUEGARAO CAG	PHL	121E43 17N36	C 9	1	0.4				A	108	3	2100—1600	
48		S	COIMBRA	POR	08W24 40N13	A20	10	10.4				A	90	4	0000—2400	
49		S	COVILHA	POR	07W29 40N14	A20	1	0.4				A	90	5	0000—2400	
50		S	VISEU	POR	07W55 40N38	A20	1	0.4				A	90	5	0000—2400	
51		S	VASLUI	ROU	27E44 46N40	A20	2	3.4				A	101	4	0300—2300	
52			JUBA	SDN	31E35 04N50	A20	200	26.4				A	276	3	0400—2200	18/TGK
53			ZIGUINCHOR	SEN	16W15 12N35	C 9	20	13.4				A	100	5	0600—2400	
54			MOROGORO	TGK	37E30 06S50	C 9	100	20.4				A	91	4	0300—2100	18/SDN



693 KHZ (19)

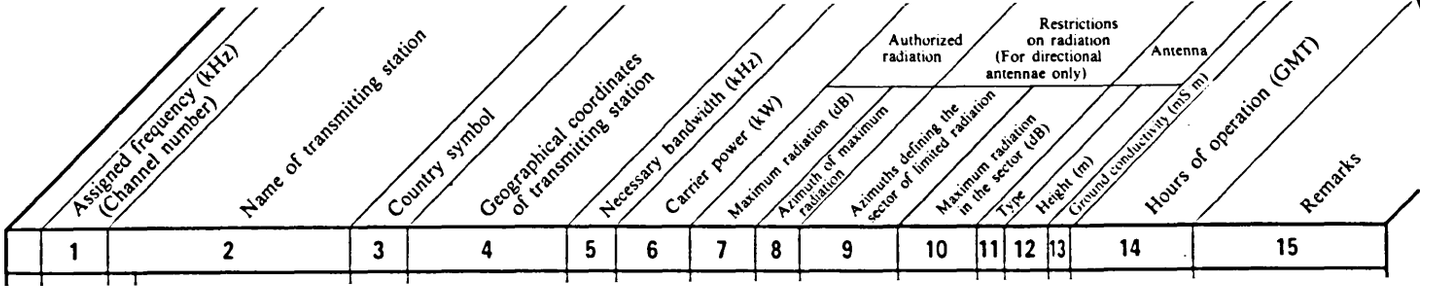
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	693	SARABURI	THA	100E55 14N31	A20	20	13.4				A	108	5	0000—2400	
2	(19)	ANADYR	URS	177E22 64N50	A16	50	19.1				A	220	5	0000—2400	
3		KEMEROVO	URS	86E00 55N22	A18	150	25.2				A	257	4	0000—2400	
4		UFA	URS	55E57 54N43	C10	150	23.9				A	220	4	0000—2400	
5		BAN ME THUOT	VTN	108E09 12N38	C10	55	19.5				A	200	4	2200—1400	
6		KINSHASA	ZAI	15E15 04S20	C 9	600	28.2				A	96	8	1800—0800	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Azimuths defining the sector of limited radiation	Antenna: Maximum radiation in the sector (dB)	Type	Height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	702		LUANDA	AGL	13E49 08S48	A20	5	7.4				A	110	3	0000—2400	
2	(20)		ANDORRA	AND	01E30 42N30	D 9	600	28.4				A	125	5	0000—2400	5/MRC 11/E 19
3			NUZLAH	ARS	39E13 21N39	C10	50	17.4				A	106	3	0300—2300	24
4		S	GRAFTON NSW	AUS	153E07 29S29	A20	50	17.6				A	152	3	1900—1400	
5		S	ORANGE NSW	AUS	148E57 33S12	A20	50	17.0				A	55	4	1900—1400	
6			LHASA	CHN	90E59 29N30	A20	5	7.6				A	120	5	2000—1800	
7		S	NANJING	CHN	118E54 32N06	A20	50	17.6				A	120	3	2000—1800	
8		S	NANTONG SHI	CHN	120E40 32N05	A20	20	13.6				A	120	3	2000—1800	
9		S	SUQIAN	CHN	118E18 33N57	A20	10	10.6				A	120	3	2000—1800	
10		S	YANCHENG	CHN	120E08 33N24	A20	20	13.6				A	120	3	2000—1800	
11			DIYAGAMA	CLN	79E58 06N50	C10	50	17.4				A	90	5	0000—1800	
12			HABOHO 2	COM	43E18 11S37	A20	50	17.6				A	120	1	0000—2400	
13		S	AACHEN STOLBRG	D	06E15 50N47	D 9	5	9.1				A	207	4	0400—1800	7
14		S	AACHEN STOLBRG	D	06E15 50N47	D 9	1.2	2.9				A	207	4	1800—0400	
15		S	AURICH	D	07E30 53N27	D 9	2	5.1				A	238	2	0000—2400	
16		S	FLENSBURG	D	09E27 54N47	D 9	5	9.1				A	222	3	0400—1800	7
17		S	FLENSBURG	D	09E27 54N47	D 9	1.2	2.9				A	222	3	1800—0400	
18		S	HERFORD	D	08E44 52N09	D 9	2	3.4				A	107	4	0000—2400	
19		S	LINGEN	D	07E21 52N32	D 9	2	3.4				A	105	3	0000—2400	
20		S	SIEGEN	D	08E03 50N53	D 9	2	3.4				A	104	4	0000—2400	
21			PARAKOU	DAH	02E38 09N20	C10	30	15.2				A	107	4	0500—2400	
22			EL KHARGA	EGY	30E33 25N30	D 9	20	13.6				A	125	4	0400—2400	24
23			AOSTA	I	07E19 45N42	D 9	10	10.4				A	97	5	0400—1700	7
24			CAMPOBASSO	I	14E39 41N33	D 9	10	10.6				A	139	5	0400—1700	7
25			GROSSETO	I	11E07 42N45	D 9	50	17.6				A	171	3	0400—1700	7
26			AJMER	IND	74E42 26N27	A20	300	26.9				A	215	4	0300—0900	25
27			JULLUNDUR	IND	75E18 31N19	A20	200	25.1				A	210	3	0400—0900	25
28			JULLUNDUR	IND	75E18 31N19	A20	100	22.0	195	305—335	13.0	B		3	0900—0400	
29			MYSORE	IND	76E42 12N18	A20	300	25.2				A	115	3	0300—1000	25
30			RASHT	IRN	49E40 37N10	A20	400	29.0	350	30—310	13.0	B		2	0200—1500	
31			HIROSHIMA	J	132E28 34N26	A15	10	10.6				A	137	4	0000—2400	
32			KITAMI	J	144E16 44N01	A15	10	10.6				A	136	4	0000—2400	
33			MERU	KEN	37E37 00N05	C 9	100	20.6				A	130	4	0000—2400	
34			LUANG PRABANG	LAO	102E08 19N51	A20	2	3.4				A	100	5	2300—1400	
35			MONTE CARLO	MCO	07E25 43N47	D 9	300	28.0	265	20— 60	11.0	B		6	0000—2400	
36			KOTA BAHRU	MLA	102E14 06N06	A20	20	13.4				A	100	5	0000—2400	
37			BAMAKO	MLI	08W02 12N41	C 9	100	22.1				A	213		0600—2400	
38			DALANTSZADAGAD	MNG	104E30 43N38	A18	5	7.6				A	120	4	2200—1500	
39			SEBAA AIOUN	MRC	05W23 33N53	A20	140	22.1				A	175	4	0600—2400	5/AND 24
40			MINNA	NIG	06E33 09N37	C 9	20	13.4				A	80	4	0500—2300	
41			FINNMARK	NOR	29E45 70N04	D 9	20	15.1				A	200	3	0000—2400	
42		S	PAENGAROA	NZL	176E25 37S49	A20	5	7.6				A	150	3	0000—2400	
43		S	TAKAPAU	NZL	176E18 40S02	A20	5	7.0				A	50	4	0000—2400	
44			MASIRAH 1	OMA	58E54 20N41	A20	1500	35.0	90			B		4	0000—2400	11/G
45			MASIRAH 2	OMA	58E54 20N41	A20	1500	35.0	270			B		4	0000—2400	11/G
46			BUTUAN AGUSAN	PHL	125E30 08N56	C 9	5	7.4				A	106	3	2100—1600	
47			VALENZUELA BUL	PHL	120E58 14N41	D 9	50	19.0	155	65—245	2.0	B		3	2100—1600	
48			HOMS 2	SYR	36E42 34N47	A20	20	13.4				A	100	5	0300—2400	
49		S	BAN BYTRICA	TCH	19E08 48N40	C 9	400	29.4				A	250	5	0000—2400	
50		S	BRATISLAVA M	TCH	17E10 48N10	C 9	14	11.9				A	60	4	0000—2400	
51		S	LIPT MIKULAS	TCH	19E35 49N05	C 9	50	17.4				A	100	5	0000—2400	
52		S	ORAVA	TCH	19E20 49N13	C 9	14	11.9				A	60	5	0000—2400	
53		S	PRESOV	TCH	21E16 48N57	C 9	400	29.4				A	250	5	0000—2400	
54		S	RIM SOBOTA	TCH	20E00 48N23	C 9	50	17.4				A	100	5	0000—2400	

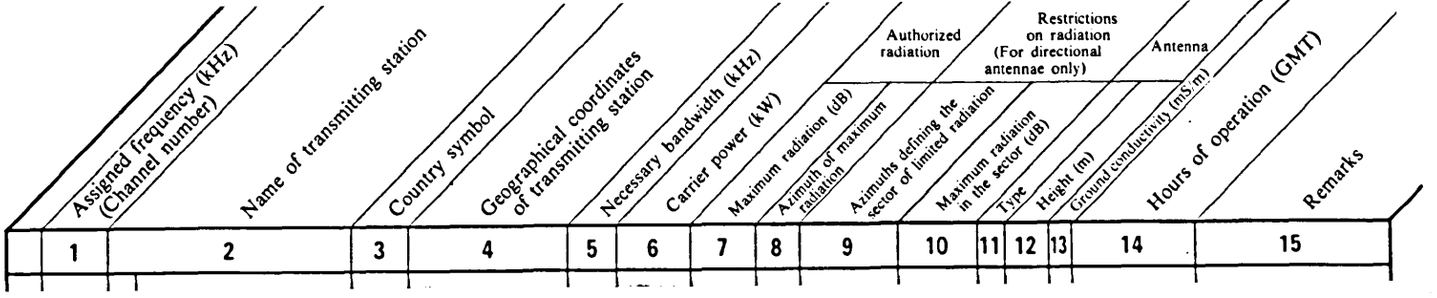
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks

702 KHZ (20)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	702	S	TATRY	TCH	20E18 49N03	C 9	14	11.9				A	60	5	0000—2400	
2	(20)	S	USTI NAD LABEM	TCH	14E02 50N39	C 9	14	11.9				A	60	5	0000—2400	
3		S	ZILINA	TCH	18E45 49N13	C 9	14	11.9				A	60	5	0000—2400	
4			LOPBURI	THA	100E49 14N46	A20	10	10.4				A	107	5	0000—2400	
5			UMRANIYE	TUR	29E06 41N02	D 9	150	23.9				A	220	3	0200—2300	
6			DUCHANBE	URS	68E50 38N40	A16	50	19.1				A	220	4	0000—2400	
7			KIRENSK	URS	108E06 57N47	A18	50	19.1				A	220	4	0000—2400	
8			CELJE	YUG	15E16 46N14	D 9	2	3.4				A	60	5	0000—2400	
9			SABAC	YUG	19E41 44N45	D 9	10	10.4				A	95	3	0700—1500	
10			BOENDE	ZAI	20E57 00S19	C 9	2	3.4				A	60	8	0000—2400	

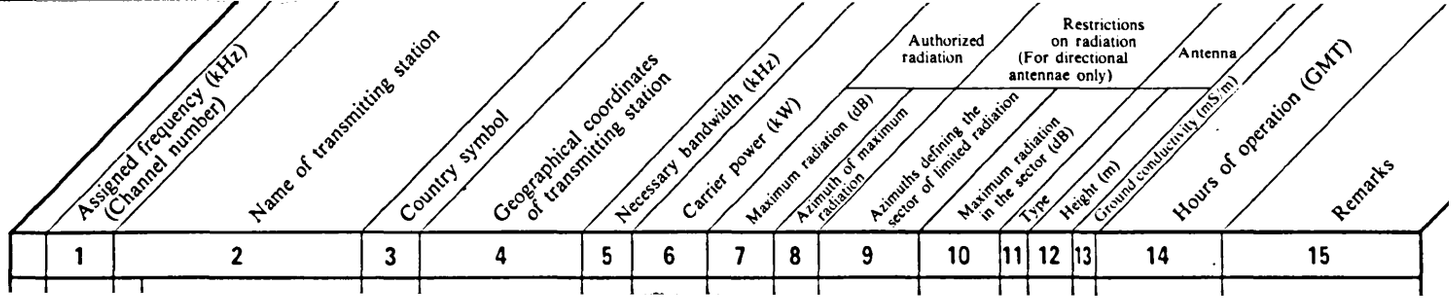


	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	711		KELSO TAS	AUS	146E47 41S06	A20	10					B		4	1900—1400	
2	(21)		S GEORGE QLD	AUS	148E40 28S00	A20	10					B		3	1900—1400	
3			SG HANCHING	BRU	114E58 04N57	A20	20	13.0				A	24	4	2200—1500	
4		S	GONGHE	CHN	100E40 36N18	A20	100	23.4				A	240	5	2000—1800	
5		S	MAQEN	CHN	100E09 34N22	A20	20	13.6				A	120	5	2000—1800	
6		S	MENYUAN	CHN	101E37 37N23	A20	10	10.6				A	120	5	2000—1800	
7			WUHU SHI	CHN	118E24 31N18	A20	5	7.6				A	120	4	2000—1800	
8			MAHO	CLN	80E15 07N44	C10	50	17.4				A	117	5	0000—1800	
9		S	BOPFINGEN	D	10E21 48N51	D 9	0.2	−7.0				A	15	4	0000—2400	
10		S	HEIDELBERG DOS	D	08E40 49N27	D 9	5	7.0				A	51	4	0000—2400	
11		S	HEILBRONN	D	09E12 49N12	D 9	5	7.4				A	74	4	0000—2400	
12		S	ULM JUNGINGEN	D	09E59 48N27	D 9	5	7.0				A	51	4	0000—2400	
13		S	WERTHEIM	D	09E31 49N45	D 9	0.2	−7.0				A	40	4	0000—2400	
14			ABU ZABAL	EGY	31E22 30N16	D 9	200	23.4				A	80	3	0000—2400	24
15			RENNES	F	01W29 47N51	D 9	300	26.9				A	220	3	0000—2400	
16			NAULU REWA	FJI	178E32 18S04	A20	10	10.0				A	45	5	1700—1200	
17			BOLOGNA	I	11E31 44N31	D 9	100	22.1				A	198	3	0400—1700	26/F
18			NEPI	I	12E30 42N10	D 9	100	22.1				A	211	4	0400—1700	26/F
19			ALLAHABAD	IND	81E54 25N28	A20	300	26.9				A	215	3	0300—0900	25
20			SANGLI	IND	74E36 16N53	A20	300	26.9				A	215	3	0300—1000	25
21			SILIGURI	IND	88E30 26N42	A20	200	25.0	175	25— 75	17.0	B		4	0000—2400	
22			ATAMBUA	INS	124E49 09S12	A18	2	3.0				A	50	7	2100—1600	
23			KHORRAMABAD	IRN	48E22 33N29	A20	20	13.4				A	90	3	0200—1600	
24			KHORRAMABAD	IRN	48E22 33N29	A20	10	10.4				A	90	3	1600—2200	
25			EZYON	ISR	34E57 29N35	D 9	30	20.0	200			B		1	0000—2400	33
26			JERUSALEM	ISR	35E13 31N46	D 9	10	10.0				A	45	3	0000—2400	33
27			SORAE	KOR	126E47 37N24	C10	500	27.6				A	160	5	0000—2400	
28			TAETAN	KRE	125E18 38N04	A16	5	7.0				A	50		2000—1800	16
29			MONROVIA	LBR	10W38 06N14	A20	100	23.0	36			B		5	0500—2400	18/MRC
30		S	GHADAMES	LBY	09E30 30N08	D 9	50	17.4				A	82	4	0400—2200	24
31		S	JEFREN	LBY	12E31 32N03	D 9	50	19.1				A	210	6	0400—2200	24
32		S	SEBHA	LBY	14E25 27N04	D 9	50	19.1				A	210	4	0400—2200	24
33			TARFAYA	MRC	12W55 27N55	C 9	600	30.8	170	320— 30	24.8	B		5	0500—0300	18/LBR 24
34			AKURE	NIG	05E15 07N15	C 9	10	10.4				A	100	4	0400—2300	
35			TAUPO	NZL	176E04 38S40	A20	2	3.0				A	50	7	0000—2400	
36			MULTAN II	PAK	71E24 30N10	A20	100	24.0	140	330	14.0	B		4	0000—2000	
37			DAVAO CITY	PHL	125E36 07N04	C 9	5	7.4				A	105	3	2100—1600	
38			ILAGAN ISABELA	PHL	121E53 17N07	C 9	1	0.4				A	105	3	2100—1600	
39			TACLOBAN LEYTE	PHL	125E00 11N13	C 9	1	0.4				A	105	3	2100—1600	
40			SIGHET	ROU	23E56 47N46	C 9	30	15.2				A	105	5	0000—2400	
41			KIGOMA	TGK	29E40 05S00	C 9	100	25.0	90	170— 10		A		4	0300—2100	
42		S	BANGKOK	THA	100E36 13N41	A20	20	13.4				A	102	2	0000—2400	
43		S	CHIANG MAI	THA	98E59 18N51	A20	20	13.4				A	102	5	0000—2400	
44			SISAKET	THA	104E20 15N07	A20	100	23.0	100			B		4	0000—2400	
45			DONETSK	UKR	37E45 47N57	A16	150	23.9				A	220	4	0000—2400	
46		S	BLAGOVECHTCHEN	URS	127E33 50N16	A16	50	19.1				A	220	4	0000—2400	
47			BUKHARA	URS	64E30 39N40	A18	25	16.1				A	220	4	0000—2400	
48		S	KOKHTLA IARVE	URS	27E10 59N20	A16	5	9.1				A	220	4	0000—2400	
49		S	PIARNU	URS	24E33 58N23	A16	5	9.1				A	220	4	0000—2400	
50		S	TALLIN	URS	24E50 59N18	A16	50	19.1				A	220	4	0000—2400	
51		S	TARTU	URS	26E35 58N23	A16	5	9.1				A	220	4	0000—2400	
52		S	VLADIVOSTOK	URS	131E53 43N07	C 9	150	24.8	50	210—240	11.0	B		4	0000—2400	
53			MOCHA	YEM	43E25 13N20	C 9	300	30.0	180			B		3	0300—2200	24
54			NIS	YUG	21E54 43N19	D 9	20	13.6				A	132	4	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	720		ARMIDALE NSW	AUS	151E40 30S30	A20	0.1	−10.0				A	24	4	1900−1400	
2	(22)	S	ATHERTON QLD	AUS	145E33 17S18	A20	4	6.4				A	61	4	1900−1400	
3		S	MACKAY QLD	AUS	149E13 21S06	A20	2	3.0				A	52	3	1900−1400	
4			OMEO VIC	AUS	147E38 37S09	A20	2	3.4				A		2	1900−1400	
5			PERTH WA	AUS	115E49 31S51	A20	50	19.1				A	177	4	2100−1600	
6		S	ALXA ZUOQI	CHN	105E41 38N50	A20	5	7.6				A	120	4	2000−1800	
7		S	ANTU	CHN	128E22 42N33	A20	10	10.6				A	120	4	2000−1800	
8		S	BAOAN	CHN	114E05 22N38	A20	10	10.6				A	120	4	2000−1800	
9		S	BEIJING	CHN	116E27 39N57	A20	150	22.0	240	20−100	16.0	B		4	2000−1800	
10		S	BIYANG	CHN	113E18 32N43	A20	5	7.6				A	120	4	2000−1800	
11		S	CANGZHOU	CHN	116E51 38N18	A20	10	10.6				A	120	4	2000−1800	
12		S	CHALING	CHN	113E33 26N48	A20	10	10.6				A	120	4	2000−1800	
13		S	CHANGDE SHI	CHN	111E42 29N02	A20	20	13.6				A	120	4	2000−1800	
14		S	CHANGLING	CHN	123E59 44N16	A20	10	10.6				A	120	4	2000−1800	
15		S	CHENGKOU	CHN	108E47 31N57	A20	5	7.6				A	120	4	2000−1800	
16		S	CHONGAN	CHN	118E01 27N43	A20	10	10.6				A	120	4	2000−1800	
17		S	DAAN	CHN	124E18 45N30	A20	10	10.6				A	120	4	2000−1800	
18		S	ERENHOT	CHN	112E00 43N39	A20	50	17.6				A	120	4	2000−1800	
19		S	FENGJIE	CHN	109E31 31N04	A20	5	7.6				A	120	4	2000−1800	
20		S	GAR	CHN	79E58 32N12	A20	10	10.6				A	120	5	2000−1800	
21		S	GARZE	CHN	99E58 31N38	A20	5	7.6				A	120	4	2000−1800	
22		S	GUI XIAN	CHN	109E36 23N06	A20	40	16.6				A	120	4	2000−1800	
23		S	GUYUAN	CHN	106E22 36N01	A20	10	10.6				A	120	4	2000−1800	
24		S	HORQIN YZH QI	CHN	121E24 45N07	A20	10	10.6				A	120	4	2000−1800	
25		S	HUAIJI	CHN	112E11 23N55	A20	10	10.6				A	120	4	2000−1800	
26		S	HUNCHUN	CHN	130E21 42N52	A20	5	7.6				A	120	4	2000−1800	
27		S	HUNJIANG	CHN	126E23 41N54	A20	20	13.6				A	120	4	2000−1800	
28		S	JIANGHUA	CHN	111E46 24N57	A20	10	10.6				A	120	4	2000−1800	
29		S	JIANNING	CHN	116E50 26N53	A20	10	10.6				A	120	4	2000−1800	
30		S	JILIN SHI	CHN	126E30 43N48	A20	10	10.6				A	120	4	2000−1800	
31		S	JINHU	CHN	119E01 33N02	A20	5	7.6				A	120	3	2000−1800	
32		S	KANGDING	CHN	102E00 30N00	A20	5	7.6				A	120	4	2000−1800	
33		S	KIANGCHENG	CHN	99E42 28N55	A20	5	7.6				A	120	4	2000−1800	
34		S	LESHAN	CHN	103E40 29N37	A20	5	7.6				A	120	4	2000−1800	
35		S	LHAZE	CHN	87E50 29N05	A20	10	10.6				A	120	5	2000−1800	
36		S	LHORONG	CHN	95E43 30N48	A20	50	17.6				A	120	5	2000−1800	
37		S	LIANYUNGANG	CHN	119E10 34N36	A20	20	13.6				A	120	3	2000−1800	
38		S	LINGLING	CHN	111E37 26N13	A20	10	10.6				A	120	4	2000−1800	
39		S	LIUZHOU	CHN	109E12 24N18	A20	0.5	−2.4				A	120	4	2000−1800	
40		S	LIYANG	CHN	119E29 31N26	A20	5	7.6				A	120	3	2000−1800	
41		S	LONGYAN	CHN	117E02 25N07	A20	10	10.6				A	120	4	2000−1800	
42		S	LUFENG	CHN	115E38 22N57	A20	20	13.6				A	120	4	2000−1800	
43		S	LUOYANG	CHN	112E24 34N42	A20	20	13.6				A	120	4	2000−1800	
44		S	LUZHOU	CHN	105E21 28N47	A20	10	10.6				A	120	4	2000−1800	
45		S	MAOMING	CHN	110E51 21N56	A20	50	17.6				A	120	4	2000−1800	
46		S	MARKAM	CHN	98E10 29N30	A20	10	10.6				A	120	5	2000−1800	
47		S	NAGQU	CHN	92E02 31N25	A20	50	17.6				A	120	5	2000−1800	
48		S	NANCHONG SHI	CHN	106E05 30N48	A20	20	13.6				A	120	4	2000−1800	
49		S	NANG XIAN	CHN	93E10 29N05	A20	10	10.6				A	120	5	2000−1800	
50		S	NANPING	CHN	118E12 26N45	A20	10	10.6				A	120	4	2000−1800	
51		S	NUNGNIN SUM	CHN	118E58 45N40	A20	20	13.6				A	120	4	2000−1800	
52		S	PINGDINGSHAN	CHN	113E17 33N42	A20	10	10.6				A	120	4	2000−1800	
53		S	PINGXIANG 1	CHN	106E45 22N11	A20	10	10.6				A	120	4	2000−1800	
54		S	PINGYU	CHN	114E38 32N58	A20	5	7.6				A	120	4	2000−1800	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	720	S	QINHUANGDAO	CHN	119E32 39N55	A20	10	10.6				A	120	4	2000—1800	
2	(22)	S	QINZHOU	CHN	108E37 21N58	A20	10	10.6				A	120	4	2000—1800	
3		S	SERXU	CHN	98E05 32N58	A20	5	7.6				A	120	4	2000—1800	
4		S	SHANGSHUI	CHN	114E38 33N38	A20	5	7.6				A	120	4	2000—1800	
5		S	SHIJIAZHUANG	CHN	114E40 37N50	A20	50	17.6				A	120	4	2000—1800	
6		S	SHUANGFENG	CHN	112E11 27N27	A20	5	7.6				A	120	4	2000—1800	
7		S	SIPING	CHN	124E20 43N10	A20	5	7.6				A	120	4	2000—1800	
8		S	TONGCHUAN	CHN	109E09 35N06	A20	10	10.6				A	120	4	2000—1800	
9		S	TONGLIAO SHI	CHN	122E13 43N40	A20	20	13.6				A	120	4	2000—1800	
10		S	WEI XIAN	CHN	115E15 36N58	A20	5	7.6				A	120	4	2000—1800	
11		S	WUQI	CHN	108E11 36N55	A20	10	10.6				A	120	4	2000—1800	
12		S	XANZA	CHN	88E42 30N54	A20	50	17.6				A	120	5	2000—1800	
13		S	XIAMEN	CHN	118E18 24N24	A20	10	10.6				A	120	4	2000—1800	
14		S	XINXIANG SHI	CHN	113E52 35N18	A20	10	10.6				A	120	4	2000—1800	
15		S	XIXIA	CHN	111E26 33N24	A20	5	7.6				A	120	4	2000—1800	
16		S	XUPU	CHN	110E35 27N55	A20	10	10.6				A	120	4	2000—1800	
17		S	XUZHOU	CHN	117E20 34N14	A20	10	10.6				A	120	3	2000—1800	
18		S	YANAN	CHN	109E29 36N37	A20	10	10.6				A	120	4	2000—1800	
19		S	YONGSHOU	CHN	108E08 34N41	A20	10	10.6				A	120	4	2000—1800	
20		S	YU XIAN	CHN	114E34 39N50	A20	10	10.6				A	120	4	2000—1800	
21		S	YULIN 1	CHN	109E36 38N18	A20	20	13.6				A	120	4	2000—1800	
22		S	ZHAOJUE	CHN	102E49 28N02	A20	5	7.6				A	120	4	2000—1800	
23		S	ZHENAN	CHN	109E10 33N27	A20	10	10.6				A	120	4	2000—1800	
24		S	ZHONGBA	CHN	84E12 29N39	A20	10	10.6				A	120	5	2000—1800	
25		S	ZHONGWEI	CHN	105E11 37N30	A20	50	17.6				A	120	4	2000—1800	
26		S	ZIGONG	CHN	104E40 29N27	A20	1	0.6				A	120	4	2000—1800	
27			TEJEDA	CNR	15W40 28N00	A20	100	22.1				A	220	4	0000—2400	
28			GAGNOA	CTI	05W56 06N07	C 9	30	16.9				A		7	0600—2400	
29			ZYYI	CYP	33E19 34N43	A20	500	34.0	90			B		4	0000—2400	10 11/G
30			HOLZKIRCHEN	D	11E43 47N52	D 9	150	28.7	40	110—330	6.7	B		4	0400—0100	
31			LANGENBERG	D	07E08 51N21	D 9	200	23.4				A	95	4	0800—1700	7
32			ADDIS ABABA	ETH	38E43 09N17	C 9	10	10.4				A	107	3	0400—2100	
33		S	BELFAST	G	06W00 54N36	A20	0.5	—2.6				A	62	4	0000—2400	
34			COVENTRY	G	01W23 52N27	A20	0.5	—2.6				A	58	3	0000—2400	
35			LONDON	G	00W11 51N28	A20	0.5	—2.6				A	80	4	0000—2400	
36		S	LONDONDERRY	G	07W20 55N00	A20	0.3	—5.2				A	30	5	0000—2400	
37			BOOUE	GAB	11E56 00S01	C 9	10	12.1				A		5	0400—2400	
38			AGANA	GUM	144E47 13N27	C10	10	10.4				A	105	3	0000—2400	
39			BARI	I	16E52 41N03	D 9	100	22.1				A	208	4	0400—1700	7
40			PERUGIA	I	12E23 43N07	D 9	10	10.6				A	139	5	0400—1700	7
41			S REMO	I	07E48 43N49	D 9	10	10.4				A	104	5	0400—1700	7
42			TRIESTE	I	13E46 45N40	D 9	10	10.4				A	107	4	0400—1700	7
43			JAIPUR	IND	75E50 26N54	A20	300	26.9				A	210	4	0300—0900	25
44			MADRAS	IND	80E17 13N04	C 9	300	27.0	255	0— 40	19.0	B		3	0000—2400	
45			SAMBALPUR	IND	84E01 21N28	A20	300	26.9				A	210	3	0300—0900	25
46			TEZU	IND	96E15 27N50	A20	20	15.1				A	210	4	0300—0900	25
47			AMBON	INS	128E10 03S41	A18	10	10.4				A	93	4	2000—1500	
48			TAYBAD	IRN	60E48 34N43	A20	400	29.0	100	220—340		B		3	0200—1600	
49			TAYBAD	IRN	60E48 34N43	A20	200	26.0	100	220—340		B		3	1600—2200	
50			KITAKYUSHU	J	130E51 33N53	A15	1	0.4				A	67	5	0000—2400	
51			KUMANO	J	136E05 33N52	A15	0.1	—10.0				A	53	5	0000—2400	
52			MIHARA HIROSHI	J	133E03 34N23	A15	0.1	—9.6				A	71	5	0000—2400	
53			TAKAYAMA	J	137E16 36N09	A15	0.1	—9.6				A	67	5	0000—2400	
54			GARISSA	KEN	39E40 00S25	C 9	10	10.4				A	100	4	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	720		KORYUNG	KOR	128E16 35N45	C10	1	0.4				A	80	6	0000–2400	
2	(22)		FARAFANGANA	MDG	47E50 22S49	C 9	20	15.1				A	208	4	0300–2000	
3			KAJANG	MLA	101E46 02N59	A20	200	23.6				A	150	5	0000–2400	
4			BOGHE	MTN	14W14 16N36	B20	20	13.4				A	105		0600–2400	24
5			ABA	NIG	07E23 05N05	C 9	50	17.4				A	105	4	0500–2300	
6			INVERCARGILL	NZL	168E37 46S19	A20	20	13.6				A	150	3	0000–2400	
7			BACOLOD CITY	PHL	122E57 10N41	C 9	5	7.4				A	104	3	2100–1600	
8			INFANTA QUEZON	PHL	121E39 14N45	C 9	5	7.4				A	104	3	2100–1600	
9		S	AZURARA	POR	08W43 41N20	A20	100	20.6				A	140	4	0000–2400	
10		S	BEJA	POR	07W52 37N59	A20	1	0.4				A	90	3	0000–2400	
11		S	CASTELO BRANCO	POR	07W31 39N49	A20	10	10.4				A	90	4	0000–2400	
12		S	ELVAS	POR	07W07 38N53	A20	10	10.4				A	90	5	0000–2400	
13		S	FARO	POR	07W53 37N01	A20	10	10.4				A	90	3	0000–2400	
14		S	GUARDA	POR	07W14 40N22	A20	10	10.4				A	90	5	0000–2400	
15		S	MIRANDELA	POR	07W10 41N31	A20	10	10.4				A	90	5	0000–2400	
16		S	ARGEL	ROU	25E28 47N45	A20	1	0.4				A	98	5	0300–2300	
17		S	BAILESTI	ROU	24E30 44N02	A20	2	3.4				A	98	2	0300–2300	
18		S	BORSA	ROU	24E50 47N34	A20	1	0.4				A	98	5	0300–2300	
19		S	BRASOV	ROU	25E35 45N40	A20	2	3.4				A	98	4	0300–2300	
20		S	CLUJ	ROU	23E34 46N42	A20	2	3.4				A	98	4	0300–2300	
21		S	HERCULANE	ROU	22E28 44N56	A20	1	0.4				A	98	5	0300–2300	
22		S	ISACCEA	ROU	28E20 45N15	A20	1	0.4				A	98	4	0300–2300	
23		S	PITESTI	ROU	24E50 44N52	A20	2	3.4				A	98	3	0300–2300	
24		S	REGHIN	ROU	24E24 46N50	A20	1	0.4				A	98	3	0300–2300	
25		S	RIMNICUL SARAT	ROU	27E05 45N24	A20	2	3.4				A	98	4	0300–2300	
26		S	TIMISOARA	ROU	21E14 45N45	A20	2	3.4				A	98	4	0300–2300	
27			KIRUNA	S	20E55 67N38	D 9	600	31.0	345	140–190	25.0	B		6	0000–2400	
28			KIRUNA	S	20E55 67N38	D 9	600	31.0		150–180	22.0	B				
29			ATI	TCD	18E20 13N13	C 9	10	12.1				A			0400–2300	
30			MWANZA	TGK	32E52 02S28	C 9	50	17.4				A	105	4	0300–2100	
31			SFAX	TUN	10E53 34N58	D 9	200	23.0	200	340– 70	10.0	B		4	0000–2400	24
32			IUJNSAKHALINSK	URS	143E00 47N00	A16	500	32.0	60	220–270	7.0	B		4	0000–2400	
33			KRASNOVODSK	URS	52E48 40N00	A18	50	22.0	0	150–220	6.0	B		4	0000–2400	
34		S	MAKSATIKHA	URS	35E53 57N46	A18	5	9.1				A	220	4	0000–2400	
35		S	SELIJAROVO	URS	33E31 56N49	A18	5	9.1				A	220	4	0000–2400	
36			HUE	VTN	107E36 16N27	C10	10	10.4				A	100	4	2200–1500	
37			ZAMBEZI	ZMB	23E07 13S32	A20	10	12.1				A	177	4	0200–2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Antenna: Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	729		ADELAIDE SA	AUS	138E31 35S06	A20	50	17.6				A	168	2	2000—1500	
2	(23)	S	DINGNAN	CHN	115E01 24N45	A20	20	13.6				A	120	4	2000—1800	
3		S	FUZHOU 2	CHN	116E19 28N00	A20	20	13.6				A	120	4	2000—1800	
4		S	JIAN SHI	CHN	114E59 27N08	A20	100	23.4				A	240	4	2000—1800	
5		S	JINGDEZHEN	CHN	117E11 29N17	A20	50	17.6				A	120	4	2000—1800	
6		S	RUIJIN	CHN	116E00 25N50	A20	50	17.6				A	120	4	2000—1800	
7		S	XIUSHUI	CHN	114E34 29N03	A20	20	13.6				A	120	4	2000—1800	
8			RATNAPURA	CLN	80E22 06N40	C10	50	17.6				A	140	7	0000—1800	
9			GREIFSWALD	DDR	13E21 54N04	D 9	10	10.0				A	50	4	0000—2400	
10			TAMPERE 2	FNL	23E49 61N29	D 9	45	17.1				A	150	5	0000—2400	
11			ATHINAI	GRC	23E42 38N02	A 9	1000	32.1				A	220	5	0400—2400	5/NIG 18/UAE
12			DEDOUGOU	HVO	03W28 12N57	A20	30	18.2				A	256	4	0000—2400	
13			GAUHATI	IND	91E47 26N11	A20	150	22.4				A	120	3	0300—0900	25
14			GAUHATI	IND	91E47 26N11	A20	75	19.4				A	120	3	0900—0300	
15			SURAT	IND	72E52 21N12	A20	300	26.9				A	210	3	0300—0900	25
16			TRIVANDRUM	IND	76E59 08N29	A20	300	26.9				A	210	4	0300—1000	25
17			KILLARNEY	IRL	09W30 52N03	A20	100	20.6				A	150	4	0000—2400	
18			NAGOYA	J	136E58 35N03	A15	50	17.4				A	89	4	0000—2400	
19			SEPO	KRE	127E22 38N37	A16	1	0.0				A	50		2000—1800	
20			KUCHING	MLA	110E20 01N33	A20	20	13.6				A	137	5	2200—1600	
21			BOUARFA	MRC	01W49 32N39	A18	100	22.1				A	210	5	0600—2400	24
22			NOUMEA 2	NCL	166E29 22S18	A20	100	25.0	80	230—280	12.0	B		3	0000—2400	
23			KANO	NIG	08E42 12N02	C 9	100	20.4				A	90	4	0500—2300	5/GRC
24			BUTAWAL	NPL	83E29 27N42	A20	1	0.4				A	60	4	2200—1900	
25			PESHAWAR	PAK	71E35 34N01	A20	10	10.4				A	60	4	0000—2000	
26			CAGAYAN DE ORO	PHL	124E38 08N28	C 9	5	7.4				A	103	3	2100—1600	
27			LEGASPI CITY	PHL	123E45 13N08	C 9	1	0.4				A	103	3	2100—1600	
28			S FERNANDO LU	PHL	120E19 16N36	C 9	5	7.4				A	103	3	2100—1600	
29			S ANDRE 2	REU	55E40 20S55	A20	20	15.1				A	220	5	0000—2400	
30			ZALINGEI	SDN	23E33 12N57	A20	200	26.4				A	247	4	0600—1600	24
31			GODERICH	SRL	13W17 08N30	C 9	20	13.0				A	40	2	0500—2400	
32			N RATCHASIMA	THA	102E00 14N56	A20	50	19.1				A	180	2	0000—2400	
33			SADIYAT	UAE	54E27 24N34	C 9	750	29.2				A	103	5	0200—2200	18/GRC 24
34			BUTEBO	UGA	33E55 01N10	C 9	100	20.4				A	103	4	0300—2100	
35			ACHKHABAD	URS	58E23 37N57	C10	50	21.0	330	120—150	7.0	B		4	0000—2400	
36			BRATSK	URS	102E38 56N12	A18	150	23.9				A	220	4	0000—2400	
37			KIROV	URS	49E41 58N36	A18	50	19.1				A	220	4	0000—2400	
38			SREDNE KOLYMSK	URS	154E49 67N27	A16	100	22.1				A	220	5	0000—2400	
39			LIVINGSTONE	ZMB	25E50 17S50	A20	10	10.6				A	164	3	0200—2100	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	738		IN AMENAS	ALG	09E38 28N03	D 9	400	31.0	90	230–310	18.0	B		5	0000–2400	24
2	(24)		SYDNEY NSW	AUS	150E53 33S56	A20	50	19.1				A	226	4	1900–1400	
3			MUHINGA	BDI	30E20 02S58	C 9	10	10.4				A	101	4	0300–2400	
4			PHNOM PENH	CBG	104E55 11N34	C10	1	0.4				A	100	3	0000–2400	
5		S	BAICHENG	CHN	122E50 45N37	A20	20	13.6				A	120	4	2000–1800	
6		S	CHANGCHUN	CHN	125E24 43N48	A20	100	23.4				A	240	4	2000–1800	
7		S	DUNHUA	CHN	128E13 43N22	A20	10	10.6				A	120	4	2000–1800	
8		S	FUHAI	CHN	87E45 47N00	A20	1	0.6				A	120	4	2000–1800	
9		S	FUSONG	CHN	127E17 42N19	A20	10	10.6				A	120	4	2000–1800	
10		S	FUYUN	CHN	89E33 47N00	A20	10	10.6				A	120	4	2000–1800	
11			GUANGZHOU	CHN	113E14 23N11	A20	10	10.6				A	120	4	2000–1800	
12		S	HOTAN	CHN	80E02 37N00	A20	10	10.6				A	120	4	2000–1800	
13			HUHHOT	CHN	111E30 41N12	A20	5	7.6				A	120	4	2000–1800	
14		S	HURE QI	CHN	121E41 42N45	A20	10	10.6				A	120	4	2000–1800	
15		S	JARUD QI	CHN	120E54 44N34	A20	10	10.6				A	120	4	2000–1800	
16		S	KASHI	CHN	76E00 39N25	A20	10	10.6				A	120	4	2000–1800	
17		S	RUOQIANG	CHN	88E10 39N00	A20	10	10.6				A	120	4	2000–1800	
18		S	TACHENG	CHN	83E05 46N45	A20	10	10.6				A	120	4	2000–1800	
19		S	TURPAN	CHN	89E02 42N53	A20	10	10.6				A	120	4	2000–1800	
20		S	WANGQING	CHN	129E46 43N18	A20	10	10.6				A	120	4	2000–1800	
21		S	XINHE	CHN	82E40 41N25	A20	10	10.6				A	120	4	2000–1800	
22		S	YINING SHI	CHN	81E28 43N55	A20	10	10.6				A	120	4	2000–1800	
23		S	YIWU	CHN	94E40 43N20	A20	1	0.6				A	120	4	2000–1800	
24			TRINCOMALEE	CLN	81E07 08N30	C10	20	13.4				A	102	5	0000–1800	
25			DOLISIE	COG	12E41 04S14	A20	50	17.6				A	163	5	0000–2400	
26			ATCHERIGBE	DAH	02E08 07N33	C10	5	7.4				A	102	4	0500–2400	
27			BARCELONA	E	02E12 41N23	D 9	500	30.4				A	236	5	0000–2400	19
28			SODDU	ETH	37E45 06N52	C 9	10	10.4				A	102	3	0400–2100	
29			AMBIKAPUR	IND	83E04 23N10	A20	300	26.9				A	200	4	0300–0900	25
30			BARMER	IND	71E18 25N45	A20	300	26.9				A	200	4	0300–0900	25
31			HYDERABAD	IND	78E30 17N20	A20	300	26.9				A	200	3	0000–2400	
32			PT BLAIR	IND	92E43 11N41	A20	300	26.9				A	200	4	0300–1000	25
33			DJEMBER	INS	113E45 08S07	A18	2	3.4				A	100	4	2200–1700	
34			TEL AVIV 2	ISR	35E00 32N15	D 9	1200	34.0				A	200	3	0000–2400	18/NIG 33
35			TOYAMA	J	137E15 36N43	A15	5	9.0	45			B		5	0000–2400	
36			MALINDI	KEN	40E05 03S15	C 9	5	7.4				A	100	4	0000–2400	
37			DAEGU	KOR	128E49 35N54	C10	100	20.6				A	158	5	0000–2400	
38			PAKSE	LAO	105E50 15N06	A20	10	10.4				A	77	5	2300–1500	
39			MACAU	MAC	113E33 22N12	A20	10	10.4				A	75	2	2200–1600	
40			LOUREN MARQUES	MOZ	32E36 25S58	C10	50	19.1				A	200	4	0400–2200	
41			BAUCHI	NIG	09E50 10N19	C 9	20	13.4				A	100	4	0500–2300	18/ISR
42			PAPEETE 1	OCE	149W29 17S30	A20	100	20.4				A	100	6	0000–2400	
43			KIDAPAWAN COT	PHL	125E05 07N00	C 9	1	0.4				A	101	3	2100–1600	
44			VALENZUELA BUL	PHL	120E58 14N40	C 9	50	17.4				A	101	3	0000–2400	
45			POZNAN	POL	17E00 52N36	C 9	1500	34.0				B		4	0000–2400	
46			NAHA	RYU	127E42 26N11	A15	5	7.6				A	128	4	0000–2400	
47			MOUNDOU	TCD	16E13 08N35	C 9	30	16.9				A			0400–2300	
48			BANGKOK	THA	100E30 13N45	A20	20	13.4				A	66	2	0000–2400	
49			CHIANG MAI	THA	98E56 18N18	A20	10	10.4				A	104	5	0000–2400	
50			KHANTYMANSIISK	URS	69E03 60N57	A16	50	19.1				A	220	4	0000–2400	
51			TCHELIABINSK	URS	61E24 55N09	C10	150	23.9				A	220	4	0000–2400	
52			QUINHON	VTN	109E07 13N53	C10	50	20.0	265			B		4	2100–1600	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	738 (24)	KRUSEVAC	YUG	21E21 43N35	D 9	10	10.4				A	90	3	0800–1500	

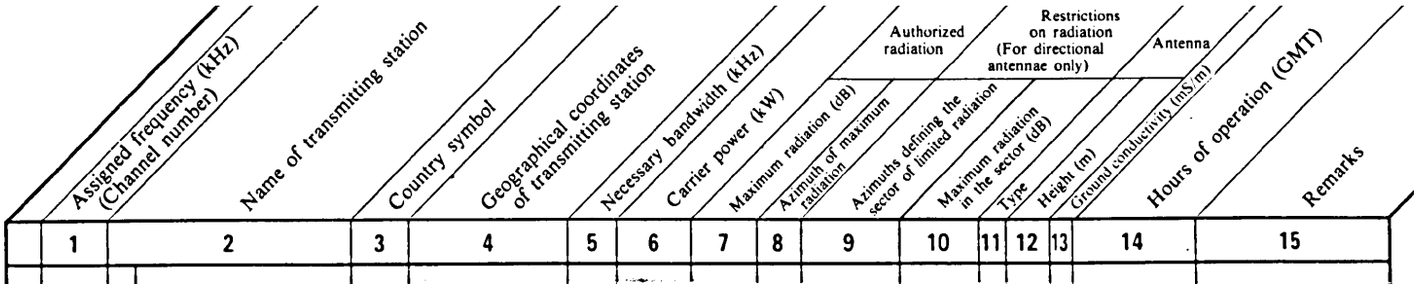
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

747 KHZ (25)

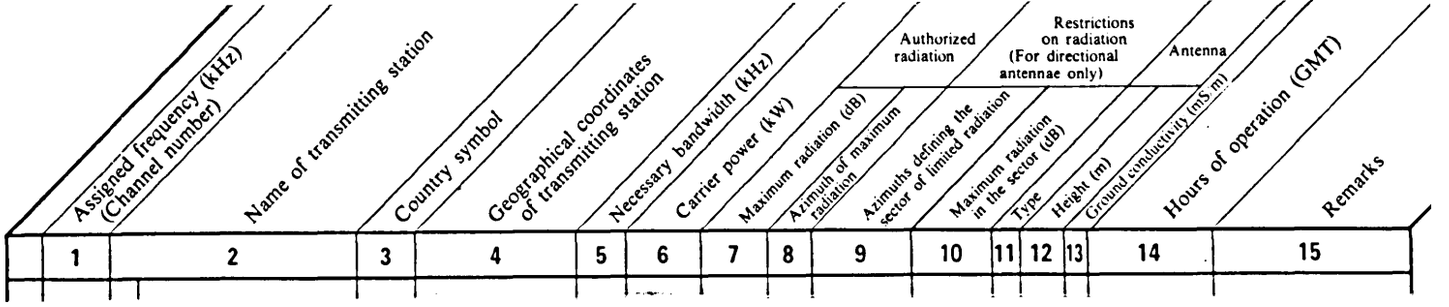
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	747		TLEMCEN	ALG	01W19 34N52	D 9	4	6.0				A	45	4	0600—2400	24
2	(25)		AFLAJ	ARS	46E40 22N15	C 9	20	13.6				A	120	4	0400—1400	24
3		S	DALBY QLD	AUS	151E18 27S08	A20	10	12.1				A	219	3	1900—1400	
4		S	LONGREACH QLD	AUS	144E13 23S23	A20	10	10.4				A	58	2	1900—1400	
5			PNT DELGADA	AZR	25W40 37N45	A20	10	10.4				A	90	4	0000—2400	
6			PETRITCH	BUL	23E35 41N37	C 9	500	29.1				A	205	4	0000—2400	18/HOL
7		S	HUALIAN	CHN	121E37 23N55	A20	100	23.4				A	240	5	2000—1800	
8		S	JIAYI	CHN	120E26 23N28	A20	100	23.4				A	240	5	2000—1800	
9		S	JINGDONG	CHN	100E45 24N24	A20	10	10.6				A	120	5	2000—1800	
10		S	KUNMING	CHN	102E50 25N10	A20	50	17.6				A	120	5	2000—1800	
11		S	TAIBEI SHI	CHN	121E28 25N05	A20	100	23.4				A	240	5	2000—1800	
12		S	TAIDONG	CHN	121E08 22N47	A20	50	17.6				A	120	5	2000—1800	
13		S	TENGCHONG	CHN	98E20 25N00	A20	50	17.6				A	120	5	2000—1800	
14		S	ZHONGDIAN	CHN	99E37 27N45	A20	10	10.6				A	120	5	2000—1800	
15			YATIYANTOTA	CLN	80E17 07N02	C10	20	13.6				A	130	7	0000—1800	
16			GAROUA	CME	12E25 09N18	C 9	100	22.1				A	200	4	0500—2300	
17			JEMSA	EGY	33E32 27N41	D 9	10	10.7				A	150	3	0600—1600	24
18			BASSE 1	GMB	14W15 13N15	C 9	2	3.0				A	49	4	0600—2400	
19			FLEVOLAND	HOL	05E26 52N20	D 9	500	30.4				A	220	4	0000—2400	18/BUL
20			OUAGADOUGOU	HVO	01W31 12N22	A20	100	20.4				A	80	4	0000—2400	
21			AGARTALA	IND	91E23 23N50	A20	300	26.9				A	200	3	0300—0900	25
22			JAISALMER	IND	70E57 26N55	A20	300	28.2				A	235	4	0300—0900	25
23			JALGAON	IND	75E31 20N55	A20	300	26.9				A	200	3	0300—0900	25
24			LUCKNOW	IND	80E52 26N45	A20	300	26.9				A	200	3	0000—2400	
25			TRICHUR	IND	76E15 10N35	A20	300	26.9				A	200	4	0300—1000	25
26			BENGKULU	INS	102E20 03S46	A18	10	10.4				A	100	4	2200—1700	
27			BANDAR SHAH	IRN	54E05 36N54	A20	400	29.0	70	200—310		B		2	0100—1500	
28			SAPPORO	J	141E37 43N05	A15	500	29.1				A	184	4	0000—2400	
29			NAIROBI	KEN	36E55 01S35	C 9	100	20.4				A	93	4	0000—2400	
30			KWANGJU	KOR	126E53 35N11	C10	100	20.6				A	140	5	0000—2400	
31			TOKCHON	KRE	126E19 39N45	A16	1	0.0				A	50		2000—1800	16
32			BUCHANAN	LBR	10W30 05N53	A20	10	10.4				A	100	5	0500—2400	
33			TAWAU	MLA	117E55 04N16	A20	10	10.6				A	150	5	0000—2400	
34			AFIKPO	NIG	07E59 05N59	C 9	10	10.4				A	110	4	0500—2300	
35			RUNTU	NMB	19E46 17S55	A20	100	23.0	180			B		5	0000—2400	
36			KUMARA	NZL	171E09 42S34	A20	10	10.6				A	150	6	0000—2400	
37			BACOLOD CITY	PHL	122E57 10N41	C 9	1	0.4				A	100	3	2100—1600	
38			BAGUIO CITY	PHL	120E35 16N24	C 9	5	7.4				A	100	3	2100—1600	
39			PT SUDAN	SDN	37E12 19N36	A20	100	24.0	200			B		4	0400—2400	24
40			APIA	SMO	171W50 13S47	A20	10	10.4				A	100	6	0000—2400	
41			S TOME	STP	06E45 00N21	C 8	5	7.4				A	100	3	0000—2400	16
42			SARAKEB	SYR	36E49 35N50	C 9	100	22.1				A	206	3	0300—2400	
43			SONGKHLA	THA	100E36 07N10	A20	10	10.4				A	104	3	0000—2400	
44		S	ARKALYK	URS	66E30 50N30	A16	15	13.9				A	220	4	0000—2400	
45			KEM	URS	34E36 64N57	A18	25	16.1				A	220	4	0000—2400	
46		S	SEMIPALATINSK	URS	80E15 50N25	C10	200	25.1				A	220	4	0000—2400	
47			KIKWIT	ZAI	18E45 05S05	C 9	10	10.4				A	60	8	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	756	S	ATHERTON QLD	AUS	145E33 17S18	A20	4	6.4				A	61	4	1900–1400	
2	(26)		KUNUNURRA WA	AUS	128E43 15S47	A20	2	3.0				A	21	4	2200–1600	
3		S	MACKAY QLD	AUS	149E13 21S06	A20	2	3.4				A	52	3	1900–1400	
4			TAREE NSW	AUS	152E26 31S54	A20	2					B		5	1900–1400	
5		S	ANDA SHI	CHN	125E20 46N30	A20	20	13.4				A	90	4	2000–1800	
6		S	ANHUA	CHN	111E13 28N22	A20	10	10.4				A	90	4	2000–1800	
7		S	ANSHAN	CHN	122E58 41N07	A20	10	10.4				A	90	4	2000–1800	
8		S	ANYANG SHI	CHN	114E22 36N08	A20	20	13.4				A	90	4	2000–1800	
9		S	CHANGSHA SHI	CHN	112E45 28N09	A20	50	17.4				A	90	4	2000–1800	
10		S	DANGCHANG	CHN	104E25 33N55	A20	5	7.4				A	90	4	2000–1800	
11		S	DANGSHAN	CHN	116E21 34N26	A20	5	7.4				A	90	4	2000–1800	
12		S	DUNHUANG	CHN	94E37 40N09	A20	5	7.4				A	90	4	2000–1800	
13		S	FENG XIAN	CHN	106E30 33N55	A20	5	7.4				A	90	4	2000–1800	
14		S	FU XIAN 1	CHN	109E21 35N59	A20	50	17.4				A	90	4	2000–1800	
15		S	FUJIN	CHN	132E01 47N20	A20	50	17.4				A	90	4	2000–1800	
16		S	FUSHUN SHI	CHN	123E53 41N51	A20	5	7.4				A	90	4	2000–1800	
17		S	FUXIN SHI	CHN	121E38 42N02	A20	20	13.4				A	90	4	2000–1800	
18		S	FUYANG	CHN	115E51 32N54	A20	5	7.4				A	90	4	2000–1800	
19		S	GUSHI	CHN	115E40 32N10	A20	10	10.4				A	90	4	2000–1800	
20		S	HAIYUAN	CHN	105E39 36N34	A20	20	13.4				A	90	4	2000–1800	
21		S	HANGZHOU	CHN	120E08 30N16	A20	20	13.4				A	90	4	2000–1800	
22		S	HE XIAN	CHN	111E39 24N28	A20	10	10.4				A	90	4	2000–1800	
23		S	HEZE	CHN	115E27 35N15	A20	5	7.4				A	90	4	2000–1800	
24		S	HUAILAI	CHN	115E31 40N23	A20	10	10.4				A	90	4	2000–1800	
25		S	HULIN	CHN	132E58 45N45	A20	20	13.4				A	90	4	2000–1800	
26		S	HUZHONG	CHN	123E32 52N05	A20	20	13.4				A	90	4	2000–1800	
27		S	JIANCHANG	CHN	119E48 40N49	A20	20	13.4				A	90	4	2000–1800	
28		S	JIANHE	CHN	108E45 26N39	A20	20	13.4				A	90	5	2000–1800	
29		S	JIAOZUO	CHN	113E14 35N15	A20	10	10.4				A	90	4	2000–1800	
30		S	JIEXI	CHN	115E50 23N26	A20	10	10.4				A	90	4	2000–1800	
31		S	JIMO	CHN	120E28 36N23	A20	10	10.4				A	90	4	2000–1800	
32		S	JINAN	CHN	116E57 36N43	A20	50	17.4				A	90	4	2000–1800	
33		S	KENLI	CHN	118E35 37N38	A20	5	7.4				A	90	4	2000–1800	
34		S	LANKAO	CHN	114E48 34N48	A20	5	7.4				A	90	4	2000–1800	
35		S	LEIYANG	CHN	112E51 26N25	A20	10	10.4				A	90	4	2000–1800	
36		S	LINFEN	CHN	111E31 36N05	A20	10	10.4				A	90	4	2000–1800	
37		S	LINGQIU	CHN	114E14 39N26	A20	1	0.4				A	90	4	2000–1800	
38		S	LINGSHAN	CHN	109E17 22N25	A20	10	10.4				A	90	4	2000–1800	
39		S	LINXIA	CHN	102E55 35N19	A20	5	7.4				A	90	4	2000–1800	
40		S	LISHI	CHN	111E08 37N31	A20	10	10.4				A	90	4	2000–1800	
41		S	LISHUI	CHN	119E54 28N28	A20	10	10.4				A	90	4	2000–1800	
42		S	LIUZHOU	CHN	109E12 24N18	A20	20	13.4				A	90	4	2000–1800	
43		S	LONGLIN	CHN	105E27 24N43	A20	10	10.4				A	90	4	2000–1800	
44		S	LUAN	CHN	116E30 31N45	A20	10	10.4				A	90	4	2000–1800	
45		S	MEITAN	CHN	107E29 27N46	A20	10	10.4				A	90	5	2000–1800	
46		S	MIANYANG	CHN	113E13 30N11	A20	10	10.4				A	90	4	2000–1800	
47		S	MULAN	CHN	128E02 45N57	A20	10	10.4				A	90	4	2000–1800	
48		S	NANYANG SHI	CHN	112E32 33N00	A20	20	13.4				A	90	4	2000–1800	
49		S	NAYONG	CHN	105E15 26N56	A20	10	10.4				A	90	5	2000–1800	
50		S	NENJIANG	CHN	125E02 49N05	A20	20	13.4				A	90	4	2000–1800	
51		S	NINGYUAN	CHN	111E59 25N35	A20	10	10.4				A	90	4	2000–1800	
52		S	ONGNIUD QI	CHN	118E54 42N55	A20	20	13.4				A	90	4	2000–1800	
53		S	PINGGUO	CHN	107E33 23N19	A20	10	10.4				A	90	4	2000–1800	
54		S	PINGNAN	CHN	110E24 23N33	A20	10	10.4				A	90	4	2000–1800	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Azimuths defining the sector of limited radiation	Maximum radiation in the sector (dB)	Antenna: Type	Height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	756	S	PUTIAN	CHN	119E01 25N25	A20	10	10.4				A	90	4	2000—1800	
2	(26)	S	QIANYANG	CHN	110E09 27N20	A20	10	10.4				A	90	4	2000—1800	
3		S	QICHUN	CHN	115E20 30N04	A20	10	10.4				A	90	4	2000—1800	
4		S	QUANZHOU 2	CHN	111E04 25N56	A20	10	10.4				A	90	4	2000—1800	
5		S	RUYANG	CHN	112E28 34N09	A20	10	10.4				A	90	4	2000—1800	
6		S	SANMENXIA	CHN	111E13 34N46	A20	10	10.4				A	90	4	2000—1800	
7		S	SHANG XIAN	CHN	109E53 33N52	A20	20	13.4				A	90	4	2000—1800	
8		S	SHENGSI	CHN	122E27 30N44	A20	5	7.4				A	90	4	2000—1800	
9		S	SHUO XIAN	CHN	112E25 39N18	A20	10	10.4				A	90	4	2000—1800	
10		S	SONGZHENG	CHN	118E45 27N32	A20	10	10.4				A	90	4	2000—1800	
11		S	TANGSHAN	CHN	118E13 39N38	A20	50	17.4				A	90	4	2000—1800	
12		S	WUHE	CHN	117E53 33N09	A20	10	10.4				A	90	4	2000—1800	
13		S	WUHU SHI	CHN	118E24 31N18	A20	5	7.4				A	90	4	2000—1800	
14		S	WULIAN	CHN	119E12 35N45	A20	5	7.4				A	90	4	2000—1800	
15		S	WUPING	CHN	116E06 25N05	A20	10	10.4				A	90	4	2000—1800	
16		S	WUWEI	CHN	102E33 37N57	A20	5	7.4				A	90	4	2000—1800	
17		S	XIANGSHAN	CHN	121E52 29N28	A20	5	7.4				A	90	4	2000—1800	
18		S	XIFENGZHEN	CHN	107E30 35N48	A20	5	7.4				A	90	4	2000—1800	
19		S	XINYANG SHI	CHN	114E04 32N10	A20	20	13.4				A	90	4	2000—1800	
20		S	XIUNING	CHN	118E10 29N47	A20	5	7.4				A	90	4	2000—1800	
21		S	XUCHANG SHI	CHN	113E48 34N02	A20	5	7.4				A	90	4	2000—1800	
22		S	YANGQUAN	CHN	113E35 37N52	A20	5	7.4				A	90	4	2000—1800	
23		S	YANTAI	CHN	121E18 37N36	A20	5	7.4				A	90	4	2000—1800	
24		S	YICHANG SHI	CHN	111E12 30N48	A20	50	17.4				A	90	4	2000—1800	
25		S	YICHUN 2	CHN	128E45 47N40	A20	50	17.4				A	90	4	2000—1800	
26		S	YINCHUAN	CHN	106E12 38N30	A20	50	17.4				A	90	4	2000—1800	
27		S	YINGDE	CHN	113E24 24N10	A20	10	10.4				A	90	4	2000—1800	
28		S	YONGSHUN	CHN	109E51 29N00	A20	10	10.4				A	90	4	2000—1800	
29		S	ZAOZHUANG	CHN	117E34 34N52	A20	5	7.4				A	90	4	2000—1800	
30		S	ZHANGYE	CHN	100E30 38N54	A20	10	10.4				A	90	4	2000—1800	
31		S	ZHANJIANG	CHN	110E24 21N12	A20	50	17.4				A	90	4	2000—1800	
32		S	ZHENFENG	CHN	105E40 25N14	A20	20	13.4				A	90	5	2000—1800	
33		S	ZHUANGHE	CHN	123E01 39N41	A20	10	10.4				A	90	4	2000—1800	
34		S	ZHUMADIAN	CHN	114E02 32N59	A20	5	7.4				A	90	4	2000—1800	
35		S	ZICHANG	CHN	109E40 37N09	A20	10	10.4				A	90	4	2000—1800	
36		S	BRAUNSCHWEIG	D	10E43 52N17	D 9	800	29.6				A	137	4	0400—1800	
37		S	BRAUNSCHWEIG	D	10E43 52N17	D 9	200	26.6	310	110—150	17.6	B		4	1800—0400	
38		S	RAVENSBURG	D	09E31 47N47	D 9	100	20.6				A	120	4	0400—1800	
39		S	RAVENSBURG	D	09E31 47N47	D 9	100	22.0	280	80—120	14.0	B		4	1800—0400	
40		S	ASSWAN	EGY	32E57 24N04	D 9	10	10.4				A	100	3	0000—2400	24
41		S	ASYUT	EGY	31E04 27N11	D 9	10	10.4				A	100	3	0000—2400	24
42		S	KENA	EGY	32E43 26N10	D 9	10	10.4				A	100	3	0000—2400	24
43			GORE	ETH	35E32 08N09	C 9	10	10.4				A	105	3	0400—2100	
44		S	KUOPIO	FNL	27E34 62N46	D 9	100	22.1				A	200	5	0000—2400	
45		S	MARIEHAMN 2	FNL	19E51 60N07	D 9	10	10.6				A	150	3	0000—2400	
46		S	SODANKYLA	FNL	26E35 67N26	D 9	45	17.1				A	150	6	0000—2400	
47			CARLISLE	G	02W55 54N52	A20	1	0.0				A	46	4	0000—2400	
48			REDRUTH	G	05W13 50N13	A20	2	3.0				A	38	5	0000—2400	
49			GAOUAL	GUI	13W18 11N45	C 9	20	13.4				A	99	4	0000—2400	
50			BOLOGNA	I	11E31 44N31	D 9	25	16.5	200	65— 90	11.0	B		3	0000—2400	18/ROU
51			C VATICANO	I	16E07 38N40	D 9	100	22.1				A	198	2	0400—1700	7
52			ITANAGAR	IND	94E42 27N12	A20	300	26.9				A	200	4	0300—0900	25
53			JAGDALPUR	IND	81E55 19N01	A20	100	22.0	85	295—345	14.0	B		4	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	756		JODHPUR	IND	72E58 26N20	A20	300	26.9				A	200	4	0300—0900	25
2	(26)		PURWOKERTO	INS	109E12 07S26	A18	10	10.4				A	99	4	2200—1700	
3			ZAHEDAN	IRN	60E53 29N28	A20	10	10.4				A	99	4	0300—1400	
4			SALMAN PAK	IRQ	44E40 33N10	A20	300	29.0	150			B		4	0200—2300	
5			KUMAMOTO	J	130E44 32N50	A15	10	10.4				A	102	4	0000—2400	
6			SEOUL	KOR	126E53 37N26	C10	50	17.6				A	142	5	0000—2400	
7			HAMHEUNG	KRE	127E35 39N58	A16	2	3.0				A	50		2000—1800	16
8			DELIMARA	MLT	14E34 35N49	D 9	20	16.4				A	240	4	0000—2400	
9			MABALANE	MOZ	33E30 24S30	C10	20	13.4				A	66	4	0500—1500	
10			NGUMBE	MWI	35E02 15S42	A20	50	17.4				A	92	3	0200—2300	
11			MAIDUGURI	NIG	13E09 11N54	C 9	250	24.4				A	85	4	0500—2300	
12			AUCKLAND	NZL	174E38 36S51	A20	20	13.6				A	150	3	0000—2400	
13			QUETTA	PAK	67E00 30N10	A20	150	25.2				A	227	4	0000—2000	
14			BUTUAN CITY	PHL	125E31 08N56	C 9	1	0.4				A	99	3	2100—1600	
15			NAGA CITY	PHL	123E11 13N37	C 9	5	7.4				A	99	3	2100—1600	
16			OLONGAPO CITY	PHL	120E17 14N49	C 9	1	0.4				A	99	3	2100—1600	
17		S	BRAGANCA	POR	06W45 41N47	A20	1	0.4				A	90	7	0000—2400	
18		S	COVILHA	POR	07W29 40N14	A20	10	10.4				A	90	5	0000—2400	
19		S	LISBOA	POR	08W57 38N58	A20	135	23.4				A	180	3	0000—2400	
20		S	PORTO	POR	08W35 41N06	A20	10	10.4				A	90	3	0000—2400	
21		S	V REAL	POR	07W43 41N16	A20	10	10.4				A	90	5	0000—2400	
22		S	VALENCA	POR	08W38 42N01	A20	10	10.4				A	90	5	0000—2400	
23		S	VISEU	POR	07W55 40N38	A20	10	10.4				A	90	5	0000—2400	
24		S	BOTOSANI	ROU	26E39 47N44	A20	50	17.4				A	93	5	0000—2400	
25		S	LUGOJ	ROU	21E55 45N40	A20	1000	33.0	190	240—320	20.0	B		4	0000—2400	
26		S	LUGOJ	ROU	21E55 45N40	A20	1000	33.0	10	60—140	20.0	B				
27			N RATCHASIMA	THA	102E06 14N58	A20	200	28.0	50			B		2	2300—1100	
28			N RATCHASIMA	THA	102E06 14N58	A20	100	20.4				A	100	2	1100—1700	
29			PHUKET	THA	98E24 07N58	A20	50	17.4				A	100	3	0000—2400	
30			NEBBI	UGA	31E00 02N30	C 9	10	10.6				A	135	4	0300—2100	
31			KOLPACHEVO	URS	82E59 58N18	A18	150	23.9				A	220	4	0000—2400	
32			URGHENTCH	URS	60E20 41N40	A18	150	25.7	340	150—180	11.7	B		4	0000—2400	
33			HISWA	YMS	44E53 12N43	C10	50	17.4				A	108	4	0300—2200	24
34		S	BANJA LUKA 2	YUG	17E11 44N50	D 9	10	10.4				A	90	3	0800—1500	
35		S	GORAZDE 2	YUG	18E58 43N41	D 9	10	10.4				A	90	5	0800—1500	
36		S	MOSTAR 2	YUG	17E49 43N25	D 9	10	10.4				A	90	5	0800—1500	
37		S	TUZLA 2	YUG	18E46 44N38	D 9	10	10.4				A	90	4	0800—1500	
38			ISIRO	ZAI	27E41 02N46	C 9	10	10.4				A	60	8	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	765		KRUJA	ALB	19E47 41N30	A20	1	0.4				A	97	4	0400—2300	(24)
2	(27)		DAMMAM	ARS	50E10 26N24	C 9	1000	35.0	120	250—350	21.0	B		3	0300—1500	24
3			CORRYONG VIC	AUS	148E00 37S00	A20	10	12.1				A		4	1900—1400	
4			PARABURDOO WA	AUS	118E00 23S00	A20	10	12.1				A		5	2100—1600	
5		S	ABGANAR QI	CHN	116E08 43N56	A20	20	13.4				A	90	4	2000—1800	
6		S	BAOTOU	CHN	109E56 40N40	A20	50	17.4				A	90	4	2000—1800	
7		S	DONG UJUMQIN	CHN	116E56 45N30	A20	10	10.4				A	90	4	2000—1800	
8			FUZHOU 1	CHN	119E24 26N06	A20	100	22.1				A	180	4	2000—1800	
9		S	OTOG QI	CHN	107E59 39N06	A20	20	13.4				A	90	4	2000—1800	
10		S	QOG QI	CHN	106E58 41N28	A20	10	10.4				A	90	4	2000—1800	
11			IOANNINA	GRC	20E52 39N40	C 9	20	13.4				A	65	4	0400—2200	
12			BHOPAL	IND	77E36 23N16	A20	300	26.9				A	200	3	0300—0900	25
13			DHARWAR	IND	74E59 15N27	A20	200	25.1				A	200	3	0000—2400	
14			TUTICORIN	IND	78E12 08N48	A20	300	26.9				A	200	3	0300—1000	25
15			BANDJARMASIN	INS	114E33 03S22	A18	5	7.4				A	100	4	2100—1600	
16			ENNISCORTHY	IRL	06W25 52N25	A20	100	24.0	290	100—120	6.0	B		4	0000—2400	
17			CHAHBAHAR 2	IRN	60E45 25N25	A20	600	33.8	95	160—230	12.8	B		2	1500—2100	
18			CHAHBAHAR 2	IRN	60E45 25N25	A20	600	33.8		270—300	14.8	B				
19			CHAHBAHAR 2	IRN	60E45 25N25	A20	600	33.8		0— 20	7.8	B				
20			CHAHBAHAR 2	IRN	60E45 25N25	A20	600	31.8	225	330— 40	23.8	B		2	0200—1500	
21			CHAHBAHAR 2	IRN	60E45 25N25	A20	600	31.8		80—140	23.8	B				
22			BEER SHEVA	ISR	34E32 31N14	D 9	20	15.1				A		3	0000—2400	33
23			KOFU	J	138E32 35N40	A15	5	8.0	120			B		5	0000—2400	
24			TOKUYAMA	J	131E43 34N08	A15	5	8.0	190			B		5	0000—2400	
25			DAEJEON	KOR	127E23 36N17	C10	10	10.6				A	124	4	0000—2400	
26			KUALATRENGGANU	MLA	103E07 05N18	A20	10	10.4				A	100	5	0000—2400	
27			NAMPULA	MOZ	39E16 15S06	C10	250	24.4				A	98	4	0400—2200	
28			TINRHIR	MRC	05W20 31N33	A18	20	15.1				A	196	6	0500—2400	24
29			OKITIPUPA	NIG	04E45 06N33	C 9	10	10.4				A	100	4	0400—2300	
30			DHANKUTA	NPL	87E19 27N00	A20	100	20.6				A	120	4	2200—1900	
31			NELSON	NZL	173E13 41S20	A20	5	10.0	60	290—340	3.0	B		5	0000—2400	
32			CEBU CITY	PHL	123E53 10N18	C 9	5	7.4				A	98	3	2100—1600	
33			GENERAL SANTOS	PHL	125E11 06N06	C 9	1	0.4				A	98	3	2100—1600	
34			TUGUEGARAO CAG	PHL	121E43 17N36	C 9	5	7.4				A	98	3	2100—1600	
35			SOBA	SDN	32E40 15N30	A20	200	26.4				A	228	3	0400—2200	24
36			DAKAR	SEN	17W16 14N45	C10	400	28.1				A	187	4	0600—2400	
37			SOTTENS	SUI	06E44 46N39	D 9	500	29.1				A	190	5	0500—2400	
38			BANGKOK	THA	100E34 13N53	A20	10	10.0				A	40	2	0000—2400	
39			SILIFKE	TUR	34E00 36N25	D 9	600	32.0	250	295—310	15.0	B		4	0200—2300	
40			SILIFKE	TUR	34E00 36N25	D 9	600	32.0		130—190	8.0	B				
41			SILIFKE	TUR	34E00 36N25	D 9	600	32.0		310— 10	8.0	B				
42			ODESSA	UKR	30E45 46N29	C 9	150	25.7	20	270—320	15.7	B		4	0000—2400	
43			KIRENSK	URS	108E06 57N47	A18	50	21.0	340	140—180	12.0	B		4	0000—2400	
44			MEDVEJIEGORSK	URS	34E24 62N56	A16	150	25.2				A	220	4	0000—2400	
45			TCHARDJOU	URS	63E55 39N02	A18	30	18.2				A	220	4	0000—2400	
46			TETIUKHE	URS	135E50 44N20	A18	50	22.0	350	90—170	9.0	B		4	0000—2400	
47		S	NOVA GRADISKA2	YUG	17E15 45N11	D 9	20	13.4				A	100	3	0800—1500	
48		S	RIJEKA	YUG	14E26 45N20	D 9	20	13.4				A	60	4	0800—1500	
49		S	STON 2	YUG	17E44 42N50	D 9	20	13.0	0	290—310	7.0	B		4	0000—2400	
50		S	STON 2	YUG	17E44 42N50	D 9	20	10.4	115	290—310	7.0	B				
51		S	STON 2	YUG	17E44 42N50	D 9	20	10.4	240	290—310	7.0	B				
52			BUNIA	ZAI	30E11 01N32	C 9	10	10.4				A	60	8	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	774		LUANDA	AGL	13E20	08S50	A20	10	10.4				A	97	3	0000—2400	
2	(28)		MELBOURNE VIC	AUS	144E47	37S43	A20	50	19.1				A	216	2	1900—1400	
3			HALLSTATT	AUT	13E40	47N33	D 9	0.1	−10.0				A	15	6	0000—2400	
4			HEILIGENBLUT	AUT	12E51	47N02	D 9	0.1	−10.0				A	15	6	0000—2400	
5			JUDENBURG	AUT	14E39	47N09	D 9	0.1	−10.0				A	15	6	0000—2400	
6		S	KLAGENFURT SEE	AUT	14E16	46N37	D 9	30	15.2				A	105	5	0000—2400	
7			LAENGENFELD	AUT	10E58	47N05	D 9	0.1	−10.0				A	15	6	0000—2400	
8		S	LIEZEN	AUT	14E14	47N34	D 9	10	10.6				A	150	6	0000—2400	
9			MAYRHOFEN	AUT	11E52	47N10	D 9	0.1	−10.0				A	15	6	0000—2400	
10			MITTERSILL	AUT	12E29	47N17	D 9	0.1	−10.0				A	15	6	0000—2400	
11			PRUTZ	AUT	10E40	47N05	D 9	0.1	−10.0				A	15	6	0000—2400	
12			S GALLENKIRCH	AUT	09E58	47N01	D 9	0.1	−10.0				A	15	6	0000—2400	
13		S	SALZBURG MOOS	AUT	13E02	47N46	D 9	20	13.0				A	23	5	0000—2400	
14			BUJUMBURA	BDI	29E30	03S25	C 9	30	15.2				A	97	4	0300—2400	
15		S	SOFIA	BUL	23E41	42N51	C 9	150	22.4				A	110	4	0000—2400	5/EGY
16		S	VARNA	BUL	27E40	43N03	C 9	150	22.2				A	81	4	0000—2400	5/EGY
17		S	ENSHI	CHN	109E28	30N17	A20	20	13.4				A	90	4	2000—1800	
18		S	SHASHI	CHN	112E14	30N18	A20	50	17.4				A	90	4	2000—1800	
19		S	SHIYAN	CHN	110E47	32N36	A20	20	13.4				A	90	4	2000—1800	
20		S	WUHAN	CHN	114E20	30N36	A20	100	22.1				A	180	4	2000—1800	
21		S	ZAOYANG	CHN	112E45	32N08	A20	20	13.4				A	90	4	2000—1800	
22			ANURADHAPURA	CLN	80E30	08N20	C10	10	10.4				A	81	5	0000—1800	
23		S	BARBASTRO	E	00E08	42N02	D 9	1	0.0				A	50	5	0000—2400	19
24		S	CACERES	E	06W20	39N20	D 9	60	19.9				A	180	4	0000—2400	19
25		S	CALATAYUD	E	01W38	41N21	D 9	0.3	−5.2				A	50	5	0000—2400	19
26		S	FIGUERAS	E	02E58	42N16	D 9	0.3	−5.2				A	50	5	0000—2400	19
27		S	GRANADA	E	03W36	37N11	D 9	1	0.0				A	50	4	0000—2400	19
28		S	JACA	E	00W33	42N34	D 9	0.3	−5.2				A	50	5	0000—2400	19
29		S	LEON	E	05W35	42N36	D 9	1	0.0				A	50	4	0000—2400	19
30		S	MARBELLA	E	04W53	36N31	D 9	0.3	−5.2				A	50	5	0000—2400	19
31		S	ORENSE	E	07W48	42N21	D 9	20	13.4				A	96	5	0000—2400	19
32		S	QUESADA	E	03W04	37N51	D 9	0.3	−5.2				A	50	5	0000—2400	19
33		S	RIBADEO	E	07W02	43N32	D 9	0.5	−3.0				A	50	4	0000—2400	19
34		S	S SEBASTIAN	E	01W50	43N21	D 9	20	13.4				A	81	5	0000—2400	19
35		S	SORIA	E	02W28	41N46	D 9	0.3	−5.2				A	50	5	0000—2400	19
36		S	VALENCIA	E	00W19	39N17	D 9	100	20.4				A	96	4	0000—2400	19
37			ABIS	EGY	30E05	31N10	D 9	1000	37.0	280	330— 30	21.0	B		3	0000—2400	5/BUL 24
38			BAHAR DAR	ETH	37E27	11N20	C 9	10	10.4				A	97	3	0400—1500	
39			LAUTOKA	FJI	177E28	17S37	A20	10	10.0				A	45	7	1700—1200	
40			HUDDERSFIELD	G	01W53	53N38	A20	0.5	−2.6				A	65	3	0000—2400	
41			BASSE 2	GMB	14W15	13N15	C 9	2	3.0				A	49	4	0600—2400	
42			AGANA	GUM	144E45	13N27	C10	10	10.4				A	97	3	0000—2400	
43			FIRENZE	I	11E16	43N49	D 9	50	17.6				A	150	4	0400—1700	7
44			MILANO	I	09E12	45N20	D 9	100	22.1				A	194	4	0400—1700	7
45			NAPOLI	I	14E19	41N00	D 9	50	17.6				A	155	4	0400—1700	7
46			JEYPORE	IND	82E40	18N51	A20	300	26.9				A	195	4	0300—1000	25
47			KOHIMA	IND	94E03	25N43	A20	300	26.9				A	195	4	0300—0900	25
48			RAJKOT	IND	70E41	22N22	A20	20	15.1				A	195	3	0300—0900	25
49			SIMLA 1	IND	77E12	31N10	A20	300	26.9				A	195	4	0300—0900	25
50			SIMLA 2	IND	77E12	31N10	A20	100	22.1				A	195	4	0900—0300	
51			BANDUNG	INS	107E34	06S57	A18	10	10.4				A	97	4	2200—1700	
52			FAKFAK	INS	132E17	02S55	A18	10	10.4				A	97	5	2000—1500	
53			AKITA	J	139E56	39N57	A15	500	29.1				A	168	4	0000—2400	
54			CHUNCHEON	KOR	127E43	37N55	C10	10	10.6				A	124	6	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

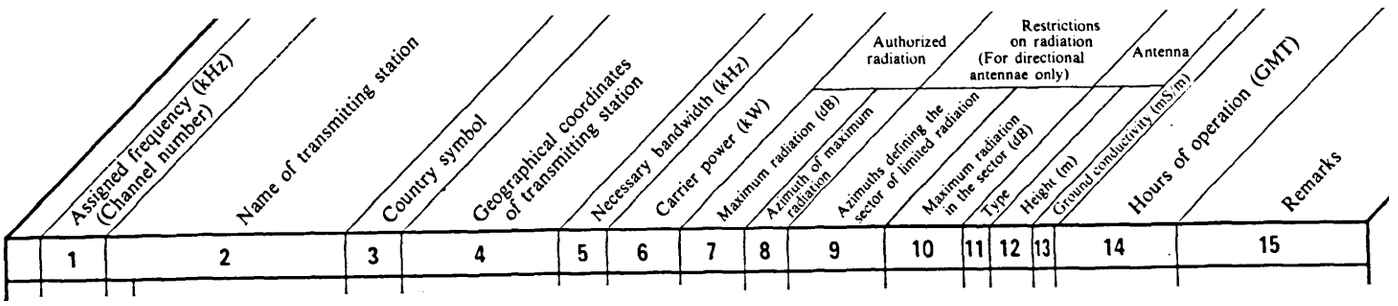
774 KHZ (28)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	774		JEJU	KOR	126E35 33N30	C10	10	10.6				A	120	4	0000—2400	
2	(28)		SUDONG	KRE	127E01 39N24	A16	1	0.0				A	50		2000—1800	16
3			SELAMA	MLA	100E40 05N12	A20	10	10.6				A	150	5	2200—1700	
4			TENOM	MLA	115E57 05N08	A20	10	10.6				A	150	5	0000—2400	
5			ULAN BATOR	MNG	107E00 47N55	A18	5	7.6				A	120	4	2200—1500	
6			LOUREN MARQUES	MOZ	32E36 25S58	C10	10	10.4				A	96	4	0400—2200	
7			AGADIR	MRC	09W31 30N20	A18	100	22.1				A	190	4	0600—2400	24
8			BENIN	NIG	05E45 06N24	C 9	50	17.4				A	85	4	0500—2300	
9			KAIKOURA	NZL	173E41 42S24	A20	2	3.0				A	50	5	0000—2400	
10			MARAWI CITY	PHL	124E18 08N01	C 9	1	0.4				A	97	3	2100—1600	
11			QUEZON CITY	PHL	122E05 14N38	C 9	10	10.4				A	97	3	2100—1600	
12			STOCKHOLM	S	18E11 59N18	D 9	600	30.0	220	110—120	22.0	B		4	0000—2400	
13			SOKOLOV	TCH	12E40 50N10	A20	1	0.4				A	60	5	0000—2400	
14			UDON THANI	THA	102E47 17N24	A20	10	10.0				A	35	3	0000—2400	
15			AIAGUZ	URS	79E59 47N50	A18	50	20.4				A	220	4	0000—2400	
16		S	ORENBURG	URS	54E47 51N46	C10	50	20.4				A	220	4	0000—2400	
17		S	VORONEJ	URS	39E14 51N38	A16	150	25.2				A	220	4	0000—2400	
18			MUKALLA	YMS	49E07 14N31	C 9	50	22.0	40	140—270	7.0	B		4	0300—2200	24
19		S	BIHAC	YUG	15E53 44N48	D 9	10	10.4				A	60	5	0000—2400	
20			GACKO	YUG	18E34 43N12	D 9	20	13.4				A	60	5	0000—2400	
21			SPLIT	YUG	16E28 43N30	D 9	50	19.0				A	120	4	0800—1500	
22		S	TOVARNIK	YUG	19E11 45N11	D 9	10	12.1				A	190	3	0800—1500	
23			TUZLA	YUG	18E46 44N38	D 9	20	13.4				A	60	4	0000—2400	

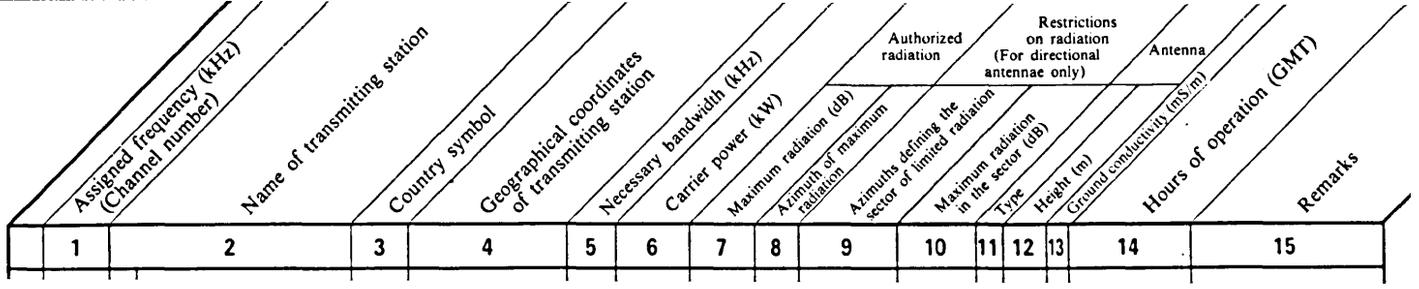
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	783		EL OUED	ALG	06E47 33N31	D 9	20	13.4				A	90	5	0600–2400	
2	(29)		ALBANY WA	AUS	117E50 35S01	A20	5	7.4				A	55	3	1900–1400	
3			KATOOMBA NSW	AUS	150E23 33S43	A20	5	7.4				A	73	4	1900–1400	
4			TOWNSVILLE QLD	AUS	146E49 19S19	A20	5	7.4				A	68	4	0000–2400	
5		S	BAODING	CHN	115E33 38N51	A20	100	22.0	240	20–100	14.0	B		4	2000–1800	
6		S	BAQEN	CHN	93E43 32N01	A20	10	10.4				A	90	5	2000–1800	
7		S	COMA	CHN	91E28 28N28	A20	10	10.4				A	90	5	2000–1800	
8		S	DAMXUNG	CHN	91E10 30N35	A20	10	10.4				A	90	5	2000–1800	
9		S	GERZE	CHN	84E15 32N20	A20	50	17.4				A	90	5	2000–1800	
10		S	KUANCHENG	CHN	118E29 40N36	A20	20	13.4				A	90	4	2000–1800	
11		S	MEDO	CHN	95E13 29N18	A20	10	10.4				A	90	5	2000–1800	
12		S	QABDO	CHN	97E05 31N11	A20	50	17.4				A	90	5	2000–1800	
13		S	SAGA	CHN	85E18 29N25	A20	10	10.4				A	90	5	2000–1800	
14		S	WEICHANG	CHN	117E45 41N57	A20	10	10.4				A	90	4	2000–1800	
15		S	XIGAZE	CHN	89E00 29N20	A20	10	10.4				A	90	5	2000–1800	
16		S	XINGTAI SHI	CHN	114E31 37N04	A20	10	10.4				A	90	4	2000–1800	
17		S	ZAMDA	CHN	79E46 31N28	A20	10	10.4				A	90	5	2000–1800	
18			SAVE	DAH	02E30 08N04	C10	5	7.4				A	96	4	0500–2400	
19			BURG	DDR	11E54 52N17	D 9	1000	32.1				A	200	4	0000–2400	
20			GOLDEN HILL	HKG	114E09 22N22	A20	20	13.4				A	92	5	2200–1800	
21			GAOUA	HVO	04W20 10N30	A20	30	16.9				A	192	4	0000–2400	
22			BIKANER	IND	73E22 28N01	A20	300	26.9				A	190	4	0300–0900	25
23			MADRAS 1	IND	80E17 13N04	A20	300	26.9				A	190	3	0300–1000	25
24			MADRAS 2	IND	80E17 13N04	A20	200	25.0	255	0– 40	17.0	B		3	1000–0300	
25			NAGPUR	IND	79E03 21N06	A20	300	26.9				A	190	3	0300–0900	25
26			SILIGURI	IND	88E30 26N42	A20	100	21.0	180	345– 15	17.0	B		4	0300–0900	25
27			TANDJUNGKARANG	INS	105E18 05S22	A18	5	7.4				A	96	5	2200–1700	
28			IRANSHAHR	IRN	60E42 27N12	A20	20	13.6				A	134	4	0100–2200	
29			MARSABIT	KEN	38E00 02N20	C 9	5	7.4				A	100	4	0200–2100	
30			BUSAN	KOR	129E07 35N09	C10	5	7.4				A	60	4	0000–2400	
31			SANDAKAN	MLA	118E01 05N58	A20	10	10.6				A	150	5	0000–2400	
32			V CABRAL	MOZ	35E08 13S18	C10	5	7.4				A	96	4	0400–2200	
33			CHINGUETTI	MTN	12W20 20N28	B20	20	13.4				A	96		0600–2400	
34		S	ANKPA	NIG	07E40 08N15	C 9	10	10.4				A	100	4	0500–2300	
35		S	LOKOJA	NIG	06E45 07N45	C 9	50	17.4				A	100	4	0500–2300	
36			WELLINGTON	NZL	174E51 41S06	A20	20	13.6				A	120	4	0000–2400	
37			MARQUISES	OCE	140W10 08S55	A20	20	13.4				A	50	1	0000–2400	
38			BAUANG LU	PHL	120E21 16N33	C 9	1	0.4				A	96	3	2100–1600	
39			DAVAO CITY	PHL	125E36 07N04	C 9	10	10.4				A	96	3	2100–1600	
40			MASBATE	PHL	123E37 12N22	C 9	1	0.4				A	96	3	2100–1600	
41			PALAWAN	PHL	118E48 09N45	C 9	1	0.4				A	96	3	2100–1600	
42		S	MIRANDELA	POR	07W10 41N31	A20	10	10.4				A	90	5	0000–2400	
43		S	PORTO	POR	08W37 41N04	A20	100	20.4				A	100	5	0000–2400	
44			NAHA	RYU	127E43 26N13	A15	5	7.4				A	86	4	0000–2400	
45			ATBARA	SDN	34E00 17N30	A20	100	26.0	340			B		4	0400–2400	
46			TARTOUS	SYR	35E50 34N50	C 9	600	33.6	250			B		2	0300–2400	
47			LOPBURI	THA	100E42 14N53	A20	20	13.4				A	96	5	0000–2400	
48			KAMPALA	UGA	32E36 00N20	C 9	20	13.4				A	96	4	0300–2100	
49			KIEV	UKR	30E38 50N27	A16	100	23.4				A	220	4	0300–1300	
50			SIMFEROPOL	UKR	34E06 44N56	A16	50	20.4				A	220	4	0300–1300	
51			UJGOROD	UKR	22E20 48N38	A16	50	20.4				A	220	4	0300–1300	
52			ACHKHABAD	URS	58E23 37N57	C10	300	27.7	20	140–250	12.7	B		4	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	783	DJAMBUL	URS	71E22 42N55	A18	150	25.7	310	110—150	15.7	B		4	0000—2400	
2	(29)	KAZAN	URS	48E48 55N47	A16	150	25.2				A	220	4	0000—2400	
3		SPASSK DALNII	URS	132E47 44N38	A18	75	22.7	60	220—260	12.7	B		4	0000—2400	
4		TSELINOGRAD	URS	71E24 49N08	A16	30	18.2				A	220	4	0000—2400	
5		CANTHO	VTN	105E46 10N05	C10	10	10.4				A	100	3	2100—1500	
6		PAZIN	YUG	15E45 45N15	D 9	50	17.4				A	100	4	0800—1500	



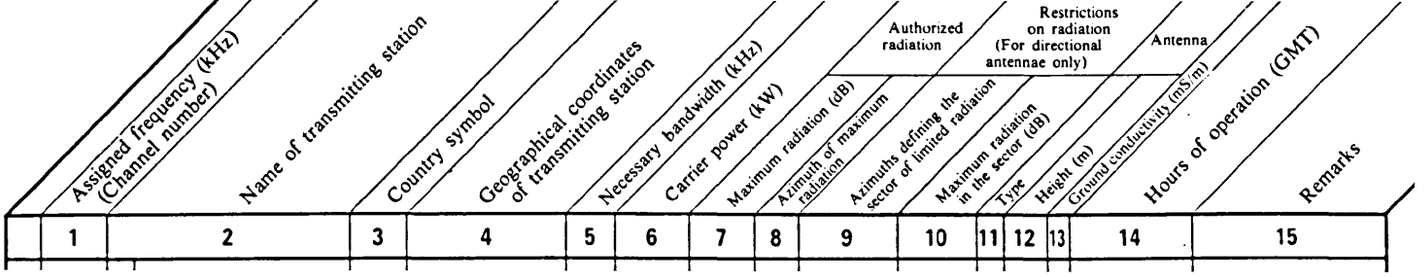
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	792	S	BRISBANE QLD	AUS	153E01 27S19	A20	10	12.1				A	198	3	2000—1500	
2	(30)	S	S GEORGE QLD	AUS	148E40 28S00	A20	10	12.1				A		3	1900—1400	
3		S	BEIHAI	CHN	109E07 21N29	A20	20	13.4				A	90	4	2000—1800	
4		S	BOSE	CHN	106E37 23N54	A20	40	16.4				A	90	4	2000—1800	
5		S	HECHI	CHN	108E03 24N42	A20	20	13.4				A	90	4	2000—1800	
6		S	NANNING	CHN	108E18 22N48	A20	100	22.1				A	180	4	2000—1800	
7		S	PINGLE	CHN	110E38 24N38	A20	20	13.4				A	90	4	2000—1800	
8			SHANGHAI	CHN	121E29 31N15	A20	50	17.4				A	90	3	2000—1800	
9			SHENYANG	CHN	123E36 41N54	A20	5	7.4				A	90	4	2000—1800	
10			XIAN	CHN	108E54 34N12	A20	10	10.4				A	90	4	2000—1800	
11		S	YULIN 2	CHN	110E08 22N37	A20	20	13.4				A	90	4	2000—1800	
12			BRAZZAVILLE	COG	15E18 04S16	A20	100	22.1				A	189	5	0000—2400	
13			SEVILLA	E	06W00 37N20	D 9	20	13.4				A	80	3	0000—2400	19
14			LIMOGES	F	01E10 45N56	D 9	300	26.9				A	160	4	0000—2400	
15			KAVALLA	GRC	24E49 40N52	C 9	500	27.6				A	119	3	0800—1500	
16			KAVALLA	GRC	24E49 40N52	C 9	500	34.0	195	270—290	24.0	B		3	1500—0800	
17			KAVALLA	GRC	24E49 40N52	C 9	500	34.0	15	90—120	24.0	B				
18			POONA 1	IND	73E55 18N31	A20	300	26.9				A	190	3	0300—1000	25
19			POONA 2	IND	73E55 18N31	A20	200	26.0	180	315— 45	13.0	B		3	1000—0300	
20			RANCHI	IND	85E23 23N23	A20	50	19.1				A	190	3	0300—0900	25
21			EMBETSU	J	141E48 44N43	A15	1	0.6				A	108	5	0000—2400	
22			IMABARI	J	133E01 34N03	A15	0.1	−9.6				A	71	5	0000—2400	
23			IWAIZUMI	J	141E48 39N51	A15	0.1	−9.6				A	71	5	0000—2400	
24			OZU	J	132E34 33N31	A15	0.1	−9.6				A	74	5	0000—2400	
25			TAKADA	J	138E17 37N06	A15	1	0.6				A	109	5	0000—2400	
26			TAKAYAMA	J	137E15 36N08	A15	1	0.4				A	67	5	0000—2400	
27			TOJO	J	133E16 34N54	A15	0.1	−9.6				A	71	5	0000—2400	
28			MOMBASA	KEN	39E40 04S05	C 9	100	23.0	45			A	93	4	0000—2400	
29			SEOUL	KOR	126E51 37N29	C10	50	17.6				A	122	5	0000—2400	
30			SINPO	KRE	128E10 40N04	A16	1	0.4				A	70		2000—1800	16
31		S	NALUT	LBY	10E59 31N52	A20	20	15.1				A	190	5	0400—2400	28
32		S	SIRTE	LBY	16E40 31N12	A20	20	15.1				A	190	5	0400—2200	28
33			TANTAN	MRC	10W51 28N27	C12	20	15.1				A	190	5	0500—0300	
34			KAEDI	MTN	13W31 16N09	B20	20	13.4				A	94		0600—2400	
35			IDOMINASI	NIG	04E42 07N41	C 9	10	10.4				A	100	4	0400—2300	
36			KATMANDU	NPL	85E20 27N45	A20	100	20.4				A	100	4	2200—1900	
37			CHATHAM IS	NZL	176W38 44S05	A20	5	7.4				A	50	4	0000—2400	
38			ROSS	NZL	170E48 42S54	A20	2	3.4				A	50	6	0000—2400	
39			MUZAFARABAD	PAK	73E29 34N22	A20	100	20.4				A	76	4	0000—2000	
40			ANGELES PAMP	PHL	120E35 15N08	C 9	1	0.4				A	94	3	2100—1600	
41			ORMOC CITY	PHL	124E36 11N01	C 9	1	0.4				A	94	3	2100—1600	
42			S PIERRE 2	REU	55E29 21S19	A20	20	13.4				A	60	4	0000—2400	
43			NASE	RYU	129E30 28N24	A15	1	0.4				A	102	5	0000—2400	
44			SINGAPORE 1	SNG	103E42 01N20	A20	750	29.2				A	100	4	2200—1800	
45			JESENIK	TCH	17E12 50N14	A20	1	0.4				A	60	5	0000—2400	
46			PRIBRAM	TCH	14E02 49N42	A20	1	0.4				A	60	5	0000—2400	
47			PRIEVIDZA	TCH	18E38 48N47	A20	1	0.4				A	60	5	0000—2400	
48			BANGKOK	THA	100E31 13N48	A20	20	13.4				A	60	2	0000—2400	
49			ASTRAKHAN	URS	48E04 46N22	C10	50	20.4				A	220	4	0000—2400	
50			OKHA	URS	142E53 53N36	A18	50	20.4				A	220	4	0000—2400	
51			SAYWN	YMS	48E50 16N00	C 9	50	17.4				A	95	4	0300—2200	
52			KINDU	ZAI	25E55 02S57	C 9	10	10.4				A	60	8	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	801		RAFHA	ARS	43E30 29N40	C 9	20	13.6				A	120	4	0400—1400	24
2	(31)	S	CAIRNS QLD	AUS	145E47 17S03	A20	5	7.0				A	43	5	1900—1400	
3			MORUYA NSW	AUS	150E00 36S00	A20	2	3.4				A		3	0000—2400	
4		S	MOSSMAN QLD	AUS	145E23 16S25	A20	2	3.4				A	61	4	1900—1400	
5			RENMARK SA	AUS	140E38 34S14	A20	5	7.0				A	43	2	1900—1400	
6			SYDNEY NSW	AUS	150E53 33S56	A20	0.5	−3.0				A	37	4	1900—1400	
7		S	DEQING	CHN	111E46 23N09	A20	20	13.4				A	90	4	2000—1800	
8		S	JIANGMEN	CHN	113E07 22N32	A20	10	10.4				A	90	4	2000—1800	
9		S	YA XIAN	CHN	109E28 18N17	A20	30	15.2				A	90	4	2000—1800	
10		S	YINGDE	CHN	113E24 24N10	A20	20	13.4				A	90	4	2000—1800	
11		S	ZHANJIANG	CHN	110E24 21N12	A20	50	19.1				A	180	4	2000—1800	
12			DIYAGAMA	CLN	79E58 06N50	C10	50	17.4				A	60	5	0000—1800	
13			DILLBERG	D	11E23 49N20	D 9	500	27.4				A	100	4	0600—1800	
14			DILLBERG	D	11E23 49N20	D 9	500	28.0	210	30— 40	25.0	B		4	1800—0600	
15			BALE GOBA	ETH	40E00 07N00	C 9	10	10.4				A	94	3	0400—2100	
16			TAUNTON	G	03W05 51N01	A20	0.5	−3.0				A	38	3	0000—2400	
17			DINGUIRAYE	GUI	10W43 11N17	C 9	30	15.2				A	74	4	0000—2400	
18			GENOVA	I	08E54 44N25	D 9	20	15.1				A	167	5	0400—1700	7
19			PESCARA	I	14E15 42N26	D 9	20	13.6				A	111	4	0400—1700	7
20			ADILABAD	IND	78E30 19N48	A20	300	26.9				A	185	3	0300—1000	25
21			BHAGALPUR	IND	87E02 25N15	C 9	300	26.9				A	200	3	0300—0900	25
22			GAUHATI	IND	91E47 26N11	A20	300	26.9				A	185	3	0300—0900	25
23			JAMMU	IND	74E49 32N47	C 9	200	23.0				A	255	4	0300—0900	25
24			REWA	IND	81E25 24N31	A20	300	26.9				A	185	4	0000—2400	
25			SEMARANG	INS	110E29 06S58	A18	10	10.4				A	94	5	2200—1700	
26			REZAIYEH	IRN	45E05 37N32	A20	10	10.4				A	94	3	0300—1400	
27			ENA SAN	J	137E25 35N28	A15	0.1	−9.6				A	68	5	0000—2400	
28			HARANOMACHI	J	140E58 37N39	A15	0.1	−9.6				A	52	5	0000—2400	
29			KAZUNO AKITA	J	140E49 40N11	A15	0.1	−9.6				A	67	5	0000—2400	
30			KESENNUMA	J	141E34 38N54	A15	0.1	−9.6				A	68	5	0000—2400	
31			KITAMI	J	143E52 43N49	A15	0.1	−9.6				A	83	4	0000—2400	
32			MUGI	J	134E25 33N40	A15	0.1	−9.4				A	107	5	0000—2400	
33			NAKAMURA	J	132E55 32N59	A15	0.1	−9.6				A	67	5	0000—2400	
34			OWASE	J	136E12 34N04	A15	0.1	−9.6				A	68	5	0000—2400	
35			SENDAI KAGOSHI	J	130E18 31N48	A15	0.1	−9.6				A	60	5	0000—2400	
36			AMMAN	JOR	35E53 31N54	C 9	200	25.1				A	162	6	0300—2300	24
37			SANGJU	KOR	128E11 36N25	C10	1	0.6				A	120	6	0000—2400	
38			KUDAT	MLA	116E43 06N55	A20	10	10.6				A	150	5	0000—2400	
39			ALHOCEIMA	MRC	03W57 35N10	A18	400	28.0	180	300— 60	18.0	B		4	0500—2400	24
40			NGUIGMI	NGR	13E00 14N10	C 9	5	7.4				A	95	4	0000—2400	
41			FORCADOS	NIG	05E25 05N22	C 9	50	17.4				A	74	4	0500—2300	
42			HASTINGS	NZL	176E52 39S39	A20	2	3.4				A	50	4	0000—2400	
43			BISLIG SURIGAO	PHL	126E18 08N13	C 9	1	0.4				A	93	3	2100—1600	
44			CAUAY ISABELA	PHL	121E46 16N56	C 9	1	0.4				A	93	3	2100—1600	
45			GENERAL SANTOS	PHL	125E10 06N06	C 9	1	0.4				A	93	3	2100—1600	
46			S JOSE ANTIQ	PHL	121E56 10N44	C 9	1	0.4				A	93	3	2100—1600	
47			SORSOGON SOR	PHL	123E59 12N58	C 9	1	0.4				A	93	3	2100—1600	
48			EL FASHER	SDN	25E30 15N38	A20	100	23.4				A	241	4	0600—1600	24
49		S	CHIANG RAI	THA	99E52 19N51	A20	10	10.4				A	72	5	0000—2400	
50		S	LOPBURI	THA	100E40 14N51	A20	5	7.4				A	60	5	0000—2400	
51		S	N RATCHASIMA	THA	102E05 14N56	A20	5	7.0				A	42	2	0000—2400	
52		S	PRACHUAB	THA	99E50 11N50	A20	1	0.0				A	48	3	0000—2400	
53		S	UBON	THA	104E52 15N15	A20	5	7.0				A	48	4	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	801	S	ATBASAR	URS	68E00 51N50	A18	150	25.2				A	220	4	0000—2400	
2	(31)	S	BAKU	URS	49E45 40N24	A18	150	29.0	0	110—250	9.0	B		4	0000—2400	
3		S	DUCHANBE	URS	68E50 38N40	C10	200	28.0	50	220—280	8.0	B		4	0000—2400	
4			LENINGRAD	URS	30E18 59N57	A16	1000	33.4				A	220	4	0300—1500	
5			LENINGRAD	URS	30E18 59N57	A16	500	30.4				A	220	4	1500—0300	
6			ULAN UDE	URS	107E38 51N50	A16	1000	34.0	350	150—190	24.0	B		4	0000—2400	
7		S	USTKAMENOGORSK	URS	82E36 49N55	A18	150	25.2				A	220	4	0000—2400	
8			QUANG NGAI	VTN	108E50 15N09	C10	10	10.4				A	100	4	1000—1200	
9			BUKAVU	ZAI	28E52 02S20	C 9	300					B		7	0000—2400	



810 KHZ (32)

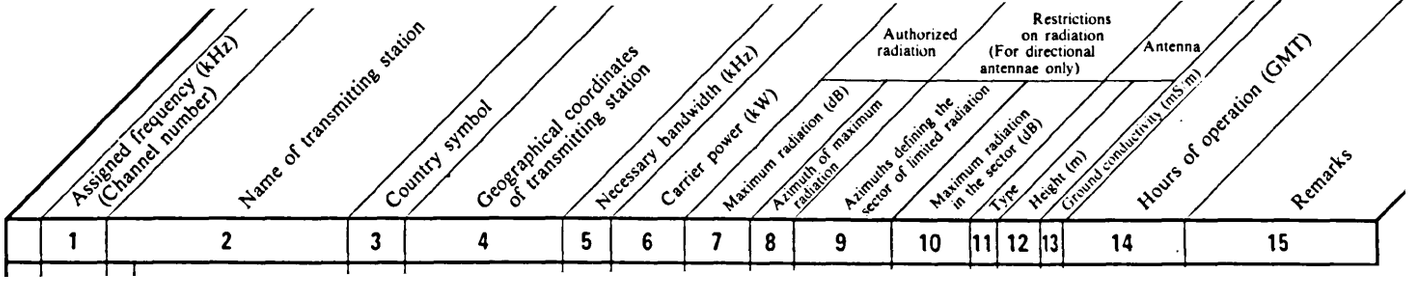
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	810		V SALAZAR	AGL	14E55 09S18	A20	5	7.4				A	93	3	0000—2400	
2	(32)	S	BEGA NSW	AUS	149E50 36S42	A20	10	10.6				A	137	4	1900—1400	
3		S	MANILLA NSW	AUS	150E44 30S47	A20	10	12.1				A	172	4	1900—1400	
4			PERTH WA	AUS	115E49 31S51	A20	10	12.1				A	177	4	2200—1700	
5			BOCARANGA	CAF	15E39 07N05	C 9	10	10.4				A	95	5	0400—2300	
6		S	JINHUA	CHN	119E30 29N15	A20	20	13.4				A	90	4	2000—1800	
7		S	NINGBO	CHN	121E32 29N52	A20	50	17.4				A	90	4	2000—1800	
8		S	PINGHU	CHN	121E01 30N42	A20	20	13.4				A	90	4	2000—1800	
9		S	WENZHOU	CHN	120E36 28N06	A20	20	13.4				A	90	4	2000—1800	
10			BERLIN 3	D	13E14 52N30	D 9	5	7.6				A	120	4	0000—2400	11/G
11			MADRID	E	03W50 40N30	D 9	20	13.4				A	80	4	0000—2400	19
12			LABASA	FJI	179E22 16S25	A20	2.5	4.0				A	30	3	1700—1200	
13		S	BURGHEAD	G	03W28 57N42	A20	100	22.1				A	152	4	0000—2400	
14			CROWBOROUGH	G	00E06 51N03	A20	500	30.0	130			B		3	1100—1400	
15		S	DUMFRIES	G	03W28 55N02	A20	2	3.0				A	38	4	0000—2400	
16		S	REDMOSS	G	02W05 57N07	A20	20	13.4				A	76	5	0000—2400	
17		S	WESTERGLEN	G	03W50 55N58	A20	100	22.1				A	152	4	0000—2400	
18			HONG KONG 7	HKG	114E02 22N17	A20	10	10.4				A	91	5	0000—2400	
19			BANGALORE	IND	77E38 12N58	A20	1000	32.1				A	185	3	0300—1000	25
20			BANGALORE	IND	77E38 12N58	A20	500	29.1				A	185	3	1000—0300	
21			BARMER	IND	71E18 25N45	A20	300	26.9				A	185	4	0300—0900	25
22			TEZU	IND	96E15 27N50	A20	300	26.9				A	185	4	0300—0900	25
23			MERAUKE	INS	140E22 08S30	A18	5	7.6				A	104	6	2000—1500	
24			EILAT	ISR	35E00 29N40	D 9	10	10.6				A	110	3	0000—2400	18/YUG 33
25			TOKYO	J	139E36 35N46	A15	50	20.0	200			B		4	0000—2400	
26			LAMU	KEN	40E52 02S20	C 9	5	7.4				A	100	4	0000—2400	
27			DAEGU	KOR	128E31 35N48	C10	20	13.6				A	125	6	0000—2400	
28			KUANTAN	MLA	103E21 03N48	A20	10	10.4				A	100	5	2200—1700	
29			JOAO BELO	MOZ	33E38 25S02	C10	50	17.4				A	93	4	0400—2200	
30			ILORIN	NIG	04E39 08N33	C 9	20	13.4				A	80	4	0400—2400	
31			DANDELDHURA	NPL	80E35 29N18	A20	10	10.4				A	60	4	2200—1900	
32			DUNEDIN	NZL	170E36 45S53	A20	20	13.6				A	150	4	0000—2400	
33			CAGAYAN DE ORO	PHL	124E39 08N29	C 9	5	7.4				A	92	3	2100—1600	
34			QUEZON CITY	PHL	122E10 14N44	C 9	10	10.4				A	92	3	2100—1600	
35			RABAUL	PNG	152E10 04S15	B10	2	3.4				A	60	6	2000—1400	
36			PODOR	SEN	14W58 16N40	C 9	10	10.4				A	50	4	0600—2400	
37			GALCAIO	SOM	47E30 06N50	A18	10	10.4				A	90	4	0300—2100	
38		S	KHON KAEN	THA	102E51 16N28	A20	7	8.9				A	60	3	0000—2400	
39		S	TRANG	THA	99E37 07N32	A20	10	10.0				A	30	3	0000—2400	
40			MAQTAA	UAE	54E34 24N21	C 9	50	19.1				A	196	5	0200—2200	24
41			BOBI	UGA	32E23 02N33	C 9	100	20.4				A	93	4	0300—2100	
42		S	KHARKOV	UKR	36E14 49N58	A16	6	11.2				A	220	4	0000—2400	
43		S	AGHINSKOE	URS	115E33 51N22	A18	150	25.2				A	220	4	0000—2400	
44		S	BODAIBO	URS	114E18 57N51	A18	50	20.4				A	220	4	0000—2400	
45		S	IMAN	URS	133E43 45N56	A16	150	25.2				A	220	4	0300—1500	
46		S	IMAN	URS	133E43 45N56	A16	75	22.2				A	220	4	1500—0300	
47		S	OMSK	URS	73E24 54N50	A18	150	25.2				A	220	4	0000—2400	
48		S	TBILISI	URS	44E28 41N42	A18	150	25.2				A	220	4	0000—2400	
49		S	ULIANOVSK	URS	48E20 54N19	C10	50	20.4				A	220	4	0000—2400	
50		S	VANAVARA	URS	102E17 60N22	A18	50	20.4				A	220	4	0000—2400	
51		S	VOLGOGRAD	URS	44E12 48N47	A16	150	25.2				A	220	4	0000—2400	
52		S	VYRU	URS	27E02 57N49	A18	5	10.4				A	220	4	0000—2400	
53			SKOPJE 1	YUG	21E54 41N47	D 9	1000	32.1				A	185	4	0000—2400	18/ISR

	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station		Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	819		SUD RADIO	AND	01E45	42N35	D 9	600					B		4	0000—2400	11/F
2	(33)		DAMMAM	ARS	50E10	26N24	C 9	1000	35.0	120	250—350	21.0	B		4	0300—1500	24
3		S	ALBURY NSW	AUS	146E58	36S03	A20	10	10.4				A	54	3	1900—1400	
4		S	GLEN INNES NSW	AUS	151E46	29S47	A20	10	10.6				A	143	4	1900—1400	
5			DACCA	BGD	90E26	23N43	A20	100	22.1				A	152	3	0000—1800	
6		S	CHANGZHI SHI	CHN	113E06	36N10	A20	50	17.4				A	90	4	2000—1800	
7		S	DATONG SHI	CHN	113E10	40N05	A20	50	17.4				A	90	4	2000—1800	
8			LANZHOU	CHN	103E50	36N02	A20	10	10.4				A	90	4	2000—1800	
9		S	TAIYUAN	CHN	112E33	37N45	A20	100	22.1				A	180	4	2000—1800	
10		S	YUNCHENG	CHN	111E00	34N57	A20	40	16.4				A	90	4	2000—1800	
11			SENKADAGALA	CLN	80E40	07N10	C10	20	13.6				A	116	6	0000—1800	
12			KRIBI	CME	09E54	02N54	C 9	20	15.1				A	183	5	0500—2300	
13			BATRA	EGY	31E27	31N09	D 9	1000	36.0	110			A	160	3	0000—2400	24
14			TRIESTE	I	13E46	45N40	D 9	25	14.4				A	80	4	0000—2400	
15			CHANDIGARH	IND	76E54	30N42	A20	300	26.9				A	185	3	0300—0900	25
16			DELHI	IND	77E12	28N38	A20	300	27.0	235	85—135	19.0	B		3	0000—2400	
17			PARBHANI	IND	76E50	19N08	A20	300	26.9				A	185	3	0300—1000	25
18			MEDAN	INS	98E39	03N35	A18	10	10.4				A	66	5	2200—1700	
19			MERAUKE	INS	140E22	08S30	A18	5	7.4				A	92	6	2000—1500	
20			FARAHABAD SARI	IRN	53E04	36N34	A20	20	15.0	90	120—150	3.0	B		2	0200—2100	
21			FARAHABAD SARI	IRN	53E04	36N34	A20	20	15.0		230—260	3.0	B				
22			FARAHABAD SARI	IRN	53E04	36N34	A20	20	15.0		350— 30	3.0	B				
23			NAGANO	J	138E12	36N40	A15	5	7.4				A	102	5	0000—2400	
24			OITA	J	131E35	33N15	A15	5	7.6				A	108	5	0000—2400	
25			SASEBO	J	129E42	33N08	A15	0.5	−2.4				A	106	5	0000—2400	
26			KWANGJU	KOR	126E49	35N18	C10	20	13.6				A	126	4	0000—2400	
27			CUREPIPE	MAU	57E31	20S19	A20	100	20.0				A	38	4	0200—2000	
28			MIRI	MLA	113E59	04N23	A20	20	13.6				A	110	5	2200—1600	
29			RABAT	MRC	06W55	33N54	A20	600	31.2				A	240	4	0500—0300	24
30			PAENGAROA	NZL	176E25	37S49	A20	10	10.6				A	150	3	0000—2400	
31			BASILAN CITY	PHL	121E58	06N42	C 9	1	0.4				A	91	3	2100—1600	
32			DAVAO CITY	PHL	125E36	07N03	C 9	5	7.4				A	91	3	2100—1600	
33			TACLOBAN CITY	PHL	125E00	11N13	C 9	1	0.4				A	91	3	2100—1600	
34			WARSZAWA 2	POL	21E17	52N27	C 9	1500	33.9				A	174	4	0000—2400	
35			DONGOLA	SDN	30E30	19N10	A20	100	24.0	55			A	235	4	0600—1600	24
36			BANGKOK	THA	100E33	13N47	A20	10	10.0				A	30	2	0000—2400	
37			KZYL ORDA	URS	65E30	44N50	A18	150	25.7	0	140—220	15.7	B		4	0000—2400	
38			TETIUKHE	URS	135E50	44N20	A18	50	22.0	350	90—170	9.0	B		4	0000—2400	
39			SAIGON	VTN	106E38	10N51	C10	10	10.0				A	30	3	2300—1300	
40			LUSAKA	ZMB	28E07	15S30	A20	500	29.0	330	60—120	29.0	B		4	0200—2100	
41			LUSAKA	ZMB	28E07	15S30	A20	500	23.0	150	180—240	23.0	B				

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

828 KHZ (34)

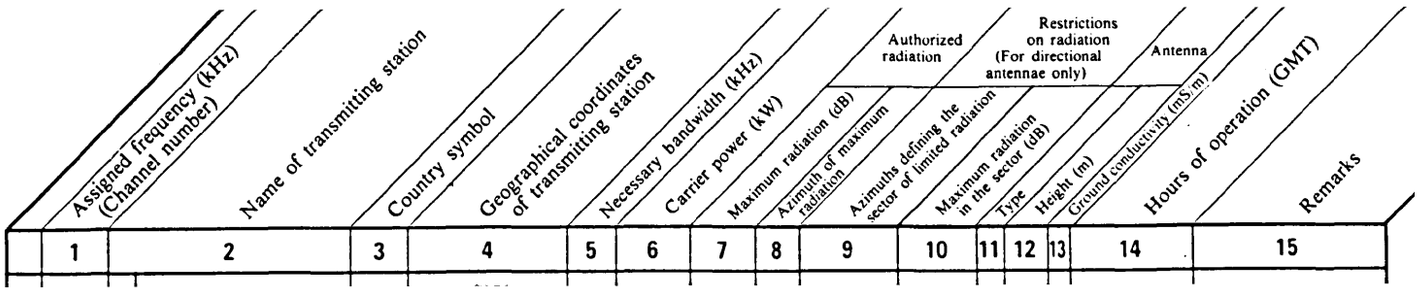
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	828		FAIZABAD	AFG	70E33 37N10	C 9	10	10.4				A	60	4	0100—2000	
2	(34)		BEESHA	ARS	42E45 20N15	C 9	20	13.6				A	120	4	0400—1400	
3		S	BUSSELTON WA	AUS	115E13 33S39	A20	2	5.1				A	183	2	2100—1600	
4		S	DOOEN VIC	AUS	142E15 36S38	A20	10	12.1				A	201	2	1900—1400	
5		S	GERALDTON WA	AUS	114E37 28S44	A20	2	3.4				A	61	3	2100—1600	
6		S	SALE VIC	AUS	147E06 38S11	A20	10	12.1				A	152	2	1900—1400	
7		S	S CRUZ FLORES	AZR	31W08 39N27	A20	1	0.4				A	60	4	0000—2400	
8		S	V DO PORTO	AZR	25W08 36N57	A20	1	0.4				A	60	4	0000—2400	
9		S	BLAGOEVGRAD	BUL	23E18 42N06	C 9	30	15.4				A	142	5	0000—2400	
10		S	CHOUMEN	BUL	26E38 42N59	C 9	500	30.4				A	205	3	0000—2400	
11		S	BAOAN	CHN	114E05 22N38	A20	10	10.4				A	90	4	2000—1800	
12			BEIJING	CHN	116E27 39N57	A20	50	17.4				A	90	4	2000—1800	
13		S	HAIKOU	CHN	110E15 20N02	A20	100	22.1				A	180	4	2000—1800	
14		S	HUAIJI	CHN	112E11 23N55	A20	10	10.4				A	90	4	2000—1800	
15		S	LUFENG	CHN	115E38 22N57	A20	40	16.4				A	90	4	2000—1800	
16		S	MAOMING	CHN	110E51 21N56	A20	50	17.4				A	90	4	2000—1800	
17		S	MEI XIAN	CHN	116E00 24N20	A20	100	22.1				A	180	4	2000—1800	
18			GALLE	CLN	80E12 06N05	C10	10	10.4				A	50	5	0000—1800	
19			KOMONO	COG	13E14 03S16	A20	5	7.4				A	91	5	0000—2400	
20		S	BADEN BADEN	D	08E15 48N46	D 9	1.5	2.2				A	50	4	0000—2400	
21		S	FREIBURG	D	07E48 48N01	D 9	40	16.4				A	92	4	0000—2400	
22		S	HANNOVER	D	09E44 52N20	D 9	100	20.6				A	119	4	0800—1600	
23		S	HANNOVER	D	09E44 52N20	D 9	5	7.6				A	119	4	1600—0800	
24		S	KIEL	D	10E04 54N20	D 9	0.5	−0.9				A	192	3	0000—2400	
25			BARCELONA	E	02E10 41N25	D 9	20	13.4				A	80	5	0000—2400	19
26			ARBA MINCHE	ETH	37E06 06N03	C 9	200	25.1				A	194	3	0400—2300	
27			BOURNEMOUTH	G	01W52 50N44	A20	0.5	−2.6				A	60	4	0000—2400	
28			LEEDS	G	01W34 53N45	A20	0.3	−4.8				A	61	3	0000—2400	
29			NSAWAM	GHA	00W20 05N47	C 9	50	17.0				A	250	4	0500—2300	
30			KISSIDOUGOU	GUI	10W06 09N11	C 9	20	13.4				A	64	4	0000—2400	
31			ROTTERDAM	HOL	04E27 51N53	D 9	2	3.0				A	40	4	0000—2400	
32			BARODA	IND	73E16 22N17	A20	300	26.9				A	185	3	0300—0900	25
33			KANPUR	IND	80E19 26N28	A20	300	26.9				A	185	3	0300—0900	25
34			PANAJI GOA 1	IND	73E51 15N28	A20	300	26.9				A	185	4	0300—1000	25
35			PANAJI GOA 2	IND	73E51 15N28	A20	10	12.1				A	185	4	1000—0300	
36			PONDICHERRY	IND	79E54 12N00	A20	300	26.9				A	185	3	0300—1000	25
37			SILCHAR	IND	92E47 24N45	A20	300	26.9				A	185	4	0300—0900	25
38			SILCHAR	IND	92E47 24N45	A20	10	12.1				A	185	4	0900—0300	
39			DJAJAPURA	INS	140E39 02S37	A18	5	7.4				A	90	6	2000—1500	
40			CAHIRCIVEEN	IRL	10W20 51N51	A20	1	0.4				A	61	5	0000—2400	
41			MIKI	J	134E59 34N49	A15	0.1	−9.6				A		5	0000—2400	
42			OSAKA	J	135E34 34N33	A15	300	26.9				A	155	4	0000—2400	
43			SEBHA	LBY	14E25 27N04	D 9	300	29.0	130	250— 10	19.0	B		4	0400—2200	
44			LAHAD DATU	MLA	118E21 05N02	A20	10	12.1				A	150	5	0000—2400	
45			VILANCULOS	MOZ	35E15 22S00	C10	20	13.4				A	60	4	0400—2200	
46			OUJDA	MRC	01W56 34N30	A18	100	20.6				A	110	5	0600—2400	
47			ENUGU	NIG	07E29 06N27	C 9	100	20.6				A	107	4	0500—2300	
48			TAKAPAU	NZL	176E18 40S02	A20	2	3.4				A	50	4	0000—2400	
49			KARACHI	PAK	67E04 24N51	A20	100	22.1				A	202	4	0000—2000	
50			ILIGAN CITY	PHL	124E14 08N13	C 9	1	0.4				A	90	3	2100—1600	
51			LEGASPI CITY	PHL	123E43 13N09	C 9	1	0.4				A	90	3	2100—1600	
52			TARLAC TARLAC	PHL	120E35 15N29	C 9	5	7.4				A	90	3	2100—1600	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	828	S	CASTELO BRANCO	POR	07W31 39N49	A20	1	0.4				A	90	4	0000—2400	
2	(34)	S	GUARDA	POR	07W16 40N32	A20	1	0.4				A	90	5	0000—2400	
3		S	LEIRIA	POR	08W46 39N46	A20	1	0.4				A	90	5	0000—2400	
4			SINGAPORE 1	SNG	103E42 01N20	A20	50	17.4				A	90	4	0000—2400	
5			DEIR 2	SYR	40E12 35N25	C 9	1500	40.0	140	300—360	15.0	B		5	0600—1500	32
6			DEIR 2	SYR	40E12 35N25	C 9	100	28.0	140	300—360	4.0	B		5	1500—0600	32
7			CHON BURI	THA	100E50 12N55	A20	20	13.4				A	60	2	0000—2400	
8			BIDE ZAYED	UAE	53E47 23N14	C 9	20	13.4				A	60	7	0400—1500	
9			GORKII	URS	44E00 56N17	A18	150	25.7	40	170—280	9.7	B		4	0000—2400	
10			KYZYL	URS	94E28 51N43	C 9	50	20.4				A	220	4	0000—2400	
11			MONGU	ZMB	23E08 15S15	A20	50	17.6				A	145	4	0200—2100	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	837		ERSEKE	ALB	20E35 40N20	A20	1	0.4				A	89	5	0400–2300	(24)
2	(35)		DJANET	ALG	09E24 24N32	A20	20	13.4				A	80	5	0600–2400	24
3		S	ESPERANCE WA	AUS	121E52 33S45	A20	2	3.4				A	62	2	2100–1600	
4		S	KALGOORLIE WA	AUS	121E24 30S47	A20	10	10.6				A	123	2	2100–1600	
5			MELBOURNE VIC	AUS	145E00 38S00	A20	0.1	−9.6				A		2	1900–1400	
6			QUEENSTOWN TAS	AUS	145E32 42S05	A20	0.5	−3.0				A	46	5	1900–1400	
7		S	ROCKHAMPTON QL	AUS	150E27 23S27	A20	10	10.6				A	128	3	1900–1400	
8		S	TOWNSVILLE QLD	AUS	147E20 19S31	A20	10	12.1				A	198	4	1900–1400	
9			PNT DELGADA	AZR	25W40 37N45	A20	10	10.4				A	90	4	0000–2400	
10			TIANJIN	CHN	117E09 39N09	A20	10	10.4				A	90	4	2000–1800	
11			WUHAN	CHN	114E20 30N36	A20	300	26.9				A	180	4	2000–1800	
12			LAS PALMAS	CNR	15W25 28N05	A20	10	10.4				A	50	4	0000–2400	
13			BOUNA	CTI	03W00 09N16	C 9	1	0.4				A		7	0600–2400	
14			NANCY	F	06E14 48N53	D 9	300	26.9				A	165	4	0000–2400	
15			KYYJARVI	FNL	24E14 63N02	D 9	100	22.1				A	200	5	0000–2400	
16			BHOPAL	IND	77E36 23N16	A20	300	26.9				A	180	3	0300–0900	25
17			SURATGARH 1	IND	73E54 29N24	A20	300	26.9				A	180	3	0300–0900	25
18			VIJAYAWADA	IND	80E39 16N31	A20	300	26.9				A	180	3	0000–2400	
19			ATAMBUA	INS	124E49 09S12	A18	2	3.4				A	90	7	2100–1600	
20			SHIRAZ	IRN	52E32 29N36	A20	400	28.1				A	164	3	0100–2200	
21			NIIGATA	J	138E55 37N51	A15	10	10.6				A	136	4	0000–2400	
22			SEOUL	KOR	126E49 37N36	C10	50	17.6				A	133	5	0000–2400	
23			SAMSU	KRE	128E02 41N17	A16	1	0.4				A	50		2000–1800	16
24			HAMAT	LBN	35E41 34N17	A20	600	33.0	198	285–340	9.0	B		4	0300–2400	16 24
25			HARPER	LBR	07W42 04N22	A20	10	10.6				A	128	5	0500–2400	
26			KOTA BAHRU	MLA	102E14 06N06	A20	10	10.4				A	100	5	2200–1700	
27			ULGEI	MNG	89E48 49N08	A18	5	7.6				A	120	5	2200–1500	
28			V FONTES	MOZ	35E15 17S54	C10	5	7.4				A	90	4	0400–2200	
29			SELIBABY	MTN	12W11 15N14	B20	20	13.4				A	90		0600–2400	24
30			NIUE I	NIU	169W55 19S02	A20	2	3.4				A	75	9	0000–2400	
31		S	KAITAIA	NZL	173E15 35S03	A20	2	3.4				A	50	4	0000–2400	
32		S	WHANGAREI	NZL	174E19 35S41	A20	2	3.4				A	50	4	0000–2400	
33			GENERAL SANTOS	PHL	125E10 06N06	C 9	1	0.4				A	90	3	2100–1600	
34			ILOILO CITY	PHL	122E33 10N40	C 9	5	7.4				A	89	3	2100–1600	
35			VIGAN ILOCO SO	PHL	120E22 17N34	C 9	5	7.4				A	89	3	2100–1600	
36			WADI HALFA	SDN	31E18 21N54	A20	50	20.4				A	230	4	0400–1500	24
37			BUKOBA	TGK	31E36 01S48	C 9	20	13.6				A	145	4	0300–2100	
38			SAKON NAKHON	THA	104E02 17N02	A20	50	17.4				A	90	3	0000–2400	
39			EDIRNE	TUR	26E33 41N40	D 9	300	30.0	190	280–100	10.0	B		4	0200–2300	
40			KMARKOV	UKR	36E14 49N58	A16	150	25.2				A	220	4	0000–2400	
41			BAKU	URS	49E45 40N24	C10	20	16.4				A	220	4	0000–2400	
42			SPASSK DALNII	URS	132E47 44N38	A18	10	13.4				A	220	4	0000–2400	
43			TURA	URS	100E17 64N16	A16	50	20.4				A	220	5	0000–2400	
44			DUBROVNIK	YUG	18E07 42N39	D 9	20	13.4				A	90	4	0800–1500	
45			NOVI SAD	YUG	19E20 45N45	D 9	50	20.0	50	100–140	17.0	B		2	0000–2400	
46			NOVI SAD	YUG	19E20 45N45	D 9	50	20.0	190	270–330	2.0	B				
47			KINSHASA	ZAI	15E15 04S20	C 9	10	12.1				A		8	0000–2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	846	S	CANBERRA ACT	AUS	149E07 35S13	A20	10	12.1				A	192	3	1900—1500	
2	(36)		CARNARVON WA	AUS	113E40 24S52	A20	10	10.0				A	34	2	2100—1600	
3		S	KEMPSEY NSW	AUS	152E50 31S06	A20	10	12.1				A		3	1900—1400	
4			RAJSHAHI	BGD	88E50 24N20	A20	100	20.6				A	122	3	0000—1800	
5			CHANGZHOU	CHN	119E57 31N47	A20	10	10.4				A	90	3	2000—1800	
6		S	DONGFANG	CHN	108E36 19N06	A20	50	17.4				A	90	4	2000—1800	
7		S	HUIZHOU	CHN	114E24 23N05	A20	100	22.1				A	180	4	2000—1800	
8		S	JIEXI	CHN	115E50 23N26	A20	10	10.4				A	90	4	2000—1800	
9		S	LINFEN	CHN	111E31 36N05	A20	20	13.4				A	90	4	2000—1800	
10		S	LINGQIU	CHN	114E14 39N26	A20	1	0.4				A	90	4	2000—1800	
11		S	LISHI	CHN	111E08 37N31	A20	20	13.4				A	90	4	2000—1800	
12		S	QIONGHAI	CHN	110E26 19N15	A20	10	10.4				A	90	4	2000—1800	
13		S	SHAOGUAN	CHN	113E32 24N47	A20	10	10.4				A	90	4	2000—1800	
14		S	SHUO XIAN	CHN	112E25 39N18	A20	20	13.4				A	90	4	2000—1800	
15		S	YANGQUAN	CHN	113E35 37N52	A20	10	10.4				A	90	4	2000—1800	
16		S	ZHAOQING	CHN	112E27 23N03	A20	20	13.4				A	90	4	2000—1800	
17			TRINCOMALEE	CLN	81E07 08N30	C10	20	13.6				A	102	5	0000—1800	
18			TARAWA	GIL	172E56 01N21	A20	10	10.0				A	31	1	1900—1100	
19			BOROMO	HVO	02W56 11N46	A20	2	3.4				A	89	4	0000—2400	
20			ROMA	I	12E35 41N42	D 9	2000	35.1				A	180	4	0000—2400	
21			AHMEDABAD	IND	72E38 23N02	A20	300	26.9				A	180	3	0000—2400	
22			AIJAL	IND	92E43 23N43	A20	100	22.1				A	180	4	0300—0900	25
23			ALLAHABAD	IND	81E54 25N28	A20	300	26.9				A	180	3	0300—0900	25
24			BHADRAVATI	IND	75E36 13N53	A20	300	26.9				A	180	3	0300—1000	25
25			DAMGHAN	IRN	54E21 36N18	A20	2	3.4				A	88	3	0200—2100	
26			ZEFAT	ISR	35E30 32N58	D 9	5	7.4				A	80	4	0000—2400	33
27			GUJYO HACHIMAN	J	136E57 35N45	A15	0.1	−9.6				A	71	5	0000—2400	
28			HIROSAKI	J	140E27 40N37	A15	0.5	−2.4				A	106	5	0000—2400	
29			HITOYOSHI	J	130E47 32N13	A15	1	0.6				A	108	5	0000—2400	
30			IWAMI	J	132E26 34N53	A15	0.1	−9.6				A	71	5	0000—2400	
31			KAMAISHI	J	141E53 39N16	A15	0.1	−9.6				A	67	5	0000—2400	
32			KORIYAMA	J	140E21 37N21	A15	1	0.6				A	109	5	0000—2400	
33			NIIHAMA	J	133E19 33N58	A15	0.1	−9.6				A	71	5	0000—2400	
34			UWAJIMA	J	132E34 33N13	A15	1	0.6				A	108	5	0000—2400	
35			KISUMU	KEN	34E45 00S05	C 9	100	20.6				A	100	4	0000—2400	
36			ULSAN	KOR	129E21 35N33	C10	10	10.6				A	120	4	0000—2400	
37			JERANTUT	MLA	102E30 03N55	A20	20	13.0				A	46	5	0000—2400	
38			KUCHING	MLA	110E20 01N33	A20	10	10.6				A	137	5	2200—1500	
39			BAUCHI	NIG	09E48 10N18	C 9	50	17.6				A	100	4	0500—2300	
40			UMUAHIA	NIG	07E26 05N31	C 9	1	0.4				A	86	4	0500—2300	
41			MASTERTON	NZL	175E35 40S58	A20	5	7.4				A	55	4	0000—2400	
42			CAGAYAN DE ORO	PHL	124E39 08N28	C 9	10	10.4				A	88	3	2100—1600	
43			MALOLOS BUL	PHL	120E49 14N51	C 9	50	22.0	160	70—250	5.0	B		3	2100—1600	
44			OUSSOUYE	SEN	16W32 12N29	C 9	1	0.0				A	45	5	0600—2400	
45			S TOME	STP	06E45 00N21	A20	5	7.4				A	89	3	0000—2400	16
46			CES BUDEJOVICE	TCH	14E31 48N58	A20	30	15.4				A	100	5	0400—1700	7
47			OSTRAVA	TCH	18E12 49N48	A20	30	15.4				A	100	5	0400—1700	7
48			BANGKOK	THA	100E30 13N45	A20	10	10.0				A	30	2	0000—2400	
49			SIVAS	TUR	37E14 39N56	D 9	300	30.0	120	180—200	15.0	B		4	0200—2300	
50			SIVAS	TUR	37E14 39N56	D 9	300	30.0		200— 40	10.0	B				
51			ABU DHABI	UAE	54E24 24N27	C 9	10	10.0				A	40	5	0600—1100	24
52			ELISTA	URS	44E15 46N19	A16	30	18.2				A	220	4	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

846 KHZ (36)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	846	MOSKVA	URS	37E08 55N54	A16	60	21.2				A	220	4	0300—1500	
2	(36)	MOSKVA	URS	37E08 55N54	A16	20	16.4				A	220	4	1500—0300	
3		TSELINOGRAD	URS	71E23 51N12	A16	50	20.4				A	220	4	0000—2400	
4		KAMINA	ZAI	25E09 08S43	C 9	10	10.4				A	60	8	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	855		HUAMBO	AGL	15E42 12S45	A20	5	7.4				A	88	3	0000—2400	
2	(37)		SETIF	ALG	05E24 36N11	D 9	4	6.0				A	45	4	0600—2400	24
3			DAMMAM	ARS	50E10 26N24	C 9	1000	35.0	300	70—170	21.0	B		3	0300—1500	24
4		S	EIDSVOLD QLD	AUS	151E07 25S24	A20	10	10.6				A	137	4	1900—1400	
5		S	PIALBA QLD	AUS	152E49 25S17	A20	10	10.6				A	137	4	1900—1400	
6		S	ANKANG	CHN	109E05 32N44	A20	5	7.4				A	90	4	2000—1800	
7		S	ANYUAN	CHN	115E24 25N09	A20	5	7.4				A	90	4	2000—1800	
8		S	BAODING	CHN	115E33 38N51	A20	50	17.4				A	90	4	2000—1800	
9		S	BIJIANG	CHN	98E52 26N34	A20	10	10.4				A	90	5	2000—1800	
10		S	BINCHUAN	CHN	100E33 25N50	A20	10	10.4				A	90	5	2000—1800	
11		S	BUSHENG	CHN	81E09 30N17	A20	10	11.0	50	170—200	3.0	B		5	2000—1800	
12		S	CHANGNING	CHN	99E29 24N51	A20	10	10.4				A	90	5	2000—1800	
13		S	CHANGTING	CHN	116E18 25N50	A20	10	10.4				A	90	4	2000—1800	
14		S	CHENGDU	CHN	104E00 30N42	A20	50	17.4				A	90	4	2000—1800	
15		S	CHUNAN	CHN	118E58 29N36	A20	10	10.4				A	90	4	2000—1800	
16		S	DENGKOU	CHN	106E43 40N10	A20	20	13.4				A	90	4	2000—1800	
17		S	DINGHAI	CHN	122E06 30N01	A20	5	7.4				A	90	4	2000—1800	
18		S	EJENHORO QI	CHN	109E41 39N15	A20	10	10.4				A	90	4	2000—1800	
19		S	FUAN	CHN	119E33 27N11	A20	10	10.4				A	90	4	2000—1800	
20		S	FUHAI	CHN	87E45 47N00	A20	1	0.4				A	90	4	2000—1800	
21		S	FUYUN	CHN	89E33 47N00	A20	10	10.4				A	90	4	2000—1800	
22		S	GEGYA	CHN	80E58 32N30	A20	10	11.0	50	140—210	5.0	B		5	2000—1800	
23		S	GEJIU	CHN	103E08 23N21	A20	20	13.4				A	90	5	2000—1800	
24		S	GONGHE	CHN	100E40 36N18	A20	20	13.4				A	90	5	2000—1800	
25		S	HAIYUAN	CHN	105E39 36N34	A20	20	13.4				A	90	4	2000—1800	
26		S	HE XIAN	CHN	111E39 24N28	A20	10	10.4				A	90	4	2000—1800	
27		S	HORQIN YQ QI	CHN	122E04 46N04	A20	10	10.4				A	90	4	2000—1800	
28		S	HOTAN	CHN	80E02 37N00	A20	10	10.4				A	90	4	2000—1800	
29		S	HUALIAN	CHN	121E37 23N55	A20	50	17.4				A	90	5	2000—1800	
30		S	HUANGCHUAN	CHN	115E02 32N07	A20	5	7.4				A	90	4	2000—1800	
31		S	JIANHE	CHN	108E45 26N39	A20	20	13.4				A	90	5	2000—1800	
32		S	JIANYANG	CHN	118E08 27N20	A20	20	13.4				A	90	4	2000—1800	
33		S	JIAYI	CHN	120E26 23N28	A20	50	17.4				A	90	5	2000—1800	
34		S	JINGHONG	CHN	100E43 22N01	A20	20	13.4				A	90	5	2000—1800	
35		S	JINING	CHN	113E05 41N02	A20	20	13.4				A	90	4	2000—1800	
36		S	JIUJIANG SHI	CHN	116E10 29N39	A20	10	10.4				A	90	4	2000—1800	
37		S	KASHI	CHN	76E00 39N25	A20	10	10.4				A	90	4	2000—1800	
38		S	KUANCHENG	CHN	118E29 40N36	A20	10	10.4				A	90	4	2000—1800	
39		S	LHASA	CHN	90E59 29N30	A20	100	22.0	120	250—280	11.0	B		5	2000—1800	
40		S	LIAOYUAN	CHN	125E10 42N52	A20	5	7.4				A	90	4	2000—1800	
41		S	LINGSHAN	CHN	109E17 22N25	A20	10	10.4				A	90	4	2000—1800	
42		S	LINHAI	CHN	121E07 28N51	A20	20	13.4				A	90	4	2000—1800	
43		S	LIUZHOU	CHN	109E12 24N18	A20	20	13.4				A	90	4	2000—1800	
44		S	LONG XIAN	CHN	106E51 34N49	A20	10	10.4				A	90	4	2000—1800	
45		S	LONGLIN	CHN	105E27 24N43	A20	10	10.4				A	90	4	2000—1800	
46		S	LONGQUAN	CHN	119E07 28N04	A20	10	10.4				A	90	4	2000—1800	
47		S	LUOHE	CHN	114E01 33N32	A20	20	13.4				A	90	4	2000—1800	
48		S	MAQEN	CHN	100E09 34N22	A20	20	13.4				A	90	5	2000—1800	
49		S	MEITAN	CHN	107E29 27N46	A20	10	10.4				A	90	5	2000—1800	
50		S	MENYUAN	CHN	101E37 37N23	A20	10	10.4				A	90	5	2000—1800	
51		S	MIAN XIAN	CHN	106E40 33N09	A20	5	7.4				A	90	4	2000—1800	
52		S	NANJING	CHN	118E54 32N06	A20	20	13.4				A	90	3	2000—1800	
53		S	NANTONG SHI	CHN	120E40 32N05	A20	10	10.4				A	90	3	2000—1800	
54		S	NAYONG	CHN	105E15 26N56	A20	10	10.4				A	90	5	2000—1800	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	855	S	NINGGANG	CHN	113E58 26N46	A20	5	7.4				A	90	4	2000—1800	
2	(37)	S	PINGGUO	CHN	107E33 23N19	A20	10	10.4				A	90	4	2000—1800	
3		S	PINGNAN	CHN	110E24 23N33	A20	10	10.4				A	90	4	2000—1800	
4		S	QINGFENG	CHN	115E06 35N54	A20	10	10.4				A	90	4	2000—1800	
5		S	QUANZHOU	CHN	111E04 25N56	A20	10	10.4				A	90	4	2000—1800	
6		S	QUANZHOU 2	CHN	118E33 24N53	A20	10	10.4				A	90	4	2000—1800	
7		S	QUJING	CHN	103E40 25N28	A20	10	10.4				A	90	5	2000—1800	
8		S	RUOQIANG	CHN	88E10 39N00	A20	10	10.4				A	90	4	2000—1800	
9		S	RUTO	CHN	79E44 33N25	A20	10	11.0	50	170—210	5.0	B		5	2000—1800	
10		S	SHANGQIU SHI	CHN	115E39 34N27	A20	10	10.4				A	90	4	2000—1800	
11		S	SHANGRAO SHI	CHN	118E15 28N20	A20	10	10.4				A	90	4	2000—1800	
12		S	SHAOXING	CHN	120E34 30N00	A20	10	10.4				A	90	4	2000—1800	
13		S	SHENMU	CHN	110E30 38N49	A20	10	10.4				A	90	4	2000—1800	
14		S	SHUANGLIAO	CHN	123E30 43N31	A20	10	10.4				A	90	4	2000—1800	
15		S	SUNID YOUQI	CHN	113E35 43N45	A20	10	10.4				A	90	4	2000—1800	
16		S	SUQIAN	CHN	118E18 33N57	A20	5	7.4				A	90	3	2000—1800	
17		S	TACHENG	CHN	83E05 46N45	A20	10	10.4				A	90	4	2000—1800	
18		S	TAIBEI SHI	CHN	121E28 25N05	A20	50	17.4				A	90	5	2000—1800	
19		S	TAIDONG	CHN	121E08 22N47	A20	20	13.4				A	90	5	2000—1800	
20		S	TONGYU	CHN	123E05 44N49	A20	20	13.4				A	90	4	2000—1800	
21		S	TURPAN	CHN	89E02 42N53	A20	10	10.4				A	90	4	2000—1800	
22		S	WEICHANG	CHN	117E45 41N57	A20	5	7.4				A	90	4	2000—1800	
23		S	WUXING	CHN	120E07 30N51	A20	5	7.4				A	90	4	2000—1800	
24		S	XI UJUMQIN QI	CHN	117E33 44N38	A20	20	13.4				A	90	4	2000—1800	
25		S	XIAN	CHN	108E54 34N12	A20	50	17.4				A	90	4	2000—1800	
26		S	XINGGUO	CHN	115E21 26N20	A20	5	7.4				A	90	4	2000—1800	
27		S	XINGTAI SHI	CHN	114E31 37N04	A20	5	7.4				A	90	4	2000—1800	
28		S	XINHE	CHN	82E40 41N25	A20	10	10.4				A	90	4	2000—1800	
29		S	YANCHENG	CHN	120E08 33N24	A20	10	10.4				A	90	3	2000—1800	
30		S	YANJI SHI	CHN	129E30 42N54	A20	5	7.4				A	90	4	2000—1800	
31		S	YICHUN 1	CHN	114E25 27N48	A20	10	10.4				A	90	4	2000—1800	
32		S	YINCHUAN	CHN	106E12 38N30	A20	50	17.4				A	90	4	2000—1800	
33		S	YINING SHI	CHN	81E28 43N55	A20	10	10.4				A	90	4	2000—1800	
34		S	YIWU	CHN	94E40 43N20	A20	1	0.4				A	90	4	2000—1800	
35		S	YUSHU 1	CHN	126E32 44N50	A20	20	13.4				A	90	4	2000—1800	
36		S	ZHAOTONG	CHN	103E34 27N20	A20	10	10.4				A	90	5	2000—1800	
37		S	ZHENFENG	CHN	105E40 25N14	A20	20	13.4				A	90	5	2000—1800	
38		S	ZHENGLAN QI	CHN	116E00 42N18	A20	10	10.4				A	90	4	2000—1800	
39		S	ZHENGZHOU	CHN	113E42 34N42	A20	50	17.4				A	90	4	2000—1800	
40		S	ZHIDAN	CHN	108E46 36N50	A20	10	10.4				A	90	4	2000—1800	
41		S	ZIZHOU	CHN	110E02 37N37	A20	10	10.4				A	90	4	2000—1800	
42			AMPARAI	CLN	81E40 07N20	A10	50	17.6				A	108	5	0000—1800	
43			BOUAFLE	CTI	05W45 06N58	C 9	200	25.1				A		7	0600—2400	
44			C GRECO	CYP	34E04 34N57	C 9	50	19.1				A	190	5	0530—1330	2/0111/2802
45			C GRECO	CYP	34E04 34N57	C 9	50	19.1				A	190		0300—1600	2/0103/3110
46			C GRECO	CYP	34E04 34N57	C 9	10	12.1				A	190	5	1330—0530	2/0111/2802
47			C GRECO	CYP	34E04 34N57	C 9	10	12.1				A	190		1600—0300	2/0103/3110
48			BERLIN 2	D	13E26 52N27	D 9	100	24.0	300	90—170	9.0	B		4	0000—2400	11/USA
49		S	CD RODRIGOE	E	06W32 40N36	D 9	0.3	—4.8				A	50	5	0000—2400	19
50		S	EIBAR	E	02W26 43N11	D 9	1	0.4				A	50	5	0000—2400	19
51		S	GUADIX	E	03W08 37N18	D 9	0.3	—4.8				A	50	5	0000—2400	19
52		S	JODAR	E	03W21 37N50	D 9	0.3	—4.8				A	50	5	0000—2400	19
53		S	LERIDA	E	00E38 41N37	D 9	1	0.4				A	50	4	0000—2400	19
54		S	LUGO	E	07W33 43N01	D 9	1	0.4				A	50	5	0000—2400	19

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	855	S	MURCIA	E	01W15 38N02	D 9	250	26.1				A	183	4	0000—2400	18/ROU 19
2	(37)	S	PALENCIA	E	04W33 42N01	D 9	0.5	−2.6				A	50	4	0000—2400	19
3		S	PAMPLONA	E	01W38 42N49	D 9	1	0.4				A	50	4	0000—2400	19
4		S	PLASENCIA	E	06W05 40N02	D 9	0.3	−4.8				A	50	5	0000—2400	19
5		S	PONFERRADA	E	06W35 42N33	D 9	1	0.4				A	50	4	0000—2400	19
6		S	PONTEVEDRA	E	08W43 42N20	D 9	20	13.4				A	96	5	0000—2400	19
7		S	PUERTOLLANO	E	04W06 38N42	D 9	0.5	−2.6				A	50	4	0000—2400	19
8		S	SANTANDER	E	03W51 43N28	D 9	20	13.6				A	100	5	0000—2400	19
9		S	TERUEL	E	01W06 40N21	D 9	0.3	−4.8				A	50	5	0000—2400	19
10		S	VIVERO	E	07W36 43N40	D 9	0.3	−4.8				A	50	5	0000—2400	19
11		S	ZAMORA	E	05W45 41N30	D 9	0.5	−2.6				A	50	4	0000—2400	19
12			HARRAR	ETH	42E08 09N18	C 9	150	23.9				A	186	3	0400—2300	
13			BLACKBURN	G	02W34 53N43	A20	0.5	−3.0				A	38	3	0000—2400	
14			TORQUAY	G	03W33 50N29	A20	1	0.0				A	18	4	0000—2400	
15			ALLEPPEY	IND	76E23 09N30	A20	300	26.9				A	175	4	0300—1000	25
16			AURANGABAD	IND	75E18 19N54	A20	300	26.9				A	175	3	0300—1000	25
17			SAMBALPUR	IND	84E01 21N28	A20	300	26.9				A	175	3	0300—0900	25
18			MATARAM	INS	116E08 08S36	A18	5	7.4				A	86	4	2100—1600	
19			MEDAN	INS	98E39 03N35	A18	100	22.1				A	163	5	2200—1400	
20			AMMAN	JOR	35E53 31N54	C 9	10	12.1				A	160	4	0500—1800	24
21			MOGPO	KOR	126E33 34N43	C10	50	17.4				A	84	5	0000—2400	
22			PT HARCOURT	NIG	06E49 04N59	C 9	40	22.0	300			B		4	0500—2300	
23			POKHRA	NPL	83E58 28N16	A20	10	10.6				A	120	4	2200—1900	
24			HAMILTON	NZL	175E20 37S48	A20	2	3.4				A	50	3	0000—2400	
25			QUETTA	PAK	67E00 30N10	A20	100	20.6				A	121	4	0000—2000	
26			NAGA CITY	PHL	123E10 13N39	C 9	5	7.4				A	87	3	2100—1600	
27			TAGUM DAVAO	PHL	125E47 07N26	C 9	1	0.4				A	87	3	2100—1600	
28			BUCURESTI	ROU	26E06 44N37	C 9	1500	33.9				A	186	5	0000—2400	18/E
29			SOBA	SDN	32E40 15N30	A20	500	30.0	212	92—152	23.0	B		3	0400—2400	24
30			DAMAS 2	SYR	36E56 33N25	C 9	500	32.0	210			B		5	0500—1500	
31			DAMAS 2	SYR	36E56 33N25	C 9	100	25.0	210			B		5	1500—0500	
32			AMGA	URS	132E00 61N01	A16	50	20.4				A	220	5	0000—2400	
33			TCHELIABINSK	URS	61E24 55N09	C10	150	25.2				A	220	4	0000—2400	
34			CHIPATA	ZMB	32E43 13S22	A20	50	23.0	260	350— 50	15.0	B		4	0200—2100	
35			CHIPATA	ZMB	32E43 13S22	A20	50	23.0		110—170	15.0	B				

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	864		KANDAHAR	AFG	65E40 31N40	C 9	20	13.4				A	60	4	0100—2000	
2	(38)		LUANDA	AGL	13E49 08S48	A20	1	0.4				A	87	3	0000—2400	
3			KELCYRA	ALB	20E12 40N18	A20	1	0.4				A	87	6	0400—2300	
4			DAMMAM	ARS	50E10 26N24	C 9	500	31.0	120	220— 20	18.0	B		3	1500—0300	
5			JEDDAH	ARS	39E09 21N14	C10	500	32.0	130	260—360	12.0	B		3	0300—1500	
6			HOBART TAS	AUS	147E19 42S55	A20	5	7.4				A	88	5	0000—2400	
7			NORTHAM WA	AUS	116E37 31S40	A20	5	7.4				A	76	3	1900—1400	
8			TOOWOOMBA QLD	AUS	151E55 27S36	A20	5	7.4				A	84	3	1900—1400	
9			PLOVDIV	BUL	24E41 42N04	C 9	150	25.2				A	205	3	0300—2400	
10		S	BO XIAN	CHN	115E46 33N53	A20	10	10.4				A	90	4	2000—1800	
11		S	CHU XIAN	CHN	118E18 32N19	A20	50	17.4				A	90	4	2000—1800	
12		S	HUAINAN	CHN	117E00 32N41	A20	50	17.4				A	90	4	2000—1800	
13		S	TONGLING	CHN	117E47 30N57	A20	50	17.4				A	90	4	2000—1800	
14			AVARUA	CKH	159W46 21S12	C10	3	4.8				A	30	5	1600—0900	
15			JAFFNA	CLN	80E00 09N37	C10	50	17.4				A	84	3	0000—1800	
16			FT ROUSSET	COG	15E35 00S24	A20	10	10.4				A	87		0000—2400	
17			COTONOU	DAH	02E28 06N22	C10	20	13.4				A	87	4	0500—2400	
18			GIZA	EGY	31E00 29N00	D 9	500	33.0	200	305—115	17.0	B		4	0000—2400	
19			PARIS	F	02E13 48N42	D 9	300	25.2				A	72	3	0000—2400	
20			PENG CHAU	HKG	114E02 22N17	A20	10	10.4				A	91	5	0000—2400	
21			SHILLONG 1	IND	91E56 25N34	A20	300	26.9				A	175	3	0300—0900	25
22			SHILLONG 2	IND	91E56 25N34	A20	100	22.1				A	175	3	0900—0300	
23			UDAIPUR	IND	73E47 24N30	A20	300	26.9				A	175	4	0300—0900	25
24			TJIREBON	INS	108E34 06S45	A18	2	3.4				A	87	5	2200—1700	
25			ASAHIKAWA	J	142E27 43N46	A15	3	7.0	60			B		5	0000—2400	
26			FUKUI	J	136E15 36N06	A15	5	10.0	210			B		5	0000—2400	
27			MATSUMOTO	J	137E57 36N14	A15	1	0.6				A	100	5	0000—2400	
28			MURORAN	J	140E59 42N19	A15	3	6.0	10			B		5	0000—2400	
29			TOYOHASHI	J	137E24 34N45	A15	0.1	−9.6				A	68	5	0000—2400	
30			GANGNEUNG	KOR	128E54 37N46	C10	100	20.6				A	130	5	2300—1100	
31			GANGNEUNG	KOR	128E54 37N46	C10	100	24.0	175	40— 70	4.0	B		5	1100—2300	
32			PENANG	MLA	100E18 05N22	A20	10	10.4				A	95	5	2200—1700	
33			KSAR ESSOUK	MRC	04W24 31N55	C 9	600	31.8	120	240—360	24.8	B		5	0500—0300	
34			INVERCARGILL	NZL	168E37 46S19	A20	10	12.1				A	150	3	0000—2400	
35			CEBU CITY	PHL	123E51 10N15	C 9	5	7.4				A	86	3	2100—1600	
36			S PABLO LAG	PHL	121E19 14N04	C 9	1	0.4				A	86	3	2100—1600	
37			MADANG	PNG	145E49 05S13	B10	2	3.4				A	60	5	2000—1400	
38			KENEMA	SRL	11W10 07N50	C 9	50	17.0				A	40	2	0500—2400	
39			CADCA	TCH	18E48 49N27	A20	1	0.4				A	60	5	0000—2400	
40			PISEK	TCH	14E09 49N18	A20	1	0.4				A	60	5	0000—2400	
41			SUMPERK	TCH	16E59 49N58	A20	1	0.4				A	60	5	0000—2400	
42			TEPLICE V C	TCH	13E50 50N39	A20	1	0.4				A	60	5	0000—2400	
43			TRUTNOV	TCH	15E55 50N35	A20	1	0.4				A	60	5	0000—2400	
44			BANGKOK	THA	100E30 13N44	A20	10	10.0				A	30	2	0000—2400	
45			TAK	THA	99E08 16N53	A20	10	10.4				A	90	5	0000—2400	
46			KAMPALA	UGA	32E36 00N20	C 9	20	13.4				A	87	4	0300—2100	
47			EREVAN	URS	44E30 40N10	C10	150	25.2				A	220	4	0000—2400	
48			KARAGANDA	URS	73E05 49N50	A16	500	30.0	70	210—290	12.0	B		4	0000—2400	
49			NARIAN MAR	URS	53E08 68N02	A16	50	20.4				A	220	4	0000—2400	
50			SKOVORODINO	URS	123E58 53N58	A18	50	20.4				A	215	4	0000—2400	
51			CHUMBUNI	ZAN	39E12 06S09	C 9	20	13.4				A	87	4	0300—2100	

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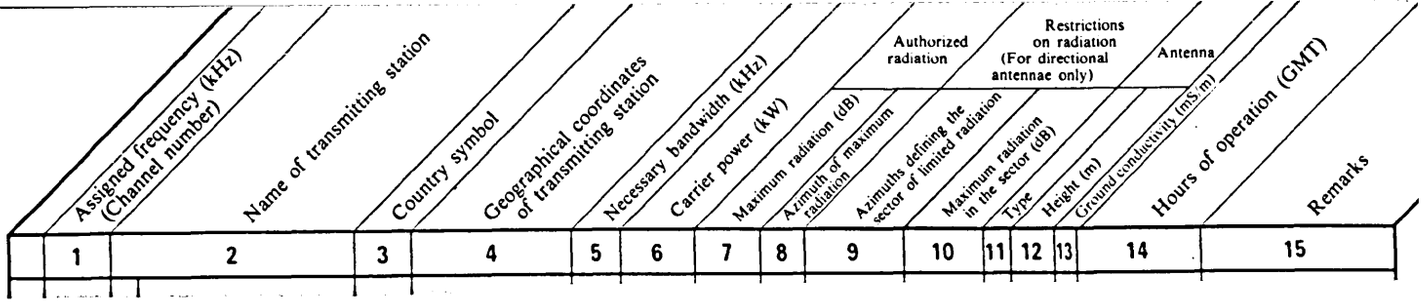
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	873		GHARDAIA	ALG	03E49 32N32	D 9	20	13.4				A	80	5	0600—2400	24
2	(39)	S	DERBY WA	AUS	123E40 17S21	A20	5	7.0				A	41	3	2100—1600	
3			SYDNEY NSW	AUS	151E05 33S49	A20	5	9.1				A	155	4	0000—2400	
4		S	WAGIN WA	AUS	117E05 33S20	A20	5	7.4				A	60	3	2100—1600	
5			HORTA	AZR	28W36 38N32	A20	1	0.4				A	60	4	0000—2400	
6			CHITTAGONG	BGD	91E50 22N21	C 9	100	20.6				A	122	3	0000—1800	
7		S	MINSK	BLR	27E34 53N56	A16	150	25.2				A	220	4	0000—2400	
8		S	ANXI	CHN	95E32 40N30	A20	10	10.4				A	90	4	2000—1800	
9		S	FUJIN	CHN	132E01 47N20	A20	100	22.1				A	180	4	2000—1800	
10		S	JAGDAQI	CHN	124E05 50N25	A20	50	17.4				A	90	4	2000—1800	
11		S	JIAYUGUAN	CHN	98E12 39N50	A20	10	10.4				A	90	4	2000—1800	
12		S	LANZHOU	CHN	103E50 36N02	A20	50	17.4				A	90	4	2000—1800	
13		S	LINTAN	CHN	103E21 34N42	A20	10	10.4				A	90	4	2000—1800	
14		S	MINQIN	CHN	102E58 38N36	A20	20	13.4				A	90	4	2000—1800	
15		S	TIANSHUI SHI	CHN	105E30 34N30	A20	20	13.4				A	90	4	2000—1800	
16			ZHAOQING	CHN	112E27 23N03	A20	5	7.4				A	90	4	2000—1800	
17			DIYAGAMA	CLN	79E58 06N50	C10	50	17.4				A	65	5	0000—1800	
18			FRANKFURT MAIN	D	08E37 50N11	D 9	150	26.7	310	40— 80	6.7	B		4	0000—2400	
19			ZARAGOZA	E	00W55 41N40	D 9	20	13.4				A	80	4	0000—2400	19
20			ABU ZABAL	EGY	31E22 30N16	D 9	200	26.4				A	206	3	0000—2400	24
21			ADDIS ABABA	ETH	38E43 09N17	C 9	150	23.9				A	182	3	0400—2300	
22		S	LAKIHEGY	HNG	19E00 47N22	D 9	20	13.4				A	86	4	0000—2400	
23		S	PECS	HNG	18E15 46N05	D 9	20	13.4				A	86	4	0000—2400	
24			HOUNDE	HVO	03W31 11N34	A20	10	10.4				A	86	4	0000—2400	
25			ALMORA	IND	79E38 29N35	A20	300	26.9				A	175	4	0300—0900	25
26			BHAGALPUR	IND	87E02 25N15	A20	300	26.9				A	175	3	0300—0900	25
27			COIMBATORE	IND	77E06 11N00	A20	300	26.9				A	175	4	0300—1000	25
28			JULLUNDUR 1	IND	75E18 31N19	A20	300	26.9				A	175	3	0300—0900	25
29			JULLUNDUR 2	IND	75E18 31N19	A20	100	22.1				A	175	3	0900—0300	
30			FAKFAK	INS	132E17 02S55	A18	5	7.4				A	84	5	2000—1500	
31			SURAKARTA	INS	110E50 07S32	A18	2	3.4				A	75	5	2200—1700	
32			KUMAMOTO	J	130E51 32N54	A15	500	29.1				A	149	4	0000—2400	
33		S	ABUGRAIN	LBY	15E15 31N27	A20	10	12.1				A	170	5	0400—2400	24
34		S	GATROUN	LBY	14E38 24N56	A20	10	12.1				A	170	5	0400—2400	24
35			LIMBANG	MLA	115E00 04N45	A20	20	13.6				A	113	5	2200—1600	
36			BEIRA	MOZ	34E44 19S36	C10	50	17.3	230			B		4	0400—2200	
37			KAEDI	MTN	13W31 16N09	B20	20	13.4				A	86		0600—2400	24
38			OGUTA	NIG	06E50 05N45	C 9	1	0.4				A	86	4	0500—2300	
39			ASHBURTON	NZL	171E46 43S54	A20	1	0.4				A	50	4	0000—2400	
40			BANGUED ABRA	PHL	120E37 17N35	C 9	5	7.4				A	86	3	2100—1600	
41			BUTUAN AGUSAN	PHL	125E32 08N56	C 9	1	0.4				A	86	3	2100—1600	
42			BURAM	SDN	25E10 10N47	A20	250	30.0	140			B		4	0400—2400	24
43			DAMAS KHARABO	SYR	36E22 33N25	C 9	10	10.0				A	33	3	0700—2200	
44		S	VOROCHILOVGRAD	UKR	38E48 48N29	A18	5	10.4				A	220	4	0000—2400	
45		S	ABAKAN	URS	91E23 53N35	A18	5	10.4				A	220	4	0000—2400	
46		S	ACHKHABAD	URS	58E24 37N57	A18	5	10.4				A	220	4	0000—2400	
47		S	GORNO ALTAISK	URS	85E52 51N57	A18	5	10.4				A	220	4	0000—2400	
48		S	IOCHKAR OLA	URS	47E50 56N39	A18	5	10.4				A	220	4	0000—2400	
49		S	KALININGRAD	URS	20E30 54N45	A18	100	23.4				A	220	4	0000—2400	
50		S	KICHINIOV	URS	28E52 47N00	A16	500	32.0	20	140—250	20.0	B		4	0000—2400	
51			LENINABAD	URS	69E37 40N16	A18	5	10.4				A	220	4	0000—2400	
52		S	LENINGRAD	URS	30E00 59N44	A16	150	25.2				A	220	4	0000—2400	
53		S	MOSKVA	URS	37E18 55N45	A16	150	25.2				A	220	4	0000—2400	
54		S	ROSSOCH	URS	39E33 50N13	A18	5	10.4				A	220	4	0000—2400	

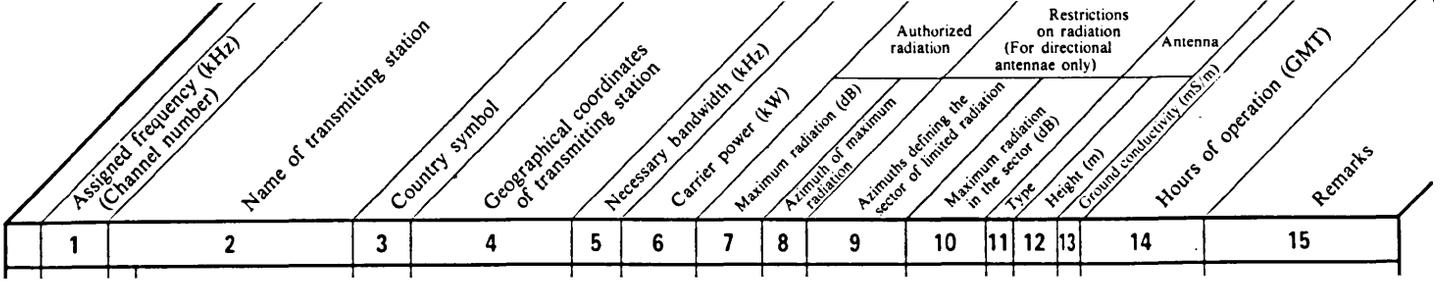
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

873 KHZ (39)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	873	S	RYLSK	URS	34E38 51N33	A18	5	10.4				A	220	4	0000—2400	
2	(39)	S	TALLIN	URS	24E47 59N27	A18	5	10.4				A	220	4	0000—2400	
3		S	ULIANOVSK	URS	48E05 54N19	A16	150	25.2				A	220	4	0000—2400	
4			SAIGON	VTN	106E38 10N51	C10	100	26.0	50			B		3	0000—2400	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	882	DAMMAM	ARS	50E10 26N24	C10	100	20.6				A	135	3	0300—2300	24
2	(40)	BRISBANE QLD	AUS	153E07 27S24	A20	5					B		3	0000—2400	
3		PERTH WA	AUS	115E48 32S02	A20	5	7.4				A	86	4	0000—2400	
4		WARRNAMBOOL VC	AUS	142E30 38S20	A20	5					B		2	1900—1400	
5		S CHONGAN	CHN	118E01 27N43	A20	10	10.4				A	90	4	2000—1800	
6		S FUZHOU 1	CHN	119E24 26N06	A20	100	22.1				A	180	4	2000—1800	
7		S JIANNING	CHN	116E50 26N53	A20	10	10.4				A	90	4	2000—1800	
8		S LONGYAN	CHN	117E02 25N07	A20	10	10.4				A	90	4	2000—1800	
9		LUDA	CHN	121E30 38N54	A20	10	10.4				A	90	4	2000—1800	
10		S NANPING	CHN	118E12 26N45	A20	10	10.4				A	90	4	2000—1800	
11		S XIAMEN	CHN	118E18 24N24	A20	10	10.4				A	90	4	2000—1800	
12		ANURADHAPURA	CLN	80E30 08N20	C10	20	13.4				A	81	5	0000—1800	
13		LA LAGUNA	CNR	16W20 28N30	A20	20	13.4				A	50	5	0000—2400	
14		ABIDJAN	CTI	04W01 05N26	C 9	100	22.1				A		5	0600—2400	
15		DIMBOKRO	CTI	04W46 06N40	C 9	10	12.1				A		7	0600—2400	
16		WACHENBRUNN	DDR	10E30 50N29	D 9	250	27.0	40	120—140	5.0	B		4	0000—2400	
17		WACHENBRUNN	DDR	10E30 50N29	D 9	250	27.0		290—330	16.0	B				
18		LUXOR	EGY	32E28 25N42	D 9	5	7.6				A	100	4	0000—2400	24
19		S PENMON	G	04W05 53N17	A20	20	13.4				A	76	4	0000—2400	
20		S TYWYN	G	04W06 52N35	A20	5	7.0				A	38	4	0000—2400	
21		S WASHFORD	G	03W21 51N10	A20	150	25.0	0	70— 80	22.0	B		4	0000—2400	
22		S WASHFORD	G	03W21 51N10	A20	150	25.0		110—115	19.0	B				
23		S WREXHAM	G	03W01 53N02	A20	5	7.0				A	38	3	0000—2400	
24		MOANDA	GAB	13E14 01S34	C 9	10	12.1				A		5	0400—2400	
25		GIBRALTAR	GIB	05W21 36N08	A20	1	0.4				A	56	9	0600—2400	
26		IMPHAL	IND	93E58 24N44	C 9	300	26.9				A	170	3	0000—2400	
27		SANGLI	IND	74E36 16N53	A20	300	26.9				A	170	3	0300—1000	25
28		MAHABAD	IRN	45E43 36N46	A20	10	10.4				A	80	3	0200—2100	
29		BET HILEL	ISR	35E36 33N12	D 9	5	7.4				A	60	4	0000—2400	18/YUG 33
30		SHIZUOKA	J	138E25 34N57	A15	10	12.1				A	140	4	0000—2400	
31		KISUMU	KEN	34E45 00S05	C 9	100	20.6				A	100	4	0000—2400	
32		DAEJEON	KOR	127E21 36N23	C10	20	13.6				A	120	4	0000—2400	
33		KAJANG	MLA	101E46 02N59	A20	200	25.1				A	150	5	2200—1700	
34		KADUNA	NIG	07E31 10N42	C 9	50	17.6				A	125	4	0500—2300	
35		OHOPOHO	NMB	13E50 18S04	A20	100	23.0	240			B		4	0000—2400	
36		AUCKLAND	NZL	174E38 36S51	A20	10	12.1				A	150	3	0000—2400	
37		COTABATO CITY	PHL	124E14 07N13	C 9	10	10.4				A	85	3	2100—1600	
38		NAVOTAS RIZAL	PHL	120E56 14N40	C 9	10	10.4				A	85	3	2100—1600	
39		MBABANE	SWZ	31E06 26S20	A20	10	10.4				A	50		0400—2200	
40		MELFI	TCD	17E56 11N03	C 9	1	0.4				A			0400—2300	
41		RUZOMBEROK	TCH	19E19 49N04	A20	1	0.4				A	60	5	0000—2400	
42		MEDENINE	TUN	10E32 33N22	D 9	10	10.6				A	100	4	0700—1600	24
43		MEDENINE	TUN	10E32 33N22	D 9	2	3.6				A	100	4	1600—0700	24
44		NALTCHIK	URS	43E35 43N28	C10	150	26.7	40	160—280	11.7	B		4	0000—2400	
45		NARYN	URS	76E00 41N25	A16	500	30.4				A	220	4	0000—2400	
46		ZEIA	URS	127E15 53N44	A18	50	17.4				A	90	4	0000—2400	
47		S BIJELO POLJE	YUG	19E45 43N02	D 9	10	10.4				A	85	5	0000—2400	
48		S HERCEGNOVI	YUG	18E30 42N27	D 9	10	10.4				A	85	4	0000—2400	
49		S PLEVLJA	YUG	19E23 43N22	D 9	10	10.4				A	85	5	0000—2400	
50		S ROZAJE	YUG	20E10 42N50	D 9	10	10.4				A	85	5	0000—2400	
51		S TITOGRAD 1	YUG	19E15 42N17	D 9	300	26.9				A	170	5	0000—2400	18/ISR
52		S ULCINJ	YUG	19E13 41N55	D 9	1	0.4				A	60	2	0000—2400	
53		KASAMA	ZMB	31E15 10S15	A20	50	19.1				A	140	4	0200—2100	

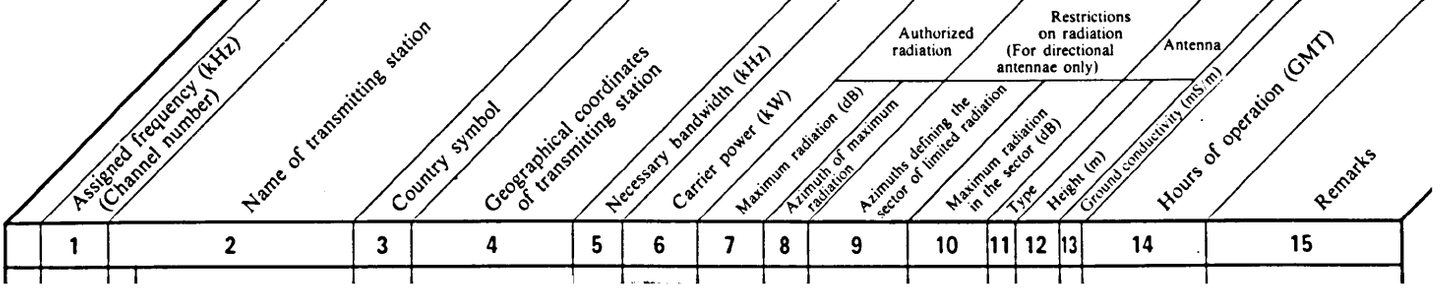


	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	891		DALATANDO	AGL	14E55 09S55	A20	1	0.4				A	87	3	0000—2400	
2	(41)		ALGER 1	ALG	03E09 36N40	D 9	200	25.1				A	158	2	0000—2400	18/TUR 24
3			ADELAIDE SA	AUS	138E31 35S06	A20	50	19.1				A	168	2	1900—1400	
4			KOETSCHACH	AUT	13E00 46N41	D 9	0.1	−10.0				A	15	6	0000—2400	
5		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	200	23.6				A	137	4	0700—1500	2/0110/3103
6		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	200	23.6				A	137		0500—1700	2/0104/3009
7		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	50	17.6				A	137	4	1500—0700	2/0110/3103
8		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	50	17.6				A	137		1700—0500	2/0104/3009
9		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105	6	0700—1500	2/0110/3103
10		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105		0500—1700	2/0104/3009
11		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105	6	1500—0700	2/0110/3103
12		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105		1700—0500	2/0104/3009
13			NEUMARKT	AUT	14E25 47N04	D 9	0.1	−10.0				A	15	6	0000—2400	
14			OBERVELLACH	AUT	13E12 46N56	D 9	0.1	−10.0				A	15	6	0000—2400	
15			S CRUZ	AZR	28W01 39N03	A20	1	0.4				A	60	4	0000—2400	
16			SG HANCHING	BRU	114E58 04N57	A20	10	10.0				A	24	4	2200—1500	
17		S	ALXA ZUOQI	CHN	105E41 38N50	A20	10	10.4				A	90	4	2000—1800	
18		S	GUYUAN	CHN	106E22 36N01	A20	20	13.4				A	90	4	2000—1800	
19		S	ZHONGWEI	CHN	105E11 37N30	A20	100	22.1				A	180	4	2000—1800	
20			MAKALE	ETH	39E28 13N31	C 9	100	22.1				A	170	3	0400—2300	
21			LAUTOKA	FJI	177E28 17S37	A20	10	10.4				A	45	7	1700—1200	
22			MAMOU	GUI	12W05 10N17	C 9	100	20.4				A	84	4	0000—2400	
23			ROERMOND	HOL	05E44 51N11	D 9	20	13.4				A	85	4	0000—2400	
24			DARBHANGA	IND	85E56 26N09	A20	300	26.9				A	170	3	0300—0900	25
25			INDORE	IND	75E50 22N44	A20	300	26.9				A	170	3	0300—0900	25
26			JAGDALPUR	IND	81E55 19N01	A20	300	26.9				A	170	3	0300—1000	25
27			RAMPUR	IND	79E04 28N48	C 9	300	26.9				A	170	3	0000—2400	
28			TINNEVELLY	IND	77E44 08N44	A20	300	26.9				A	170	3	0300—1000	25
29			MALANG	INS	112E45 07S59	A18	10	10.4				A	84	4	2200—1700	
30			TERNATE	INS	127E23 00N48	A18	10	10.4				A	84	6	2000—1500	
31			BUNDORAN	IRL	08W25 54N26	A20	100	23.4				A	210	4	0000—2400	
32			YASOJ	IRN	51E35 30N39	A20	20	13.4				A	83	3	0200—2100	
33			SENDAI	J	140E55 38N16	A15	20	13.6				A	138	4	0000—2400	
34			BUSAN	KOR	128E53 35N13	C10	250	26.1				A	150	5	0000—2400	
35			PANGYO	KRE	126E58 38N44	A16	1	0.4				A	50		2000—1800	16
36			LANCERS GAP	LSO	27E32 29S19	A20	100	20.4				A	91	4	0400—2200	
37			OGBOMOSHO	NIG	04E13 08N07	C 9	10	10.4				A	92	4	0400—2300	
38			WELLINGTON	NZL	174E52 41S13	A20	10	10.4				A	50	4	0000—2400	
39			DUMAGUETE CITY	PHL	123E18 09N16	C 9	10	10.4				A	84	3	2100—1600	
40			BABANUSA	SDN	27E48 11N21	A20	100	23.4				A	215	4	0400—1500	24
41			MASSENYA	TCD	16E10 11N24	C 9	1	0.4				A			0400—2300	
42			DODOMA	TGK	35E30 06S10	C 9	100	20.4				A	88	4	0300—2100	
43			NAKHON PATHOM	THA	100E19 13N47	A20	500	27.6				A	122	2	0000—2400	
44			ANTALYA	TUR	30E56 36N55	D 9	600	33.0	0			B		4	0200—2300	18/ALG UKR URS
45		S	DNEPROPETROVSK	UKR	35E04 48N28	A16	20	16.4				A	220	4	0000—2400	18/TUR
46		S	UJGOROD	UKR	22E20 48N38	A16	150	25.2				A	220	4	0000—2400	18/TUR
47		S	BAKU	URS	49E45 40N24	A16	30	18.2				A	220	4	0000—2400	18/TUR
48			TIUMEN	URS	65E30 57N02	A18	100	23.4				A	220	4	0000—2400	
49			USSURUSK	URS	132E15 44N00	A16	5	10.4				A	220	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	900		GURIAT	ARS	37E25 31N25	C 9	1000	36.0	328	20—280	20.0	B		4	1500—0300	24
2	(42)		UDHAILIYAH	ARS	49E42 25N09	A20	0.1	—10.0				A	15	4	0100—2400	24
3			ALICE SPR NT	AUS	133E52 23S46	A20	2	3.4				A	46	3	1900—1400	
4			BRIDGETOWN WA	AUS	116E10 34S03	A20	5	9.1				A	143	4	1900—1400	
5			DEVONPORT TAS	AUS	146E19 41S10	A20	5	7.4				A	56	3	1900—1400	
6			LISMORE NSW	AUS	153E21 28S49	A20	5	7.4				A	83	4	1900—1400	
7			MT TOMPRICE WA	AUS	117E46 22S43	A20	5	7.4				A	70	5	2100—1600	
8		S	GUIYANG	CHN	106E36 26N25	A20	100	22.1				A	180	5	2000—1800	
9		S	HAILAR	CHN	119E45 49N02	A20	50	17.4				A	90	4	2000—1800	
10		S	HUMA	CHN	126E36 51N35	A20	50	17.4				A	90	4	2000—1800	
11		S	MUDANJIANG	CHN	129E36 44N36	A20	10	10.4				A	90	4	2000—1800	
12		S	SHUANGYASHAN	CHN	131E05 46N32	A20	10	10.0	320	90—190	4.0	B		4	2000—1800	
13		S	SUIHUA	CHN	126E50 46N34	A20	50	17.4				A	90	4	2000—1800	
14		S	TONGREN 2	CHN	109E13 27N43	A20	50	17.4				A	90	5	2000—1800	
15		S	TONGZI	CHN	106E49 28N08	A20	10	10.4				A	90	5	2000—1800	
16		S	WEINING	CHN	104E17 26N52	A20	50	17.4				A	90	5	2000—1800	
17		S	XINGYI	CHN	104E52 25N07	A20	10	10.4				A	90	5	2000—1800	
18			BAFIA	CME	11E12 04N42	C 9	20	15.1				A	166	5	0500—2300	
19			YAOUNDE	CME	11E32 03N55	C 9	20	15.1				A	166	5	0500—2300	
20			ABENGOUROU	CTI	03W29 06N43	C 9	10	12.1				A		7	0600—2400	
21			SASSANDRA	CTI	06W04 04N57	C 9	1	0.4				A		7	0600—2400	
22			BISSAU	GNB	15W35 11N51	A20	5	7.4				A	83	3	0000—2400	
23			DIAPAGA	HVO	01E47 12N04	A20	10	10.4				A	80	4	0000—2400	
24			MILANO	I	09E12 45N20	D 9	2000	35.1				A	145	4	0000—2400	
25			CUDDAPAH	IND	78E49 14N29	A20	200	25.1				A	170	3	0300—1000	25
26			CUDDAPAH	IND	78E49 14N29	A20	100	22.1				A	170	3	1000—0300	
27			SILCHAR	IND	92E47 24N45	A20	300	26.9				A	170	4	0300—0900	25
28			DJAKARTA	INS	106E45 06S23	A18	10	10.4				A	83	5	2200—1700	
29			SAMARINDA	INS	117E09 00S30	A18	25	16.1				A	150	4	2100—1600	
30		S	AHWAZ	IRN	48E40 31N20	A20	10	10.4				A	80	2	0100—2200	
31		S	BANDARFARAHNAZ	IRN	49E58 37N25	A20	10	10.4				A	80	2	0100—2200	
32		S	ISFAHAN	IRN	51E38 32N37	A20	10	10.4				A	80	3	0100—2200	
33		S	KERMAN	IRN	57E05 30N21	A20	10	10.4				A	80	3	0100—2200	
34		S	KERMANSHAH	IRN	47E04 34N19	A20	10	10.4				A	80	3	0100—2200	
35		S	MESHED	IRN	59E33 36N15	A20	10	10.4				A	80	3	0100—2200	
36		S	TABRIZ	IRN	46E20 38N02	A20	10	10.4				A	80	3	0100—2200	
37		S	TEHERAN	IRN	51E27 35N41	A20	50	19.1				A	140	3	0100—2200	
38			HAKODATE	J	140E47 41N47	A15	5	8.0	10			B		5	0000—2400	
39		S	IZUMO	J	132E47 35N23	A15	0.1	—9.6				A	50	5	0000—2400	
40			KOCHI	J	133E35 33N33	A15	5	7.0	265			B		4	0000—2400	
41		S	KURAYOSHI	J	133E49 35N27	A15	0.1	—9.6				A	50	5	0000—2400	
42			MASUDA	J	131E50 34N41	A15	0.1	—9.6				A	65	5	0000—2400	
43		S	YONAGO	J	133E18 35N26	A15	5	10.0	280			B		5	0000—2400	
44			MERU	KEN	37E37 00N05	C 9	100	20.6				A	100	4	0000—2400	
45			SEOUL	KOR	126E46 37N38	C10	50	19.1				A	140	5	0000—2400	
46			KANGGYE	KRE	126E36 40N58	A16	2	3.4				A	50		2000—1800	16
47			MACAU	MAC	113E33 22N12	A20	10	10.4				A	75	2	2200—1600	
48			BEIRA	MOZ	34E44 19S36	C10	10	10.4				A	66	4	0400—2200	
49			AKJOUJT	MTN	14W22 19N45	B20	20	13.4				A	83		0600—2400	24
50			FILINGUE	NGR	03E20 14N20	C 9	1	0.4				A	80	4	0000—2400	
51			SURKHET	NPL	81E38 28N36	A20	20	13.6				A	120	4	2200—1900	
52			DUNEDIN	NZL	170E35 45S53	A20	10	12.1				A	150	4	0000—2400	
53			KASHMOR	PAK	69E38 28N25	A20	2	3.4				A	83	4	0000—2000	
54			BATANGAS BAT	PHL	121E02 13N44	C 9	1	0.4				A	83	3	2100—1600	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	900		DAVAO CITY	PHL	125E36 07N03	C 9	1	0.4				A	83	3	2100–1600	
2	(42)		LAOAG CITY	PHL	120E35 18N11	C 9	1	0.4				A	83	3	2100–1600	
3			GOROKA	PNG	145E23 06S05	B10	2	3.4				A	60	5	2000–1400	
4		S	BRNO	TCH	16E38 49N11	C 9	30	15.2				A	60	5	0400–1700	7
5		S	KARLOVY VARY	TCH	12E52 50N15	C 9	25	14.4				A	60	5	0400–1700	7
6		S	MOR BUDEJOVICE	TCH	15E48 49N04	C 9	30	15.4				A	100	5	0400–1700	7
7		S	OLOMOUC	TCH	17E15 49N45	C 9	30	15.2				A	60	4	0400–1700	7
8		S	PLZEN	TCH	13E23 49N45	C 9	25	14.4				A	60	5	0400–1700	7
9			AIAGUZ	URS	79E59 47N50	A18	50	20.4				A	220	4	0000–2400	
10			IOCHKAR OLA	URS	47E50 56N39	C10	50	20.4				A	220	4	0000–2400	
11			KULIAB	URS	69E46 37N55	A18	50	20.4				A	220	4	0000–2400	

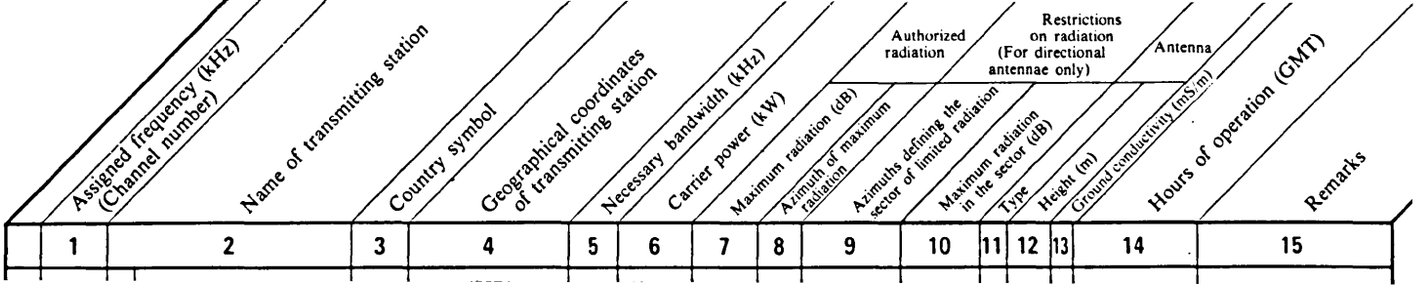
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	909		MAZAR I SHARIF	AFG	67E08 36N40	C 9	20	13.4				A	60	4	0100—2000	
2	(43)		UIGE	AGL	15E08 07S40	A20	5	7.4				A	83	3	0000—2400	
3			TAMANRASSET	ALG	05E30 22N50	D 9	100	22.1				A	140	5	0000—2400	24
4			ANGRA HEROISMO	AZR	27W11 38N42	A20	10	10.4				A	60	4	0000—2400	
5		S	FUHAI	CHN	87E45 47N00	A20	1	0.4				A	90	4	2000—1800	
6		S	FUYUN	CHN	89E33 47N00	A20	10	10.4				A	90	4	2000—1800	
7		S	HOTAN	CHN	80E02 37N00	A20	10	10.4				A	90	4	2000—1800	
8		S	KASHI	CHN	76E00 39N25	A20	10	11.0	100	210—290	7.0	B		4	2000—1800	
9		S	RUOQIANG	CHN	88E10 39N00	A20	10	10.4				A	90	4	2000—1800	
10		S	TACHENG	CHN	83E05 46N45	A20	10	10.4				A	90	4	2000—1800	
11			TIANJIN	CHN	117E09 39N09	A20	50	17.4				A	90	4	2000—1800	
12		S	TURPAN	CHN	89E02 42N53	A20	10	10.4				A	90	4	2000—1800	
13			WENCHENG	CHN	120E06 27N47	A20	100	22.1				A	180	4	2000—1800	
14		S	XINHE	CHN	82E40 41N25	A20	10	10.4				A	90	4	2000—1800	
15			YICHUN 2	CHN	128E45 47N40	A20	5	7.4				A	90	4	2000—1800	
16		S	YINING SHI	CHN	81E28 43N55	A20	10	10.4				A	90	4	2000—1800	
17		S	YIWU	CHN	94E40 43N20	A20	1	0.4				A	90	4	2000—1800	
18			TRINCOMALEE	CLN	81E07 08N30	C10	20	13.6				A	102	5	0000—1800	
19			MUENCHEN ISMAN	D	11E45 48N15	D 9	200	23.6				A	100	4	0600—1800	15
20			MUENCHEN ISMAN	D	11E45 48N15	D 9	200	32.0	50	100—120	8.0	B		4	1800—0600	
21			MUENCHEN ISMAN	D	11E45 48N15	D 9	200	32.0		290—320	5.0	B				
22			JYVASKYLA	FNL	25E46 62N17	D 9	100	23.4				A	200	5	0000—2400	
23		S	BROOKMANS PARK	G	00W11 51N44	C10	140	23.6				A	152	3	0000—2400	
24		S	BURGHEAD	G	03W28 57N42	C10	50	18.4				A	152	4	0000—2400	
25		S	CLEVEDON	G	02W52 51N25	C10	20	13.6				A	107	3	0000—2400	
26		S	HULL	G	00W14 53N43	C10	2	3.0				A	38	3	0000—2400	
27		S	REDRUTH	G	05W13 50N13	C10	2	3.0				A	38	5	0000—2400	
28		S	SCARBOROUGH	G	00W24 54N17	C10	2	3.0				A	30	4	0000—2400	
29		S	STAGSHAW	G	02W01 55N02	C10	100	22.1				A	145	4	0000—2400	
30			RADIO SYD	GMB	16W36 13N28	C 9	5	7.4				A	83	4	0600—0200	
31			DIEBOUGOU	HVO	03W09 11N10	A20	10	10.4				A	82	4	0000—2400	
32			CHHINDWARA	IND	78E55 22N05	A20	300	26.9				A	165	4	0300—0900	25
33			GORAKHPUR	IND	83E28 26N52	A20	100	22.1				A	170	3	0000—2400	
34			RATNAGIRI	IND	73E22 17N00	A20	100	22.1				A	170	4	0300—1000	25
35			SORONG	INS	131E17 00S50	A18	10	10.4				A	82	5	2000—1500	
36			MIZPE RAMON	ISR	34E48 30N46	D 9	10	12.1				A		3	0000—2400	33
37			NAGOYA	J	136E58 35N03	A15	10	10.4				A	89	4	0000—2400	
38			CHINJU	KOR	128E06 35N09	C10	10	10.6				A	120	4	0000—2400	
39			SUNCHON	KRE	125E46 39N25	A16	1	0.0				A	30		2000—1800	
40		S	GIAGHBOUB	LBY	24E31 29N45	D 9	20	15.1				A	165	5	0400—2400	24
41		S	KUFRA	LBY	23E18 24N11	D 9	10	12.1				A	165	5	0400—2400	24
42			SIBU	MLA	111E49 02N18	A20	20	13.6				A	135	5	2200—1600	
43			SIDI BENNOUR	MRC	08W17 32N44	A12	100	20.6				A	100	6	0600—2400	24
44			SIMLEMBA	MWI	33E40 12S45	A20	20	13.4				A	92	3	0200—2300	
45		S	PT VILA	NHB	168E18 17S45	A20	20	13.4				A	50	1	0000—2400	
46		S	SANTO 1	NHB	167E15 15S30	A20	20	13.4				A	50	1	0000—2400	
47			LOKOJA	NIG	06E45 07N49	C 9	20	13.6				A	100	4	0500—2300	
48			ILIGAN CITY	PHL	124E19 08N15	C 9	1	0.4				A	75	3	2100—1600	
49			TAWI TAWI SULU	PHL	119E46 05N01	C 9	5	7.4				A	82	3	2100—1600	
50		S	CLUJ	ROU	23E37 46N47	A20	50	19.1				A	155	5	0000—2400	
51		S	RESITA	ROU	21E55 45N18	A20	15	12.2				A	80	6	0000—2400	
52		S	TOMIS	ROU	28E36 44N07	A20	25	16.1				A	155	4	0000—2400	
53			YAMBIO	SDN	28E24 04N32	A20	50	21.0	235			B		3	0400—1600	24
54			HARAZE MANGUEG	TCD	21E19 10N31	C 9	1	0.4				A			0400—2300	



909 KHZ (43)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	909	SURIN	THA	103E32 14N57	A20	50	17.6				A	110	3	0000—2400	
2	(43)	KAMPALA	UGA	32E36 00N20	C 9	20	15.1				A		4	0300—2100	
3		IMAN	URS	133E43 45N56	A18	50	21.0	60	220—260	11.0	B		4	0000—2400	
4		TAIZ 2	YEM	44E05 13N32	C 9	500	30.0	120	250—330	16.0	B		3	0300—2200	24
5		SOLWEZI	ZMB	26E25 12S10	A20	10	12.1				A	168	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	918		TABOUK	ARS	36E30 28N25	C 9	20	13.6				A	120	4	0400—1400	24
2	(44)		CHARLEVIL QLD	AUS	146E13 26S23	A20	5					B		2	1900—1400	
3			COOMA NSW	AUS	149E09 36S14	A20	5	7.4				A	81	5	1900—1400	
4			NARROGIN WA	AUS	117E12 32S57	A20	5	7.4				A	82	3	1900—1400	
5		S	BIN XIAN	CHN	118E02 37N22	A20	10	10.4				A	90	4	2000—1800	
6		S	JINING SHI	CHN	116E35 35N28	A20	50	17.4				A	90	4	2000—1800	
7		S	LINYI	CHN	118E20 35N04	A20	20	13.4				A	90	4	2000—1800	
8		S	WEIFANG	CHN	119E06 36N43	A20	100	22.1				A	180	4	2000—1800	
9		S	WEIHAI	CHN	122E07 37N31	A20	10	10.4				A	90	4	2000—1800	
10			ZHANGJIAKOU	CHN	114E51 40N49	A20	5	7.4				A	90	4	2000—1800	
11			DIYAGAMA	CLN	79E58 06N50	C10	50	17.4				A	60	5	0000—1800	
12			DUEKOUE	CTI	07W21 06N43	C 9	1	0.4				A		7	0600—2400	
13			PAPHOS	CYP	32E22 34N52	C 9	50	19.1				A	176	5	0530—1330	2/0111/2802
14			PAPHOS	CYP	32E22 34N52	C 9	50	19.1				A	176		0300—1600	2/0103/3110
15			PAPHOS	CYP	32E22 34N52	C 9	2	5.1				A	176	5	1330—0530	2/0111/2802
16			PAPHOS	CYP	32E22 34N52	C 9	2	5.1				A	176		1600—0300	2/0103/3110
17			OVIEDO	E	05W50 43N20	D 9	20	13.4				A	80	5	0000—2400	19
18		S	EL MINYA	EGY	30E33 28N07	D 9	10	10.6				A	100	3	0000—2400	24
19		S	IDFU	EGY	32E49 25N00	D 9	10	10.6				A	100	3	0000—2400	24
20		S	SOHAG	EGY	31E43 26N27	D 9	10	10.6				A	100	3	0000—2400	24
21			SODDU	ETH	37E45 06N52	C 9	10	12.1				A	160	3	0400—2100	
22			BANGALORE	IND	77E38 12N58	A20	300	28.2				A	215	3	0300—1000	25
23			DIBRUGARH	IND	94E58 27N29	A20	300	26.9				A	165	3	0300—0900	25
24			SURAT	IND	72E52 21N12	A20	300	26.9				A	165	3	0300—0900	25
25			SURATGARH	IND	73E54 29N24	A20	300	27.0	35	145—175	20.0	B		3	0000—2400	
26			SURABAJA	INS	112E45 07S14	A18	10	10.4				A	82	4	2200—1700	
27			JIROFT	IRN	57E45 28N40	A20	20	13.4				A	82	3	0200—2100	
28			IWAKUNI	J	132E13 34N08	A15	0.1	−9.6				A	52	5	0000—2400	
29			KUSHIMA	J	131E14 31N28	A15	0.1	−9.6				A	67	5	0000—2400	
30			NOBEOKA	J	131E41 32N33	A15	1	0.4				A	67	5	0000—2400	
31			SHIMONOSEKI	J	130E56 33N58	A15	0.1	−9.6				A	52	5	0000—2400	
32			YAMAGATA	J	140E21 38N16	A15	5	8.0	10			B		5	0000—2400	
33			NAKURU	KEN	36E05 00S07	C 9	20	13.6				A	100	4	0000—2400	
34			YEONCHEON	KOR	127E04 38N06	C10	50	19.1				A	138	5	2100—0800	7
35			YEONCHEON	KOR	127E04 38N06	C10	10	12.1				A	138	5	0800—2100	
36			SANTANA 2	MDR	16W54 32N47	A20	1	0.4				A	60	4	0000—2400	
37			KUALA LIPIS	MLA	102E00 04N03	A20	20	15.1				A	150	5	0000—2400	
38			LOUREN MARQUES	MOZ	32E36 25S58	C10	100	22.1				A	160	4	0400—2200	
39			TETOUAN	MRC	05W23 35N36	A12	5	7.4				A	56	5	0500—2400	24
40			BOGHE	MTN	14W14 16N36	B20	20	13.4				A	82		0600—2400	24
41			LAGOS IKORODU	NIG	03E34 06N34	C 9	20	13.4				A	70	4	0500—2300	
42			MAKURDI	NIG	08E32 07N45	C 9	50	17.6				A	120	4	0500—2300	
43		S	CHATHAM IS	NZL	176W38 44S05	A20	5	7.4				A	50	4	0000—2400	
44		S	KUMARA	NZL	171E09 42S34	A20	10	12.1				A	150	6	0000—2400	
45			MALOLOS BUL	PHL	120E49 14N51	D 9	50	20.0	155	65—245	3.0	B		3	2100—1600	
46			MASSAKORY	TCD	15E44 13N00	C 9	1	0.4				A			0400—2300	
47			CHANDHABURI	THA	102E07 12N36	A20	1	0.4				A	85	3	0000—2400	
48			CHIANG MAI	THA	98E58 18N48	A20	10	10.4				A	60	5	0000—2400	
49			MUBENDE	UGA	31E20 00N30	C 9	10	10.4				A	68	4	0300—2100	
50			CHADRINSK	URS	63E37 56N00	A18	5	10.4				A	220	4	0000—2400	
51			MAKHATCHKALA	URS	47E30 42N59	C10	50	20.4				A	220	4	0000—2400	
52			MEZEN	URS	44E20 65N48	A16	100	20.4				A	85	4	0000—2400	
53			SRETENSK	URS	117E37 52N17	A18	50	21.0	0	160—200	11.0	B		5	0000—2400	
54			LJUBLJANA	YUG	14E35 46N08	D 9	600	29.9				A	136	5	0000—2400	



918 KHZ (44)

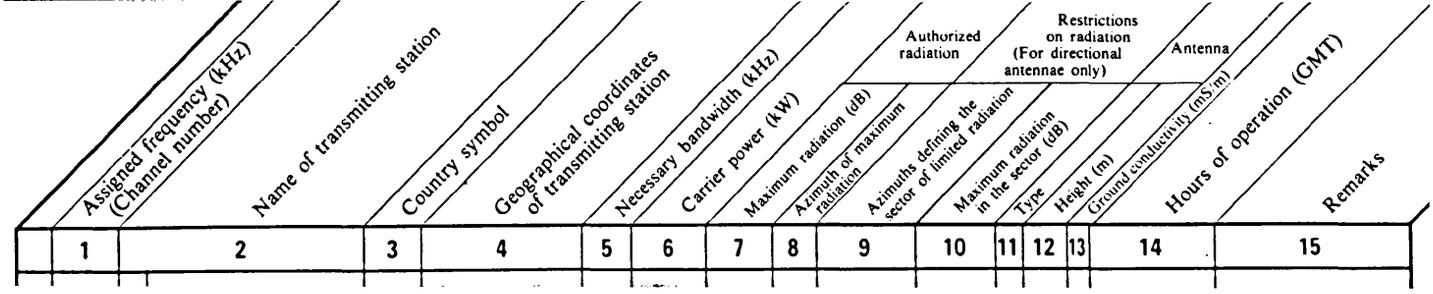
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	918 (44)	MANSA	ZMB	28E53 11S10	A20	10	12.1				A	167	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	927		LIBRAZHD	ALB	20E16 41N10	A20	1	0.4				A	81	6	0400—2300	(24)
2	(45)		BENI ABBES	ALG	02W08 30N08	A20	4	6.4				A		5	0600—2400	24
3			GURIAT	ARS	37E25 31N25	C 9	500	33.0	300	80—170	17.0	A	161	4	0400—1400	24
4			GLADSTONE QLD	AUS	151E14 23S51	A20	5					B		4	1900—1400	
5			MELBOURNE VIC	AUS	145E06 37S44	A20	5	9.1				A	142	2	0000—2400	
6			BRUXELLES WAVR	BEL	04E35 50N45	D 9	600	29.9				A	165	4	0000—2400	
7		S	ANSHUN SHI	CHN	105E55 26N15	A20	10	10.4				A	90	5	2000—1800	
8			BEIJING	CHN	116E27 39N57	A20	20	13.4				A	90	4	2000—1800	
9		S	BIJIE	CHN	105E16 27N18	A20	10	10.4				A	90	5	2000—1800	
10		S	DEJIANG	CHN	108E08 28N10	A20	50	17.4				A	90	5	2000—1800	
11			JILIN SHI	CHN	126E30 43N48	A20	10	10.4				A	90	4	2000—1800	
12		S	LUODIAN	CHN	106E40 25N29	A20	50	17.4				A	90	5	2000—1800	
13		S	QINGLONG	CHN	105E13 25N51	A20	10	10.4				A	90	5	2000—1800	
14		S	RONGJIANG	CHN	108E31 25N55	A20	10	10.4				A	90	5	2000—1800	
15		S	SHIBING	CHN	108E07 27N03	A20	10	10.4				A	90	5	2000—1800	
16		S	ZUNYI SHI	CHN	106E50 27N32	A20	10	10.4				A	90	5	2000—1800	
17		.	LOUM	CME	09E47 04N42	C 9	20	15.1				A	161	5	0500—2300	18/NGR
18			NKONGSAMBA	CME	09E54 04N57	C 9	30	16.9				A	161	5	0500—2300	18/NGR
19			DEBRA MA	ETH	37E44 10N20	C 9	10	12.1				A	160	3	0400—1500	
20			SIGATOKA	FJI	177E31 18S09	A20	2.5	4.0				A	30	3	1700—1200	
21			BISSAU	GNB	15W35 11N51	A20	0.5	−2.6				A	80	3	0000—2400	
22			ZAKYNTHOS	GRC	20E53 37N45	C 9	50	19.0	115	270—310	7.0	B		3	0400—2400	
23			KEROUANE	GUI	09W04 09N16	C 9	100	20.4				A	81	4	0000—2400	
24			ALMORA	IND	79E38 29N35	A20	300	26.9				A	165	4	0300—0900	25
25			JABALPUR	IND	79E59 23N10	A20	300	26.9				A	165	3	0300—0900	25
26			TURA	IND	90E12 25N36	A20	300	26.9				A	160	3	0300—0900	25
27			VIZAGAPATAM	IND	83E20 17N42	A20	200	25.0	185	285—335	17.0	B		4	0000—2400	
28			PAKANBARU	INS	101E30 00N33	A18	50	19.1				A	162	4	2200—1700	
29			BOJNURD	IRN	57E18 37N25	A20	20	13.4				A	81	3	0200—2100	
30			TIRAT ZEVI	ISR	35E30 32N29	A16	10	12.1				A		3	0000—2400	17/TUR 33
31			FUKUI	J	136E14 36N02	A15	5	9.0	230			B		5	0000—2400	
32			KOFU	J	138E32 35N39	A15	5	9.0	100			B		5	0000—2400	
33			WAKKANAI	J	141E43 45N23	A15	1	0.4				A	67	4	0000—2400	
34			MOMBASA	KEN	39E40 04S05	C 9	100	23.0	45			A	100	4	0000—2400	18/SDN
35			BUYEO	KOR	126E54 36N16	C10	10	10.4				A	60	4	0000—2400	
36			HADONG	KOR	127E45 35N03	C10	1	0.4				A	60	6	0000—2400	
37			HONGCHEON	KOR	127E54 37N41	C10	1	0.6				A	100	6	0000—2400	
38			TAWAU	MLA	117E55 04N16	A20	10	12.1				A	150	5	0000—2400	
39			AGADES	NGR	08E00 17N00	C 9	10	10.4				A	80	4	0000—2400	18/CME
40			NEW BUSSA	NIG	04E30 10N14	C 9	10	10.4				A	80	4	0500—2300	
41			PALMERSTON NO	NZL	175E34 40S21	A20	2	3.4				A	55	4	0000—2400	
42			KHAIRPUR	PAK	68E20 27N15	A20	100	20.4				A	81	3	0000—2000	
43			CALBAYOG SAMAR	PHL	124E35 12N04	C 9	1	0.4				A	81	3	2100—1600	
44			ZAMBOANGA CITY	PHL	122E03 06N54	C 9	5	7.4				A	81	3	2100—1600	
45			MALAKAL	SDN	31E40 09N32	A20	250	27.4				A	200	3	0400—2200	18/KEN 24
46			BANGKOK	THA	100E33 13N47	A20	10	10.0				A	30	2	0000—2400	
47		S	CANAKKALE	TUR	26E25 40N09	D 9	10	10.4				A	68	4	0200—2300	
48		S	IZMIR	TUR	27E15 38N15	D 9	200	28.0	75	250—260	15.0	B		4	0200—2300	17/ISR
49		S	MUGLA	TUR	28E22 37N13	D 9	1	0.4				A	68	4	0200—2300	
50			NEBIT DAG	URS	54E05 39N20	A18	50	20.4				A	220	4	0000—2400	
51			TAICHET	URS	98E01 55N57	A16	50	17.4				A	90	4	0000—2400	
52			VLADIMIR	URS	40E23 56N08	C10	30	18.2				A	220	4	0000—2400	
53			LIVINGSTONE	ZMB	25E50 17S50	A20	10	12.1				A	162	3	0200—2100	

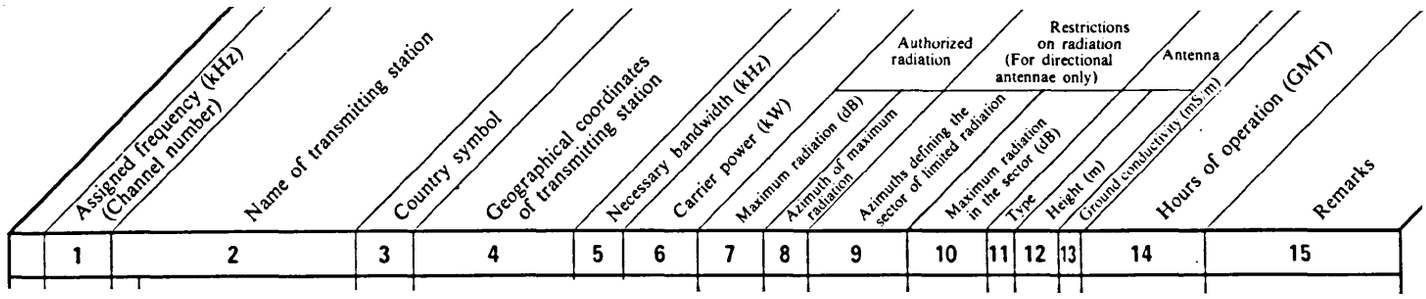
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Antenna: Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	936		BAGHLAN	AFG	68E50 36N12	C 9	10	10.4				A	70	4	0100—2000	
2	(46)		BERAT	ALB	19E58 40N41	A20	1	0.4				A	80	5	0400—2300	(24)
3			AYR QLD	AUS	147E15 19S30	A20	5					B		3	1900—1400	
4		S	HOBART TAS	AUS	147E30 42S55	A20	10					B		5	1900—1400	
5		S	KELSO TAS	AUS	146E47 41S06	A20	10	12.1				A		4	1900—1400	
6			NAMBOUR QLD	AUS	153E03 26S37	A20	5					B		4	1900—1400	
7			SIBUT	CAF	19E06 05N46	C 9	10	10.4				A	56	5	0400—2300	
8		S	ANQING	CHN	117E00 30N30	A20	20	13.6				A	90	4	2000—1800	
9		S	BUSHENG	CHN	81E09 30N17	A20	10	10.6				A	90	5	2000—1800	
10		S	GEGYA	CHN	80E58 32N30	A20	10	10.4				A	70	5	2000—1800	
11		S	HEFEI	CHN	117E19 31N46	A20	100	23.4				A	180	4	2000—1800	
12		S	HUOQIU	CHN	116E15 32N20	A20	10	10.6				A	90	4	2000—1800	
13		S	LHASA	CHN	90E59 29N30	A20	100	23.4				A	180	5	2000—1800	
14		S	NINGGUO	CHN	118E58 30N38	A20	10	10.6				A	90	4	2000—1800	
15		S	RUTO	CHN	79E44 33N25	A20	10	10.6				A	90	5	2000—1800	
16		S	SU XIAN	CHN	116E58 33N39	A20	50	17.0	260	30—130	11.0	B		4	2000—1800	
17		S	BREMEN	D	08E53 53N07	D 9	100	24.0	280	80—130	14.0	B		4	0000—2400	
18		S	BREMERHAVEN	D	08E37 53N32	D 9	5	7.4				A	56	4	1800—0600	
19			PARAKOU	DAH	02E38 09N20	C10	100	20.4				A	80	4	0500—2400	
20			CAIRO	EGY	31E14 30N01	D 9	100	22.1				A	160	3	0000—2400	24
21			AGANA	GUM	144E45 13N27	C10	10	10.6				A	97	3	0000—2400	
22		S	CUNEO	I	07E32 44N22	D 9	10	10.4				A	80	5	0000—2400	
23		S	OLBIA	I	09E29 40N54	D 9	10	10.4				A	80	4	0000—2400	
24		S	ORISTANO	I	08E36 39N53	D 9	5	7.4				A	80	4	0000—2400	
25		S	TRAPANI	I	12E34 37N55	D 9	5	7.6				A	110	5	0000—2400	
26		S	VENEZIA	I	12E18 45N29	D 9	25	14.6				A	118	3	0000—2400	
27			DHARWAR	IND	74E59 15N27	A20	300	26.9				A	165	3	0300—1000	25
28			TIRUCHIRAPALLI	IND	78E46 10N50	A20	300	26.9				A	165	3	0300—1000	25
29			TIRUCHIRAPALLI	IND	78E46 10N50	A20	100	22.1				A	165	3	1000—0300	
30			UDAIPUR	IND	73E47 24N30	A20	300	26.9				A	165	4	0300—0900	25
31			CLONBUR	IRL	09W22 53N31	A20	0.1	−9.6				A	50	5	0000—2400	
32			REZAIEH	IRN	45E05 37N32	A20	10	10.4				A	70	3	0100—2200	
33			AKITA	J	140E06 39N42	A15	5	7.4				A	78	4	0000—2400	
34			KWANGJU	KOR	126E49 35N12	C10	20	13.6				A	130	4	0000—2400	
35			KYONGWON	KRE	130E10 42N50	A16	1	0.4				A	50		2000—1800	
36			BEIRA	MOZ	34E44 19S36	C10	250	24.4	220			B		4	0400—2200	
37			AGADIR	MRC	09W31 30N20	C 9	600	28.8	190	240—320	19.8	B		4	0500—0300	24
38			KAFANCHAN	NIG	08E18 09N36	C 9	10	10.6				A	100	4	0500—2300	
39			S ARNAUD	NZL	172E49 41S49	A20	2	3.4				A	50	6	0000—2400	
40			MIR PURE	PAK	73E48 33N10	A20	5	7.6				A	121	4	0000—2000	
41			BINALBAGAN NEG	PHL	122E52 10N12	C 9	1	0.4				A	80	3	2100—1600	
42			DAVAO CITY	PHL	125E34 07N04	C 9	10	10.4				A	80	3	2100—1600	
43			TARLAC TARLAC	PHL	120E35 15N29	C 9	1	0.4				A	80	3	2100—1600	
44			AL KHAISAH	QAT	51E25 25N24	C 9	100	20.6				A	100	5	0300—2100	24
45			MOYAMBA	SRL	12W35 08N15	C 9	20	13.0				A	40	2	0500—2400	
46			NAKHON SAWAN	THA	100E09 15N42	A20	100	25.0	340			B		2	0000—2400	
47			PATTANI	THA	101E15 06N50	A20	1.5	2.2				A	45	3	0000—2400	
48			YUMBE	UGA	31E25 03N30	C 9	10	10.4				A	80	4	0300—2100	
49			LVOV	UKR	23E59 49N50	A16	500	32.0	10	150—250	21.0	B		4	0000—2400	
50			AMGA	URS	132E00 61N01	A16	50	20.4				A	220	5	0000—2400	
51		S	ENGELS	URS	46E05 51N27	A16	100	23.4				A	220	4	0000—2400	
52		S	FT CHEVTCHENKO	URS	50E18 44N30	A18	150	26.7	25	180—240	6.7	B		4	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	936	S	KEMEROVO	URS	86E00 55N22	A16	50	20.4				A	220	4	0000—2400	
2	(46)	S	KRASNOIARSK	URS	92E54 56N01	A18	50	20.4				A	220	4	0000—2400	
3			DJAKOVICA	YUG	20E26 42N22	D 9	10	10.0				A	40	4	0800—1500	
4			DJAKOVICA	YUG	20E26 42N22	D 9	2	3.0				A	40	4	1500—0800	
5			GEVGELIJA	YUG	22E31 41N09	D 9	10	10.4				A	60	3	0800—1500	
6			GEVGELIJA	YUG	22E31 41N09	D 9	2	3.4				A	60	3	1500—0800	
7			KISANGANI	ZAI	25E11 00N03	C 9	10	12.1				A	135	6	0000—2400	
8			KABWE	ZMB	28E30 14S22	A20	2	5.1				A	160	4	0200—2100	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	945		FARAH	AFG	62E08 32N23	C 9	10	10.4				A	60	4	0100—2000	
2	(47)		LUANDA	AGL	13E14 08S48	C10	1	0.4				A	65	3	0500—2400	
3			GURIAT	ARS	37E25 31N25	C 9	1000	36.0	270	10—170	15.0	B		4	0000—2400	24
4			CHARLEVIL QLD	AUS	146E00 27S00	A20	5	7.4				A		2	1900—1400	
5			MEEKATHARRA WA	AUS	118E30 27S00	A20	10	12.1				A		4	2100—1600	
6		S	AIHUI	CHN	127E20 50N18	A20	20	13.6				A	90	4	2000—1800	
7		S	ANHUA	CHN	111E13 28N22	A20	10	10.6				A	90	4	2000—1800	
8		S	ANSHAN	CHN	122E58 41N07	A20	10	10.6				A	90	4	2000—1800	
9		S	ANXI	CHN	95E32 40N30	A20	5	7.6				A	90	4	2000—1800	
10		S	BEIAN	CHN	126E40 48N18	A20	1	0.6				A	90	4	2000—1800	
11		S	BO XIAN	CHN	115E46 33N53	A20	5	7.6				A	90	4	2000—1800	
12		S	CHANGSHA SHI	CHN	112E45 28N09	A20	50	17.6				A	90	4	2000—1800	
13		S	CHU XIAN	CHN	118E18 32N19	A20	10	10.6				A	90	4	2000—1800	
14		S	CHUXIONG	CHN	101E28 25N02	A20	20	13.6				A	90	5	2000—1800	
15		S	DEZHOU	CHN	116E17 37N27	A20	20	13.6				A	90	4	2000—1800	
16		S	ERGUNE ZUOQI	CHN	121E30 50N50	A20	10	10.6				A	90	4	2000—1800	
17		S	FUSHUN SHI	CHN	123E53 41N51	A20	5	7.6				A	90	4	2000—1800	
18		S	FUXIN SHI	CHN	121E38 42N02	A20	20	13.6				A	90	4	2000—1800	
19		S	HABAHE	CHN	87E03 48N04	A20	10	10.6				A	90	4	2000—1800	
20		S	HARBIN	CHN	126E52 45N49	A20	20	13.6				A	90	4	2000—1800	
21		S	HUAINAN	CHN	117E00 32N41	A20	5	7.6				A	90	4	2000—1800	
22		S	JIAMUSI	CHN	130E30 46N40	A20	20	13.6				A	90	4	2000—1800	
23		S	JIANCHANG	CHN	119E48 40N49	A20	20	13.6				A	90	4	2000—1800	
24		S	JIAYUGUAN	CHN	98E12 39N50	A20	5	7.6				A	90	4	2000—1800	
25		S	JINGDONG	CHN	100E45 24N24	A20	5	7.6				A	90	5	2000—1800	
26		S	JINGSHAN	CHN	113E06 31N02	A20	20	13.6				A	90	4	2000—1800	
27		S	JIXI	CHN	130E58 45N18	A20	20	13.6				A	90	4	2000—1800	
28		S	KUNMING	CHN	102E50 25N10	A20	50	17.6				A	90	5	2000—1800	
29		S	LANZHOU	CHN	103E50 36N02	A20	20	13.6				A	90	4	2000—1800	
30		S	LEIYANG	CHN	112E51 26N25	A20	10	10.6				A	90	4	2000—1800	
31		S	LIAOCHENG	CHN	115E58 36N26	A20	10	10.6				A	90	4	2000—1800	
32		S	LINTAN	CHN	103E21 34N42	A20	5	7.6				A	90	4	2000—1800	
33		S	MANZHOULI	CHN	117E30 49N28	A20	20	13.6				A	90	4	2000—1800	
34		S	MINQIN	CHN	102E58 38N36	A20	20	13.6				A	90	4	2000—1800	
35		S	MOHE	CHN	122E10 53N21	A20	20	13.6				A	90	4	2000—1800	
36		S	NINGYUAN	CHN	111E59 25N35	A20	10	10.6				A	90	4	2000—1800	
37		S	ONGNIUD QI	CHN	118E54 42N55	A20	20	13.6				A	90	4	2000—1800	
38		S	PUER	CHN	101E02 22N57	A20	20	13.6				A	90	5	2000—1800	
39		S	QIANYANG	CHN	110E09 27N20	A20	10	10.6				A	90	4	2000—1800	
40		S	QIQIHAR	CHN	123E58 47N18	A20	10	10.6				A	90	4	2000—1800	
41		S	RAOHE	CHN	134E00 46N40	A20	20	13.6				A	90	4	2000—1800	
42		S	RUSHAN	CHN	121E29 36N53	A20	20	13.6				A	90	4	2000—1800	
43		S	SHAN XIAN	CHN	116E05 34N48	A20	5	7.6				A	90	4	2000—1800	
44		S	TAXKORGAN	CHN	75E08 37N42	A20	10	10.6				A	90	4	2000—1800	
45		S	TENGCHONG	CHN	98E20 25N00	A20	20	13.6				A	90	5	2000—1800	
46		S	TIANSHUI SHI	CHN	105E30 34N30	A20	10	10.6				A	90	4	2000—1800	
47		S	TONGLING	CHN	117E47 30N57	A20	5	7.6				A	90	4	2000—1800	
48		S	URUMQI SHI	CHN	87E30 43N35	A20	100	22.0	140	290— 10	16.0	B		4	2000—1800	
49		S	WEIXI	CHN	99E12 27N10	A20	10	10.6				A	90	5	2000—1800	
50		S	WENSHAN	CHN	104E15 23N22	A20	5	7.6				A	90	5	2000—1800	
51		S	WUFENG	CHN	110E40 30N12	A20	25	14.6				A	90	4	2000—1800	
52		S	XIANNING	CHN	114E17 29N52	A20	10	10.6				A	90	4	2000—1800	
53		S	XIAOYI	CHN	111E48 37N07	A20	10	10.6				A	90	4	2000—1800	
54		S	XIN XIAN	CHN	112E40 38N25	A20	10	10.6				A	90	4	2000—1800	

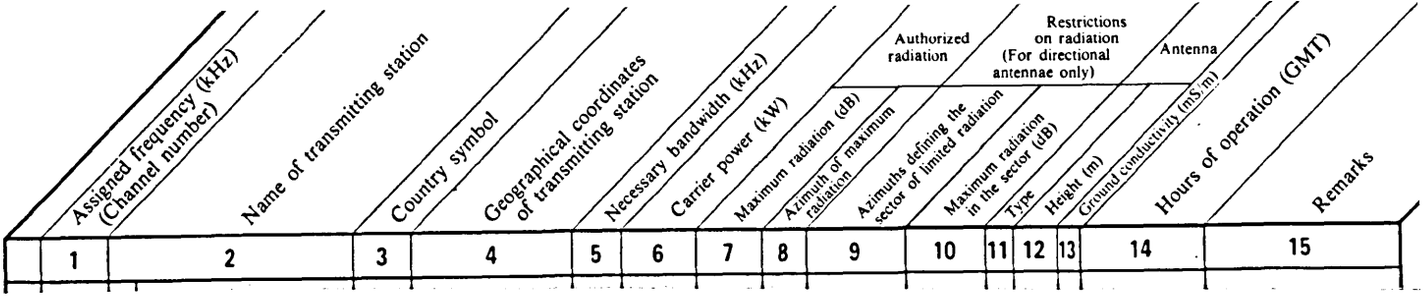


	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	945	S	YANGCHENG	CHN	112E25 35N29	A20	10	10.6				A	90	4	2000—1800	
2	(47)	S	YONGSHUN	CHN	109E51 29N00	A20	10	10.6				A	90	4	2000—1800	
3		S	YUNLONG	CHN	99E19 25N56	A20	5	7.6				A	90	5	2000—1800	
4		S	ZHONGDIAN	CHN	99E37 27N45	A20	5	7.6				A	90	5	2000—1800	
5		S	ZHUANGHE	CHN	123E01 39N41	A20	10	10.6				A	90	4	2000—1800	
6		S	ZIBO	CHN	118E03 36N48	A20	5	7.6				A	90	4	2000—1800	
7		S	ZUOQUAN	CHN	113E22 37N05	A20	10	10.6				A	90	4	2000—1800	
8			GALLE	CLN	80E12 06N05	A10	10	10.4				A	50	5	0000—1800	
9			MINDELO	CPV	24W59 16N53	A18	10	10.0				A	40	6	1900—2400	
10			ADIUGRI	ETH	38E49 14N54	C 9	100	22.1				A	170	3	0400—2100	
11			TOULOUSE	F	01E20 43N21	D 9	300	26.9				A	132	3	0000—2400	
12			MESSOLGION	GRC	21E33 38N22	C 9	10	10.4				A	65	4	0400—2400	
13			AGARTALA	IND	91E23 23N50	A20	300	26.9				A	160	3	0300—0900	25
14			AURANGABAD	IND	75E18 19N54	A20	300	26.9				A	160	3	0300—1000	25
15			KAVARATHY I	IND	72E42 10N36	A20	300	26.9				A	160	4	0300—1000	25
16			ROURKELA	IND	85E00 22N12	A20	100	22.1				A	160	4	0000—2400	
17			MARIVAN	IRN	46E10 35N33	A20	20	13.4				A	79	3	0200—2100	
18			HIKONE	J	136E10 35N15	A15	1	0.6				A	108	5	0000—2400	
19			MURORAN	J	140E59 42N19	A15	3	7.0	20			B		5	0000—2400	
20			TOKUSHIMA	J	134E35 34N04	A15	5	9.0	250			B		5	0000—2400	
21			WEONJU	KOR	127E56 37N23	C10	10	10.6				A	110	6	0000—2400	
22			HYESAN	KRE	128E12 41N24	A16	1	0.0				A	30		2000—1800	16
23			GREENVIL	LBR	09W02 05N01	A20	10	10.4				A	76	5	0500—2400	
24		S	JOHORE BAHRU	MLA	103E45 01N27	A20	50	19.1				A	150	5	2200—1700	
25		S	TRONOH	MLA	100E59 04N23	A20	100	22.1				A	150	5	2200—1700	
26			GOUNDAM	MLI	03W40 16N25	C 9	10	12.1				A	158		0600—2400	
27			ABEOKUTA	NIG	03E18 07N10	C 9	10	10.6				A	100	4	0400—2300	
28			SOKOTO	NIG	05E18 12N57	C 9	50	17.6				A	100	4	0500—2300	
29			GISBORNE	NZL	178E04 38S42	A20	5	7.4				A	50	5	0000—2400	
30			COTABATO CITY	PHL	124E14 07N13	C 9	5	7.4				A	79	3	2100—1600	
31			ROXAS CITY	PHL	122E45 11N34	C 9	.1	0.4				A	79	3	2100—1600	
32			MIERCUREA CIUC	ROU	25E48 46N23	A20	15	12.4				A	105	5	0000—2400	
33			ABU HAMED	SDN	33E08 15N30	A20	100	23.4				A	205	3	0500—1600	24
34			GIZO	SLM	156E50 08S06	A20	10	12.1				A		1	1900—1200	
35			S TOME	STP	06E45 00N21	A20	5	7.4				A	80	3	0000—2400	16
36			KOUMRA	TCD	17E33 08N55	C 9	5	7.4				A			0400—2300	
37			CHOMUTOV	TCH	13E24 50N28	A20	1	0.4				A	60	5	0000—2400	
38			VARNSDORF	TCH	14E36 50N54	A20	1	0.4				A	60	5	0000—2400	
39			JOHNS CORNER	TGK	35E12 08S20	C 9	50	17.4				A	77	4	0300—2100	
40			PAVLODAR	URS	76E57 52N18	A18	50	21.0	320	120—160	7.0	B		4	0000—2400	
41			RIGA	URS	24E00 56N55	A16	50	20.4				A	220	4	0000—2400	
42			ROSTOV NA DONU	URS	39E43 47N12	A16	300	27.7	60	180—300	12.7	B		4	0000—2400	
43			TAICHET	URS	98E01 55N57	A18	50	20.4				A	220	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

954 KHZ (48)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	954		CHARTERSTRS QL	AUS	146E18 20S06	A20	5	7.4				A		3	1900—1400	
2	(48)		SYDNEY NSW	AUS	151E04 33S51	A20	5	9.1				A	145	4	0000—2400	
3			PNT DELGADA	AZR	25W40 37N45	A20	10	10.4				A	60	4	0000—2400	
4			PHNOM PENH	CBG	104E55 11N34	C10	1	0.4				A	80	3	0000—2400	
5		S	DANBA	CHN	101E53 30N53	A20	20	13.6				A	90	4	2000—1800	
6			HAIKOU	CHN	110E15 20N02	A20	30	15.4				A	90	4	2000—1800	
7			JIANHE	CHN	108E45 26N39	A20	5	7.6				A	90	5	2000—1800	
8		S	NEIJIANG SHI	CHN	105E15 29N39	A20	20	13.6				A	90	4	2000—1800	
9		S	SHIMIAN	CHN	102E27 29N12	A20	10	10.6				A	90	4	2000—1800	
10			TIANJIN	CHN	117E09 39N09	A20	50	17.6				A	90	4	2000—1800	
11			VALENCIA	E	00W20 39N25	D 9	20	13.4				A	80	4	0000—2400	19
12			LONDON MEDWAY	G	00E32 51N22	A20	1	0.4				A	60	3	0000—2400	
13			IRAKLION	GRC	25E07 35N20	C 9	20	13.4				A	65	5	0400—2400	
14			DHARMSALA	IND	76E15 32N12	A20	300	26.9				A	160	3	0300—0900	25
15			NAJIBABAD	IND	78E12 29N24	A20	200	25.1				A	160	3	0300—0900	25
16			NAJIBABAD	IND	78E12 29N24	A20	100	22.0	25	245—275	13.0	B		3	0900—0300	
17			PONDICHERRY	IND	79E54 12N00	A20	300	26.9				A	160	3	0300—1000	25
18			KENDARI	INS	122E36 03S57	A18	10	10.4				A	78	5	2100—1600	
19			HAIFA	ISR	35E03 32N49	D 9	100	23.0				A	157	3	0000—2400	18/TUR 33
20			TOKYO	J	139E40 35N48	A15	100	22.1				A	129	4	0000—2400	
21			KISUMU	KEN	34E45 00S05	C 9	100	22.1				A	130	4	0000—2400	
22			UNRYUL	KRE	125E10 38N30	A16	1	0.0				A	30		2000—1800	
23			BEYROUTH	LBN	35E29 33N54	A20	10	10.4				A	65	4	0300—2400	16 24
24			SANOKOLE	LBR	08W43 07N22	A20	10	10.4				A	79	5	0500—2400	
25			KUCHING	MLA	110E20 01N33	A20	10	12.1				A	137	5	2200—1500	
26			ARWAIHER	MNG	102E20 46N20	A18	5	7.6				A	120	5	2200—1500	
27			ATAR	MTN	13W03 20N31	B20	20	13.4				A	79		0600—2400	24
28			ENUGU	NIG	07E28 06N27	C 9	10	10.4				A	80	4	0500—2300	
29			HAMILTON	NZL	175E21 37S53	A20	2	3.4				A	50	3	0000—2400	
30			GWADAR	PAK	62E30 25N10	A20	10	10.4				A	78	4	0000—2000	
31			ILIGAN CITY	PHL	124E14 08N13	C 9	1	0.4				A	78	3	2100—1600	
32			VALENZUELA BUL	PHL	120E58 14N40	C 9	10	10.4				A	78	3	0000—2400	
33			AL ARISH	QAT	51E04 26N03	D 9	750	37.0	280	310—240	26.0	B		5	0300—2100	24
34			DEIR EZ ZOR	SYR	40E12 35N25	C 9	60	17.8				A	33	2	0300—2400	
35			FADA	TCD	21E35 17N11	C 9	10	12.1				A			0500—2300	
36		S	BRNO	TCH	17E08 49N23	C 9	750	32.2				A	184	4	0000—2400	
37		S	KARLOVY VARY	TCH	12E52 50N15	C 9	30	15.2				A	60	5	0000—2400	
38		S	OSTRAVA	TCH	18E12 49N48	C 9	50	17.6				A	100	5	0000—2400	
39		S	PLZEN	TCH	13E23 49N45	C 9	60	18.4				A	100	4	0000—2400	
40		S	BANGKOK	THA	100E36 13N55	A20	5	7.0				A	36	2	0000—2400	
41		S	CHANDHABURI	THA	102E06 12N36	A20	5	7.4				A	42	3	0000—2400	
42		S	MAHA SARAKHAM	THA	103E18 16N10	A20	1.1	0.8				A	75	3	0000—2400	
43		S	NAKHON SAWAN	THA	100E18 15N16	A20	5	7.4				A	60	2	0000—2400	
44		S	PHITSANULOK	THA	100E22 16N49	A20	5	7.4				A	45	2	0000—2400	
45		S	UDON THANI	THA	102E48 17N23	A20	5	7.4				A	78	3	0000—2400	
46			TRABZON	TUR	39E46 40N59	D 9	300	26.9				A	157	3	0200—2300	18/ISR
47			ARALSK	URS	61E41 46N45	A18	150	26.7	30	150—260	15.7	B		4	0000—2400	
48			BIKIN	URS	134E14 46N49	C 9	50	17.6				A	90	4	0000—2400	

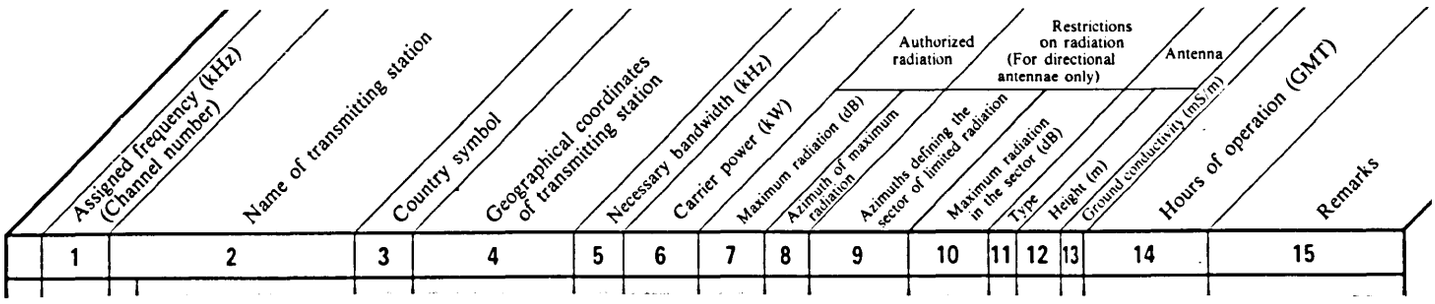


	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	963		KORCE	ALB	20E48	40N36	A20	15	13.9				A	155	5	0500—2200	(24)
2	(49)		BENDIGO VIC	AUS	144E14	36S42	A20	5	7.4				A	78	2	1900—1400	
3			BUNBURY WA	AUS	115E45	33S20	A20	5	7.4				A	57	3	1900—1400	
4			WARWICK QLD	AUS	152E04	28S13	A20	5					B		3	1900—1400	
5			S ANTON ARLBG	AUT	10E17	47N08	D 9	0.1	−10.0				A	15	6	0000—2400	
6			S GALLEN	AUT	14E37	47N41	D 9	0.1	−10.0				A	15	6	0000—2400	
7			SYLHET	BGD	92E00	25N00	A20	20	13.6				A	122	3	0000—1800	
8			SOFIA	BUL	23E41	42N51	A18	150	22.4				A	110	4	0000—2400	18/FNL
9		S	AKSU	CHN	80E19	41N03	A20	10	12.0	90	230—310	4.0	B		4	2000—1800	
10		S	ALTAY	CHN	88E18	47N50	A20	10	10.6				A	90	4	2000—1800	
11		S	BAIRIN ZUOQI	CHN	119E12	43N58	A20	20	13.6				A	90	4	2000—1800	
12		S	BENXI SHI	CHN	123E38	41N10	A20	20	13.6				A	90	4	2000—1800	
13		S	BOLE	CHN	82E08	44N54	A20	10	10.6				A	90	4	2000—1800	
14		S	CHIFENG SHI	CHN	118E52	42N18	A20	50	17.6				A	90	4	2000—1800	
15		S	HAMI	CHN	93E20	42N50	A20	10	10.6				A	90	4	2000—1800	
16		S	HUANREN	CHN	125E21	41N15	A20	10	10.6				A	90	4	2000—1800	
17			HUHHOT	CHN	111E30	41N12	A20	5	7.6				A	90	4	2000—1800	
18		S	KARAMAY	CHN	85E00	45N32	A20	10	10.6				A	90	4	2000—1800	
19		S	KORLA	CHN	86E10	41N44	A20	10	10.6				A	90	4	2000—1800	
20		S	YECHENG	CHN	77E22	37N55	A20	20	16.0	90	240—300	0.0	B		4	2000—1800	
21		S	YINGKOU SHI	CHN	122E12	40N41	A20	100	23.4				A	180	4	2000—1800	
22			NICOSIA	CYP	33E23	35N09	C 9	600	28.4				A	100	4	0000—2400	18/IRN SDN TUN
23			PARIS	F	02E25	48N53	D 9	10	10.4				A	65	3	0900—1600	
24			PORI	FNL	21E52	61N28	D 9	600	31.2				A	200	4	0000—2400	18/BUL
25			BLACKBURN	G	02W29	53N45	A20	0.8	−1.0	90	280—290	−9.9	B		3	0000—2400	
26			LAMBARENE	GAB	10E13	00S12	C 9	10	12.1				A		5	0400—2400	
27			BANFORA	HVO	04W45	10N38	A20	20	13.6				A	123	4	0000—2400	
28			GWALIOR	IND	78E10	26N14	A20	300	26.9				A	160	3	0300—0900	25
29			JALGAON	IND	75E31	20N55	A20	100	21.0	180	345— 15	17.0	B		3	0000—2400	
30			MANGALORE	IND	74E48	12N48	A20	300	26.9				A	160	4	0300—1000	25
31			TAWANG	IND	91E54	27N36	A20	200	25.1				A	160	4	0300—0900	25
32			BIAK	INS	136E04	01S11	A18	2	3.4				A	78	5	2000—1500	
33			DJEMBER	INS	113E45	08S07	A18	10	10.4				A	78	4	2200—1700	
34			ANNAGARY	IRL	08W20	55N01	A20	10	10.4				A	61	5	0000—2400	
35			BIRJAND	IRN	59E12	32N52	A20	20	13.6				A	120	3	0200—2100	18/CYP
36			AOMORI	J	140E46	40N48	A15	5	9.0	40			B		5	0000—2400	
37			HAGI	J	131E24	34N25	A15	1	0.4				A	47	5	0000—2400	
38			MATSUYAMA	J	132E44	33N49	A15	5	9.0	160			B		5	0000—2400	
39			SAGA	J	130E16	33N15	A15	1	0.6				A	108	5	0000—2400	
40			YONAGO	J	133E19	35N27	A15	1	0.6				A	103	5	0000—2400	
41			ANDONG	KOR	128E43	36N33	C10	10	10.6				A	100	6	0000—2400	
42			JEJU	KOR	126E34	33N26	C10	10	10.6				A	120	4	0000—2400	
43			ORANG	KRE	129E39	41N25	A16	2	3.0				A	30		2000—1800	16
44			KUWAIT	KWT	48E20	29N34	A20	20	13.4				A	75	8	0000—2400	24
45			KUALATRENGGANU	MLA	103E07	05N18	A20	10	10.6				A	100	5	2200—1700	
46			TETE	MOZ	33E35	16S11	C10	100	20.4				A	78	4	0400—2200	
47			MARADI	NGR	07E00	13N30	C 9	20	15.1				A		4	0000—2400	
48			OTJIWARONGO	NMB	16E38	20S28	A20	50	19.1				A	150	3	0000—2400	
49		S	CHRISTCHURCH	NZL	172E39	43S42	A20	10	10.6				A	120	4	0000—2400	
50		S	MAHIA	NZL	177E51	39S05	A20	10	12.1				A	150	3	0000—2400	
51			CEBU CITY	PHL	123E56	10N19	C 9	10	10.4				A	77	3	2100—1600	
52			ZAMBOANGA CITY	PHL	122E05	06N55	C 9	5	7.4				A	77	3	2100—1600	
53			DABROWA TARNOW	POL	21E00	50N10	A20	1	0.4				A	78	5	0000—2400	
54			KLUCZBORK	POL	18E13	50N59	A20	1	0.4				A	78	5	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

963 KHZ (49)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	963	LIPSKO	POL	21E38 51N10	A20	1	0.4				A	78	5	0000—2400	
2	(49)	LUBACZOW	POL	23E07 50N10	A20	1	0.4				A	78	5	0000—2400	
3		NISKO	POL	22E09 50N31	A20	1	0.4				A	78	5	0000—2400	
4		SLUBICE	POL	14E35 52N22	A20	1	0.4				A	78	5	0000—2400	
5		WLOSZCZOWA	POL	19E58 50N52	A20	1	0.4				A	78	5	0000—2400	
6		SOBA	SDN	32E40 15N30	A20	200	26.4				A	181	3	0400—2400	18/CYP 24
7		MATAM	SEN	13W15 15N40	C 9	10	10.4				A	50	4	0600—2400	
8		MOGADISCIO	SOM	45E20 02N02	A16	150					B		4	0300—2000	
9		N RATCHASIMA	THA	102E07 14N57	A20	10	10.4				A	77	2	0000—2400	
10		PHUKET	THA	98E23 07N51	A20	25	14.4				A	78	3	0000—2400	
11		TUNIS DJEDEIDA	TUN	09E56 36N50	D 9	200	25.1				A	145	4	0000—2400	18/CYP 24
12		KULIAB	URS	69E46 37N55	C10	10	15.0	10	130—230	6.0	B		4	0000—2400	
13		ULAN UDE	URS	107E38 51N50	A18	50	20.0	330	100—200	11.0	B		4	0000—2400	
14		BEOGRAD	YUG	20E08 44N38	D 9	200	26.0	130	270—350	8.0	B		3	0800—1500	
15		KOLWEZI	ZAI	25E27 10S47	C 9	10	10.4				A	60	8	0000—2400	

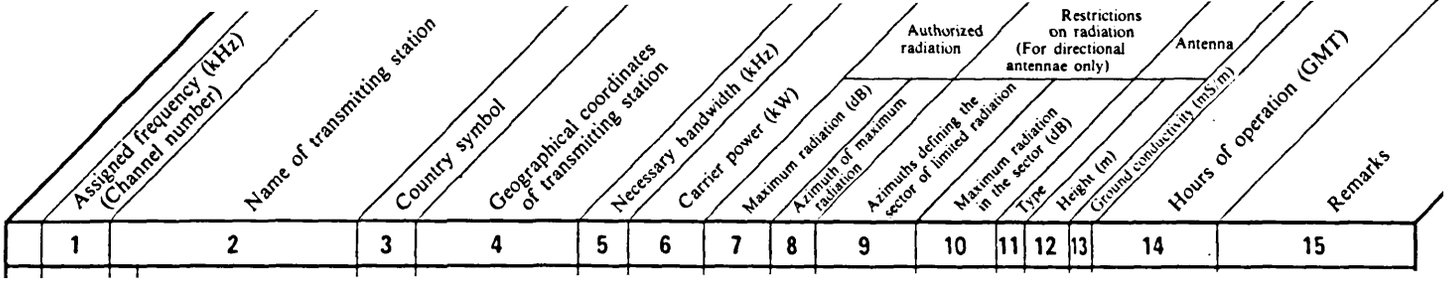


	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	972		PUKE	ALB	19E50	42N03	A20	20	15.1				A	155	6	0400—2300	23/URS (24)
2	(50)		ADELAIDE SA	AUS	138E34	34S50	A20	5	9.1				A	141	2	0000—2400	
3			MURWILLUMB NSW	AUS	153E30	28S19	A20	5					B		4	1900—1400	
4			SEBELE	BOT	25E58	24S34	A20	50	17.4				A	100	4	0300—2100	
5			BUKIT PUAN	BRU	114E27	04N32	A20	10	10.0				A	24	4	2200—1500	
6		S	ANYANG SHI	CHN	114E22	36N08	A20	50	17.4				A	70	4	2000—1800	
7		S	GUSHI	CHN	115E40	32N10	A20	10	10.4				A	70	4	2000—1800	
8			HARBIN	CHN	126E52	45N49	A20	20	13.4				A	70	4	2000—1800	
9		S	JIAOZUO	CHN	113E14	35N15	A20	10	10.4				A	70	4	2000—1800	
10		S	LANKAO	CHN	114E48	34N48	A20	10	10.4				A	70	4	2000—1800	
11		S	NANYANG SHI	CHN	112E32	33N00	A20	50	17.4				A	70	4	2000—1800	
12		S	RUYANG	CHN	112E28	34N09	A20	10	10.4				A	70	4	2000—1800	
13		S	SANMENXIA	CHN	111E13	34N46	A20	20	13.4				A	70	4	2000—1800	
14		S	XINYANG SHI	CHN	114E04	32N10	A20	50	17.4				A	70	4	2000—1800	
15		S	XUCHANG SHI	CHN	113E48	34N02	A20	10	10.4				A	70	4	2000—1800	
16		S	ZHUMADIAN	CHN	114E02	32N59	A20	5	7.4				A	70	4	2000—1800	
17			AMPARAI	CLN	81E40	07N20	A10	50	17.6				A	108	5	0000—1800	
18			BERTOUA	CME	15E42	04N34	C 9	100	22.1				A	154	5	0500—2300	
19			MPOUYA	COG	16E17	02S40	A20	2	3.4				A	77	5	0000—2400	
20		S	BONN	D	07E06	50N43	D 9	5	7.6				A	109	4	0000—2400	
21		S	HAMBURG	D	10E07	53N31	D 9	600	31.2				A	184	3	0800—1700	
22		S	HAMBURG	D	10E07	53N31	D 9	600	29.7	267	65—110	21.8	B		3	1700—0800	
23		S	KLEVE	D	06E07	51N47	D 9	3	5.4				A	110	4	0000—2400	
24			LANGENBERG	D	07E08	51N21	D 9	800	31.1				A	165	4	0800—1700	
25			PABEGOU	DAH	01E35	09N48	C10	5	7.4				A	77	4	0500—2400	
26			BAHAR DAR	ETH	37E27	11N20	C 9	100	22.1				A	162	3	0400—2300	
27			LONDON	G	00W11	51N28	A20	1	0.4				A	80	4	0000—2400	
28			BOKE	GUI	14W18	10N56	C 9	50	19.0	50	160—280	22.0	B		4	0000—2400	
29			CUTTACK	IND	85E55	20N35	A20	300	26.9				A	155	3	0000—2400	
30			DARBHANGA	IND	85E56	26N09	A20	300	26.9				A	155	3	0300—0900	25
31			HISSAR	IND	75E48	29N00	A20	300	26.9				A	155	4	0300—0900	25
32			JOGJAKARTA	INS	110E24	07S48	A18	20	13.4				A	77	5	2200—1700	
33			ILAM	IRN	46E25	33N39	A20	1	0.4				A	76	3	0200—2100	
34			MIZPE RAMON	ISR	34E48	30N46	D 9	10	12.1				A		3	0000—2400	33
35			KIMJAE	KOR	126E52	35N49	C10	1500	32.4				A	100	5	2100—0800	7
36			KIMJAE	KOR	126E52	35N49	C10	500	30.0	25	220—310	17.0	B		5	0800—2100	
37			KIMJAE	KOR	126E52	35N49	C10	500	30.0	145			B				
38			SINWON	KRE	125E40	38N14	A16	1	0.0				A	30		2000—1800	
39		S	BENI ULID	LBY	14E01	31N45	D 9	100	22.1				A	155	6	0400—2200	24
40		S	HUN	LBY	15E56	29N07	D 9	100	22.1				A	155	6	0400—2200	24
41		S	MURZUQ	LBY	13E57	25N59	D 9	100	22.1				A	155	6	0400—2200	24
42			PT SANTO 2	MDR	16W20	33N04	A20	1	0.4				A	60	4	0000—2400	
43			KUALA KRAI	MLA	102E12	05N30	A20	50	19.1				A	150	5	0000—2400	
44			MARRAKECH	MRC	08W00	31N26	A18	50	17.4				A	60	5	0500—2400	24
45			KATSINA 1	NIG	07E31	12N52	C 9	10	10.6				A	100	4	0500—2300	
46			CAGAYAN DE ORO	PHL	124E38	08N28	C 9	5	7.4				A	77	3	2100—1600	
47			S PABLO CITY	PHL	121E19	14N04	C 9	1	0.4				A	77	3	2100—1600	
48			SUMBAWANGA	TGK	31E42	07S55	C 9	20	15.1				A	142	4	0300—2100	
49			UDON THANI	THA	102E48	17N22	A20	50	17.4				A	75	3	0000—2400	
50			FUJAIRAH	UAE	56E19	25N09	C 9	100	23.4				A	177	7	0200—2200	24
51		S	NIKOLAEV	UKR	32E01	46N58	A16	500	32.0	100	270— 30	20.0	B		4	0000—2400	
52			IUJNSAKHALINSK	URS	142E40	47N00	A16	50	17.0				A	220	4	0300—1300	
53			IUJNSAKHALINSK	URS	142E40	47N00	A16	25	14.0				A	220	4	1300—0300	

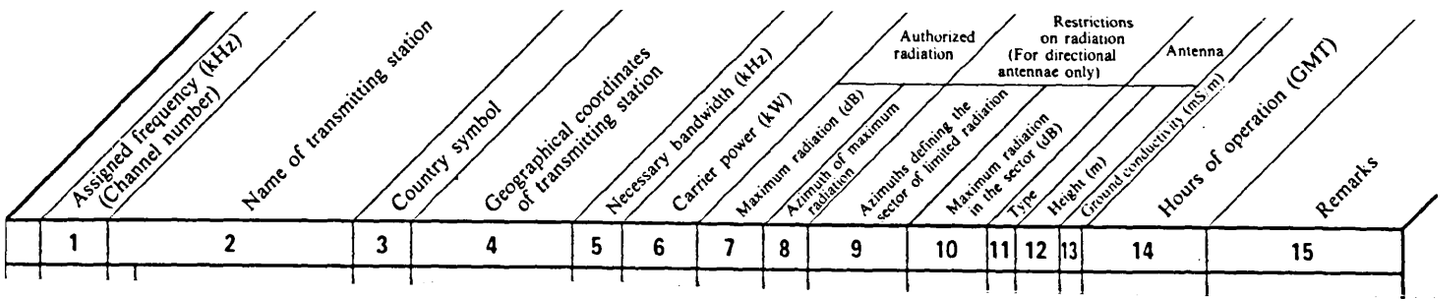
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

972 KHZ (50)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	972	MURGAB	URS	73E56 38N12	A18	50	17.0				A	220	4	0000—2400	
2	(50)	S SMOLENSK	URS	32E04 54N48	A16	20	13.0				A	220	4	0000—2400	

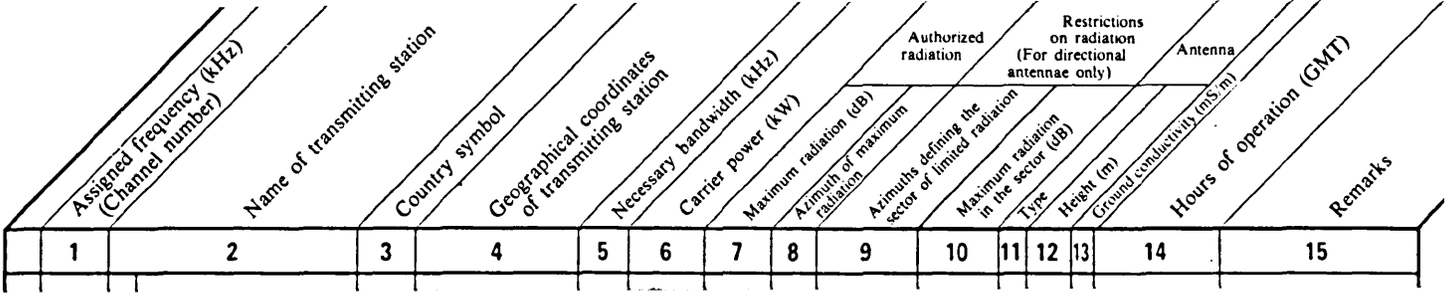


.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	981	PERMET	ALB	20E15 40N15	A20	1	0.4				A	76	6	0400—2300	(24)
2	(51)	ALGER 2	ALG	00E36 36N45	D 9	400	28.1				A	158	2	0000—2400	18/GRC 24
3		OULA	ARS	37E50 26N40	C 9	20	13.6				A	120	4	0400—1400	24
4		HAMILTON VIC	AUS	142E01 37S41	A20	5	7.4				A	75	2	1900—1400	
5		KALGOORLIE WA	AUS	121E29 30S43	A20	5	7.0				A	29	2	1900—1400	
6		ROCKHAMPTON	AUS	150E28 23S21	A20	5	7.4				A	48	3	1900—1400	
7		VARNA	BUL	27E40 43N03	A18	150	22.4				A	110	4	0000—2400	
8		S ABGANAR QI	CHN	116E08 43N56	A20	10	10.4				A	70	4	2000—1800	
9		S ANCI	CHN	116E42 39N31	A20	10	10.4				A	70	4	2000—1800	
10		S BAICHENG	CHN	122E50 45N37	A20	10	10.4				A	70	4	2000—1800	
11		S BAOTOU	CHN	109E56 40N40	A20	20	13.4				A	70	4	2000—1800	
12		S CHANGCHUN	CHN	125E24 43N48	A20	50	17.4				A	70	4	2000—1800	
13		S CHONGAN	CHN	118E01 27N43	A20	10	10.4				A	70	4	2000—1800	
14		S DANDONG	CHN	124E22 40N07	A20	10	10.4				A	70	4	2000—1800	
15		S DINGNAN	CHN	115E01 24N45	A20	10	10.4				A	70	4	2000—1800	
16		S DONG UJUMQIN	CHN	116E56 45N30	A20	10	10.4				A	70	4	2000—1800	
17		S DUNHUA	CHN	128E13 43N22	A20	5	7.4				A	70	4	2000—1800	
18		S ENPING	CHN	112E18 22N11	A20	10	10.4				A	70	4	2000—1800	
19		S ERENHOT	CHN	112E00 43N39	A20	50	17.4				A	70	4	2000—1800	
20		S FENGNING	CHN	116E39 41N13	A20	20	13.4				A	70	4	2000—1800	
21		S FU XIAN 2	CHN	122E00 39N38	A20	5	7.4				A	70	4	2000—1800	
22		S FUHAI	CHN	87E45 47N00	A20	1	0.4				A	70	4	2000—1800	
23		S FUSONG	CHN	127E17 42N19	A20	10	10.4				A	70	4	2000—1800	
24		S FUYUN	CHN	89E33 47N00	A20	10	10.4				A	70	4	2000—1800	
25		S FUZHOU 1	CHN	116E19 28N00	A20	10	10.4				A	70	4	2000—1800	
26		S FUZHOU 2	CHN	119E24 26N06	A20	100	22.1				A	140	4	2000—1800	
27		S GAR	CHN	79E58 32N12	A20	10	10.4				A	70	5	2000—1800	
28		S GUANGZHOU	CHN	113E14 23N11	A20	50	19.1				A	140	4	2000—1800	
29		S HOTAN	CHN	80E02 37N00	A20	10	10.0	120	260—340	0.0	B		4	2000—1800	
30		S HURE QI	CHN	121E41 42N45	A20	5	7.4				A	70	4	2000—1800	
31		S JARUD QI	CHN	120E54 44N34	A20	10	10.4				A	70	4	2000—1800	
32		S JIAN SHI	CHN	114E59 27N08	A20	50	17.4				A	70	4	2000—1800	
33		S JIANNING	CHN	116E50 26N53	A20	10	10.4				A	70	4	2000—1800	
34		S JINGDEZHEN	CHN	117E11 29N17	A20	20	13.4				A	70	4	2000—1800	
35		S JINHU	CHN	119E01 33N02	A20	5	7.4				A	70	3	2000—1800	
36		S JINZHOU	CHN	121E07 41N07	A20	20	13.4				A	70	4	2000—1800	
37		S KASHI	CHN	76E00 39N25	A20	10	12.0	90	240—300	—4.0	B		4	2000—1800	
38		S LHAZE	CHN	87E50 29N05	A20	10	10.4				A	70	5	2000—1800	
39		S LHORONG	CHN	95E43 30N48	A20	20	13.4				A	70	5	2000—1800	
40		S LIAN XIAN	CHN	112E23 24N47	A20	20	13.4				A	70	4	2000—1800	
41		S LIYANG	CHN	119E29 31N26	A20	5	7.4				A	70	3	2000—1800	
42		S LONGCHUAN	CHN	115E11 24N04	A20	20	13.4				A	70	4	2000—1800	
43		S LONGYAN	CHN	117E02 25N07	A20	10	10.4				A	70	4	2000—1800	
44		S MADO	CHN	98E14 34N50	A20	20	13.4				A	70	5	2000—1800	
45		S MARKAM	CHN	98E10 29N30	A20	10	10.4				A	70	5	2000—1800	
46		S NAGQU	CHN	92E02 31N25	A20	50	17.4				A	70	5	2000—1800	
47		S NANG XIAN	CHN	93E10 29N05	A20	10	10.4				A	70	5	2000—1800	
48		S NANPING	CHN	118E12 26N45	A20	10	10.4				A	70	4	2000—1800	
49		S OTOG QI	CHN	107E59 39N06	A20	20	13.4				A	70	4	2000—1800	
50		S QINGYUAN	CHN	124E55 42N06	A20	5	7.4				A	70	4	2000—1800	
51		S QOG QI	CHN	106E58 41N28	A20	10	10.4				A	70	4	2000—1800	
52		S RUIJIN	CHN	116E00 25N50	A20	20	13.4				A	70	4	2000—1800	
53		S RUOQIANG	CHN	88E10 39N00	A20	10	10.4				A	70	4	2000—1800	
54		S SHANTOU	CHN	116E36 23N30	A20	20	13.4				A	70	4	2000—1800	

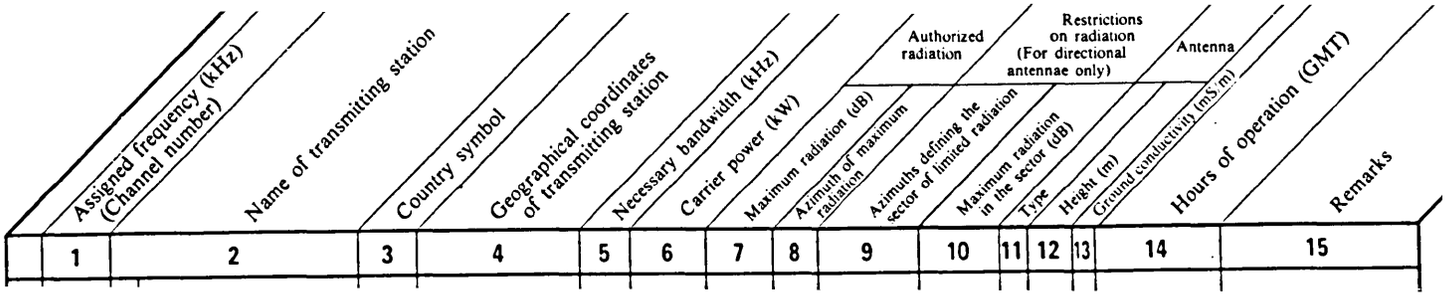


981 KHZ (51)

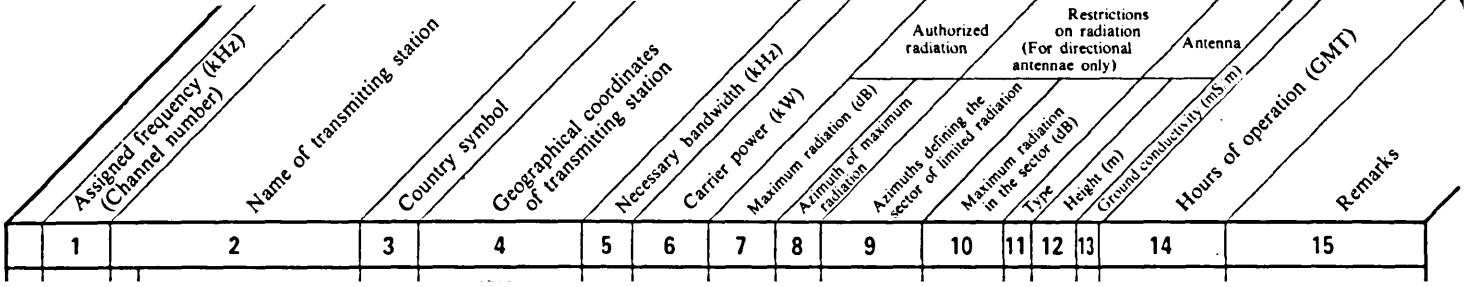
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	981	S	SHIJIAZHUANG	CHN	114E40 37N50	A20	50	17.4				A	70	4	2000—1800	
2	(51)	S	TACHENG	CHN	83E05 46N45	A20	10	10.4				A	70	4	2000—1800	
3		S	TURPAN	CHN	89E02 42N53	A20	10	10.4				A	70	4	2000—1800	
4		S	WANGQING	CHN	129E46 43N18	A20	5	7.4				A	70	4	2000—1800	
5		S	WEI XIAN	CHN	115E15 36N58	A20	5	7.4				A	70	4	2000—1800	
6		S	XANZA	CHN	88E42 30N54	A20	50	17.4				A	70	5	2000—1800	
7		S	XIAMEN	CHN	118E18 24N24	A20	10	10.4				A	70	4	2000—1800	
8		S	XIANGHUANG QI	CHN	113E43 42N18	A20	50	17.4				A	70	4	2000—1800	
9		S	XINHE	CHN	82E40 41N25	A20	10	10.4				A	70	4	2000—1800	
10		S	XINING	CHN	101E50 36N35	A20	20	13.4				A	70	5	2000—1800	
11		S	XIUSHUI	CHN	114E34 29N03	A20	10	10.4				A	70	4	2000—1800	
12		S	XUZHOU	CHN	117E20 34N14	A20	10	10.4				A	70	3	2000—1800	
13		S	YINING SHI	CHN	81E28 43N55	A20	10	10.4				A	70	4	2000—1800	
14		S	YIWU	CHN	94E40 43N20	A20	1	0.4				A	70	4	2000—1800	
15		S	YU XIAN	CHN	114E34 39N50	A20	10	10.4				A	70	4	2000—1800	
16		S	YUSHU 2	CHN	97E00 33N00	A20	10	10.4				A	70	5	2000—1800	
17		S	ZHANGWU	CHN	122E29 42N24	A20	10	10.4				A	70	4	2000—1800	
18		S	ZHONGBA	CHN	84E12 29N39	A20	10	10.4				A	70	5	2000—1800	
19			MADINGOU	COG	13E33 04S10	A20	20	13.6				A	101	5	0000—2400	
20			NICOSIA	CYP	33E23 35N09	C 9	100	20.6				A	100	4	0000—2400	
21			BARIS	EGY	30E37 24N40	D 9	20	13.6				A	100	4	0000—2400	24
22			ATHINAI	GRC	23E25 37N58	C 9	200	25.1				A	150	4	0400—2400	18/ALG
23		S	AVEZZANO	I	13E28 42N02	D 9	1	0.4				A	50	5	0000—2400	
24		S	RIETI	I	12E54 42N25	D 9	1	0.4				A	50	5	0000—2400	
25		S	TARANTO	I	17E14 40N28	D 9	1	0.4				A	50	5	0000—2400	
26		S	TERAMO	I	13E42 42N39	D 9	1	0.4				A	50	5	0000—2400	
27		S	TRIESTE	I	13E46 45N40	D 9	10	10.4				A	80	4	0000—2400	
28			BARODA	IND	73E16 22N17	A20	300	26.9				A	155	3	0300—0900	25
29			GOALPARA	IND	90E40 26N13	A20	300	26.9				A	155	3	0300—0900	25
30			RAIPUR	IND	81E41 21N15	A20	100	22.0	255	5— 35	13.0	B		3	0000—2400	
31			TUTICORIN 1	IND	78E12 08N48	A20	300	26.9				A	155	3	0300—1000	25
32			TUTICORIN 2	IND	78E12 08N48	A20	200	25.1				A	155	3	1000—0300	
33			ENDEH	INS	121E40 08S51	A18	5	7.4				A	76	5	2100—1600	
34			VOI	KEN	38E35 03S20	C 9	100	20.6				A	100	4	0000—2400	
35			KIMCHAEK	KRE	129E14 40N43	A16	5	7.4				A	50		2000—1800	16
36			PT HARCOURT	NIG	06E46 04N59	C 9	10	10.4				A	65	4	0500—2300	
37			KAIKOHE	NZL	173E52 35S22	A20	5	7.4				A	50	4	0000—2400	
38			MIR PUR KHAS	PAK	69E00 25N20	A20	100	20.4				A	77	4	0000—2000	
39			BACOLOD CITY	PHL	122E57 10N41	C 9	5	7.4				A	76	3	2100—1600	
40			DAGUPAN CITY	PHL	120E20 16N02	C 9	5	7.4				A	76	3	2100—1600	
41			DAVAO CITY	PHL	125E35 07N04	C 9	5	7.4				A	76	3	2100—1600	
42			LE PORT 1	REU	55E18 20S55	A20	10	10.6				A	100	3	0000—2400	
43			BOHUSLAEN	S	11E34 57N58	D 9	600	30.0				A	150	4	0000—2400	
44			KEDOUGOU	SEN	12W11 12N32	A20	50	17.4				A	50	4	0600—2400	
45			CHEB	TCH	12E23 50N15	A20	1	0.4				A	60	5	0000—2400	
46			NOVY JICIN	TCH	18E01 49N36	A20	1	0.4				A	60	5	0000—2400	
47			TABOR	TCH	14E40 49N24	A20	1	0.4				A	60	5	0000—2400	
48		S	BANGKOK	THA	100E30 13N45	A20	10	10.0				A	30	2	0000—2400	
49		S	MAE HONG SON	THA	97E58 19N18	A20	5	7.0				A	20	5	0000—2400	
50		S	NAKHON PHANOM	THA	104E45 17N23	A20	10	10.4				A	60	3	0000—2400	
51		S	YALA	THA	101E17 06N10	A20	50	19.1				A	150	3	0000—2400	
52			AKTIUBINSK	URS	57E13 50N17	A16	150	21.8				A	220	4	0000—2400	
53			GARM	URS	70E20 39N01	C10	20	13.0				A	220	4	0000—2400	
54			KRASNOIARSK	URS	92E54 56N01	A16	100	25.0	95	190—280	10.0	B		4	0000—2400	



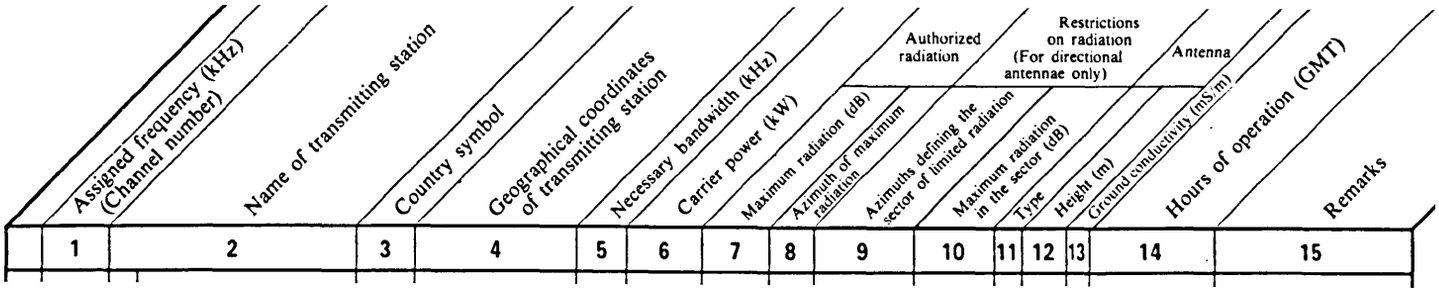
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	981	SANAA 2	YEM	44E11 15N22	C 9	600	28.4				A	120	4	0300—2300	24
2	(51)	CACAK	YUG	20E21 43N54	D 9	10	12.1				A	153	4	0000—2400	
3		MONZE	ZMB	27E40 16S15	A20	2	6.4				A	178	2	0200—2100	



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	990 SILVA PORTO	AGL	16E57 12S25	A20	5	7.4				A	76	3	0000–2400	
2	(52) KUKES	ALB	20E23 42N09	A20	15	12.4				A	94	6	0500–2200	(24)
3	GURIAT	ARS	37E25 31N25	C 9	500	33.0	328	20–280	17.0	B		4	0000–2400	5/LBN 24
4	GOVE NT	AUS	136E47 12S11	A20	5	7.4				A	61	3	1900–1400	
5	ORANGE NSW	AUS	148E57 33S12	A20	5	7.4				A	55	4	1900–1400	
6	PERTH WA	AUS	115E50 32S00	A20	5	7.4				A	78	4	0000–2400	
7	S BIJIANG	CHN	98E52 26N34	A20	10	10.4				A	70	5	2000–1800	
8	S BINCHUAN	CHN	100E33 25N50	A20	10	10.4				A	70	5	2000–1800	
9	S CHANGNING	CHN	99E29 24N51	A20	10	10.4				A	70	5	2000–1800	
10	S GEJIU	CHN	103E08 23N21	A20	20	13.4				A	70	5	2000–1800	
11	S JINGHONG	CHN	100E43 22N01	A20	20	13.4				A	70	5	2000–1800	
12	LUDA	CHN	121E30 38N54	A20	10	10.4				A	70	4	2000–1800	
13	S QUJING	CHN	103E40 25N28	A20	10	10.4				A	70	5	2000–1800	
14	SHANGHAI	CHN	121E29 31N15	A20	20	13.4				A	70	3	2000–1800	
15	S ZHAOTONG	CHN	103E34 27N20	A20	20	13.4				A	70	5	2000–1800	
16	JAFFNA	CLN	80E00 09N37	C10	50	17.4				A	84	3	0000–1800	
17	MAKOUA	COG	15E35 00S00	A20	10	10.4				A	76	9	0000–2400	
18	S BERLIN 2	D	13E26 52N27	D 9	300	26.9				A	140	4	0000–2400	11/USA
19	S HOF SAALE	D	11E54 50N19	D 9	40	22.0	20	135–145	2.0	B		4	1500–0800	
20	S HOF SAALE	D	11E54 50N19	D 9	40	22.0		245–255	6.0	B				
21	BILBAO	E	02W55 43N15	D 9	20	13.4				A	80	5	0000–2400	19
22	ADDIS ABABA	ETH	38E38 08N47	C 9	50	17.4				A	75	3	0400–2100	
23	NAULU REWA	FJI	178E32 18S04	A20	10	10.4				A	60	5	1700–1200	
24	S LAHTI	FNL	26E09 61N19	D 9	100	23.4				A	200	5	0000–2400	
25	S ROVANIEMI	FNL	25E43 66N32	D 9	100	23.4				A	200	6	0000–2400	
26	EXETER	G	03W31 50N41	A20	1	0.0				A	36	4	0000–2400	
27	WOLVERHAMPTON	G	02W08 52N32	A20	0.3	−4.8				A	50	3	0000–2400	
28	FRANCEVILLE	GAB	13E33 01S36	C 9	20	13.6				A	100	5	0400–2400	
29	JAMMU 1	IND	74E49 32N47	A20	300	26.9				A	155	4	0300–0900	25
30	JAMMU 2	IND	74E49 32N47	A20	50	19.1				A	155	4	0900–0300	
31	ROHTAK	IND	76E27 28N56	A20	300	26.9				A	155	3	0300–0900	25
32	UDIPI	IND	74E44 13N27	A20	300	26.9				A	155	3	0300–1000	25
33	SHIRAZ	IRN	52E32 29N36	A20	400	28.1				A	164	3	0100–2200	
34	KOCHI	J	133E36 33N34	A15	10	10.6				A	93	4	0000–2400	
35	MASAN	KOR	128E34 35N10	C10	10	10.6				A	120	4	0000–2400	
36	SAKJU	KRE	125E03 40N23	A16	2	3.0				A	30		2000–1800	
37	AMCHIT	LBN	35E38 34N09	A20	100	20.6				A	120	4	0300–2400	5/ARS 16 24
38	GREENVILLE	LBR	09W02 05N01	A20	10	10.4				A	76	5	0500–2400	
39	PT MONIZ 2	MDR	16W11 32N50	A20	1	0.4				A	60	4	0000–2400	
40	S ALTAI	MNG	96E10 46N30	A18	25	17.4				A	180	5	2200–1500	
41	S SAIN SHANDA	MNG	110E05 44N50	A18	25	14.6				A	120	4	2200–1500	
42	S TCHOIBOLSAN	MNG	114E30 48N05	A18	25	14.6				A	120	4	2200–1500	
43	S TSETSERLIG	MNG	101E10 47N30	A18	25	17.4				A	180	5	2200–1500	
44	S ULAN BATOR	MNG	107E00 47N55	A18	60	21.2				A	180	4	2200–1500	
45	GOMBE	NIG	11E05 10N20	C 9	50	17.6				A	100	4	0500–2300	
46	DUNEDIN	NZL	170E36 45S53	A20	10	12.1				A	150	4	0000–2400	
47	CALOOCAN CITY	PHL	120E59 14N38	A 9	10	10.4				A	75	3	0000–2400	
48	SINGAPORE 1	SNG	103E42 01N20	A20	50	17.4				A	75	4	0000–2400	
49	LARGEAU FAYA	TCD	19E05 17N58	A 9	10	12.1				A			0400–2300	
50	SONGEA	TGK	35E40 10S40	A 9	100	22.1				A	133	4	0300–2100	
51	SOKODE	TGO	01E08 08N59	A20	30	15.2				A	75	5	0000–2400	
52	N RATCHASIMA	THA	102E05 14N58	A20	10	10.4				A	79	2	0000–2400	
53	YERKESIK	TUR	28E22 37N13	D 9	100	22.1				A	150	4	0200–2300	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	990	S KARTALY	URS	60E13 52N40	A18	5	7.0				A	220	4	0000—2400	
2	(52)	S ZLATOUST	URS	59E37 55N12	A18	5	7.0				A	220	4	0000—2400	



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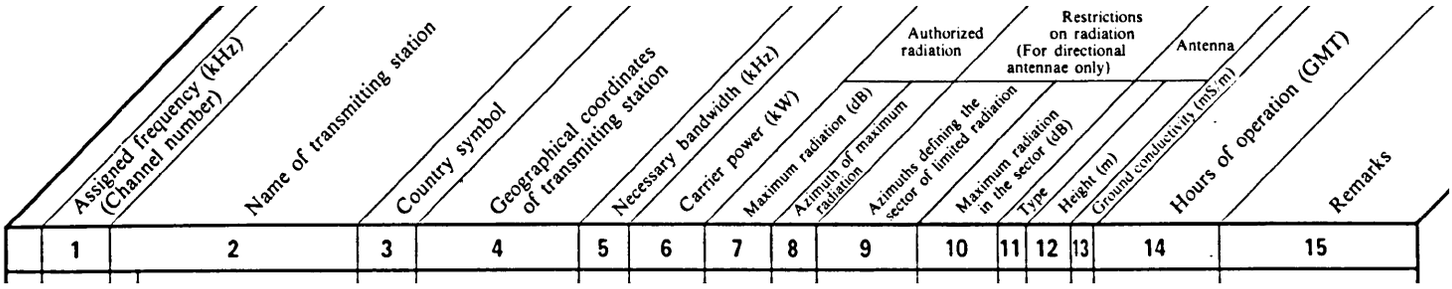
1	999		JALALABAD	AFG	70E25	34N25	C 9	20	13.4				A	60	4	0100—2000	
2	(53)		V CISNEROS	AOE	16W00	23N40	A20	100	20.4				A	50	4	0000—2400	11/E
3			BROKEN HLL NSW	AUS	141E29	31S56	A20	5					B		2	1900—1400	
4			NOWRA NSW	AUS	150E32	34S53	A20	5					B		3	1900—1400	
5			THAKURGAON	BGD	88E26	26N02	A20	2	3.6				A	122	3	0000—1800	
6			GUIYANG	CHN	106E36	26N25	A20	5	7.4				A	70	5	2000—1800	
7		S	HABAHE	CHN	87E03	48N04	A20	10	10.4				A	70	4	2000—1800	
8		S	HENGCHUN	CHN	120E43	22N01	A20	100	23.0	0	100—260	10.0	B		5	2000—1800	
9		S	TAXKORGAN	CHN	75E08	37N42	A20	10	11.0	100	210—290	7.0	B		4	2000—1800	
10		S	URUMQI SHI	CHN	87E30	43N35	A20	100	20.0	120	260—340	10.0	B		4	2000—1800	
11		S	XINZHU	CHN	120E58	24N48	A20	100	22.1				A	140	5	2000—1800	
12			YAOUNDE	CME	11E32	03N51	C 9	100	22.1				A	150	5	0500—2300	
13		S	HOYERSWERDA	DDR	14E17	51N25	D 9	20	13.6				A	105	4	0000—2400	
14		S	SCHWERIN	DDR	11E31	53N23	D 9	20	13.4				A	50	4	0000—2400	
15		S	WACHENBRUNN	DDR	10E30	50N29	D 9	20	13.4				A	50	4	0000—2400	
16			FAREHAM	G	01W13	50N51	A20	1	1.0	305			B		4	0000—2400	
17			NOTTINGHAM	G	01W15	52N57	A20	0.3	−5.0	100			B		3	0000—2400	
18		S	C VATICANO	I	15E51	38N37	D 9	50	17.6				A	120	2	0000—2400	
19		S	PERUGIA	I	12E23	43N06	D 9	25	14.6				A	90	5	0000—2400	
20		S	SALENTO	I	18E17	39N55	D 9	10	10.6				A	117	4	0000—2400	
21		S	TORINO	I	07E44	45N02	D 9	200	25.1				A	150	4	0000—2400	
22		S	VENOSA	I	15E50	40N58	D 9	10	10.4				A	75	5	0000—2400	
23			ADILABAD	IND	78E30	19N48	A20	300	26.9				A	150	3	0300—1000	25
24			ALMORA 1	IND	79E38	29N35	A20	20	15.1				A	150	4	0300—0900	25
25			ALMORA 2	IND	79E38	29N35	A20	5	9.1				A	150	4	0900—0300	
26			COIMBATORE 1	IND	77E06	11N00	A20	20	15.1				A	150	4	0300—1000	25
27			COIMBATORE 2	IND	77E06	11N00	A20	10	12.1				A	150	4	1000—0300	
28			PASIGHAT	IND	95E20	28N06	A20	300	26.9				A	150	4	0300—0900	25
29			DJAKARTA	INS	106E53	06S14	A18	300	26.9				A	150	5	2200—1700	
30			BANEH	IRN	45E53	36N00	A20	20	13.6				A	105	3	0200—2100	
31			BET SHEAN	ISR	35E30	32N30	D 9	10	10.4				A	50	4	0000—2400	33
32			HACHINOHE	J	141E27	40N31	A15	1	0.6				A	108	5	0000—2400	
33			HAMAMATSU	J	137E46	34N40	A15	1	0.6				A	106	4	0000—2400	
34			KOMAGANE	J	137E56	35N43	A15	0.1	−9.6				A	71	5	0000—2400	
35			MIYAZU	J	135E12	35N32	A15	0.1	−9.6				A	71	5	0000—2400	
36			NAKAMURA	J	132E55	32N59	A15	1	0.6				A	105	5	0000—2400	
37			ONOMICHI	J	133E11	34N23	A15	1	0.6				A	110	5	0000—2400	
38			TSUWANO	J	131E46	34N27	A15	0.1	−9.6				A	47	5	0000—2400	
39			KWANGJU	KOR	126E54	35N11	C10	10	10.6				A	120	4	0000—2400	
40			DIEGO SUAREZ	MDG	49E08	12S36	C 9	5	7.0				A	252	4	0300—2000	
41			DELIMARA	MLT	14E34	35N49	D 9	600	35.0	340	80—250	8.0	B		4	0000—2400	
42		S	HAAST	NZL	169E02	43S49	A20	2	3.4				A	50	6	0000—2400	
43		S	REEFTON	NZL	171E51	42S05	A20	2	3.4				A	50	6	0000—2400	
44			PAPEETE 2	OCE	149W29	17S30	A20	20	13.6				A	100	6	0000—2400	
45			BAGUIO CITY	PHL	120E35	16N24	C 9	5	7.4				A	75	3	2100—1600	
46			BISLIG SURIGAO	PHL	126E21	08N11	C 9	1	0.4				A	75	3	2100—1600	
47			CEBU CITY	PHL	123E53	10N18	C 9	5	7.4				A	75	3	2100—1600	
48			AL KHAISAH	QAT	51E25	25N24	C 9	10	10.0				A	50	5	1400—2200	24
49			KABALE	UGA	29E55	01S15	C 9	100	20.4				A	75	4	0300—2100	
50			BIROBIDJAN	URS	133E00	49N16	A16	25	14.0				A	220	4	0000—2400	
51			KICHINIOV	URS	28E30	47N01	A16	500	27.0				A	220	4	0000—2400	
52			KIRENSK	URS	108E06	57N47	A18	50	17.0				A	220	4	0000—2400	
53			TSELINOGRAD	URS	71E24	49N08	A16	30	14.8				A	220	4	0000—2400	
54			HODEIDAH	YEM	42E55	14N58	C 9	500	34.0	290	10—210	12.0	B		3	0300—2200	24



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	999 (53)	MPIKA	ZMB	31E25 11S50	A20	10	12.1				A	167	4	0200–2100	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1008 KHZ (54)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1008		CAIRNS QLD	AUS	145E45 16S59	A20	5	7.4				A	54	5	1900—1400	
2	(54)		GERALDTON WA	AUS	114E37 28S44	A20	5	7.4				A	54	3	1900—1400	
3			IPSWICH QLD	AUS	152E48 27S35	A20	5					B		3	0000—2400	
4			LAUNCESTON TAS	AUS	147E13 41S27	A20	5	7.4				A	54	4	0000—2400	
5		S	KLIMOVITCHI	BLR	32E00 53N36	A18	5	10.4				A	190	4	0000—2400	
6		S	MOZYR	BLR	29E25 52N01	A18	50	22.0	115	200—290	6.0	B		4	0000—2400	
7		S	SLONIM	BLR	25E20 53N03	A16	50	22.0	340			B		4	0400—1600	7
8		S	SLONIM	BLR	25E20 53N03	A16	25	19.0	115	200—290	3.0	B		4	1600—0400	
9		S	UCHATCHI	BLR	28E30 55N00	A16	50	22.0	115	200—290	6.0	B		4	0000—2400	
10		S	FENG XIAN	CHN	106E30 33N55	A20	10	10.4				A	70	4	2000—1800	
11		S	FU XIAN 1	CHN	109E21 35N59	A20	100	22.1				A	140	4	2000—1800	
12		S	SHANG XIAN	CHN	109E53 33N52	A20	40	16.4				A	70	4	2000—1800	
13		S	ZICHANG	CHN	109E40 37N09	A20	10	10.4				A	70	4	2000—1800	
14			TEJEDA	CNR	15W40 28N00	A20	10	10.4				A	50	5	0000—2400	
15		S	ASSWAN	EGY	32E57 24N04	D 9	10	10.6				A	100	3	0000—2400	24
16		S	ASYUT	EGY	31E04 27N11	D 9	10	10.6				A	100	3	0000—2400	24
17		S	KENA	EGY	32E43 26N10	D 9	10	10.6				A	100	3	0000—2400	24
18			KERKYRA	GRC	19E55 39N37	C 9	50	19.0	150	300—350	7.0	B		3	0400—2400	
19			PITA	GUI	12W15 11S09	C 9	20	13.4				A	52	4	0000—2400	
20			FLEVOLAND	HOL	05E26 52N20	D 9	500	30.4				A	165	4	0000—2400	
21			BOBO DIOULASSO	HVO	04W17 11N10	A20	100	22.1				A	149	4	0000—2400	
22			CALCUTTA	IND	88E23 22N36	A20	200	25.1				A	150	3	0300—0900	25
23			CALCUTTA	IND	88E23 22N36	A20	100	22.1				A	150	3	0900—0300	
24			KANPUR	IND	80E19 26N28	A20	300	26.9				A	150	3	0300—0900	25
25			KAVARATHY I	IND	72E42 10N36	A20	300	26.9				A	150	4	0300—1000	25
26			MADIUN	INS	111E31 07S36	A18	10	10.6				A	84	4	2200—1700	
27			SEMNAN	IRN	53E23 35N33	A20	20	13.4				A	74	3	0200—2100	
28			OSAKA	J	135E26 34N31	A15	50	20.4				A	171	4	0000—2400	
29			SOGCHO	KOR	128E39 38N05	C10	50	17.6				A	100	5	0000—2400	
30			SOGCHO	KOR	128E39 38N05	C10	50	21.0	195	40—100	2.0	B		5	0000—2400	
31			SOGCHO	KOR	128E39 38N05	C10	50	21.0	315			B				
32			SONGWON	KRE	125E36 40N22	A16	1	0.0				A	30		2000—1800	16
33			MACAU	MAC	113E33 22N12	A20	1	0.4				A	70	2	2200—1600	
34			MALACCA	MLA	102E15 02N14	A20	20	13.4				A	61	5	2200—1700	
35			LOUREN MARQUES	MOZ	32E36 25S58	C10	250	24.6	20			B		4	0400—2200	
36			KSAR ES SOUK	MRC	04W24 31N55	A18	50	19.1				A	150	5	0600—2400	24
37			KONTAGORA	NIG	05E29 10N30	C 9	50	17.4				A	75	4	0500—2300	
38			PAENGAROA	NZL	176E25 37S49	A20	10	12.1				A	150	3	0000—2400	
39			HYDERABAD	PAK	68E15 25N25	A20	120	21.4				A	121	3	0000—2000	
40			LUCENA CITY	PHL	121E39 13N55	C 9	1	0.6				A	92	3	2100—1600	
41			ZAMBOANGA CY 1	PHL	122E04 06N56	D 9	100	23.0	90	15—180	3.0	B		3	2100—1600	
42			TABORA	TGK	32E40 05S00	C 9	50	19.1				A	123	4	0300—2100	
43			BANGKOK	THA	100E30 13N46	A20	10	10.4				A	55	2	0000—2400	
44			MAGADAN	URS	151E50 59N40	C 9	50	20.4				A	190	5	0000—2400	
45			SEMIPALATINSK	URS	80E15 50N25	A18	150	25.2				A	190	4	0000—2400	
46			USSURIISK	URS	132E00 43N47	A18	50	20.4				A	190	4	0000—2400	
47			TAIZ 1	YEM	44E05 13N32	C 9	60	18.2				A	60	3	0300—2200	24
48			ALEKSINAC	YUG	21E43 43N32	D 9	200	26.0	130	270—350	8.0	B		4	0000—2400	
49			BANDUNDU	ZAI	17E26 03S25	C 9	50	17.4				A	70	7	0000—2400	

1	Assigned frequency (kHz) (Channel number)	2	Name of transmitting station	3	Country symbol	4	Geographical coordinates of transmitting station	5	Necessary bandwidth (kHz)	6	Carrier power (kW)	Authorized radiation: 7 Maximum radiation (dB); 8 Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): 9 Azimuths defining the sector of limited radiation; 10 Maximum radiation in the sector (dB)	Antenna: 11 Type; 12 Height (m); 13 Ground conductivity (mS/m)	14 Hours of operation (GMT)	15 Remarks
1	2			3		4		5		6		7	8	9	10	11	12	13	14	15

1	2		3	4		5	6	7	8	9	10	11	12	13	14	15
1	1017	GARDIZ	AFG	69E15	33N38	C 9	5	7.4				A	60	4	0100—2000	
2	(55)	BATNA	ALG	06E10	35N38	D 9	2	3.4				A	45	4	0600—2400	24
3		ABQAIQ	ARS	49E40	25N57	A20	0.1	−10.0				A	15	4	0100—2400	24
4		HAIL	ARS	41E45	27N30	C 9	20	13.6				A	120	4	0000—2400	24
5		SYDNEY NSW	AUS	151E04	33S50	A20	5	9.1				A	147	4	0000—2400	
6		WYNDHAM WA	AUS	128E06	15S29	A20	0.1	−10.0				A	21	2	2200—1600	
7	S	BAOAN	CHN	114E05	22N38	A20	10	10.4				A	70	4	2000—1800	
8		CHANGCHUN	CHN	125E24	43N48	A20	100	22.1				A	140	4	2000—1800	
9	S	DARLA	CHN	99E33	33N42	A20	10	10.4				A	70	5	2000—1800	
10	S	GANGCA	CHN	100E10	37N20	A20	20	13.4				A	70	5	2000—1800	
11	S	LUFENG	CHN	115E38	22N57	A20	20	13.4				A	70	4	2000—1800	
12	S	MAOMING	CHN	110E51	21N56	A20	50	17.4				A	70	4	2000—1800	
13	S	MEI XIAN	CHN	116E00	24N20	A20	100	20.0	230	350—110	17.0	B		4	2000—1800	
14	S	SHAOGUAN	CHN	113E32	24N47	A20	10	10.4				A	70	4	2000—1800	
15	S	TONGREN 1	CHN	102E01	35N31	A20	10	10.4				A	70	5	2000—1800	
16	S	ZHAOQING	CHN	112E27	23N03	A20	20	13.4				A	70	4	2000—1800	
17		OUESSO	COG	16E20	01N40	A20	30	15.4				A	118	5	0000—2400	
18		WOLFSHEIM	D	08E03	49N53	D 9	600	29.9				A	150	4	0000—2400	
19		DESSIE	ETH	39E37	11N00	C 9	10	10.4				A	70	3	0400—2100	
20		GENOVA	I	08E54	44N25	D 9	20	13.6				A	102	5	0400—1700	7
21		VENEZIA	I	12E18	45N29	D 9	25	14.6				A	118	4	0400—1700	7
22		AIJAL	IND	92E43	23N43	A20	300	26.9				A	150	4	0300—0900	25
23		CHHINDWARA	IND	78E55	22N05	A20	300	26.9				A	150	4	0300—0900	25
24		DELHI	IND	77E12	28N38	A20	20	15.1				A	150	3	0000—2400	
25		MADURAI	IND	78E15	09N25	A20	300	26.9				A	150	3	0300—1000	25
26		KUPANG	INS	123E38	10S13	A18	2	3.4				A	74	7	2100—1600	
27		ZAHEDAN	IRN	60E53	29N28	A20	10	10.4				A	74	3	0200—2200	
28		FUKUOKA	J	130E27	33N32	A15	50	19.1				A	157	4	0000—2400	
29		NYERI	KEN	36E55	00S27	C 9	20	13.6				A	100	4	0000—2400	
30		ANDONG	KOR	128E41	36N34	C10	10	10.6				A	109	6	0000—2400	
31		SONGCHON	KRE	126E13	39N15	A16	1	0.0				A	30		2000—1800	16
32		SANTANA 1	MDR	16W54	32N47	A20	1	0.4				A	60	4	0000—2400	
33		SEGAMAT	MLA	102E52	02N29	A20	100	22.1				A	150	5	2200—1700	
34		TETOUAN	MRC	05W23	35N36	A18	20	15.1				A	165	5	0500—2400	24
35		YOLA	NIG	12E39	09N12	C 9	10	10.4				A	70	4	0400—2400	
36		DAGUPAN CITY	PHL	120E20	16N02	C 9	5	7.6				A	91	3	2100—1600	
37		DAVAO CITY	PHL	125E36	07N03	C 9	5	7.6				A	91	3	2100—1600	
38		ILOILO CITY	PHL	122E33	10N41	C 9	5	7.6				A	91	3	2100—1600	
39		SURIGAO	PHL	125E29	09N47	C 9	1	0.6				A	91	3	2100—1600	
40		NAHA	RYU	127E41	26N14	A15	1	0.4				A	68	4	0000—2400	
41		SEDHIOU	SEN	15W32	12N42	C 9	20	13.4				A	50	5	0600—2400	
42	S	BRATISLAVA M	TCH	17E10	48N10	A20	14	11.9				A	60	4	0500—1700	
43	S	HRADEC KRALOVE	TCH	15E50	50N14	A20	14	11.9				A	60	4	0500—1700	
44	S	KOSICE	TCH	21E15	48N42	A20	14	11.9				A	60	5	0500—1700	
45	S	NITRA	TCH	18E05	48N20	C 9	30	15.4				A	100	4	0500—1700	
46	S	RIM SOBOTA	TCH	20E00	48N23	A20	30	15.4				A	100	5	0500—1700	
47		KANDE	TGO	01E10	10N00	A20	10	10.4				A	75	4	0000—2400	
48		NUKUALOFA	TON	175W10	21S08	C10	10	10.4				A	61	2	1800—1000	
49		ISTANBUL	TUR	28E41	40N21	D 9	1200	32.9				A	153	3	0200—2300	
50		RUBTSOVSK	URS	82E13	51N08	A18	50	20.4				A	190	4	0000—2400	
51		PETAUKE	ZMB	31E15	14S15	A20	10	12.1				A	130	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1026		LASHKAR GAH	AFG	64E20 31N35	A 9	10	10.4				A	60	4	0100—2000	
2	(56)		LUANDA	AGL	13E49 08S48	A20	5	7.4				A	67	3	0000—2400	
3			HASSI MESSAOUD	ALG	06E09 31N40	D 9	9	9.9				A	73		0600—2400	24
4			MELBOURNE VIC	AUS	145E06 37S44	A20	5	9.1				A	132	2	0000—2400	
5			ACHENKIRCH	AUT	11E43 47N32	D 9	0.1	—10.0				A	15	6	0000—2400	
6		S	DORNBIRNLAUTER	AUT	09E42 47N27	D 9	50	17.6				A	116	4	0700—1500	2/0110/3103
7		S	DORNBIRNLAUTER	AUT	09E42 47N27	D 9	50	17.6				A	116		0500—1700	2/0104/3009
8		S	DORNBIRNLAUTER	AUT	09E42 47N27	D 9	50	17.6				A	116	4	1500—0700	2/0110/3103
9		S	DORNBIRNLAUTER	AUT	09E42 47N27	D 9	50	17.6				A	116		1700—0500	2/0104/3009
10		S	GRAZ DOBL	AUT	15E23 46N57	D 9	300	26.9				A	156	4	0700—1500	2/0110/3103
11		S	GRAZ DOBL	AUT	15E23 46N57	D 9	300	26.9				A	156		0500—1700	2/0104/3009
12		S	GRAZ DOBL	AUT	15E23 46N57	D 9	200	25.0		110—150	22.0	B		4	1500—0700	2/0110/3103
13		S	GRAZ DOBL	AUT	15E23 46N57	D 9	200	25.0				B			1700—0500	2/0104/3009
14			GREIFENBURG	AUT	13E10 46N45	D 9	0.1	—10.0				A	15	6	0000—2400	
15			GROSS ARL	AUT	13E12 47N14	D 9	0.1	—10.0				A	15	6	0000—2400	
16			HEILIGENBLUT	AUT	12E51 47N02	D 9	0.1	—10.0				A	15	6	0000—2400	
17			KAPPL	AUT	10E23 47N04	D 9	0.1	—10.0				A	15	6	0000—2400	
18			KITZBUEHEL	AUT	12E24 47N27	D 9	0.1	—10.0				A	15	6	0000—2400	
19		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	300	25.9				A	137	4	0700—1500	2/0110/3103
20		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	300	25.9				A	137		0500—1700	2/0104/3009
21		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	200	24.0		110—150	21.0	B		4	1500—0700	2/0110/3103
22		S	LINZ KRONSTORF	AUT	14E27 48N10	D 9	200	24.0				B			1700—0500	2/0104/3009
23			MALLNITZ	AUT	13E10 46N59	D 9	0.1	—10.0				A	15	6	0000—2400	
24		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105	6	0700—1500	2/0110/3103
25		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105		0500—1700	2/0104/3009
26		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105	6	1500—0700	2/0110/3103
27		S	MARIA PFARR	AUT	13E45 47N09	D 9	10	10.6				A	105		1700—0500	2/0104/3009
28			MUEHLBACH HKG	AUT	13E07 47N22	D 9	0.1	—10.0				A	15	6	0000—2400	
29			NAUDERS	AUT	10E31 46N54	D 9	0.1	—10.0				A	15	6	0000—2400	
30			NEUKIRCHEN GRV	AUT	12E17 47N15	D 9	0.1	—10.0				A	15	6	0000—2400	
31			OBERDRAUBURG	AUT	12E59 46N46	D 9	0.1	—10.0				A	15	6	0000—2400	
32			OETZ	AUT	10E54 47N12	D 9	0.1	—10.0				A	15	6	0000—2400	
33			PRUTZ	AUT	10E40 47N05	D 9	0.1	—10.0				A	15	6	0000—2400	
34			RADENTHEIN	AUT	13E40 46N49	D 9	0.1	—10.0				A	15	6	0000—2400	
35			RAURIS	AUT	13E00 47N14	D 9	0.1	—10.0				A	20	6	0000—2400	
36			REUTTE	AUT	10E43 47N29	D 9	0.1	—10.0				A	15	6	0000—2400	
37			S LAMBRECHT	AUT	14E18 47N04	D 9	0.1	—10.0				A	15	6	0000—2400	
38			SAALFELDEN	AUT	12E51 47N26	D 9	0.1	—10.0				A	15	6	0000—2400	
39			SCHARNITZ	AUT	11E16 47N23	D 9	0.1	—10.0				A	15	6	0000—2400	
40			SILLIAN	AUT	12E25 46N45	D 9	0.1	—10.0				A	15	6	0000—2400	
41			UNZMARKT	AUT	14E27 47N12	D 9	0.1	—10.0				A	15	6	0000—2400	
42			ZELL AM ZILLER	AUT	11E53 47N14	D 9	0.1	—10.0				A	15	6	0000—2400	
43		S	BREST	BLR	23E54 52N18	A20	5	12.0	110	190—300	0.0	B		4	0000—2400	
44		S	GRODNO	BLR	24E00 53N54	A20	5	12.0	110	190—300	0.0	B		4	0000—2400	
45		S	PINSK	BLR	26E10 52N10	A20	5	12.0	110	190—300	0.0	B		4	0000—2400	
46			BEIJING	CHN	116E27 39N57	A20	20	13.4				A	70	4	2000—1800	
47		S	JIANHE	CHN	108E45 26N39	A20	50	17.4				A	70	5	2000—1800	
48		S	MEITAN	CHN	107E29 27N46	A20	10	10.4				A	70	5	2000—1800	
49		S	NAYONG	CHN	105E15 26N56	A20	10	10.4				A	70	5	2000—1800	
50		S	ZHENFENG	CHN	105E40 25N14	A20	50	17.4				A	70	5	2000—1800	
51			GALLE	CLN	80E12 06N05	C10	10	10.4				A	50	5	0000—1800	
52			VIGO	E	08W40 42N10	D 9	10	10.4				A	60	5	0000—2400	19
53			BELFAST	G	05W52 54N33	A20	1	1.0	300			B		3	0000—2400	
54			LA CHASSE	G	02W11 49N14	A20	1	—3.0				A	68	4	0000—2400	

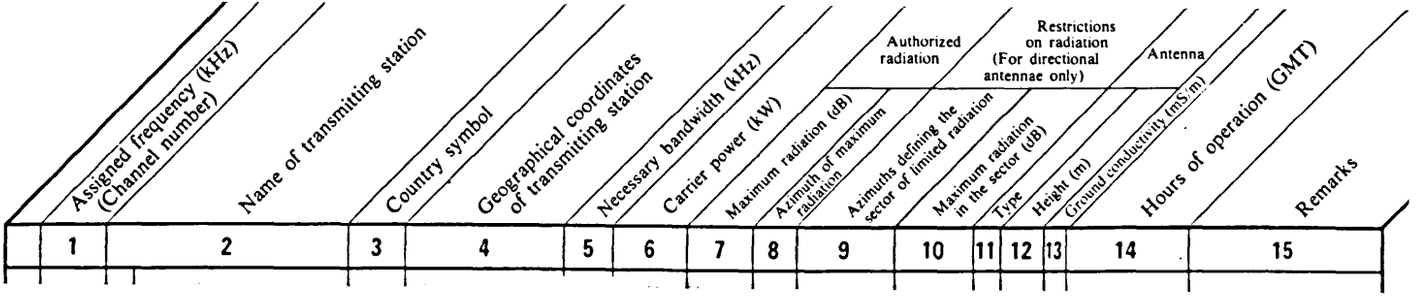
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1026		ASUANSI	GHA	01W15 05N25	C 9	20	13.0				A	250	4	0500—2300	
2	(56)		ALLAHABAD	IND	81E54 25N28	A20	20	15.1				A	150	3	0000—2400	
3			DHARMSALA	IND	76E15 32N12	A20	300	26.9				A	150	4	0300—0900	25
4			MERCARA	IND	75E42 12N24	A20	300	26.9				A	150	4	0300—1000	25
5			ROURKELA	IND	85E00 22N12	A20	300	26.9				A	150	4	0300—0900	25
6			CHALUS	IRN	51E25 36N40	A20	10	10.4				A	73	2	0300—1400	18/ISR
7			TABRIZ	IRN	46E15 38N08	A20	100	22.1				A	147	2	0100—2200	
8			TEL AVIV 1	ISR	34E50 31N50	D 9	200	25.0		290—340	19.0	A		3	0000—2400	18/IRN 33
9			AKUNE	J	130E12 32N01	A15	0.1	—9.6				A	67	5	0000—2400	
10			ENGARU	J	143E31 44N03	A15	0.1	—9.6				A	71	5	0000—2400	
11			FUKUCHIYAMA	J	135E07 35N18	A15	0.1	—9.6				A	67	5	0000—2400	
12			HAMADA	J	132E05 34N54	A15	0.1	—9.6				A	67	5	0000—2400	
13			HITA	J	130E56 33N18	A15	0.1	—9.6				A	47	5	0000—2400	
14			KISOFUKUSHIMA	J	137E42 35N51	A15	0.1	—9.6				A	47	5	0000—2400	
15			KOBAYASHI MIYA	J	130E58 32N00	A15	0.1	—9.6				A	67	5	0000—2400	
16			KOMORO	J	138E26 36N19	A15	0.1	—9.6				A	67	5	0000—2400	
17			KURAYOSHI	J	133E48 35N25	A15	0.1	—9.6				A	47	5	0000—2400	
18			KURE	J	132E36 34N15	A15	0.1	—9.6				A	71	5	0000—2400	
19			KUSHIMA	J	131E14 31N28	A15	0.1	—9.6				A	71	5	0000—2400	
20			MIYAKO	J	141E58 39N38	A15	0.1	—9.6				A	71	5	0000—2400	
21			OFUNATO	J	141E44 39N05	A15	0.1	—9.6				A	67	5	0000—2400	
22			SHIMONOSEKI	J	130E56 33N58	A15	0.1	—9.6				A	67	5	0000—2400	
23			SHINGU	J	136E00 33N43	A15	0.1	—9.6				A	67	5	0000—2400	
24			TSURUGA	J	136E03 35N39	A15	0.1	—9.6				A	67	5	0000—2400	
25			YAMANAKA	J	136E22 36N15	A15	0.1	—9.6				A	71	5	0000—2400	
26			YONEZAWA	J	140E06 37N54	A15	0.1	—9.6				A	47	5	0000—2400	
27			MALINDI	KEN	40E05 03S15	C 9	5	7.6				A	100	4	0000—2400	
28			HWACHEON	KOR	127E42 38N05	C10	1	0.4				A	60	6	0000—2400	
29			KEOCHANG	KOR	127E54 35N40	C10	1	2.1				A	120	6	0000—2400	
30			SEOCHEON	KOR	126E43 36N03	C10	1	2.1				A	120	4	0000—2400	
31			VIENTIANE	LAO	102E38 17N59	A15	10	10.4				A	55	5	0500—1500	
32			PERY	MOZ	33E25 19S00	C10	50	17.4				A	73	4	0400—2200	
33			RABAT	MRC	06W55 33N54	A18	5	7.4				A	48	4	0600—2400	24
34			SAFI	MRC	09W10 32N20	A18	1	0.6				A	82	4	0500—2400	24
35			ROSSO	MTN	15W50 16N32	B20	20	15.1				A	146		0600—2400	24
36			HADIJA	NIG	10E10 12N30	C 9	50	17.4				A	75	4	0500—2300	
37		S	KAITAIA	NZL	173E15 35S03	A20	2	3.4				A	50	4	0000—2400	
38		S	WHANGAREI	NZL	174E19 35S41	A20	2	3.4				A	50	4	0000—2400	
39			ILIGAN CITY	PHL	124E15 08N14	C 9	1	0.6				A	91	3	2100—1600	
40			NOVALICHES QC	PHL	121E02 14N42	C 9	10	10.6				A	91	3	2100—1600	
41			PIBOR POST	SDN	33E08 06N49	A20	50	20.4				A	164	3	0400—1500	24
42			HONIARA	SLM	159E58 09S25	A20	5	7.4				A	61	1	1900—1200	
43		S	PHITSANULOK	THA	100E13 16N51	A20	50	17.6				A	88	2	0000—2400	
44		S	YALA	THA	101E04 05N46	A20	10	10.0				A	30	3	0000—2400	
45		S	BEREZNIKI	URS	56E15 59N24	A18	5	10.4				A	190	4	0000—2400	
46		S	NIANDOMA	URS	38E57 61N31	A18	5	10.4				A	190	4	0000—2400	
47			RAITCHIKMINSK	URS	129E30 49N50	A18	50	17.6				A	90	4	0000—2400	
48			TOMSK	URS	85E04 56N30	C10	200	26.4				A	190	4	0000—2400	
49			KRAGUJEVAC	YUG	20E55 44N01	D 9	10	12.1				A	144	4	0800—1500	
50			KANANGA	ZAI	22E25 05S54	C 9	10	10.4				A	70	8	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1035 KHZ (57)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1035		YAMBO	ARS	38E05 24N10	C 9	20	15.1				A	120	3	0400—1400	24
2	(57)		INNISFAIL QLD	AUS	146E00 17S30	A20	10	12.1				A		4	1900—1400	
3			ONSLOW WA	AUS	115E00 22S00	A20	5	7.4				A		3	1900—1400	
4		S	AIHUI	CHN	127E20 50N18	A20	20	13.4				A	70	4	2000—1800	
5		S	BAICHENG	CHN	122E50 45N37	A20	10	10.4				A	70	4	2000—1800	
6		S	BAIRIN ZUOQI	CHN	119E12 43N58	A20	20	13.4				A	70	4	2000—1800	
7		S	BEIAN	CHN	126E40 48N18	A20	1	0.4				A	70	4	2000—1800	
8		S	BENXI SHI	CHN	123E38 41N10	A20	10	10.4				A	70	4	2000—1800	
9		S	BIN XIAN	CHN	118E02 37N22	A20	5	7.4				A	70	4	2000—1800	
10		S	BO XIAN	CHN	115E46 33N53	A20	5	7.4				A	70	4	2000—1800	
11		S	CHANGZHI SHI	CHN	113E06 36N10	A20	20	13.4				A	70	4	2000—1800	
12		S	CHEN XIAN	CHN	113E02 25N48	A20	20	13.4				A	70	4	2000—1800	
13		S	CHIFENG SHI	CHN	118E52 42N18	A20	30	15.2				A	70	4	2000—1800	
14		S	CHU XIAN	CHN	118E18 32N19	A20	10	10.4				A	70	4	2000—1800	
15		S	DATONG SHI	CHN	113E10 40N05	A20	20	13.4				A	70	4	2000—1800	
16		S	DINGXI	CHN	104E30 35N20	A20	5	7.4				A	70	4	2000—1800	
17		S	DUNHUA	CHN	128E13 43N22	A20	5	7.4				A	70	4	2000—1800	
18		S	ENSHI	CHN	109E28 30N17	A20	10	10.4				A	70	4	2000—1800	
19		S	ERGUNE ZUOQI	CHN	121E30 50N50	A20	10	10.4				A	70	4	2000—1800	
20		S	FUSONG	CHN	127E17 42N19	A20	10	10.4				A	70	4	2000—1800	
21		S	GANZHOU	CHN	114E54 25N48	A20	20	13.4				A	70	4	2000—1800	
22		S	GAOXIONG SHI	CHN	120E18 22N36	A20	50	17.4				A	70	5	2000—1800	
23		S	GUANGCHANG	CHN	116E16 26N52	A20	5	7.4				A	70	4	2000—1800	
24		S	HARBIN	CHN	126E52 45N49	A20	20	13.4				A	70	4	2000—1800	
25		S	HUAINAN	CHN	117E00 32N41	A20	5	7.4				A	70	4	2000—1800	
26		S	HUANREN	CHN	125E21 41N15	A20	5	7.4				A	70	4	2000—1800	
27		S	HUHHOT	CHN	111E30 41N12	A20	50	17.4				A	70	4	2000—1800	
28		S	HURE QI	CHN	121E41 42N45	A20	5	7.4				A	70	4	2000—1800	
29		S	JARUD QI	CHN	120E54 44N34	A20	10	10.4				A	70	4	2000—1800	
30		S	JIAMUSI	CHN	130E30 46N40	A20	20	13.4				A	70	4	2000—1800	
31		S	JINGTAI	CHN	104E08 37N06	A20	10	10.4				A	70	4	2000—1800	
32		S	JINING SHI	CHN	116E35 35N28	A20	20	13.4				A	70	4	2000—1800	
33		S	JISHOU	CHN	109E43 28N19	A20	20	13.4				A	70	4	2000—1800	
34		S	JIXI	CHN	130E58 45N18	A20	20	13.4				A	70	4	2000—1800	
35		S	LENGSHUIJIANG	CHN	111E23 27N44	A20	10	10.4				A	70	4	2000—1800	
36		S	LINYI	CHN	118E20 35N04	A20	10	10.4				A	70	4	2000—1800	
37		S	MANZHOULI	CHN	117E30 49N28	A20	20	13.4				A	70	4	2000—1800	
38		S	MOHE	CHN	122E10 53N21	A20	20	13.4				A	70	4	2000—1800	
39		S	NANCHANG SHI	CHN	115E54 28N42	A20	50	17.4				A	70	4	2000—1800	
40		S	NUNGNIN SUM	CHN	118E58 45N40	A20	20	13.4				A	70	4	2000—1800	
41		S	PINGLIANG	CHN	106E38 35N18	A20	5	7.4				A	70	4	2000—1800	
42		S	PINGXIANG 1	CHN	113E52 27N37	A20	10	10.4				A	70	4	2000—1800	
43		S	QIQIHAR	CHN	123E58 47N18	A20	10	10.4				A	70	4	2000—1800	
44		S	RAOHE	CHN	134E00 46N40	A20	20	13.4				A	70	4	2000—1800	
45		S	SHASHI	CHN	112E14 30N18	A20	20	13.4				A	70	4	2000—1800	
46		S	SHIYAN	CHN	110E47 32N36	A20	10	10.4				A	70	4	2000—1800	
47		S	TAIYUAN	CHN	112E33 37N45	A20	50	17.4				A	70	4	2000—1800	
48		S	TAIZHONG SHI	CHN	120E41 24N09	A20	50	17.4				A	70	5	2000—1800	
49		S	TONGLING	CHN	117E47 30N57	A20	5	7.4				A	70	4	2000—1800	
50		S	WANGQING	CHN	129E46 43N18	A20	5	7.4				A	70	4	2000—1800	
51		S	WEIFANG	CHN	119E06 36N43	A20	50	17.4				A	70	4	2000—1800	
52		S	WEIHAI	CHN	122E07 37N31	A20	5	7.4				A	70	4	2000—1800	
53		S	WUDU	CHN	104E55 33N24	A20	5	7.4				A	70	4	2000—1800	
54		S	WUGANG	CHN	110E38 26N43	A20	20	13.4				A	70	4	2000—1800	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1035	S	YINGKOU SHI	CHN	122E12 40N41	A20	20	13.4				A	70	4	2000—1800	
2	(57)	S	YIYANG SHI	CHN	112E21 28N36	A20	10	10.4				A	70	4	2000—1800	
3		S	YONGCHANG	CHN	101E58 38N15	A20	10	10.4				A	70	4	2000—1800	
4		S	YUEYANG	CHN	113E10 29N17	A20	10	10.4				A	70	4	2000—1800	
5		S	YUMEN SHI	CHN	97E20 39N42	A20	50	17.4				A	70	4	2000—1800	
6		S	YUNCHENG	CHN	111E00 34N57	A20	20	13.4				A	70	4	2000—1800	
7		S	ZAOYANG	CHN	112E45 32N08	A20	10	10.4				A	70	4	2000—1800	
8			MATRUH	EGY	27E09 31N19	D 9	1000	38.0	270	315—330	20.0	B		3	0000—2400	24
9			MATRUH	EGY	27E09 31N19	D 9	1000	38.0		135—145	25.0	B				
10			HOO	G	00E33 51N24	A20	1	0.0				A	30	3	0000—2400	
11			SHEFFIELD	G	01W29 53N21	A20	1	0.0				A	18	4	0000—2400	
12			BISSAU	GNB	15W35 11N51	A20	5	7.4				A	75	3	0000—2400	
13			SGRAVENHAGE	HOL	04E20 52N05	D 9	2	3.4				A	40	4	0000—2400	
14		S	CATANZARO	I	16E35 38N54	D 9	10	10.4				A	72	5	0000—2400	
15		S	FIRENZE	I	11E16 43N49	D 9	10	10.4				A	80	4	0000—2400	
16		S	NAPOLI	I	14E12 40N52	D 9	30	15.4				A	118	5	0000—2400	
17		S	PESCARA	I	14E15 42N26	D 9	10	10.6				A	111	4	0000—2400	
18		S	PIANA SIBARI	I	16E27 39N45	D 9	10	10.4				A	72	4	0000—2400	
19		S	SONDRIO	I	09E50 46N10	D 9	2	3.4				A	61	5	0000—2400	
20		S	TRIESTE	I	13E46 45N40	D 9	10	10.4				A	60	4	0000—2400	
21		S	UDINE	I	13E15 46N03	D 9	2	3.6				A	103	5	0000—2400	
22			GAUHATI 1	IND	91E47 26N11	A20	20	15.1				A	145	3	0300—0900	25
23			GAUHATI 2	IND	91E47 26N11	A20	10	12.1				A	145	3	0900—0300	
24			REWA	IND	81E25 24N31	A20	300	26.9				A	145	4	0300—0900	25
25			TIRUCHIRAPALLI	IND	78E46 10N50	A20	300	26.9				A	145	3	0300—1000	25
26			PALU	INS	119E52 00S54	A18	10	10.4				A	73	6	2100—1600	
27			TANDJUNGKARANG	INS	105E18 05S22	A18	5	7.4				A	73	6	2200—1700	
28			YAZD	IRN	54E24 31N54	A20	20	13.4				A	72	3	0100—2200	
29			MIYOSHI	J	132E51 34N48	A15	0.1	−9.6				A	71	5	0000—2400	
30			NIIHAMA	J	133E19 33N58	A15	0.1	−9.6				A	71	5	0000—2400	
31			TAISHO	J	132E59 33N12	A15	0.1	−9.6				A	71	5	0000—2400	
32			TAKAMATSU	J	134E04 34N19	A15	1	0.6				A	109	4	0000—2400	
33			TOYAMA	J	137E14 36N43	A15	1	0.6				A	108	5	0000—2400	
34			YAWATAHAMA	J	132E27 33N28	A15	0.1	−9.6				A	67	5	0000—2400	
35			AMMAN	JOR	35E53 31N54	C 9	10	12.1				A	130	4	0800—1600	24
36			POHANG	KOR	129E22 36N04	A10	10	10.4				A	80	4	0000—2400	
37			PHYHEN	KRE	124E37 40N02	A16	1	0.4				A	50		2000—1800	16
38			PENANG	MLA	100E18 05N22	A20	10	10.6				A	95	5	2200—1700	
39			ONDO	NIG	04E50 07N10	C 9	10	10.6				A	110	4	0400—2400	
40			WELLINGTON	NZL	174E51 41S06	A20	20	15.1				A	120	4	0000—2400	
41			MULTAN	PAK	71E24 30N12	A20	120	22.9				A	121	3	0000—2000	
42			BAGUIO CITY	PHL	120E35 16N24	C 9	10	10.6				A	90	3	2100—1600	
43			CEBU CITY	PHL	123E51 10N15	C 9	1	0.6				A	90	3	2100—1600	
44			GENERAL SANTOS	PHL	125E10 06N06	C 9	5	7.4				A	75	3	2100—1600	
45			LISBOA	POR	08W51 38N54	A20	120	22.9				A	145	3	0000—2400	
46			KIBAHA	TGK	39E00 06S50	C 9	100	20.6				A	105	4	0300—2100	
47			ATAKPAME	TGO	01E10 07N32	A20	20	13.4				A	75	4	0000—2400	
48			BANGKOK	THA	100E35 13N53	A20	20	13.4				A	40	2	0000—2400	
49			KARSIYAKA	TUR	27E03 38N28	D 9	20	13.4				A	72	4	0200—2300	
50			TALLIN	URS	24E46 59N24	A16	500	30.4				A	190	4	0000—2400	
51			SANAA 3	YEM	44E11 15N22	C 9	1000	35.0	150	86—270	20.0	B		5	0300—2200	24
52			KINSHASA	ZAI	15E15 04S20	C 9	1	0.4				A	50	8	0000—2400	
53			LIKASI	ZAI	26E44 10S50	C 9	10	10.4				A	60	8	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1044		HERAT	AFG	62E12 34N20	C 9	100	20.4				A	75	4	0100—2000	
2	(58)		LUBANGO	AGL	13E30 14S55	A20	10	10.4				A	75	3	0000—2400	
3			SAFANIYA	ARS	48E45 27N59	A20	0.1	—10.0				A	15	4	0100—2400	24
4			CRYSTAL BRK SA	AUS	138E16 33S19	A20	5	9.1				A	153	2	1900—1400	
5			MUSWELLBRK NSW	AUS	150E55 32S14	A20	2					B		4	1900—1400	
6			WEIPA QLD	AUS	141E54 12S39	A20	0.5	—2.6				A				
7			CHANGZHOU	CHN	119E57 31N47	A20	300	26.9				A	140	3	2000—1800	
8		S	FUHAI	CHN	87E45 47N00	A20	1	0.4				A	70	4	2000—1800	
9		S	FUYUN	CHN	89E33 47N00	A20	10	10.4				A	70	4	2000—1800	
10		S	HOTAN	CHN	80E02 37N00	A20	10	10.4				A	70	4	2000—1800	
11		S	KASHI	CHN	76E00 39N25	A20	10	10.4				A	70	4	2000—1800	
12		S	RUOQIANG	CHN	88E10 39N00	A20	10	10.4				A	70	4	2000—1800	
13		S	TACHENG	CHN	83E05 46N45	A20	10	10.4				A	70	4	2000—1800	
14		S	TURPAN	CHN	89E02 42N53	A20	10	10.4				A	70	4	2000—1800	
15		S	XINHE	CHN	82E40 41N25	A20	10	10.4				A	70	4	2000—1800	
16		S	YINING SHI	CHN	81E28 43N55	A20	10	10.4				A	70	4	2000—1800	
17		S	YIWU	CHN	94E40 43N20	A20	1	0.4				A	70	4	2000—1800	
18			MAMFE	CME	09E14 05N56	C 9	20	15.1				A	143	4	0500—2300	
19			VASILIKO	CYP	33E20 34N42	C 9	100	20.6				A	100	4	0000—2400	
20			BURG	DDR	11E54 52N17	D 9	1000	30.0				A	210	4	0000—2400	
21			MAKALE	ETH	39E28 13N31	C 9	10	10.0				A	72	3	0400—2100	
22			THESSALONIKI	GRC	22E56 40N30	C 9	150	24.7	255	340—350	15.7	B		4	0400—2400	
23			THESSALONIKI	GRC	22E56 40N30	C 9	150	24.7	75	160—170	15.7	B				
24			BEYLA	GUI	08W38 08N41	C 9	50	17.4				A	70	4	0000—2400	
25			PENG CHAU	HKG	114E02 22N17	A20	10	10.6				A	91	5	0000—2400	
26			BOMBAY 1	IND	72E54 18N53	A20	300	26.9				A	145	3	0300—1000	25
27			BOMBAY 2	IND	72E54 18N53	A20	100	22.1				A	145	3	1000—0300	
28			DHANBAD	IND	86E24 23N48	A20	300	26.9				A	145	3	0300—0900	25
29			RAMPUR	IND	79E04 28N48	A20	300	26.9				A	145	3	0300—0900	25
30			AMBON	INS	128E10 03S41	A18	10	10.4				A	72	4	2000—1500	
31			SIBOLGA	INS	98E48 01N42	A18	10	10.4				A	71	5	2200—1700	
32			VOI	KEN	38E35 03S20	C 9	100	20.6				A	100	4	0000—2400	
33			CHUNCHEON	KOR	127E42 37N52	C10	1	0.0				A	33	6	0000—2400	
34			SIMANGGANG	MLA	111E27 01N14	A20	20	15.1				A	137	5	2200—1600	
35			BEIRA	MOZ	34E44 19S36	C10	100	20.3	340			B		4	0400—2200	
36			SEBAA AIOUN	MRC	05W23 33N53	C 9	300	26.9				A	140	4	0600—2400	24
37			AOUPINIE	NCL	165E16 21S11	A20	10	10.4				A	50	3	0000—2400	
38			DUNEDIN	NZL	170E36 45S53	A20	10	12.1				A	120	4	0000—2400	
39			CATBALOGAN SAM	PHL	124E52 11N46	C 9	1	0.6				A	89	3	2100—1600	
40			DIGOS DAVAO SR	PHL	125E21 06N45	C 9	1	0.6				A	89	3	2100—1600	
41			NAGA CITY	PHL	123E11 13N37	C 9	5	7.6				A	89	3	2100—1600	
42			SURICZAMBALES	PHL	120E14 14N53	C 9	1	0.6				A	89	3	2100—1600	
43			ZAMBOANGA CITY	PHL	122E06 06N56	C 9	5	7.6				A	89	3	2100—1600	
44			ALEPPO 2	SYR	37E08 36N14	A20	20	13.4				A	70	4	0300—2400	
45			MAO	TCD	15E18 14N08	C 9	1	0.4				A			0400—2300	
46			KHON KAEN	THA	102E40 16N02	A20	10	10.4				A	74	3	0000—2400	
47			KAHRAMANMARAS	TUR	36E56 37N35	D 9	50	20.0	295	20— 60	3.0	B		4	0200—2300	
48			KAHRAMANMARAS	TUR	36E56 37N35	D 9	50	20.0		280—290	15.0	B				
49			RUBTSOVSK	URS	82E13 51N08	A18	50	20.4				A	190	4	0000—2400	
50			TBILISI	URS	44E48 41N42	A16	200	26.4				A	190		0000—2400	
51			MBUJIMAYI	ZAI	23E10 06S13	C 9	2	3.4				A	70	8	0000—2400	

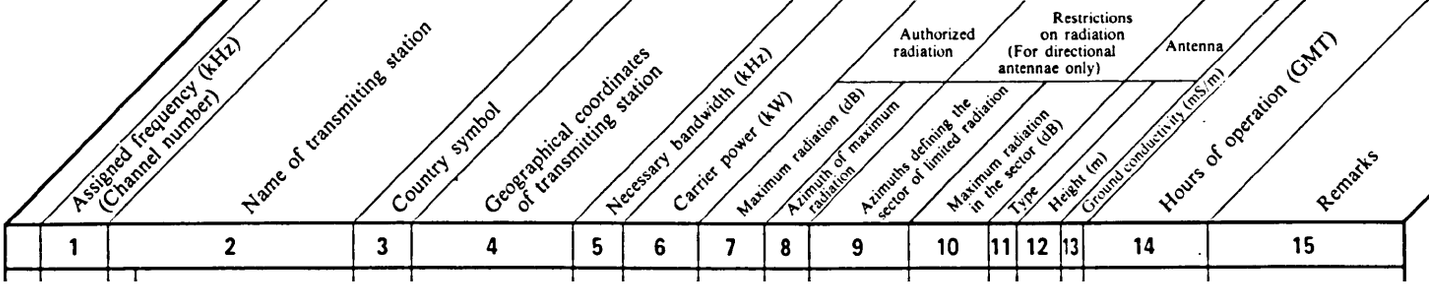
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1053		GIZAN	ARS	42E31 16N52	C 9	20	15.1				A	120	4	0000–2400	24
2	(59)		BRISBANE QLD	AUS	153E00 27S30	A20	5	7.4				A		3	1900–1400	
3			CANBERRA ACT	AUS	149E07 35S13	A20	5					B		3	0000–2400	
4			KARRATHA WA	AUS	117E00 20S43	A20	10	10.4				A	70	3	2100–1600	
5			BAD GOISERN	AUT	13E37 47N38	D 9	0.1	–10.0				A	15	6	0000–2400	
6			HOPFGARTEN	AUT	12E10 47N27	D 9	0.1	–10.0				A	15	6	0000–2400	
7			OBERWOELZ	AUT	14E17 47N12	D 9	0.1	–10.0				A	15	6	0000–2400	
8			PFUNDS	AUT	10E32 46N58	D 9	0.1	–10.0				A	15	6	0000–2400	
9			SPITTAL DRAU	AUT	13E29 46N48	D 9	0.1	–10.0				A	15	6	0000–2400	
10			MURAMVYA	BDI	30E51 03S28	C 9	10	10.4				A	71	4	0300–2400	
11			RANGPUR	BGD	89E00 26N00	A20	10	12.1				A	122	3	0000–1800	
12			ANTU	CHN	128E22 42N33	A20	10	10.4				A	70	4	2000–1800	
13		S	DONGCHUAN	CHN	103E18 26N08	A20	10	10.4				A	70	5	2000–1800	
14			JINAN	CHN	116E57 36N43	A20	5	7.4				A	70	4	2000–1800	
15		S	LIJIANG	CHN	100E15 26N55	A20	20	13.4				A	70	5	2000–1800	
16		S	LINCANG	CHN	100E02 23N52	A20	20	13.4				A	70	5	2000–1800	
17		S	LUCHUN	CHN	102E20 23N00	A20	10	10.4				A	70	5	2000–1800	
18		S	LUXI	CHN	98E34 24N27	A20	20	13.4				A	70	5	2000–1800	
19		S	QIUBEI	CHN	104E11 24N02	A20	50	17.4				A	70	5	2000–1800	
20		S	XIAGUAN	CHN	100E13 25N34	A20	10	10.4				A	70	5	2000–1800	
21			MOSSENDJO	COG	12E50 03S00	A20	30	15.4				A	114	5	0000–2400	
22		S	BARROW	G	03W12 54N08	A20	2	3.4				A	43	4	0000–2400	
23		S	BEXHILL	G	00E27 50N50	A20	2	3.4				A	52	4	0000–2400	
24		S	CARLISLE	G	02W55 54N52	A20	2	3.4				A	46	4	0000–2400	
25		S	DROITWICH	G	02W06 52N18	A20	150	24.0	40			B		3	0000–2400	
26		S	FOLKESTONE	G	01E13 51N06	A20	1	0.0				A	34	3	0000–2400	
27		S	POSTWICK	G	01E24 52N38	A20	7.5	9.2				A	38	3	0000–2400	
28		S	START POINT	G	03W40 50N14	A20	100	22.0	340			B		4	0000–2400	
29		S	STOCKTON	G	01W21 54N35	A20	2	3.4				A	38	3	0000–2400	
30			LEH	IND	77E35 34N09	A20	100	22.0	350	255–265	13.0	B		4	0300–0900	25
31			LEH	IND	77E35 34N09	A20	100	22.0		65– 95	13.0	B				
32			LEH	IND	77E35 34N09	A20	50	19.0	350	255–265	10.0	B		4	0900–0300	
33			LEH	IND	77E35 34N09	A20	50	19.0		65– 95	10.0	B				
34			DJAJAPURA	INS	140E39 02S37	A18	10	10.4				A	71	6	2000–1500	
35			KHORRAMABAD	IRN	48E22 33N29	A20	20	13.6				A	90	3	0100–2200	
36			JERUSALEM	ISR	35E13 31N46	D 9	20	15.1				A	140	3	0600–1800	33
37			JERUSALEM	ISR	35E13 31N46	D 9	10	12.1				A	140	3	1800–0600	
38			NAGOYA	J	136E58 35N06	A15	50	17.6				A	110	4	0000–2400	
39			NYERI	KEN	36E55 00S27	C 9	20	13.6				A	100	4	0000–2400	
40			YENSA	KRE	129E01 41N53	A16	1	0.0				A	30		2000–1800	
41			TRIPOLI KM8	LBY	13E05 32N52	D 9	50	23.0	175	320– 40	10.0	B		4	0400–2200	24
42			MERSING	MLA	103E51 02N25	A20	20	13.6				A	100	5	2200–1700	
43			MUEDA	MOZ	39E32 11S39	C10	5	7.4				A	70	4	0400–2200	
44			TANGER	MRC	05W50 35N45	A18	600	29.8	180	310– 50	20.0	B		5	0500–0300	18/MTN 24
45			TANGER	MRC	05W50 35N45	A18	600	29.8		320– 40	17.8	B				
46			NEMA	MTN	07W16 16N36	B20	20	15.1				A	144		0600–2400	18/MRC 24
47			DOGONDOUTCHI	NGR	04E00 13N40	C 9	10	10.4				A	71	4	0000–2400	
48			MAIDUGURI	NIG	13E55 11N53	C 9	50	17.6				A	100	4	0500–2400	18/TCD
49			NEW PLYMOUTH	NZL	174E08 39S02	A20	2	3.4				A	50	5	0000–2400	
50			TARAVAO	OCE	149W13 17S46	A20	5	7.4				A	50	4	0000–2400	
51			RAWALPINDI	PAK	73E06 33N37	A20	10	10.4				A	71	3	0000–2000	
52			DIPOLOG ZAM NR	PHL	123E20 08N35	C 9	1	0.6				A	88	3	2100–1600	
53			ILOILO CITY	PHL	122E33 10N41	C 9	1	0.6				A	88	3	2100–1600	
54			LAOAG CITY	PHL	120E36 18N11	C 9	5	7.6				A	88	3	2100–1600	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

1053 KHZ (59)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1053	S	IASI	ROU	27E37 47N10	A20	1000	32.0	340	230—270	20.0	B		4	0000—2400	
2	(59)	S	IASI	ROU	27E37 47N10	A20	1000	32.0	160	50— 90	20.0	B				
3		S	RESITA	ROU	21E55 45N18	A20	50	19.1				A	130	6	0000—2400	
4			HLATIKULU	SWZ	31E20 27S05	A20	10	12.1				A	120	7	0400—2200	
5			BOUSSO	TCD	16E43 10N30	C 9	10	12.1				A			0400—2300	18/NIG
6			N SITHAMMARAT	THA	99E57 08N29	A20	10	10.4				A	48	3	0000—2400	
7			NAKHON SAWAN	THA	100E07 15N38	A20	10	10.4				A	68	2	0000—2400	
8			KURGAN	URS	65E17 55N29	C10	50	20.4				A	190	4	0000—2400	
9			SVOBODNYI	URS	128E00 51N30	A18	50	20.0	0	140—240	7.0	B		4	0000—2400	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1062 (60)	MAJMAA	ARS	45E20 25N55	C 9	20	15.1				A	120	4	0400—1400	24
	MAJMAA	ARS	45E20 25N55	C 9	10	12.1				A	120	4	1400—2300	24
	KINGAROY QLD	AUS	151E50 26S25	A20	5	7.4				A	67	3	1900—1400	
	MARYBOROUGH VC	AUS	143E49 37S02	A20	5					B		2	1900—1400	
	BOSSANGOA	CAF	17E27 06N30	C 9	30	15.2				A	70	5	0400—2300	
S	DONGFANG	CHN	108E36 19N06	A20	50	17.4				A	70	4	2000—1800	
S	ENPING	CHN	112E18 22N11	A20	20	13.4				A	70	4	2000—1800	
S	GAR	CHN	79E58 32N12	A20	10	10.4				A	70	5	2000—1800	
S	GUANGZHOU	CHN	113E14 23N11	A20	100	22.1				A	140	4	2000—1800	
S	LHAZE	CHN	87E50 29N05	A20	10	10.4				A	70	5	2000—1800	
S	LHORONG	CHN	95E43 30N48	A20	50	17.4				A	70	5	2000—1800	
S	LIAN XIAN	CHN	112E23 24N47	A20	50	17.4				A	70	4	2000—1800	
S	LONGCHUAN	CHN	115E11 24N04	A20	20	13.4				A	70	4	2000—1800	
S	MARKAM	CHN	98E10 29N30	A20	10	10.4				A	70	5	2000—1800	
S	NAGQU	CHN	92E02 31N25	A20	50	17.4				A	70	5	2000—1800	
S	NANG XIAN	CHN	93E10 29N05	A20	10	10.4				A	70	5	2000—1800	
S	QIONGHAI	CHN	110E26 19N15	A20	10	10.4				A	70	4	2000—1800	
S	SHANTOU	CHN	116E36 23N30	A20	50	17.4				A	70	4	2000—1800	
S	XANZA	CHN	88E42 30N54	A20	50	17.4				A	70	5	2000—1800	
S	ZHONGBA	CHN	84E12 29N39	A20	10	10.4				A	70	5	2000—1800	
	KALUNDBORG	DNK	11E04 55N40	D 9	250	26.1				A	144	4	0000—2400	
	ABU ZABAL	EGY	31E22 30N16	D 9	100	23.2				A	175	3	0000—2400	24
	NEGHELLI	ETH	39E41 05N17	C 9	100	22.1				A	149	3	0400—2300	
	CONAKRY	GUI	13W39 09N36	C 9	100	20.6				A	90	4	0000—2400	
S	ANCONA	I	13E20 43N35	D 9	25	16.0	180	340— 20	10.0	B		4	0000—2400	
S	CAGLIARI	I	09E04 39N17	D 9	30	15.4				A	108	3	0000—2400	
S	CATANIA	I	15E05 37N32	D 9	2	3.6				A	98	5	0000—2400	
S	GORIZIA	I	13E37 45N57	D 9	0.2	—6.6				A	50	5	0000—2400	
S	GROSSETO	I	11E07 42N45	D 9	1	0.4				A	50	5	0000—2400	
S	LA SPEZIA	I	09E49 44N06	D 9	1	0.4				A	50	5	0000—2400	
S	OLBIA	I	09E29 40N54	D 9	10	10.4				A	71	4	0000—2400	
S	SQUINZANO	I	18E00 40N27	D 9	25	14.6				A	87	4	0000—2400	
S	VERONA	I	11E00 45N27	D 9	2	3.4				A	62	5	0000—2400	
	GWALIOR	IND	78E10 26N14	A20	300	26.9				A	140	3	0300—0900	25
	PASIGHAT 1	IND	95E20 28N06	A20	300	26.9				A	140	4	0300—0900	25
	PASIGHAT 2	IND	95E20 28N06	A20	200	25.0	340	145—175	20.0	B		4	0900—0300	
	PONDICHERRY 1	IND	79E54 12N00	A20	20	15.1				A	140	3	0300—1000	25
	PONDICHERRY 2	IND	79E54 12N00	A20	10	12.1				A	140	3	1000—0300	
	KERMAN	IRN	56E58 30N15	A20	20	13.4				A	69	3	0100—2200	
	ASHIKAGA	J	139E30 36N18	A15	0.1	—9.4				A	90	5	0000—2400	
	FUJIYOSHIDA	J	138E49 35N30	A15	0.1	—9.6				A	68	5	0000—2400	
	FUKUYAMA	J	133E22 34N30	A15	0.1	—9.6				A	65	5	0000—2400	
	GERO	J	137E14 35N49	A15	0.1	—9.6				A	53	5	0000—2400	
	HIRADO	J	129E33 33N23	A15	0.1	—9.6				A	67	5	0000—2400	
	HIROSAKI	J	140E29 40N37	A15	0.1	—9.6				A	58	5	0000—2400	
	HITOYOSHI	J	130E47 32N13	A15	0.1	—9.6				A	68	5	0000—2400	
	IKEDA TOKUSHIM	J	133E48 34N02	A15	0.1	—9.6				A	68	5	0000—2400	
	IWAKI	J	140E55 37N03	A15	0.1	—9.6				A	52	5	0000—2400	
	KAKEGAWA	J	138E02 34N47	A15	0.1	—9.4				A	87	5	0000—2400	
	KAMAISHI	J	141E54 39N16	A15	0.1	—9.6				A	52	5	0000—2400	
	KAMIOKA	J	137E19 36N20	A15	0.1	—9.6				A	49	5	0000—2400	
	KANOYA	J	130E52 31N24	A15	0.1	—9.6				A	60	5	0000—2400	
	MAESAWA	J	141E07 39N03	A15	0.1	—9.6				A	47	5	0000—2400	
	MAIZURU	J	135E24 35N28	A15	0.1	—9.6				A	67	5	0000—2400	

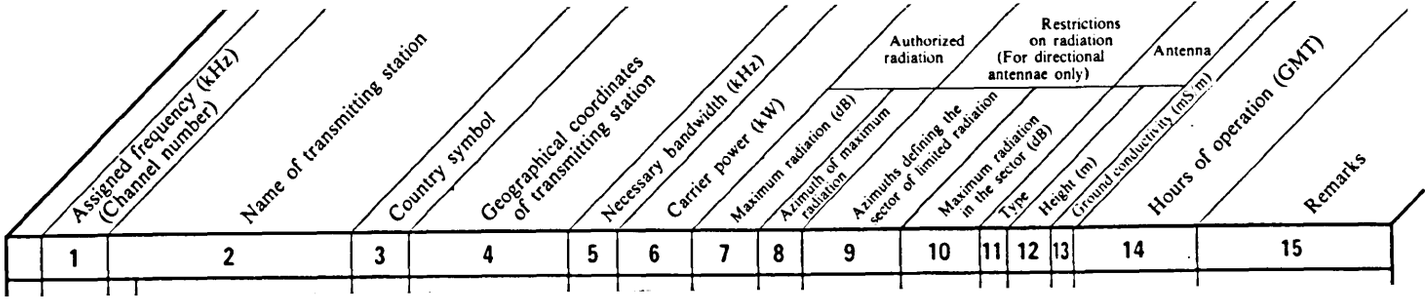


	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1062	NAGAOKA	J	138E50 37N25	A15	0.1	−9.6				A	65	5	0000−2400	
2	(60)	NIIMI	J	133E29 34N59	A15	0.1	−9.6				A	60	5	0000−2400	
3		OKAYA	J	138E04 36N03	A15	0.1	−9.6				A	45	5	0000−2400	
4		OMUTA	J	130E26 33N02	A15	0.1	−9.6				A	48	5	0000−2400	
5		OWASE	J	136E12 34N04	A15	0.1	−9.6				A	68	5	0000−2400	
6		TANABE	J	135E24 33N42	A15	0.1	−9.6				A	68	5	0000−2400	
7		TSUYAMA	J	134E01 35N04	A15	0.1	−9.6				A	60	5	0000−2400	
8		UEDA	J	138E17 36N23	A15	0.1	−9.6				A	65	5	0000−2400	
9		WAKAMATSU	J	139E57 37N29	A15	0.1	−9.6				A	52	5	0000−2400	
10		YUKUHASHI	J	131E00 33N44	A15	0.1	−9.6				A	66	5	0000−2400	
11		CHEONGJU	KOR	127E27 36N43	C10	50	19.1				A	120	5	2100−0800	7
12		CHEONGJU	KOR	127E27 36N43	C10	10	13.1				A	120	5	0800−2100	
13		SIBU	MLA	111E49 02N18	A20	20	15.1				A	135	5	2200−1500	
14		SEGOU	MLI	06W15 13N26	C 9	30	16.9				A	141		0600−2400	
15		ONITSHA	NIG	06E47 06N10	C 9	10	10.4				A	76	4	0500−2300	
16		ROTORUA	NZL	176E14 38S10	A20	5	7.4				A	50	5	0000−2400	
17		MARBEL COT	PHL	124E50 06N30	C 9	5	7.6				A	87	3	2100−1600	
18		PASIG RIZAL	PHL	121E04 14N35	C 9	10	10.6				A	87	3	2100−1600	
19		HRUBIESZOW	POL	23E53 50N48	A20	1	0.4				A	70	5	0000−2400	
20		MIELEC	POL	21E26 50N18	A20	1	0.4				A	70	5	0000−2400	
21		PULAWY	POL	21E58 51N25	A20	1	0.4				A	70	5	0000−2400	
22		RADYMNO	POL	22E48 49N57	A20	1	0.4				A	70	5	0000−2400	
23		SZYDLOWIEC	POL	20E51 51N14	A20	1	0.4				A	70	5	0000−2400	
24	S	AZURARA	POR	08W43 41N20	A20	100	22.1				A	140	4	0000−2400	
25	S	BEJA	POR	07W52 37N59	A20	1	0.6				A	90	3	0000−2400	
26	S	CASTELO BRANCO	POR	07W31 39N49	A20	10	10.6				A	90	4	0000−2400	
27	S	ELVAS	POR	07W07 38N53	A20	10	10.6				A	90	5	0000−2400	
28	S	FARO	POR	07W53 37N01	A20	10	10.6				A	90	3	0000−2400	
29	S	GUARDA	POR	07W14 40N22	A20	10	10.6				A	90	5	0000−2400	
30	S	MIRANDELA	POR	07W10 41N31	A20	10	10.6				A	90	5	0000−2400	
31		APIA	SMO	171W50 13S47	A20	10	10.6				A	100	6	0000−2400	
32		BANGKOK	THA	100E34 13N45	A20	20	13.4				A	72	2	0000−2400	
33		DIYARBAKIR	TUR	40E19 37N49	D 9	300	26.9				A	146	4	0200−2300	
34		ANDIJAN	URS	72E21 40N47	A18	50	20.0	350	150−200	11.0	B		4	0000−2400	
35		IOCHKAR OLA	URS	47E50 56N39	C10	50	20.4				A	190	4	0000−2400	
36		BOR	YUG	22E06 44N06	D 9	10	10.6				A	110	4	0800−1500	
37		NOVI PAZAR	YUG	20E32 43N10	D 9	1	0.4				A	70	4	0000−2400	
38		ZAGREB	YUG	15E58 45N49	D 9	10	10.4				A	70	4	0800−1500	
39		ZAGREB	YUG	15E58 45N49	D 9	1	0.4				A	70	4	1500−0800	
40		KINSHASA	ZAI	15E15 04S20	C 9	1	0.4				A	50	8	0000−2400	
41		MWINILUNGA	ZMB	24E12 11S40	A20	10	10.6				A	113	4	0200−2100	

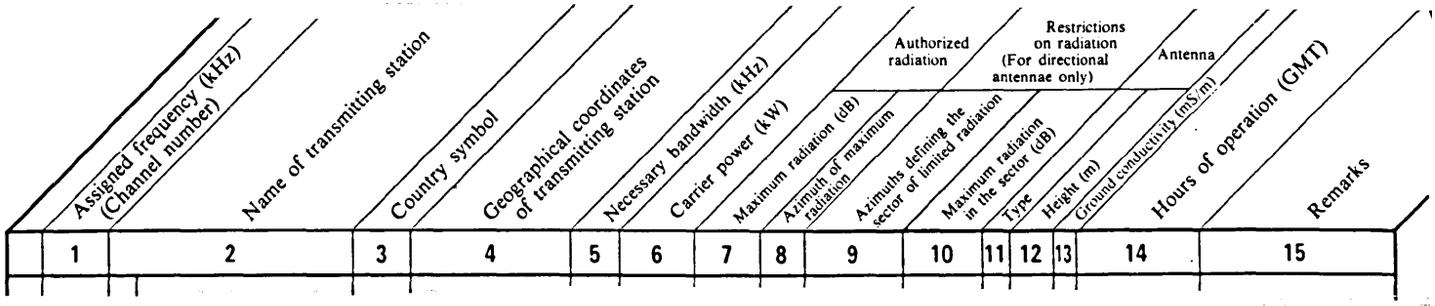
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1071		BUSHTRICA	ALB	19E24 41N53	A20	1	0.4				A	70	6	0400—2300	(24)
2	(61)		ILLIZI	ALG	08E26 26N01	D 9	2	3.4				A	70	5	0600—2400	24
3			GRIFFITH NSW	AUS	146E08 34S19	A20	5	7.4				A	53	2	1900—1400	
4			KATANNING WA	AUS	117E29 33S39	A20	5	7.4				A	70	2	1900—1400	
5			ANSHAN	CHN	122E58 41N07	A20	10	10.4				A	70	4	2000—1800	
6			BAOJI SHI	CHN	107E10 34N22	A20	10	10.4				A	70	4	2000—1800	
7		S	GUI XIAN	CHN	109E36 23N06	A20	100	22.1				A	140	4	2000—1800	
8		S	PINGXIANG 2	CHN	106E45 22N11	A20	20	13.4				A	70	4	2000—1800	
9		S	QINZHOU	CHN	108E37 21N58	A20	10	10.4				A	70	4	2000—1800	
10			QIQIHAR	CHN	123E58 47N18	A20	10	10.4				A	70	4	2000—1800	
11			TIANJIN	CHN	117E09 39N09	A20	50	17.4				A	70	4	2000—1800	
12			KINKALA	COG	14E49 04S18	A20	30	15.4				A	112	5	0000—2400	
13			PRAIA	CPV	23W30 14N55	A18	10	10.4				A	40	6	1900—2400	16
14			MAN	CTI	07W38 07N29	C 9	10	12.1				A		7	0600—2400	
15			GIMMA	ETH	36E50 07N40	C 9	30	16.9				A	140	3	0400—2300	
16		S	BASTIA	F	09E24 42N47	D 9	20	13.6				A	100	5	0000—2400	
17		S	BAYONNE	F	01W28 43N29	D 9	20	13.4				A	50	4	0000—2400	
18		S	BREST	F	04W09 48N16	D 9	100	22.1				A	130	5	0000—2400	
19		S	GRENOBLE	F	05E39 45N11	D 9	20	13.6				A	110	6	0000—2400	
20		S	LILLE	F	03E00 50N31	D 9	100	20.4				A	76	3	0000—2400	
21		S	MONTPELLIER	F	03E51 43N39	D 9	100	25.0	335			B		3	0000—2400	
22		S	PORTO—VECCHIO	F	09E12 41N30	D 9	20	15.1				A	120	6	0000—2400	
23			COIMBATORE	IND	77E06 11N00	A20	300	26.9				A	140	4	0300—1000	25
24			RAJKOT	IND	70E31 22N30	A20	1000	32.1				A	140	3	0000—2400	
25			HIROSHIMA	J	132E28 34N26	A15	20	15.1				A	137	4	0000—2400	
26			WONSAN	KRE	124E25 40N07	A16	1	0.0				A	30		2000—1800	
27			IBU KOTA	MLA	101E45 03N15	A20	20	13.4				A	37	5	2200—1700	
28			F DERICK	MTN	12W43 22N41	B20	20	15.1				A	122		0600—2400	24
29			OGWASHI UKU	NIG	06E31 06N10	C 9	30	16.9				A	140	4	0500—2300	
30			KUMARA	NZL	171E09 42S34	A20	10	12.1				A	150	6	0000—2400	
31			DAVAO CITY	PHL	125E34 07N03	C 9	1	0.6				A	87	3	2100—1600	
32			TAGBILARAN BHL	PHL	123E51 09N38	C 9	1	0.6				A	87	3	2100—1600	
33			WAU	SDN	28E01 07N48	A20	200	23.0				A	266	3	0400—2200	24
34			TARTOUS	SYR	35E53 34N51	C 9	60	17.8				A	33	2	0500—2200	
35			LITVINOV	TCH	13E36 50N36	A20	1	0.4				A	60	5	0000—2400	
36			MNICH HRADISTE	TCH	15E00 50N30	A20	25	14.4				A	50	5	0000—2400	
37		S	ABAKAN	URS	91E11 53N46	A16	50	20.4				A	190	4	0000—2400	
38			KRASNODAR	URS	39E00 45N02	A16	20	16.4				A	190	4	0000—2400	
39		S	KULDIGA	URS	22E00 56N56	A16	50	20.4				A	190	4	0000—2400	
40		S	RIGA	URS	24E00 56N55	A16	60	21.2				A	190	4	0000—2400	
41		S	USTKAMENOGORSK	URS	82E36 49N55	C10	100	25.0	60	140—220	10.0	B		4	0000—2400	
42		S	VALMIERA	URS	25E29 57N32	A16	50	20.4				A	190	4	0000—2400	
43			ZEIA	URS	127E15 53N44	A18	10	10.6				A	80	4	0000—2400	
44		S	BANJA LUKA	YUG	17E11 44N50	D 9	25	16.1				A	140	3	0000—2400	
45		S	BIJELJINA	YUG	19E14 44N42	D 9	10	10.6				A	90	3	0000—2400	
46		S	GORAZDE	YUG	18E58 43N41	D 9	10	10.6				A	90	5	0000—2400	
47		S	MOSTAR	YUG	17E49 43N25	D 9	50	17.6				A	90	5	0000—2400	
48			KITWE	ZMB	28E12 12S46	A20	100	22.1				A	150	4	0200—2100	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1080		SOUK AHRAS	ALG	07E57 36N17	D 9	10	10.4				A	45	4	0600–2400	24
2	(62)		TAIF	ARS	40E15 21N15	C 9	20	15.1				A	120	4	0400–1400	24
3			GUNNEDAH NSW	AUS	150E13 30S59	A20	5	7.4				A	50	3	1900–1400	
4			HOBART TAS	AUS	147E24 42S55	A20	5	7.4				A		5	0000–2400	
5			MT ISA QLD	AUS	139E30 20S41	A20	0.2	–6.6				A	43	2	1900–1400	
6			PERTH WA	AUS	115E54 31S56	A20	5	7.6				A	79	4	0000–2400	
7			RAJSHAHI	BGD	88E50 24N20	A20	10	12.1				A	122	3	0000–1800	
8			CHONGQING	CHN	106E30 29N45	A20	5	7.4				A	70	4	2000–1800	
9			HAIKOU	CHN	110E15 20N02	A20	200	25.1				A	140	4	2000–1800	
10			SHANTOU	CHN	116E36 23N30	A20	5	7.4				A	70	4	2000–1800	
11			WUXI SHI	CHN	120E26 31N33	A20	10	10.4				A	70	3	2000–1800	
12			KOTUGODA	CLN	79E55 07N08	C10	100	23.0	40			B		5	0000–1800	
13			LA CORUNA	E	08W25 43N20	D 9	10	10.4				A	60	5	0000–2400	19
14		S	EL MINYA	EGY	30E33 28N07	D 9	10	10.6				A	100	3	0000–2400	24
15		S	IDFU	EGY	32E49 25N00	D 9	10	10.6				A	100	3	0000–2400	24
16		S	SOHAG	EGY	31E43 26N27	D 9	10	10.6				A	100	3	0000–2400	24
17			ORESTIAS	GRC	26E32 41N30	C 9	20	13.4				A	65	2	0400–2200	
18			FADA NGOURMA	HVO	00E21 12N03	A20	30	16.9				A	139	4	0000–2400	
19			MADURAI	IND	78E15 09N25	A20	300	26.9				A	140	3	0300–1000	25
20			NAJIBABAD	IND	78E12 29N24	A20	100	22.1				A	140	3	0300–0900	25
21			SINGARADJA	INS	115E04 08S06	A18	10	10.4				A	70	5	2100–1600	
22			ABADAN	IRN	48E15 30N22	A20	600	33.8	270	320–220	21.8	B		2	1500–2200	
23			EILAT	ISR	35E00 29N40	D 9	10	10.4				A	65	3	0000–2400	33
24			MOMBASA	KEN	39E40 04S05	C 9	100	23.0	310	50–210	20.0	B		4	0000–2400	
25			YEOSU	KOR	127E44 34N43	C10	10	12.1				A	120	4	0000–2400	
26		S	AJEDABIA	LBY	20E13 30N45	A20	40	18.1				A	138	5	0400–2400	24
27		S	JALO	LBY	21E15 28N50	A20	20	15.1				A	138	5	0400–2400	24
28			SANDAKAN	MLA	118E01 05N58	A20	10	12.1				A	150	5	0000–2400	
29			LOUREN MARQUES	MOZ	32E36 25S58	C10	5	7.4				A	70	4	0400–2200	
30			CASABLANCA	MRC	07W40 33N36	C 9	5	7.6				A	80	4	0600–2400	24
31			MINNA	NIG	06E42 09N38	C 9	50	17.4				A	75	4	0500–2300	
32			AUCKLAND	NZL	174E38 36S51	A20	10	12.1				A	120	3	0000–2400	
33			LAHORE	PAK	74E20 31N35	A20	50	17.4				A	69	3	0000–2000	
34			LUCENA CITY	PHL	121E37 13N34	C 9	5	7.6				A	86	3	2100–1600	
35			KATOWICE	POL	18E52 50N38	C 9	1500	33.9				A	132	4	0000–2400	
36			LUNSAR	SRL	12W03 08N41	C 9	20	13.4				A	40	2	0500–2400	
37			MONGO	TCD	18E41 12N11	C 9	30	16.9				A			0400–2300	
38		S	NAKHON SAWAN	THA	100E08 15N40	A20	10	10.4				A	69	2	0000–2400	
39		S	YALA	THA	101E10 06N48	A20	10	10.4				A	69	3	0000–2400	
40			DILI	TMP	125E34 08S33	A20	10	10.4				A	75	3	2200–1800	
41			BIISK	URS	85E15 52N34	A18	50	17.0				A	190	4	0000–2400	
42			KRASNOVODSK	URS	52E48 40N00	A18	50	17.6				A	100	4	0000–2400	
43			KYZYL	URS	94E28 51N43	C10	500	27.0				A	190	4	0000–2400	
44			ULIANOVSK	URS	48E20 54N19	A18	5	7.0				A	190	4	0000–2400	
45			BELI KRIZ 1	YUG	13E35 45N31	D 9	200	28.0	270	25– 42	8.0	B		2	0000–2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1089		DURRES	ALB	19E20 41N17	A20	150	23.9				A	130	5	0400—2400	23/URS (24)
2	(63)		REGGANE	ALG	00E20 26N50	D 9	4	6.4				A	70	5	0600—2400	24
3			LUBECK VIC	AUS	142E33 36S45	A20	5	7.4				A	56	2	1900—1400	
4			MOORAMBAH QLD	AUS	148E00 23S00	A20	5	7.4				A		4	1900—1400	
5			BOUAR	CAF	15E35 05N58	C 9	100	20.4				A	68	5	0400—2300	
6		S	AOHAN QI	CHN	119E42 42N20	A20	10	10.4				A	70	4	2000—1800	
7			BAODING	CHN	115E33 38N51	A20	5	7.4				A	70	4	2000—1800	
8		S	HEXIGTEN QI	CHN	117E22 43N12	A20	20	13.4				A	70	4	2000—1800	
9		S	KUANDIAN	CHN	124E42 40N44	A20	20	13.4				A	70	4	2000—1800	
10		S	LUDA	CHN	121E30 38N54	A20	10	10.4				A	70	4	2000—1800	
11		S	PANSHAN	CHN	122E02 41N08	A20	10	10.4				A	70	4	2000—1800	
12		S	PENGHU	CHN	119E33 23N34	A20	50	17.4				A	70	5	2000—1800	
13		S	SHENYANG	CHN	123E36 41N54	A20	100	22.1				A	140	4	2000—1800	
14		S	SUIZHONG	CHN	120E20 40N21	A20	10	10.4				A	70	4	2000—1800	
15		S	YILAN	CHN	121E45 24N45	A20	50	17.4				A	70	5	2000—1800	
16		S	YULI	CHN	121E19 23N20	A20	20	15.1				A	140	5	2000—1800	
17			HABOHO 1	COM	43E18 11S37	A20	50	19.1				A	120	1	0000—2400	
18			ZYYI	CYP	33E19 34N43	A20	7.5	9.4				A	106	5	0400—2200	11/G
19			NAKFA	ETH	38E30 16N36	C 9	10	10.4				A	69	3	0400—2300	
20			NAULU REWA	FJI	178E32 18S04	A20	10	10.4				A	60	5	1700—1200	
21			ORFORDNESS	G	01E35 52N06	D10	500	30.0	115			B		3	0000—2400	
22			GIBRALTAR 2	GIB	05W21 36N08	A20	2	3.4				A	40		0700—2300	
23			ANDERSEN AFB	GUM	144E55 14N34	C 9	0.1	−10.0				A	27	2	0000—2400	
24			JAMMU 1	IND	74E49 32N47	A20	20	15.1				A	140	4	0300—0900	25
25			JAMMU 2	IND	74E49 32N47	A20	10	12.1				A	140	4	0900—0300	
26			NAGPUR	IND	79E03 21N06	A20	20	15.1				A	115	3	0300—0900	25
27			PATNA	IND	85E13 25N37	A20	20	15.1				A	115	3	0300—0900	25
28			UDIPI	IND	74E44 13N27	A20	20	15.1				A	140	3	0000—2400	
29			ENDEH	INS	121E40 08S51	A18	2	3.4				A	69	5	2100—1600	
30			TJIREBON	INS	108E34 06S45	A18	10	10.4				A	69	5	2200—1700	
31			MIANEH	IRN	47E42 37N27	A20	10	10.4				A	69	3	0300—1400	
32			BET HILEL	ISR	35E36 33N12	D 9	1	0.4				A	45	4	0000—2400	33
33			SENDAI	J	140E55 38N16	A15	10	12.1				A	138	4	0000—2400	
34			CHUNG JU	KOR	127E55 36N59	C10	10	10.6				A	100	6	0000—2400	
35			PT SANTO 1	MDR	16W20 33N04	A20	1	0.4				A	60	4	0000—2400	
36			GRIK	MLA	101E08 05N23	A20	20	15.1				A	150	5	2200—1700	
37			IKORODU	NIG	03E34 06N34	C 9	20	13.4				A	70	4	0500—2300	
38			CHITRAL	PAK	72E00 35N50	A20	10	10.4				A	70	4	0000—2000	
39			CALBAYOG SAMAR	PHL	124E35 12N04	C 9	5	7.6				A	85	3	2100—1600	
40			COTABATO CITY	PHL	124E14 07N12	C 9	5	7.6				A	85	3	2100—1600	
41			DAGUPAN CITY	PHL	120E20 16N02	C 9	5	7.6				A	85	3	2100—1600	
42			DIOURBEL	SEN	16W15 14N40	C 9	20	13.6				A	100	4	0600—2400	
43			SINGIDA	TGK	34E48 04S50	C 9	20	15.1				A	138	4	0300—2100	
44			BANGKOK	THA	100E30 13N44	A20	2	3.0				A	30	2	0000—2400	
45			KRASNODAR	URS	39E07 45N01	A16	300	24.8				A	190	4	0000—2400	
46			PERM	URS	56E18 57N59	C10	50	17.0				A	190	4	0000—2400	
47			NOVI SAD	YUG	19E48 45N30	D 9	50	19.1				A	145	2	0800—1500	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1098		OUARGLA	ALG	05E25 31N56	D 9	40	16.4				A	70	5	0600–2400	24
2	(64)		ABHA	ARS	42E30 18N15	C 9	20	15.1				A	120	4	0000–2400	24
3			NAJMAH	ARS	50E04 26N42	A20	0.1	−10.0				A	24	4	0100–2400	24
4			LAUNCESTON TAS	AUS	147E04 41S23	A20	5	7.4				A	55	4	0000–2400	
5			LONGREACH QLD	AUS	144E13 23S23	A20	5	7.4				A	58	2	1900–1400	
6			MERREDIN WA	AUS	118E12 31S30	A20	5	7.4				A	69	2	1900–1400	
7			TANGAIL	BGD	89E26 24N14	A20	10	12.1				A	122	3	0000–1800	
8			BUKIT PUAN	BRU	114E27 04N32	A20	10	10.0				A	24	4	2200–1500	
9		S	ABGANAR QI	CHN	116E08 43N56	A20	20	13.4				A	70	4	2000–1800	
10		S	BAOTOU	CHN	109E56 40N40	A20	50	17.4				A	70	4	2000–1800	
11		S	DONG UJUMQIN	CHN	116E56 45N30	A20	10	10.4				A	70	4	2000–1800	
12			MAOMING	CHN	110E51 21N56	A20	5	7.4				A	70	4	2000–1800	
13		S	OTOG QI	CHN	107E59 39N06	A20	20	13.4				A	70	4	2000–1800	
14		S	QOG QI	CHN	106E58 41N28	A20	10	10.4				A	70	4	2000–1800	
15			XIAMEN	CHN	118E18 24N24	A20	10	10.4				A	70	4	2000–1800	
16			MAROUA	CME	14E18 10N50	C 9	30	16.9				A	136	4	0500–2300	
17			S CRUZ DEPALMA	CNR	17W45 28N40	A20	5	7.4				A	40	5	0000–2400	
18			ZAGNANADO	DAH	02E19 07N14	C10	5	7.6				A	94	4	0500–2400	
19			BOLOGNA	I	11E31 44N31	D 9	60	19.9				A	135	3	0400–1700	7
20			GOALPARA	IND	90E40 26N13	A20	100	22.1				A	135	3	0300–0900	25
21			ROHTAK	IND	76E27 28N56	A20	300	26.9				A	130	3	0300–0900	25
22			VIJAYAWADA	IND	80E39 16N31	A20	20	15.1				A	120	3	0300–1000	25
23			DJAMBI	INS	103E39 01S36	A18	10	10.4				A	68	3	2200–1700	
24			SUMENEP	INS	113E51 07S01	A18	10	10.6				A	105	6	2200–1700	
25			ZABOL	IRN	61E29 31N02	A20	200	25.0	90	220–320		B		4	0200–2100	
26			BEER SHEVA	ISR	34E32 31N14	D 9	20	13.0				A	30	3	0000–2400	33
27			INA	J	137E59 35N50	A15	0.1	−9.4				A	85	5	0000–2400	
28			KORIYAMA	J	140E22 37N23	A15	1	0.4				A	62	5	0000–2400	
29			MIYAZAKI	J	131E26 31N56	A15	5	7.6				A	102	4	0000–2400	
30			NAGANO	J	138E13 36N40	A15	5	7.6				A	100	5	0000–2400	
31		S	OITA	J	131E41 33N25	A15	5	7.4				A	70	5	0000–2400	
32		S	SAEKI	J	131E55 32N58	A20	0.1	−9.6				A	50	5	0000–2400	
33			SASEBO	J	129E45 33N09	A15	1	0.4				A	44	5	0000–2400	
34			SHIMABARA	J	130E22 32N46	A15	0.1	−9.6				A	47	5	0000–2400	
35			TSURUOKA	J	139E51 38N45	A15	1	0.4				A	68	5	0000–2400	
36			CHINJU	KOR	128E04 35N11	C10	20					B		4	0000–2400	
37			TO SAN	KRE	126E02 38N18	A16	1	0.0				A	30		2000–1800	
38			MOPTI	MLI	04W11 14N29	C 9	30	16.9				A	136		0600–2400	
39			MAJURO	MRL	171E23 07N06	C10	10	10.4				A	64	2	1800–1200	
40			TIEBAGHI 2	NCL	164E13 20S28	A20	10	14.0	60	190–270	0.0	B		3	0000–2400	
41			CHRISTCHURCH	NZL	172E49 43S42	A20	10	12.1				A	120	4	0000–2400	
42			HYDERABAD	PAK	68E16 25N25	A20	10	12.1				A	121	3	0000–2000	
43			MANDALU RIZAL	PHL	121E03 14N35	C 9	10	10.6				A	85	3	2000–1600	
44			BRATISLAVA	TCH	17E44 48N31	C 9	1500	35.2				A	160	5	0000–2400	
45			NAKHON SAWAN	THA	100E07 15N12	A20	50	17.4				A	74	2	0000–2400	
46			SONGKHLA	THA	100E30 07N00	A20	10	10.4				A	66	3	0000–2400	
47			KOTIDO	UGA	34E06 03N00	C 9	10	10.6				A	105	4	0300–2100	
48			ALMA ATA	URS	77E00 43N17	A16	150	21.8				A	190	4	0000–2400	
49			KRASNOGORSK	URS	142E18 48N27	A18	50	17.0				A	190	4	0000–2400	
50			VOLOGDA	URS	40E00 59N12	A18	5	7.0				A	190	4	0000–2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation; Azimuths defining the sector of limited radiation; Maximum radiation in the sector (dB)		Antenna: Type	Height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1107		KABOUL	AFG	69E12 34N31	C 9	1000	33.0	270	30—150	24.0	B		4	0100—2000	
2	(65)		SYDNEY NSW	AUS	151E04 33S51	A20	5	9.1				A	144	4	0000—2400	
3		S	MOGHILEV	BLR	30E17 53N55	A16	100	25.0	100	180—250	10.0	B		4	0000—2400	
4		S	AKSU	CHN	80E19 41N03	A20	10	10.4				A	70	4	2000—1800	
5		S	ALTAY	CHN	88E18 47N50	A20	10	10.4				A	70	4	2000—1800	
6		S	BOLE	CHN	82E08 44N54	A20	10	10.4				A	70	4	2000—1800	
7		S	CHANGLING	CHN	123E59 44N16	A20	10	10.4				A	70	4	2000—1800	
8		S	DAAN	CHN	124E18 45N30	A20	20	13.4				A	70	4	2000—1800	
9		S	HAMI	CHN	93E20 42N50	A20	10	10.6				A	90	4	2000—1800	
10		S	HORQIN YZH QI	CHN	121E24 45N07	A20	20	13.4				A	70	4	2000—1800	
11		S	HUNCHUN	CHN	130E21 42N52	A20	10	10.4				A	70	4	2000—1800	
12		S	HUNJIANG	CHN	126E23 41N54	A20	100	20.0	310	80—180	14.0	B		4	2000—1800	
13		S	JILIN SHI	CHN	126E30 43N48	A20	20	13.4				A	70	4	2000—1800	
14		S	KARAMAY	CHN	85E00 45N32	A20	10	10.4				A	70	4	2000—1800	
15		S	KORLA	CHN	86E10 41N44	A20	10	10.6				A	90	4	2000—1800	
16		S	SIPING	CHN	124E20 43N10	A20	10	10.4				A	70	4	2000—1800	
17		S	TONGLIAO SHI	CHN	122E13 43N40	A20	50	17.4				A	70	4	2000—1800	
18		S	YECHENG	CHN	77E22 37N55	A20	20	13.4				A	70	4	2000—1800	
19			DOUALA	CME	09E47 04N04	C 9	100	22.1				A	135	5	0500—2300	
20			ZANAGA	COG	13E50 02S49	A20	20	13.6				A	81	5	0000—2400	
21		S	BERLIN 2	D	13E17 52N27	D 9	10	12.1				A	122	4	0000—2400	11/USA
22		S	GRAFENWOEHR	D	11E57 49N43	D 9	10	10.4				A	65	4	0000—2400	
23		S	KAISERSLAUTERN	D	07E43 49N30	D 9	10	12.1				A	131	4	0000—2400	
24		S	MUENCHEN ISMAN	D	11E45 48N15	D 9	40	16.0				A	200	4	0000—2400	18/YUG
25		S	NUERNBERG	D	10E59 49N27	D 9	10	12.1				A	122	4	0000—2400	
26		S	CABRA	E	04W30 37N30	D 9	5	7.4				A	60	4	0000—2400	19
27		S	CADIZ	E	06W20 36N30	D 9	5	7.4				A	60	3	0000—2400	19
28		S	LEON	E	05W35 42N35	D 9	5	7.4				A	60	4	0000—2400	19
29		S	LOGRONO	E	02W25 42N30	D 9	5	7.4				A	60	4	0000—2400	19
30		S	MADRID	E	03W50 40N30	D 9	25	14.4				A	60	4	0000—2400	19
31		S	MOTRIL	E	03W30 36N40	D 9	5	7.4				A	60	5	0000—2400	19
32		S	PLASENCIA	E	06W10 40N00	D 9	5	7.4				A	60	5	0000—2400	19
33		S	PONTEVEDRA	E	09W20 42N25	D 9	5	7.4				A	60	5	0000—2400	19
34		S	TERUEL	E	01W10 40N20	D 9	5	7.4				A	60	5	0000—2400	19
35		S	VILLANUEVA GEL	E	01E40 41N15	D 9	5	7.4				A	60	5	0000—2400	19
36		S	YECLA	E	01W10 38N40	D 9	5	7.4				A	60	4	0000—2400	19
37			BATRA	EGY	31E27 31N09	D 9	600	35.0	90			B		3	0000—2400	24
38			BRISTOL	G	02W28 51N29	A20	0.3	−1.0	225			B		4	0000—2400	
39			LEEDS	G	01W38 53N46	A20	1	0.4				A	38	3	0000—2400	
40			DHANBAD	IND	86E24 23N48	A20	300	26.9				A	135	3	0300—0900	25
41			GULBARGA	IND	76E54 17N19	A20	300	26.9				A	135	3	0000—2400	
42			PALGHAT	IND	76E42 10N48	A20	300	26.9				A	135	4	0300—1000	25
43			JOGJAKARTA	INS	110E24 07S48	A18	10	10.4				A	68	5	2200—1700	
44			KUPANG	INS	123E38 10S13	A18	5	7.4				A	67	7	2100—1600	
45			MAHABAD	IRN	45E43 36N46	A20	10	10.4				A	68	3	0300—1400	
46			HIKONE	J	136E15 35N15	A15	1	0.4				A	67	5	0000—2400	
47			KAGOSHIMA	J	130E35 31N39	A15	5	9.0	150			B		4	0000—2400	
48			KANAZAWA	J	136E37 36N32	A15	5	10.0	30			B		4	0000—2400	
49			KANNONJI	J	133E39 34N07	A15	0.1	−9.6				A	67	5	0000—2400	
50			MERU	KEN	37E37 00N05	C 9	100	20.6				A	100	4	0000—2400	
51			POHANG	KOR	129E13 35N55	C10	10	10.6				A	105	4	0000—2400	
52			RAGRIM	KRE	127E12 40N57	A16	5	7.4				A	50		2000—1800	16
53			TEMERLOH	MLA	102E32 03N31	A20	20	13.6				A	100	5	0000—2400	
54			KIFFA	MTN	11W23 16N36	B20	20	15.1				A	136		0600—2400	24

Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

1107 KHZ (65)

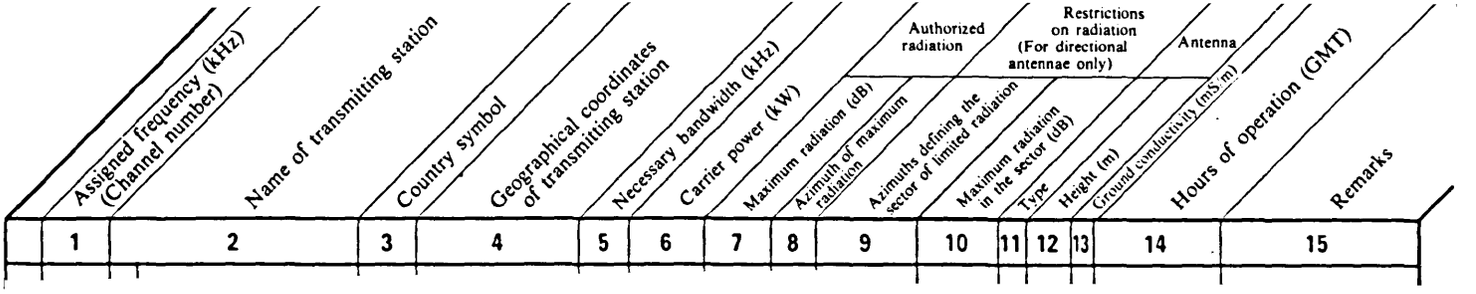
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1107	NKHOTA KOTA	MWI	34E18 12S57	A20	1	0.6				A	92	3	0200—2300	
2	(65)	OWERRI	NIG	07E15 05N25	C 9	10	10.6				A	94	4	0500—2300	
3		DAVAO CITY	PHL	125E35 07N05	C 9	1	0.6				A	84	3	2100—1600	
4		ILOILO CITY	PHL	122E29 10N42	C 9	1	0.6				A	84	3	2100—1600	
5		S KAVIENG	PNG	150E48 02S25	B10	10	10.6				A	80	3	1900—1300	
6		S NAMATANAI	PNG	152E27 03S40	B10	2	3.0				A	30	4	1900—1300	
7		CHON BURI	THA	100E53 12N39	A20	10	10.4				A	62	2	0000—2400	
8		DUBAI	UAE	55E16 25N14	C 9	10	10.4				A	60	5	0200—2100	24
9		ARKHANGHELSK	URS	40E12 64N33	A16	100	20.0				A	190	5	0000—2400	
10		S CHAULIAI	URS	23E15 55N56	A18	25	14.0				A	190	4	0000—2400	
11		S KAUNAS	URS	23E40 55N31	A16	150	26.0	60	140—210	11.0	B		4	0000—2400	
12		S KLAIPEDA	URS	21E06 55N44	A18	25	14.0				A	190	4	0000—2400	
13		NALTCHIK	URS	43E35 43N28	A16	35	15.4				A	190	4	0000—2400	
14		S TIURI	URS	24E43 58N28	A18	75	18.8				A	190	4	0000—2400	
15		NOVI SAD	YUG	20E35 45N22	D 9	150	24.8	140	0— 60	11.8	B		2	0000—2400	18/D
16		NOVI SAD	YUG	20E35 45N22	D 9	150	24.8	280	190—230	22.8	B				

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

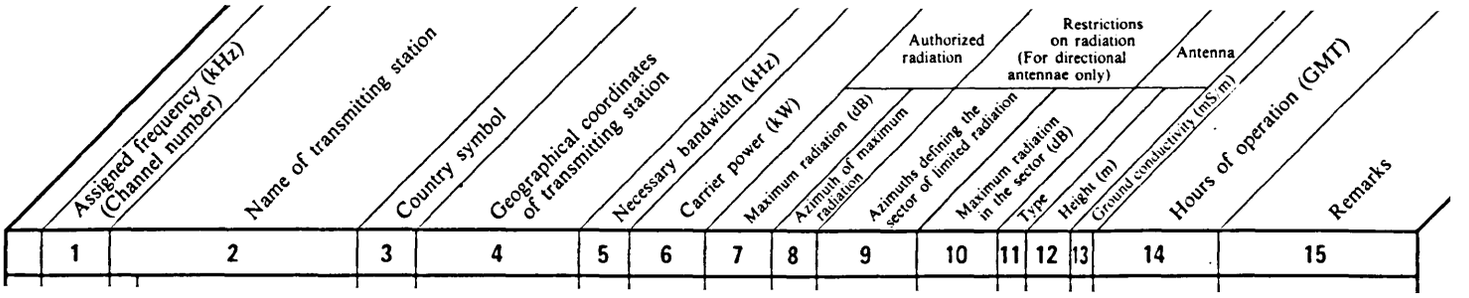
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1116		S SALVADOR	AGL	14E00 06S20	A20	5	7.4				A	66	3	0000—2400	
2	(66)		SHAQRA	ARS	45E10 25N15	C 9	20	15.1				A	120	4	0000—2400	
3			BRISBANE QLD	AUS	152E58 27S32	A20	5					B		3	0000—2400	
4			MELBOURNE VIC	AUS	145E00 38S00	A20	5	7.4				A		2	0000—2400	
5			S CRUZ 1	AZR	28W01 39N03	A20	1	0.4				A	60	4	0000—2400	
6			GITEGA	BDI	29E30 03S25	C 9	300	26.9				A	134	4	0300—2400	
7		S	ANTU	CHN	128E22 42N33	A20	100	22.1				A	140	4	2000—1800	
8		S	BARKAM	CHN	102E27 31N42	A20	10	10.4				A	70	4	2000—1800	
9		S	CHONGQING	CHN	106E30 29N45	A20	50	17.4				A	70	4	2000—1800	
10		S	DEGE	CHN	98E37 31N46	A20	10	10.4				A	70	4	2000—1800	
11		S	DEQING	CHN	111E46 23N09	A20	20	13.4				A	70	4	2000—1800	
12		S	DUKOU	CHN	101E43 26N35	A20	10	10.4				A	70	4	2000—1800	
13		S	HORQIN YQ QI	CHN	122E04 46N04	A20	100	22.1				A	140	4	2000—1800	
14		S	JIANGMEN	CHN	113E07 22N32	A20	30	15.2				A	70	4	2000—1800	
15		S	MEI XIAN	CHN	116E00 24N20	A20	100	22.1				A	140	4	2000—1800	
16		S	WANXIAN SHI	CHN	108E33 30N52	A20	40	16.4				A	70	4	2000—1800	
17		S	YA XIAN	CHN	109E28 18N17	A20	50	17.4				A	70	4	2000—1800	
18		S	YAAN	CHN	103E01 29N59	A20	10	10.4				A	70	4	2000—1800	
19		S	YAJIANG	CHN	100E57 30N05	A20	10	10.4				A	70	4	2000—1800	
20		S	YIBIN SHI	CHN	104E37 28N46	A20	10	10.4				A	70	4	2000—1800	
21		S	YOUYANG	CHN	108E46 28N51	A20	20	13.4				A	70	4	2000—1800	
22			PERKARA	CLN	81E10 08N44	C10	400	29.0	350			B		3	0000—1800	
23			KORHOGO	CTI	05W39 09N27	C 9	100	22.1				A		7	0600—2400	
24			ASMARA	ETH	38E56 15N21	C 9	10	10.4				A	67	3	0400—2100	
25			DERBY	G	01W25 52N52	A20	0.5	−3.0				A	33	3	0000—2400	
26			LES TOUILLETS	G	02W35 49N28	A20	0.5	−2.4				A	78	4	0000—2400	
27			KOULAMOUTOU	GAB	12E26 01S14	C 9	10	12.1				A		5	0400—2400	
28			ERMOUPOLIS	GRC	26E16 35N17	C 9	300	26.9				A	134	5	0400—2400	
29		S	AOSTA	I	07E18 45N42	D 9	10	10.6				A	95	5	0000—2400	
30		S	BARI	I	16E52 41N04	D 9	250	26.1				A	135	4	0000—2400	
31		S	BOLOGNA	I	11E31 44N31	D 9	60	19.9				A	135	3	0000—2400	
32		S	BOLZANO	I	11E20 46N30	D 9	10	10.4				A	62	5	0000—2400	
33		S	CAGLIARI	I	09E04 39N17	D 9	10	10.4				A	67	3	0000—2400	
34		S	FROSINONE	I	13E22 41N39	D 9	10	10.4				A	67	5	0000—2400	
35		S	REGGIO CALABR	I	15E39 38N06	D 9	1	0.4				A	50	5	0000—2400	
36		S	RIETI	I	12E54 42N25	D 9	10	10.4				A	67	5	0000—2400	
37		S	S REMO	I	07E47 43N49	D 9	5	7.4				A	75	5	0000—2400	
38			MATHURA	IND	77E40 27N30	A20	300	26.9				A	135	3	0300—0900	25
39			SRINAGAR	IND	74E49 34N04	A20	200	25.1				A	135	3	0000—2400	
40			TURA	IND	90E12 25N36	A20	300	26.9				A	145	3	0300—0900	25
41			BIAK	INS	136E04 01S11	A18	10	10.6				A	100	5	2000—1500	
42			PAKANBARU	INS	101E30 00N33	A18	10	10.4				A	68	4	2200—1700	
43			BANDAR LENGEH	IRN	54E50 26N35	A20	125	21.4				A	71	3	0200—2100	
44			HAMADA	J	132E03 34N52	A15	0.1	−9.6				A	68	5	0000—2400	
45		S	IMABARI	J	133E01 34N03	A15	0.1	−9.6				A	50	5	0000—2400	
46		S	MATSUYAMA	J	132E47 33N48	A15	5	8.0	235			B		5	0000—2400	
47			NIIGATA	J	139E06 37N53	A15	5	13.0	90			B		4	0000—2400	
48		S	YAWATAHAMA	J	132E27 33N28	A15	0.1	−9.6				A	50	5	0000—2400	
49			SAMCHEOG	KOR	129E16 37N25	C10	1	0.4				A	60	6	0000—2400	
50			OUARZAZATE	MRC	06W50 30N55	A18	100	20.4				A	70	5	0500—2400	
51			TANGER	MRC	05W50 35N45	A18	1	0.0				A	25	5	0500—2400	
52			NELSON	NZL	173E13 41S20	A20	2	3.4				A	50	5	0000—2400	
53			BATACILOCOS	PHL	120E33 18N03	C 9	5	7.6				A	83	3	2100—1600	
54			LOS BANOS LAG	PHL	121E14 14N09	C 9	5	7.6				A	83	3	2100—1600	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

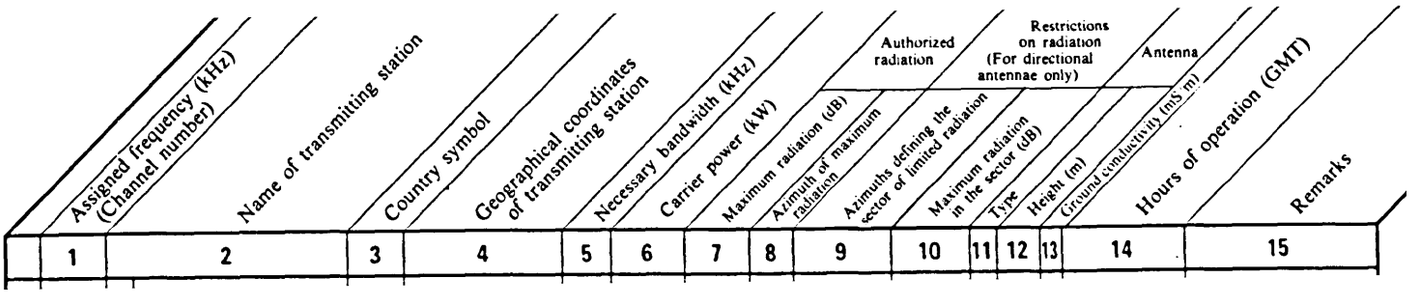
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1116	TAG BOHOL	PHL	123E51 09N38	C 9	1	0.6				A	83	3	2100—1600	
2	(66)	ISHIGAKI	RYU	124E08 24N22	A15	1	0.4				A	70	5	0000—2400	
3		LEONE	SMA	170W47 14S22	C10	10	10.4				A	58	2	1700—1100	
4		IRIBA	TCD	22E14 15N08	C 9	1	0.4				A			0400—2300	
5		SAMUT SAKHON	THA	100E20 13N40	A20	20	13.4				A	67	2	0000—2400	
6		KALININGRAD	URS	20E30 54N45	A16	30	14.8				A	190	4	0000—2400	
7		KHANTYMANSIISK	URS	69E03 60N57	A16	50	17.0				A	190	4	0000—2400	
8		MOSKVA	URS	38E23 55N50	A18	5	7.0				A	190	4	0000—2400	
9		SOTCHI	URS	39E23 43N35	A16	30	14.8				A	190	4	0000—2400	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1125	CARNARVON WA	AUS	113E40 24S50	A20	10	12.1				A		2	2100—1600	
2	(67)	COBAR NSW	AUS	146E00 31S30	A20	5	7.4				A		3	0000—2400	
3		EHRWALD TIROL	AUT	10E55 47N24	D 9	0.1	—10.0				A	15	6	0000—2400	
4		EISENERZ	AUT	14E54 47N33	D 9	0.1	—10.0				A	15	6	0000—2400	
5		GMUEND KAERNT	AUT	13E31 46N55	D 9	0.1	—10.0				A	15	6	0000—2400	
6		KUFSTEIN	AUT	12E11 47N35	D 9	0.1	—10.0				A	15	6	0000—2400	
7		HOUDENG	BEL	04E08 50N29	D 9	150	21.0	310	110—150	18.0	B		4	0000—2400	
8		STARA ZAGORA	BUL	25E34 42N40	C 9	500	32.0	165			B		4	0000—2400	
9	S	HANDAN SHI	CHN	114E28 36N36	A20	20	13.4				A	70	4	2000—1800	
10	S	HENGSHUI	CHN	115E42 37N44	A20	20	13.4				A	70	4	2000—1800	
11	S	HUAILAI	CHN	115E31 40N23	A20	20	13.4				A	70	4	2000—1800	
12	S	LONGHUA	CHN	117E43 41N19	A20	20	13.4				A	70	4	2000—1800	
13	S	TANGSHAN	CHN	118E13 39N38	A20	100	22.1				A	140	4	2000—1800	
14		PERKARA	CLN	81E10 08N44	C10	400	29.0	350			B		3	0000—1800	
15		C GRECO	CYP	34E04 34N57	C 9	250	30.0	200			B		4	0000—2400	
16		GANGTOK	IND	88E40 27N20	A20	100	23.4				A	150	4	0000—2400	
17		KOZHIKODE	IND	75E50 11N15	A20	300	26.9				A	135	4	0300—1000	25
18		TAWANG	IND	91E54 27N36	A20	300	26.9				A	135	4	0300—0900	25
19		UDAIPUR	IND	73E47 24N30	A20	20	15.1				A	125	3	0000—2400	
20		PALU	INS	119E53 00S54	A18	5	7.4				A	64	6	2100—1600	
21		MURORAN	J	140E59 42N19	A15	1	0.6				A	107	5	0000—2400	
22		NAYORO	J	142E28 44N22	A15	1	0.4				A	67	5	0000—2400	
23		OBIHIRO	J	143E12 42N59	A15	1	0.6				A	108	4	0000—2400	
24		TAKAYAMA	J	137E15 36N08	A15	1	0.4				A	67	5	0000—2400	
25		TOTTORI	J	134E12 35N31	A15	1	0.6				A	108	5	0000—2400	
26		MARSABIT	KEN	38E00 02N20	C 9	5	9.1				A	130	4	0000—2400	
27		JANGHEUNG	KOR	126E54 34N40	C10	10	12.1				A	120	4	0000—2400	
28		HOERYONG	KRE	129E36 40N41	A16	2	3.0				A	30		2000—1800	
29		EL BEIDA	LBY	21E45 32N45	D 9	500	33.0	125	280—330	20.0	B		4	0400—2400	24
30		FT DAUPHIN	MDG	46E58 25S00	C 9	5	9.1				A	125	4	0300—2000	
31		NOSY BE	MDG	48E20 13S25	C 9	5	7.0				A	238	4	0300—2000	
32		PT MONIZ 1	MDR	16W11 32N50	A20	1	0.4				A	60	4	0000—2400	
33		TANTAN	MRC	10W51 28N27	A12	25	14.6				A	100	5	0600—2400	24
34		ROSSO	MTN	15W50 16N32	B20	20	13.6				A	94		0600—2400	24
35		NIAMEY	NGR	02E00 13N30	C 9	100	23.4				A	150	4	0000—2400	18/NIG
36		SANTO 1	NHB	167E15 15S30	A20	20	13.4				A	50	1	0000—2400	
37		JATTU	NIG	06E17 07N05	C 9	100	20.4				A	74	4	0500—2300	18/NGR
38		WAIPAWA	NZL	176E36 39S48	A20	1	0.4				A	50	4	0000—2400	
39		DAGUPAN CITY	PHL	120E20 16N02	C 9	5	7.6				A	83	3	2100—1600	
40		JOLO SULU	PHL	121E00 06N02	C 9	1	0.4				A	65	3	2100—1600	
41		MASBATE MAS	PHL	123E37 12N21	C 9	1	0.6				A	83	3	2100—1600	
42		NAHA	RYU	127E42 26N10	A15	10	10.6				A	107	4	0000—2400	
43		GAROWE	SOM	48E30 08N20	A18	10	10.4				A	67	4	0300—2100	
44		CHANDHABURI	THA	102E06 12N36	A20	50	17.6				A	80	3	0000—2400	
45		MOROTO	UGA	34E39 02N30	C 9	10	10.4				A	65	5	0300—2100	
46		EROFEI PAVLOVI	URS	121E57 54N00	A18	50	17.6				A	75	4	0000—2400	
47		MARY	URS	61E50 37N35	A18	50	17.0				A	190	4	0000—2400	
48		VYBORG	URS	28E46 60N42	A16	150	21.8				A	190	4	0000—2400	
49	S	PAZIN	YUG	13E56 45N15	D 9	200	23.0	130	290—330	13.0	B		4	0000—2400	
50	S	PODRAVSLATINA	YUG	17E44 45N45	D 9	100	20.0	160	310— 10	5.0	B		3	0000—2400	
51	S	STON	YUG	17E44 42N50	D 9	100	22.0				A	100	4	0000—2400	
52		SOLWEZI	ZMB	26E25 12S10	A20	10	12.1				A	134	4	0200—2100	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1134		N GIVA	AGL	15E45 17S05	A20	5	7.4				A	66	3	0000—2400	
2	(68)		ARMIDALE NSW	AUS	151E36 30S33	A20	5					B		4	1900—1400	
3			COLAC VIC	AUS	143E32 38S19	A20	5					B		2	1900—1400	
4			COLLIE WA	AUS	116E11 33S22	A20	5	7.4				A	57	5	1900—1400	
5		S	CHUNAN	CHN	118E58 29N36	A20	20	13.4				A	70	4	2000—1800	
6		S	DINGHAI	CHN	122E06 30N01	A20	10	10.4				A	70	4	2000—1800	
7		S	LINHAI	CHN	121E07 28N51	A20	50	17.4				A	70	4	2000—1800	
8		S	LONGQUAN	CHN	119E07 28N04	A20	10	10.4				A	70	4	2000—1800	
9		S	SHAOXING	CHN	120E34 30N00	A20	20	13.4				A	70	4	2000—1800	
10		S	WUXING	CHN	120E07 30N51	A20	10	10.4				A	70	4	2000—1800	
11			ZHANJIANG	CHN	110E24 21N12	A20	10	10.4				A	70	4	2000—1800	
12			FOUMBAN	CME	11E00 05N48	C 9	10	12.1				A	132	4	0500—2300	
13		S	ALBACETE	E	01W50 39N00	D 9	5	7.4				A	60	4	0000—2400	19
14		S	BADALONA	E	02E15 41N25	D 9	5	7.4				A	60	5	0000—2400	19
15		S	GRANADA	E	03W35 37N10	D 9	5	7.4				A	60	4	0000—2400	19
16		S	GUADALAJARA	E	03W10 40N35	D 9	5	7.4				A	60	4	0000—2400	19
17		S	IBIZA	E	01E30 38N50	D 9	5	7.4				A	60	4	0000—2400	19
18		S	LUGO	E	07W35 43N00	D 9	5	7.4				A	60	5	0000—2400	19
19		S	PAMPLONA	E	01W40 42N50	D 9	5	7.4				A	60	5	0000—2400	19
20		S	PUERTOLLANO	E	04W10 38N40	D 9	5	7.4				A	60	4	0000—2400	19
21		S	SEVILLA	E	06W00 37N20	D 9	25	14.4				A	60	3	0000—2400	19
22		S	TORTOSA	E	00E30 40N50	D 9	5	7.4				A	60	4	0000—2400	19
23			CALCUTTA	IND	88E21 23N01	A20	1000	33.4				A	152	3	0900—0300	
24			HISSAR	IND	75E48 29N00	A20	300	26.9				A	135	3	0300—0900	25
25			BANDJARMASIN	INS	114E33 03S22	A18	50	19.1				A	132	4	2100—1600	
26			BOJNURD	IRN	57E18 37N25	A20	20	13.6				A	81	3	0200—2100	
27			MIZPE RAMON	ISR	34E48 30N46	D 9	10	12.1				A		3	0000—2400	33
28			TOKYO	J	139E46 35N50	A15	100	22.1				A	137	4	0000—2400	
29			NAKURU	KEN	36E05 00S07	C 9	20	13.6				A	100	4	0000—2400	
30			KIMPO	KOR	126E35 37N35	C10	100	20.4	155	240— 70	9.0	B		5	2100—0800	7
31			KIMPO	KOR	126E35 37N35	C10	50	17.4	155	240— 70	9.0	B		5	0800—2100	
32			SULAIBIYA	KWT	47E53 29N16	A20	750	35.0	170	230—110	26.0	B		8	0000—2400	24
33			SAN	MLI	04W54 13N18	C 9	10	12.1				A	132		0600—2400	
34			TSETSERLIG	MNG	101E10 47N30	A18	5	9.1				A	120	5	2200—1500	
35			NAMPULA	MOZ	39E16 15S06	C10	50	17.4				A	66	4	0400—2200	
36			OGOJA	NIG	08E48 06N40	C 9	10	10.6				A	80	4	0500—2300	
37			QUEENSTOWN	NZL	168E41 45S03	A20	5	7.4				A	50	6	0000—2400	
38			KHOZDAR	PAK	66E30 27N28	A20	100	20.4				A	66	4	0000—2000	
39			BALABAC PALAW	PHL	117E04 07N53	C 9	1	0.6				A	82	3	2100—1600	
40			MALAYBALAY BUK	PHL	125E07 08N06	C 9	5	7.6				A	82	3	2100—1600	
41			MANILA	PHL	120E57 14N38	C 9	10	10.6				A	82	3	2100—1600	
42			MARINDUQUE	PHL	122E00 13N30	C 9	1	0.6				A	82	3	2100—1600	
43			LAMPANG	THA	99E29 18N17	A20	10	10.4				A	60	5	0000—2400	
44			DJES KAZGAN	URS	67E30 47N30	A16	25	14.0				A	190	4	0000—2400	
45			TROITSKOE	URS	136E34 49N30	A18	50	17.0				A	190	4	0000—2400	
46		S	BIOGRAD NM	YUG	15E31 43N57	D 9	1200	35.8	135			B		4	0000—2400	
47		S	BIOGRAD NM	YUG	15E31 43N57	D 9	1200	35.8	315			B				
48		S	DEANOVAC	YUG	16E29 45N42	D 9	150	23.9				A	140	3	0000—2400	
49		S	TOVARNIK	YUG	19E09 45N11	D 9	300	26.9				A	140	3	0000—2400	



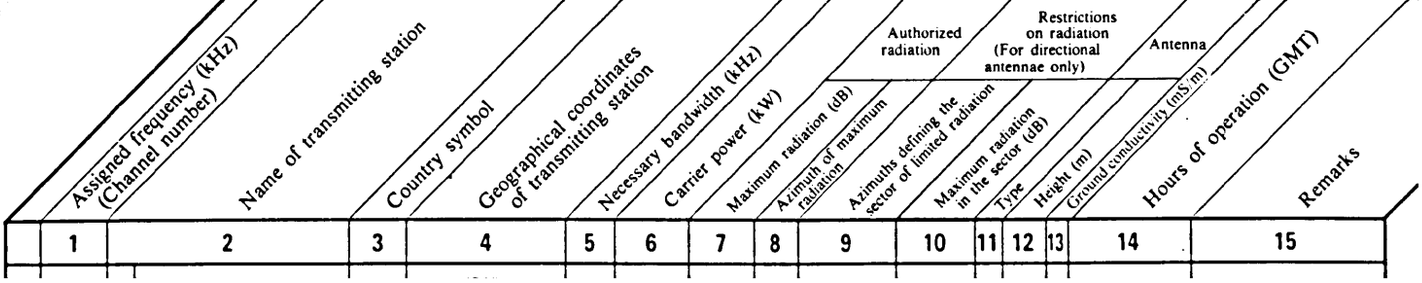
	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1143		GJIROKASTRA	ALB	20E10	40N04	A20	20	15.1				A	132	5	0400—2300	(24)
2	(69)		LES TREMBLES	ALG	00W37	35N41	D 9	40	18.1				A	130	4	0600—2400	24
3			NEWCASTLE NSW	AUS	151E42	32S52	A20	5	7.4				A	65	3	0000—2400	
4			ABTENAU	AUT	13E21	47N34	D 9	0.1	−10.0				A	15	6	0000—2400	
5			LANDECK	AUT	10E33	47N08	D 9	0.1	−10.0				A	15	6	0000—2400	
6			SCHEIFLING	AUT	14E25	47N09	D 9	0.1	−10.0				A	15	6	0000—2400	
7			ZWETTL	AUT	15E10	48N36	D 9	0.1	−10.0				A	15	6	0000—2400	
8			SYLHET	BGD	92E00	25N00	A20	10	10.4				A	67	3	0000—1800	
9			DONGSHENG	CHN	110E00	39N49	A20	10	10.4				A	70	4	2000—1800	
10		S	JINGDONG	CHN	100E45	24N24	A20	50	17.4				A	70	5	2000—1800	
11		S	PUER	CHN	101E02	22N57	A20	50	17.4				A	70	5	2000—1800	
12		S	TENGCHONG	CHN	98E20	25N00	A20	50	18.0	120	250—280	11.0	B		5	2000—1800	
13		S	WENSHAN	CHN	104E15	23N22	A20	50	17.4				A	70	5	2000—1800	
14			BOUNDJI	COG	15E29	01S20	A20	5	7.4				A	66	9	0000—2400	
15		S	BAD KISSINGEN	D	10E05	50N13	D 9	0.3	−4.8				A	49	4	0000—2400	
16		S	BAMBERG	D	10E53	49N53	D 9	0.3	−4.8				A	40	4	0000—2400	
17		S	BITBURG EIFEL	D	06E32	49N56	D 9	0.3	−4.8				A	54	5	0000—2400	
18			BREMERHAVEN	D	08E34	53N34	D 9	5	7.4				A	65	3	0000—2400	
19		S	FULDA	D	09E40	50N33	D 9	0.3	−4.8				A	54	4	0000—2400	
20		S	GIESSEN	D	08E42	50N36	D 9	0.3	−4.8				A	61	4	0000—2400	
21		S	GOEPPINGEN	D	09E40	48N42	D 9	0.3	−4.8				A	37	4	0000—2400	
22		S	HEIDELBERG	D	08E39	49N26	D 9	1	0.4				A	65	4	0000—2400	
23		S	HERSFELD	D	09E44	50N52	D 9	0.3	−5.2				A	25	4	0000—2400	
24		S	HOF SAALE	D	11E54	50N19	D 9	1	0.4				A	45	4	0000—2400	
25		S	KARLSRUHE	D	08E26	49N02	D 9	1	0.4				A	61	4	0000—2400	
26		S	SCHWEINFURT	D	10E14	50N02	D 9	0.3	−4.8				A	40	4	0000—2400	
27		S	STUTTGART HIR	D	09E02	48N50	D 9	10	10.4				A	40	4	0000—2400	
28		S	ULM	D	09E59	48N26	D 9	1	0.4				A	40	4	0000—2400	
29		S	WERTHEIM	D	09E30	49N45	D 9	0.3	−4.8				A	45	4	0000—2400	
30		S	WILDFLECKEN	D	09E52	50N22	D 9	0.3	−4.8				A	45	4	0000—2400	
31		S	WUERZBURG	D	09E56	49N47	D 9	0.3	−4.8				A	40	4	0000—2400	
32		S	EL MINYA	EGY	30E33	28N07	D 9	20	13.6				A	100	3	0000—2400	18/TUR 24
33		S	IDFU	EGY	32E49	25N00	D 9	20	13.6				A	100	3	0000—2400	18/TUR 24
34		S	SOHAG	EGY	31E43	26N27	D 9	20	13.6				A	100	3	0000—2400	18/TUR 24
35			GORE	ETH	35E32	08N09	C 9	10	10.4				A	64	3	0400—2100	
36			TELIMELE	GUI	13W02	11N00	C 9	20	13.4				A	65	4	0000—2400	
37			DORI	HVO	00W01	14N02	A20	30	16.9				A	131	4	0000—2400	18/NIG
38			C VATICANO	I	15E51	38N37	D 9	65	21.6	220	70— 90	16.5	B		2	0000—2400	
39			C VATICANO	I	15E51	38N37	D 9	65	19.6	220	120—130	20.0	B				
40			C VATICANO	I	15E51	38N37	D 9	65	19.6	220	350— 20	16.5	B				
41			RATNAGIRI 1	IND	73E22	17N00	A20	300	26.9				A	130	3	0300—1000	25
42			RATNAGIRI 2	IND	73E22	17N00	A20	20	15.1				A	130	3	1000—0300	
43			ROHTAK	IND	76E27	28N56	A20	20	15.1				A	135	3	0000—2400	
44			WESTPORT	IRL	09W31	53N48	A20	50	17.6				A	75	4	0000—2400	
45			YASOJ	IRN	51E35	30N39	A20	20	13.6				A	83	3	0200—2100	
46			KYOTO	J	135E45	34N52	A15	20	15.1				A	141	5	0000—2400	
47			JEJU	KOR	126E46	33N33	C10	100	20.4	0	90—280	9.0	B		5	2100—0800	7
48			JEJU	KOR	126E46	33N33	C10	50	24.0	0	90—280	9.0	B		5	0800—2100	
49			NOSY VARIKA	MDG	48E24	20S40	C 9	5	9.1				A	131	4	0300—2000	
50			KUANTAN	MLA	103E21	03N48	A20	10	10.6				A	100	5	2200—1700	
51			KONTAGORA	NIG	05E28	10N24	C 9	10	10.6				A	100	4	0500—2300	18/HVO
52			WARRI	NIG	05E45	05N31	C 9	50	17.6				A	80	4	0500—2300	18/HVO
53			DHALKEBAR	NPL	86E02	26N58	A20	10	10.4				A	60	4	2200—1900	
54			HAMILTON	NZL	175E20	37S48	A20	2	3.4				A	50	3	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1143 KHZ (69)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1143		PORO LA UNION	PHL	120E17 16N37	D 9	1000	34.0	260	0— 40	17.0	B		3	1000—1600	
2	(69)		BANGKOK	THA	100E29 13N45	A20	25	14.4				A	48	2	0000—2400	
3		S	ADANA	TUR	35E20 36N59	D 9	100	22.1				A	130	4	0200—2300	18/EGY
4		S	MANAVGAT	TUR	31E26 37N47	D 9	100	22.1				A	131	4	0200—2300	18/EGY
5		S	MARDIN	TUR	40E44 37N19	D 9	100	22.1				A	130	4	0200—2300	18/EGY
6			DUCHANBE	URS	68E49 38N34	A16	150	21.8				A	190	4	0000—2400	
7			KALININGRAD	URS	20E35 54N43	A16	150	21.8				A	190	4	0000—2400	
8			TAICHET	URS	98E01 55N57	A18	50	17.0				A	190	4	0000—2400	
9			ULIANOVSK	URS	48E05 54N19	A16	100	20.0				A	190	4	0000—2400	
10		S	NOVA GRADISKA	YUG	17E15 45N11	D 9	100	22.0	25	170—250	17.0	B		3	0000—2400	
11		S	OTOCAC	YUG	15E15 44N52	D 9	20	13.4				A	65	4	0000—2400	
12			MBALA	ZMB	31E30 09S03	A20	10	12.1				A	132	4	0200—2100	

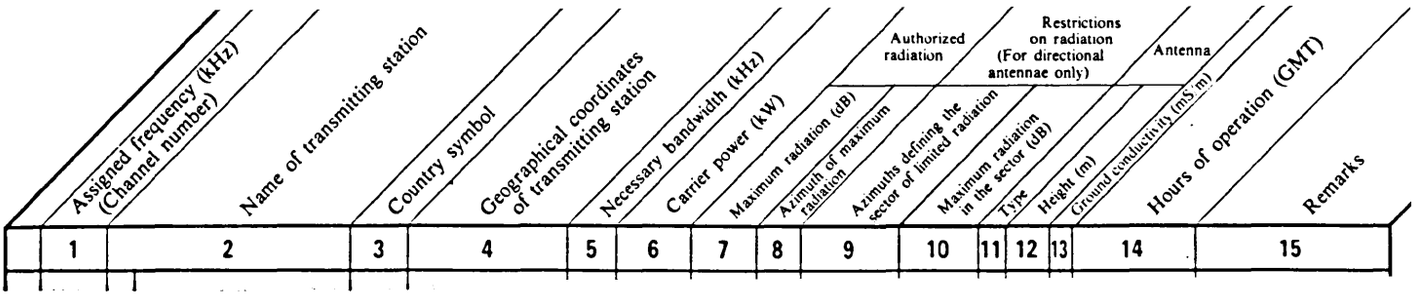
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1152		HAQL	ARS	34E55 29N20	C 9	20	15.1				A	120	4	0400—1400	24
2	(70)		WAGGAWAGGA NSW	AUS	147E25 35S02	A20	5	9.1				A	111	3	1900—1400	
3			HORTA	AZR	28W36 38N32	A20	1	0.4				A	60	4	0000—2400	
4			RANGOON	BRM	96E10 16N52	A20	1	0.4				A	62	3	1100—1500	
5		S	CHALING	CHN	113E33 26N48	A20	20	13.4				A	70	4	2000—1800	
6		S	CHANGDE SHI	CHN	111E42 29N02	A20	50	17.4				A	70	4	2000—1800	
7		S	JIANGHUA	CHN	111E46 24N57	A20	20	13.4				A	70	4	2000—1800	
8		S	LINGLING	CHN	111E37 26N13	A20	20	13.4				A	70	4	2000—1800	
9			LUDA	CHN	121E30 38N54	A20	5	7.4				A	70	4	2000—1800	
10		S	SHUANGFENG	CHN	112E11 27N27	A20	10	10.4				A	70	4	2000—1800	
11			TONGLIAO SHI	CHN	122E13 43N40	A20	50	17.0	230	10— 90	7.0	B		4	2000—1800	
12		S	XUPU	CHN	110E35 27N55	A20	20	13.4				A	70	4	2000—1800	
13			BAMENDA	CME	10E59 06N00	C 9	30	16.9				A	130	4	0500—2300	
14			LABASA	FJI	179E22 16S25	A20	2.5	4.0				A	30	3	1700—1200	
15			BIRMINGHAM	G	01W46 52N34	A20	1	8.0	215	290—291	—3.0	B		3	0000—2400	
16			GLASGOW	G	04W10 55N48	A20	2	7.0	315			B		4	0000—2400	
17			LONDON 1	G	00W14 51N39	A20	5.5	14.0	160	270—320	—8.0	B		3	0000—2400	
18			MANCHESTER	G	02W07 53N29	A20	1	6.0	250			B		3	0000—2400	
19			PLYMOUTH	G	04W08 50N24	A20	0.5	—2.6				A	34	5	0000—2400	
20			TYNESIDE	G	01W46 54N57	A20	1	4.0	70			B		3	0000—2400	
21			KAVARATHY I	IND	72E42 10N36	A20	20	15.1				A	130	3	0000—2400	
22			MYSORE	IND	76E42 12N18	A20	300	26.9				A	130	3	0300—1000	25
23			RANCHI 1	IND	85E23 23N23	A20	20	15.1				A	130	3	0300—0900	25
24			RANCHI 2	IND	85E23 23N23	A20	10	12.1				A	130	3	0900—0300	
25			TABRIZ	IRN	46E15 38N08	A20	100	22.1				A	131	2	0100—2200	
26			TIRAT ZEVI	ISR	35E30 32N29	D 9	10	12.1				A		3	0000—2400	33
27			KOCHI	J	133E36 33N34	A15	10	10.6				A	93	4	0000—2400	
28			KUSHIRO	J	144E25 42N59	A15	10	13.4				A	152	4	0000—2400	
29			NAIROBI	KEN	36E55 01S35	C 9	100	20.6				A	100	4	0000—2400	
30			KWANGJU	KOR	126E55 35N08	C10	0.3	—5.2				A	24	4	0000—2400	
31			WEONJU	KOR	127E57 37N21	C10	10	12.1				A	120	6	0000—2400	
32			HOCHON	KRE	128E36 40N41	A16	1	0.0				A	30		2000—1800	
33			VOINJAMA	LBR	09W45 08N25	A20	10	10.4				A	65	5	0500—2400	
34			KOBDO	MNG	91E48 48N10	A18	5	9.1				A	120	5	2200—1500	
35			MARRAKECH	MRC	07W59 31N37	A20	20	13.4				A	60	5	0600—2400	24
36			AKURE	NIG	05E12 07N15	C 9	50	17.6				A	80	4	0500—2300	
37			TIMARU	NZL	171E16 44S21	A20	5	7.4				A	50	4	0000—2400	
38			RAWALPINDI	PAK	73E06 33N37	A20	10	10.4				A	70	3	0000—2000	
39			TAG BOHOL	PHL	123E51 09N38	C 9	1	0.6				A	79	3	2100—1600	
40		S	CLUJ	ROU	23E37 46N47	A20	950	33.0	185	270—290	20.0	B		5	0000—2400	
41		S	CLUJ	ROU	23E37 46N47	A20	950	33.0	0	80—100	20.0	B				
42		S	TURNU SEVERIN	ROU	22E42 44N36	A20	50	17.4				A	60	5	0300—2300	
43			MIYAKO OKINAWA	RYU	125E17 24N47	A15	0.1	—10.0				A	30	5	0000—2400	
44			BOSASO	SOM	49E10 11N20	A18	50					B		4	0300—2100	
45			CHIANG MAI	THA	98E57 18N42	A20	20	13.4				A	65	5	0000—2400	
46			BAUCAU	TMP	126E28 08S28	A20	10	10.4				A	70	3	2200—1800	
47			AL NAKHIL	UAE	56E02 25N56	C 9	100	23.0	248	40—110	17.0	B		6	0200—2200	24
48			AL NAKHIL	UAE	56E02 25N56	C 9	100	23.0		180—210	7.0	B				
49			AL NAKHIL	UAE	56E02 25N56	C 9	100	23.0		280—350	6.0	B				
50			KHANTYMANSIISK	URS	69E03 60N57	A16	25	14.0				A	190	4	0000—2400	
51			KOMSOMOLSKAMUR	URS	137E05 50N30	C 9	30	19.8	20	150—250	7.8	B		4	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1161		HUAMBO	AGL	15E45 12S47	C10	10	10.4				A	65	3	0500—2300	
2	(71)		IN SALAH	ALG	02E31 27N15	D 9	20	13.4				A	65	5	0600—2400	24
3			JOWF	ARS	39E55 29N45	C 9	20	15.1				A	120	4	0400—1400	24
4			JOWF	ARS	39E55 29N45	C 9	10	12.1				A	120	4	1400—2300	24
5		S	CRYSTAL BRK SA	AUS	138E15 33S21	A20	10	10.0				A	183	2	1900—1400	
6			FINGAL TAS	AUS	147E59 41S37	A20	1	0.4				A		5	1900—1400	
7			MARYBOROUGH QL	AUS	152E44 25S28	A20	5	7.4				A	63	4	1900—1400	
8		S	NARACOORTE SA	AUS	140E40 36S57	A20	10					B		2	1900—1400	
9			RANGAMATI	BGD	92E12 22N38	A20	10	12.1				A	122	3	0000—1800	
10		S	BIALA SLATINA	BUL	23E40 43N27	C 9	150	23.9				A	140	4	0000—2400	
11		S	KARDJALI	BUL	25E12 41N29	C 9	150	21.8				A	205	5	0000—2400	
12			KEMBE	CAF	21E55 04N36	C 9	10	10.4				A	64	5	0400—2300	
13		S	CHENGKOU	CHN	108E47 31N57	A20	10	10.4				A	70	4	2000—1800	
14		S	FENGJIE	CHN	109E31 31N04	A20	10	10.4				A	70	4	2000—1800	
15		S	GARZE	CHN	99E58 31N38	A20	10	10.4				A	70	4	2000—1800	
16		S	KANGDING	CHN	102E00 30N00	A20	10	10.4				A	70	4	2000—1800	
17		S	LESHAN	CHN	103E40 29N37	A20	10	10.4				A	70	4	2000—1800	
18		S	LUZHOU	CHN	105E21 28N47	A20	10	10.4				A	70	4	2000—1800	
19		S	NANCHONG SHI	CHN	106E05 30N48	A20	50	17.4				A	70	4	2000—1800	
20		S	SERXU	CHN	98E05 32N58	A20	10	10.4				A	70	4	2000—1800	
21		S	XIANGCHENG	CHN	99E42 28N55	A20	10	10.4				A	70	4	2000—1800	
22		S	ZHAOJUE	CHN	102E49 28N02	A20	25	14.4				A	70	4	2000—1800	
23			DASSAZOUME	DAH	02E12 07N44	C10	10	10.4				A	65	4	0500—2400	
24			TANTA	EGY	30E57 30N45	D 9	200	23.4				A	60	3	0000—2400	24
25			ADDIS ABABA	ETH	38E43 09N17	C 9	10	10.4				A	64	3	0400—2100	
26		S	AJACCIO	F	08E46 41N46	D 9	20	13.4				A	50	6	0000—2400	
27		S	CORTE	F	09E10 42N20	D 9	20	15.1				A	120	6	0000—2400	
28		S	STRASBOURG	F	07E26 48N15	D 9	300	30.0	20	90—130	18.0	B		4	0000—2400	
29		S	TOULOUSE	F	01E20 43N21	D 9	100	22.1				A	132	3	0000—2400	
30		S	TAMMISAARI	FNL	23E27 59N59	D 9	10	10.6				A	100	4	0000—2400	
31		S	VAASA 2	FNL	21E38 63N10	D 9	100	23.4				A	150	4	0000—2400	
32			TEZPUR	IND	92E42 26N48	A20	300	26.9				A	130	3	0300—0900	25
33			TRIVANDRUM 1	IND	76E59 08N29	A20	20	15.1				A	130	4	0300—1000	25
34			TRIVANDRUM 2	IND	76E59 08N29	A20	10	12.1				A	130	4	1000—0300	
35			KENDARI	INS	122E36 03S57	A18	5	7.4				A	64	5	2100—1600	
36			ABADAN	IRN	48E15 30N22	A20	10	10.4				A	65	2	0200—2100	
37			ATAMI	J	139E05 35N05	A15	0.1	−9.6				A	72	5	0000—2400	
38			FUKUYAMA	J	133E21 34N30	A15	0.1	−9.6				A	71	5	0000—2400	
39			IMAGANE	J	139E58 42N25	A15	0.1	−9.6				A	71	5	0000—2400	
40			KESENNUMA	J	141E34 38N54	A15	0.1	−9.6				A	67	5	0000—2400	
41			KOZA	J	135E50 33N31	A15	0.1	−9.6				A	71	5	0000—2400	
42			MIYAKONOJO	J	131E05 31N46	A15	0.1	−9.6				A	47	5	0000—2400	
43			NAKATSUGAWA	J	137E29 35N29	A15	0.1	−9.6				A	67	5	0000—2400	
44			NARUKO	J	140E44 38N45	A15	0.1	−9.6				A	71	5	0000—2400	
45			OBAMA FUKUI	J	135E45 35N30	A15	0.1	−9.6				A	67	5	0000—2400	
46			ODATE	J	140E34 40N16	A15	0.1	−9.6				A	67	5	0000—2400	
47			OWASE	J	136E12 34N04	A15	0.1	−9.6				A	67	5	0000—2400	
48			SAEKI	J	131E55 32N58	A15	0.1	−9.6				A	47	5	0000—2400	
49			SHIROTORI	J	136E52 35N51	A15	0.1	−9.6				A		5	0000—2400	
50			SHOBARA	J	133E02 34N51	A15	0.1	−9.6				A	47	5	0000—2400	
51			TANABE	J	135E24 33N45	A15	0.1	−9.6				A	67	5	0000—2400	
52			TOYOHASHI	J	137E22 34N46	A15	0.1	−9.6				A	71	5	0000—2400	
53			TOYOOKA	J	134E50 35N32	A15	0.1	−9.6				A	67	5	0000—2400	
54			TSUNAN	J	138E41 37N02	A15	0.1	−9.6				A		5	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Antenna: Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1161		TSUYAMA	J	134E01 35N03	A15	0.1	−9.6				A	67	5	0000−2400	
2	(71)		UENO	J	136E08 34N45	A15	0.1	−9.6				A	47	5	0000−2400	
3			WAKAMATSU	J	139E57 37N29	A15	0.1	−9.6				A	67	5	0000−2400	
4			YUSUHARA	J	132E56 33N23	A15	0.1	−9.6				A	71	5	0000−2400	
5			PUSAN	KOR	129E07 35N08	C10	20	15.1				A	120	4	0000−2400	
6			UIJONGBU	KOR	127E01 37N44	C10	0.3	−5.2				A	12	4	0000−2400	
7			SANGWON	KRE	126E06 38N51	A16	10	10.6				A	75		2000−1800	
8			PT SANTO 3	MDR	16W20 33N04	A20	1	0.4				A	60	4	0000−2400	
9			MALACCA	MLA	102E15 02N14	A20	10	10.4				A	61	5	2200−1700	
10			SIMANGGANG	MLA	111E27 01N14	A20	20	15.1				A	137	5	2200−1600	
11		S	BARUNURT	MNG	113E20 46N40	A18	5	9.1				A	120	4	2200−1500	
12		S	MANDAL GOBI	MNG	106E10 45N40	A18	5	9.1				A	120	4	2200−1500	
13			TETE	MOZ	33E35 16S11	C10	10	10.4				A	66	4	0400−2200	
14			WELLINGTON	NZL	174E48 41S18	A20	5	7.4				A	50	4	0000−2400	
15			CAMARINES NO	PHL	122E56 14N07	C 9	1	0.6				A	80	3	2100−1600	
16			DIGOS DAVAO	PHL	125E21 06N45	C 9	1	0.6				A	80	3	2100−1600	
17			ILOILO CITY	PHL	122E33 10N41	C 9	1	0.6				A	80	3	2100−1600	
18			VELINGARA	SEN	14W06 13N09	C 9	10	10.4				A	50	4	0600−2400	
19			NAKHON PHANOM	THA	104E42 17N15	A20	10	10.4				A	64	3	0000−2400	
20			KARS	TUR	43E05 40N35	D 9	10	10.4				A	54	4	0200−2300	
21			MBALE	UGA	34E10 01N05	C 9	10	10.4				A	55	4	0300−2100	
22			ABAKAN	URS	91E11 53N46	A16	50	17.0				A	190	4	0000−2400	
23			DUCHANBE	URS	68E50 38N40	C 9	1000	38.0	15	120−290	20.0	B		4	0000−2400	
24			MATADI	ZAI	13E26 05S48	C 9	50					B		8	0000−2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1170		DJIBOUTI 1	AFI	43E05 11N35	A20	10	10.4				A	50	3	0000–2400	
2	(72)		MALANGE	AGL	16E22 09S33	C10	5	7.4				A	65	3	0600–2100	
3			PESHKOPI	ALB	20E20 41N40	A20	1	0.4				A	64	6	0400–2300	(24)
4			LES TREMBLES	ALG	00W37 35N41	D 9	40	16.6				A	90	4	0600–1800	24
5			LES TREMBLES	ALG	00W37 35N41	D 9	20	13.6				A	90	4	1800–2400	24
6			GURIAT	ARS	37E25 31N25	C 9	500	33.0	270	10–170	12.0	B		4	0000–2400	24
7			SYDNEY NSW	AUS	151E03 33S46	A20	5	9.1				A	135	4	0000–2400	
8			NGOZI	BDI	29E50 02S54	C 9	10	10.4				A	64	4	0300–2400	
9			DACCA	BGD	90E26 23N43	A20	20	13.6				A	92	3	0000–1800	
10		S	MOGHILEV	BLR	30E17 53N55	A16	1000	33.0	120	260–330	24.0	B		4	0000–2400	
11			QABDO	CHN	97E05 31N11	A20	200	25.1				A	140	5	2000–1800	
12			KOTUGODA	CLN	79E55 07N08	C10	100	23.0	40			B		5	0000–1800	
13			SIBITI	COG	13E50 03S45	A20	10	10.4				A	64	5	0000–2400	
14		S	ERFURT	DDR	11E00 51N00	D 9	20	13.6				A	90	4	0000–2400	
15		S	REICHENBACH	DDR	14E48 51N08	D 9	4	6.4				A	50	4	0000–2400	
16			IPSWICH	G	01E14 52N04	A20	0.5	−2.6				A	53	3	0000–2400	
17			PORTSMOUTH	G	01W02 50N50	A20	0.8	−0.6				A	46	4	0000–2400	
18			STOKE	G	02W12 52N59	A20	0.4	−3.6				A	43	3	0000–2400	
19			SWANSEA	G	03W55 51N39	A20	0.8	−0.6				A	46	4	0000–2400	
20			TEES SIDE	G	01W21 54N35	A20	1	0.4				A	34	3	0000–2400	
21			NSUTA	GHA	02W00 05N15	C 9	10	10.0				A	280	4	0500–2300	
22		S	BOLZANO	I	11E20 46N30	D 9	2	3.4				A	62	5	0000–2400	
23		S	BRESSANONE	I	11E39 46N43	D 9	1	0.4				A	50	5	0000–2400	
24		S	LIVORNO	I	10E19 43N33	D 9	1	0.4				A	50	5	0000–2400	
25		S	MERANO	I	11E09 46N40	D 9	1	0.4				A	50	5	0000–2400	
26			HYDERABAD 1	IND	78E30 17N20	A20	20	15.1				A	130	3	0300–1000	25
27			HYDERABAD 2	IND	78E30 17N20	A20	10	12.1				A	130	3	1000–0300	
28			SEMARANG	INS	110E29 06S58	A18	50	17.4				A	64	5	2200–1700	
29			TERNATE	INS	127E23 00N48	A18	2	3.4				A	64	6	2000–1500	
30			DAMGHAN	IRN	54E21 36N18	A20	2	3.6				A	88	3	0200–2100	
31			JERUSALEM	ISR	35E13 31N46	D 9	10	10.4				A	45	3	0000–2400	33
32			LAMU	KEN	40E52 02S20	C 9	5	7.6				A	100	4	0000–2400	
33			SOSAN	KOR	126E55 36N56	C10	500	27.6				A	100	5	2300–1100	
34			SOSAN	KOR	126E55 36N56	C10	500	31.0	115	190–290	17.0	B		5	1100–2300	
35			SOSAN	KOR	126E55 36N56	C10	500	31.0	355			B				
36			KOKSAN	KRE	126E40 38N48	A16	1	0.0				A	30		2000–1800	16
37			TULEAR	MDG	43E46 23S28	C 9	5	9.1				A	136	4	0300–2000	
38			ATAR	MTN	13W03 20N31	B20	20	15.1				A	128		0600–2400	24
39			CALABAR	NIG	08E19 04N58	C 9	50	19.1				A	128	4	0500–2300	
40			TE KUITI	NZL	175E10 38S20	A20	1	0.4				A	50	5	0000–2400	
41			DERAISMAILKHAN	PAK	71E00 31N55	A20	10	10.4				A	70	3	0000–2000	
42			COTABATO CITY	PHL	124E14 07N12	C 9	1	0.6				A	79	3	2100–1600	
43			MUNTI RIZAL	PHL	121E02 14N25	C 9	10	10.6				A	79	3	2100–1600	
44		S	BRAGANCA	POR	06W45 41N48	A20	1	0.4				A	60	6	0000–2400	
45		S	PORTO	POR	08W38 41N11	A20	10	10.4				A	60	3	0000–2400	
46		S	V REAL	POR	07W43 41N16	A20	10	10.6				A	90	5	0000–2400	
47		S	VALENCA	POR	08W39 42N01	A20	10	10.6				A	90	5	0000–2400	
48			N DJAMENA	TCD	15E03 12N08	C 9	20	13.6				A	83		0400–2300	
49			NJOMBE	TGK	34E48 09S28	C 9	5	9.1				A	128	4	0300–2100	
50			BANGKOK	THA	100E35 13N48	A20	20	13.4				A	65	2	0000–2400	
51			RAS AL KHAYMAH	UAE	55E58 25N49	C 9	50	19.1				A	136	5	0200–2100	24
52		S	LUTSK	UKR	25E00 50N50	A16	50	17.0				A	190	4	0000–2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1170	S	MAIKOP	URS	40E08 44N36	A16	500	32.0	220	70—140	16.0	B		4	0000—2400	
2	(72)		ULAN UDE	URS	107E38 51N50	A16	250	27.0	0	130—230	20.0	B		4	0000—2400	
3			BELI KRIZ 2	YUG	13E35 45N31	D 9	50	17.0	320	40— 90	5.0	B		4	0000—2400	

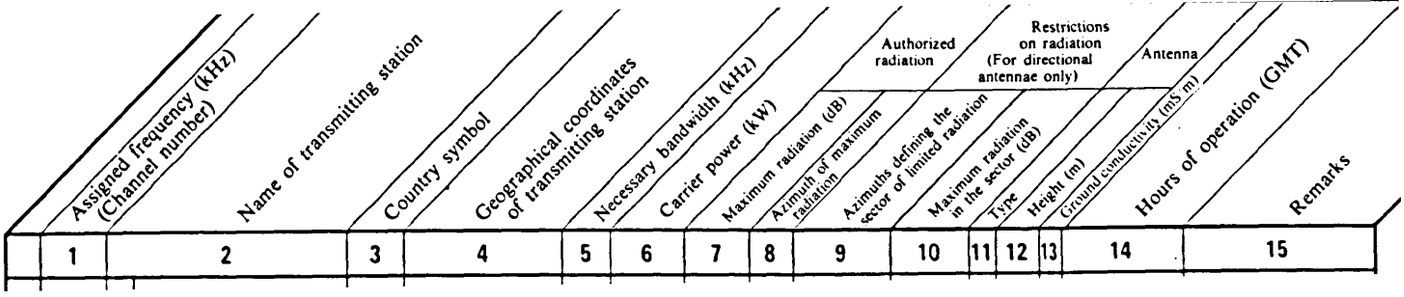
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1179 KHZ (73)

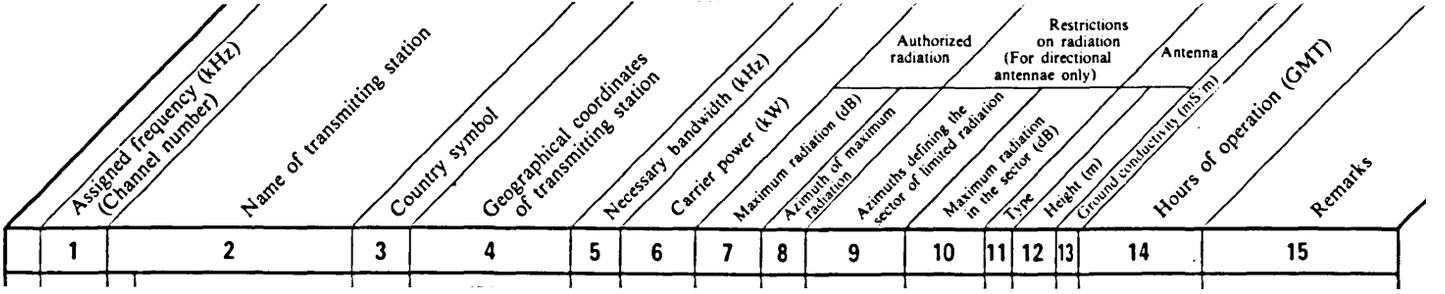
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1179		HARAD	ARS	49E05 24N10	C 9	20	15.1				A	120	4	0000–2400	24
2	(73)		MELBOURNE VIC	AUS	145E07 37S44	A20	5	9.1				A	136	2	0000–2400	
3		S	ALXA ZUOQI	CHN	105E41 38N50	A20	20	13.4				A	70	4	2000–1800	
4		S	GUYUAN	CHN	106E22 36N01	A20	100	22.1				A	140	4	2000–1800	
5		S	YANCHI	CHN	107E30 37N47	A20	20	13.4				A	70	4	2000–1800	
6		S	ZHONGWEI	CHN	105E11 37N30	A20	50	17.4				A	70	4	2000–1800	
7			BUEA	CME	09E06 04N09	C 9	100	22.1				A		5	0500–2300	
8			MURCIA	E	01W10 38N00	D 9	10	10.4				A	60	4	0000–2400	19
9		S	ASSWAN	EGY	32E57 24N04	D 9	10	10.6				A	100	3	0000–2400	24
10		S	ASYUT	EGY	31E04 27N11	D 9	10	10.6				A	100	3	0000–2400	24
11		S	KENA	EGY	32E43 26N10	D 9	10	10.6				A	100	3	0000–2400	24
12			BAHAR DAR	ETH	37E27 11N20	C 9	10	10.4				A	64	3	0400–2100	
13			THESSALONIKI	GRC	22E57 40N34	C 9	100	20.6				A	75	4	0400–2300	
14			JUBBULPORE	IND	79E59 23N10	A20	20	15.1				A	125	3	0000–2400	
15			PALGHAT	IND	76E42 10N48	A20	20	15.1				A	125	4	0300–1000	25
16			PADANG	INS	100E25 01S00	A18	10	10.4				A	64	5	2200–1700	
17			OSAKA	J	135E27 34N31	A15	50	19.1				A	110	4	0000–2400	13
18			MARALAL	KEN	36E40 01N05	C 9	5	7.6				A	100	4	0000–2400	
19			YECHEON	KOR	128E27 36N38	A10	1	2.1				A	120	6	0000–2400	
20			DELIMARA	MLT	14E34 35N49	D 9	600	35.0	240	340–150	8.0	B		4	0000–2400	
21			QUELIMANE	MOZ	36E53 17S52	C10	50	17.3	310			B		4	0400–2200	
22			PT VILA	NHB	168E18 17S45	A20	20	13.4				A	50	1	0000–2400	
23		S	BAYUGAN	PHL	125E50 08N20	C 9	10	10.6				A	79	3	2100–1600	
24		S	BOGO	PHL	124E00 11N00	C 9	10	10.6				A	79	3	2100–1600	
25		S	KABASALAN	PHL	122E50 07N48	C 9	10	10.6				A	79	3	2100–1600	
26		S	KALINANGAN	PHL	124E48 08N30	C 9	10	10.6				A	79	3	2100–1600	
27		S	SIQUIJOR	PHL	123E38 09N12	C 9	10	10.6				A	79	3	2100–1600	
28		S	TANDAG	PHL	126E12 08N55	C 9	10	10.6				A	79	3	2100–1600	
29		S	BACAU	ROU	26E50 46N30	A20	200	25.0	210	250–350	15.0	B		5	0000–2400	
30		S	BACAU	ROU	26E50 46N30	A20	200	25.0	30	70–170	15.0	B				
31		S	SEGARCEA	ROU	23E48 44N05	C 9	5	7.6				A	88	3	0300–2300	
32		S	VASCAU	ROU	22E28 46N25	C 9	5	7.6				A	88	4	0300–2300	
33			OKINAWA 1	RYU	128E09 26N44	C 9	1000	39.0	20			B			1100–1700	29
34			OKINAWA 2	RYU	128E09 26N44	C 9	1000	39.0	310			B			1100–1700	29
35			SKAANE	S	14E18 55N29	D 9	1200	33.0	80	125–155	26.0	B		3	0000–2400	
36			SKAANE	S	14E18 55N29	D 9	1200	33.0	260	155–220	28.0	B				
37			CHANDHABURI	THA	102E50 12N37	A20	10	10.4				A	65	3	0000–2400	
38			VAN ISKELESI	TUR	43E19 38N31	D 9	2	3.4				A	63	4	0200–2300	
39			PETROPAVLO KAZ	URS	69E08 54N53	C10	150	21.8				A	190	4	0000–2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1188		EXMOUTH WA	AUS	114E07 21S57	A20	5	7.6				A	87	2	2200–1600	
2	(74)		INVERELL NSW	AUS	151E13 29S47	A20	5	7.6				A	102	5	1900–1400	
3			KORTRIJK	BEL	03E17 50N49	D 9	150	22.2				A	65	4	0600–1800	
4			KORTRIJK	BEL	03E17 50N49	D 9	50	17.4				A	65	4	1800–0600	
5		S	EJENHORO QI	CHN	109E41 39N15	A20	10	10.4				A	60	4	2000–1800	
6			KUNMING	CHN	102E50 25N10	A20	300	26.9				A	120	5	2000–1800	
7		S	LINHE	CHN	107E20 40N44	A20	50	17.4				A	60	4	2000–1800	
8		S	SUNID YOUQI	CHN	113E35 43N45	A20	20	13.4				A	60	4	2000–1800	
9		S	XI UJUMQIN QI	CHN	117E33 44N38	A20	50	17.4				A	60	4	2000–1800	
10		S	ZHENGLAN QI	CHN	116E00 42N18	A20	10	10.4				A	60	4	2000–1800	
11			MOSSAKA	COG	16E48 01S13	A20	5	7.4				A	63		0000–2400	
12			SUEZ	EGY	32E31 30N00	D 9	20	15.1				A	125	4	0000–2400	
13			ADDIS ABABA	ETH	38E39 08N46	C 9	10	10.4				A	62	3	0400–2100	
14			KOS	GRC	27E05 36N47	C 9	10	10.4				A	55	5	0400–2200	
15		S	SZOLNOK	HNG	20E12 47N11	D 9	1000	32.1				A	125	3	0000–2400	
16		S	SZOMBATHELY	HNG	16E39 47N12	D 9	40	16.4				A	60	4	0000–2400	
17			OUAGADOUGOU	HVO	01W31 12N22	A20	10	10.4				A	63	4	0000–2400	
18		S	AVEZZANO	I	13E28 42N02	D 9	1	0.4				A	50	5	0000–2400	
19		S	GENOVA	I	08E55 44N25	D 9	20	13.6				A	102	5	0000–2400	
20		S	POTENZA	I	15E48 40N38	D 9	1	0.4				A	50	5	0000–2400	
21		S	ROVERETO	I	11E04 45N53	D 9	1	0.4				A	50	5	0000–2400	
22		S	TERAMO	I	13E42 42N39	D 9	1	0.4				A	50	5	0000–2400	
23			BOMBAY 1	IND	72E54 18N53	A20	300	26.9				A	125	3	0300–1000	25
24			BOMBAY 2	IND	72E54 18N53	A20	100	22.1				A	125	3	1000–0300	
25			SIMLA	IND	77E12 31N10	A20	300	26.9				A	125	4	0300–0900	25
26			MENADO	INS	124E55 01N32	A18	5	7.4				A	58	5	2100–1600	
27			CORK 1	IRL	08W24 51N53	A20	10	12.1				A	120	4	0000–2400	
28			TEHERAN	IRN	51E27 35N41	A20	100	22.1				A	140	3	0000–2400	
29			KITAMI	J	144E16 44N01	A15	10	12.1				A	136	4	0000–2400	
30			INCHEON	KOR	126E42 37N24	C10	50	19.1				A	129	5	2300–1100	
31			INCHEON	KOR	126E42 37N24	C10	50	20.0	120	270–320	10.0	B		5	1100–2300	
32			PT MONIZ 3	MDR	16W11 32N50	A20	1	0.4				A	60	4	0000–2400	
33			KANGAR	MLA	100E13 06N29	A20	10	12.1				A	120	5	2200–1700	
34			MARRUPA	MOZ	37E30 13S12	C10	2	3.4				A	63	4	0400–2200	
35			CASABLANCA	MRC	07W35 33N34	A20	3	5.4				A	80	4	0600–2400	
36			CHINGUETTI	MTN	12W20 20N28	B20	20	15.1				A	132		0600–2400	
37			LANGTANG	NIG	09E50 09N10	C 9	20	13.6				A	75	4	0500–2300	
38			CABANATUAN NE	PHL	120E57 15N29	C 9	1	0.6				A	78	3	2100–1600	
39			TACLOBAN LEYTE	PHL	125E00 11N14	C 9	1	0.6				A	78	3	2100–1600	
40		S	GOROKA	PNG	145E23 06S05	B10	10	10.6				A	80	5	1900–1300	
41		S	KAINANTU	PNG	145E52 06S17	B10	2	3.0				A	30	5	1900–1300	
42		S	OKAPA	PNG	145E38 06S33	B10	2	3.0				A	30	5	1900–1300	
43			PALA	TCD	14E56 09N22	C 9	10	12.1				A			0400–2300	
44			MTWARA	TGK	40E00 10S20	C 9	20	13.6				A	80	4	0300–2100	
45			SAKON NAKHON	THA	104E10 17N15	A20	20	13.4				A	63	3	0000–2400	
46			USTKAMENOGORSK	URS	82E36 49N55	C10	30	14.8				A	190	4	0000–2400	
47			WALLIS	WAL	176W09 13S21	A20	20	13.4				A	50	1	0000–2400	
48			HISWA	YMS	44E54 12N48	C 9	200	25.1				A	130	4	0300–2200	
49			KALEMIE	ZAI	29E13 05S53	C 9	10	10.4				A	60	8	0000–2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Restrictions on radiation (For directional antennae only): Authorized radiation: Maximum radiation (dB)	Azimuth of maximum radiation	Azimuths defining the sector of limited radiation	Maximum radiation in the sector (dB)	Antenna: Type	Height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1197		MOCAMEDES	AGL	12E10 15S10	A20	5	7.4				A	63	3	0000–2400	
2	(75)		JOBAIL	ARS	49E40 27N00	C 9	20	15.1				A	120	3	0000–2400	24
3			ADELAIDE SA	AUS	138E35 34S50	A20	5	7.6				A	84	2	0000–2400	
4			GOLD COAST QLD	AUS	153E24 28S00	A20	5					B		4	1900–1400	
5		S	S CRUZ FLORES	AZR	31W08 39N27	A20	1	0.4				A	60	4	0000–2400	
6		S	V DO PORTO	AZR	25W08 36N57	A20	1	0.4				A	60	4	0000–2400	
7		S	GOMEL	BLR	31E01 52N25	C 9	5	7.0				A	190	4	0000–2400	
8		S	MIADEL	BLR	26E54 54N53	C18	5	9.1				A	120	4	0000–2400	
9		S	MINSK	BLR	27E34 53N56	C 9	50	17.0				A	190	4	0000–2400	
10		S	MOGHILEV	BLR	30E17 53N55	C18	5	9.1				A	120	4	0000–2400	
11			BANGASSOU	CAF	22E50 04N48	C 9	10	10.4				A	62	5	0400–2300	
12		S	CHUXIONG	CHN	101E28 25N02	A20	100	22.1				A	120	5	2000–1800	
13			HARBIN	CHN	126E52 45N49	A20	5	7.4				A	60	4	2000–1800	
14			JINING	CHN	113E05 41N02	A20	10	10.4				A	60	4	2000–1800	
15		S	PUER	CHN	101E02 22N57	A20	50	17.4				A	60	5	2000–1800	
16		S	WEIXI	CHN	99E12 27N10	A20	20	13.4				A	60	5	2000–1800	
17		S	WENSHAN	CHN	104E15 23N22	A20	10	10.4				A	60	5	2000–1800	
18		S	YUNLONG	CHN	99E19 25N56	A20	10	10.4				A	60	5	2000–1800	
19			LOUDIMA	COG	13E05 04S06	A20	10	10.4				A	69	5	0000–2400	
20			MUENCHEN ISMAN	D	11E45 48N15	D 9	300	29.8	110	50– 70	10.8	B		4	0600–1800	
21			MUENCHEN ISMAN	D	11E45 48N15	D 9	300	29.8		230–240	10.8	B				
22			MUENCHEN ISMAN	D	11E45 48N15	D 9	300	33.8	60	0– 20	14.7	B		4	1800–0600	30
23			MUENCHEN ISMAN	D	11E45 48N15	D 9	300	33.8		100–120	9.8	B				
24			MUENCHEN ISMAN	D	11E45 48N15	D 9	300	33.8		190–280	9.8	B				
25			ATHIEME	DAH	01E41 06N31	C10	5	7.4				A	63	4	0500–2400	
26			ALEXANDRIA	EGY	29E52 31N11	D 9	30	15.2				A	60	3	0000–2400	24
27			BAFATA	GNB	14W39 12N09	A20	5	7.4				A	63	3	0000–2400	
28			MALI	GUI	12W30 12N03	C 9	50	17.4				A	63	4	0000–2400	
29			CHHATARPUR	IND	79E33 24N52	A20	300	26.9				A	125	3	0300–0900	25
30			JODHPUR 1	IND	72E58 26N20	A20	20	15.1				A	125	4	0300–0900	25
31			JODHPUR 2	IND	72E58 26N20	A20	10	12.1				A	125	4	0900–0300	
32			SHILLONG 1	IND	91E56 25N34	A20	20	15.1				A	125	3	0300–0900	25
33			SHILLONG 2	IND	91E56 25N34	A20	20	15.1				A	125	3	0900–0300	
34			TINNEVELLY 1	IND	77E44 08N44	A20	20	15.1				A	125	3	0300–1000	25
35			TINNEVELLY 2	IND	77E44 08N44	A20	10	12.1				A	125	3	1000–0300	
36			PALENGKARAJA	INS	113E11 02S02	A18	5	7.4				A	63	6	2100–1600	
37			MOGHAN	IRN	48E00 39N40	A20	20	13.4				A	62	3	0200–2100	
38			ARBIL	IRQ	44E00 36N15	A18	50	17.4				A	38	6	0200–2300	
39			ASAHIKAWA	J	142E27 43N46	A15	0.1	–7.9				A	123	5	0000–2400	
40			HAGIWARA	J	137E14 35N50	A15	0.1	–9.6				A	66	5	0000–2400	
41			IIDA	J	137E49 35N30	A15	1	0.6				A	100	5	0000–2400	
42			KITAKYUSHU	J	130E52 33N53	A15	1	0.6				A	93	5	0000–2400	
43			KUMAMOTO	J	130E42 32N50	A15	5	12.0	240			B		4	0000–2400	
44			MITO	J	140E26 36N26	A15	5	9.1				A	104	4	0000–2400	
45			NANAO	J	136E57 37N02	A15	1	4.0	355			B		4	0000–2400	
46			DONGTUCHON	KOR	127E03 37N53	C10	1	0.4				A	60	6	0000–2400	
47			MOHALESHOEK	LSO	27E29 30S09	A20	2	3.0				A	30	4	0400–2200	
48			MACAU	MAC	113E33 22N12	A20	1	0.4				A	70	2	2200–1600	
49			MAJUNGA	MDG	46E20 15S42	C 9	10	10.0				A	252	4	0300–2000	
50			KUDAT	MLA	116E43 06N55	A20	10	13.4				A	150	5	0000–2400	
51			UNDERHAN	MNG	102E55 46N10	A18	5	9.1				A	120	4	2200–1500	
52			AGADIR	MRC	09W31 30N20	A18	20	13.4				A	70	4	0600–2400	24
53			KASUNGU	MWI	33E50 13S00	A20	2	3.6				A	92	3	0200–2300	
54			WANGANUI	NZL	175E05 39S58	A20	2	3.4				A	50	4	0000–2400	



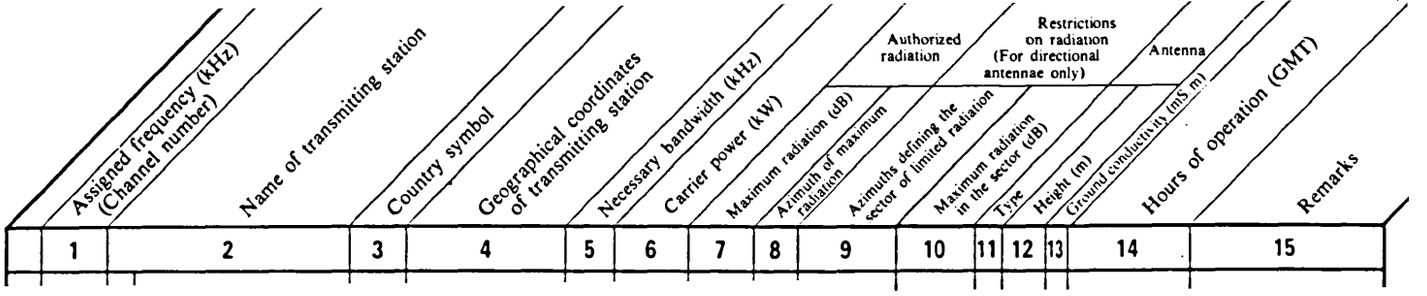
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1197		BACOLOD CITY	PHL	122E57 10N40	C 9	5	7.6				A	78	3	2100–1600	
2	(75)		DAVAO CITY	PHL	125E35 07N04	C 9	5	7.6				A	78	3	2100–1600	
3			COVASNA	ROU	26E17 45N50	A20	15	13.9				A	125	5	0000–2400	
4			BAIDOA	SOM	43E50 03N00	A18	10	10.4				A	60	4	0300–2100	
5			BANGKOK	THA	100E39 13N45	A20	20	13.4				A	51	2	0000–2400	
6			SAMSUN	TUR	36E00 41N39	D 9	20	15.1				A	127	4	0200–2300	
7		S	ANDIJAN	URS	72E21 40N47	A18	5	7.0				A	190	4	0000–2400	
8		S	KHANTYMANSIISK	URS	69E03 60N57	A18	5	7.0				A	190	4	0000–2400	
9		S	KZYL ORDA	URS	65E30 44N50	C10	30	14.8				A	190	4	0000–2400	



1206 KHZ (76)

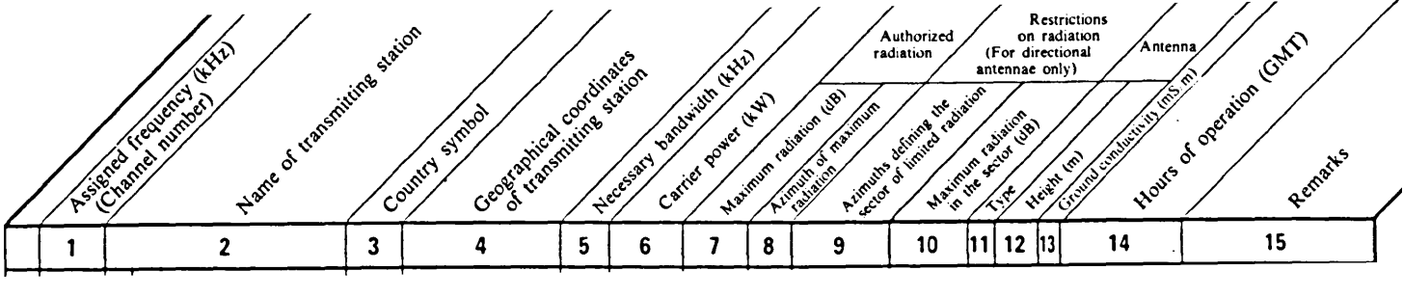
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1206		MAZAR I SHARIF	AFG	67E08 36N40	C 9	500	30.0	210	320—100	25.0	B		4	0100—2000	
2	(76)		KORCE	ALB	20E48 40N36	A20	10	11.0	215			B		5	0400—2300	(24)
3			KHURMAH	ARS	42E00 22N00	C 9	20	15.1				A	120	4	0400—1400	24
4			CANBERRA ACT	AUS	149E07 35S13	A20	5					B		3	0000—2400	
5			GRAFTON NSW	AUS	152E59 29S40	A20	5					B		3	1900—1400	
6			PERTH WA	AUS	115E54 31S56	A20	5	7.6				A	79	4	0000—2400	
7			KUNMING	CHN	102E50 25N10	A20	300	26.9				A	120	5	2000—1800	
8		S	SHIZUISHAN	CHN	106E40 39N09	A20	10	10.4				A	60	4	2000—1800	
9		S	YANCHI	CHN	107E30 37N47	A20	100	22.1				A	120	4	2000—1800	
10			YANJI SHI	CHN	129E30 42N54	A20	100	22.1				A	120	4	2000—1800	
11			NATITINGOU	DAH	01E23 10N18	C10	10	10.4				A	62	4	0500—2400	
12			BORDEAUX	F	00W11 44N57	D 9	300	32.0	267			B		3	0000—2400	
13			SIGATOKA	FJI	177E31 18S09	A20	2.5	4.0				A	30	3	1700—1200	
14			BHAWANI PATNA	IND	83E18 19N54	A20	300	26.9				A	125	3	0000—2400	
15			TEZPUR	IND	92E42 26N48	A20	300	26.9				A	125	3	0300—0900	25
16			UDIPI	IND	74E44 13N27	A20	300	26.9				A	125	3	0300—1000	25
17			DENPASAR	INS	115E14 08S40	A18	10	10.4				A	62	5	2100—1600	
18			HAIFA	ISR	35E03 32N49	D 9	100	23.0				A	100	3	0000—2400	33
19		S	KYOTO	J	135E46 35N03	A15	1	0.6				A	70	4	0000—2400	12
20		S	OSAKA	J	135E27 34N31	A15	50	17.6				A	85	4	0000—2400	12
21			NAKURU	KEN	36E05 00S07	C 9	40	18.1				A	130	4	0000—1600	
22			NAKURU	KEN	36E05 00S07	C 9	20	15.1				A	130	4	1600—2400	
23			CHEONGSONG	KOR	129E04 36N22	C10	1	2.1				A	120	6	0000—2400	
24			JEONGSEON	KOR	128E39 37N22	C10	1	0.4				A	60	6	0000—2400	
25			SAMJIYON	KRE	128E18 41N48	A16	1	0.0				A	30		2000—1800	
26			MIRI	MLA	113E59 04N23	A20	20	15.1				A	110	5	2000—1500	
27			INHAMBANE	MOZ	35E23 23S53	C10	50	17.3	290			B		4	0400—2200	
28			TARFAYA	MRC	12W55 27N55	C10	100	22.0	160	280— 60	10.0	B		6	0500—2400	24
29			YOLA	NIG	12E29 09N12	C 9	10	10.6				A	75	4	0500—2300	
30			DUNEDIN	NZL	170E30 45S53	A20	2	3.4				A	40	4	0000—2400	
31			NOVALICHES QC	PHL	121E02 14N44	C 9	10	10.6				A	77	3	2100—1600	
32			SURIGAO	PHL	125E29 09N47	C 9	1	0.6				A	77	3	2100—1600	
33		S	KOSZALIN	POL	16E22 54N01	A20	60	19.9				A	118	4	0000—2400	
34		S	LUBLIN	POL	22E40 51N00	A20	60	19.9				A	118	3	0000—2400	
35		S	MYSLIBORZ	POL	14E38 52N53	A20	10	12.1				A	118	4	0000—2400	
36		S	NOWY SACZ	POL	20E40 49N38	A20	10	12.1				A	118	5	0000—2400	
37		S	OLSZTYN	POL	20E32 53N51	A20	60	19.9				A	118	4	0000—2400	
38		S	WROCLAW	POL	17E03 50N58	C 9	200	25.1				A	118	4	0000—2400	
39		S	ZYWIEC	POL	19E11 49N41	A20	10	12.1				A	118	4	0000—2400	
40			RODRIGUES	ROD	63E26 19S42	A20	25	14.4				A	62	6	0200—2000	
41		S	BO	SRL	11W55 07N55	C 9	20	13.4				A	40	2	0500—2400	
42		S	GODERICH	SRL	13W17 08N30	C 9	20	13.4				A	40	2	0500—2400	
43		S	KABALA	SRL	11W35 09N35	C 9	20	13.4				A	40	2	0500—2400	
44		S	KENEMA	SRL	11W10 07N50	C 9	20	13.4				A	40	2	0500—2400	
45		S	LUNSAR	SRL	12W03 08N41	C 9	20	13.4				A	40	2	0500—2400	
46		S	MAKENI	SRL	12W00 08N52	C 9	20	13.4				A	40	2	0500—2400	
47		S	MOYAMBA	SRL	12W35 08N15	C 9	20	13.4				A	40	2	0500—2400	
48		S	SEFADU	SRL	11W45 07N58	C 9	20	13.4				A	40	2	0500—2400	
49			BOKORO	TCD	17E04 12N23	C 9	1	0.4				A			0400—2300	
50			FT PORTAL	UGA	30E16 00N39	C 9	20	13.6				A	70	4	0300—2100	
51			SEMIPALATINSK	URS	80E15 50N25	A18	5	7.0				A	190	4	0000—2400	
52			SANAA 1	YEM	44E11 15N22	C 9	60	18.2				A	60	5	0300—2200	24
53			NDOLA	ZMB	28E40 13S00	A20	2	5.1				A	125	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Azimuths defining the sector of limited radiation	Maximum radiation in the sector (dB)	Antenna: Type	Height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1215		LUSO	AGL	19E55 11S48	C10	1	0.4				A	58	3	0500—2200	
2	(77)		LUSHNJE	ALB	19E40 40N57	C 9	500	29.1				A	124	5	0300—2400	23/URS (24)
3			MEDINAH	ARS	39E33 24N28	C10	1	0.4				A	69	4	0300—2300	24
4			LAUNCESTON TAS	AUS	147E00 42S00	A20	10	12.1				A		4	1900—1400	
5			PEMBERTON WA	AUS	116E30 34S30	A20	10	12.1				A		3	2100—1600	
6			MYMENSINGH	BGD	90E24 24N44	A20	10	12.1				A	122	3	0000—1800	
7			AWALI	BHR	50E33 26N05	C 9	0.1	−9.6				A	60	6	0000—2400	
8			SEBELE	BOT	25E58 24S34	A20	50	17.4				A	100	4	0300—2100	
9		S	ANQING	CHN	117E00 30N30	A20	10	10.4				A	60	4	2000—1800	
10		S	AOHAN QI	CHN	119E42 42N20	A20	10	10.4				A	60	4	2000—1800	
11		S	DARLA	CHN	99E33 33N42	A20	10	10.4				A	60	5	2000—1800	
12		S	DINGNAN	CHN	115E01 24N45	A20	10	10.4				A	60	4	2000—1800	
13		S	ENSHI	CHN	109E28 30N17	A20	10	10.4				A	60	4	2000—1800	
14		S	FUYUAN	CHN	134E15 48N17	A20	20	13.4				A	60	4	2000—1800	
15		S	FUZHOU 2	CHN	116E19 28N00	A20	10	10.4				A	60	4	2000—1800	
16		S	GANGCA	CHN	100E10 37N20	A20	20	13.4				A	60	5	2000—1800	
17		S	HAILAR	CHN	119E45 49N02	A20	20	13.4				A	60	4	2000—1800	
18		S	HEFEI	CHN	117E19 31N46	A20	20	13.4				A	60	4	2000—1800	
19		S	HEXIGTEN QI	CHN	117E22 43N12	A20	10	10.4				A	60	4	2000—1800	
20		S	HEZE	CHN	115E27 35N15	A20	5	7.4				A	60	4	2000—1800	
21		S	HUIZHOU	CHN	114E24 23N05	A20	50	17.4				A	60	4	2000—1800	
22		S	HUMA	CHN	126E36 51N35	A20	20	13.4				A	60	4	2000—1800	
23		S	HUOQIU	CHN	116E15 32N20	A20	5	7.4				A	60	4	2000—1800	
24		S	JAGDAQI	CHN	124E05 50N25	A20	20	13.4				A	60	4	2000—1800	
25		S	JIAN SHI	CHN	114E59 27N08	A20	50	17.4				A	60	4	2000—1800	
26		S	JIAYIN	CHN	130E21 48N42	A20	50	17.4				A	60	4	2000—1800	
27		S	JIMO	CHN	120E28 36N23	A20	10	10.4				A	60	4	2000—1800	
28		S	JINAN	CHN	116E57 36N43	A20	50	17.4				A	60	4	2000—1800	
29		S	JINGDEZHEN	CHN	117E11 29N17	A20	20	13.4				A	60	4	2000—1800	
30		S	JINHUA	CHN	119E30 29N15	A20	10	10.4				A	60	4	2000—1800	
31		S	KENLI	CHN	118E35 37N38	A20	5	7.4				A	60	4	2000—1800	
32		S	KUANDIAN	CHN	124E42 40N44	A20	10	10.4				A	60	4	2000—1800	
33		S	LINFEN	CHN	111E31 36N05	A20	10	10.4				A	60	4	2000—1800	
34		S	LINGQIU	CHN	114E14 39N26	A20	1	0.4				A	60	4	2000—1800	
35		S	LISHI	CHN	111E08 37N31	A20	10	10.4				A	60	4	2000—1800	
36		S	LONGJIANG	CHN	123E14 47N20	A20	1	0.4				A	60	4	2000—1800	
37		S	LUDA	CHN	121E30 38N54	A20	10	10.4				A	60	4	2000—1800	
38		S	MUDANJIANG	CHN	129E36 44N36	A20	10	10.4				A	60	4	2000—1800	
39		S	NINGBO	CHN	121E32 29N52	A20	20	13.4				A	60	4	2000—1800	
40		S	NINGGUO	CHN	118E58 30N38	A20	5	7.4				A	60	4	2000—1800	
41		S	PANSHAN	CHN	122E02 41N08	A20	5	7.4				A	60	4	2000—1800	
42		S	PENGHU	CHN	119E33 23N34	A20	20	13.4				A	60	5	2000—1800	
43		S	PINGHU	CHN	121E01 30N42	A20	10	10.4				A	60	4	2000—1800	
44		S	RUIJIN	CHN	116E00 25N50	A20	20	13.4				A	60	4	2000—1800	
45		S	SHASHI	CHN	112E14 30N18	A20	20	13.4				A	60	4	2000—1800	
46		S	SHIYAN	CHN	110E47 32N36	A20	10	10.4				A	60	4	2000—1800	
47		S	SHUANGYASHAN	CHN	131E05 46N32	A20	5	7.4				A	60	4	2000—1800	
48		S	SHUO XIAN	CHN	112E25 39N18	A20	10	10.4				A	60	4	2000—1800	
49		S	SU XIAN	CHN	116E58 33N39	A20	20	13.4				A	60	4	2000—1800	
50		S	SUIHUA	CHN	126E50 46N34	A20	20	13.4				A	60	4	2000—1800	
51		S	SUIZHONG	CHN	120E20 40N21	A20	5	7.4				A	60	4	2000—1800	
52		S	SUZHOU	CHN	120E41 31N18	A20	5	7.4				A	60	3	2000—1800	
53		S	TAIZHOU	CHN	119E55 32N30	A20	5	7.4				A	60	3	2000—1800	
54		S	TONGREN 1	CHN	102E01 35N31	A20	10	10.4				A	60	5	2000—1800	

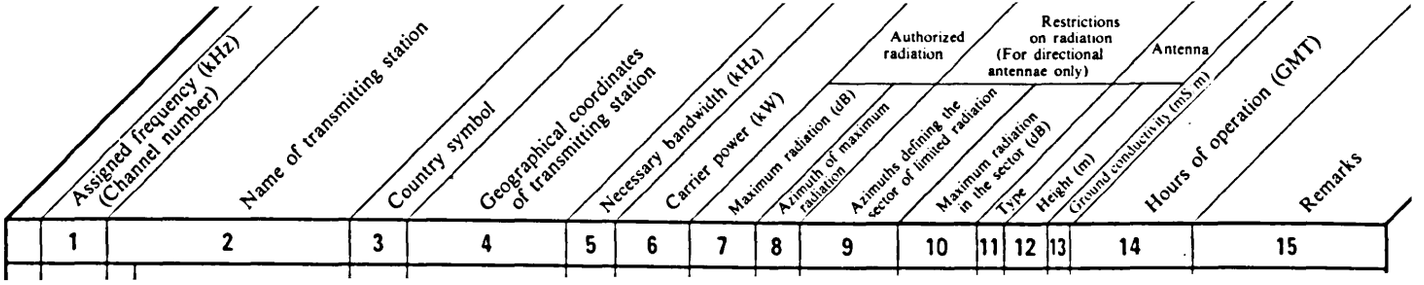


1215 KHZ (77)

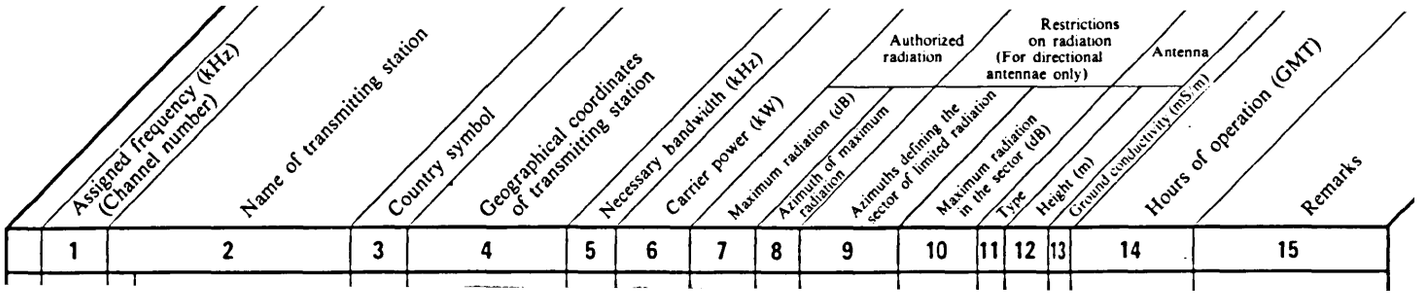
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1215	S	WENZHOU	CHN	120E36 28N06	A20	10	10.4				A	60	4	2000—1800	
2	(77)	S	WUHAN	CHN	114E20 30N36	A20	50	17.4				A	60	4	2000—1800	
3		S	WULIAN	CHN	119E12 35N45	A20	5	7.4				A	60	4	2000—1800	
4		S	XIUSHUI	CHN	114E34 29N03	A20	10	10.4				A	60	4	2000—1800	
5		S	YANGQUAN	CHN	113E35 37N52	A20	5	7.4				A	60	4	2000—1800	
6		S	YANTAI	CHN	121E18 37N36	A20	5	7.4				A	60	4	2000—1800	
7		S	YINGDE	CHN	113E24 24N10	A20	10	10.4				A	60	4	2000—1800	
8		S	YULI	CHN	121E19 23N20	A20	20	15.1				A	120	5	2000—1800	
9		S	ZAOYANG	CHN	112E45 32N08	A20	10	10.4				A	60	4	2000—1800	
10		S	ZAOZHUANG	CHN	117E34 34N52	A20	5	7.4				A	60	4	2000—1800	
11		S	ZHANJIANG	CHN	110E24 21N12	A20	50	17.4				A	60	4	2000—1800	
12			LAS PALMAS	CNR	15W25 28N05	A20	20	13.4				A	60	4	0000—2400	
13			KIBANGOU	COG	12E21 03S28	A20	10	10.4				A	62	5	0000—2400	
14			GHIMBI	ETH	35E49 09N11	C 9	10	10.4				A	62	3	0400—2100	
15		S	BRIGHTON	G	00W15 50N50	A20	1	0.6				A	82	4	0000—2400	
16		S	BROOKMANS PARK	G	00W11 51N44	A20	50	19.0	170			B		4	0000—2400	
17		S	BURGHEAD	G	03W28 57N42	A20	20	16.4				A	152	4	0000—2400	
18		S	DROITWICH	G	02W06 52N18	A20	30	18.0	40			B		3	0000—2400	
19		S	FAREHAM	G	01W13 50N51	A20	1	1.0	305			B		4	0000—2400	
20		S	HULL	G	00W14 53N43	A20	0.2	−6.6				A	38	3	0000—2400	
21		S	LISNAGARVEY	G	06W04 54N30	A20	10	12.1				A	110	4	0000—2400	
22		S	LONDONDERRY	G	07W20 55N00	A20	0.3	−5.2				A	30	5	0000—2400	
23		S	MOORSIDE EDGE	G	01W54 53N38	A20	50	20.0	90			B		4	0000—2400	
24		S	MOORSIDE EDGE	G	01W54 53N38	A20	50	20.0	270			B				
25		S	NEWCASTLE	G	01W34 54N56	A20	2	3.4				A	38	4	0000—2400	
26		S	PLYMOUTH	G	04W08 50N24	A20	1	0.4				A	34	5	0000—2400	
27		S	POSTWICK	G	01E24 52N38	A20	1	0.4				A	38	3	0000—2400	
28		S	REDMOSS	G	02W05 57N07	A20	2	3.6				A	76	5	0000—2400	
29		S	REDRUTH	G	05W13 50N13	A20	2	3.4				A	38	5	0000—2400	
30		S	TYWYN	G	04W06 52N35	A20	0.5	−2.6				A	38	4	0000—2400	
31		S	WASHFORD	G	03W21 51N10	A20	60	19.9				A	137	4	0000—2400	
32		S	WESTERGLEN	G	03W50 55N58	A20	40	19.0	90			B		4	0000—2400	
33		S	WESTERGLEN	G	03W50 55N58	A20	40	19.0	270			B				
34			DELHI 1	IND	77E12 28N38	A20	10	12.1				A	125	3	0900—0300	
35			DELHI 2	IND	77E12 28N38	A20	20	15.1				A	125	3	0300—0900	25
36			MADURAI 1	IND	78E15 09N25	A20	20	15.1				A	125	3	0300—1000	25
37			MADURAI 2	IND	78E15 09N25	A20	10	12.1				A	125	3	1000—0300	
38			DJAKARTA	INS	106E45 06S23	A18	10	10.4				A	61	5	2200—1700	
39			CHALUS	IRN	51E25 36N40	A20	20	13.4				A	66	2	0200—2100	
40			JAECHEON	KOR	128E13 37N17	C10	10	12.1				A	120	6	0000—2400	
41			HAEJU	KRE	125E42 38N03	A16	1	0.0				A	30		2000—1800	
42			MORONDAVA	MDG	44E18 20S17	C 9	20	15.1				A	124	4	0300—2000	
43			DELIMARA	MLT	14E34 35N49	D 9	600	35.0	75	170—340	8.0	B		4	0000—2400	23/URS
44			TAHOUA	NGR	05E10 15N00	C 9	300	26.9				A	120	4	0000—2400	18/NIG
45			MONGUN	NIG	09E32 09N15	C 9	20	13.6				A	75	4	0500—2300	18/NGR
46		S	DARGAVILLE	NZL	173E53 35S57	A20	2	3.4				A	50	3	0000—2400	
47		S	KAIKOHE	NZL	173E52 35S22	A20	2	3.4				A	50	4	0000—2400	
48			NOOKUNDI	PAK	63E20 28N40	A20	10	10.4				A	53	4	0000—2000	
49			CEBU CITY	PHL	123E56 10N19	C 9	5	7.6				A	76	3	2100—1600	
50			DAGUPAN CITY	PHL	120E20 16N03	C 9	5	7.6				A	76	3	2100—1600	
51		S	KANDRIAN	PNG	149E33 06S34	B10	2	3.0				A	30	6	1900—1300	
52		S	KIMBE	PNG	150E25 05S17	B10	10	10.6				A	80	6	1900—1300	
53			BAKEL	SEN	12W28 14N55	C 9	20	13.4				A	50	4	0600—2400	
54			ARUSHA	TGK	36E40 03S00	C 9	50	17.4				A	64	4	0300—2100	



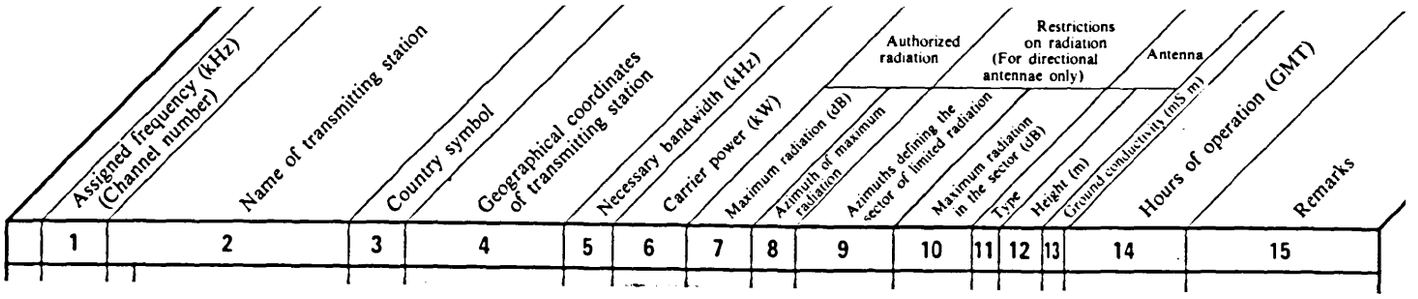
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1215		PHRAE	THA	100E09 18N08	A20	10	10.4				A	62	5	0000—2400	
2	(77)		SURAT THANI	THA	99E12 09N07	A20	50	17.4				A	60	3	0000—2400	
3			GAZIANTEP	TUR	37E22 37N04	D 9	10	10.4				A	52	4	0200—2300	
4		S	KURSK	URS	36E15 51N45	A16	20	13.0				A	190	4	0000—2400	
5			OMSK	URS	73E25 55N01	A16	100	20.0				A	190	4	0000—2400	23/MLT
6		S	ORISSARE	URS	23E30 58N56	C 9	30	14.8				A	190	4	0000—2400	
7		S	TARTU	URS	26E35 58N23	C 9	50	17.0				A	190	4	0000—2400	
8			TSKHINVALI	URS	44E00 42N18	A18	25	14.0				A	190	4	0000—2400	
9			HISWA	YMS	44E54 12N49	C 9	200	26.0	26	140—270	13.0	B		4	0300—2200	24



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1224	DIRIYAH	ARS	46E37 24N39	C10	1	2.1				A	107	4	0300—2300	24
2	(78)	MELBOURNE VIC	AUS	144E47 37S43	A20	10	10.4				A	65	2	1900—1400	
3		VIDIN	BUL	22E40 43N39	C 9	1000	30.0				A	257	4	0000—2400	
4		CHENGDU	CHN	104E00 30N42	A20	100	22.1				A	120	4	2000—1800	
5		S HENGCHUN	CHN	120E43 22N01	A20	10	12.1				A	120	5	2000—1800	
6		S JIAYI	CHN	120E26 23N28	A20	10	12.1				A	120	5	2000—1800	
7		S XINZHU	CHN	120E58 24N48	A20	100	22.1				A	120	5	2000—1800	
8		YOKO	CME	12E50 05N23	C 9	1	2.1				A	122	4	0500—2300	
9		S ALGECIRAS	E	05W30 36N10	D 9	5	7.4				A	60	4	0000—2400	19
10		S CUENCA	E	02W10 40N05	D 9	5	7.4				A	60	4	0000—2400	19
11		S GIJON	E	05W40 43N30	D 9	5	7.4				A	60	5	0000—2400	19
12		S JAEN	E	03W45 37N45	D 9	5	7.4				A	60	4	0000—2400	19
13		S LA CORUNA	E	08W25 43N20	D 9	5	7.4				A	60	5	0000—2400	19
14		S MURCIA	E	01W10 38N00	D 9	5	7.4				A	60	4	0000—2400	19
15		S PALMA MALLORCA	E	02E40 39N35	D 9	5	7.4				A	60	4	0000—2400	19
16		S S SEBASTIAN	E	02W00 43N20	D 9	5	7.4				A	60	4	0000—2400	19
17		S TALAVERA REINA	E	04W50 39N55	D 9	5	7.4				A	60	4	0000—2400	19
18		S ZARAGOZA	E	00W55 41N40	D 9	25	14.4				A	60	4	0000—2400	19
19		ASSEN	HOL	06E33 53N00	D 9	20	13.4				A	60	4	0000—2400	
20		PO	HVO	01W08 11N10	A20	30	16.9				A	123	4	0000—2400	
21		BARMER	IND	71E18 25N45	A20	20	15.1				A	125	4	0300—0900	25
22		CALCUTTA 1	IND	88E23 22N36	A20	20	15.1				A	125	3	0300—0900	25
23		CALCUTTA 2	IND	88E23 22N36	A20	10	12.1				A	125	3	0900—0300	
24		GORAKHPUR	IND	83E28 26N52	A20	20	15.1				A	125	3	0300—0900	25
25		GULBARGA	IND	76E54 17N19	A20	20	15.1				A	125	3	0300—1000	25
26		ITANAGAR	IND	94E42 27N12	A20	20	15.1				A	125	4	0300—0900	25
27		NAGPUR	IND	79E03 21N06	A20	20	15.1				A	125	3	0300—0900	25
28		SRINAGAR 1	IND	74E49 34N04	A20	20	15.1				A	125	3	0300—0900	25
29		SRINAGAR 2	IND	74E49 34N04	A20	10	12.1				A	125	3	0900—0300	
30		BEER SHEVA	ISR	34E32 31N14	D 9	10	10.4				A	55	3	0000—2400	33
31		KANAZAWA	J	136E37 36N32	A15	10	12.1				A	114	4	0000—2400	18/KOR
32		GARISSA	KEN	39E40 00S25	C 9	10	10.6				A	100	4	0000—2400	
33		SUWEON	KOR	127E02 37N16	C10	100	22.1				A	135	5	0000—2400	18/J
34		S JOHORE BAHRU	MLA	103E45 01N27	A20	50	20.4				A	150	5	2200—1700	
35		S TRONOH	MLA	100E59 04N23	A20	100	23.4				A	150	5	2200—1700	
36		LOUREN MARQUES	MOZ	32E36 25S58	C10	10	10.4				A	60	4	0400—2200	31
37		MOCIMBOA	MOZ	40E45 13S02	C10	50	17.5	230	330—130	7.0	B		4	0400—2200	
38		NAMPULA	MOZ	39E16 15S06	C10	5	7.4				A	60	4	0400—2200	31
39		KWAJALEIN	MRL	167E44 08N44	A20	1	0.4				A	46	3	0000—2400	
40		TIEBAGHI	NCL	164E13 20S28	A20	10	10.4				A	50	3	0000—2400	
41		JOS 1	NIG	08E53 09N52	C 9	20	13.6				A	75	4	0500—2300	
42		KEETMANSHOOP	NMB	18E08 26S35	A20	50	19.1				A	122	2	0000—2400	
43		OBAN	NZL	168E08 46S52	A20	2	3.4				A	50	5	0000—2400	
44		CATBALOGAN	PHL	124E53 11N46	C 9	1	0.6				A	76	3	2100—1600	
45		JOLO SULU	PHL	121E00 06N03	C 9	1	0.6				A	76	3	2100—1600	
46		LUCENA QUEZON	PHL	121E36 13N57	C 9	5	7.6				A	76	3	2100—1600	
47		LE PORT 2	REU	55E18 20S55	A20	10	10.6				A	100	3	0000—2400	
48		OESTERSUND	S	14E36 63N07	D 9	600	30.0				A	120	6	0000—2400	
49		ZIGUINCHOR	SEN	16W15 12N35	C 9	20	15.1				A	125	5	0600—2400	
50		GUEREDA	TCD	22E06 14N31	C 9	1	0.4				A			0400—2300	
51		S BANGKOK	THA	100E37 13N55	A20	10	10.4				A	63	2	0000—2400	
52		S CHIANG RAI	THA	99E49 19N54	A20	10	10.4				A	60	5	0000—2400	
53		JJINJA	UGA	33E14 00N29	C 9	10	10.4				A	60	4	0300—2100	
54		DJAMBUL	URS	71E22 42N55	A18	150	25.8	340	140—180	7.0	A		4	0000—2400	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1224	SOVETSKAIA GVN	URS	140E20 48N58	A18	50	17.0				A	190	4	0000—2400	
2	(78)	UST KUT	URS	105E41 56N46	A18	50	17.0				A	190	4	0000—2400	



1233 KHZ (79)

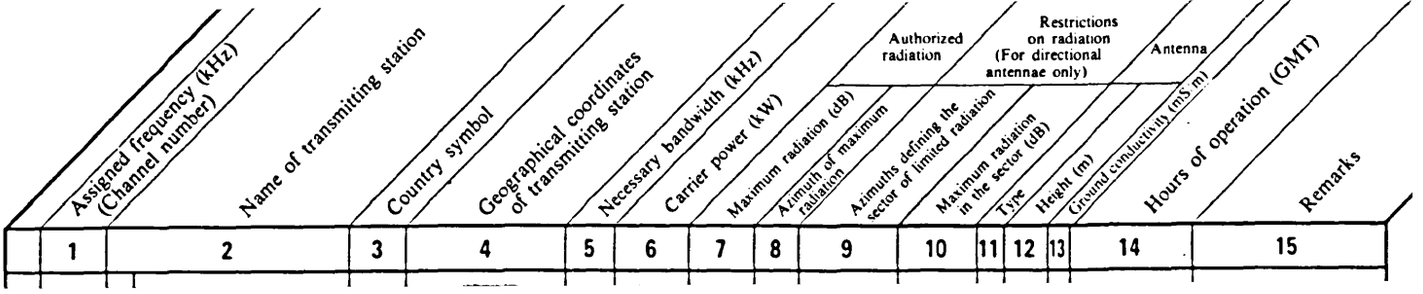
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1233	LUANDA	AGL	13E20 08S50	A20	5	7.4				A	62	3	0000—2400	
2	(79)	JEDDAH	ARS	39E09 21N14	C 9	20	15.1				A	120	3	0400—1400	24
3		NEWCASTLE NSW	AUS	151E40 32S48	A20	10	10.6				A	91	3	1900—1400	
4		LIEGE	BEL	05E34 50N40	D 9	50	19.1				A	130	4	0600—1800	7
5		LIEGE	BEL	05E34 50N40	D 9	50	17.0	270	70—110	—7.0	B		4	1800—0600	
6		S ANHUA	CHN	111E13 28N22	A20	20	13.4				A	60	4	2000—1800	
7		S CHANGSHA SHI	CHN	112E45 28N09	A20	100	22.1				A	120	4	2000—1800	
8		S HABAHE	CHN	87E03 48N04	A20	10	10.4				A	60	4	2000—1800	
9		S LEIYANG	CHN	112E51 26N25	A20	20	13.4				A	60	4	2000—1800	
10		S NINGYUAN	CHN	111E59 25N35	A20	20	13.4				A	60	4	2000—1800	
11		S QIANYANG	CHN	110E09 27N20	A20	20	13.4				A	60	4	2000—1800	
12		S TAXKORGAN	CHN	75E08 37N42	A20	10	10.4				A	60	4	2000—1800	
13		S URUMQI SHI	CHN	87E30 43N35	A20	100	22.1				A	120	4	2000—1800	
14		S YONGSHUN	CHN	109E51 29N00	A20	20	13.4				A	60	4	2000—1800	
15		KOUSSERI	CME	14E57 12N02	C 9	20	15.1				A	121	4	0500—2300	
16		GAMBOMA	COG	15E52 01S52	A20	10	10.4				A	61	5	0000—2400	
17		BONDOUKOU	CTI	02W47 08N08	C 9	10	12.1				A		7	0600—2400	
18		OUELLE	CTI	04W01 07N17	C 9	1	0.4				A		7	0600—2400	
19		C GRECO	CYP	34E04 34N57	D 9	600	34.0	200	320—350	9.0	B		4	0000—2400	
20		GHIMBI	ETH	35E49 09N11	C 9	10	10.4				A	61	3	0400—2100	
21		PT GENTIL	GAB	08E42 00S42	C 9	5	7.4				A		4	0400—2400	
22		BAFATA	GNB	14W39 12N09	A20	5	7.4				A	62	3	0000—2400	
23		PUTTUR	IND	75E12 12N42	A20	20	15.1				A	120	4	0000—2400	
24		RAMPUR	IND	79E04 28N48	A20	20	15.1				A	120	3	0300—0900	25
25		SURAT	IND	72E52 21N12	A20	20	15.1				A	120	3	0300—0900	25
26		SURATGARH	IND	73E54 29N24	A20	20	15.1				A	120	3	0300—0900	25
27		TURA	IND	90E12 25N36	A20	20	15.1				A	120	3	0000—2400	
28		VIZAGAPATAM	IND	83E20 17N42	A20	20	15.1				A	120	4	0300—1000	25
29		PONTIANAK	INS	109E16 00S05	A18	50	17.6				A	70	5	2100—1600	
30		MAKU	IRN	44E25 39N15	A20	20	13.4				A	61	3	0200—2100	
31		AOMORI	J	140E39 40N47	A15	5	9.0	40			B		5	0000—2400	
32		NAGASAKI	J	129E53 32N43	A15	5	7.6				A	83	5	0000—2400	
33		MOMBASA	KEN	39E40 04S05	C 9	50	19.1				A	100	4	0000—2400	
34		KUMI	KOR	128E20 36N07	C10	1	0.6				A	80	6	0000—2400	
35		PYEONGCHANG	KOR	128E23 37N22	C10	1	2.1				A	120	6	0000—2400	
36		YEONGYANG	KOR	129E07 36N39	C10	1	2.1				A	120	6	0000—2400	
37		JUNGGANG	KRE	126E44 41N45	A16	1	0.0				A	30		2000—1800	
38		SELAMA	MLA	100E40 05N12	A20	10	12.1				A	120	5	2200—1700	
39		SAINSHAND	MNG	110E05 44N50	A18	5	9.1				A	120	4	2200—1500	
40		MARRUPA	MOZ	37E30 13S12	C10	1	0.4				A	40	4	0400—2200	
41		TANGER	MRC	05W50 35N45	C 9	200	25.0	110	310— 50	16.0	B		4	0700—2400	24
42		OHAKUNE	NZL	175E29 39S24	A20	1	0.4				A	50	6	0000—2400	
43		BACOLOD CITY	PHL	122E57 10N12	C 9	1	0.6				A	75	3	2100—1600	
44		DAVAO CITY	PHL	125E35 07N05	C 9	5	7.6				A	75	3	2100—1600	
45		S KOROBA	PNG	142E44 05S42	B10	2	3.0				A	30	5	1900—1300	
46		S MENDI	PNG	143E40 06S10	B10	10	10.6				A	80	5	1900—1300	
47		S TARI	PNG	142E57 05S51	B10	2	3.0				A	30	5	1900—1300	
48		AL KHAISAH	QAT	51E25 25N24	C 9	100	28.0	130	180— 60	18.0	B		5	0300—2100	24
49		S CES BUDEJOVICE	TCH	14E31 48N58	C 9	100	22.1				A	100	5	0000—2400	
50		S KARLOVY VARY	TCH	12E52 50N15	C 9	50	19.1				A	100	5	0000—2400	
51		S PLZEN	TCH	13E23 49N45	C 9	100	22.1				A	100	4	0000—2400	
52		S PRAHA 2	TCH	14E31 50N22	C 9	750	32.2				A	140	4	0000—2400	
53		S STRAKONICE	TCH	13E55 49N17	C 9	7	8.9				A	60	5	0000—2400	
54		DAPANGO	TGO	00E12 10N51	A20	10	10.4				A	60	4	0000—2400	

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1233	UDON THANI	THA	102E47 17N23	A20	10	10.4				A	60	3	0000—2400	
2	(79)	NUKUALOFA	TON	175W10 21S08	A20	10	10.4				A	61	2	1800—1000	
3		DARGAN ATA	URS	62E14 40N27	A18	50	17.4				A	60	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Antenna: Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1242 KHZ (80)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1242		HENRIQCARVALHO	AGL	20E24 09S40	A20	5	7.4				A	62	3	0000—2400	
2	(80)		GIZAN	ARS	42E31 16N52	C 9	20	15.1				A	120	3	0400—1400	24
3			DARWIN NT	AUS	130E51 12S26	A20	10	10.4				A	53	3	1900—1400	
4			OAKEY QLD	AUS	151E45 27S28	A20	5	7.4				A	60	3	0000—2400	
5			PT AUGUSTA SA	AUS	137E56 32S42	A20	5					B		3	1900—1400	
6			SALE VIC	AUS	147E02 38S03	A20	5					B		2	1900—1400	
7			BUJUMBURA	BDI	29E30 03S28	C 9	100	22.1				A	120	4	0300—2400	
8			SG HANCHING	BRU	114E58 04N57	A20	20	13.4				A	55	4	2200—1500	
9			PHNOM PENH	CBG	104E55 11N34	C10	1	0.4				A	61	3	0000—2400	
10		S	BIJIANG	CHN	98E52 26N34	A20	10	10.4				A	60	5	2000—1800	
11		S	BINCHUAN	CHN	100E33 25N50	A20	10	10.4				A	60	5	2000—1800	
12		S	CHANGNING	CHN	99E29 24N51	A20	10	10.4				A	60	5	2000—1800	
13		S	GEJIU	CHN	103E08 23N21	A20	20	13.4				A	60	5	2000—1800	
14			JIAYIN	CHN	130E21 48N42	A20	100	21.0	310	90—170	14.0	B		4	2000—1800	
15		S	JINGHONG	CHN	100E43 22N01	A20	20	13.4				A	60	5	2000—1800	
16		S	QUJING	CHN	103E40 25N28	A20	10	10.4				A	60	5	2000—1800	
17			SHENYANG	CHN	123E36 41N54	A20	100	21.0	280	60—140	14.0	B		4	2000—1800	
18		S	ZHAOTONG	CHN	103E34 27N20	A20	10	10.4				A	60	5	2000—1800	
19			MINDELO	CPV	24W59 16N53	A18	10	10.4				A	40	6	1900—2400	
20			PORT FUAD	EGY	32E20 31N05	D 9	20	15.1				A	100	3	0000—2400	24
21			MARSEILLE	F	05E20 43N28	D 9	300	32.0	305	60— 90	25.0	B		5	0000—2400	
22		S	PUUMALA	FNL	28E04 61N30	D 9	45	18.6				A	100	5	0000—2400	
23		S	VAASA 1	FNL	21E38 63N10	D 9	600	29.8	340	150—160	24.8	B		4	0000—2400	
24			TOUGUE	GUI	11W35 11N30	C 9	30	15.2				A	60	4	0000—2400	
25			KOUDOUGOU	HVO	02W30 12N22	A20	10	10.4				A	60	4	0000—2400	
26			ADILABAD	IND	78E30 19N48	A20	20	15.1				A	120	3	0300—1000	25
27			ALMORA	IND	79E38 29N35	A20	20	15.1				A	120	4	0300—0900	25
28			BHUJ	IND	69E43 23N15	A20	20	15.1				A	120	3	0300—0900	25
29			LEH	IND	77E35 34N09	A20	20	15.1				A	120	4	0300—0900	25
30			VARANASHI 1	IND	83E00 25N20	A20	300	26.9				A	120	3	0300—0900	25
31			VARANASHI 2	IND	83E00 25N20	A20	100	22.1				A	120	3	0900—0300	
32			BOGOR SEMPLAK	INS	106E47 06S36	A18	10	10.4				A	60	5	2200—1700	
33			JAZIREH SERRI	IRN	54E30 25N55	A20	400	29.0	210	320— 90		B		4	0200—2100	
34			KERMAN	IRN	56E58 30N15	A20	10	10.4				A	60	3	0300—1400	
35			TEL AVIV 3	ISR	34E47 32N04	D 9	10	10.4				A	50	3	0000—2400	33
36			TOKYO	J	139E59 35N23	A15	100	22.1				A	122	4	0000—2400	
37			MASAN	KOR	128E35 35N08	C10	10	12.1				A	100	4	0000—2400	
38			RYWON	KRE	128E40 40N21	A16	30	16.9				A	105		2000—1800	
39		S	KOBDO	MNG	91E48 48N10	A18	5	9.1				A	120	5	2200—1500	
40		S	ULAN GOM	MNG	92E00 50N00	A18	5	9.1				A	120	5	2200—1500	
41		S	ULIASUTAI	MNG	96E50 47N40	A18	5	9.1				A	120	5	2200—1500	
42			KEFFI	NIG	07E45 08N50	C 9	20	13.6				A	75	4	0500—2300	
43		S	MURUPARA	NZL	176E38 38S28	A20	1	0.4				A	50	5	0000—2400	
44		S	WHAKATANE	NZL	176E54 38S03	A20	2	3.4				A	50	4	0000—2400	
45			MALABON RIZAL	PHL	120E57 14N40	C 9	10	10.6				A	75	3	2100—1600	
46			OZAMIS CITY	PHL	123E50 08N08	C 9	5	7.6				A	75	3	2100—1600	
47			GOZ BEIDA	TCD	21E26 12N14	C 9	1	0.4				A			0400—2300	
48			ROI ET	THA	103E38 16N03	A20	10	10.4				A	54	3	0000—2400	
49			SURAT THANI	THA	99E20 09N09	A20	100	23.0	200			B		3	0000—2400	
50		S	DONETSK	UKR	37E29 47N56	A16	30	14.8				A	190	4	0000—2400	
51		S	KIEV	UKR	30E49 50N30	A16	150	21.8				A	190	4	0000—2400	
52		S	ODESSA	UKR	30E45 46N29	A16	30	14.8				A	190	4	0000—2400	
53		S	SIMFEROPOL	UKR	34E06 44N56	A16	50	17.0				A	190	4	0000—2400	

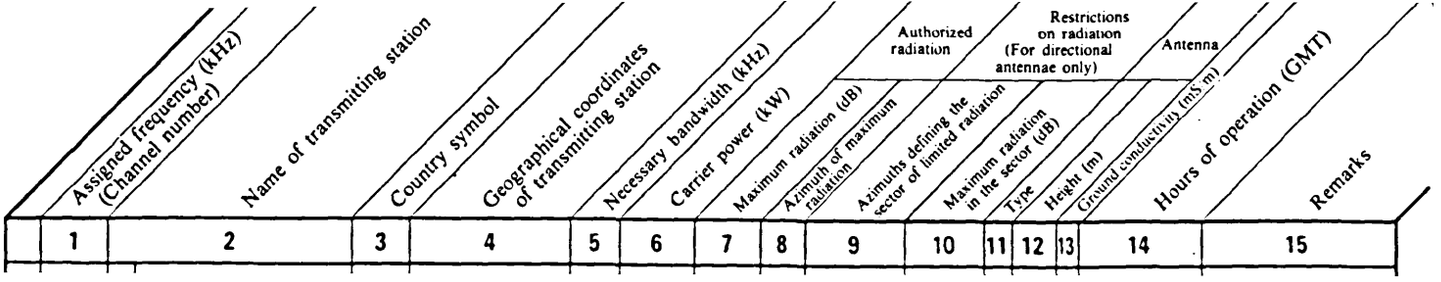


	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1242	S	TIRASPOL	URS	29E37 46N50	A16	20	13.0				A	190	4	0000—2400	
2	(80)	S	VOLOTCHISK	URS	26E20 48N30	A16	50	17.0				A	190	4	0000—2400	
3			OHRID 1	YUG	20E47 41N08	D 9	10	10.4				A	60	4	0000—2400	
4			STUDENT	YUG	14E29 46N03	D 9	1	0.4				A	50	6	0800—1600	
5			MWENEDITU	ZAI	23E10 06S13	C 9	1	0.4				A	60	8	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

1251 KHZ (81)

	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1251		MENONGUE	AGL	17E40	14S40	A20	5	7.4				A	62	3	0000—2400	
2	(81)		DHAHRAN	ARS	50E06	26N18	A20	0.1	—9.6				A	38	4	0100—2400	24
3			RIYADH	ARS	46E23	24N30	C 9	20	15.1				A	120	4	0400—1400	24
4			DUBBO NSW	AUS	148E40	32S16	A20	5	7.6				A	96	3	1900—1400	
5			HEFEI	CHN	117E19	31N46	A20	5	7.4				A	50	4	2000—1800	
6		S	MADO	CHN	98E14	34N50	A20	20	13.4				A	60	5	2000—1800	
7		S	XINING	CHN	101E50	36N35	A20	100	22.1				A	120	5	2000—1800	
8		S	YUSHU 2	CHN	97E00	33N00	A20	10	10.4				A	60	5	2000—1800	
9			APLAHOUE	DAH	01E40	06N57	C10	5	7.4				A	60	4	0500—2400	
10			MAKALE	ETH	39E28	13N31	C 9	10	10.4				A	60	3	0400—2100	
11			FRANCEVILLE	GAB	13E33	01S36	C 9	2	3.4				A		5	0400—2400	
12			SEKKONG	HKG	114E06	22N25	A20	2	3.4				A	60	4	0700—1600	
13		S	BALATONSZABADI	HNG	18E07	46N55	D 9	500	30.4				A	145	4	0000—2400	
14		S	NYIREGYHAZA	HNG	21E45	47N56	D18	40	18.1				A	115	4	0000—2400	
15			ROERMOND	HOL	05E44	51N11	D 9	20	13.0	100	280—290	10.0	B		4	0000—2400	
16			BIKANER	IND	73E22	28N01	A20	20	15.1				A	120	4	0300—0900	25
17			CUTTACK	IND	85E55	20N35	A20	20	15.1				A	120	3	0300—0900	25
18			IMPHAL 1	IND	93E58	24N44	A20	20	15.1				A	120	3	0300—0900	25
19			IMPHAL 2	IND	93E58	24N44	A20	10	12.1				A	120	3	0900—0300	
20			MADRAS	IND	80E17	13N04	A20	20	15.1				A	120	3	0300—1000	25
21			MANGALORE	IND	74E48	12N48	A20	20	15.1				A	120	4	0300—1000	25
22			SANGLI	IND	74E36	16N53	A20	20	15.1				A	120	3	0000—2400	
23			BANDA ATJEH	INS	95E20	05N30	A18	10	10.4				A	61	5	2200—1700	
24			MATARAM	INS	116E08	08S36	A18	10	10.4				A	60	4	2100—1600	
25			DUBLIN 1	IRL	06W18	53N21	A20	20	13.4				A	60	4	0000—2400	
26			FARAHABAD SARI	IRN	53E04	36N34	A20	20	15.0	90	120—150		B		2	0200—2100	
27			FARAHABAD SARI	IRN	53E04	36N34	A20	20	15.0		230—260		B				
28			FARAHABAD SARI	IRN	53E04	36N34	A20	20	15.0		330— 50		B				
29			DAEGU	KOR	128E32	35N54	C10	10	10.6				A	83	5	0000—2400	
30			TRIPOLI KM16	LBY	13E00	32N50	D 9	500	33.0	215	20 70	20.0	B		4	0400—2400	24
31			TULEAR	MDG	43E41	23S28	C 9	5	7.6				A	93	4	0300—2000	
32			AIOUN ATROUSS	MTN	09W33	16N40	B20	20	15.1				A	120		0600—2400	24
33			DOSSO	NGR	03E11	13N03	C 9	1	0.4				A	60	4	0000—2400	
34			AUCKLAND	NZL	174E38	36S51	A20	5	9.1				A	120	3	0000—2400	
35			NOORPURNAURANG	PAK	71E25	29N10	A20	2	3.4				A	33	3	0000—2000	
36			BUTUAN AGUSAN	PHL	125E32	08N57	C 9	1	0.6				A	74	3	2100—1600	
37			SORSOGON SOR	PHL	124E00	12N58	C 9	1	0.6				A	74	3	2100—1600	
38		S	BEREINA	PNG	146E31	08S39	B10	2	3.0				A	30	3	1900—1300	
39		S	KUPIANO 1	PNG	148E13	10S04	B10	2	3.0				A	30	3	1900—1300	
40		S	PT MORESBY	PNG	147E12	09S26	B10	10	10.6				A	80	3	1900—1300	
41		S	TAPINI	PNG	146E59	08S22	B10	2	3.0				A	30	5	1900—1300	
42			NAHA	RYU	127E41	26N14	A15	5	7.6				A	68	4	0000—2400	
43			SAFOTU	SMO	172W21	13S26	A20	2	3.4				A	50	6	0000—2400	
44			DUSA MAREB	SOM	46E20	05N30	A18	10	10.4				A	60	4	0300—2100	
45			KELO	TCD	15E48	09N18	C 9	1	0.4				A			0400—2300	
46			MPANDA	TGK	31E00	06S30	C 9	10	12.1				A	126	4	0300—2100	
47			BANGKOK	THA	100E30	13N45	A20	20	13.4				A	54	2	0000—2400	
48			DUBAI	UAE	55E16	25N14	C 9	50	17.4				A	60	5	0200—2100	24
49		S	ALEKSANDROVSKO	URS	43E00	44N20	A18	5	7.0				A	190	4	0000—2400	
50			LENINABAD	URS	69E40	40N17	A18	25	14.0				A	190	4	0000—2400	
51		S	TCHERKESSK	URS	42E02	44N14	A18	5	7.0				A	190	4	0000—2400	
52			VLADIVOSTOK	URS	131E53	43N07	C 9	1000	35.0	45	200—250	20.0	B		4	2200—0800	
53			VLADIVOSTOK	URS	131E53	43N07	C 9	500	32.0	45	200—250	17.0	B		4	0800—2200	



	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1260		DALATANDO	AGL	14E55	09S55	A20	5	7.4				A	62	3	0000—2400	
2	(82)		FIER	ALB	19E35	40N40	A20	1	0.4				A	60	3	0400—2300	
3			DAMMAM	ARS	50E10	26N24	C 9	20	15.1				A	120	3	0000—2400	
4			PT HEDLAND WA	AUS	118E40	20S24	A20	5	7.4				A		3	2100—1600	
5			SHEPPARTON VIC	AUS	145E31	36S23	A20	5	9.1				A	130	2	1900—1400	
6			HORTA	AZR	28W36	38N32	A20	1	0.4				A	60	4	0000—2400	
7			DACCA	BGD	90E26	23N43	C 9	10	12.1				A	122	3	0000—1800	
8		S	ANSHAN	CHN	122E58	41N07	A20	20	13.4				A	60	4	2000—1800	
9		S	FUSHUN SHI	CHN	123E53	41N51	A20	10	10.4				A	60	4	2000—1800	
10		S	FUXIN SHI	CHN	121E38	42N02	A20	100	22.1				A	120	4	2000—1800	
11		S	JIANCHANG	CHN	119E48	40N49	A20	50	17.4				A	60	4	2000—1800	
12		S	ONGNIUD QI	CHN	118E54	42N55	A20	50	17.4				A	60	4	2000—1800	
13		S	ZHUANGHE	CHN	123E01	39N41	A20	20	13.4				A	60	4	2000—1800	
14			BANYO	CME	11E48	06N51	C 9	20	15.1				A	119	4	0500—2300	
15			NGAOUNDERE	CME	13E29	07N24	C 9	30	16.9				A	119	4	0500—2300	
16			PRAIA	CPV	23W30	14N55	A18	30	15.2				A	40	6	1900—2400	
17			S M DI GALERIA	CVA	12E19	42N03	D 9	50	18.0	195	07— 40	3.0	B		4	0600—2400	
18			S M DI GALERIA	CVA	12E19	42N03	D 9	50	18.0		90—140	3.0	B				
19			S M DI GALERIA	CVA	12E19	42N03	D 9	50	18.0		250—285	7.0	B				
20			DJOUGOU	DAH	01E40	09N44	C10	10	10.4				A	60	4	0500—2400	
21		S	ALCALA HENARES	E	03W20	40N30	D 9	5	7.4				A	60	4	0000—2400	19
22		S	ALMERIA	E	02W30	36N50	D 9	5	7.4				A	60	5	0000—2400	19
23		S	CALAHORRA	E	02W00	42N20	D 9	5	7.4				A	60	4	0000—2400	19
24		S	CASTELLON	E	00W00	40N00	D 9	5	7.4				A	60	4	0000—2400	19
25		S	EIBAR	E	02W30	43N10	D 9	5	7.4				A	60	5	0000—2400	19
26		S	ELCHE	E	00W40	38N20	D 9	5	7.4				A	60	4	0000—2400	19
27		S	FREGENAL	E	06W40	38N10	D 9	5	7.4				A	60	5	0000—2400	19
28		S	LA LINEA	E	05W20	36N10	D 9	5	7.4				A	60	4	0000—2400	19
29		S	LINARES	E	03W40	38N10	D 9	5	7.4				A	60	4	0000—2400	19
30		S	MANRESA	E	01E50	41N40	D 9	5	7.4				A	60	5	0000—2400	19
31		S	ORENSE	E	07W50	42N20	D 9	5	7.4				A	60	5	0000—2400	19
32		S	PALENCIA	E	04W30	42N00	D 9	5	7.4				A	60	4	0000—2400	19
33			HARRAR	ETH	42E08	09N18	C 9	10	10.4				A	60	3	0400—2100	
34			LEICESTER	G	01W09	52N37	A20	0.2	—7.0				A	30	3	0000—2400	
35			RHODOS	GRC	28E10	36N15	C 9	500	33.0	135	240—250	5.0	B		3	0000—2400	
36			RHODOS	GRC	28E10	36N15	C 9	500	33.0		20— 30	5.0	B				
37			AMBIKAPUR 1	IND	83E04	23N10	A20	300	26.9				A	120	4	0300—0900	25
38			AMBIKAPUR 2	IND	83E04	23N10	A20	50	19.0	110	275—295	13.0	B		4	0900—0300	
39			BARODA	IND	73E16	22N17	A20	20	15.1				A	120	3	0300—0900	25
40			JAMMU	IND	74E49	32N47	A20	20	15.1				A	120	4	0300—0900	25
41			MATHURA	IND	77E40	27N30	A20	20	15.1				A	120	3	0300—0900	25
42			SILIGURI	IND	88E30	26N42	A20	20	15.1				A	120	4	0300—0900	25
43			SENDAI	J	140E53	38N23	A15	20	15.1				A	109	4	0000—2400	
44			NAMWEON	KOR	127E23	35N24	C10	10	10.4				A	60	6	0000—2400	
45			ICHON	KRE	126E52	38N28	A16	1	0.0				A	30		2000—1800	
46			ZWEDRU	LBR	08W08	06N04	A20	10	10.4				A	60	5	0500—2400	
47			KUALA DUNGUN	MLA	103E25	04N45	A20	5	7.4				A	61	5	0000—2400	
48			CABRAL	MOZ	35E08	13S18	C10	50	17.3	100			B		4	0400—2200	
49			AOUPINIE 1	NCL	165E16	21S11	A20	20	13.4				A	60	3	0000—2400	
50			WINDHOEK	NMB	17E06	22S35	A20	100	22.1				A	119	3	0000—2400	
51			CHRISTCHURCH	NZL	172E37	43S31	A20	2	3.4				A	50	4	0000—2400	
52			KHAIRPUR	PAK	68E20	27N15	A20	100	22.1				A	120	4	0000—2400	
53			CEBU CITY	PHL	123E55	10N19	C 9	5	7.6				A	74	3	2100—1600	
54			ROSALES PANG	PHL	120E36	15N53	C 9	1	0.6				A	74	3	2100—1600	

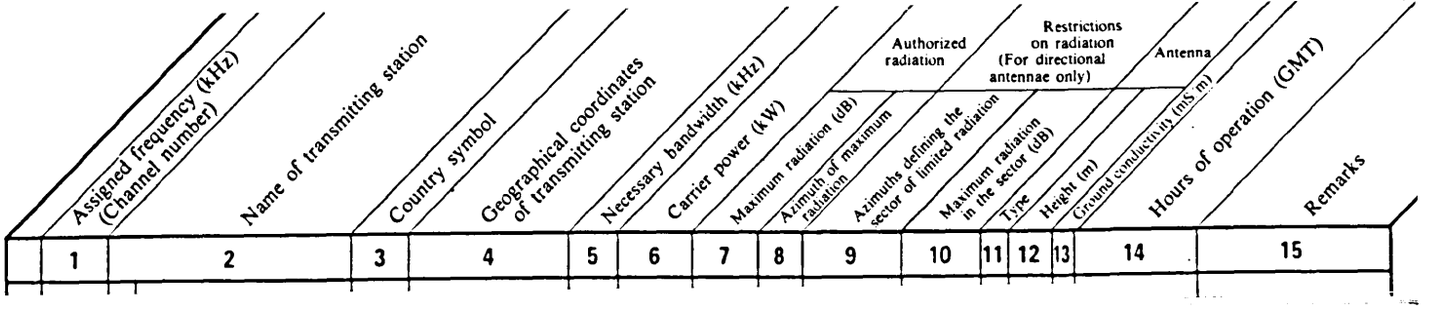
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1260 KHZ (82)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1260	S	BOLESLAWIEC	POL	15E28 51N12	C 9	60	23.0	325	120—180	4.0	B		5	0000—2400	9
2	(82)	S	KIELCE	POL	20E42 50N38	C 9	60	23.0	340	130—190	4.0	B		4	0000—2400	9
3		S	MIASTKO	POL	17E18 53N59	C 9	10	12.1				A	109	5	0000—2400	9
4		S	NOWY TARG	POL	20E00 49N31	C 9	10	12.1				A	109	5	0000—2400	9
5		S	OPOLE	POL	18E09 50N37	C 9	60	23.0	330	120—180	4.0	B		5	0000—2400	9
6		S	SUWALKI	POL	22E27 54N00	C 9	60	19.9				A	109	4	0000—2400	9
7		S	SZCZECIN	POL	14E34 53N30	C 9	160	24.1				A	109	4	0000—2400	9
8			MUSOMA	TGK	34E00 01S50	C 9	20	15.1				A	121	4	0300—2100	
9			CHIANG RAI	THA	99E51 19N56	A20	50	17.6				A	80	5	0000—2400	
10		S	KCHENSKII	URS	37E42 51N48	A18	5	7.0				A	190	4	0000—2400	
11		S	KUZEMA	URS	34E12 65N22	A18	5	7.0				A	190	4	0000—2400	
12		S	LENDERY	URS	31E14 63N22	A18	5	7.0				A	190	4	0000—2400	
13		S	SUKHINITCHI	URS	32E56 54N04	A18	5	7.0				A	190	4	0000—2400	
14		S	TCHEREMKHOVO	URS	103E05 53N10	A18	5	7.0				A	190	4	0000—2400	
15		S	USTKAMENOGORSK	URS	82E36 49N55	A18	100	20.0				A	190	4	0000—2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1269		SYDNEY NSW	AUS	151E04 33S50	A20	5	9.1				A	123	4	0000—2400	
2	(83)		DEHUA	CHN	118E15 25N30	A20	200	25.1				A	120	4	2000—1800	
3			LINHE	CHN	107E20 40N44	A20	10	10.4				A	60	4	2000—1800	
4			NANNING	CHN	108E18 22N48	A20	50	17.0				A	120	4	2000—1800	
5		S	XIAOYI	CHN	111E48 37N07	A20	20	13.4				A	60	4	2000—1800	
6		S	XIN XIAN	CHN	112E40 38N25	A20	10	10.4				A	60	4	2000—1800	
7		S	YANGCHENG	CHN	112E25 35N29	A20	10	10.4				A	60	4	2000—1800	
8		S	ZUOQUAN	CHN	113E22 37N05	A20	20	13.4				A	60	4	2000—1800	
9			LA OROTAVA	CNR	16W30 28N25	A20	20	13.4				A	50	5	0000—2400	
10			IMPFONDO	COG	18E03 01N39	A20	10	10.4				A	59	5	0000—2400	
11			NEUMUENSTER	D	09E51 54N03	D 9	600	28.2				A	65	3	0400—1800	7
12			NEUMUENSTER	D	09E51 54N03	D 9	600	30.5	20	135—145	9.5	B		3	1800—0400	
13			NEUMUENSTER	D	09E51 54N03	D 9	600	30.5	250	135—145	9.5	B				
14			AGARTALA	IND	91E23 23N50	C 9	20	15.1				A	120	3	0000—2400	
15			HYDERABAD	IND	78E30 17N20	A20	20	15.1				A	120	3	0300—1000	25
16			JAISALMER	IND	70E57 26N55	A20	20	15.1				A	120	4	0000—2400	
17			PONDICHERRY 1	IND	79E54 12N00	A20	20	15.1				A	120	3	0300—1000	25
18			PONDICHERRY 2	IND	79E54 12N00	A20	10	12.1				A	120	3	1000—0300	
19			RATNAGIRI	IND	73E22 17N00	A20	20	15.1				A	120	3	0300—1000	25
20			TEZU	IND	96E15 27N50	A20	20	15.1				A	120	4	0300—0900	25
21			PONTIANAK	INS	109E16 00S05	A18	10	10.4				A	60	5	2100—1600	
22			OBIHIRO	J	143E18 42N52	A15	5	7.6				A	93	4	0000—2400	
23			TOKUSHIMA	J	134E35 34N04	A15	5	10.0	210			B		5	0000—2400	
24			NYERI	KEN	36E55 00S27	C 9	20	15.1				A	100	4	0000—2400	
25			KURYE	KOR	127E27 35N12	C10	1	0.4				A	60	6	0000—2400	
26			YANGJOO	KOR	127E03 37N50	C10	10	10.6				A	84	6	0000—2400	
27			KUWAIT	KWT	48E20 29N34	A20	100	27.0	150	210—090	18.0	B		8	0000—2400	24
28			MOPTI	MLI	04W11 14N28	C 9	4	6.4				A	59		0600—2400	
29			WUKARI	NIG	09E50 07N50	C 9	20	13.6				A	75	4	0500—2300	
30			TAKAKA	NZL	172E49 40S52	A20	1	0.4				A	50	5	0000—2400	
31			DAET CAMARINES	PHL	122E55 14N07	C 9	5	7.6				A	73	3	2100—1600	
32			KIDAPAWAN COT	PHL	124E48 06N28	C 9	5	7.6				A	92	3	2100—1600	
33			SONGKHLA	THA	100E31 07N07	A20	20	13.4				A	56	3	0000—2400	
34			OGUZELI	TUR	37E31 37N00	D 9	50	22.0	90			B		4	0200—2300	
35			KOR FAKAN	UAE	56E18 25N48	C 9	50	19.1				A	130	7	0200—2200	24
36			BLAGOVECHTCHEN	URS	127E33 50N16	A18	5	7.0				A	190	4	0000—2400	
37			FERGANA	URS	71E55 40N20	C10	10	10.0				A	190	4	0000—2400	
38			NOVI SAD	YUG	19E48 45N30	D 9	750	32.8	75	110—180	30.8	A		2	0800—1600	
39			NOVI SAD	YUG	19E48 45N30	D 9	750	32.8	215	295—355	16.8	B		2	1600—0800	
40			MANSA	ZMB	28E53 11S10	A20	10	12.1				A	120	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1278		KABOUL TSCHARC	AFG	69E12 34N31	C 9	100	20.4				A	58	4	0100—2000	
2	(84)		N REDONDO	AGL	13E54 11S13	A20	5	7.4				A	60	3	0000—2400	
3			MELBOURNE VIC	AUS	145E06 37S44	A20	5	9.1				A	97	2	0000—2400	
4		S	ANCI	CHN	116E42 39N31	A20	10	10.4				A	60	4	2000—1800	
5		S	CANGZHOU	CHN	116E51 38N18	A20	20	13.4				A	60	4	2000—1800	
6		S	FENGNING	CHN	116E39 41N13	A20	50	17.4				A	60	4	2000—1800	
7		S	GAR	CHN	79E58 32N12	A20	10	10.4				A	60	5	2000—1800	
8			HANGZHOU	CHN	120E08 30N16	A20	5	7.4				A	60	4	2000—1800	
9		S	LHAZE	CHN	87E50 29N05	A20	10	10.4				A	60	5	2000—1800	
10		S	LHORONG	CHN	95E43 30N48	A20	50	17.4				A	60	5	2000—1800	
11		S	MARKAM	CHN	98E10 29N30	A20	10	10.4				A	60	5	2000—1800	
12		S	NAGQU	CHN	92E02 31N25	A20	50	17.6				A	70	5	2000—1800	
13		S	NANG XIAN	CHN	93E10 29N05	A20	10	10.4				A	60	5	2000—1800	
14		S	QINHUANGDAO	CHN	119E32 39N55	A20	20	13.4				A	60	4	2000—1800	
15		S	SHIJIAZHUANG	CHN	114E40 37N50	A20	100	22.1				A	120	4	2000—1800	
16		S	WEI XIAN	CHN	115E15 36N58	A20	10	10.4				A	60	4	2000—1800	
17		S	XANZA	CHN	88E42 30N54	A20	50	17.4				A	60	5	2000—1800	
18			XIAMEN	CHN	118E18 24N24	A20	10	10.4				A	60	4	2000—1800	
19		S	YU XIAN	CHN	114E34 39N50	A20	20	13.4				A	60	4	2000—1800	
20		S	ZHONGBA	CHN	84E12 29N39	A20	10	10.4				A	60	5	2000—1800	
21			SANGMELIMA	CME	11E55 02N54	C 9	20	15.1				A	117	5	0500—2300	
22			YAOUNDE	CME	11E32 03N55	C 9	10	12.1				A	117	5	0500—2300	
23			MOHELI	COM	43E44 12S15	A20	10	10.4				A	50	1	0000—2400	
24			ODIENNE	CTI	07W35 09N20	C 9	10	12.1				A		7	0600—2400	
25		S	ASSWAN	EGY	32E57 24N04	D 9	10	12.1				A	100	3	0000—2400	24
26		S	ASYUT	EGY	31E04 27N11	D 9	10	12.1				A	100	3	0000—2400	24
27		S	KENA	EGY	32E43 26N10	D 9	10	12.1				A	100	3	0000—2400	24
28			STRASBOURG	F	07E26 48N15	D 9	300	30.0	20	90—130	18.0	B		4	0000—2400	
29			STRASBOURG	F	07E26 48N15	D 9	300	30.0		270—310	21.0	B				
30			TURKU 2	FNL	22E18 60N26	D 9	45	18.6				A	100	4	0000—2400	
31			BRADFORD	G	01W42 53N47	A20	0.3	−4.8				A	46	3	0000—2400	
32			FLORINA	GRC	21E25 40N48	C 9	20	13.4				A	55	4	0400—2200	
33			AHMEDABAD	IND	72E38 23N02	A20	20	15.1				A	120	3	0300—0900	25
34			BHADRAVATI	IND	75E36 13N53	A20	20	15.1				A	120	3	0300—1000	25
35			BHOPAL	IND	77E36 23N16	A20	20	15.1				A	120	3	0300—0900	25
36			DHANBAD	IND	86E24 23N48	A20	20	15.1				A	120	3	0300—0900	25
37			JEYPORE	IND	82E40 18N51	A20	20	15.1				A	120	4	0300—1000	25
38			LUCKNOW 1	IND	80E52 26N45	A20	300	26.9				A	120	3	0300—0900	25
39			LUCKNOW 2	IND	80E52 26N45	A20	20	15.0	195	305—335	6.0	B		3	0900—0300	
40			DUBLIN 2	IRL	06W18 53N21	A20	20	13.4				A	60	4	0000—2400	
41			KERMANSHAH	IRN	47E07 34N19	A20	100	22.1				A	118	3	0100—2200	
42			BET HILEL	ISR	35E36 33N12	D 9	5	7.4				A	50	4	0000—2400	33
43			FUKUOKA	J	130E26 33N41	A15	50	19.1				A	119	4	0000—2400	
44			KITALE	KEN	34E58 01N01	C 9	5	9.1				A	100	4	0000—2400	
45			HYEOBCHEON	KOR	128E10 35N33	A10	1	0.6				A	80	5	0000—2400	
46			PAEKAM	KRE	128E45 41N15	A16	1	0.0				A	30		2000—1800	
47			MALACCA	MLA	102E15 02N14	A20	10	10.4				A	46	5	2200—1700	
48			ZAGORA	MRC	05W23 30N10	A12	10	10.0				A	175	6	0500—2400	24
49			AKJOUJT	MTN	14W22 19N45	B20	20	15.1				A	118		0600—2400	24
50			NSANJE	MWI	35E16 16S57	A20	2	3.4				A	61	3	0200—2300	
51			NAPIER	NZL	176E52 39S34	A20	2	3.4				A	40	4	0000—2400	
52			SEEB	OMA	58E10 23N40	C 9	20	13.0				A	28	5	0400—1900	
53			CALOOCA RIZAL	PHL	120E58 14N39	C 9	25	14.6				A	73	3	2100—1600	
54			ILIGAN CITY	PHL	124E15 08N14	C 9	5	7.6				A	73	3	2100—1600	



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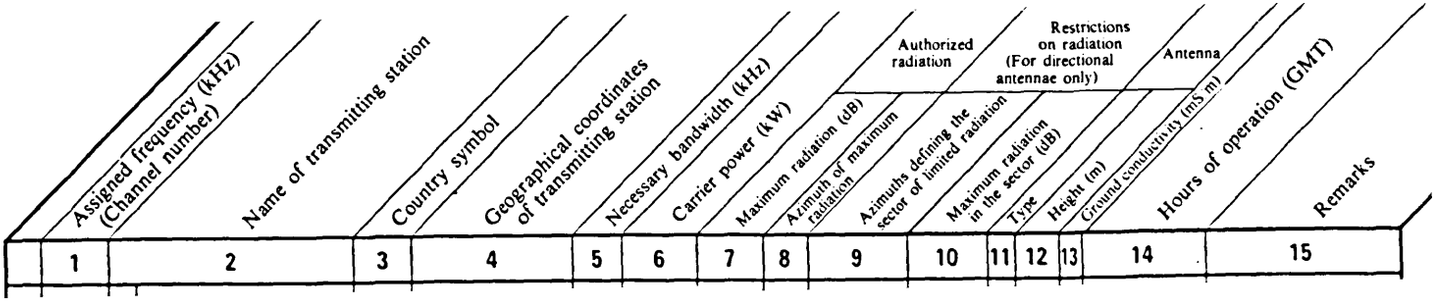
1	1278	S	GEMBOGL	PNG	145E06 05S50	B10	2	3.0				A	30	5	1900—1300	
2	(84)	S	KUNDIAWA	PNG	145E03 06S02	B10	10	10.6				A	80	5	1900—1300	
3			PALIME	TGO	00E46 06N52	A20	10	10.4				A	60	4	0000—2400	
4			BANGKOK	THA	100E30 14N45	A20	20	13.4				A	60	2	0000—2400	
5			DENIZLI	TUR	29E00 37N57	D 9	10	10.4				A	50	4	0200—2300	
6			KALANGALA	UGA	32E20 00S20	C 9	2	3.4				A	60	4	0300—2100	
7			MOROTO	UGA	34E39 02N30	C 9	10	10.4				A	55	5	0300—2100	
8		S	ODESSA	UKR	30E45 46N29	C 9	150	26.7	10	150—230	15.7	B		4	0000—2400	
9			BAIKAL	URS	104E47 51N43	A18	5	7.0				A	190	4	0000—2400	
10		S	IJEVSK	URS	53E14 56N49	A18	5	7.0				A	190	4	0000—2400	
11		S	ROSTOV NA DONU	URS	39E43 47N12	A16	50	17.0				A	190	4	0000—2400	
12		S	SARATOV	URS	45E56 51N32	A18	5	7.0				A	190	4	0000—2400	
13		S	ULIANOVSK	URS	48E20 54N19	C10	100	20.0				A	190	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1287 KHZ (85)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1287		TIMIMOUN	ALG	00E17 29N14	D 9	20	13.4				A	53	5	0600—2400	24
2	(85)		MECCA	ARS	39E40 21N30	C 9	20	15.1				A	120	4	0000—2400	24
3			TAMWORTH NSW	AUS	150E55 31S10	A20	5	9.1				A	122	4	1900—1400	
4			RUTANA	BDI	29E59 03S55	C 9	1	0.4				A	58	4	0300—2400	
5			BARISAL	BGD	90E23 22N43	A20	10	12.1				A	122	3	0000—1800	
6		S	HAIYUAN	CHN	105E39 36N34	A20	50	17.4				A	60	4	2000—1800	
7			HUIZHOU	CHN	114E24 23N05	A20	5	7.4				A	60	4	2000—1800	
8		S	YINCHUAN	CHN	106E12 38N30	A20	100	22.1				A	120	4	2000—1800	
9			ZHANJIANG	CHN	110E24 21N12	A20	5	7.4				A	60	4	2000—1800	
10			HARRAR	ETH	42E08 09N18	C 9	10	10.4				A	58	3	0400—2100	
11			RAKIRAKI	FJI	178E09 17S22	A20	2.5	4.0				A	30	5	1700—1200	
12			MYTILINI	GRC	26E33 39N07	C 9	5	7.4				A	65	5	0400—2200	
13			POUYTENGA	HVO	00W30 12N10	A20	20	13.6				A	72	4	0000—2400	
14			CHHATARPUR 1	IND	79E33 24N52	A20	100	22.0	225	85—115	13.0	B		3	0900—0300	
15			CHHATARPUR 2	IND	79E33 24N52	A20	300	26.9				A	115	3	0300—0900	25
16			GAUHATI	IND	91E47 26N11	A20	20	15.1				A	120	3	0300—0900	25
17			JAIPUR	IND	75E50 26N54	A20	20	15.1				A	120	4	0300—0900	25
18			SIMLA	IND	77E12 31N10	A20	20	15.1				A	120	4	0300—0900	25
19			PALEMBANG	INS	104E45 02S59	A18	50	17.0				A	159	3	2200—1700	
20			LAR	IRN	54E18 27N45	A20	20	13.4				A	57	3	0200—2100	
21			TEL AVIV 1	ISR	34E50 31N50	D 9	100	23.0				A	150	3	0000—2400	33
22			SAPPORO	J	141E32 43N08	A15	50	19.1				A	124	4	0000—2400	
23			CHEONGJU	KOR	127E29 36N40	C10	1	2.1				A	120	6	0000—2400	
24			GANGNEUNG	KOR	128E55 37N47	C10	10	10.6				A	80	6	0000—2400	
25			KAESONG	KRE	126E34 37N59	A16	30	15.2				A	50		2000—1800	
26			ZINDER	NGR	09E00 13N40	C 9	25	16.1				A	120	4	0000—2400	
27			WESTPORT	NZL	171E28 41S51	A20	2	3.4				A	50	6	0000—2400	
28			SAN FERNANDO P	PHL	120E42 15N10	D 9	200	26.0	150	310—350	13.0	B		3	0000—2400	
29		S	BEJA	POR	07W52 37N59	A20	10	10.4				A	60	3	0000—2400	
30		S	LISBOA	POR	09W12 38N44	A20	10	10.4				A	60	3	0000—2400	
31		S	PORTALEGRE	POR	07W25 39N18	A20	1	0.4				A	60	5	0000—2400	
32			KAOLACK	SEN	16W07 14N10	C 9	20	13.4				A	45	4	0600—2400	
33		S	CESKOSLOV 2	TCH	13E23 49N45	C 9	1500	35.2				A	135	4	0000—2400	
34		S	MOR BUDEJOVICE	TCH	15E48 49N04	C 9	30	16.9				A	100	5	0000—2400	
35		S	PRAHA MESTO	TCH	14E23 49N58	C 9	30	15.2				A	60	5	0000—2400	
36		S	PRESOV	TCH	21E16 48N57	C 9	50	19.1				A	100	5	0000—2400	
37		S	CHIANG RAI	THA	99E48 19N54	A20	10	10.4				A	58	5	0000—2400	
38		S	N SITHAMMARAT	THA	99E48 08N10	A20	10	10.4				A	58	3	0000—2400	
39		S	UBON	THA	104E52 15N16	A20	10	10.4				A	58	4	0000—2400	
40		S	BATUMI	URS	41E19 41N39	A18	5	7.0				A	190	4	0000—2400	
41		S	ENISEISK	URS	92E05 58N27	A18	5	7.0				A	190	4	0000—2400	
42		S	KALUGA	URS	36E19 54N37	A18	5	7.0				A	190	4	0000—2400	
43		S	KIAKHTA	URS	106E40 50N45	A18	5	7.0				A	190	4	0000—2400	
44		S	KYZYL	URS	94E28 51N43	A18	5	7.0				A	190	4	0000—2400	
45		S	NOVOKUZNETSK	URS	87E07 53N45	A18	5	7.0				A	190	4	0000—2400	
46			SEROV	URS	60E34 59N36	A18	5	7.0				A	190	4	0000—2400	
47			BUTEMBO	ZAI	29E10 00N10	C 9	1	0.4				A	60	8	0000—2400	
48			MBANDAKA	ZAI	18E16 00N02	C 9	2	3.4				A	60	6	0000—2400	



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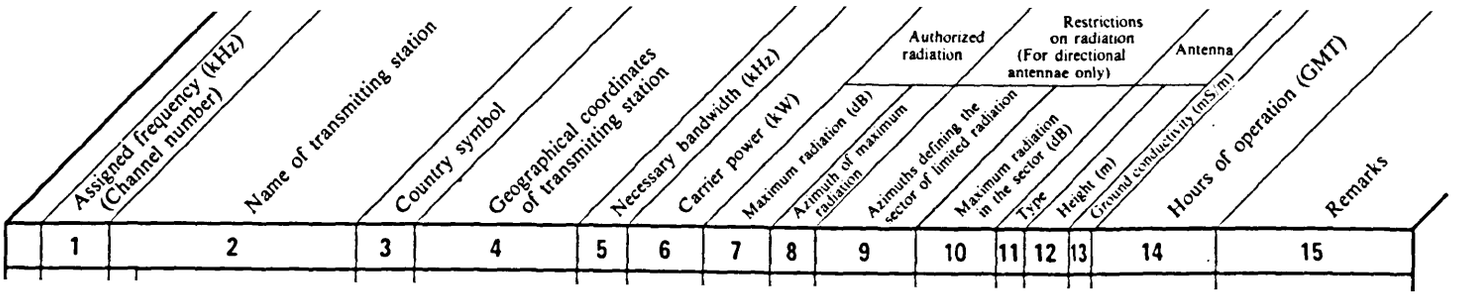
1	1296		KANDAHAR	AFG	65E40 31N40	C 9	1000	33.0	270	120—240	27.0	B		4	0100—2000	
2	(86)		UIGE	AGL	15E08 07S40	C10	5	7.4				A	58	3	1700—0100	
3			MEDINAH	ARS	39E33 24N28	C 9	50	19.1				A	120	4	0400—1400	24
4			BRISBANE QLD	AUS	153E07 27S28	A20	5					B		3	0000—2400	
5			MT GAMBIER SA	AUS	140E43 37S48	A20	5					B		3	1900—1400	
6		S	CHOUMEN	BUL	26E38 42N59	A18	30	18.2				A	142	3	0300—2400	
7		S	KARDJALI	BUL	25E12 41N29	A18	30	15.4				A	88	5	0300—2400	
8			BENXI SHI	CHN	123E38 41N10	A20	10	10.4				A	60	4	2000—1800	
9			KUNMING	CHN	102E50 25N10	A20	300	26.9				A	120	5	2000—1800	
10			SHANGHAI	CHN	121E29 31N15	A20	20	13.4				A	60	3	2000—1800	
11			XIAN	CHN	108E54 34N12	A20	5	7.4				A	60	4	2000—1800	
12			YOKADOUMA	CME	15E00 03N27	C 9	10	12.1				A	115	5	0500—2300	
13			ORFORDNESS	G	01E35 52N06	D10	500	36.0	95			B		3	0000—2400	
14			TAMALE	GHA	00W52 09N27	C 9	10	10.0				A	180	4	0500—2300	
15			GIBRALTAR	GIB	05W20 36N08	C10	50	20.0	180			B		3	0000—2400	
16			MIRAI	GRC	24E52 35N04	C 9	10	10.4				A	55	4	0400—2200	
17			TUMBO	GUI	13W39 09N36	C 9	50	17.4				A	58	4	0000—2400	
18			CUDDAPAH	IND	78E49 14N29	A20	20	15.1				A	120	3	0300—1000	25
19			DARBHANGA 1	IND	85E56 26N08	A20	20	15.1				A	120	3	0300—0900	25
20			DARBHANGA 2	IND	85E56 26N08	A20	20	15.1				A	120	3	0900—0300	
21			NAJIBABAD	IND	78E12 29N24	A20	20	15.1				A	115	3	0300—0900	25
22			PALGHAT 1	IND	76E42 10N48	A20	300	26.9				A	120	4	0300—1000	25
23			PALGHAT 2	IND	76E42 10N48	A20	100	22.1				A	120	4	1000—0300	
24			PANAJI GOA	IND	73E51 15N28	A20	20	15.1				A	120	4	0300—1000	25
25			SEMNAN	IRN	53E23 35N33	A20	10	10.4				A	58	3	0300—1400	
26			MATSUE	J	132E45 35N22	A15	10	13.4				A	136	4	0000—2400	
27			KYENGSON	KRE	129E37 41N35	A16	5	7.0				A	30		2000—1800	
28			BEIRA	MOZ	34E44 19S36	C10	10	10.4				A	60	4	0400—2200	
29			RABAT	MRC	06W55 33N54	A18	1	0.4				A	48	4	0600—2400	24
30			HAMILTON	NZL	175E20 37S48	A20	5	7.4				A	50	3	0000—2400	
31			BATANGAS BAT	PHL	121E05 13N45	C 9	1	0.6				A	72	3	2100—1600	
32			CAGAYAN DE ORO	PHL	124E39 08N29	C 9	1	0.6				A	72	3	2100—1600	
33			SANTI ISABELA	PHL	121E32 16N41	C 9	1	0.6				A	72	3	2100—1600	
34			SENNAR	SDN	33E36 13N31	A20	1500	34.0	180			B		3	0400—2400	23/URS 24
35			PATTANI	THA	101E16 06N47	A20	50	17.4				A	58	3	0000—2400	
36			BAKU	URS	49E45 40N24	C10	150	21.8				A	190	4	0000—2400	23/SDN
37			DUCHANBE	URS	68E49 38N34	A16	1000	30.0				A	190	4	0000—2400	
38			LOZNICA	YUG	19E14 44N31	D 9	10	12.1				A	112	4	0800—1500	
39			VRANJE	YUG	21E54 42N33	D 9	10	12.1				A	116	4	0000—2400	



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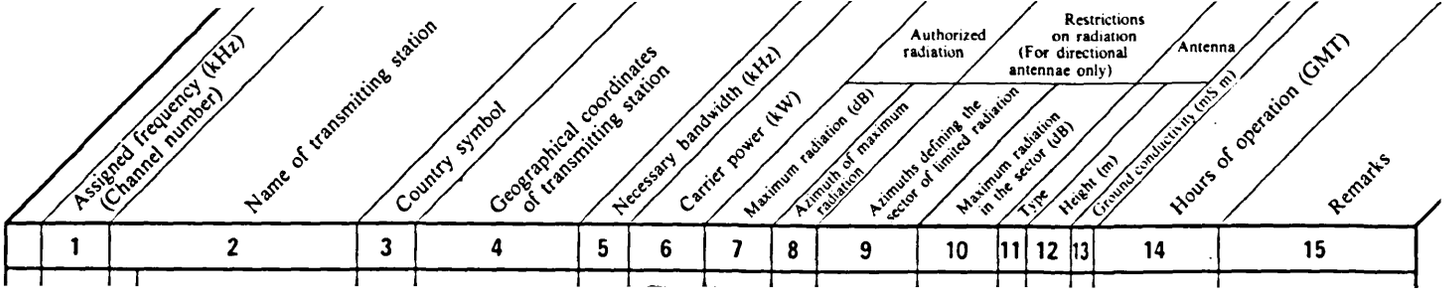
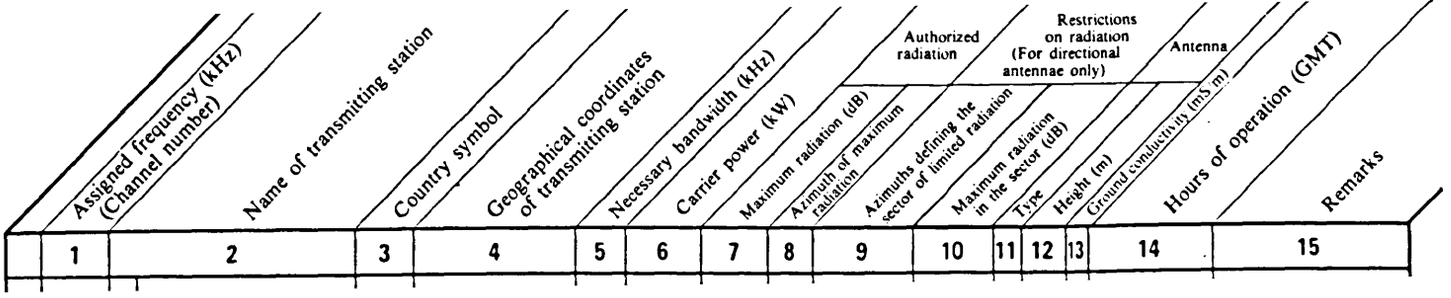
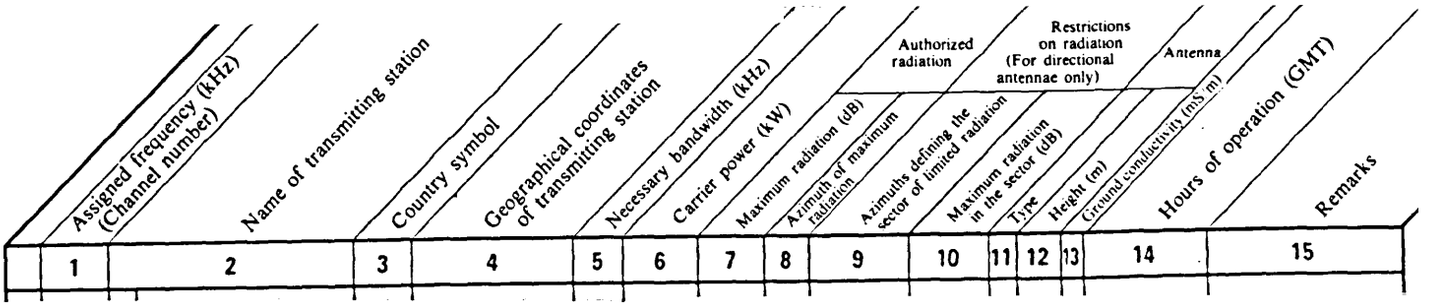
1	1305		GJIROKASTER	ALB	20E10 40N04	A20	15	13.9				A	115	5	0500—2200	(24)
2	(87)		CONSTANTINE	ALG	06E38 36N23	D 9	40	16.6				A	75	4	0600—2400	24
3			BROOME WA	AUS	122E15 18S00	A20	10	12.1				A		3	2100—1600	
4			ORBOST VIC	AUS	148E30 37S30	A20	10	12.1				A		2	1900—1400	
5			AYE MARCHE	BEL	05E17 50N12	D 9	50	17.0	350	230—280	9.0	B		4	0000—2400	
6			AYE MARCHE	BEL	05E17 50N12	D 9	50	17.0		60—100	7.0	B				
7		S	ABGANAR QI	CHN	116E08 43N56	A20	10	10.4				A	60	4	2000—1800	
8		S	AKSU	CHN	80E19 41N03	A20	10	10.4				A	60	4	2000—1800	
9		S	ALTAY	CHN	88E18 47N50	A20	10	10.4				A	60	4	2000—1800	
10		S	ANYANG SHI	CHN	114E22 36N08	A20	20	13.4				A	60	4	2000—1800	
11		S	BAOTOU	CHN	109E56 40N40	A20	20	13.4				A	60	4	2000—1800	
12		S	BAQEN	CHN	93E43 32N01	A20	10	10.4				A	60	5	2000—1800	
13		S	BARKAM	CHN	102E27 31N42	A20	5	7.4				A	60	4	2000—1800	
14		S	BEIHAI	CHN	109E07 21N29	A20	10	10.4				A	60	4	2000—1800	
15		S	BOLE	CHN	82E08 44N54	A20	10	10.4				A	60	4	2000—1800	
16		S	BOSE	CHN	106E37 23N54	A20	20	13.4				A	60	4	2000—1800	
17		S	CHONGQING	CHN	106E30 29N45	A20	20	13.4				A	60	4	2000—1800	
18		S	COMA	CHN	91E28 28N28	A20	10	10.4				A	60	5	2000—1800	
19		S	DAMXUNG	CHN	91E10 30N35	A20	10	10.4				A	60	5	2000—1800	
20		S	DANBA	CHN	101E53 30N53	A20	2	3.4				A	60	4	2000—1800	
21		S	DANDONG	CHN	124E22 40N07	A20	10	10.4				A	60	4	2000—1800	
22		S	DANGCHANG	CHN	104E25 33N55	A20	5	7.4				A	60	4	2000—1800	
23		S	DEGE	CHN	98E37 31N46	A20	5	7.4				A	60	4	2000—1800	
24		S	DONG UJUMQIN	CHN	116E56 45N30	A20	10	10.4				A	60	4	2000—1800	
25		S	DONGCHUAN	CHN	103E18 26N08	A20	10	10.4				A	60	5	2000—1800	
26		S	DUKOU	CHN	101E43 26N35	A20	5	7.4				A	60	4	2000—1800	
27		S	DUNHUANG	CHN	94E37 40N09	A20	5	7.4				A	60	4	2000—1800	
28		S	FENG XIAN	CHN	106E30 33N55	A20	5	7.4				A	60	4	2000—1800	
29		S	FU XIAN 1	CHN	122E00 39N38	A20	5	7.4				A	60	4	2000—1800	
30		S	FU XIAN 2	CHN	109E21 35N59	A20	50	17.4				A	60	4	2000—1800	
31		S	GERZE	CHN	84E15 32N20	A20	50	17.4				A	60	5	2000—1800	
32		S	GUIYANG	CHN	106E36 26N25	A20	50	17.4				A	60	5	2000—1800	
33		S	GUSHI	CHN	115E40 32N10	A20	10	10.4				A	60	4	2000—1800	
34		S	HAMI	CHN	93E20 42N50	A20	10	10.4				A	60	4	2000—1800	
35		S	HECHI	CHN	108E03 24N42	A20	10	10.4				A	60	4	2000—1800	
36		S	HEKOU	CHN	103E59 22N32	A20	10	10.4				A	60	5	2000—1800	
37		S	HENGSHUI	CHN	115E42 37N44	A20	10	10.4				A	60	4	2000—1800	
38		S	HUAILAI	CHN	115E31 40N23	A20	10	10.4				A	60	4	2000—1800	
39		S	HUHHOT	CHN	111E30 41N12	A20	50	17.4				A	60	4	2000—1800	
40		S	JIAOZUO	CHN	113E14 35N15	A20	10	10.4				A	60	4	2000—1800	
41		S	JINZHOU	CHN	121E07 41N07	A20	20	13.4				A	60	4	2000—1800	
42		S	KARAMAY	CHN	85E00 45N32	A20	10	10.4				A	60	4	2000—1800	
43		S	KORLA	CHN	86E10 41N44	A20	10	10.4				A	60	4	2000—1800	
44		S	LANKAO	CHN	114E48 34N48	A20	5	7.4				A	60	4	2000—1800	
45		S	LIJIANG	CHN	100E15 26N55	A20	20	13.4				A	60	5	2000—1800	
46		S	LINCANG	CHN	100E02 23N52	A20	20	13.4				A	60	5	2000—1800	
47		S	LINXIA	CHN	102E55 35N19	A20	5	7.4				A	60	4	2000—1800	
48		S	LONGHUA	CHN	117E43 41N19	A20	10	10.4				A	60	4	2000—1800	
49		S	LUCHUN	CHN	102E20 23N00	A20	10	10.4				A	60	5	2000—1800	
50		S	LUXI	CHN	98E34 24N27	A20	20	13.4				A	60	5	2000—1800	
51		S	MADO	CHN	98E14 34N50	A20	20	13.4				A	60	5	2000—1800	
52		S	MEDO	CHN	95E13 29N18	A20	10	10.4				A	60	5	2000—1800	
53		S	NANNING	CHN	108E18 22N48	A20	50	17.4				A	60	4	2000—1800	
54		S	NANYANG SHI	CHN	112E32 33N00	A20	20	13.4				A	60	4	2000—1800	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1305	S	NEIJIANG SHI	CHN	105E15 29N39	A20	2	3.4				A	60	4	2000—1800	
2	(87)	S	PINGLE	CHN	110E38 24N38	A20	10	10.4				A	60	4	2000—1800	
3		S	PUTIAN	CHN	119E01 25N25	A20	10	10.4				A	60	4	2000—1800	
4		S	QABDO	CHN	97E05 31N11	A20	50	17.4				A	60	5	2000—1800	
5		S	QINGYUAN	CHN	124E55 42N06	A20	5	7.4				A	60	4	2000—1800	
6		S	QIUBEI	CHN	104E11 24N02	A20	20	13.4				A	60	5	2000—1800	
7		S	QOG QI	CHN	106E58 41N28	A20	10	10.4				A	60	4	2000—1800	
8		S	RUYANG	CHN	112E28 34N09	A20	10	10.4				A	60	4	2000—1800	
9		S	SAGA	CHN	85E18 29N25	A20	10	10.4				A	60	5	2000—1800	
10		S	SANMENXIA	CHN	111E13 34N46	A20	10	10.4				A	60	4	2000—1800	
11		S	SANMING	CHN	117E36 26N14	A20	50	17.4				A	60	4	2000—1800	
12		S	SHANG XIAN	CHN	109E53 33N52	A20	20	13.4				A	60	4	2000—1800	
13		S	SHANGHAI	CHN	121E29 31N15	A20	50	17.4				A	60	3	2000—1800	
14		S	SHIMIAN	CHN	102E27 29N12	A20	1	0.4				A	60	4	2000—1800	
15		S	SHIZUISHAN	CHN	106E40 39N09	A20	10	10.4				A	60	4	2000—1800	
16		S	SONGZHENG	CHN	118E45 27N32	A20	10	10.4				A	60	4	2000—1800	
17		S	TANGSHAN	CHN	118E13 39N38	A20	50	17.4				A	60	4	2000—1800	
18		S	TONGREN 2	CHN	109E13 27N43	A20	20	13.4				A	60	5	2000—1800	
19		S	TONGZI	CHN	106E49 28N08	A20	5	7.4				A	60	5	2000—1800	
20		S	WANXIAN SHI	CHN	108E33 30N52	A20	20	13.4				A	60	4	2000—1800	
21		S	WEINING	CHN	104E17 26N52	A20	20	13.4				A	60	5	2000—1800	
22		S	WUPING	CHN	116E06 25N05	A20	10	10.4				A	60	4	2000—1800	
23		S	WUWEI	CHN	102E33 37N57	A20	5	7.4				A	60	4	2000—1800	
24		S	XIAGUAN	CHN	100E13 25N34	A20	10	10.4				A	60	5	2000—1800	
25		S	XIANGHUANG QI	CHN	113E43 42N18	A20	50	17.4				A	60	4	2000—1800	
26		S	XIFENGZHEN	CHN	107E30 35N48	A20	5	7.4				A	60	4	2000—1800	
27		S	XIGAZE	CHN	89E00 29N20	A20	10	10.4				A	60	5	2000—1800	
28		S	XINGYI	CHN	104E52 25N07	A20	10	10.4				A	60	5	2000—1800	
29		S	XINING	CHN	101E50 36N35	A20	20	13.4				A	60	5	2000—1800	
30		S	XINYANG SHI	CHN	114E04 32N10	A20	20	13.4				A	60	4	2000—1800	
31		S	XUCHANG SHI	CHN	113E48 34N02	A20	5	7.4				A	60	4	2000—1800	
32		S	YAAN	CHN	103E01 29N59	A20	5	7.4				A	60	4	2000—1800	
33		S	YAJIANG	CHN	100E57 30N05	A20	5	7.4				A	60	4	2000—1800	
34		S	YANCHI	CHN	107E30 37N47	A20	50	17.4				A	60	4	2000—1800	
35		S	YECHENG	CHN	77E22 37N55	A20	20	13.4				A	60	4	2000—1800	
36		S	YIBIN SHI	CHN	104E37 28N46	A20	5	7.4				A	60	4	2000—1800	
37		S	YOUYANG	CHN	108E46 28N51	A20	10	10.4				A	60	4	2000—1800	
38		S	YULIN 2	CHN	110E08 22N37	A20	10	10.4				A	60	4	2000—1800	
39		S	YUSHU 2	CHN	97E00 33N00	A20	10	10.4				A	60	5	2000—1800	
40		S	ZAMDA	CHN	79E46 31N28	A20	10	10.4				A	60	5	2000—1800	
41		S	ZHANGWU	CHN	122E29 42N24	A20	10	10.4				A	60	4	2000—1800	
42		S	ZHANGYE	CHN	100E30 38N54	A20	10	10.4				A	60	4	2000—1800	
43		S	ZHANGZHOU	CHN	117E40 24N30	A20	20	13.4				A	60	4	2000—1800	
44		S	ZHUMADIAN	CHN	114E02 32N59	A20	5	7.4				A	60	4	2000—1800	
45		S	ZICHANG	CHN	109E40 37N09	A20	10	10.4				A	57	4	0400—2100	
46			KOTUGODA	CLN	79E55 07N08	C10	100	23.0	40			B		5	0000—1800	
47			MINDOULI	COG	14E50 04S15	A20	10	10.4				A	57	5	0000—2400	
48			BAHAR DAR	ETH	37E27 11N20	C 9	10	10.4				A	57	3	0400—2100	
49			PARBHANI 1	IND	76E50 19N08	A20	300	26.9				A	120	3	0300—1000	25
50			PARBHANI 2	IND	76E50 19N08	A20	50	19.1				A	120	3	1000—0300	
51			PASIGHAT	IND	95E20 28N06	A20	20	15.1				A	115	4	0300—0900	25
52			RAIPUR	IND	81E41 21N15	A20	20	15.1				A	115	3	0300—0900	25



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1305		SURATGARH	IND	73E54 29N24	A20	20	15.1				A	115	3	0300—0900	25
2	(87)		MENADO	INS	124E55 01N32	A18	10	10.4				A	65	5	2100—1600	
3			PALENGKARAJA	INS	113E11 02S02	A18	5	7.4				A	57	6	2100—1600	
4			ATHLONE	IRL	07W57 53N26	A20	2	3.4				A	50	4	0000—2400	
5			BUSHEHR	IRN	50E50 28N59	A20	20	13.4				A	57	3	0200—2100	
6			EILAT	ISR	35E00 29N40	D 9	10	12.1				A	120	3	0000—2400	33
7			HAIFA	ISR	35E03 32N49	D 9	20	15.1				A	120	3	0000—2400	33
8			MOMBASA	KEN	39E40 04S05	C 9	20	15.1				A	100	4	0000—2400	
9			ULJIN	KOR	129E24 36N58	C10	10	10.6				A	80	6	0000—2400	
10			MUNDOK	KRE	125E36 39N29	A16	1	0.4				A	30		2000—1800	16
11			TINRHIR	MRC	05W20 31N33	A18	25	17.4				A	150	5	0600—2400	24
12			SANTO 1	NHB	167E15 15S30	A20	20	13.4				A	50	1	0000—2400	
13			DUNEDIN	NZL	170E35 45S53	A20	10	12.1				A	120	4	0000—2400	
14			KALAT	PAK	66E30 29N00	A20	10	10.4				A	56	4	0000—2000	
15			BATAC ILOCOS N	PHL	120E37 18N12	C 9	1	0.6				A	71	3	2100—1600	
16			CEBU CITY	PHL	123E56 10N20	C 9	5	7.6				A	71	3	2100—1600	
17		S	BIALYSTOK	POL	23E13 53N11	C 9	60	19.9				A	108	4	0000—2400	
18		S	GDANSK	POL	18E35 54N14	C 9	60	19.9				A	108	3	0000—2400	
19		S	JELENIA GORA	POL	15E40 50N55	C 9	10	12.1				A	108	5	0000—2400	
20		S	LODZ	POL	19E32 51N36	C 9	60	19.9				A	108	4	0000—2400	
21		S	RACIBORZ	POL	18E02 50N11	C 9	10	12.1				A	108	4	0000—2400	
22		S	RZESZOW	POL	21E58 50N00	C 9	300	26.9				A	108	4	0000—2400	
23			DAKAR	SEN	17W16 14N45	C 9	50	19.1				A	126	4	0600—2400	
24			AM TIMAN	TCD	20E14 11N05	C 9	10	12.1				A			0400—2300	
25			TOGBLEKOPE	TGO	01E12 06N16	A20	10	10.6				A	81	4	0000—2400	
26			BANGKOK	THA	100E31 13N47	A20	10	10.4				A	50	2	0000—2400	
27			MASINDI	UGA	31E45 01N41	C 9	20	13.6				A	70	4	0300—2100	
28			ALEKSANDROVSKO	URS	43E00 44N20	A18	5	9.1				A	120	4	0000—2400	
29		S	BODAIBO	URS	114E18 57N51	A18	5	9.1				A	120	4	0000—2400	
30		S	KIRENSK	URS	108E06 57N47	A18	5	9.1				A	120	4	0000—2400	
31		S	TOMSK	URS	85E04 56N30	A18	150	23.9				A	120	4	0000—2400	
32		S	TSELINOGRAD	URS	71E23 51N12	C10	50	19.1				A	120	4	0000—2400	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1314	LUBANGO	AGL	13E30 14S55	A20	1	0.4				A	60	3	0000—2400	
2	(88)	ADELAIDE SA	AUS	138E35 34S50	A20	5	7.6				A	84	2	0000—2400	
3		GOSFORD NSW	AUS	151E22 33S22	A20	5					B		3	1900—1400	
4		OBDACH	AUT	14E42 47N04	D 9	0.1	−10.0				A	15	6	0000—2400	
5		RAURIS	AUT	13E00 47N14	D 9	0.1	−10.0				A	15	6	0000—2400	
6		COXS BAZAR	BGD	92E00 21N27	A20	10	12.1				A	122	3	0000—1800	
7		PHNOM PENH	CBG	104E55 11N34	C10	1	0.4				A	57	3	0000—2400	
8		CHONGQING	CHN	106E30 29N45	A20	5	7.4				A	60	4	2000—1800	
9		ERENHOT	CHN	112E00 43N39	A20	100	22.1				A	120	4	2000—1800	
10		JINAN	CHN	116E57 36N43	A20	10	10.4				A	60	4	2000—1800	
11	S	JINHU	CHN	119E01 33N02	A20	10	10.4				A	60	3	2000—1800	
12	S	LIYANG	CHN	119E29 31N26	A20	10	10.4				A	60	3	2000—1800	
13	S	XUZHOU	CHN	117E20 34N14	A20	20	13.4				A	60	3	2000—1800	
14		YIWU	CHN	94E40 43N20	A20	100	22.1				A	120	4	2000—1800	
15	S	AVILES	E	06W00 43N30	D 9	5	7.4				A	40	5	0000—2400	19
16	S	CACERES	E	06W20 39N30	D 9	5	7.4				A	40	4	0000—2400	19
17	S	CORDOBA	E	04W50 37N50	D 9	5	7.4				A	40	3	0000—2400	19
18	S	GETAFE	E	03W45 40N20	D 9	5	7.4				A	40	4	0000—2400	19
19	S	JEREZ FRONTERA	E	06W10 36N40	D 9	5	7.4				A	40	3	0000—2400	19
20	S	LORCA	E	01W40 37N40	D 9	5	7.4				A	40	4	0000—2400	19
21	S	TARRASA	E	02E00 41N35	D 9	5	7.4				A	40	5	0000—2400	19
22	S	VALENCIA	E	00W30 39N25	D 9	25	14.4				A	40	4	0000—2400	19
23	S	VALLADOLID	E	04W40 41N40	D 9	5	7.4				A	40	4	0000—2400	19
24	S	EL MINYA	EGY	30E33 28N07	D 9	10	12.1				A	100	3	0000—2400	24
25	S	IDFU	EGY	32E49 25N00	D 9	10	12.1				A	100	3	0000—2400	24
26	S	SOHAG	EGY	31E43 26N27	D 9	10	12.1				A	100	3	0000—2400	24
27		LIBREVILLE	GAB	09E25 00N25	C 9	5	7.4				A		4	0400—2400	
28		TRIPOLIS	GRC	22E26 37N30	C 9	20	13.6				A	65	5	0400—2200	
29		DABOLA	GUI	11W09 10N46	C 9	50	17.4				A	57	4	0000—2400	
30	S	ANCONA	I	13E29 43N36	D 9	10	10.6				A	93	4	0000—2400	
31	S	CIRO CROTONE	I	17E04 39N22	D 9	10	10.4				A	57	5	0000—2400	
32	S	CORTINA	I	12E07 46N31	D 9	1	0.4				A	50	5	0000—2400	
33	S	ISERNIA	I	14E14 41N36	D 9	1	0.4				A	50	5	0000—2400	
34	S	LOCRI	I	16E14 38N13	D 9	10	10.4				A	57	5	0000—2400	
35	S	PISA	I	10E25 43N38	D 9	50	20.4				A	135	3	0000—2400	
36		AJMER	IND	74E42 26N17	A20	20	15.1				A	115	4	0300—0900	25
37		BHUJ 1	IND	69E43 23N15	A20	20	15.1				A	115	3	0300—0900	25
38		BHUJ 2	IND	69E43 23N15	A20	10	12.1				A	115	3	0900—0300	
39		CHANDIGARH	IND	76E54 30N42	A20	20	15.1				A	115	3	0300—0900	25
40		CUTTACK 1	IND	85E55 20N35	A20	20	15.1				A	115	3	0300—0900	25
41		CUTTACK 2	IND	85E55 20N35	A20	10	12.1				A	115	3	0900—0300	
42		JALGAON	IND	75E31 20N55	A20	20	15.1				A	115	3	0300—0900	25
43		SHILLONG	IND	91E56 25N34	A20	20	15.1				A	115	3	0300—0900	25
44		TINNEVELLY	IND	77E44 08N44	A20	20	15.1				A	115	3	0300—1000	25
45		ARDEBIL	IRN	48E20 38N28	A20	20	13.4				A	56	3	0200—2100	
46		SANANDAJ	IRN	47E00 35N20	A20	10	10.4				A	55	3	0300—1400	
47		OSAKA	J	135E32 34N33	A15	50	19.1				A	120	4	0000—2400	
48		GARISSA	KEN	39E40 00S25	C 9	10	13.4				A	130	4	0000—2400	
49		IRI	KOR	126E54 35N55	C10	10	12.1				A	120	4	0000—2400	
50		HONGWON	KRE	127E57 40N03	A16	10	10.4				A	50		2000—1800	
51		MERSING	MLA	103E51 02N25	A20	20	15.1				A	100	5	2200—1700	
52		BUKURU	NIG	08E51 09N46	C 9	10	10.4				A	47	4	0500—2300	
53		STAVANGER KVIT	NOR	05E26 59N04	D 9	1200	33.8				A	140	3	0000—2400	

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks

1314 KHZ (88)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1314	S	GISBORNE	NZL	178E04 38S42	A20	2	3.4				A	50	5	0000—2400	
2	(88)	S	TAUPO	NZL	176E04 38S40	A20	5	7.4				A	50	7	0000—2400	
3		S	BAGUIO CITY	PHL	120E36 16N24	C10	0.1	−9.6				A	30	3	0100—2400	
4			BAMBANG BULACA	PHL	120E52 14N46	C 9	10	10.6				A	71	3	0000—2400	
5			JOLO SULU	PHL	121E00 06N03	C 9	1	0.6				A	71	3	2100—1600	
6		S	OLONGAPO	PHL	120E42 14N24	C10	0.3	−5.2				A	15	3	0100—2400	
7		S	PORO POINT	PHL	120E25 16N35	C10	0.1	−10.0				A	12	3	0100—2400	
8		S	AMBUNTI	PNG	142E50 04S31	D10	2	3.4				A	30	3	1900—1300	
9		S	MAPRIK	PNG	143E03 03S38	D10	2	3.4				A	30	3	1900—1300	
10		S	WEWAK	PNG	143E38 03S35	D10	10	10.6				A	80	5	1900—1300	
11		S	CONSTANTZA	ROU	28E38 44N10	C 9	50	19.1				A	115	6	0000—2400	
12		S	CRAIOVA	ROU	23E49 44N20	C 9	15	12.2				A	55	6	0000—2400	
13		S	TIMISOARA	ROU	21E14 45N45	C 9	50	19.1				A	115	4	0000—2400	
14			ALEPPO	SYR	37E08 36N14	C 9	10	10.4				A	33	3	0700—2200	
15			KHON KAEN	THA	102E49 16N26	A20	20	13.4				A	56	3	0000—2400	
16			SADIYAT	UAE	54E27 24N34	C 9	750	29.0	256	90—120	25.0	B		5	0200—2200	24
17			SADIYAT	UAE	54E27 24N34	C 9	750	29.0		190—220	25.0	B				
18			SADIYAT	UAE	54E27 24N34	C 9	750	29.0		300— 10	24.0	B				
19			LIRA	UGA	32E54 02N15	C 9	10	10.4				A	50	4	0300—2100	
20			STAVROPOL	URS	42E01 45N06	C10	500	35.0	10	130—150	7.0	B		4	0000—2400	
21		S	OHRID 2	YUG	20E47 41N08	D 9	10	10.4				A	60	4	0000—2400	
22		S	SKOPJE 2	YUG	21E33 41N59	D 9	100	23.0	170	310— 30	5.0	B		4	0000—2400	
23			MPIKA	ZMB	31E25 11S50	A20	10	12.1				A	115	4	0200—2100	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1323		SHKODER	ALB	19E30 42N06	A20	15	13.9				A	113	5	0500—2200	
2	(89)		CONSTANTINE	ALG	06E38 36N23	D 9	40	16.4				A	50	4	0600—1800	
3			CONSTANTINE	ALG	06E38 36N23	D 9	20	13.4				A	50	4	1800—2400	
4			DIRIYAH	ARS	46E37 24N39	C 9	20	15.1				A	120	4	0000—2400	
5			BALLARAT VIC	AUS	143E46 37S32	A20	5	7.4				A	60	3	0000—2400	
6			CHANGCHUN	CHN	125E24 43N48	A20	100	22.1				A	120	4	2000—1800	
7		S	CHEN XIAN	CHN	113E02 25N48	A20	50	17.4				A	60	4	2000—1800	
8		S	JISHOU	CHN	109E43 28N19	A20	40	16.4				A	60	4	2000—1800	
9		S	LENGSHUIJIANG	CHN	111E23 27N44	A20	20	13.4				A	60	4	2000—1800	
10			LHASA	CHN	90E59 29N30	A20	100	22.0	330	180—240	17.0	B		5	2000—1800	
11		S	WUGANG	CHN	110E38 26N43	A20	50	17.4				A	60	4	2000—1800	
12		S	YIYANG SHI	CHN	112E21 28N36	A20	10	10.4				A	60	4	2000—1800	
13		S	YUEYANG	CHN	113E10 29N17	A20	20	13.4				A	60	4	2000—1800	
14			JACOB	COG	13E16 04S11	A20	30	15.4				A	91	5	0000—2400	
15			ZYYI	CYP	33E19 34N43	A20	200	26.0	150			B		4	0000—2400	
16			BIMBEREKE	DAH	02E39 10N14	C10	10	10.4				A	57	4	0500—2400	
17			NAUEN	DDR	12E55 52N39	D 9	1000	34.0				B		4	0400—1800	
18			NAUEN	DDR	12E55 52N39	D 9	150	21.0				B		4	1800—0400	
19			RAKIRAKI	FJI	178E09 17S22	A20	2.5	4.4				A	30	5	1700—1200	
20			BRIGHTON	G	00W15 50N50	A20	0.5	−2.3				A	82	4	0000—2400	
21			BOMBAY	IND	72E54 18N53	A20	20	15.1				A	115	3	0300—1000	25
22			CALCUTTA	IND	88E23 22N36	A20	20	15.1				A	115	3	0000—2400	
23			CHINDWARA	IND	78E55 22N05	A20	20	15.1				A	115	4	0300—0900	25
24			GORAKHPUR	IND	83E28 26N52	A20	20	15.1				A	115	3	0300—0900	25
25			GULBARGA	IND	76E54 17N19	A20	20	15.1				A	115	3	0300—1000	25
26			KOZHIKODE	IND	75E50 11N15	A20	20	15.1				A	115	4	0300—1000	25
27			PT BLAIR	IND	92E43 11N41	A20	20	16.4				A	150	4	0300—1000	25
28			MALANG	INS	112E45 07S59	A18	2	3.4				A	57	4	2200—1700	
29			DUNDALK	IRL	06W25 54N01	A20	2	3.4				A	50	4	0000—2400	
30			JOLFA SEVVOM	IRN	45E38 38N57	A20	20	13.4				A	51	3	0200—2100	23/URS
31			FUKUSHIMA	J	140E29 37N46	A15	5	7.6				A	67	5	0000—2400	
32			SO SA	KOR	126E45 37N27	C10	1	0.4				A	33	4	0000—2400	
33			ULNEUNGDO	KOR	130E54 37N29	C10	1	0.4				A	30	6	0000—2400	
34			YUNGKWANG	KOR	126E30 35N16	C10	1	0.6				A	80	4	0000—2400	
35			TAECHON	KRE	125E30 39N55	A16	5	7.4				A	30		2000—1800	16
36			TANANARIVE	MDG	47E31 18S54	C 9	5	9.1				A	113	4	0300—2000	
37			BINTULU	MLA	113E01 03N11	A20	20	15.1				A	100	5	0000—2400	
38			SAFI	MRC	09W10 32N20	A18	5	7.6				A	82	4	0600—2400	
39			NAURU ISLAND	NRU	166E56 00S33	C 9	0.2	−6.6				A	40		2000—1200	
40			CHRISTCHURCH	NZL	172E35 43S34	A20	5	7.4				A	50	4	0000—2400	
41			ILOILO CITY	PHL	122E33 10N42	C 9	5	7.6				A	70	3	2100—1600	
42		S	HATEG	ROU	22E57 45N37	C 9	1	0.4				A	55	5	0300—2300	
43		S	NEHOIU	ROU	26E20 45N20	C 9	1	0.4				A	55	5	0300—2300	
44		S	SULINA	ROU	29E31 45N10	A20	2	5.1				A	110	3	0300—2300	
45		S	TARGU MURES	ROU	24E35 46N37	C 9	15	12.2				A	55	5	0000—2400	
46			LINGUERE	SEN	15W07 15N24	C 9	10	10.4				A	45	4	0600—2400	
47			SAME	TGK	37E45 04S40	C 9	20	15.1				A	113	4	0300—2100	
48		S	CHIANG MAI	THA	98E58 18N47	A20	10	10.4				A	57	5	0000—2400	
49		S	CHON BURI	THA	100E56 12N38	A20	1	0.0				A	24	2	0000—2400	
50		S	NAKHON PATHOM	THA	99E55 14N06	A20	1	0.4				A	48	2	0000—2400	
51		S	SONGKHLA	THA	100E37 07N11	A20	5	7.4				A	57	3	0000—2400	
52			MBARARA	UGA	30E37 00S36	C 9	10	10.4				A	60	4	0300—2100	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

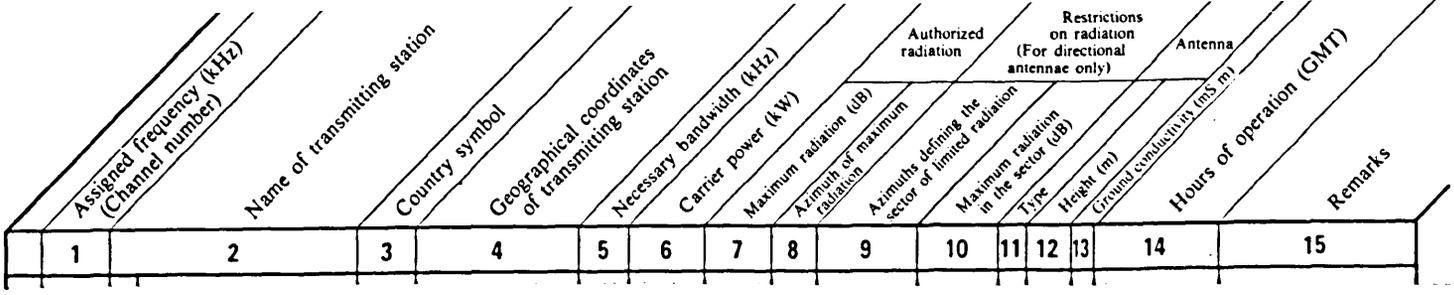
1323 KHZ (89)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1323	S	BUKHARA	URS	64E30 39N40	A18	100	22.1				A	120	4	0000—2400	
2	(89)	S	GURIEV	URS	51E55 47N03	A18	100	22.1				A	120	4	0000—2400	
3		S	KANDALAKCHA	URS	32E06 67N08	A16	100	22.1				A	120	4	0000—2400	
4		S	KHOROG	URS	71E32 37N18	A18	50	19.1				A	120	4	0000—2400	
5		S	NEBIT DAG	URS	54E05 39N20	A18	100	22.1				A	120	4	0000—2400	
6		S	TSKHINVALI	URS	44E00 42N18	A16	30	16.9				A	120	4	0000—2400	23/IRN
7			BITOLA 2	YUG	21E22 41N03	D 9	10	10.4				A	60	4	0000—2400	
8			DELCEVO	YUG	22E47 41N58	D 9	10	10.4				A	60	5	0000—2400	
9			GOSTIVAR	YUG	20E55 41N48	D 9	2	3.4				A	60	4	0000—2400	
10			SID	YUG	19E15 45N05	D 9	1	0.4				A	60	2	0000—2400	

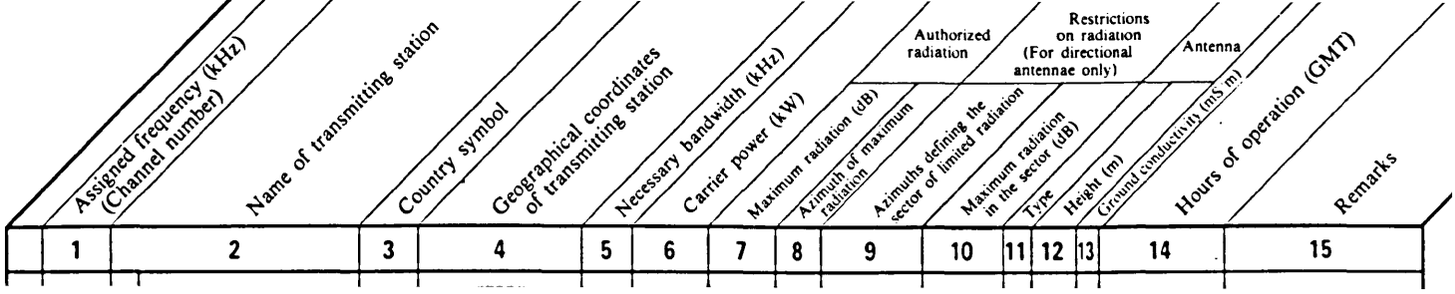
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1332		GIZAN	ARS	42E31 16N52	C 9	20	15.1				A	120	3	0400—1400	
2	(90)		BUNDABERG QLD	AUS	152E24 24S51	A20	5	7.4				A	54	4	1900—1400	
3			SWAN HILL VIC	AUS	143E34 35S25	A20	5	7.4				A	57	2	1900—1400	
4		S	BIYANG	CHN	113E18 32N43	A20	10	10.4				A	60	4	2000—1800	
5			FUZHOU 1	CHN	119E24 26N06	A20	10	10.4				A	60	4	2000—1800	
6		S	LUOYANG	CHN	112E24 34N42	A20	50	17.4				A	60	4	2000—1800	
7		S	PINGDINGSHAN	CHN	113E17 33N42	A20	20	13.4				A	60	4	2000—1800	
8		S	PINGYU	CHN	114E38 32N58	A20	10	10.4				A	60	4	2000—1800	
9		S	SHANGSHUI	CHN	114E38 33N38	A20	10	10.4				A	60	4	2000—1800	
10		S	XINXIANG SHI	CHN	113E52 35N18	A20	10	10.4				A	60	4	2000—1800	
11		S	XIXIA	CHN	111E26 33N24	A20	10	10.4				A	60	4	2000—1800	
12			MINDELO	CPV	24W59 16N53	A18	10	10.4				A	40	6	1900—2400	
13			DALOA	CTI	06W29 06N30	C 9	10	12.1				A		7	0600—2400	
14			MENDI	ETH	35E05 09N47	C 9	30	16.9				A	112	3	0400—2300	
15			MAKOKOU	GAB	12E50 00N34	C 9	20	15.1				A		5	0400—2400	
16			UTRECHT	HOL	05E08 52N05	D 9	2	3.4				A	40	4	0000—2400	
17		S	CATANIA	I	15E05 37N32	D 9	5	9.1				A	103	5	0000—2400	
18		S	ROMA	I	12E35 41N42	D 9	300	30.8	333			B		4	0000—2400	
19		S	SQUINZANO	I	18E00 40N27	D 9	100	24.5	299	75—110	19.5	B		4	0000—2400	
20			HISSAR	IND	75E48 29N00	A20	20	15.1				A	115	4	0300—0900	25
21			MERCARA 1	IND	75E42 12N24	A20	20	15.1				A	115	4	0300—1000	25
22			MERCARA 2	IND	75E42 12N24	A20	10	12.1				A	115	4	1000—0300	
23			REWA	IND	81E25 24N31	A20	20	15.1				A	115	4	0300—0900	25
24			SAMBALPUR	IND	84E01 21N28	A20	20	15.1				A	115	3	0300—0900	25
25			SILIGURI	IND	88E30 26N42	A20	20	15.1				A	115	4	0300—0900	25
26			TEZU 1	IND	96E15 27N50	A20	20	15.1				A	115	4	0300—0900	25
27			TEZU 2	IND	96E15 27N50	A20	10	12.1				A	115	4	0900—0300	
28			UDAIPUR	IND	73E47 24N30	A20	20	15.1				A	115	4	0300—0900	25
29			DJAKARTA	INS	106E45 06S23	A18	10	10.4				A	56	5	2200—1700	
30			TEHERAN	IRN	51E27 35N41	A20	100	22.1				A	113	3	0000—2400	
31			NAGOYA	J	136E48 35N10	A15	50	19.1				A	109	4	0000—2400	
32			ALKHARUBA	JOR	35E30 32N10	A20	20	15.1				A	110	5	0300—2300	
33			CHUNG JU	KOR	127E54 36N58	C10	10	12.1				A	120	6	0000—2400	
34			HWAPYONG	KRE	126E55 41N14	A16	1	0.4				A	30		2000—1800	
35			BIR MOGHREIN	MTN	11W36 25N13	B20	1	0.4				A	57		0600—2400	
36			MAINE SOROA	NGR	12E00 13N10	C 9	20	16.0	0			B		4	0000—2400	
37			AUCKLAND	NZL	174E38 36S51	A20	10	12.1				A	120	3	0000—2400	
38			MIR PUR KHAS	PAK	69E00 25N20	A20	10	10.4				A	58	4	0000—2000	
39			CABANATUAN NE	PHL	120E57 15N28	C 9	5	7.6				A	70	3	2100—1600	
40			IRIGA CAM SUR	PHL	123E25 13N25	C 9	1	0.6				A	70	3	2100—1600	
41			TAGBILARAN BHL	PHL	123E50 09N39	C 9	1	0.6				A	70	3	2100—1600	
42			BARWICE	POL	16E20 53N44	A20	1	0.4				A	56	5	0000—2400	
43			MEDYKA	POL	22E56 49N49	A20	1	0.4				A	56	5	0000—2400	
44			OPOCZNO	POL	20E17 51N23	A20	1	0.4				A	56	5	0000—2400	
45			PINCZOW	POL	20E32 50N32	A20	1	0.4				A	56	5	0000—2400	
46			STALOWA WOLA	POL	22E02 50N35	A20	1	0.4				A	56	5	0000—2400	
47			USTRONIE MORSK	POL	15E40 54N11	A20	1	0.4				A	56	5	0000—2400	
48			ZWOLEN	POL	21E35 51N21	A20	1	0.4				A	56	5	0000—2400	
49			ELVAS	POR	07W07 38N53	A20	1	0.4				A	60	5	0000—2400	
50		S	ALEXANDRIA	ROU	25E17 43N58	C 9	1	0.4				A	55	2	0300—2300	
51		S	BABADAG	ROU	28E45 44N54	C 9	1	0.4				A	55	3	0300—2300	
52		S	FAGARAS	ROU	24E57 45N52	A20	2	3.2				A	55	5	0300—2300	
53		S	GALATZI	ROU	27E54 45N25	A20	15	13.9				A	100	4	0500—1900	18/I
54		S	SAVENI	ROU	26E49 47N55	A20	2	5.1				A	95	4	0300—2300	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1332	S	TOPLITA	ROU	25E19 46N55	C 9	1	0.4				A	55	5	0300—2300	
2	(90)	S	BRNO MESTO	TCH	16E38 49N11	A20	25	14.4				A	50	5	0400—1700	7
3		S	JIHLAVA	TCH	15E35 49N23	A20	14	11.9				A	50	5	0400—1700	7
4			JINDR HRADEC	TCH	15E00 49N09	A20	1	0.4				A	60	5	0000—2400	
5			SVITAVY	TCH	16E28 50N36	A20	1	0.4				A	60	5	0000—2400	
6			TURNOV	TCH	15E10 50N35	A20	1	0.4				A	60	5	0000—2400	
7			BANGKOK	THA	100E37 13N46	A20	10	10.4				A	52	2	0000—2400	
8			AKCAABAT	TUR	39E42 41N00	D 9	10	10.4				A	43	4	0200—2300	
9		S	KOKHTLA IARVE	URS	27E10 59N20	A16	15	13.9				A	120	4	0000—2400	
10		S	PIARNU	URS	24E33 58N23	A16	30	16.9				A	120	4	0000—2400	
11			TACHKENT	URS	69E15 41N19	C10	30	16.9				A	120	4	0000—2400	
12		S	UYRU	URS	27E02 57N49	A16	30	16.9				A	120	4	0000—2400	
13			GNJILANE	YUG	21E28 42N28	D20	10	10.4				A	40	4	0800—1500	
14			GNJILANE	YUG	21E28 42N28	D20	1	0.4				A	40	4	1500—0800	
15			MARHUBI	ZAN	39E12 06S08	C 9	5	7.6				A	83	4	0300—2100	

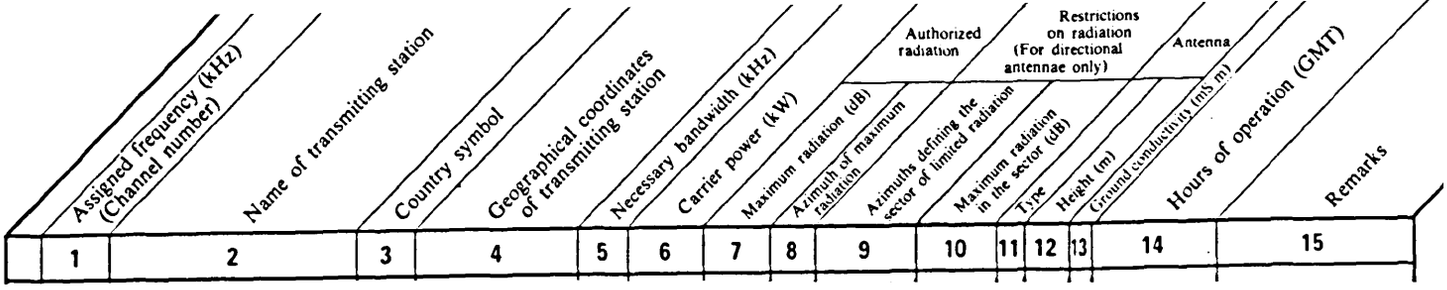


	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1341		POGRADEC	ALB	20E39 40N54	A20	1	0.4				A	56	5	0400—2300	
2	(91)		YOUNG NSW	AUS	148E20 34S20	A20	5	7.4				A	59	3	1900—1400	
3			KHULNA	BGD	89E37 22N48	A20	10	10.6				A	70	3	0000—1800	
4			KAGABANDORO	CAF	19E11 06N59	C 9	10	10.6				A	91	5	0400—2300	
5			PHNOM PENH	CBG	104E55 11N34	C10	1	0.4				A	57	3	0000—2400	
6		S	ANDA SHI	CHN	125E20 46N30	A20	50	17.4				A	60	4	2000—1800	
7		S	DONGFANG	CHN	108E36 19N06	A20	10	10.4				A	60	4	2000—1800	
8		S	ENPING	CHN	112E18 22N11	A20	40	16.4				A	60	4	2000—1800	
9		S	FUYUAN	CHN	134E15 48N17	A20	50	17.4				A	60	4	2000—1800	
10		S	GUANGZHOU	CHN	113E14 23N11	A20	100	22.1				A	120	4	2000—1800	
11		S	HULIN	CHN	132E58 45N45	A20	50	17.4				A	60	4	2000—1800	
12		S	HUZHONG	CHN	123E32 52N05	A20	50	17.4				A	60	4	2000—1800	
13		S	LIAN XIAN	CHN	112E23 24N47	A20	50	17.4				A	60	4	2000—1800	
14		S	LONGCHUAN	CHN	115E11 24N04	A20	20	13.4				A	60	4	2000—1800	
15		S	MULAN	CHN	128E02 45N57	A20	10	10.4				A	60	4	2000—1800	
16		S	NENJIANG	CHN	125E02 49N05	A20	50	17.4				A	60	4	2000—1800	
17		S	QIONGHAI	CHN	110E26 19N15	A20	10	10.4				A	60	4	2000—1800	
18		S	SHANTOU	CHN	116E36 23N30	A20	50	17.4				A	60	4	2000—1800	
19		S	YICHUN 2	CHN	128E45 47N40	A20	100	20.0	320	90—190	14.0	B		4	2000—1800	
20			S CRUZ TENERIF	CNR	16W15 28N30	A20	20	13.4				A	50	5	0000—2400	
21			BAWITI	EGY	28E50 28N22	D 9	20	15.1				A	100	4	0000—2400	
22			SIGATOKA	FJI	177E31 18S09	A20	2.5	4.4				A	30	3	1700—1200	
23		S	LISNAGARVEY	G	06W04 54N30	A20	250	26.1				A	110	4	0000—2400	
24		S	LONDONDERRY	G	07W22 55N00	A20	5	7.4				A	30	5	0000—2400	
25			SWINDON	G	01W48 51N32	A20	1	0.0				A	18	3	0000—2400	
26			FARANAH	GUI	10W45 10N02	C 9	100	20.4				A	56	4	0000—2400	
27			LAKIHEGY	HNG	19E00 47N22	D18	300	26.9				A	117	3	0000—2400	
28		S	OUAGADOUGOU	HVO	01W31 12N22	A20	2	3.4				A	40	4	0000—2400	
29		S	OUAHIGOUYA	HVO	02W25 13N34	A20	100	22.1				A	112	4	0000—2400	
30			JAISALMER	IND	70E57 26N55	A20	20	15.1				A	115	4	0300—0900	25
31			KOHIMA 1	IND	94E03 25N43	A20	20	15.1				A	115	4	0300—0900	25
32			KOHIMA 2	IND	94E03 25N43	A20	10	12.0	5	215—265	4.0	B		4	0900—0300	
33			RAMPUR	IND	79E04 28N48	A20	20	15.1				A	115	3	0300—0900	25
34			SURAT 1	IND	72E52 21N12	A20	20	15.1				A	115	3	0300—0900	25
35			SURAT 2	IND	72E52 21N12	A20	10	13.0	160	300— 20	0.0	B		3	0900—0300	
36			TIRUCHIRAPALLI	IND	78E46 10N50	A20	20	15.1				A	115	3	0300—1000	25
37			VIZAGAPATAM	IND	83E20 17N42	A20	20	15.1				A	115	4	0300—1000	25
38			TANDJUNGPINANG	INS	104E28 00N55	A18	5	7.4				A	56	5	2200—1700	
39			BAM	IRN	58E22 29N08	A20	1	0.4				A	56	3	0100—2200	
40			HAGIWARA	J	137E14 35N49	A15	0.1	−9.4				A	71	5	0000—2400	
41			HANAWA	J	140E48 40N13	A15	0.1	−9.4				A	71	5	0000—2400	
42			INA	J	137E57 35N50	A15	0.1	−9.4				A	71	5	0000—2400	
43			IWAKI	J	140E53 37N03	A15	0.1	−9.4				A	67	5	0000—2400	
44			JOHEN	J	132E35 32N58	A15	0.1	−9.6				A	47	5	0000—2400	
45			KAMIOKA	J	137E18 36N20	A15	0.1	−9.4				A	71	5	0000—2400	
46			KUJI AOMORI	J	141E48 40N11	A15	0.1	−9.4				A	71	5	0000—2400	
47			MAIZURU	J	135E24 35N28	A15	0.1	−9.4				A	67	5	0000—2400	
48			MASUDA	J	131E51 34N41	A15	0.1	−9.6				A	47	5	0000—2400	
49			NAKASHIBETSU	J	144E59 43N32	A15	0.1	−9.4				A	67	5	0000—2400	
50			NICHINAN	J	131E23 31N36	A15	0.1	−9.4				A	67	5	0000—2400	
51			NIIMI	J	133E28 34N58	A15	0.1	−9.4				A	67	5	0000—2400	
52			SAKUMA	J	137E49 35N05	A15	0.1	−9.6				A		5	0000—2400	
53			SHINJO YAMAGAT	J	140E19 38N47	A15	0.1	−9.6				A	47	5	0000—2400	
54			TAJIMA	J	139E46 37N12	A15	0.1	−9.4				A	71	5	0000—2400	



1341 KHZ (91)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1341		TONO	J	141E33 39N20	A15	0.1	−9.4				A	71	5	0000−2400	
2	(91)		UEDA	J	138E16 36N24	A15	0.1	−9.4				A	67	5	0000−2400	
3			URAKAWA	J	142E47 42N10	A15	0.1	−9.4				A	71	5	0000−2400	
4			YOKOTE AKITA	J	140E34 39N18	A15	0.1	−9.4				A	67	5	0000−2400	
5			KIMPO	KOR	126E38 37N42	C10	10	10.6				A	80	4	0000−2400	
6			MAGWA	KWT	48E02 29N10	A20	200	26.0	275	350−200	21.0	B		8	0000−2400	
7			TANANARIVE	MDG	47E31 18S54	C 9	1	2.1				A	102	4	0300−2000	
8			DELIMARA	MLT	14E33 35N49	D 9	20	15.1				A	120	4	0000−2400	
9			BULAGAN	MNG	103E20 48N50	A18	5	9.1				A	120	5	2200−1500	
10			NELSON	NZL	173E13 41S20	A20	2	3.4				A	50	5	0000−2400	
11			BAHAWALPUR	PAK	71E47 29N25	A20	10	12.1				A	121	3	0000−2000	
12			ROXAS CITY	PHL	123E44 11N35	C 9	1	0.6				A	69	3	2100−1600	
13			TOKUNOSHIMA	RYU	129E01 27N45	A15	0.1	−9.4				A	72	5	0000−2400	
14			HARGEISA	SOM	44E03 09N33	A16	25	14.4				A	62	5	0300−2000	
15			DAMAS 3	SYR	36E22 33N30	A20	20	15.1				A	100	5	0400−1500	
16			LAI	TCD	16E18 09N24	C 9	1	0.4				A			0400−2300	
17			SHINYANGA	TGK	33E00 03S40	C 9	20	15.1				A	110	4	0300−2100	
18		S	LOEY	THA	101E43 17N28	A20	10	10.6				A	64	3	0000−2400	
19		S	UBON	THA	104E50 15N15	A20	50	17.6				A	67	4	0000−2400	
20			ALMA ATA	URS	77E00 43N17	A16	30	16.9				A	120	4	0000−2400	
21			FT CHEVTCHENKO	URS	50E18 44N30	A16	25	14.0				A	190	4	0000−2400	
22			PIROT	YUG	22E33 43N08	D 9	10	10.4				A	60	4	0800−1500	
23			KENGE	ZAI	16E55 04S50	C 9	1	0.4				A	60	8	0000−2400	
24			KABWE	ZMB	28E30 14S22	A20	2	6.4				A	142	4	0200−2100	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1350	CABINDA	AGL	12E12 05S35	C10	1	0.4				A	56	3	0600–2200	
2	(92)	TAIF	ARS	40E15 21N15	C 9	20	15.1				A	120	4	0400–1400	24
3		BLACKTOWN NSW	AUS	151E00 33S00	A20	5	7.4				A		3	0000–2400	
4		GEELONG VIC	AUS	144E20 38S12	A20	5	7.4				A	56	2	1900–1400	
5		KARRATHA WA	AUS	117E00 20S43	A20	5	7.4				A		3	2100–1600	
6		KAYOGORO	BDI	29E30 04S14	C 9	1	0.4				A	55	4	0300–2400	
7	S	GANZHOU	CHN	114E54 25N48	A20	50	17.4				A	60	4	2000–1800	
8	S	GUANGCHANG	CHN	116E16 26N52	A20	10	10.4				A	60	4	2000–1800	
9		KUNMING	CHN	102E50 25N10	A20	10	10.4				A	60	5	2000–1800	
10		LIANYUNGANG	CHN	119E10 34N36	A20	5	7.4				A	60	3	2000–1800	
11	S	NANCHANG SHI	CHN	115E54 28N42	A20	100	22.1				A	120	4	2000–1800	
12	S	PINGXIANG 1	CHN	113E52 27N37	A20	20	13.4				A	60	4	2000–1800	
13		ABONG MBANG	CME	13E09 04N00	C 9	20	15.1				A	111	5	0500–2300	
14		MAYAMA	COG	15E15 04S16	A20	5	7.4				A	56	5	0000–2400	
15		QUSEIR	EGY	34E16 26N07	D 9	20	15.1				A	100	3	0000–2400	24
16	S	NANCY	F	06E14 48N53	D 9	100	22.1				A	115	3	0000–2400	
17	S	NICE	F	07E10 43N40	D 9	600	34.0	300	220–230	25.0	B		5	0000–2400	
18	S	NICE	F	07E10 43N40	D 9	600	34.0		80–100	20.0	B				
19		LARISSA	GRC	22E24 39N38	C 9	20	13.4				A	55	4	0400–2200	
20		GYOER	HNG	17E38 47N41	D18	5	7.4				A	60	3	0000–2400	
21		SZOLNOK	HNG	20E12 47N11	D18	5	7.4				A	60	3	0000–2400	
22		AMBIKAPUR	IND	83E04 23N10	A20	20	15.1				A	115	4	0300–0900	25
23		DHARWAR 1	IND	74E59 15N27	A20	20	15.1				A	115	3	0300–1000	25
24		DHARWAR 2	IND	74E59 15N27	A20	10	12.1				A	115	3	1000–0300	
25		GOALPARA	IND	90E40 26N13	A20	20	15.1				A	115	3	0300–0900	25
26		INDORE	IND	75E50 22N44	A20	20	15.1				A	115	3	0300–0900	25
27		JULLUNDUR 1	IND	75E18 31N19	A20	20	15.1				A	115	3	0300–0900	25
28		JULLUNDUR 2	IND	75E18 31N19	A20	10	12.1				A	115	3	0900–0300	
29		KAVARATHY I	IND	72E42 10N36	A20	20	15.1				A	115	4	0300–1000	25
30		LUCKNOW	IND	80E52 26N45	A20	20	15.1				A	115	3	0300–0900	25
31		POONA	IND	73E55 18N31	A20	20	15.1				A	115	3	0300–1000	25
32		HIROSHIMA	J	132E20 34N21	A15	20	15.1				A	122	4	0000–2400	
33		MARSABIT	KEN	38E00 02N20	C 9	5	9.1				A	100	4	0000–2400	
34		SAMCHEOG	KOR	129E07 37N27	C10	1	2.1				A	120		0000–2400	
35		KOSONG	KRE	128E10 38N46	A16	2	3.4				A	30		2000–1800	
36		FIANARANTSOA	MDG	47E05 21S27	C 9	20	16.4				A	141	4	0300–2000	
37		TANANARIVE	MDG	47E31 18S56	C 9	20	15.1				A	111	4	0300–2000	
38	S	DALANTSZADAGAD	MNG	104E30 43N38	A18	150	21.8				A	257	4	0800–1500	
39	S	MUREN	MNG	100E10 49N28	A18	150	21.8				A	257	5	0800–1500	
40	S	TCHOIBOLSAN	MNG	114E30 48N05	A18	75	18.8				A	257	4	0800–1500	
41		SAIPAN	MRA	145E43 15N12	C10	0.5	−2.4				A	64	2	2000–1400	
42		NOUAKCHOTT	MTN	16W00 18N08	B20	50	19.1				A	118		0600–2400	24
43		ROTORUA	NZL	176E14 38S10	A20	2	3.4				A	50	5	0000–2400	
44		DAVAO CITY	PHL	125E35 07N04	C 9	5	7.6				A	69	3	2100–1600	
45		MARAWI CITY	PHL	124E17 08N01	C 9	1	0.6				A	69	3	2100–1600	
46		QUEZON CITY	PHL	122E10 14N01	C 9	10	10.6				A	69	3	2100–1600	
47		SANTI ISABELA	PHL	121E33 16N41	C 9	5	7.6				A	69	3	2100–1600	
48	S	FINSCHHAFEN	PNG	147E51 06S34	D10	2	3.4				A	30	5	1900–1300	
49	S	LAE	PNG	147E00 06S44	D10	10	10.6				A	80	3	1900–1300	
50	S	MUMENG	PNG	146E35 06S30	D10	2	3.4				A	30	5	1900–1300	
51	S	WAU	PNG	146E33 07S20	D10	2	3.4				A	30	5	1900–1300	
52	S	LAMPANG	THA	99E31 18N17	A20	10	10.4				A	53	5	0000–2400	

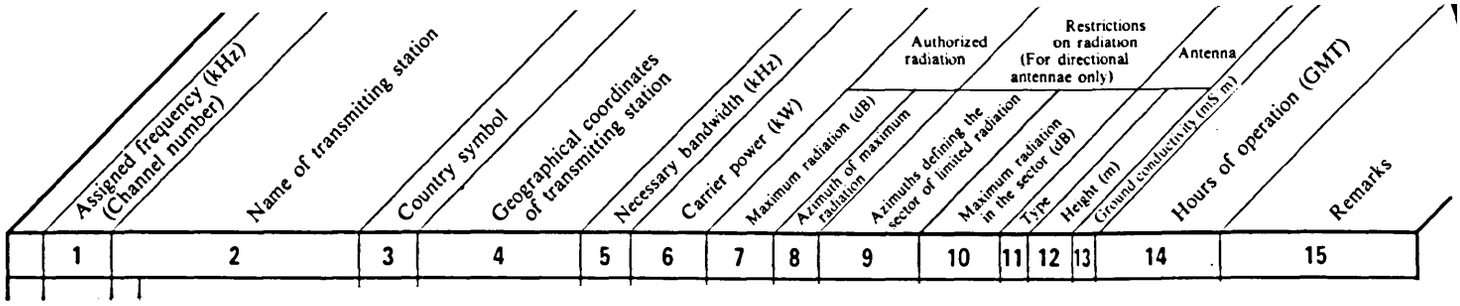
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

1350 KHZ (92)

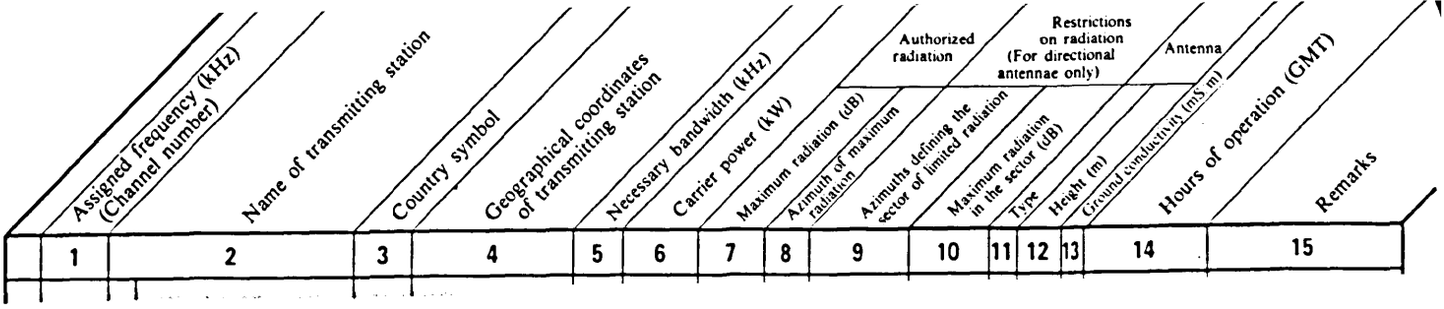
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1350	S	SURIN	THA	103E30 14N53	A20	10	10.4				A	56	3	0000—2400	
2	(92)	S	TRANG	THA	99E52 07N40	A20	10	10.4				A	56	3	0000—2400	
3		S	EREVAN	URS	44E30 40N10	C10	500	29.1				A	120	4	0000—2400	
4		S	KULDIGA	URS	21E58 56N58	A16	20	15.1				A	120	4	0000—2400	
5		S	MADONA	URS	26E13 56N49	C10	50	19.1				A	120	4	0000—2400	
6		S	SUKHUMI	URS	41E00 43N00	A16	30	16.9				A	120	4	0000—2400	
7			STUDIO B 1	YUG	20E29 44N47	D 9	10	10.4				A	55	3	0000—2400	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks

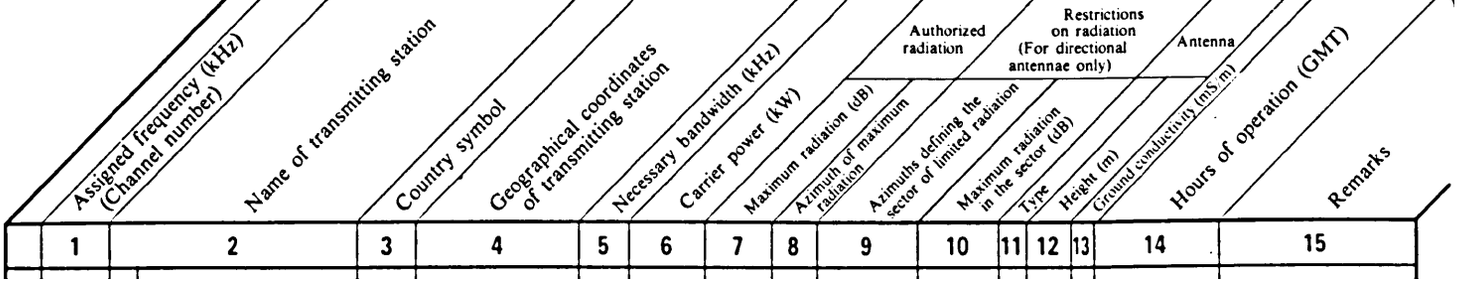
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1359 TIRANE	ALB	19E51 41N18	A20	50	17.6				A	85	5	0500—2300	(24)
2	(93) ABHA	ARS	42E30 18N15	C 9	20	15.1				A	120	4	0000—2400	24
3	BOLWARRA NSW	AUS	151E34 32S42	A20	5	9.1				A	101	4	0000—2400	
4	S AKSU	CHN	80E19 41N03	A20	10	10.4				A	60	4	2000—1800	
5	S ALTAY	CHN	88E18 47N50	A20	10	10.4				A	60	4	2000—1800	
6	S ALXA ZUOQI	CHN	105E41 38N50	A20	5	7.4				A	60	4	2000—1800	
7	S ANKANG	CHN	109E05 32N44	A20	5	7.4				A	60	4	2000—1800	
8	S ANSHUN SHI	CHN	105E55 26N15	A20	10	10.4				A	60	5	2000—1800	
9	S ANTU	CHN	128E22 42N33	A20	10	10.4				A	60	4	2000—1800	
10	S BAODING	CHN	115E33 38N51	A20	50	17.4				A	60	4	2000—1800	
11	S BIJIANG	CHN	98E52 26N34	A20	10	10.4				A	60	5	2000—1800	
12	S BIJIE	CHN	105E16 27N18	A20	5	7.4				A	60	5	2000—1800	
13	S BINCHUAN	CHN	100E33 25N50	A20	10	10.4				A	60	5	2000—1800	
14	S BOLE	CHN	82E08 44N54	A20	10	10.4				A	60	4	2000—1800	
15	S CHANGLING	CHN	123E59 44N16	A20	10	10.4				A	60	4	2000—1800	
16	S CHANGNING	CHN	99E29 24N51	A20	10	10.4				A	60	5	2000—1800	
17	S CHANGTING	CHN	116E18 25N50	A20	10	10.4				A	60	4	2000—1800	
18	S CHENGKOU	CHN	108E47 31N57	A20	5	7.4				A	60	4	2000—1800	
19	S DAAN	CHN	124E18 45N30	A20	10	10.4				A	60	4	2000—1800	
20	S DEJIANG	CHN	108E08 28N10	A20	20	13.4				A	60	5	2000—1800	
21	S FENGJIE	CHN	109E31 31N04	A20	5	7.4				A	60	4	2000—1800	
22	S FUAN	CHN	119E33 27N11	A20	10	10.4				A	60	4	2000—1800	
23	S GARZE	CHN	99E58 31N38	A20	5	7.4				A	60	4	2000—1800	
24	S GEJIU	CHN	103E08 23N21	A20	20	13.4				A	60	5	2000—1800	
25	S GONGHE	CHN	100E40 36N18	A20	20	13.4				A	60	5	2000—1800	
26	S GUI XIAN	CHN	109E36 23N06	A20	40	16.4				A	60	4	2000—1800	
27	S GUYUAN	CHN	106E22 36N01	A20	10	10.4				A	60	4	2000—1800	
28	S HAMI	CHN	93E20 42N50	A20	10	10.4				A	60	4	2000—1800	
29	S HORQIN YZH QI	CHN	121E24 45N07	A20	10	10.4				A	60	4	2000—1800	
30	S HUALIAN	CHN	121E37 23N55	A20	50	17.4				A	60	5	2000—1800	
31	S HUANGCHUAN	CHN	115E02 32N07	A20	5	7.4				A	60	4	2000—1800	
32	S HUNCHUN	CHN	130E21 42N52	A20	5	7.4				A	60	4	2000—1800	
33	S HUNJIANG	CHN	126E23 41N54	A20	20	13.4				A	60	4	2000—1800	
34	S JIAMUSI	CHN	130E30 46N40	A20	1	0.4				A	60	4	2000—1800	
35	S JIANYANG	CHN	118E08 27N20	A20	20	13.4				A	60	4	2000—1800	
36	S JILIN SHI	CHN	126E30 43N48	A20	10	10.4				A	60	4	2000—1800	
37	S JINGHONG	CHN	100E43 22N01	A20	10	10.4				A	60	5	2000—1800	
38	S JINHUA	CHN	119E30 29N15	A20	10	10.4				A	60	4	2000—1800	
39	S KANGDING	CHN	102E00 30N00	A20	5	7.4				A	60	4	2000—1800	
40	S KARAMAY	CHN	85E00 45N32	A20	10	10.4				A	60	4	2000—1800	
41	S KORLA	CHN	86E10 41N44	A20	10	10.4				A	60	4	2000—1800	
42	S KUANCHENG	CHN	118E29 40N36	A20	10	10.4				A	60	4	2000—1800	
43	S LESHAN	CHN	103E40 29N37	A20	5	7.4				A	60	4	2000—1800	
44	S LONG XIAN	CHN	106E51 34N49	A20	10	10.4				A	60	4	2000—1800	
45	S LUODIAN	CHN	106E40 25N29	A20	20	13.4				A	60	5	2000—1800	
46	S LUOHE	CHN	114E01 33N32	A20	20	13.4				A	60	4	2000—1800	
47	S LUZHOU	CHN	105E21 28N47	A20	10	10.4				A	60	4	2000—1800	
48	S MAQEN	CHN	100E09 34N22	A20	20	13.4				A	60	5	2000—1800	
49	S MENYUAN	CHN	101E37 37N23	A20	10	10.4				A	60	5	2000—1800	
50	S MIAN XIAN	CHN	106E40 33N09	A20	5	7.4				A	60	4	2000—1800	
51	S NANCHONG SHI	CHN	106E05 30N48	A20	20	13.4				A	60	4	2000—1800	
52	S NANJING	CHN	118E54 32N06	A20	20	13.4				A	60	3	2000—1800	
53	S NANTONG SHI	CHN	120E40 32N05	A20	10	10.4				A	60	3	2000—1800	
54	S NINGBO	CHN	121E32 29N52	A20	20	13.4				A	60	4	2000—1800	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1359	S	PINGHU	CHN	121E01 30N42	A20	10	10.4				A	60	4	2000—1800	
2	(93)	S	PINGXIANG 2	CHN	106E45 22N11	A20	10	10.4				A	60	4	2000—1800	
3		S	QINGFENG	CHN	115E06 35N54	A20	10	10.4				A	60	4	2000—1800	
4		S	QINGLONG	CHN	105E13 25N51	A20	5	7.4				A	60	5	2000—1800	
5		S	QINZHOU	CHN	108E37 21N58	A20	10	10.4				A	60	4	2000—1800	
6		S	QUANZHOU 1	CHN	118E33 24N53	A20	10	10.4				A	60	4	2000—1800	
7		S	QUJING	CHN	103E40 25N28	A20	10	10.4				A	60	5	2000—1800	
8		S	RONGJIANG	CHN	108E31 25N55	A20	10	10.4				A	60	5	2000—1800	
9		S	SERXU	CHN	98E05 32N58	A20	5	7.4				A	60	4	2000—1800	
10		S	SHANGQIU SHI	CHN	115E39 34N27	A20	10	10.4				A	60	4	2000—1800	
11		S	SHENMU	CHN	110E30 38N49	A20	10	10.4				A	60	4	2000—1800	
12		S	SHIBING	CHN	108E07 27N03	A20	10	10.4				A	60	5	2000—1800	
13		S	SIPING	CHN	124E20 43N10	A20	5	7.4				A	60	4	2000—1800	
14		S	SUQIAN	CHN	118E18 33N57	A20	5	7.4				A	60	3	2000—1800	
15		S	TAIBEI SHI	CHN	121E28 25N05	A20	50	17.4				A	60	5	2000—1800	
16		S	TAIDONG	CHN	121E08 22N47	A20	20	13.4				A	60	5	2000—1800	
17		S	TONGLIAO SHI	CHN	122E13 43N40	A20	20	13.4				A	60	4	2000—1800	
18		S	WEICHANG	CHN	117E45 41N57	A20	5	7.4				A	60	4	2000—1800	
19		S	WENZHOU	CHN	120E36 28N06	A20	10	10.4				A	60	4	2000—1800	
20		S	XIAN	CHN	108E54 34N12	A20	50	17.4				A	60	4	2000—1800	
21		S	XIANGCHENG	CHN	99E42 28N55	A20	5	7.4				A	60	4	2000—1800	
22		S	XINGTAI SHI	CHN	114E31 37N04	A20	5	7.4				A	60	4	2000—1800	
23		S	YANCHENG	CHN	120E08 33N24	A20	10	10.4				A	60	3	2000—1800	
24		S	YECHENG	CHN	77E22 37N55	A20	20	13.4				A	60	4	2000—1800	
25		S	ZHAOJUE	CHN	102E49 28N02	A20	5	7.4				A	60	4	2000—1800	
26		S	ZHAOTONG	CHN	103E34 27N20	A20	10	10.4				A	60	5	2000—1800	
27		S	ZHENGZHOU	CHN	113E42 34N42	A20	50	17.4				A	60	4	2000—1800	
28		S	ZHIDAN	CHN	108E46 36N50	A20	10	10.4				A	60	4	2000—1800	
29		S	ZHONGWEI	CHN	105E11 37N30	A20	50	17.4				A	60	4	2000—1800	
30		S	ZIGONG	CHN	104E40 29N27	A20	1	0.4				A	60	4	2000—1800	
31		S	ZIZHOU	CHN	110E02 37N37	A20	10	10.4				A	60	4	2000—1800	
32		S	ZUNYI SHI	CHN	106E50 27N32	A20	5	7.4				A	60	5	2000—1800	
33			ABIDJAN	CTI	04W01 05N26	C 9	50	19.1				A		7	0600—2400	
34			BERLIN	DDR	13E35 52N28	D 9	250	24.4				A	50	4	0400—1800	
35			BERLIN	DDR	13E35 52N28	D 9	100	20.4				A	50	4	1800—0400	
36			FIGUERAS	E	03E00 42N15	D 9	1000	38.0	240	320—340	10.0	B		4	0000—2400	19
37			FIGUERAS	E	03E00 42N15	D 9	1000	38.0		350—110	8.0	B				
38			MAKALE	ETH	39E28 13N31	C 9	10	10.4				A	55	3	0400—2100	
39			BOURNEMOUTH	G	01W52 50N44	A20	0.3	−4.8				A	30	4	0000—2400	
40			CARDIFF	G	03W12 51N28	A20	0.3	−4.8				A	46	3	0000—2400	
41			BHADRAVATI 1	IND	75E36 13N53	A20	300	26.9				A	115	3	0300—1000	25
42			BHADRAVATI 2	IND	75E36 13N53	A20	100	22.1				A	115	3	1000—0300	
43			JEYPORE	IND	82E40 18N51	A20	20	15.1				A	115	4	0300—1000	25
44			JODHPUR	IND	72E58 26N20	A20	20	15.1				A	115	4	0300—0900	25
45			MADURAI	IND	78E15 09N25	A20	20	15.1				A	115	3	0300—1000	25
46			PARBHANI	IND	76E50 19N08	A20	20	15.1				A	115	3	0300—1000	25
47			TEZPUR	IND	92E42 26N48	A20	20	15.1				A	115	3	0300—0900	25
48			UJUNGPANDANG	INS	119E28 05S09	A18	10	10.4				A	55	4	2100—1600	
49			GALWAY 2	IRL	09W04 53N17	A20	2	3.4				A	50	4	0000—2400	
50			EILAT	ISR	35E00 29N40	D 9	10	10.4				A	45	3	0000—2400	33
51			ESASHI	J	140E08 41N51	A15	0.1	−9.6				A	47	5	0000—2400	
52			FUKUCHIYAMA	J	135E07 35N18	A15	0.1	−9.4				A	67	5	0000—2400	
53			HAMADA	J	132E05 34N54	A15	0.1	−9.4				A	67	5	0000—2400	
54			IKEDA TOKUSHIM	J	133E49 34N02	A15	0.1	−9.4				A	67	5	0000—2400	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1359	KATSUYAMA	J	136E32 36N01	A15	0.1	−9.4				A	71	5	0000−2400	
2	(93)	KURAYOSHI	J	133E48 35N25	A15	0.1	−9.6				A	47	5	0000−2400	
3		MIYAKO	J	141E58 39N38	A15	0.1	−9.4				A	71	5	0000−2400	
4		MIYAKONOJO	J	131E05 31N46	A15	0.1	−9.6				A	47	5	0000−2400	
5		NAKATOMBETSU	J	142E18 44N58	A15	0.1	−9.4				A	71	5	0000−2400	
6		NAKATSUGAWA	J	137E29 35N29	A15	0.1	−9.4				A	67	5	0000−2400	
7		NEMURO	J	145E36 43N20	A15	0.1	−9.4				A	67	4	0000−2400	
8		OBAMA FUKUI	J	135E45 35N30	A15	0.1	−9.4				A	67	5	0000−2400	
9		ODATE	J	140E34 40N16	A15	0.1	−9.4				A	67	5	0000−2400	
10		OFUNATO	J	141E44 39N05	A15	0.1	−9.4				A	67	5	0000−2400	
11		OKAYA SUWA	J	138E04 36N03	A15	0.1	−9.4				A	67	5	0000−2400	
12		RUMOI	J	141E39 43N56	A15	0.1	−9.6				A	47	5	0000−2400	
13		SHIMONOSEKI	J	130E56 33N58	A15	0.1	−9.4				A	67	5	0000−2400	
14		SHINGU	J	136E00 33N43	A15	0.1	−9.4				A	67	5	0000−2400	
15		SHOBARA	J	133E02 34N51	A15	0.1	−9.6				A	47	5	0000−2400	
16		TADAMI	J	139E22 37N18	A15	0.1	−9.4				A	71	5	0000−2400	
17		TAKACHIHO	J	131E18 32N42	A15	0.1	−9.4				A	71	5	0000−2400	
18		TAKADA	J	138E17 37N06	A15	0.1	−7.9				A	109	5	0000−2400	
19		TOYOHASHI	J	137E22 34N46	A15	0.1	−9.4				A	71	5	0000−2400	
20		TSUWANO	J	131E46 34N27	A15	0.1	−9.6				A	47	5	0000−2400	
21		WAJIMA	J	136E55 37N22	A15	0.1	−9.4				A	71	5	0000−2400	
22		YONEZAWA	J	140E06 37N54	A15	0.1	−9.6				A	47	5	0000−2400	
23		MARALAL	KEN	36E40 01N05	C 9	5	9.1				A	100	4	0000−2400	
24		OSAN	KOR	127E06 37N07	C10	1	0.4				A	33	4	0000−2400	
25		ONSONG	KRE	129E51 42N57	A16	1	0.4				A	30		2000−1800	16
26		LOUREN MARQUES	MOZ	32E36 25S58	C10	5	7.4				A	54	4	0000−2400	
27		QUEENSTOWN	NZL	168E41 45S03	A20	2	3.4				A	50	6	0000−2400	
28		CEBU CITY	PHL	123E52 10N17	C 9	1	0.6				A	68	3	2100−1600	
29		S FERNANDO LU	PHL	120E19 16N36	C 9	1	0.6				A	68	3	2100−1600	
30	S	KAINTEBA	PNG	146E02 07S28	D10	2	3.4				A	30	5	1900−1300	
31	S	KEREMA	PNG	145E46 07S59	D10	10	10.6				A	80	3	1900−1300	
32	S	CORABIA	ROU	24E30 43N48	A20	2	5.1				A	104	3	0300−2300	
33	S	DARMANESTI	ROU	26E20 46N22	C 9	1	0.4				A	55	5	0300−2300	
34	S	ZALAU	ROU	23E06 47N15	C 9	2	3.4				A	55	4	0300−2300	
35		TAGA	SMO	172W32 13S48	A20	2	3.4				A	60	6	0000−2400	
36		ABECHER	TCD	20E48 13N47	C 9	100	22.1				A			0400−2300	
37		TANGA	TGK	38E30 05S21	C 9	20	16.4				A	149	4	0300−2100	
38		BANGKOK	THA	100E30 13N46	A20	10	10.4				A	50	2	0000−2400	
39	S	GDOV	URS	27E51 58N41	A18	5	9.1				A	120	4	0000−2400	
40	S	IVANOFRANKOVSK	URS	24E32 48N36	A18	5	9.1				A	120	4	0000−2400	
41	S	LIPETSK	URS	39E35 52N38	A18	5	9.1				A	120	4	0000−2400	
42		MOSKVA	URS	37E08 55N45	A16	15	13.9				A	120	4	0000−2400	
43	S	SMOLENSK	URS	31E43 54N48	A18	5	9.1				A	120	4	0000−2400	
44		DELNICE 2	YUG	14E50 45N22	D 9	10	10.4				A	60	4	0800−1500	



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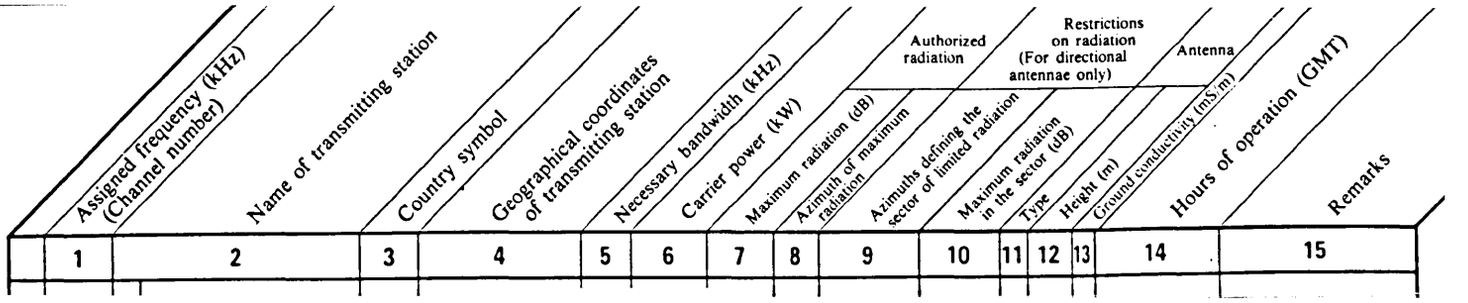
1	1368	TABOUK	ARS	36E30 28N25	C 9	20	15.1				A	120	4	0400—1400	24
2	(94)	ADELAIDE SA	AUS	138E30 35S00	A20	5	7.4				A		2	0000—2400	
3		LITHGOW NSW	AUS	150E08 33S29	A20	5	7.6				A	71	5	1900—1400	
4		MT ISA QLD	AUS	139E30 20S43	A20	2	3.0				A	21	2	1900—1400	
5		RAFAI	CAF	23E56 04N58	C 9	10	10.6				A	78	5	0400—2300	
6		CHONGQING	CHN	106E30 29N45	A20	10	10.4				A	60	4	2000—1800	
7	S	EJENHORO QI	CHN	109E41 39N15	A20	10	10.4				A	60	4	2000—1800	
8	S	LINHE	CHN	107E20 40N44	A20	50	17.4				A	60	4	2000—1800	
9	S	SUNID YOUQI	CHN	113E35 43N45	A20	20	13.4				A	60	4	2000—1800	
10		WUHAN	CHN	114E20 30N36	A20	10	10.4				A	60	4	2000—1800	
11	S	ZHENGLAN QI	CHN	116E00 42N18	A20	10	10.4				A	60	4	2000—1800	
12		FARAFRA	EGY	27E53 27N05	D 9	20	15.1				A	100	4	0000—2400	24
13		FOXDALE	G	04W39 54N10	A20	2	6.0	225			B		4	0000—2400	
14		FOXDALE	G	04W39 54N10	A20	2	6.0	45			B				
15		TENKODOGO	HVO	00W22 11N46	A20	30	16.9				A	118	4	0000—2400	5/NIG
16	S	BARI	I	16E52 41N07	D 9	10	10.4				A	55	4	0000—2400	
17	S	CAGLIARI	I	09E07 39N13	D 9	5	7.4				A	55	3	0000—2400	
18	S	CATANIA	I	15E05 37N32	D 9	5	9.1				A	103	5	0000—2400	
19	S	FIRENZE	I	11E15 43N45	D 9	5	7.6				A	62	4	0000—2400	
20	S	GENOVA	I	08E55 44N25	D 9	10	12.1				A	102	5	0000—2400	
21	S	MESSINA	I	15E32 38N11	D 9	5	7.6				A	62	5	0000—2400	
22	S	MILANO	I	09E12 45N26	D 9	20	13.6				A	66	4	0000—2400	
23	S	NAPOLI	I	14E12 40N52	D 9	20	16.4				A	130	5	0000—2400	
24	S	PALERMO	I	13E21 38N09	D 9	5	7.6				A	65	4	0000—2400	
25	S	PISA	I	10E24 43N43	D 9	5	7.4				A	55	3	0000—2400	
26	S	ROMA	I	12E26 41N54	D 9	10	12.1				A	112	5	0000—2400	
27	S	SASSARI	I	08E27 40N45	D 9	5	7.6				A	62	4	0000—2400	
28	S	TORINO	I	07E44 45N02	D 9	10	10.6				A	80	4	0000—2400	
29	S	TRENTO	I	11E07 46N04	D 9	5	7.4				A	55	5	0000—2400	
30	S	VENEZIA	I	12E18 45N29	D 9	25	14.6				A	70	3	0000—2400	
31	S	VERONA	I	11E00 45N27	D 9	2	3.6				A	62	5	0000—2400	
32		AGARTALA	IND	91E23 23N50	A20	20	15.1				A	110	3	0300—0900	25
33		CUDDAPAH	IND	78E49 14N29	A20	20	15.1				A	110	3	0300—1000	25
34		DELHI	IND	77E12 28N38	A20	300	26.9				A	110	3	0000—2400	
35		ROURKELA	IND	85E00 22N12	A20	20	15.1				A	110	4	0300—0900	25
36		SANGLI	IND	74E36 16N53	A20	20	15.1				A	110	3	0300—1000	25
37		VARANASHI	IND	83E00 25N20	A20	20	15.1				A	110	3	0300—0900	25
38		BANDARFARAHNAZ	IRN	49E58 37N25	A20	200	25.0	90	120—150	11.0	B		2	0200—2100	
39		BANDARFARAHNAZ	IRN	49E58 37N25	A20	200	25.0		230—260	11.0	B				
40		BANDARFARAHNAZ	IRN	49E58 37N25	A20	200	25.0		320— 50	11.0	B				
41		YAMIT	ISR	34E20 31N10	D 9	30	20.0	210			B		1	0000—2400	33
42		KAWAMOTO	J	132E29 34N58	A15	0.1	−9.4				A	71	5	0000—2400	
43		KUMANO	J	136E06 33N53	A15	0.1	−9.4				A	71	5	0000—2400	
44		TAISHO	J	132E59 33N12	A15	0.1	−9.4				A	71	5	0000—2400	
45		TAKAMATSU	J	134E04 34N19	A15	5	10.0	250			B		4	0000—2400	
46		TOTTORI	J	134E12 35N31	A15	1	2.1				A	108	5	0000—2400	
47		TSURUOKA	J	139E52 38N44	A15	1	2.1				A	109	5	0000—2400	
48		YAWATAHAMA	J	132E27 33N28	A15	0.1	−9.4				A	67	5	0000—2400	
49		NYERI	KEN	36E55 00S27	C 9	20	15.1				A	100	4	0000—2400	
50		CHEONGYANG	KOR	126E48 36N26	C10	1	0.6				A	80	6	0000—2400	
51		MUJU	KOR	127E39 36N00	C10	1	0.4				A	60	6	0000—2400	
52		JANGYEN	KRE	125E06 38N16	A16	2	3.4				A	30		2000—1800	
53		PAKSE	LAO	105E50 15N06	A20	10	10.6				A	77	5	2300—1500	
54		BENIMELLAL	MRC	06W20 32N19	A18	50	19.1				A	110	4	0500—2400	24

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

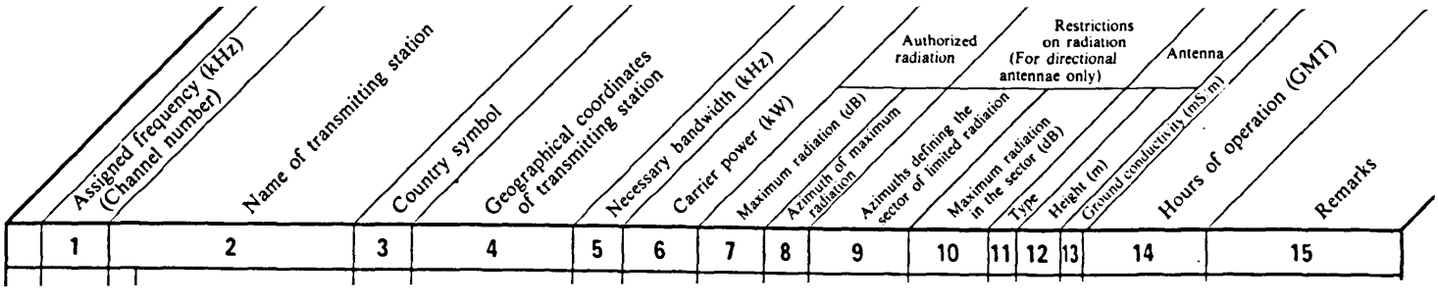
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1368		CALABAR	NIG	08E18 04N57	C 9	10	10.4				A	47	4	0500—2300	5/HVO
2	(94)		WHAKATANE	NZL	177E00 37S56	A20	10	10.4				A	50	4	0000—2400	
3			BAGUIO CITY	PHL	120E35 16N25	C 9	1	0.6				A	67	3	2100—1600	
4			CAGAYAN DE ORO	PHL	124E39 08N29	C 9	1	0.6				A	68	3	2100—1600	
5			S JOSE ANTIQ	PHL	121E56 10N44	C 9	1	0.6				A	69	3	2100—1600	
6			VIRAC CATAND	PHL	124E14 13N35	C 9	1	0.6				A	68	3	2100—1600	
7		S	POMIO	PNG	151E31 05S32	D10	2	3.4				A	30	6	1900—1300	
8		S	RABAUL	PNG	152E10 04S15	D10	10	10.6				A	80	6	1900—1300	
9		S	BIALA PODLASKA	POL	23E05 51N57	C 9	60	19.9				A	104	4	0000—2400	
10		S	KRAKOW	POL	19E53 50N04	C 9	60	19.9				A	104	4	0000—2400	
11		S	LIDZBARK	POL	19E49 53N19	C 9	60	19.9				A	104	4	0000—2400	
12		S	PISZ	POL	22E02 53N32	C 9	10	12.1				A	104	4	0000—2400	
13		S	SLUPSK	POL	17E09 54N23	C 9	60	19.9				A	104	5	0000—2400	
14		S	WIELUN	POL	18E30 51N16	C 9	60	19.9				A	104	4	0000—2400	
15		S	ZIELONA GORA	POL	15E07 52N06	C 9	60	19.9				A	104	5	0000—2400	
16			MIYAKO OKINAWA	RYU	125E17 24N49	A15	0.1	−9.4				A	71	5	0000—2400	
17			S LOUIS	SEN	16W29 16N00	C 9	40	19.4				A	125	4	0600—2400	
18			VICTORIA MAHE	SEY	55E27 04S37	A20	10	10.4				A	33	1	0000—2400	
19			SINGAPORE 1	SNG	103E42 01N20	A20	50	17.4				A	55	4	0000—2400	
20		S	CHUMPHON	THA	99E12 10N36	A20	1	0.4				A	32	3	0000—2400	
21		S	NAN	THA	100E44 18N41	A20	50	17.6				A	75	5	0000—2400	
22		S	NOVOSIBIRSK	URS	82E58 55N04	A16	500	32.0	320	110—170	21.0	B		4	0000—2400	
23		S	PETROPAVLO KAZ	URS	69E08 54N53	C10	30	16.9				A	120	4	0000—2400	
24			VALJEVO	YUG	19E54 44N17	D 9	10	10.4				A	60	4	0800—1500	



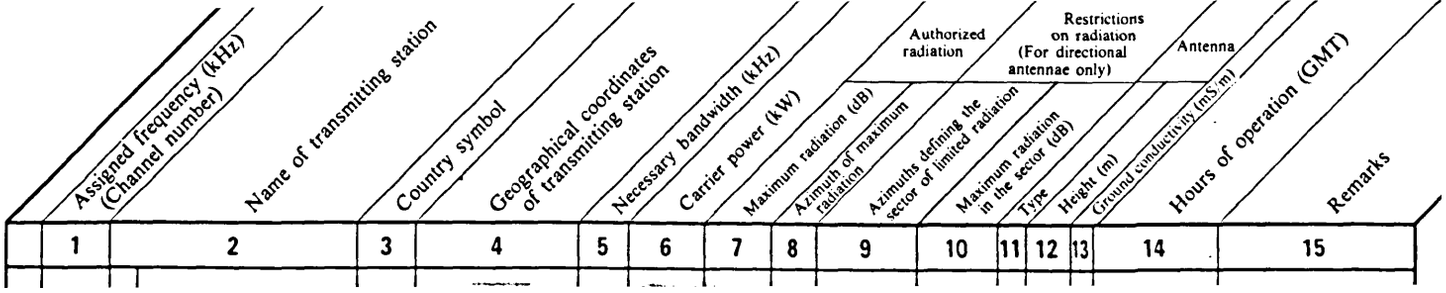
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1377	DHAHRAN	ARS	50E06 26N18	C 9	20	15.1				A	120	3	0000—2400	24
2	(95)	ALICE SPR NT	AUS	133E52 23S43	A20	2	3.0				A	21	3	1900—1400	
3		GOULBURN NSW	AUS	149E42 34S45	A20	5					B		3	0000—2400	
4		MACKAY QLD	AUS	149E13 21S07	A20	5					B		3	1900—1400	
5		S BUSHENG	CHN	81E09 30N17	A20	10	10.4				A	60	5	2000—1800	
6		DEHUA	CHN	118E15 25N30	A20	200	25.1				A	120	4	2000—1800	
7		S GEGYA	CHN	80E58 32N30	A20	10	10.4				A	60	5	2000—1800	
8		S LHASA	CHN	90E59 29N30	A20	100	22.1				A	120	5	2000—1800	
9		QINGDAO	CHN	120E20 36N03	A20	10	10.4				A	60	4	2000—1800	
10		S RUTO	CHN	79E44 33N25	A20	1	0.4				A	60	5	2000—1800	
11		MAKABANA	COG	12E46 03S29	A20	5	7.4				A	54	5	0000—2400	
12		LILLE	F	03E00 50N31	D 9	300	30.8				B		3	0000—2400	
13		KUMASI	GHA	01W37 06N45	C 9	50	17.0				A	200	4	0500—2300	
14		GUECKEDOU	GUI	10W09 08N33	C 9	50	17.4				A	52	4	0000—2400	
15		ALLEPPEY	IND	76E23 09N30	A20	20	15.1				A	110	4	0300—1000	25
16		BARODA	IND	73E16 22N17	A20	20	15.1				A	110	3	0300—0900	25
17		DARBHANGA	IND	85E56 26N09	A20	20	15.1				A	110	3	0300—0900	25
18		DHARMSALA	IND	76E15 32N12	A20	20	15.1				A	110	3	0300—0900	25
19		HYDERABAD 1	IND	78E30 17N20	A20	300	26.9				A	110	3	0300—1000	25
20		HYDERABAD 2	IND	78E30 17N20	A20	100	23.0	160	295— 35	10.0	B		3	1000—0300	
21		HYDERABAD 2	IND	78E30 17N20	A20	100	23.0		25— 40	14.0	B				
22		MYSORE	IND	76E42 12N18	A20	20	15.1				A	110	3	0300—1000	25
23		RAIPUR	IND	81E41 21N15	A20	20	15.1				A	110	3	0300—0900	25
24		SUMENEP	INS	113E51 07S01	A18	2	3.4				A	55	6	2200—1700	
25		YAMAGUCHI	J	131E31 34N02	A15	5	9.1				A	109	5	0000—2400	
26		POCHEON	KOR	127E15 37N53	C10	0.1	−10.0				A	9	6	0000—2400	
27		HOEYANG	KRE	127E15 38N42	A16	1	0.4				A	30		2000—1800	
28		AMBATONDRAZAKA	MDG	48E31 17S48	C 9	5	9.1				A	108	4	0300—2000	
29		DELIMARA	MLT	14E34 35N49	D 9	20	15.1				A	120	4	0000—2400	
30		S SAIN SHANDA	MNG	110E05 44N50	A18	75	18.8				A	200	4	2200—1500	
31		S TSETSERLIG	MNG	101E10 47N30	A18	50	17.0				A	200	5	2200—1500	
32		ALHOCEIMA	MRC	03W57 35N10	A18	40	24.0	180	310— 50	10.0	B		5	0500—2400	24
33		KUMARA	NZL	171E09 42S34	A20	10	10.0				A	150	6	0000—2400	
34		FT SANDEMAN	PAK	69E20 31N00	A20	10	10.4				A	54	4	0000—2000	
35		PAGADIAN ZAMBO	PHL	123E26 07N49	C 9	10	10.6				A	67	3	2100—1600	
36		ROXAS CITY	PHL	123E44 11N35	C 9	5	7.6				A	67	3	2100—1600	
37		EVORA 1	POR	07W54 38N32	A20	10	10.4				A	60	3	0000—2400	
38		JOWHAR	SOM	45E30 02N50	A18	25	14.4				A	55	4	0300—2100	
39		SANDLANE	SWZ	30E48 26S38	A20	50	17.4				A	50	7	0400—2200	
40		FT ARCHAMBAULT	TCD	18E21 09N12	C 9	30	16.9				A			0400—2300	
41		MWANZA	TGK	32E52 02S28	C 9	50	19.1				A	112	4	0300—2100	
42		PHITSANULOK	THA	100E16 16N50	A20	10	10.4				A	54	2	0000—2400	
43		S LUTSK	UKR	25E20 50N45	C 9	50	19.1				A	120	4	0000—2400	
44		S TCHERNOVTSY	UKR	25E55 48N20	C 9	50	19.1				A	120	4	0000—2400	
45		ALEKSANDROV SA	URS	142E18 50N58	A18	5	9.1				A	120	4	0000—2400	
46		S IMAN	URS	133E43 45N56	C 9	30	16.9				A	120	4	0000—2400	
47		S SISIAN	URS	46E45 39N13	B16	25	16.1				A	120	4	0000—2400	
48		S SKALAT	URS	26E00 49N24	C 9	25	16.1				A	120	4	0000—2400	
49		S SOVGAVAN	URS	140E20 48N58	A18	5	9.1				A	120	4	0000—2400	
50		S TOKMAK	URS	29E40 47N00	A16	25	16.1				A	120	4	0000—2400	
51		S VINNITSA	URS	28E26 49N13	C 9	30	16.9				A	120	4	0000—2400	
52		KUMROVEC	YUG	15E42 46N03	D 9	20	13.4				A	60	3	0000—2400	

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1377	S PEC	YUG	20E18 42N39	D 9	10	10.4				A	40	4	0800—1500	
2	(95)	S PEC	YUG	20E18 42N39	D20	2	3.4				A	40	4	1500—0800	
3		S PRIZREN	YUG	20E44 42N12	D 9	10	10.4				A	40	4	0800—1500	
4		S PRIZREN	YUG	20E44 42N12	D20	2	3.4				A	40	4	1500—0800	
5		IDIOFA	ZAI	19E25 04S50	C 9	1	0.4				A	60	8	0000—2400	
6		CHOMA	ZMB	26E58 16S45	A20	10	13.4				A	136	2	0200—2100	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1386	SILVA PORTO	AGL	16E58 12S23	C10	1	0.4				A	56	3	0500–2200	
2	(96)	MORNINGTON VIC	AUS	145E00 38S15	A20	5	7.4				A		2	0000–2400	
3		WOLLONGONG NSW	AUS	150E50 34S30	A20	5	7.4				A		3	0000–2400	
4		PABNA	BGD	89E18 24N02	A20	10	13.4				A	122	3	0000–1800	
5		BODA	CAF	17E28 04N19	C 9	30	15.2				A	54	5	0400–2300	
6		JINMEN	CHN	118E24 24N36	A20	10	10.4				A	60	4	2000–1800	
7		LINHE	CHN	107E20 40N44	A20	50	17.4				A	60	4	2000–1800	
8		LIUZHOU	CHN	109E12 24N18	A20	5	7.4				A	60	4	2000–1800	
9		TIANJIN	CHN	117E09 39N09	A20	50	17.4				A	60	4	2000–1800	
10		S CRUZ TENERIF	CNR	16W15 28N30	A20	2	3.4				A	40	5	0000–2400	
11		MUT	EGY	28E55 25N30	D 9	20	15.1				A	100	4	0000–2400	24
12		ATHINAI	GRC	23E41 37N57	C 9	300	26.9				A	108	5	2300–2200	
13		LABE	GUI	12W17 11N19	C 9	100	22.1				A	94	4	0000–2400	
14		BARSALOG KAYA	HVO	01W00 13N28	A20	50	19.1				A	108	4	0000–2400	
15		ALLAHABAD	IND	81E54 25N28	A20	20	15.1				A	110	3	0300–0900	25
16		DIBRUGARH	IND	94E58 27N29	A20	20	15.1				A	110	3	0300–0900	25
17		GWALIOR	IND	78E10 26N14	A20	20	15.1				A	110	3	0000–2400	
18		PANAJI GOA	IND	73E51 15N28	A20	20	15.1				A	110	4	0300–1000	25
19		RANCHI	IND	85E23 23N23	A20	20	15.1				A	110	3	0300–0900	25
20		LIMERICK	IRL	08W37 52N40	A20	2	3.4				A	50	4	0000–2400	
21		AHWAZ	IRN	48E40 31N20	B16	400	30.0	0	110–240	19.0	B		3	0100–2200	
22		KAGOSHIMA	J	130E45 31N43	A15	10	12.1				A	103	4	0000–2400	
23		KANAZAWA	J	136E37 36N32	A15	10	12.1				A	114	4	0000–2400	
24		MORIOKA	J	141E08 39N38	A15	10	13.4				A	138	5	0000–2400	
25		OKAYAMA	J	133E54 34N37	A15	5	9.1				A	110	4	0000–2400	
26		NAKURU	KEN	36E05 00S07	C 9	20	15.1				A	100	4	0000–2400	
27		MOGPO	KOR	126E23 34N48	C10	10	13.4				A	124	4	0000–2400	
28		SINHUNG	KRE	127E32 40N12	A16	1	0.4				A	30		2000–1800	
29		VADUZ	LIE	09E30 47N12	D 9	500	34.0	298	45–195	11.0	B		6	0000–2400	
30		MORRUMBALA	MOZ	35E35 17S17	C10	10	10.4				A	54	4	0400–2200	
31		LUDERITZ	NMB	15E10 26S39	A20	10	12.1				A	108	4	0000–2400	
32		TURANGI	NZL	175E48 38S59	A20	1	0.4				A	50	5	0000–2400	
33		CALOOCAN CITY	PHL	120E59 14N38	C 9	10	10.6				A	67	3	2100–1600	
34		MALAYBALAY BUK	PHL	125E07 08N06	C 9	5	7.6				A	67	3	2100–1600	
35		CANTON ISLAND	PHX	171W43 02S47	C10	0.3	−4.8				A	55	2	0000–2400	
36		KIRAKIRA	SLM	161E55 10S27	A20	10	12.1				A		1	1900–1200	
37		BANGKOK	THA	100E33 13N47	A20	10	10.4				A	54	2	0000–2400	
38		KAUNAS	URS	23E54 54N52	A16	1000	32.1				A	120	4	0000–2400	
39		TCHEBOKSARY	URS	47E05 56N10	A18	5	9.1				A	120	4	0000–2400	

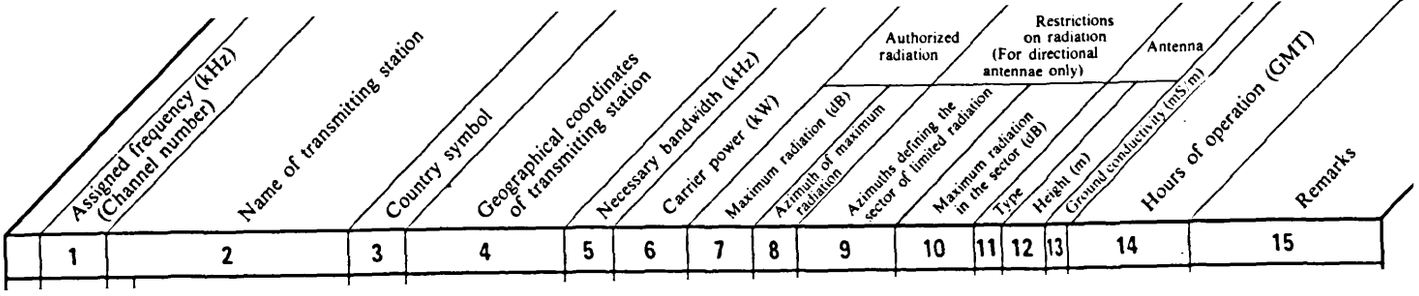


	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1395		LUSHNJE	ALB	19E40 40N57	C 9	1000	32.1				A	107	5	0300—2400	(24)
2	(97)		GIZAN	ARS	42E31 16N52	C 9	20	15.1				A	120	3	0000—2400	24
3			BROOME WA	AUS	122E15 18S00	A20	10	12.1				A		3	2100—1600	
4			MONARTO SA	AUS	139E00 35S00	A20	10	12.1				A		2	1900—1400	
5			ANGRA HEROISMO	AZR	27W11 38N42	A20	10	10.4				A	60	4	0000—2400	
6		S	DANGSHAN	CHN	116E21 34N26	A20	20	13.4				A	60	4	2000—1800	
7		S	FUYANG	CHN	115E51 32N54	A20	20	13.4				A	60	4	2000—1800	
8		S	LUAN	CHN	116E30 31N45	A20	20	13.4				A	60	4	2000—1800	
9		S	WUHE	CHN	117E53 33N09	A20	20	13.4				A	60	4	2000—1800	
10		S	WUHU SHI	CHN	118E24 31N18	A20	10	10.4				A	60	4	2000—1800	
11		S	XIUNING	CHN	118E10 29N47	A20	10	10.4				A	60	4	2000—1800	
12			NGABE	COG	16E12 03S12	A20	2	3.4				A	54	5	0000—2400	
13		S	ALICANTE	E	00W30 38N20	D 9	5	7.4				A	50	4	0000—2400	19
14		S	AVILA	E	04W40 40N40	D 9	5	7.4				A	50	5	0000—2400	19
15		S	BURGOS	E	03W40 42N20	D 9	5	7.4				A	50	4	0000—2400	19
16		S	GERONA	E	02E50 42N00	D 9	5	7.4				A	50	4	0000—2400	19
17		S	HUESCA	E	00W20 42N10	D 9	5	7.4				A	50	5	0000—2400	19
18		S	MAHON MENORCA	E	04E20 39N50	D 9	5	7.4				A	50	4	0000—2400	19
19		S	MALAGA	E	04W30 36N40	D 9	100	20.4				A	50	5	0000—2400	19
20		S	PONFERRADA	E	06W40 42N30	D 9	5	7.4				A	50	5	0000—2400	19
21		S	VALDEPENAS	E	03W30 38N50	D 9	5	7.4				A	50	4	0000—2400	19
22		S	VIGO	E	08W40 42N10	D 9	5	7.4				A	50	5	0000—2400	19
23			LOPIK	HOL	05E03 52N01	D 9	500	27.4				A	45	4	0000—2400	
24			AIJAL	IND	92E43 23N43	A20	20	15.1				A	110	4	0300—0900	25
25			BHAVANI PATNA	IND	83E18 19N54	A20	20	15.1				A	110	3	0300—1000	25
26			BIKANER	IND	73E22 28N01	A20	20	15.1				A	110	4	0000—2400	
27			JABALPUR	IND	79E59 23N10	A20	20	15.1				A	110	3	0300—0900	25
28			TRICHUR	IND	76E15 10N35	A20	20	15.1				A	110	4	0300—1000	25
29			BANDA ATJEH	INS	95E20 05N30	A18	10	10.4				A	54	5	2200—1700	
30			BANDAR ABBAS	IRN	56E17 27N10	A20	10	10.4				A	54	2	0300—1400	
31			EZYON	ISR	34E57 29N35	A16	50	22.0	200			B		1	0000—2400	
32			CHORWON	KOR	127E17 38N08	C10	10	10.6				A	80	6	0000—2400	
33			YANGDOK	KRE	126E38 39N15	A16	10	10.4				A	50		2000—1800	
34			TANANARIVE	MDG	47E31 18S54	C 9	20	15.1				A	107	4	0300—2000	
35			KUANTAN	MLA	103E21 03N48	A20	10	12.1				A	100	5	2200—1700	
36		S	ALEG	MTN	13W54 17N03	B20	1	0.4				A	47		0600—2400	24
37		S	BOUTILIMIT	MTN	14W40 17N30	B20	1	0.4				A	47		0600—2400	24
38		S	MBOUT	MTN	12W37 16N02	B20	1	0.4				A	47		0600—2400	24
39		S	TAMCHAKETT	MTN	10W40 17N13	B20	1	0.4				A	47		0600—2400	24
40		S	TIDJIKJA	MTN	11W24 18N33	B20	1	0.4				A	47		0600—2400	24
41		S	TIMBEDRA	MTN	08W12 16N16	B20	1	0.4				A	47		0600—2400	24
42			UYO	NIG	07E50 05N03	C 9	50	17.6				A	75	4	0500—2300	
43			BALCLUTHA	NZL	169E46 46S16	A20	10	10.4				A	50	4	0000—2400	
44			LEGASPI CITY	PHL	123E43 13N09	C 9	1	0.6				A	66	3	2100—1600	
45			SOLANO NV	PHL	121E10 16N31	C 9	1	0.6				A	66	3	2100—1600	
46			LAE	PNG	147E00 06S44	B10	100	20.6				A	80	3	1900—1400	
47			RADZYN PODLASK	POL	22E38 51N48	A20	1	0.4				A	54	5	0000—2400	
48			SLAWNO	POL	16E39 54N22	A20	1	0.4				A	54	5	0000—2400	
49			DODOMA	TGK	35E30 06S10	C 9	20	15.1				A	116	4	0300—2100	
50			TOGBLEKOPE	TGO	01E12 06N16	A20	20	15.1				A	104	4	0000—2400	
51			CHIANG RAI	THA	99E50 20N09	A20	25	14.4				A	54	5	0000—2400	
52			AGHINSKOE	URS	115E33 51N22	A18	150	24.0	0	90—270	16.0	B		4	0000—2400	
53			BULUN	URS	127E10 70N44	A16	50	19.1				A	120	5	0000—2400	
54			NIJNII TAGHIL	URS	60E00 57N55	A18	5	9.1				A	120	4	0000—2400	

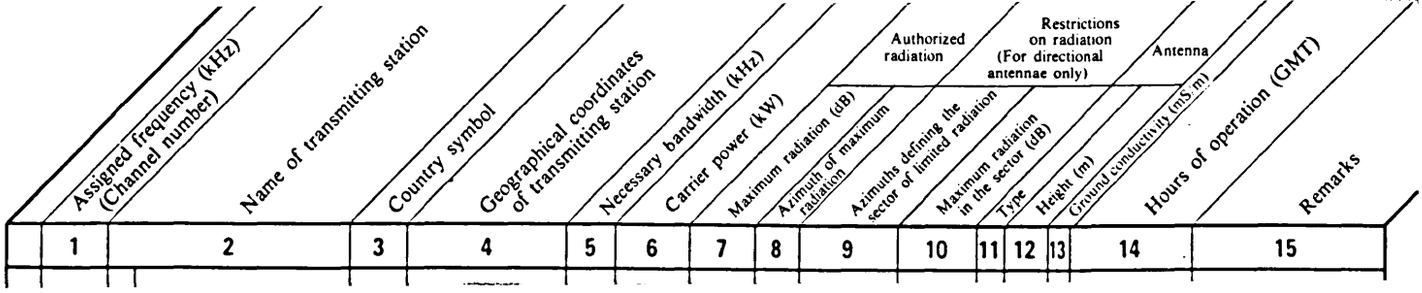
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

1395 KHZ (97)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1395	URALSK	URS	51E19 51N14	A16	50	19.1				A	120	4	0000—2400	
2	(97)	VANAVARA	URS	102E17 60N22	A18	5	9.1				A	120	4	0000—2400	
3		S VOLGA	URS	38E22 57N56	A18	5	9.1				A	120	4	0000—2400	
4		S VYBORG	URS	28E48 60N42	A18	5	9.1				A	120	4	0000—2400	

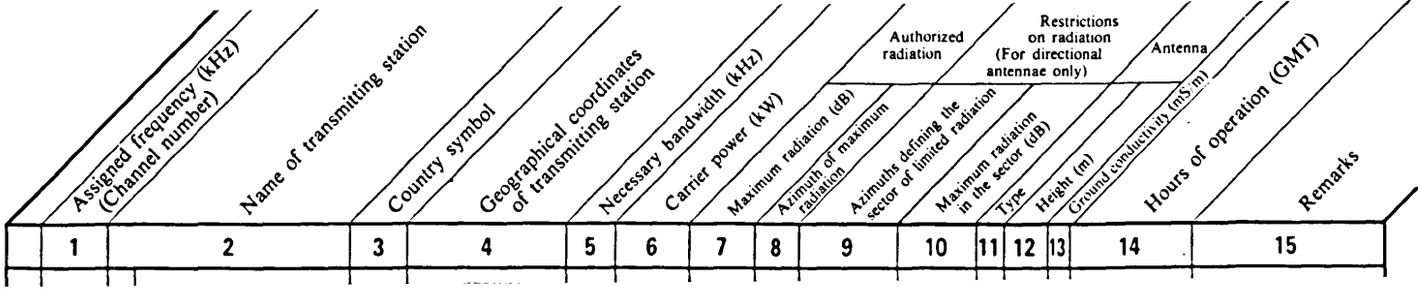


	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1404	LOBITO	AGL	13E33 12S23	C10	1	0.4				A	54	3	0600—2300	
2	(98)	DAMMAM	ARS	50E10 26N24	C 9	20	16.4				A	120	3	0400—1400	24
3		DAMMAM	ARS	50E10 26N24	C 9	10	13.4				A	120	3	1400—2300	24
4		PARKES NSW	AUS	148E13 33S09	A20	5	7.4				A	53	3	1900—1400	
5		S BARANOVITCHI	BLR	26E01 53N08	A16	5	10.4				A	120	4	0000—2400	
6		BAMBARI	CAF	20E40 05N45	C 9	30	16.9				A	115	5	0400—2300	
7		DANDONG	CHN	124E22 40N07	A20	10	10.4				A	50	4	2000—1800	
8		S MIANYANG	CHN	113E13 30N11	A20	20	13.4				A	50	4	2000—1800	
9		S QICHUN	CHN	115E20 30N04	A20	20	13.4				A	50	4	2000—1800	
10		S YICHANG SHI	CHN	111E12 30N48	A20	100	22.1				A	100	4	2000—1800	
11		ASMARA	ETH	38E56 15N21	C 9	10	10.4				A	53	3	0400—2100	
12		S AJACCIO	F	08E46 41N46	D 9	50	17.4				A	50	6	0000—2400	
13		S BREST	F	04W09 48N16	D 9	20	16.4				A	130	5	0000—2400	
14		S CORTE	F	09E10 42N20	D 9	20	16.4				A	120	6	0000—2400	
15		S DIJON	F	05E01 47N18	D 9	20	13.4				A	50	6	0000—2400	
16		S GRENOBLE	F	05E39 45N11	D 9	20	15.1				A	110	6	0000—2400	
17		S PAU	F	00W24 43N18	D 9	20	16.4				A	120	4	0000—2400	
18		S ROUEN	F	00E44 49N34	D 9	100	23.4				A	120	4	0000—2400	
19		HELSINKI 2	FNL	24E49 60N11	D 9	300	27.8	340	145—180	14.8	B		5	0000—2400	
20		KOMOTINI	GRC	25E24 41N07	C 9	50	17.6				A	75	4	0400—2400	
21		KIPE	GUI	13W39 09N36	C 9	400	28.0	50	160—280	22.0	B		4	0000—2400	
22		COCOS ISLANDS	ICO	96E49 12S09	A20	0.1	−9.6				A		5	2300—1700	
23		AURANGABAD	IND	75E18 19N54	A20	20	15.1				A	110	3	0300—1000	25
24		BANGALORE	IND	77E38 12N58	A20	20	15.1				A	105	3	0300—1000	25
25		PATNA	IND	85E13 25N37	A20	20	15.1				A	110	3	0300—0900	25
26		TEZPUR	IND	92E42 26N48	A20	20	15.1				A	110	3	0000—2400	
27		TUTICORIN	IND	78E12 08N48	A20	20	15.1				A	110	3	0300—0900	25
28		DJAKARTA	INS	106E53 06S14	A18	10	10.4				A	54	5	2200—1700	
29		RASHT	IRN	49E40 37N10	A20	200	26.0	350	30—310	10.0	B		2	1400—2200	
30		ZEFAT	ISR	35E30 32N58	D 9	20	15.1				A	100	3	0000—2400	33
31		S GOTEMBA	J	138E55 35N20	A15	0.1	−9.4				A	67	5	0000—2400	
32		S HAMAMATSU	J	137E43 34N44	A15	0.5					B		4	0000—2400	
33		KUSHIRO	J	144E24 42N59	A15	5					B		4	0000—2400	
34		S SHIZUOKA	J	138E23 34N55	A15	5					B		4	0000—2400	
35		KITALE	KEN	34E58 01N01	C 9	5	9.1				A	100	4	0000—2400	
36		BUSAN	KOR	128E58 35N07	C10	10	10.6				A	83		0000—2400	
37		SONCHON	KRE	124E55 39N46	A16	1	0.4				A	30		2000—1800	
38		TOBRUK	LBY	23E58 32N05	D 9	10	10.4				A	54	4	0400—2200	24
39		BARUNURT	MNG	113E20 46N40	A18	5	10.4				A	120	4	2200—1500	
40		CHITIPA	MWI	33E30 09S19	A20	2	5.1				A	92	3	0200—2300	
41		OGOJA	NIG	08E45 06N40	C 9	50	17.6				A	60	4	0500—2300	
42		WARKWORTH	NZL	174E42 36S23	A20	5	7.4				A	50	4	0000—2400	
43		BANNU	PAK	70E40 33N48	A20	10	10.4				A	54	4	0000—2000	
44		BACOLOD CITY	PHL	122E57 10N41	C 9	5	7.6				A	66	3	2100—1600	
45		S PABLO LAG	PHL	121E20 14N03	C 9	1	0.6				A	66	3	2100—1600	
46		BIALY BOR	POL	16E49 53N50	A20	1	0.4				A	54	5	0000—2400	
47		BOGATYNIA	POL	14E56 50N55	A20	1	0.4				A	54	5	0000—2400	
48		LUBSKO	POL	14E58 51N48	A20	1	0.4				A	54	5	0000—2400	
49		PELCZYCE	POL	15E20 53N03	A20	1	0.4				A	54	5	0000—2400	
50		S BAIA MARE	ROU	23E30 47N40	A20	15	12.2				A	55	5	0000—2400	
51		S SIBIU	ROU	24E10 45N47	A20	15	12.2				A	55	5	0000—2400	
52		MULIVAI	SMO	171W46 14S02	A20	10	10.6				A	60	6	0000—2400	
53		HUDDUR	SOM	43E55 04N05	A18	10	10.4				A	55	4	0300—2100	
54		YALA	THA	101E10 06N48	A20	50	17.4				A	47	3	0000—2400	

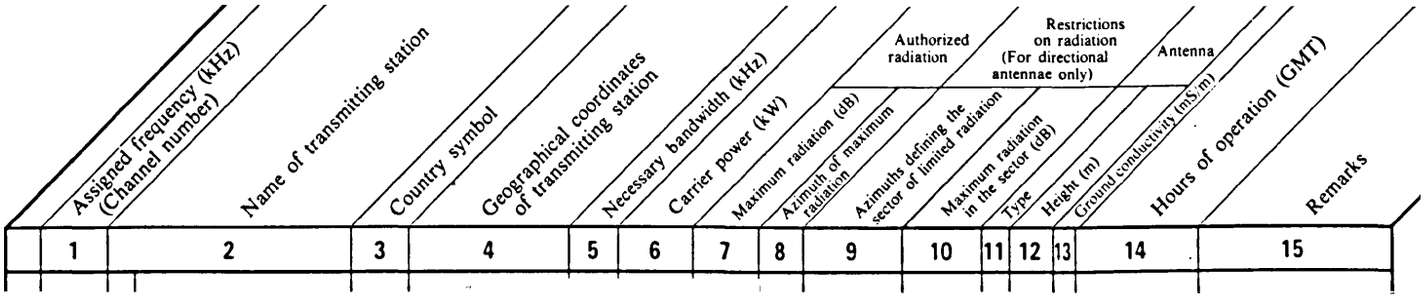


1404 KHZ (98)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1404		YASOTHON	THA	104E09 15N47	A20	10	10.4				A	51	4	0000—2400	
2	(98)	S	DNEPROPETROVSK	UKR	35E44 48N48	A16	30	18.2				A	120	4	0000—2400	
3		S	IZMAIL	UKR	28E51 45N20	A16	25	17.4				A	120	4	0000—2400	
4		S	LVOV	UKR	24E00 49N50	A16	30	18.2				A	120	4	0000—2400	
5		S	NARYN	URS	76E00 41N25	A18	5	10.4				A	120	4	0000—2400	
6		S	TALAS	URS	72E00 42N30	A18	5	10.4				A	120	4	0000—2400	
7			SR MITROVICA	YUG	19E38 44N59	D 9	1	0.6				A	60	3	0000—2400	
8			VARAZDIN	YUG	16E19 46N23	D 9	10	10.4				A	50	3	0800—1500	

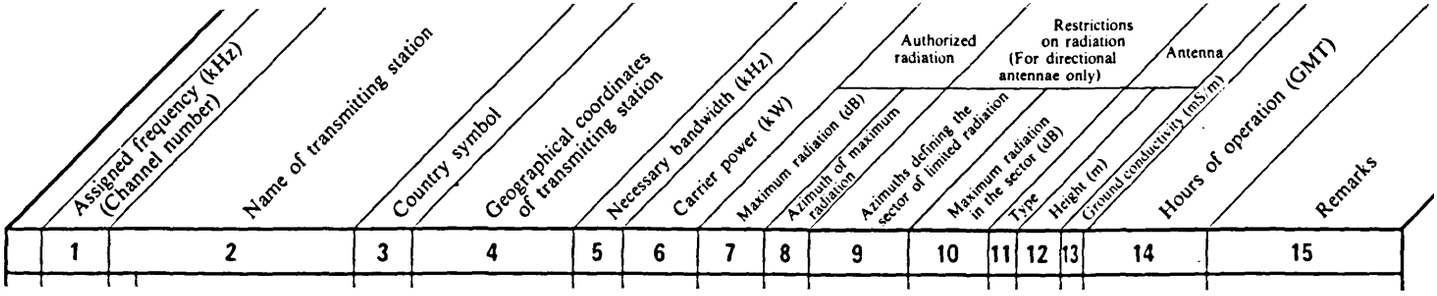


	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1413	NEWCASTLE NSW	AUS	151E42 32S51	A20	5	7.4				A	54	3	0000—2400	
2	(99)	COMILLA	BGD	91E13 23N23	A20	10	13.4				A	122	3	0000—1800	
3		PHNOM PENH	CBG	104E55 11N34	C10	20	13.4				A	53	3	0000—2400	
4		S HABAHE	CHN	87E03 48N04	A20	10	10.4				A	50	4	2000—1800	
5		S LIANYUNGANG	CHN	119E10 34N36	A20	50	17.4				A	50	3	2000—1800	
6		S SUZHOU	CHN	120E41 31N18	A20	10	10.4				A	50	3	2000—1800	
7		S TAIZHOU	CHN	119E55 32N30	A20	10	10.4				A	50	3	2000—1800	
8		S TAXKORGAN	CHN	75E08 37N42	A20	10	10.4				A	50	4	2000—1800	
9		S URUMQI SHI	CHN	87E30 43N35	A20	100	22.1				A	100	4	2000—1800	
10		BOKO	COG	14E36 04S51	A20	10	10.4				A	53		0000—2400	
11		S BAD MERGENTHM	D	09E47 49N30	D 9	3	5.2				A	59	4	0000—2400	
12		S BUCHEN WALLD	D	09E20 49N32	D 9	0.2	−6.6				A	48	4	0000—2400	
13		S HEIDENHEIM	D	10E09 48N41	D 9	0.2	−7.0				A	20	4	0000—2400	
14		S ALCAZAR S JUAN	E	03W10 39N20	D 9	5	7.4				A	40	4	0000—2400	19
15		S ALCOY	E	00W30 38N40	D 9	5	7.4				A	40	5	0000—2400	19
16		S ANTEQUERA	E	04W35 37N00	D 9	5	7.4				A	40	4	0000—2400	19
17		S CARTAGENA	E	01W00 37N35	D 9	5	7.4				A	40	5	0000—2400	19
18		S HUELVA	E	06W55 37N15	D 9	100	20.4				A	40	3	0000—2400	19
19		S MELILLA	E	02W55 35N15	D 9	5	7.4				A	40	4	0000—2400	19
20		S MERIDA	E	06W20 38N45	D 9	5	7.4				A	40	4	0000—2400	19
21		S OVIEDO	E	05W50 43N20	D 9	5	7.4				A	40	5	0000—2400	19
22		S SABADELL	E	02E10 41N30	D 9	5	7.4				A	40	5	0000—2400	19
23		S SANTIAGO COMPO	E	08W30 42N50	D 9	5	7.4				A	40	5	0000—2400	19
24		S SEGOVIA	E	04W05 40N55	D 9	5	7.4				A	40	5	0000—2400	19
25		S VITORIA	E	02W40 42N50	D 9	5	7.4				A	40	4	0000—2400	19
26		MERSA ALAM	EGY	34E55 25N03	D 9	20	15.1				A	100	4	0000—2400	24
27		OULU 2	FNL	25E32 65N00	D 9	10	10.6				A	100	5	0000—2400	
28		AJMER	IND	74E42 26N27	A20	20	15.1				A	110	4	0300—0900	25
29		CHHATTARPUR	IND	79E33 24N52	A20	20	15.1				A	110	3	0300—0900	25
30		CHINDWARA	IND	78E55 22N05	A20	20	15.1				A	110	4	0000—2400	
31		COIMBATORE	IND	77E06 11N00	A20	20	15.1				A	110	4	0300—1000	25
32		ITANAGAR	IND	94E42 27N12	A20	20	15.1				A	110	4	0300—0900	25
33		JAGDALPUR	IND	81E55 19N01	A20	20	15.1				A	110	3	0300—1000	25
34		SIMLA	IND	77E12 31N10	A20	20	15.1				A	110	4	0300—0900	25
35		PANGKALPINANG	INS	106E09 02S05	A18	5	7.4				A	53	5	2200—1700	
36		RING	IRL	07W44 52N04	A20	2	5.1				A	100	4	0000—2400	
37		GEROFIT	ISR	35E04 30N34	D 9	10	12.1				A		3	0000—2400	33
38		FUKUOKA	J	130E25 33N41	A15	50	19.1				A	105	4	0000—2400	
39		CHASONG	KRE	126E24 41N21	A16	1	0.4				A	30		2000—1800	
40		MOCUBA	MOZ	36E59 16S50	C10	10	10.4				A	54	4	0400—2200	
41		TOKOROA	NZL	175E47 38S10	A20	2	3.4				A	55	4	0000—2400	
42		MASIRAH 1	OMA	58E54 20N41	A20	1500	35.0	90			B		4	0000—2400	11/G
43		MASIRAH 2	OMA	58E54 20N41	A20	1500	35.0	350			B		4	0000—2400	11/G
44		BUN JAWA	PAK	74E18 32N24	A20	2	3.0				A	27	3	0000—1400	
45		DAVAO CITY	PHL	125E34 07N03	C 9	5	7.6				A	66	3	2100—1600	
46		S BUIN	PNG	155E42 06S31	B10	2	3.4				A	30	5	1900—1300	
47		S KIETA	PNG	155E40 06S20	B10	10	10.6				A	80	5	1900—1300	
48		S SOHANO	PNG	154E41 05S26	B10	2	3.4				A	30	5	1900—1300	
49		S WAKUNAI	PNG	155E13 05S52	B10	2	3.4				A	30	5	1900—1300	
50		BARLINEK	POL	15E12 53N00	A20	1	0.4				A	53	5	0000—2400	
51		BARTOSZYCE	POL	20E50 54N16	A20	1	0.4				A	53	5	0000—2400	
52		ILAWA	POL	19E33 53N37	A20	1	0.4				A	53	5	0000—2400	
53		PARCZEW	POL	22E53 51N39	A20	1	0.4				A	53	5	0000—2400	
54		POLCZYN ZDROJ	POL	16E06 53N46	A20	1	0.4				A	53	5	0000—2400	

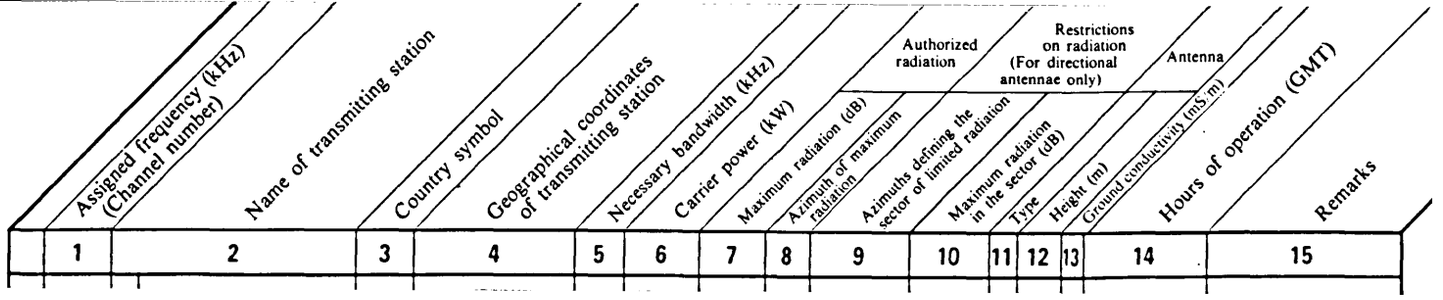


1413 KHZ (99)

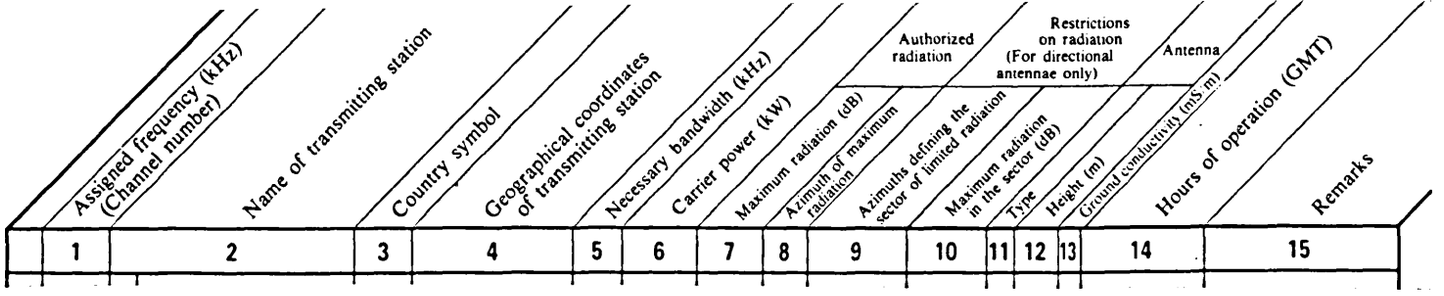
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1413		STASZOW	POL	21E08 50N33	A20	1	0.4				A	53	5	0000—2400	
2	(99)		LERE	TCD	14E13 09N39	C 9	1	0.4				A			0400—2300	
3			ARUSHA	TGK	36E40 03S00	C 9	50	19.1				A	98	4	0300—2100	
4			MANGO	TGO	00E28 10N21	A20	10	10.4				A	50	4	0000—2400	
5			BANGKOK	THA	100E35 13N53	A20	10	10.4				A	30	2	2300—1700	
6		S	BELEBEI	URS	54E07 54N05	A18	5	10.4				A	120	4	0000—2400	
7		S	INIA RV	URS	144E23 59N28	A18	5	10.4				A	120	5	0000—2400	
8		S	KAMEN NA OBI	URS	81E19 54N40	A18	5	10.4				A	120	4	0000—2400	
9		S	KIROV KALUJKII	URS	34E20 54N04	A18	5	10.4				A	120	4	0000—2400	
10		S	KOLPACHEVO	URS	82E59 58N18	A18	5	10.4				A	120	4	0000—2400	
11		S	MILLEROVO	URS	40E22 48N55	A18	5	10.4				A	120	4	0000—2400	
12		S	PROKOPIEVSK	URS	86E44 53N54	A18	5	10.4				A	120	4	0000—2400	
13		S	STAVROPOL	URS	42E01 45N06	A18	5	10.4				A	120	4	0000—2400	
14		S	SUKHUMI	URS	40E42 43N00	A18	5	10.4				A	120	4	0000—2400	
15		S	TATARSK	URS	76E00 55N13	A18	5	10.4				A	120	4	0000—2400	
16		S	TBILISI	URS	44E48 41N41	A18	5	10.4				A	120	4	0000—2400	
17		S	VOLGOGRAD	URS	44E12 48N47	C10	50	20.4				A	120	4	0000—2400	
18			DALAT	VTN	108E26 11N58	C10	1	0.4				A	45	4	2200—1500	
19			PRISTINA 1	YUG	21E07 42N40	D 9	1000	32.1				A	106	4	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1422		HENRIQCARVACHO	AGL	20E24 09S38	C10	1	0.4				A	54	3	1700—0100	
2	(100)		ALGER	ALG	03E09 36N40	D 9	40	18.1				A	108	2	0600—2400	24
3			RIYADH	ARS	46E23 24N30	C 9	20	16.4				A	120	3	0400—1400	24
4			RIYADH	ARS	46E23 24N30	C 9	10	13.4				A	120	3	1400—2300	24
5			MELBOURNE VIC	AUS	145E06 37S44	A20	5	9.1				A	97	2	0000—2400	
6			BERBERATI	CAF	15E48 04N10	C 9	30	15.2				A	52	3	0400—2300	
7		S	FU XIAN 1	CHN	122E00 39N38	A20	20	13.4				A	50	4	2000—1800	
8		S	JINZHOU	CHN	121E07 41N07	A20	50	17.4				A	50	4	2000—1800	
9		S	QINGYUAN	CHN	124E55 42N06	A20	20	13.4				A	50	4	2000—1800	
10			SHANGHAI	CHN	121E29 31N15	A20	20	13.4				A	50	3	2000—1800	
11		S	ZHANGWU	CHN	122E29 42N24	A20	20	13.4				A	50	4	2000—1800	
12			CHRISTMAS IS	CHR	105E41 10S26	A20	0.5	−2.6				A		7	2300—1700	
13			ABOISSO	CTI	03W13 05N32	C 9	10	12.1				A		7	0600—2400	
14			SAARBRUECKEN	D	06E55 49N21	D 9	1200	37.0	60	200—280	24.0	B		4	0600—1800	
15			SAARBRUECKEN	D	06E55 49N21	D 9	600	32.8	60	200—300	26.8	B		4	1800—0600	
16			SUEZ	EGY	32E31 30N00	D 9	20	15.1				A	100	4	0000—2400	24
17			SODDU	ETH	37E45 06N52	C 9	10	10.4				A	52	3	0400—2100	
18			AMBIKAPUR	IND	83E04 23N10	A20	20	15.1				A	105	4	0300—0900	25
19			DHANBAD 1	IND	86E24 23N48	A20	20	15.1				A	105	3	0300—0900	25
20			DHANBAD 2	IND	86E24 23N48	A20	10	12.1				A	105	3	0900—0300	
21			NAZIBABAD	IND	78E12 29N24	A20	20	15.1				A	105	3	0300—0900	25
22			POONA	IND	73E55 18N31	A20	20	15.1				A	105	3	0300—1000	25
23			RAJKOT 1	IND	70E41 22N22	A20	20	15.1				A	105	3	0300—0900	25
24			RAJKOT 2	IND	70E41 22N22	A20	10	12.1				A	105	3	0900—0300	
25			SINGARADJA	INS	115E04 08S06	A18	10	10.4				A	53	5	2200—1700	
26			KERMANSHAH	IRN	47E07 34N19	A20	100	22.1				A	110	3	0100—2200	
27			YOKOHAMA	J	139E42 35N33	A15	30	15.4				A	85	4	0000—2400	
28			LAMU	KEN	40E52 02S20	C 9	5	9.1				A	100	4	0000—2400	
29			YEONGDEOG	KOR	129E22 36N24	C10	1	0.6				A	80	6	0000—2400	
30			KIFFA	MTN	11W23 16N36	B20	20	15.1				A	106		0600—2400	24
31			PHALOMBE	MWI	35E45 15S50	A20	2	5.1				A	92	3	0200—2300	
32			PT VILA	NHB	168E18 17S45	A20	20	13.4				A	50	1	0000—2400	
33			BOMADI	NIG	05E55 05N10	C 9	50	17.4				A	50	4	0500—2300	
34			OPUNAKE	NZL	173E52 39S27	A20	2	3.4				A	50	5	0000—2400	
35			MALABON RIZAL	PHL	120E57 14N41	C 9	10	10.6				A	65	3	2100—1600	
36			MUSUAN BUK	PHL	125E01 07N49	C 9	5	7.6				A	65	3	2100—1600	
37		S	BERESTI	ROU	27E49 46N08	A20	1	0.4				A	40	2	0300—2300	
38		S	DEVA	ROU	22E50 45N52	A20	2	3.4				A	40	4	0300—2300	
39		S	LAPUS	ROU	23E55 47N29	A20	1	0.4				A	40	4	0300—2300	
40		S	ODORHEI	ROU	25E18 46N19	A20	1	0.4				A	40	4	0300—2300	
41		S	PUCIOASA	ROU	25E24 45N05	A20	1	0.4				A	40	4	0300—2300	
42		S	TIRGU NEAMT	ROU	26E16 47N12	C 9	1	0.4				A	40	3	0300—2300	
43		S	VRATA	ROU	22E51 44N12	A20	2	3.4				A	40	3	0300—2300	
44			SINGAPORE 1	SNG	103E42 01N20	A20	350	25.8				A	55	4	2200—1800	
45			PHITSANULOK	THA	100E15 16N48	A20	10	10.4				A	45	2	0000—2400	
46			ORDU	TUR	37E53 40N59	D 9	50	19.1				A	106	4	0200—2300	
47			KITGUM	UGA	32E54 03N17	C 9	10	10.6				A	75	4	0300—2100	
48			TCHERNIGOV	UKR	31E19 51N29	A16	5	10.4				A	120	4	0000—2400	
49			BATUMI	URS	41E19 41N39	A16	30	18.2				A	120	4	0000—2400	
50		S	LIEPAIA	URS	21E02 56N33	A16	5	10.4				A	120	4	0000—2400	
51		S	REZEKNE	URS	27E20 56N33	A16	5	10.4				A	120	4	0000—2400	
52		S	VALMIERA	URS	25E29 57N32	A16	50	20.4				A	120	4	0000—2400	



	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1431		DJIBOUTI 3	AFI	43E05	11N35	A20	600	27.8				A	150	3	0000–2400	18/ISR
2	(101)		PESHKOPI	ALB	20E20	41N40	A20	20	15.1				A	105	6	0400–2300	(24)
3			WOLLONGONG NSW	AUS	150E52	34S31	A20	5	7.4				A	55	3	0000–2400	
4			CHITTAGONG	BGD	91E50	22N21	A20	10	13.4				A	122	3	0000–1800	
5			PHNOM PENH	CBG	104E55	11N34	C10	1	0.4				A	52	3	0000–2400	
6			BENGBU	CHN	117E45	32N58	A20	5	7.4				A	50	4	2000–1800	
7			HAILAR	CHN	119E45	49N02	A20	100	22.1				A	100	4	2000–1800	
8			ABALA	COG	15E35	01S03	A20	5	7.4				A	52		0000–2400	
9			DRESDEN	DDR	13E30	51N03	D 9	250	24.0				A	150	4	0800–1500	
10			DRESDEN	DDR	13E30	51N03	D 9	150	21.8				A	150	4	1500–0800	
11		S	KOEBENHAVN	DNK	12E21	55N41	D 9	10					B		4	0000–2400	
12		S	SKIVE	DNK	09E02	56N34	D 9	70	20.6				A	106	4	0000–2400	
13			READING	G	00W58	51N26	A20	0.7	−1.1				A	35	4	0000–2400	
14		S	BRESSANONE	I	11E39	46N43	D 9	1	0.4				A	50	5	0000–2400	
15		S	BRUNICO	I	11E58	46N48	D 9	1	0.4				A	50	5	0000–2400	
16		S	FOGGIA	I	15E32	41N27	D 9	10	10.4				A	52	3	0000–2400	
17		S	GROSSETO	I	11E07	42N45	D 9	10	10.4				A	52	4	0000–2400	
18		S	MERANO	I	11E09	46N40	D 9	1	0.4				A	50	5	0000–2400	
19		S	MESSINA	I	15E32	38N11	D 9	10	10.6				A	62	5	0000–2400	
20		S	PALERMO	I	13E21	38N09	D 9	12.5	13.1				A	103	5	0000–2400	
21		S	RIMINI	I	12E30	44N05	D 9	20	15.1				A	110	4	0000–2400	
22		S	RIVA DEL GARDA	I	10E42	45N55	D 9	1	0.4				A	50	5	0000–2400	
23		S	SASSARI	I	08E27	40N45	D 9	20	15.1				A	112	4	0000–2400	
24		S	TARANTO	I	17E14	40N28	D 9	1	0.4				A	50	5	0000–2400	
25		S	VERONA	I	11E00	45N27	D 9	2	3.6				A	62	5	0000–2400	
26			CHANDIGARH 1	IND	76E54	30N42	A20	20	15.1				A	105	3	0300–0900	25
27			CHANDIGARH 2	IND	76E54	30N42	A20	10	12.1				A	105	3	0900–0300	
28			INDORE	IND	75E50	22N44	A20	20	15.1				A	105	3	0300–0900	25
29			KOZHIKODE 1	IND	75E50	11N15	A20	20	15.1				A	105	4	0300–1000	25
30			KOZHIKODE 2	IND	75E50	11N15	A20	10	12.1				A	105	4	1000–0300	
31			SILCHAR	IND	92E47	24N45	A20	20	15.1				A	105	4	0300–0900	25
32			EN GEDI	ISR	35E22	31N22	D 9	10	12.1				A		4	0000–2400	18/F(AFI) 33
33		S	GIFU	J	136E42	35N25	A15	5	7.6				A	67	5	0000–2400	
34		S	GUJYO HACHIMAN	J	136E57	35N45	A15	0.1	−9.6				A	50	5	0000–2400	
35			KUSHIMOTO	J	135E47	33N27	A15	0.1					B		5	0000–2400	
36		S	TAJIMI	J	137E10	35N20	A15	0.1	−9.4				A	65	5	0000–2400	
37			WAKAYAMA	J	135E09	34N15	A15	5					B		4	0000–2400	
38			YANGPYEONG	KOR	127E30	37N30	C10	1	3.4				A	120	4	0000–2400	
39			BAMAKO 1	MLI	07W58	12N38	C 9	60	19.9				A	104		0600–2400	
40			BAMAKO 2	MLI	08W02	12N41	C 9	100	22.1				A	104		0600–2400	
41			DELIMARA	MLT	14E34	35N49	D 9	20	16.4				A	120	4	0000–2400	
42			BEIRA	MOZ	34E44	19S36	C10	10	10.4				A	54	4	0400–2200	
43			DUNEDIN	NZL	170E30	45S53	A20	1	0.4				A	30	4	0000–2400	
44			DAGUPAN CITY	PHL	120E20	16N01	C 9	5	7.6				A	65	3	0000–2400	
45		S	BRAGA 1	POR	08W10	41N37	A20	10	12.1				A	90	5	0000–2400	
46		S	CHAVES 1	POR	07W25	41N45	A20	1	2.1				A	90	5	0000–2400	
47		S	EVORA 1	POR	07W54	38N32	A20	1	2.1				A	90	3	0000–2400	
48		S	MIRANDA DOURO1	POR	06W16	41N29	A20	1	2.1				A	90	6	0000–2400	
49		S	MONTEMORVELHO1	POR	08W38	40N12	A20	100	20.0				A	180	5	0000–2400	
50		S	PORTALEGRE 1	POR	07W25	39N18	A20	1	2.1				A	90	5	0000–2400	
51			ISHIGAKI	RYU	124E08	24N22	A15	1	0.6				A	70	5	0000–2400	
52			DAPANGO	TGO	00E12	10N51	A20	10	10.4				A	50	4	0000–2400	
53			SONGKHLA	THA	100E35	07N12	A20	10	10.4				A	35	3	0000–2400	
54			KRIVOI ROG	UKR	33E25	47N55	A16	500	30.4				A	120	4	0000–2400	



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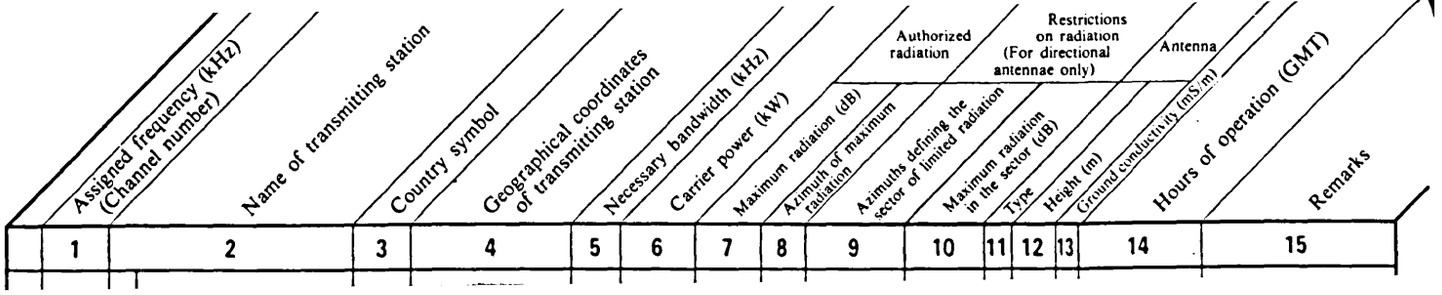
1	1431	S OCH	URS	72E48 41N27	A16	50	20.4				A	120	4	0000—2400	
2	(101)	S PRJEVALSK	URS	78E26 42N29	A16	50	20.4				A	120	4	0000—2400	
3		S SULIUKTA	URS	69E34 39N56	A18	5	10.4				A	120	4	0000—2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1440		DAMMAM	ARS	49E54 26N43	C 9	1600	36.0	90	200—350	17.0	B		3	0000—2400	24
2	(102)		CANBERRA ACT	AUS	149E07 35S13	A20	5	7.4				A	40	3	2000—1400	
3			BANGUI	CAF	18E35 04N22	C 9	100	20.4				A	52	3	0400—2300	
4		S	AR HORQIN QI	CHN	120E05 43N52	A20	20	13.4				A	50	4	2000—1800	
5		S	CHIFENG SHI	CHN	118E52 42N18	A20	10	10.4				A	50	4	2000—1800	
6		S	HE XIAN	CHN	111E39 24N28	A20	20	13.4				A	50	4	2000—1800	
7		S	LINGSHAN	CHN	109E17 22N25	A20	20	13.4				A	50	4	2000—1800	
8		S	LIUZHOU	CHN	109E12 24N18	A20	50	17.4				A	50	4	2000—1800	
9		S	LONGLIN	CHN	105E27 24N43	A20	20	13.4				A	50	4	2000—1800	
10		S	PINGGUO	CHN	107E33 23N19	A20	20	13.4				A	50	4	2000—1800	
11		S	PINGNAN	CHN	110E24 23N33	A20	20	13.4				A	50	4	2000—1800	
12		S	QUANZHOU 2	CHN	111E04 25N56	A20	20	13.4				A	50	4	2000—1800	
13			ICOD	CNR	16W45 28N20	A20	2	3.4				A	40	5	0000—2400	
14			BALE GOBA	ETH	40E00 07N00	C 9	10	10.4				A	52	3	0400—2100	
15			AHMEDABAD	IND	72E38 23N02	A20	10	12.1				A	110	3	0000—2400	
16			KANPUR 1	IND	80E19 26N28	A20	20	15.1				A	105	3	0300—0900	25
17			KANPUR 2	IND	80E19 26N28	A20	10	12.1				A	105	3	0900—0300	
18			PT BLAIR 1	IND	92E43 11N40	A20	20	15.1				A	105	4	0300—1000	25
19			PT BLAIR 2	IND	92E43 11N40	A20	10	12.1				A	105	4	1000—0300	
20			PUTTUR	IND	75E12 12N42	A20	20	15.1				A	105	4	0300—1000	25
21			RATNAGIRI	IND	73E22 17N00	A20	20	15.1				A	105	4	0300—1000	25
22			TAWANG	IND	91E54 27N36	A20	20	15.1				A	105	4	0300—0900	25
23			TIRUCHIRAPALLI	IND	78E46 10N50	A20	20	15.1				A	105	3	0300—1000	25
24			YAMIT	ISR	34E20 31N10	D 9	30	20.0	210			B		1	0000—2400	33
25		S	ABASHIRI	J	144E15 44N00	A15	0.1	−9.6				A	50	4	0000—2400	
26		S	KITAMI	J	143E52 43N49	A15	0.1	−9.6				A	50	4	0000—2400	
27		S	KUSHIRO	J	144E25 42N59	A15	0.1	−9.6				A	50	4	0000—2400	
28		S	MURORAN	J	140E59 42N19	A15	0.1	−9.6				A	50	5	0000—2400	
29		S	NAYORO	J	142E26 44N21	A15	0.1	−9.6				A	50	5	0000—2400	
30		S	SAPPORO	J	141E28 43N07	A15	50	17.6				A	81	4	0000—2400	
31			KUNSAN	KOR	126E37 35N55	C10	1	0.4				A	39	4	0000—2400	
32			MASAN	KOR	128E33 35N10	C10	0.3	−5.2				A	9	4	0000—2400	
33			PYEONGTAEG	KOR	127E01 36N57	C10	1	0.4				A	54	4	0000—2400	
34			WEONJU	KOR	127E57 37N22	C10	0.3	−5.2				A	18	6	0000—2400	
35			MARNACH	LUX	06E04 50N02	D 9	1200	37.0	45	95—345	28.0	B		4	0500—1900	
36			MARNACH	LUX	06E04 50N02	D 9	1200	31.0	320	110—170	23.0	B		4	1900—0500	
37			TEMERLOH	MLA	102E32 03N31	A20	20	15.1				A	100	5	0000—2400	
38			DALANTSZADAGAD	MNG	104E30 43N38	A18	25	17.4				A	120	4	2200—1500	
39		S	ALEG	MTN	13W54 17N03	B20	1	0.4				A	50		0600—2400	24
40		S	BOUTILIMIT	MTN	14W40 17N30	B20	1	0.4				A	50		0600—2400	24
41		S	MBOUT	MTN	12W37 16N02	B20	1	0.4				A	50		0600—2400	24
42		S	TAMCHAKETT	MTN	10W40 17N13	B20	1	0.4				A	50		0600—2400	24
43		S	TIDJIKJA	MTN	11W25 18N33	B20	1	0.4				A	50		0600—2400	24
44		S	TIMBEDRA	MTN	08W12 16N16	B20	1	0.4				A	50		0600—2400	24
45			JALINGO	NIG	11E22 08N50	C 9	50	19.1				A	100	4	0500—2300	
46			HAMILTON	NZL	175E20 37S48	A20	2	3.4				A	50	3	0000—2400	
47			GILGIT	PAK	73E12 35N55	A20	10	10.6				A	70	4	0000—2000	
48			TANAUAN BAT	PHL	121E10 14N05	C 9	1	0.6				A	64	3	2100—1600	
49		S	ALOTAU	PNG	150E20 10S18	B10	10	10.6				A	80	5	1900—1300	
50		S	WANIGELA	PNG	149E11 09S51	B10	10	10.6				A	80	3	1900—1300	
51			KIGOMA	TGK	29E40 05S00	C 9	100	25.0	90	170— 10		A		4	0300—2100	
52			BANGKOK	THA	100E33 13N43	A20	10	10.4				A	52	2	0000—2400	
53			CARSAMBA	TUR	36E44 41N11	D 9	100	24.0	90	180—360	5.0	B		4	0200—2300	
54			CARSAMBA	TUR	36E44 41N11	D 9	100	24.0		0— 50	15.0	B				



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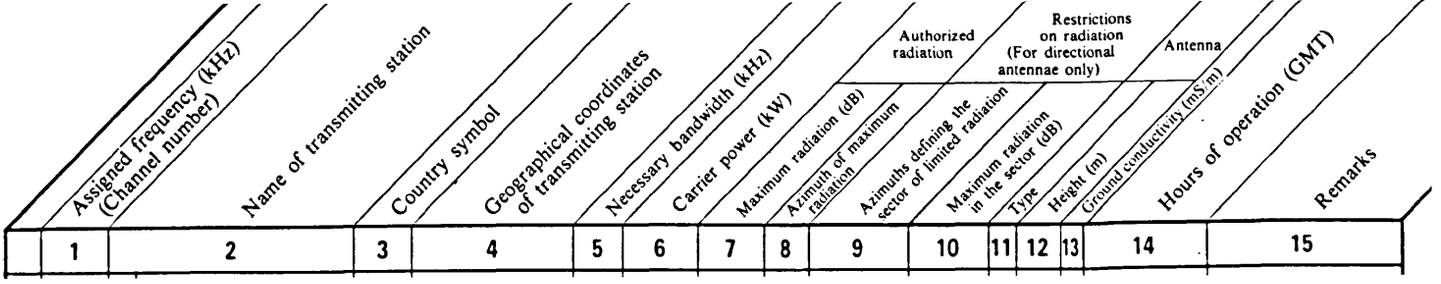
1	1440	URALSK	URS	51E19 51N14	A18	50	20.4				A	120	4	0000—2400	
2	(102)	KRALJEVO	YUG	20E42 43N44	D 9	100	20.0				A	145	4	0800—1500	
3		KRALJEVO	YUG	20E42 43N44	D 9	10	10.4				A	47	4	1500—0800	



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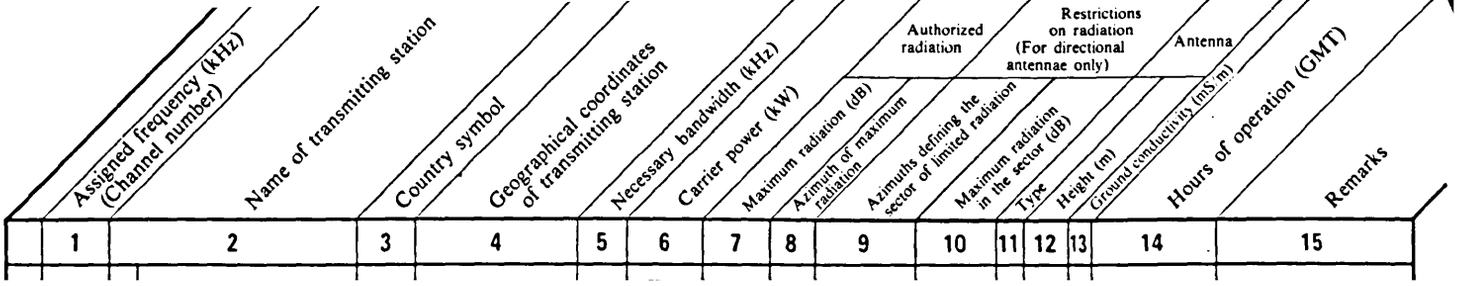
1	1449		JEDDAH	ARS	39E09 21N14	C10	500	32.0	130	260—360	18.0	B		3	0000—2400	24
2	(103)		MUDGEE NSW	AUS	149E35 32S35	A20	5					B		4	1900—1400	
3			PONAPE	CAR	158E20 07N01	C10	1	0.6				A	64	2	1900—1300	
4		S	ANYUAN	CHN	115E24 25N09	A20	10	10.4				A	50	4	2000—1800	
5			CHANGCHUN	CHN	125E24 43N48	A20	10	10.4				A	50	4	2000—1800	
6		S	FUHAI	CHN	87E45 47N00	A20	1	0.4				A	50	4	2000—1800	
7		S	FUYUN	CHN	89E33 47N00	A20	10	10.4				A	50	4	2000—1800	
8		S	HOTAN	CHN	80E02 37N00	A20	10	10.4				A	50	4	2000—1800	
9		S	JIUJIANG SHI	CHN	116E10 29N39	A20	20	13.4				A	50	4	2000—1800	
10		S	KASHI	CHN	76E00 39N25	A20	10	10.4				A	50	4	2000—1800	
11		S	NINGGANG	CHN	113E58 26N46	A20	10	10.4				A	50	4	2000—1800	
12		S	RUOQIANG	CHN	88E10 39N00	A20	10	10.4				A	50	4	2000—1800	
13		S	SHANGRAO SHI	CHN	118E15 28N20	A20	20	13.4				A	50	4	2000—1800	
14		S	TACHENG	CHN	83E05 46N45	A20	10	10.4				A	50	4	2000—1800	
15		S	TURPAN	CHN	89E02 42N53	A20	10	10.4				A	50	4	2000—1800	
16		S	XINGGUO	CHN	115E21 26N20	A20	10	10.4				A	50	4	2000—1800	
17		S	XINHE	CHN	82E40 41N25	A20	10	10.4				A	50	4	2000—1800	
18		S	YICHUN 1	CHN	114E25 27N48	A20	20	13.4				A	50	4	2000—1800	
19		S	YINING SHI	CHN	81E28 43N55	A20	10	10.4				A	50	4	2000—1800	
20		S	YIWU	CHN	94E40 43N20	A20	1	0.4				A	50	4	2000—1800	
21			BAFOUSSAM	CME	10E25 05N27	C 9	100	22.1				A	103	4	0500—2300	
22			BERLIN 1	D	13E14 52N30	D 9	5	10.4				A	120	5	0000—2400	
23			REDMOSS	G	02W05 57N07	A20	2	3.6				A	76	5	0000—2400	
24			GOLFO BARATTI	I	10E32 43N08	D 9	300	31.8	312	158	23.3	B		2	0000—2400	
25			ALLEPPEY	IND	76E23 09N30	A20	20	15.1				A	105	4	0300—1000	25
26			JULLUNDUR	IND	75E18 31N19	A20	20	15.1				A	105	3	0300—0900	25
27			PARBHANI	IND	76E50 19N08	A20	20	15.1				A	105	3	0300—1000	25
28			SAMBALPUR	IND	84E01 21N28	A20	20	15.1				A	105	3	0000—2400	
29			TURA	IND	90E12 25N36	A20	20	15.1				A	105	3	0300—0900	25
30			BENGKULU	INS	102E20 03S46	A18	5	7.4				A	52	4	2200—1700	
31			SAMARINDA	INS	117E09 00S30	A18	10	10.6				A	60	4	2100—1600	
32			WATERFORD	IRL	07W08 52N16	A20	2	3.4				A	50	4	0000—2400	
33			BANDAR SHAH	IRN	54E05 36N54	A20	400	29.0	70	200—310		B		2	0100—2200	
34			ABASHIRI	J	144E15 44N00	A15	5	10.4				A	122	4	0000—2400	
35			TAKAMATSU	J	134E05 34N19	A15	5	7.6				A	67	4	0000—2400	
36			AMMAN	JOR	35E53 31N54	C 9	10	12.1				A	90	6	1300—2300	24
37			MERU	KEN	37E37 00N05	C 9	20	15.1				A	100	4	0000—2400	
38			ULSAN	KOR	129E29 35N28	C10	10					B		4	0000—2400	
39			CHANGDO	KRE	127E47 38N22	A16	1	0.4				A	30		2000—1800	
40			MISURATA	LBY	15E05 32N46	D 9	20	18.0	160	280— 40	8.0	B		4	0400—2200	24
41			KAYES	MLI	11W27 14N27	C 9	30	16.9				A	103		0600—2400	
42			SUHE BATOR 2	MNG	113E10 46N50	A18	5	10.4				A	120	4	2200—1500	
43			KAFUKULE	MWI	33E50 10S36	A20	2	5.1				A	92	3	0200—2300	
44			PALMERSTON NO	NZL	175E34 40S21	A20	5	7.4				A	55	4	0000—2400	
45			KARACHI	PAK	67E04 24N51	A20	10	10.4				A	52	4	0000—2000	
46			S CARLOS NEG	PHL	123E25 10N29	C 9	1	0.6				A	64	3	2100—1600	
47			SAFOTU	SMO	172W21 13S26	A20	2	3.4				A	50	6	0000—2400	
48			GARBA HARLEY	SOM	42E20 03N10	A18	10	10.4				A	55	4	0300—2100	16
49		S	LOPBURI	THA	100E54 14N53	A20	5	7.0				A	20	5	0000—2400	
50		S	NARATHIWAT	THA	101E48 06N25	A20	10	10.6				A	75	3	0000—2400	
51			KALININ	URS	36E11 56N51	A16	30	18.2				A	120	4	0000—2400	
52		S	KANDALAKCHA	URS	32E26 67N08	A18	5	10.4				A	120	5	0000—2400	
53			KICHINIOV	URS	28E52 47N00	A16	50	20.4				A	120	4	0000—2400	
54			S ANADYR	URS	177E23 64N44	A18	5	10.4				A	120	4	0000—2400	



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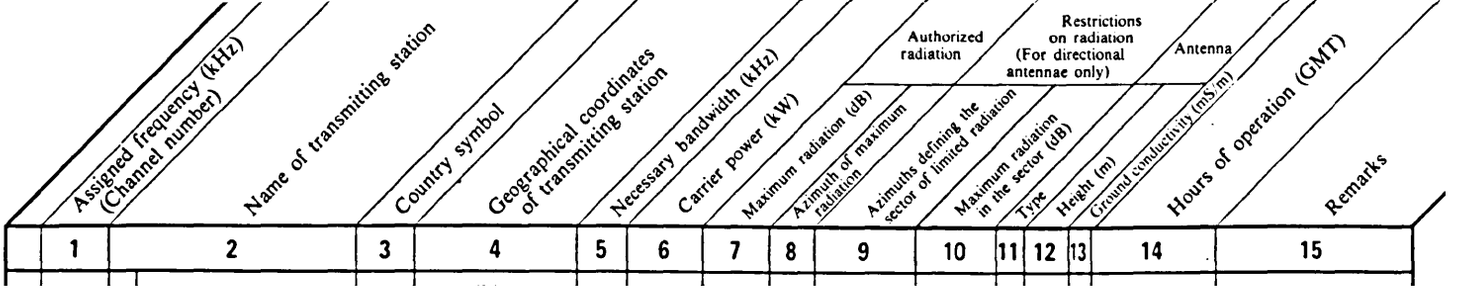
1	1449	S	TAMBOV	URS	41E05 52N44	A18	5	10.4				A	120		0000—2400	
2	(103)		KARLOVAC	YUG	15E33 45N27	D 9	10	10.4				A	55	3	0800—1500	
3			KARLOVAC	YUG	15E33 45N27	D 9	1	0.4				A	55	3	1500—0800	
4			KINSHASA	ZAI	15E15 04S20	C 9	2	3.4				A	50	8	0000—2400	
5			SAKANIA	ZAI	27E59 12S28	C 9	1	0.6				A	60	8	0000—2400	



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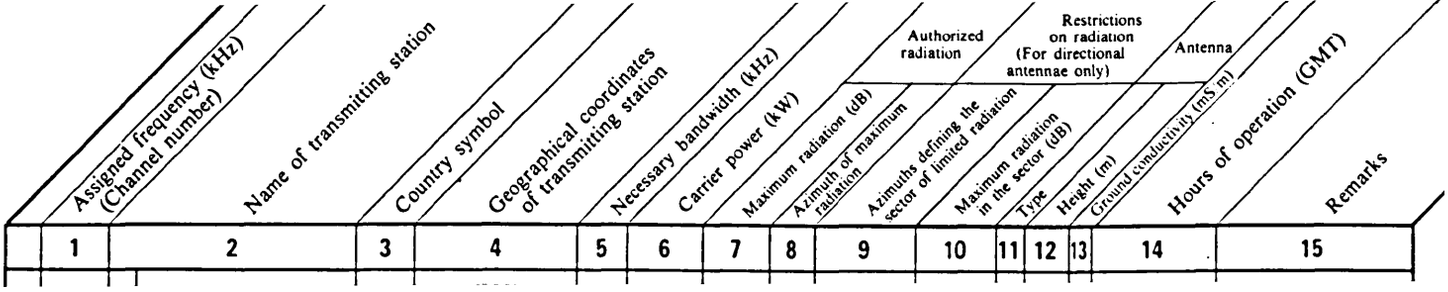
1	1458	LUSHNJE	ALB	19E40 40N57	C 9	500	29.1				A	103	5	0300—2400	23/ROU (24)
2	(104)	JEDDAH	ARS	39E09 21N14	C 9	20	16.4				A	120	3	0400—1400	24
3		MURRAY BRDG SA	AUS	139E15 35S07	A20	5	7.4				A	52	2	1900—1400	
4		MUSWELLBRK NSW	AUS	150E54 32S14	A20	5	7.4				A	52	4	1900—1400	
5		NEUBERG MUERZ	AUT	15E34 47N40	D 9	0.1	−10.0				A	15	6	0000—2400	
6		S HUHHOT	CHN	111E30 41N12	A20	100	22.1				A	100	4	2000—1800	
7		S NUNGNIN SUM	CHN	118E58 45N40	A20	20	13.4				A	50	4	2000—1800	
8		SOUANKE	COG	14E00 02N00	A20	2	3.4				A	51		0000—2400	
9		MAYOTTE 1	COM	45E14 12S45	A20	100	20.4				A	50	4	0000—2400	
10		DESSIE	ETH	39E11 11N00	C 9	150	23.9				A	100	3	0400—2300	
11		BROOKMANS PARK	G	00W11 51N44	A20	50	20.0	155			B		4	0000—2400	
12		MANCHESTER	G	02W07 53N29	A20	10	13.0	280			B		4	0000—2400	
13		NEWCASTLE	G	01W34 54N56	A20	2	3.4				A	38	4	0000—2400	
14		PLYMOUTH	G	04W08 50N24	A20	1	0.4				A	33	5	0000—2400	
15		SUTTON COLDFLD	G	01W55 52N36	A20	10	14.0	230			B		4	0000—2400	
16		WHITEHAVEN	G	03W35 54N32	A20	0.5	−2.6				A	30	4	0000—2400	
17		WELLINGTON FT	GIB	05W21 36N08	A20	2	3.4				A	40		0700—2300	
18		SIGUIRI	GUI	09W10 11N25	C 9	40	16.4				A	54	4	0000—2400	
19		BARMER	IND	71E18 25N45	A20	20	15.1				A	100	4	0000—2400	
20		BHAGALPUR 1	IND	87E02 25N15	A20	20	15.1				A	105	3	0300—0900	25
21		BHAGALPUR 2	IND	87E02 25N15	A20	10	12.1				A	105	3	0900—0300	
22		IMPHAL	IND	93E58 24N44	A20	20	15.1				A	105	3	0300—0900	25
23		MANGALORE 1	IND	74E48 12N48	A20	20	15.1				A	105	4	0300—1000	25
24		MANGALORE 2	IND	74E48 12N48	A20	10	12.1				A	105	4	1000—0300	
25		REWA	IND	81E25 24N31	A20	20	15.1				A	105	4	0300—0900	25
26		EZYON	ISR	34E57 29N35	D 9	50	22.0	200			B		1	0000—2400	33
27		FUKUSHIMA	J	140E30 37N46	A15	5	7.6				A	62	5	0000—2400	
28		KOBAYASHI	J	130E57 32N00	A15	0.1	−9.4				A	67	5	0000—2400	
29		SAGA	J	130E17 33N15	A15	1	0.6				A	63	5	0000—2400	
30		SAKU	J	138E29 36N17	A15	0.1	−7.9				A	85	5	0000—2400	
31		TSUCHIURA	J	140E11 36N04	A15	1	2.1				A	88	4	0000—2400	
32		BONGHWHA	KOR	128E43 36N52	C10	1	0.6				A	80	4	0000—2400	
33		HAMYANG	KOR	127E43 35N31	C10	1	0.6				A	80	4	0000—2400	
34		KYEONGJU	KOR	129E15 35N47	C10	1	0.6				A	80	4	0000—2400	
35		PYONGSAN	KRE	126E24 38N20	A16	1	0.4				A	30		2000—1800	
36		GAO	MLI	00W03 16N17	C 9	200	25.1				A	103		0600—2400	
37		WESTPORT	NZL	171E28 41S51	A20	2	3.4				A	50	6	0000—2400	
38		IBA ZAMBALES	PHL	119E57 15N22	D 9	250	31.0	160	90—255	7.0	B		3	0000—2400	
39		S BAIYER RIVER	PNG	144E10 05S32	B10	2	3.4				A	30	5	1900—1300	
40		S MT HAGEN	PNG	144E18 05S50	B10	10	10.6				A	80	5	1900—1300	
41		S TABIBUGA	PNG	144E38 05S33	B10	2	3.4				A	30	5	1900—1300	
42		CONSTANTZA	ROU	28E38 44N04	A20	100	22.1				A	100	4	0000—2400	
43		PHUKET	THA	98E22 07N50	A20	10	10.4				A	50	3	0000—2400	
44		SISAKET	THA	104E20 15N06	A20	10	10.6				A	60	4	0000—2400	
45		JDANOV	UKR	37E31 47N06	A18	5	10.4				A	120	4	0000—2400	
46		S KAUNAS	URS	23E40 55N31	A18	5	10.4				A	120	4	0000—2400	
47		S LUGA	URS	29E50 58N44	A18	5	10.4				A	120	4	0000—2400	
48		S MEDVEJIEGORSK	URS	34E24 62N56	A18	5	10.4				A	120	4	0000—2400	
49		S MINVODY	URS	43E09 44N13	A18	5	10.4				A	120	4	0000—2400	
50		S RIGA	URS	24E01 56N57	A18	5	10.4				A	120	4	0000—2400	
51		S SALSK	URS	41E36 46N31	A18	5	10.4				A	120	4	0000—2400	
52		S SISIAN	URS	46E45 39N13	A18	5	10.4				A	120	4	0000—2400	
53		S TIKHVIN	URS	33E30 59N40	A18	5	10.4				A	120	4	0000—2400	
54		S VALUIKI	URS	38E08 50N12	A18	5	10.4				A	120	4	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

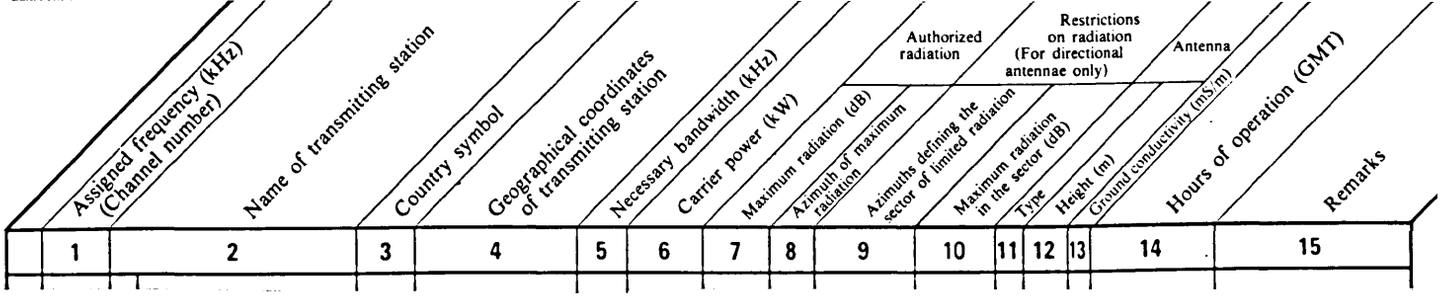
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1458	S	VLADIMIR	URS	40E23 56N08	A18	5	10.4				A	120	4	0000—2400	
2	(104)		SVETOZAREVO	YUG	21E20 43N50	D 9	10	12.1				A	103	3	0800—1500	
3			NDOLA	ZMB	28E40 13S00	A20	2	6.4				A	129	4	0200—2100	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1467	MILDURA VIC	AUS	142E07 34S11	A20	5	7.4				A	55	2	1900–1400	
2	(105)	MOREE NSW	AUS	149E30 29S00	A20	10	10.4				A	50	3	1900–1400	
3		S CHANGTING	CHN	116E18 25N50	A20	10	10.4				A	50	4	2000–1800	
4		CHENGDU	CHN	104E00 30N42	A20	50	17.4				A	50	4	2000–1800	
5		S FUAN	CHN	119E33 27N11	A20	10	10.4				A	50	4	2000–1800	
6		S JIANYANG	CHN	118E08 27N20	A20	50	17.4				A	50	4	2000–1800	
7		S QUANZHOU	CHN	118E33 24N53	A20	20	13.4				A	50	4	2000–1800	
8		SOHAG	EGY	31E43 26N27	D 9	20	15.1				A	100	4	0000–2400	24
9		RAKIRAKI	FJI	178E09 17S22	A20	2.5	4.4				A	30	5	1700–1200	
10		MEKAMBO	GAB	13E56 01N00	C 9	10	12.1				A		5	0400–2400	
11		BOLGATANGA	GHA	00W52 10N50	C 9	10	10.0				A	150	4	0500–2300	
12		DIBRUGARH	IND	94E58 27N29	A20	20	15.1				A	105	3	0300–0900	25
13		JALGAON	IND	75E31 20N55	A20	20	15.1				A	105	3	0300–0900	25
14		JEYPORE 1	IND	82E40 18N51	A20	300	26.9				A	105	4	0300–1000	25
15		JEYPORE 2	IND	82E40 18N51	A20	100	22.1				A	105	4	1000–0300	
16		TRICHUR	IND	76E15 10N35	A20	20	15.1				A	105	4	0300–1000	25
17		TANDJUNGPINANG	INS	104E28 00N55	A18	10	10.4				A	52	6	2200–1700	
18		ISFAHAN	IRN	51E40 32N37	A20	100	22.1				A	101	3	0100–2200	
19		AKUNE	J	130E12 32N01	A15	0.1	−9.4				A	67	5	0000–2400	
20		FUKUYAMA	J	133E21 34N30	A15	0.1	−9.4				A	71	5	0000–2400	
21		HAKODATE	J	140E46 41N49	A15	1	2.1				A	108	5	0000–2400	
22		HIROSAKI	J	140E27 40N37	A15	0.5	−0.9				A	106	5	0000–2400	
23		MIYAZAKI	J	131E27 31N57	A15	1	2.1				A	106	4	0000–2400	
24		NAGANO	J	138E12 36N40	A15	1	2.1				A	102	5	0000–2400	
25		NANAO	J	137E00 37N02	A15	0.1	−7.9				A	109	4	0000–2400	
26		OITA	J	131E35 33N15	A15	1	2.1				A	108	5	0000–2400	
27		WAKKANAI	J	141E43 45N23	A15	0.5	−2.4				A	67	4	0000–2400	
28		YUSUHARA	J	132E56 33N23	A15	0.1	−9.4				A	71	5	0000–2400	
29		CHONJU	KOR	127E03 35N54	C10	10	13.4				A	125	4	0000–2400	
30		YODOK	KRE	126E49 39N39	A16	1	0.4				A	30		2000–1800	16
31		MONTE CARLO	MCO	07E25 43N47	D 9	1000	30.0	50	227–233	20.0	B		6	0000–2400	
32		FT DAUPHIN	MDG	46E59 25S01	C 9	5	9.1				A	95	4	0300–2000	
33		S MUREN	MNG	100E10 49N30	A18	5	10.4				A	120	5	2200–1500	
34		S TCHOIBOLSAN	MNG	114E30 48N05	A18	5	10.4				A	120	4	2200–1500	
35		NOUADHIBOU	MTN	17W03 20N50	B20	20	15.1				A	102		0600–2400	24
36		KARASBURG	NMB	18E45 28S01	A20	50	19.1				A	102	2	0000–2400	
37		WELLINGTON	NZL	174E48 41S18	A20	10	10.4				A	50	4	0000–2400	
38		MUNTI RIZAL	PHL	121E02 14N25	C 9	15	12.4				A	78	3	0000–2400	
39		MBEYA	TGK	33E30 09S00	C 9	100	20.0				A	175	4	0300–2100	
40		BANGKOK	THA	100E44 13N49	A20	200					B		2	0000–2400	
41		DEDEDORUK	TUR	32E47 39N58	D 9	10	10.4				A	43	4	0200–2300	
42		S IALTA	UKR	34E10 44N39	A16	30	18.2				A	120	4	0000–2400	
43		S KIEV	UKR	30E49 50N30	A16	300					B		4	1500–0100	22
44		S FRUNZE	URS	74E30 42N54	C10	30	18.2				A	120	4	0000–2400	
45		S MOSKVA	URS	37E38 55N45	A16	50	20.4				A	120	4	0000–2400	
46		S OCH	URS	72E48 41N27	A16	15	15.2				A	120	4	0000–2400	
47		S ORISSARE	URS	23E30 58N56	A18	5	10.4				A	120	4	0000–2400	
48		IMOTSKI	YUG	17E15 43N27	D 9	10	10.4				A	50	4	0800–1500	
49		ZRENJANIN	YUG	20E25 45N21	D 9	2	3.6				A	60	3	0800–1500	
50		ZVORNIK	YUG	19E06 44N23	D 9	10	10.6				A	60	4	0000–2400	
51		BUMBA	ZAI	22E27 00N11	C 9	1	0.6				A	60	8	0000–2400	

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1476		BEGA NSW	AUS	149E51 36S42	A20	5	7.4				A	37	4	1900–1400	
2	(106)		ROMA QLD	AUS	148E49 26S34	A20	5	7.4				A	52	2	1900–1400	
3			WIEN BISAMBERG	AUT	16E23 48N19	D 9	1200	34.2				A	120	4	0000–2400	
4			BUJUMBURA	BDI	29E30 03S25	C 9	1	0.4				A	51	4	0300–2400	
5			BEIJING	CHN	116E27 39N57	A20	20	13.4				A	50	4	2000–1800	
6			HUANGSHI	CHN	115E06 30N13	A20	10	10.4				A	50	4	2000–1800	
7			WENCHENG	CHN	120E06 27N47	A20	200	23.0	210	340– 80	19.0	B		4	2000–1800	
8			MPIAKA BRAZZA	COG	15E18 04S15	A20	50	19.1				A	102		0000–2400	
9			COTONOU	DAH	02E28 06N22	C10	50	17.4				A	51	4	0500–2400	
10		S	BARCELONA	E	02E10 41N25	D 9	25	14.4				A	40	5	0000–2400	19
11		S	CEUTA	E	05W20 35N55	D 9	5	7.4				A	40	4	0000–2400	19
12		S	LERIDA	E	00E40 41N35	D 9	5	7.4				A	40	5	0000–2400	19
13		S	PENARROYA	E	05W15 38N20	D 9	5	7.4				A	40	4	0000–2400	19
14		S	SANTANDER	E	03W50 43N30	D 9	5	7.4				A	40	5	0000–2400	19
15		S	SORIA	E	02W30 41N45	D 9	5	7.4				A	40	5	0000–2400	19
16		S	TOLEDO	E	04W00 39N50	D 9	5	7.4				A	40	4	0000–2400	19
17		S	UBEDA	E	03W20 38N00	D 9	5	7.4				A	40	4	0000–2400	19
18		S	ZAMORA	E	05W45 41N30	D 9	5	7.4				A	40	4	0000–2400	19
19		S	ASSWAN	EGY	32E57 24N04	D 9	10	12.1				A	100	3	0000–2400	
20		S	ASYUT	EGY	31E04 27N11	D 9	10	12.1				A	100	3	0000–2400	
21		S	KENA	EGY	32E43 26N10	D 9	10	12.1				A	100	3	0000–2400	
22			ASMARA	ETH	38E56 15N21	C 9	10	10.4				A	50	3	0400–2100	
23			KINDIA	GUI	13W15 10N02	C 9	100	20.4				A	51	4	0000–2400	
24			BHADRAVATI	IND	75E36 13N53	A20	20	15.1				A	105	3	0300–1000	25
25			JAIPUR	IND	75E50 26N54	A20	20	16.0	150	325–335	0.0	B		4	0000–2400	
26			ROURKELA	IND	85E00 22N12	A20	20	15.1				A	105	4	0300–0900	25
27			VARANASHI	IND	83E00 25N20	A20	20	15.1				A	105	3	0300–0900	25
28			SURAKARTA	INS	110E50 07S32	A18	50	19.1				A	100	5	2200–1700	
29			SANANDAJ	IRN	47E00 35N20	A20	20	13.4				A	51	3	0100–2200	
30			IIDA	J	137E51 35N30	A15	0.5	–0.9				A	102	5	0000–2400	
31			OZU	J	132E34 33N31	A15	0.1	–9.4				A	74	5	0000–2400	
32			MILYANG	KOR	128E45 35N23	C10	1	0.6				A	80	4	0000–2400	
33			KUJANG	KRE	126E02 39N51	A16	1	0.4				A	30		2000–1800	16
34			TUARAN	MLA	116E11 06N11	A20	600					B		5	2200–1700	
35			ALTAI	MNG	96E10 46N30	A18	5	10.4				A	120	5	2200–1500	
36			JOAO BELO	MOZ	33E38 25S02	C10	10	10.4				A	54	4	0400–2200	
37			POTISKUM	NIG	11E02 11N50	C 9	50	19.1				A	100	4	0500–2300	
38			AUCKLAND	NZL	174E46 36S57	A20	5	10.0	70	180–300	3.0	B		3	0000–2400	
39			SARGODHA	PAK	73E00 32N00	A20	10	10.4				A	51	3	0000–2000	
40			CAL MINDORO	PHL	121E10 13N24	C 9	5	7.6				A	63	3	0000–2400	
41			BIHARAMULO	TGK	31E30 03S00	C 9	20	15.1				A	107	4	0300–2100	
42			MAHENGE	TGK	36E42 06S42	C 9	20	16.4				A	134	4	0300–2100	
43			LAMPHUN	THA	99E02 18N34	A20	100	22.1				A	108	5	0000–2400	
44			DUBAI	UAE	55E16 25N14	C 9	600	29.9				A	100	5	0200–2100	
45			LVOV	UKR	24E00 49N50	A16	120	24.2				A	120	4	0400–1700	2/0104/3009
46			LVOV	UKR	24E00 49N50	A16	120	24.2				A	120		0530–1500	2/0110/3103
47			BAKU	URS	49E45 40N24	A16	25	17.4				A	120	4	0000–2400	
48			VLADIVOSTOK	URS	131E53 43N07	C 9	100	24.0	80	260–270	10.0	B		4	0000–2400	
49			ZAMBEZI	ZMB	23E07 13S32	A20	10	12.1				A	103	4	0200–2100	

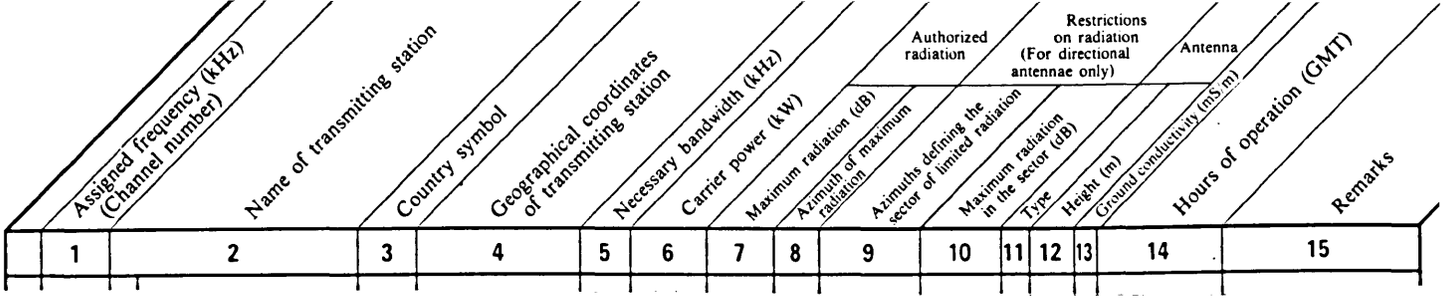
1485 kHz (107) Canal pour émetteurs de faible puissance — voir l'appendice 1
Low-power channel — see Appendix 1
Canal para transmisores de baja potencia — véase el apéndice 1



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1494	PRENJAS	ALB	20E31 41N04	A20	1	0.4				A	50	4	0400–2300	
2	(108)	ALBURY NSW	AUS	146E58 36S03	A20	5	7.4				A	54	3	1900–1400	
3		BOGRA	BGD	89E21 24N52	A20	2	6.4				A	122	3	0000–1800	
4		PAOUA	CAF	16E26 07N15	C 9	5	10.4				A	131	5	0400–2300	
5		S AKSU	CHN	80E19 41N03	A20	10	10.4				A	50	4	2000–1800	
6		S ALTAY	CHN	88E18 47N50	A20	10	10.4				A	50	4	2000–1800	
7		S BOLE	CHN	82E08 44N54	A20	10	10.4				A	50	4	2000–1800	
8		S HAMI	CHN	93E20 42N50	A20	10	10.4				A	50	4	2000–1800	
9		S KARAMAY	CHN	85E00 45N32	A20	10	10.4				A	50	4	2000–1800	
10		S KORLA	CHN	86E10 41N44	A20	10	10.4				A	50	4	2000–1800	
11		S PUTIAN	CHN	119E01 25N25	A20	10	10.4				A	50	4	2000–1800	
12		S SANMING	CHN	117E36 26N14	A20	100	22.1				A	100	4	2000–1800	
13		S SONGZHENG	CHN	118E45 27N32	A20	10	10.4				A	50	4	2000–1800	
14		TONGLIAO SHI	CHN	122E13 43N40	A20	100	22.1				A	100	4	2000–1800	
15		S WUPING	CHN	116E06 25N05	A20	10	10.4				A	50	4	2000–1800	
16		S YECHENG	CHN	77E22 37N55	A20	20	13.4				A	50	4	2000–1800	
17		S ZHANGZHOU	CHN	117E40 24N30	A20	50	17.4				A	50	4	2000–1800	
18		S CRUZ DEPALMA	CNR	17W45 28N40	A20	5	7.4				A	40	5	0000–2400	
19		MINDELO	CPV	24W59 16N53	A18	10	10.4				A	40	6	1900–2400	
20		ABIDJAN	CTI	04W01 05N26	C 9	20	13.6				A	80	7	0600–2400	
21		DESSIE	ETH	39E37 11N00	C 9	10	10.4				A	50	3	0400–2100	
22		S BASTIA	F	09E24 42N47	D 9	50	19.1				A	100	5	0000–2400	
23		S BAYONNE	F	01W28 43N29	D 9	20	13.4				A	50	4	0000–2400	
24		S BESANCON	F	06E02 47N15	D 9	20	13.4				A	50	5	0000–2400	
25		S CAEN	F	00W30 49N08	D 9	20	15.1				A	100	3	0000–2400	
26		S CLERMONT	F	03E13 45N55	D 9	20	15.1				A	96	4	0000–2400	
27		S MONTPELLIER	F	03E51 43N39	D 9	20	16.4				A	120	3	0000–2400	
28		S PORTO VECCHIO	F	09E12 41N30	D 9	20	16.4				A	120	6	0000–2400	
29		RHODOS	GRC	28E13 36N27	C 9	50	17.6				A	75	5	0400–2400	
30		DHARMSALA	IND	76E15 32N12	A20	20	15.1				A	105	3	0000–2400	
31		TRIVANDRUM 1	IND	76E59 08N29	A20	20	15.1				A	105	4	0300–1000	25
32		TRIVANDRUM 2	IND	76E59 08N29	A20	10	12.1				A	105	4	1000–0300	
33		UDIPI	IND	74E44 13N27	A20	20	15.1				A	105	3	0300–1000	25
34		MAKU	IRN	44E25 39N15	A20	20	13.6				A	61	3	0200–2100	
35		S BIZEN	J	134E14 34N50	A15	0.1	−9.6				A	40	5	0000–2400	
36		S KASAOKA	J	133E31 34N27	A15	0.1	−9.4				A	75	5	0000–2400	
37		NAYORO	J	142E29 44N21	A15	1	2.1				A	83	5	0000–2400	
38		S OKAYAMA	J	133E50 34N39	A15	5	9.1				A	100	4	0000–2400	
39		AJLUN	JOR	35E47 32N25	C 9	10	12.1				A	90	6	0300–2300	
40		KITALE	KEN	34E58 01N01	C 9	5	9.1				A	100	4	0000–2400	
41		DONGCHANG	KRE	125E25 40N18	A16	1	0.4				A	30		2000–1800	16
42		AITO	LBN	35E56 34N18	A20	10	10.0				A	20	4	0300–2400	16
43		PT AMELIA	MOZ	40E31 12S57	C10	10	10.4				A	54	4	0400–2200	
44		ORANJEMUND	NMB	16E25 28S33	A20	5	9.1				A	100	4	0000–2400	
45		TAUPO	NZL	176E04 38S40	A20	2	3.4				A	50	7	0000–2400	
46		MEYCAUAYAN	PHL	120E57 14N40	C 9	5	7.6				A	64	3	2100–1600	
47		OZAMIS CITY	PHL	123E49 08N09	C 9	1	0.6				A	62	3	2100–1600	
48		S LAIAGAM	PNG	143E20 05S30	B10	2	3.4				A	30	5	1900–1300	
49		S PORGERA	PNG	143E07 05S28	B10	2	3.4				A	30	5	1900–1300	
50		S WABAG	PNG	143E44 05S19	B10	10	10.6				A	80	5	1900–1300	
51		TAGA	SMO	172W32 13S48	A20	2	3.6				A	60	6	0000–2400	
52		BO	SRL	11W55 07N55	C 9	20	13.4				A	40	2	0500–2400	
53		ARADA	TCD	20E37 15N01	C 9	1	0.4				A			0400–2300	
54		BANGKOK	THA	100E30 13N45	A20	25	14.4				A	48	2	0000–2400	

Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

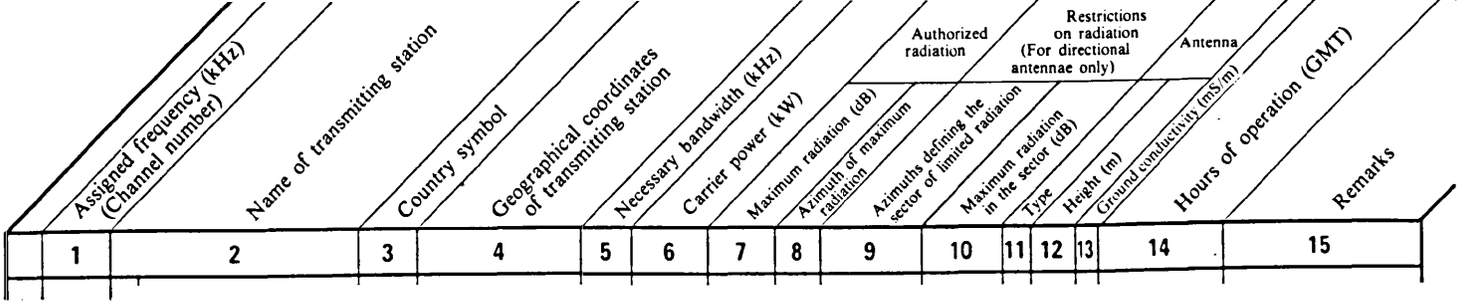
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1494	S EDINTSY	URS	27E20 48N12	A16	25	17.4				A	120	4	0000—2400	
2	(108)	S KAGUL	URS	28E14 47N55	A16	25	17.4				A	120	4	0000—2400	
3		S LENINGRAD	URS	30E00 59N44	C 9	1000	33.4				A	120	4	0000—2400	



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1503	BENGUELA	AGL	13E25 12S35	C10	5	7.4				A	50	3	0500–2300	
2	(109)	MECCA	ARS	39E40 21N30	C 9	20	16.4				A	120	7	0400–1400	24
3		MECCA	ARS	39E40 21N30	C 9	10	13.4				A	120	7	1400–2300	24
4		BATHURST NSW	AUS	149E32 33S22	A20	5					B		4	0000–2400	
5		MELBOURNE VIC	AUS	145E06 37S45	A20	5					B		2	0000–2400	
6		LAJES	AZR	27W06 38N46	A20	0.3	−4.8				A		4	0000–2400	
7		BATANGAFO	CAF	18E18 07N18	C 9	10	10.4				A	49	5	0400–2300	
8		S HANGZHOU	CHN	120E08 30N16	A20	100	22.1				A	100	4	2000–1800	
9		JINING	CHN	113E05 41N02	A20	10	10.4				A	50	4	2000–1800	
10		S LISHUI	CHN	119E54 28N28	A20	20	13.4				A	50	4	2000–1800	
11		S SHENGSI	CHN	122E27 30N44	A20	10	10.4				A	50	4	2000–1800	
12		S XIANGSHAN	CHN	121E52 29N28	A20	10	10.4				A	50	4	2000–1800	
13		NGO	COG	15E45 02S29	A20	2	3.4				A	50	5	0000–2400	
14		NICOSIA	CYP	33E17 35N08	A20	1	0.4				A	50	5	0400–2200	11/G
15		S BADAJOZ	E	07W00 38N50	D 9	5	7.4				A	40	4	0000–2400	19
16		S BILBAO	E	02W55 43N15	D 9	25	14.4				A	40	5	0000–2400	19
17		S CD REAL	E	03W55 39N00	D 9	5	7.4				A	40	4	0000–2400	19
18		S JACA	E	00W30 42N35	D 9	5	7.4				A	40	5	0000–2400	19
19		S JATIVA	E	00W35 39N00	D 9	5	7.4				A	40	4	0000–2400	19
20		S MOLINADEARAGON	E	01W55 40N50	D 9	5	7.4				A	40	5	0000–2400	19
21		S MONFORTE	E	07W30 42N30	D 9	5	7.4				A	40	5	0000–2400	19
22		S RONDA	E	05W10 36N45	D 9	5	7.4				A	40	5	0000–2400	19
23		S SALAMANCA	E	05W40 41N00	D 9	5	7.4				A	40	5	0000–2400	19
24		S TARRAGONA	E	01E15 41N10	D 9	5	7.4				A	40	4	0000–2400	19
25		ISMAILIA	EGY	32E18 30N35	D 9	20	16.0	180	260–270	8.0	B		3	0000–2400	24
26		STOKE ON TRENT	G	02W14 53N01	A20	1	0.4				A	49	3	0000–2400	
27		BHAVANI PATNA	IND	83E18 19N54	A20	20	15.1				A	100	3	0300–1000	25
28		ROHTAK	IND	76E27 28N56	A20	20	15.1				A	100	3	0300–0900	25
29		SRINAGAR 1	IND	74E49 34N04	A20	20	15.1				A	100	3	0300–0900	25
30		SRINAGAR 2	IND	74E49 34N04	A20	5	9.1				A	100	3	0900–0300	
31		VIJAYAWADA 1	IND	80E39 16N31	A20	20	15.1				A	100	3	0300–1000	25
32		VIJAYAWADA 2	IND	80E39 16N31	A20	5	9.1				A	100	3	1000–0300	
33		DJAMBI	INS	103E39 01S36	A18	10	10.6				A	58	3	2200–1700	
34		BUSHEHR	IRN	50E50 28N59	A20	100	24.0	150	200–290		B		3	0200–2100	
35		BUSHEHR	IRN	50E50 28N59	A20	100	24.0		20–110		B				
36		AKITA	J	140E05 39N47	A15	10	12.1				A	110	4	0000–2400	
37		MARALAL	KEN	36E40 01N05	C 9	5	9.1				A	100	4	0000–2400	
38		KIMCHEON	KOR	128E06 36N07	C10	1	0.6				A	60	6	0000–2400	
39		SHINPYONG	KRE	126E45 38N54	A16	1	0.4				A	30		2000–1800	
40		S ABUGRAIN	LBY	15E15 31N27	D 9	10	10.4				A	50	4	0400–2200	24
41		S GHAT	LBY	10E11 24N57	D 9	10	12.1				A	100	6	0400–2200	24
42		S IMSAAD	LBY	23E28 31N36	D 9	10	10.4				A	50	4	0400–2200	24
43		S ZELTEN	LBY	11E51 32N56	D 9	10	10.4				A	50	6	0400–2200	24
44		TANANARIVE	MDG	47E31 18S54	C 9	20	15.1				A	100	4	0300–2000	
45		MANDAL GOBI	MNG	106E10 45N40	A18	5	10.4				A	120	4	2200–1500	
46		KATMANDU	NPL	85E20 27N45	A20	50	17.4				A	50	4	2200–1900	
47		CASTLE POINT	NZL	176E11 40S53	A20	5	11.0	20	110–130	3.0	B		4	0000–2400	
48		CASTLE POINT	NZL	176E11 40S53	A20	5	11.0		280–300	3.0	B				
49		CEBU CITY	PHL	123E52 10N16	C 9	1	0.6				A	62	3	2100–1600	
50		S ILAGAN ISABELA	PHL	121E52 17N08	C 9	1	0.6				A	62	3	2100–1600	
51		S SANTIAGO ISA	PHL	121E32 16N41	C 9	5	7.6				A	62	3	2100–1600	
52		LORENGAU	PNG	147E16 02S02	B10	10	10.6				A	80	4	1900–1300	
53		STARGARD SZCZE	POL	15E07 53N18	D 9	1000	33.0	225	10– 90	30.0	B		4	0000–2400	
54		TAMBACOUNDA	SEN	13W41 13N47	C 9	20	15.1				A	100	4	0600–2400	

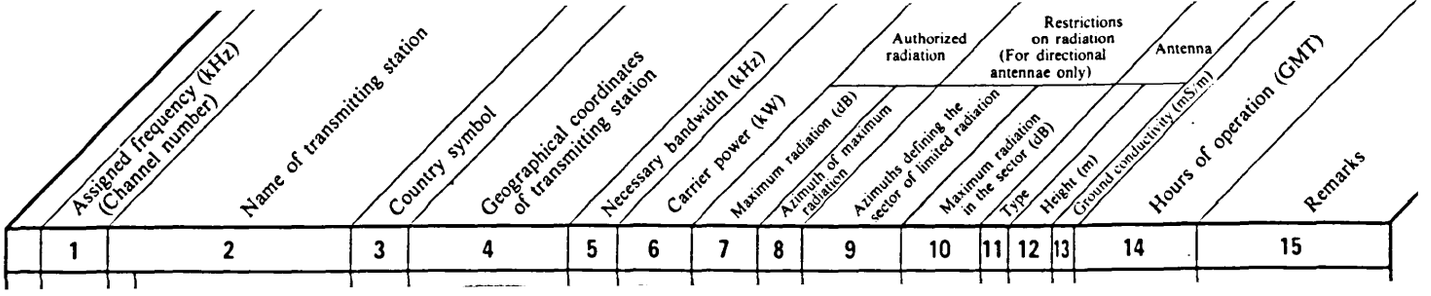
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1503		KISMAIO	SOM	42E33 00S22	A18	50	20.0	45			B		4	0300—2100	
2	(109)		PRINCIPE	STP	07E25 01N40	A20	1	0.4				A	50	3	0000—2400	
3			YADE	TGO	01E11 09N33	A20	10	10.4				A	50	5	0000—2400	
4			KHON KAEN	THA	102E48 16N50	A20	20	13.4				A	50	3	0000—2400	
5			SURAT THANI	THA	99E14 09N06	A20	10	10.4				A	42	3	0000—2400	
6		S	AIAGUZ	URS	79E59 47N50	A18	5	10.4				A	120	4	0000—2400	
7		S	ALMA ATA	URS	76E58 43N07	C10	10	13.4				A	120	4	0000—2400	
8		S	DUCHANBE	URS	68E49 38N34	A16	5	10.4				A	120		0000—2400	
9		S	KAFAN	URS	46E45 39N13	A18	5	10.4				A	120	4	0000—2400	
10		S	KUBA	URS	48E31 41N22	A18	5	10.4				A	120	4	0000—2400	
11		S	KZYL ORDA	URS	65E30 44N50	A18	5	10.4				A	120	4	0000—2400	
12			ULCINJ	YUG	19E13 41N55	D 9	10	10.6				A	60	2	0000—2400	
13			ZAGUBICA	YUG	21E46 44N14	D 9	10	10.4				A	50	4	0800—1500	
14			PETAUKE	ZMB	31E15 14S15	A20	10	10.0				A	150	4	0200—1700	

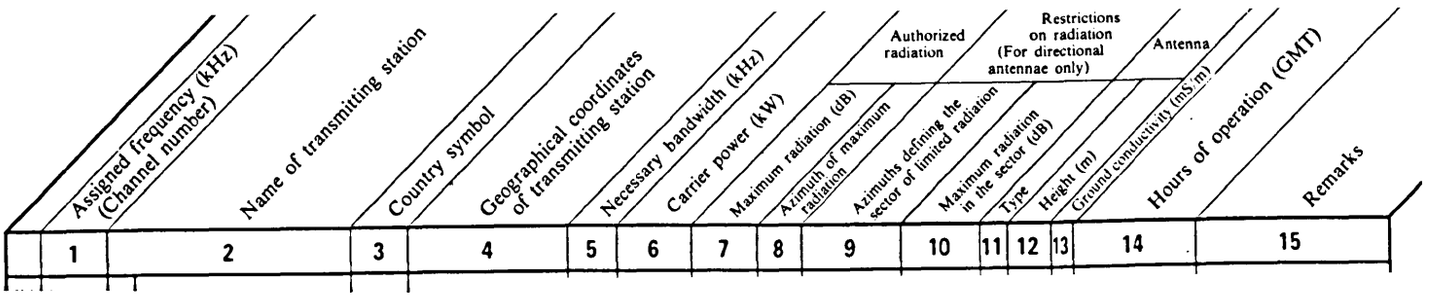


1512 KHZ (110)

	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1512		JEDDAH	ARS	39E09	21N14	C10	1200	35.0	180	280— 80	15.0	B	-	3	1500—0300	24
2	(110)		NEWCASTLE NSW	AUS	151E40	32S48	A20	10	12.1				A	91	3	2000—1500	
3			ANTWERPEN	BEL	04E32	51N18	D 9	600	29.9				A	100	4	0000—2400	
4		S	GAOXIONG SHI	CHN	120E18	22N36	A20	10	12.1				A	100	5	2000—1800	
5			HAILAR	CHN	119E45	49N02	A20	50	17.4				A	50	4	2000—1800	
6		S	TAIZHONG SHI	CHN	120E41	24N09	A20	100	20.0	220	0— 80	10.0	B		5	2000—1800	
7		S	YILAN	CHN	121E45	24N45	A20	50	17.4				A	50	5	2000—1800	
8			EBOLOWA	CME	11E00	02N51	C 9	30	16.9				A	99	5	0500—2300	
9			CHANIA	GRC	24E03	35N29	C 9	50	17.6				A	75	5	0400—2400	
10			LEO	HVO	02W06	11N05	A20	50	19.1				A	99	4	0000—2400	
11			GOALPARA	IND	90E40	26N13	A20	20	15.1				A	100	3	0000—2400	
12			GWALIOR	IND	78E10	26N14	A20	20	15.1				A	100	3	0300—0900	25
13			MERCARA	IND	75E42	12N24	A20	20	15.1				A	100	4	0300—1000	25
14			TUTICORIN	IND	78E12	08N48	A20	20	15.1				A	100	3	0300—1000	25
15			BUKITTINGGI	INS	100E20	00S17	A18	10	10.4				A	33	5	2200—1700	
16			JERUSALEM	ISR	35E13	31N46	D 9	20	13.6				A	70	3	0000—2400	33
17			HACHINOHE	J	141E27	40N31	A15	1	2.1				A	108	5	0000—2400	
18			IWAMI	J	132E26	34N53	A15	0.1	−9.4				A	71	5	0000—2400	
19			KOMAGANE	J	137E56	35N43	A15	0.1	−9.4				A	71	5	0000—2400	
20			KORIYAMA	J	140E21	37N21	A15	1	2.1				A	109	5	0000—2400	
21			KUSHIMA	J	131E14	31N28	A15	0.1	−9.4				A	71	5	0000—2400	
22			MATSUMOTO	J	137E57	36N13	A15	1	2.1				A	108	5	0000—2400	
23			MATSUYAMA	J	132E44	33N49	A15	5	10.0	180			B		5	0000—2400	
24			SASEBO	J	129E42	33N08	A15	0.5	−0.9				A	106	5	0000—2400	
25			TSURUGA	J	136E03	35N39	A15	0.1	−9.4				A	67	5	0000—2400	
26			TSURUOKA	J	139E52	38N44	A15	1	2.1				A	109	5	0000—2400	
27			GWANGCHEON	KOR	126E38	36N30	C10	0.1	−10.0				A	11	4	0000—2400	
28			JINHAE	KOR	128E39	35N07	C10	0.1	−10.0				A	18	4	0000—2400	
29			POHANG	KOR	129E23	36N03	C10	0.3	−5.2				A	9	4	0000—2400	
30			BAIANHONGOR	MNG	100E40	46N10	A18	5	10.4				A	120	5	2200—1500	
31			TAUMARUNUI	NZL	175E16	38S53	A20	1	0.4				A	40	5	0000—2400	
32			RAHIMYAR KHAN	PAK	70E20	28N25	A20	10	10.6				A	70	4	0000—2000	
33		S	ANGELES CITY	PHL	120E33	15N11	C10	1	0.4				A	46	3	0100—2400	
34			LIPA BATANGAS	PHL	121E09	13N56	C 9	1	0.6				A	61	3	2100—1600	
35		S	S ANTONIO	PHL	120E03	14N57	C10	0.3	−1.8				A	122	3	0100—2400	
36			KIGALI	RRW	30E04	01S57	C 9	100	22.1				A			0300—2100	16
37			S LOUIS	SEN	16W29	16N00	C 9	20	15.1				A	100	4	0600—2400	
38			CHIANG RAI	THA	99E55	19N05	A20	10	10.4				A	50	5	0000—2400	
39		S	KIEV	UKR	30E49	50N30	A16	5	10.4				A	120	4	0000—2400	
40			AKTIUBINSK	URS	57E13	50N17	C10	100	23.4				A	120	4	0000—2400	
41		S	MILLEROVO	URS	40E22	48N55	A18	5	10.4				A	120	4	0000—2400	
42		S	MOROZOVSK	URS	41E50	48N21	A18	5	10.4				A	120	4	0000—2400	
43		S	SOTCHI	URS	39E23	43N35	A16	30	18.2				A	120	4	0000—2400	
44		S	STARYI OSKOL	URS	37E49	51N17	A18	5	10.4				A	120	4	0000—2400	
45		S	TALLIN	URS	24E50	59N18	A16	30	18.2				A	120	4	0000—2400	
46			PRISTINA 2	YUG	21E07	42N40	D 9	100	20.6				A	60	4	0700—1400	
47			PRISTINA 2	YUG	21E07	42N40	D 9	20	13.6				A	60	4	1400—0700	



	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1521		DUBA	ARS	35E36	27N25	C 9	2000	41.0	296	40—200	18.0	B		3	1500—0300	8 24
2	(111)		DENILIQUIN NSW	AUS	144E55	35S37	A20	5	9.1				A	102	2	1900—1400	
3		S	TONGCHUAN	CHN	109E09	35N06	A20	20	13.4				A	50	4	2000—1800	
4			URUMQI SHI	CHN	87E30	43N35	A20	500	33.0	80	330— 10	9.0	B		4	2000—1800	
5		S	WUQI	CHN	108E11	36N55	A20	20	13.4				A	50	4	2000—1800	
6		S	YANAN	CHN	109E29	36N37	A20	20	13.4				A	50	4	2000—1800	
7		S	YONGSHOU	CHN	108E08	34N41	A20	20	13.4				A	50	4	2000—1800	
8		S	YULIN 1	CHN	109E36	38N18	A20	50	17.4				A	50	4	2000—1800	
9		S	ZHENAN	CHN	109E10	33N27	A20	20	13.4				A	50	4	2000—1800	
10			EDEA	CME	10E09	03N51	C 9	20	15.1				A	98	5	0500—2300	
11			PNT NOIRE	COG	12E01	04S51	A20	100	22.1				A	99		0000—2400	
12			MALAGA	E	04W30	36N40	D 9	10	10.6				A	60	5	0000—2400	19
13			KOSSEIR	EGY	34E16	26N07	D 9	20	15.1				A	100	4	0000—2400	24
14			NOTTINGHAM	G	01W15	52N57	A20	0.5	−3.0	105			B		3	0000—2400	
15			NOUNA	HVO	03W52	12N44	A20	10	13.4				A	111	4	0000—2400	
16			AURANGABAD 1	IND	75E18	19N54	A20	20	15.1				A	100	3	0300—1000	25
17			AURANGABAD 2	IND	75E18	19N54	A20	10	12.1				A	100	3	1000—0300	
18			JAGDALPUR	IND	81E55	19N01	A20	20	15.1				A	100	3	0300—1000	25
19			KANPUR	IND	80E19	26N28	A20	20	15.1				A	100	3	0300—0900	25
20			TAWANG 1	IND	91E54	27N36	A20	20	15.1				A	100	4	0300—0900	25
21			TAWANG 2	IND	91E54	27N36	A20	10	12.1				A	100	4	0900—0300	
22			BANDARFARAHNAZ	IRN	49E58	37N25	A20	100	22.0	90	120—150		B		2	0200—2100	
23			BANDARFARAHNAZ	IRN	49E58	37N25	A20	100	22.0		230—260		B				
24			BANDARFARAHNAZ	IRN	49E58	37N25	A20	100	22.0		330— 50		B				
25			AOMORI	J	140E46	40N48	A15	1	2.1				A	108	5	0000—2400	
26			FUKUI	J	136E14	36N02	A15	1	2.1				A	110	5	0000—2400	
27			GUJYO HACHIMAN	J	136E57	35N45	A15	0.1	−9.4				A	71	5	0000—2400	
28			HAMAMATSU	J	137E46	34N40	A15	1	2.1				A	106	4	0000—2400	
29			HANAWA	J	140E48	40N13	A15	0.1	−9.4				A	71	5	0000—2400	
30			KURE	J	132E36	34N15	A15	0.1	−9.4				A	71	5	0000—2400	
31			NAKAMURA	J	132E55	32N59	A15	0.5	−0.9				A	105	5	0000—2400	
32			SAEKI	J	131E55	32N58	A15	0.1	−9.6				A	47	5	0000—2400	
33			YAMAGATA	J	140E20	38N17	A15	1	2.1				A	108	5	0000—2400	
34			YONAGO	J	133E19	35N27	A15	1	2.1				A	103	5	0000—2400	
35			MOMBASA	KEN	39E40	04S05	C 9	5	10.0	310	50—210	7.0	B		4	0000—2400	
36			JINAN	KOR	127E26	35N47	C10	1	0.6				A	80	6	0000—2400	
37			NEGOMANO	MOZ	38E29	11S25	C10	3	5.2				A	50	4	0400—2200	
38			NOUAKCHOTT	MTN	16W00	18N08	B20	50	19.1				A	98		0600—2400	24
39			REEFTON	NZL	171E51	42S05	A20	2	3.4				A	50	6	0000—2400	
40			BACOLOD CITY	PHL	122E56	10N40	C 9	5	7.6				A	61	3	2100—1600	
41			DAGUPAN CITY	PHL	120E20	16N03	C 9	5	7.6				A	61	3	2100—1600	
42		S	AIOME	PNG	144E44	05S08	B10	2	3.4				A	30	3	1900—1300	
43		S	KARKAR I	PNG	145E53	04S44	B10	2	3.4				A	30	6	1900—1300	
44		S	MADANG	PNG	145E49	05S13	B10	10	10.6				A	80	5	1900—1300	
45			ISHIGAKI	RYU	124E08	24N22	A15	1	2.1				A	106	5	0000—2400	
46			BAIBOKOUM	TCD	15E41	08N14	C 9	1	0.4				A			0400—2300	
47		S	BAN BYSTRICA	TCH	19E08	48N40	C 9	14	12.1				A	60	5	0000—2400	
48		S	BRATISLAVA M	TCH	17E10	48N10	C 9	14	12.1				A	60	4	0000—2400	
49		S	KOSICE	TCH	21E15	48N42	C 9	600	31.2				A	115	5	0000—2400	
50		S	NITRA	TCH	18E05	48N20	C 9	60	19.9				A	100	4	0000—2400	
51		S	OSTRAVA	TCH	18E12	49N48	C 9	60	19.9				A	100	5	0000—2400	
52		S	RIM SOBOTA	TCH	20E00	48N23	C 9	30	16.9				A	100	5	0000—2400	
53		S	TATRY	TCH	20E18	49N03	C 9	14	12.1				A	60	5	0000—2400	
54			NIAMTOUGOU	TGO	01E18	09N37	A20	10	10.4				A	50	5	0000—2400	



1521 KHZ (111)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1521		BANGKOK	THA	100E31 13N46	A20	10	10.4				A	54	2	0000—2400	
2	(111)		DJEDEIDA	TUN	09E50 36N50	D 9	100	22.1				A	100	4	0800—1500	24
3		S	KALEVALA	URS	31E11 65N13	A18	5	10.4				A	120	4	0000—2400	
4		S	KUSTANAI	URS	63E37 53N12	C10	20	16.4				A	120	4	0000—2400	
5		S	NIKEL	URS	30E12 69N28	A18	5	10.4				A	120	5	0000—2400	
6		S	SORTAVALA	URS	30E37 61N41	A18	5	10.4				A	120	4	0000—2400	
7		S	TARA	URS	74E18 56N55	A18	5	10.4				A	120	4	0000—2400	
8		S	TCHADAN	URS	91E29 51N26	A18	5	10.4				A	120	4	0000—2400	
9		S	TURA	URS	100E17 64N16	A18	5	10.4				A	120	5	0000—2400	
10		S	VOLKHOV	URS	32E22 59N53	A18	5	10.4				A	120	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station		Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1530		LUBANGO	AGL	13E30	14S56	C10	5	7.4				A	50	3	0600—2400	
2	(112)		GIZAN	ARS	42E31	16N52	C 9	1000	35.0	130	230— 30	15.0	B		4	0000—2400	24
3			MOREE NSW	AUS	149E53	29S29	A20	5	7.4				A	50	3	1900—1400	
4			PT LINCOLN SA	AUS	135E53	34S44	A20	0.2	−6.6				A	37	2	1900—1400	
5		S	DENGKOU	CHN	106E43	40N10	A20	50	17.4				A	50	4	2000—1800	
6		S	LIAOYUAN	CHN	125E10	42N52	A20	10	10.4				A	50	4	2000—1800	
7		S	SHUANGLIAO	CHN	123E30	43N31	A20	20	13.4				A	50	4	2000—1800	
8		S	TONGYU	CHN	123E05	44N49	A20	50	17.4				A	50	4	2000—1800	
9		S	XI UJUMQIN QI	CHN	117E33	44N38	A20	50	17.4				A	50	4	2000—1800	
10		S	XIANGHUANG QI	CHN	113E43	42N18	A20	100	20.4				A	50	4	2000—1800	
11		S	YANJI SHI	CHN	129E30	42N54	A20	10	10.4				A	50	4	2000—1800	
12		S	YUSHU 1	CHN	126E32	44N50	A20	50	17.4				A	50	4	2000—1800	
13			MANIHIKI	CKN	161W01	10S25	C10	1	0.0				A	20	2	1600—0900	
14			PENRHYN	CKN	158W02	08S59	C10	1	0.0				A	20	2	1600—0900	
15			PUKAPUKA	CKN	165W49	10S53	C10	1	0.0				A	20	2	1600—0900	
16			PRAIA	CPV	23W30	14N55	A18	100	20.4				A	50	6	1900—2400	
17			S M DI GALERIA	CVA	12E19	42N03	D 9	450	28.6				A	98	4	0000—2400	
18			KANDI	DAH	02E56	11N08	C10	30	15.2				A	49	4	0500—2400	
19			BLACKPOOL	G	03W02	53N49	A20	0.3	−4.8				A	36	3	0000—2400	
20			HITCHIN	G	00W16	51N57	A20	0.2	−7.0	350	160—190	−20.0	B		4	0000—2400	
21			BHAGALPUR	IND	87E02	25N15	A20	20	15.1				A	100	3	0300—0900	25
22			MATHURA 1	IND	77E40	27N30	A20	20	15.1				A	100	3	0300—0900	25
23			MATHURA 2	IND	77E40	27N30	A20	10	12.1				A	100	3	0900—0300	
24			MYSORE	IND	76E42	12N18	A20	20	15.1				A	100	3	0300—1000	25
25			PASIGHAT 1	IND	95E20	28N06	A20	20	15.1				A	100	4	0300—0900	25
26			PASIGHAT 2	IND	95E20	28N06	A20	10	12.1				A	100	4	0900—0300	
27			SILCHAR	IND	92E47	24N45	A20	20	15.1				A	100	4	0300—0900	25
28			PADANG	INS	100E25	01S00	A18	5	7.4				A	51	3	2200—1700	
29			YAZD	IRN	54E24	31N54	A20	20	13.6				A	72	3	0100—1600	
30			YAZD	IRN	54E24	31N54	A20	10	10.6				A	72	3	1600—2200	
31			GEROFIT	ISR	35E04	30N34	D 9	10	12.1				A		3	0000—2400	33
32			ASO	J	131E03	32N56	A15	0.1	−9.4				A	67	5	0000—2400	
33			MINAMATA	J	130E25	32N11	A15	0.1	−9.4				A	68	5	0000—2400	
34			UTSUNOMIYA	J	139E48	36N33	A15	5	9.1				A	104	4	0000—2400	
35			UWAJIMA	J	132E33	33N12	A15	1	0.6				A	68	5	0000—2400	
36			FUNCHAL	MDR	16W54	32N40	A20	10	10.6				A	60	4	0000—2400	
37			BINTULU	MLA	113E01	03N11	A20	20	15.1				A	100	5	2200—1700	
38			NEW PLYMOUTH	NZL	174E08	39S02	A20	2	3.4				A	50	5	0000—2400	
39			BHIRIA	PAK	68E30	26N00	A20	2	3.0				A	25	4	0000—1400	
40			DAVAO CITY	PHL	125E35	07N03	C 9	1	0.6				A	61	3	2100—1600	
41			MANDALU RIZAL	PHL	121E05	14N34	C 9	10	10.6				A	61	3	2100—1600	
42		S	MAHMUDIA	ROU	29E05	45N07	A20	15	12.2				A	49	4	0000—2400	18/CVA
43		S	MIHAILENI	ROU	26E12	47N54	A20	15	11.8				A	495	5	0000—2400	18/CVA
44			GITARAMA	RRW	29E44	02S03	C 9	50	19.1				A			0300—2100	
45			UTTARADIT	THA	100E06	17N38	A20	10	10.4				A	49	5	0000—2400	
46		S	JITOMIR	UKR	28E37	50N15	A18	5	10.4				A	120	4	0000—2400	
47		S	KIROVOGRAD	UKR	32E20	48N30	A18	5	10.4				A	120	4	0000—2400	
48		S	KOVEL	UKR	24E41	51N16	A18	5	10.4				A	120	4	0000—2400	
49		S	ANADYR	URS	177E30	64N45	A16	50	20.4				A	120	5	0000—2400	
50		S	ARALSK	URS	61E41	46N45	A18	5	10.4				A	120	4	0000—2400	
51		S	DJAMBUL	URS	71E22	42N55	A18	5	10.4				A	120	4	0000—2400	
52		S	GUZAR	URS	66E13	38N36	A18	5	10.4				A	120	4	0000—2400	
53		S	KARKARALINSK	URS	75E27	49N24	A18	5	10.4				A	120	4	0000—2400	
54		S	TALDY KURGAN	URS	78E00	45N34	A18	5	10.4				A	120	4	0000—2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

1530 KHZ (112)

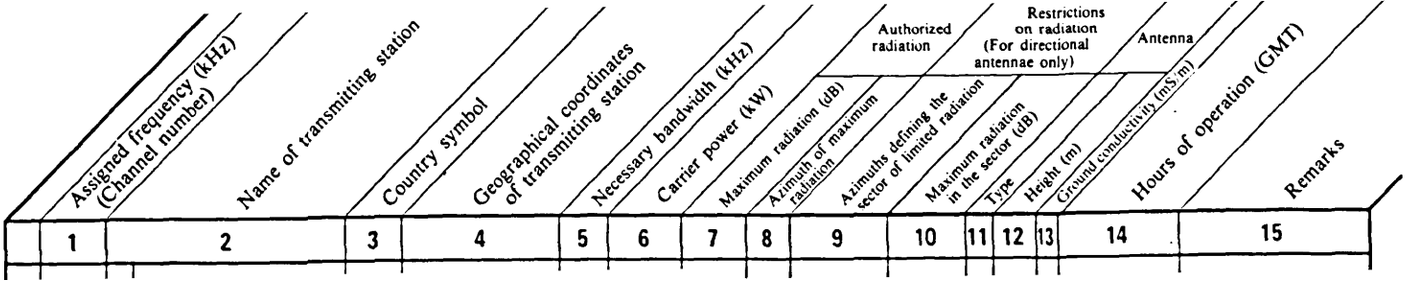
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1530 (112)	S ZEIA	URS	127E15 53N44	A18	5	10.4				A	120	4	0000—2400	

	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1539		DJIBOUTI 2	AFI	43E05	11N35	D 9	10	10.4				A	50	3	0000—2400	
2	(113)		MEDINAH	ARS	39E33	24N28	C 9	50	20.4				A	120	4	0400—1400	24
3			MEDINAH	ARS	39E33	24N28	C 9	20	16.4				A	120	4	1400—2300	24
4			SYDNEY NSW	AUS	150E53	33S56	A20	10	10.4				A	30	4	0000—2400	
5			MBAIKI	CAF	17E50	03N53	C 9	10	10.6				A	72	3	0400—2300	
6			PHNOM PENH	CBG	104E50	11N33	C10	1	0.4				A	49	3	0000—1600	
7			DEHUA	CHN	118E15	25N30	A20	200	25.1				A	100	4	2000—1800	
8		S	GONGHE	CHN	100E40	36N18	A20	100	22.1				A	100	5	2000—1800	
9		S	MAQEN	CHN	100E09	34N22	A20	20	13.4				A	50	5	2000—1800	
10		S	MENYUAN	CHN	101E37	37N23	A20	10	10.4				A	50	5	2000—1800	
11			PAPHOS	CYP	32E22	34N52	C 9	50	19.1				A	100	5	0000—2400	
12			MAINFLINGEN	D	08E59	50N00	D 9	700	28.5				A	140	4	0000—2400	
13			VALLADOLID	E	04W40	41N40	D 9	10	10.6				A	60	4	0000—2400	19
14			MAYUMBA	GAB	10E40	03S25	C 9	10	12.1				A		5	0400—2400	
15			TOUGAN	HVO	03W09	13N23	A20	10	10.4				A	49	4	0000—2400	
16			PANAJI GOA 1	IND	73E51	15N28	A20	300	26.9				A	100	4	0300—1000	25
17			PANAJI GOA 2	IND	73E51	15N28	A20	100	22.1				A	100	4	1000—0300	
18			KHASH	IRN	61E13	28N13	A20	2	3.4				A	50	4	0200—2100	
19			ENGARU	J	143E31	44N03	A15	0.1	−9.4				A	71	5	0000—2400	
20			IMABARI	J	133E01	34N03	A15	0.1	−9.4				A	71	5	0000—2400	
21			IMAGANE	J	139E58	42N25	A15	0.1	−9.4				A	71	5	0000—2400	
22			INA	J	137E57	35N50	A15	0.1	−9.4				A	71	5	0000—2400	
23			IWAKI	J	140E53	37N03	A15	0.1	−9.4				A	67	5	0000—2400	
24			JOHEN	J	132E35	32N58	A15	0.1	−9.6				A	47	5	0000—2400	
25			KAMIOKA	J	137E18	36N20	A15	0.1	−9.4				A	71	5	0000—2400	
26			KESENNUMA	J	141E34	38N54	A15	0.1	−9.4				A	67	5	0000—2400	
27			KOBAYASHI	J	130E58	32N00	A15	0.1	−9.4				A	67	5	0000—2400	
28			KOMORO	J	138E26	36N19	A15	0.1	−9.4				A	67	5	0000—2400	
29			KUJI	J	141E48	40N11	A15	0.1	−9.4				A	71	5	0000—2400	
30			MASUDA	J	131E51	34N41	A15	0.1	−9.6				A	47	5	0000—2400	
31			NAKASHIBETSU	J	144E59	43N32	A15	0.1	−9.4				A	67	5	0000—2400	
32			NIIMI	J	133E28	34N58	A15	0.1	−9.4				A	67	5	0000—2400	
33			OWASE	J	136E12	34N04	A15	0.1	−9.4				A	67	5	0000—2400	
34			SHINJO	J	140E19	38N47	A15	0.1	−9.6				A	47	5	0000—2400	
35			TOYOOKA	J	134E50	35N32	A15	0.1	−9.4				A	67	5	0000—2400	
36			TSUNAN	J	138E41	37N02	A15	0.1	−9.6				A		5	0000—2400	
37			TSUYAMA	J	134E01	35N03	A15	0.1	−9.4				A	67	5	0000—2400	
38			WAKAMATSU	J	139E57	37N29	A15	0.1	−9.4				A	67	5	0000—2400	
39			KISUMU	KEN	34E45	00S05	C 9	5	9.1				A	100	4	0000—2400	
40			DAEJEONG	KOR	126E12	33N17	C10	1	2.1				A	80	4	0000—2400	
41			YANGKU	KOR	126E01	38N04	C10	5	9.1				A	80	6	0000—2400	
42			PUJON	KRE	127E40	40N28	A16	1	0.4				A	30		2000—1800	
43			MAJUNGA	MDG	46E18	15S42	C 9	5	7.0				A	144	4	0300—2000	
44			LOUREN MARQUES	MOZ	32E36	25S58	C10	10	10.4				A	50	4	0400—2200	
45			BLENHEIM	NZL	173E58	41S31	A20	2	3.4				A	40	5	0000—2400	
46			CEBU CITY	PHL	123E53	10N18	C 9	1	0.6				A	60	3	2100—1600	
47			MINDORO OCC	PHL	121E03	12N21	C 9	1	0.6				A	60	3	2100—1600	
48		S	KOKODA	PNG	147E44	08S53	D10	2	3.4				A	30	5	1900—1300	
49		S	POPONDETTA	PNG	148E17	08S49	D10	10	12.1				A	80	3	1900—1300	
50		S	WANIGELA	PNG	149E11	09S51	D10	2	3.4				A	30	3	1900—1300	
51			TOKUNOSHIMA	RYU	129E01	27N45	A15	0.1	−9.4				A	72	5	0000—2400	
52			DAKAR	SEN	17W16	14N45	C 9	10	12.1				A	100	4	0600—2400	
53			N DJAMENA	TCD	15E03	12N08	C 9	2	5.1				A	83		0400—2300	
54			UDON THANI	THA	102E46	17N26	A20	10	10.4				A	40	3	0000—2400	

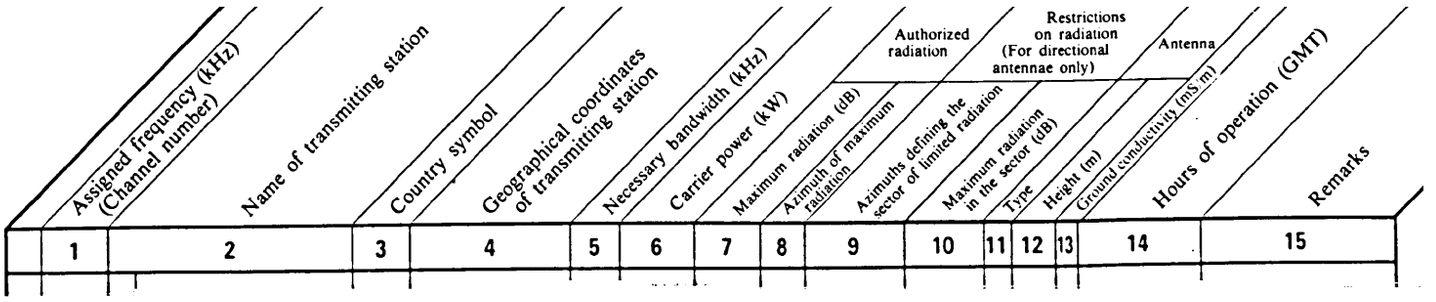
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Restrictions on radiation (For directional antennae only): Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks

1539 KHZ (113)

	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1539		SHARJAH	UAE	55E24 25N22	C 9	50	17.4				A	45	5	0200—2100	24
2	(113)	S	IALTA	UKR	34E10 44N39	A16	25	17.4				A	120	4	0000—2400	
3		S	IZIUM	UKR	37E17 49N13	A18	5	10.4				A	120	4	0000—2400	
4		S	TCHERNIGOV	UKR	31E19 51N29	A18	5	10.4				A	120	4	0000—2400	
5		S	BOROVITCHI	URS	33E50 58N21	A18	5	10.4				A	120	4	0000—2400	
6		S	DAUGAVPILS	URS	26E33 55N50	A16	5	10.4				A	120	4	0000—2400	
7		S	KUSTANAI	URS	63E37 53N12	A18	5	10.4				A	120	4	0000—2400	
8		S	LIEPAIA	URS	21E02 56N33	A16	5	10.4				A	120	4	0000—2400	
9		S	ROSLAVL	URS	32E48 53N56	A18	5	10.4				A	120	4	0000—2400	
10		S	SAMARKAND	URS	66E57 39N39	A18	5	10.4				A	120	4	0000—2400	
11		S	TCHELIABINSK	URS	61E24 55N09	C10	10	13.4				A	120	4	0000—2400	
12		S	TSESVAINE	URS	26E20 57N56	A16	5	10.4				A	120	4	0000—2400	
13		S	TURKESTAN	URS	68E17 43N17	A18	5	10.4				A	120	4	0000—2400	
14			ISTOK	YUG	20E29 42N46	D 9	2	3.4				A	40	3	0000—2400	



	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1548		LAGHOUAT	ALG	02E53 33N49	A20	4	6.4				A	45	5	0600—2400	24
2	(114)		EMERALD QLD	AUS	148E09 23S27	A20	50	19.1				A	94	4	1900—1400	
3			GROSS ARL	AUT	13E12 47N14	D 9	0.1	−10.0				A	15	6	0000—2400	
4		S	BAQEN	CHN	93E43 32N01	A20	10	10.4				A	50	5	2000—1800	
5		S	COMA	CHN	91E28 28N28	A20	10	10.4				A	50	5	2000—1800	
6		S	DAMXUNG	CHN	91E10 30N35	A20	10	10.4				A	50	5	2000—1800	
7		S	DEZHOU	CHN	116E17 37N27	A20	30	15.2				A	50	4	2000—1800	
8		S	GERZE	CHN	84E15 32N20	A20	50	17.4				A	50	5	2000—1800	
9		S	LIAOCHENG	CHN	115E58 36N26	A20	30	15.2				A	50	4	2000—1800	
10		S	MEDO	CHN	95E13 29N18	A20	10	10.4				A	50	5	2000—1800	
11			NINGBO	CHN	121E32 29N52	A20	10	10.4				A	50	4	2000—1800	
12		S	QABDO	CHN	97E05 31N11	A20	50	17.4				A	50	5	2000—1800	
13		S	RUSHAN	CHN	121E29 36N53	A20	100	22.0	220	0— 80	12.0	B		4	2000—1800	
14		S	SAGA	CHN	85E18 29N25	A20	10	10.4				A	50	5	2000—1800	
15		S	SHAN XIAN	CHN	116E05 34N48	A20	20	13.4				A	50	4	2000—1800	
16		S	XIGAZE	CHN	89E00 29N20	A20	10	10.4				A	50	5	2000—1800	
17		S	ZAMDA	CHN	79E46 31N28	A20	10	10.4				A	50	5	2000—1800	
18		S	ZIBO	CHN	118E03 36N48	A20	10	10.4				A	50	4	2000—1800	
19			PERKARA	CLN	81E10 08N44	C10	400	33.0	185			B		3	0000—1800	
20			DJAMBALA	COG	14E59 02S32	A20	10	10.4				A	48		0000—2400	
21			MINDELO	CPV	24W59 16N53	A18	10	10.4				A	40	6	1900—2400	
22			ABOMEY	DAH	02E00 07N14	C10	10	10.4				A	48	4	0500—2400	
23			BRISTOL	G	02W28 51N29	A20	5	10.0	225			B		4	0000—2400	
24			EDINBURGH	G	03W19 56N03	A20	2	3.4				A	46	3	0000—2400	
25			LIVERPOOL	G	02W48 53N30	A20	1	7.0	220			B		3	0000—2400	
26			LONDON 2	G	00W14 51N39	A20	27.5	20.0	160			B		3	0000—2400	
27			SHEFFIELD	G	01W30 53N26	A20	0.3	1.0	130			B		3	0000—2400	
28			STOCKTON	G	01W21 54N35	A20	1	0.4				A	38	3	0000—2400	
29			ADILABAD	IND	78E30 19N48	A20	20	15.1				A	100	3	0000—2400	
30			MARIVAN	IRN	46E10 35N33	A20	20	13.6				A	79	3	0200—2100	
31			BEER SHEVA	ISR	34E32 31N14	D 9	20	15.1				A		3	0000—2400	33
32			ITAZUKE	J	130E28 33N32	A15	10	10.6				A	60	4	0000—2400	
33			MARSABIT	KEN	38E00 02N20	C 9	20	15.1				A	100	4	0000—2400	
34			SUNCHEON	KOR	127E29 34N57	C10	1	0.6				A	60	6	0000—2400	
35			SUNGSANPO	KOR	126E54 33N27	C10	1	2.1				A	80	4	0000—2400	
36			KUWAIT	KWT	48E20 29N34	A20	100	27.0	170	240—120	18.0	B		8	0000—2400	24
37		S	BENGHAZI	LBY	20E04 32N02	D 9	20	13.4				A	50	4	0400—2400	24
38		S	DERNA	LBY	22E38 32N45	D 9	20	15.1				A	100	4	0400—2400	24
39			ULIASUTAI	MNG	96E50 47N40	A18	5	10.4				A	120	5	2200—1500	
40			FUNHALOURO	MOZ	34E23 23S05	C10	1	0.4				A	30	4	0400—2200	
41			MANIAMBA	MOZ	34E59 12S45	C10	1	0.4				A	30	4	0400—2200	
42		S	KAIAMA	NIG	03E57 09N36	C 9	10	12.1				A	100	4	0500—2300	
43		S	NEW BUSSA	NIG	04E30 10N14	C 9	10	12.1				A	100	4	0500—2300	
44			INVERCARGILL	NZL	168E37 46S19	A20	10	10.0				A	150	3	0000—2400	
45			KHIPRO	PAK	69E23 25N15	A20	2	3.0				A	23	4	0000—1400	
46			ANGELES PAMP	PHL	120E35 15N09	C 9	1	0.6				A	60	3	2100—1600	
47			BACOLOD CITY	PHL	122E57 10N42	C 9	1	0.6				A	72	3	0000—2400	
48			S HELENA	SHN	05W42 15S57	A20	0.5	−3.0				A	20	5	0600—2400	
49			MOUSSORO	TCD	16E31 13N39	C 9	1	0.4				A			0400—2300	
50			BANGKOK	THA	100E31 13N46	A20	10	10.4				A	50	2	0000—2400	
51			VINNITSA	UKR	28E28 49N14	A16	1000	33.0	40	110—200	22.0	B		4	0000—2400	
52			BIROBIDJAN	URS	133E00 49N16	C 9	50	22.0	350	160—230	13.0	B		4	0000—2400	
53			KARAGANDA	URS	73E05 49N50	C10	10	13.4				A	120	4	0000—2400	
54			MONZE	ZMB	27E40 16S15	A20	2	6.4				A	122	2	0200—2100	



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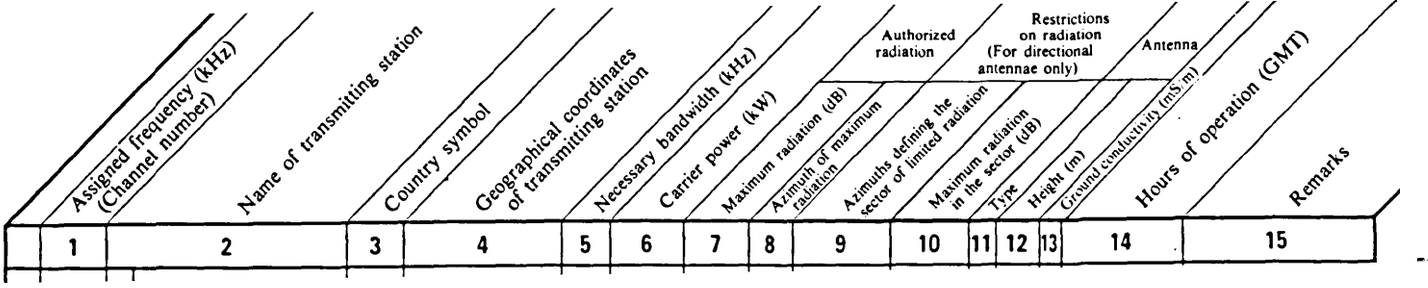
2	(115)	CHIFENG SHI	CHN	118E52 42N18	A20	20	13.4				A	50	4	2000—1800	
3	S	CHONGAN	CHN	118E01 27N43	A20	10	10.4				A	50	4	2000—1800	
4	S	FUZHOU 1	CHN	119E24 26N06	A20	100	22.1				A	100	4	2000—1800	
5	S	JIANNING	CHN	116E50 26N53	A20	10	10.4				A	50	4	2000—1800	
6	S	LONGYAN	CHN	117E02 25N07	A20	10	10.4				A	50	4	2000—1800	
7	S	NANPING	CHN	118E12 26N45	A20	10	10.4				A	50	4	2000—1800	
8		SHANGHAI	CHN	121E29 31N15	A20	1	0.4				A	50	3	2000—1800	
9	S	XIAMEN	CHN	118E18 24N24	A20	10	10.4				A	50	4	2000—1800	
10		NICE	F	07E06 43N35	D 9	300	26.9				A	90	5	0000—2400	
11		MELENE	GAB	09E28 00N25	C 9	20	15.1				A	100	4	0400—2400	
12		AMSTERDAM	HOL	04E53 52N20	D 9	2	3.4				A	40	5	0000—2400	
13		GT NICOBAR	IND	93E50 07N15	A20	1000	35.0	120	5— 55	11.0	B		4	0000—2400	
14		GT NICOBAR	IND	93E50 07N15	A20	1000	35.0	300	185—235	11.0	B				
15		ARDEBIL	IRN	48E20 38N28	A20	10	10.4				A	48	3	0300—1400	
16		AKUNE	J	130E13 32N02	A15	0.1	−9.4				A	60	5	0000—2400	
17		ARAO	J	130E26 32N58	A15	0.1	−9.4				A	73	5	0000—2400	
18	S	ATAMI	J	139E11 35N02	A15	0.1	−8.0	240			B		5	0000—2400	
19		HAKODATE	J	140E45 41N49	A15	0.1	−9.4				A	72	5	0000—2400	
20		HITA	J	130E55 33N20	A15	0.1	−9.6				A	48	5	0000—2400	
21	S	MISHIMA	J	138E55 35N06	A15	0.1	−7.9				A	87	5	0000—2400	
22		MIYAKO	J	141E56 39N38	A15	0.1	−9.4				A	67	5	0000—2400	
23		MIYAKONOJO	J	131E06 31N46	A15	0.1	−9.4				A	62	5	0000—2400	
24		NAKATSU	J	131E13 33N35	A15	0.1	−9.4				A	62	5	0000—2400	
25		NAKATSUGAWA	J	137E29 35N30	A15	0.1	−9.6				A	52	5	0000—2400	
26		NARUGO	J	140E42 38N44	A15	0.1	−9.6				A	34	5	0000—2400	
27		NIIHAMA	J	133E19 33N59	A15	0.1	−9.4				A	68	5	0000—2400	
28		OBAMA	J	135E45 35N30	A15	0.1	−9.4				A	62	5	0000—2400	
29		ODATE	J	140E30 40N17	A15	0.1	−9.4				A	66	5	0000—2400	
30		SHINGU	J	136E00 33N43	A15	0.1	−9.6				A	48	5	0000—2400	
31		TAKAYAMA	J	137E15 36N09	A15	0.1	−9.6				A	48	5	0000—2400	
32		UENO	J	136E09 34N45	A15	0.1	−9.6				A	53	5	0000—2400	
33		MALINDI	KEN	40E05 03S15	C 9	5	9.1				A	100	4	0000—2400	
34		PYOKDONG	KRE	125E22 40N36	A16	5	7.4				A	30		2000—1800	
35		KOLAHUN	LBR	10W05 08N16	A20	10	10.4				A	48	5	0500—2400	
36		DIEGO SUAREZ	MDG	49E17 12S17	C 9	5	9.1				A	96	4	0300—2000	
37		CYCLOPS	MLT	14E34 35N50	D 9	600	35.0	143	260— 30	8.0	B		3	0200—2400	
38		NAMAPA	MOZ	39E50 13S42	C10	3	5.2				A	48	4	0400—2200	
39		F DERICK	MTN	12W43 22N41	B20	20	15.1				A	96		0600—2400	24
40		HAWERA	NZL	174E16 39S31	A20	2	3.4				A	50	4	0000—2400	
41		SKARDU	PAK	75E24 35N12	A20	10	10.6				A	70	4	0000—2000	
42		LEGASPI CITY	PHL	123E44 13N08	C 9	1	0.6				A	60	3	2100—1600	
43		LINGAYEN PANG	PHL	120E10 16N03	C 9	1	0.6				A	60	3	2100—1600	
44	S	DARU	PNG	143E13 09S05	B10	10	12.1				A	80	3	1900—1300	
45	S	KIUNGA	PNG	141E18 06S08	B10	2	3.4				A	30	3	1900—1300	
46	S	L MURRAY	PNG	141E30 07S00	B10	2	3.4				A	30	3	1900—1300	
47		MULIVAI	SMO	171W46 14S02	A20	2	3.6				A	60	6	0000—2400	
48		ERIGAVO	SOM	47E22 10N37	A18	10	12.1				A		4	0300—2100	
49		ADRE	TCD	22E12 13N28	C 9	10	12.1				A			0400—2300	
50		PHETCHABUN	THA	101E14 16N48	A20	10	10.4				A	48	5	0000—2400	
51		ANTAKYA	TUR	36E10 36N12	D 9	50	19.1				A	97	4	0200—2300	
52	S	KAMYCH ZARIA	UKR	36E35 45N20	A18	5	10.4				A	120	4	0000—2400	



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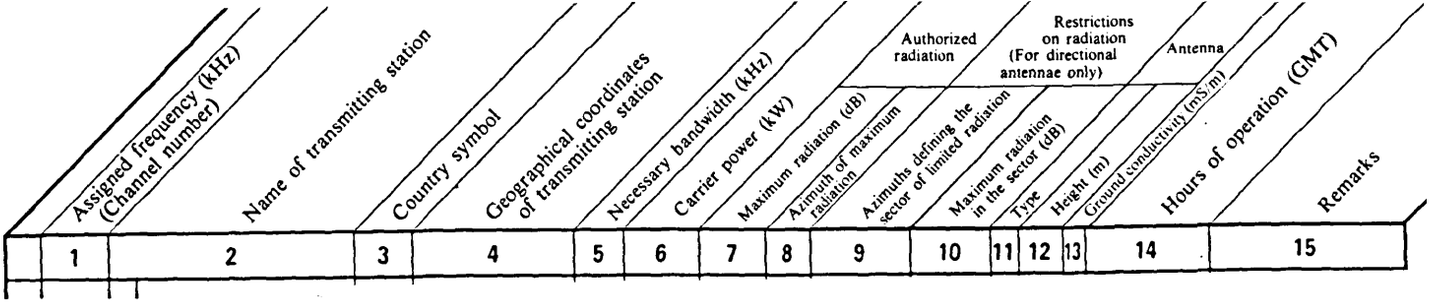
2	(115)	S KARSAKPAI	URS	66E44 47N54	A18	5	10.4				A	120	4	0000—2400	
3		S KAUNAS	URS	23E40 55N31	A18	75	22.2				A	120	4	0000—2400	
4		S KHOLBON	URS	116E17 52N06	A18	5	10.4				A	120	5	0000—2400	
5		S KLAIPEDA	URS	21E06 55N44	A16	5	10.4				A	120	4	0000—2400	
6		S LENKORAN	URS	48E51 38N45	A18	5	10.4				A	120	4	0000—2400	
7		S STEPNIAK	URS	70E50 52N51	A18	5	10.4				A	120	4	0000—2400	
8		S TIURI	URS	24E43 58N28	A16	20	16.4				A	120	4	0000—2400	
9		S TOMSK	URS	85E04 56N30	C10	20	16.4				A	120	4	0000—2400	
10		S VECHINTOS	URS	25E00 55N40	A16	50	20.4				A	120	4	0000—2400	
11		OSIJEK	YUG	18E30 45N40	D 9	50	20.0	0	70—110	15.0	B		3	0000—2400	
12		OSIJEK	YUG	18E30 45N40	D 9	50	20.0	180	250—290	10.0	B				
13		CHOMA	ZMB	26E58 16S45	A20	10	13.4				A	121	2	0200—2100	



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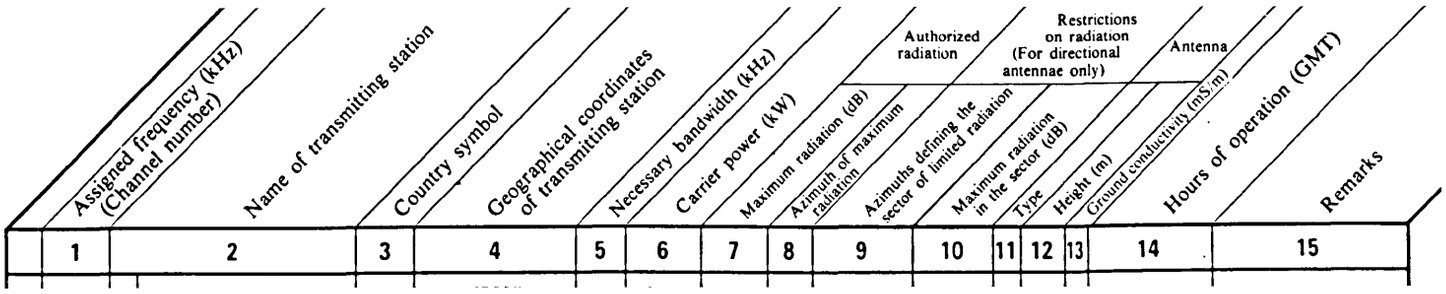
1	1566		CABINDA	AGL	12E12 05S35	C10	5	7.4				A	50	3	1700—0100	
2	(116)		LOBITO	AGL	13E53 12S22	A20	1	0.4				A	48	3	0000—2400	
3		S	GYMPIE QLD	AUS	152E41 26S13	A20	2	3.4				A	36	4	1900—1400	
4			NORFOLK ISLAND	AUS	167E56 29S03	A20	0.1	−9.6				A		5	0000—2400	
5		S	SOUTHPORT QLD	AUS	153E26 28S02	A20	2	3.4				A	33	4	1900—1400	
6			ST HELENS TAS	AUS	148E17 41S20	A20	0.1	−9.6				A	48	5	1900—1400	
7			WANGARATTA VIC	AUS	146E22 36S19	A20	5	9.1				A	95	3	1900—1400	
8			WILCANNIA NSW	AUS	143E22 31S32	A20	0.1	−9.6				A	48	2	1900—1400	
9		S	S CRUZ FLORES	AZR	31W08 39N27	A20	1	0.6				A	60	4	0000—2400	
10		S	V DO PORTO	AZR	25W08 36N57	A20	1	0.6				A	60	4	0000—2400	
11		S	MINSK	BLR	27E34 53N56	A16	5	10.4				A	120	4	0000—2400	
12		S	DEQING	CHN	111E46 23N09	A20	20	13.4				A	50	4	2000—1800	
13		S	HUIZHOU	CHN	114E24 23N05	A20	100	22.1				A	100	4	2000—1800	
14		S	JIANGMEN	CHN	113E07 22N32	A20	10	10.4				A	50	4	2000—1800	
15		S	JIEXI	CHN	115E50 23N26	A20	10	10.4				A	50	4	2000—1800	
16		S	YA XIAN	CHN	109E28 18N17	A20	50	17.4				A	50	4	2000—1800	
17		S	YINGDE	CHN	113E24 24N10	A20	20	13.4				A	50	4	2000—1800	
18		S	ZHANJIANG	CHN	110E24 21N12	A20	100	22.1				A	100	4	2000—1800	
19			BAFANG	CME	09E52 05N06	C 9	20	15.1				A	95	4	0500—2300	
20			EWO	COG	14E49 00S53	A20	5	7.4				A	48		0000—2400	
21			APLAHOUE	DAH	01E40 06N57	C10	100	20.4				A	48	4	0800—1800	
22			SUVA	FJI	178E26 18S09	A20	5	7.0				A	20	5	1700—1200	
23			NAGPUR	IND	79E03 21N06	C 9	2000	35.1				A	100	3	0300—0900	25
24			NAGPUR	IND	79E03 21N06	C 9	1000	32.0	260	65— 95	27.0	B		3	0900—0300	
25			BANDAR ABBAS	IRN	56E17 27N10	A20	100	22.1				A	96	2	0200—2100	
26			EN GEDI	ISR	35E22 31N22	D 9	10	12.1				A		4	0000—2400	33
27			CHITOSE	J	141E39 42N48	A15	0.3	−4.6				A	60	5	0000—2400	
28			SASEBO	J	129E43 33N10	A15	0.3	−4.8				A	39	5	0000—2400	
29			NAIROBI	KEN	36E55 01S35	C 9	10	12.1				A	100	4	0000—2400	
30			JEJU	KOR	126E23 33N28	C10	250	30.0	80	140—200	16.0	B		4	2300—1100	
31			JEJU	KOR	126E23 33N28	C10	250	30.0	270	330— 20	16.0	B				
32			JEJU	KOR	126E23 33N28	C10	250	30.0	355	80—260	14.0	B		4	1100—2300	
33			TAEHUNG	KRE	126E56 40N06	A16	1	0.4				A	30		2000—1800	16
34			TAMATAVE	MDG	49E24 18S08	C 9	5	9.1				A	95	4	0300—2000	
35		S	ARWAIHER	MNG	102E55 46N10	A18	5	10.4				A	120	5	2200—1500	
36		S	BULAGAN	MNG	103E20 48N50	A18	5	10.4				A	120	5	2200—1500	
37		S	SUHE BATOR 1	MNG	106E00 50N10	A18	5	10.4				A	120	5	2200—1500	
38		S	UNDERHAN	MNG	102E55 46N10	A18	5	10.4				A	120	4	2200—1500	
39			MABOTE	MOZ	34E07 22S03	C10	1	0.4				A	30	4	0400—2200	
40			MAUA	MOZ	37E10 13S53	C10	5	7.4				A	48	4	0400—2200	
41			ROTORUA	NZL	176E14 38S10	A20	2	3.4				A	50	5	0000—2400	
42			QUEZON CITY	PHL	122E10 14N01	C 9	10	10.6				A	59	3	2100—1600	
43			SARNEN	SUI	08E15 46N54	D 9	300	31.0	90			B		5	0500—2400	
44			AM DAM	TCD	20E28 12N46	C 9	1	0.4				A			0400—2300	
45			NOKOU	TCD	14E47 14N34	C 9	1	0.4				A			0400—2300	
46			N SITHAMMARAT	THA	99E55 08N30	A20	50	17.4				A	48	3	0000—2400	
47			SFAX	TUN	10E53 34N58	D 9	1200	32.0	120	320— 60	17.0	B		4	0000—2400	24
48			SFAX	TUN	10E53 34N58	D 9	1200	32.0	170	160—220	21.0	B				
49		S	ODESSA	UKR	30E45 46N29	A16	5	10.4				A	120	4	0000—2400	
50		S	PODVOLOTCHISK	UKR	26E10 49N35	A18	5	10.4				A	120	4	0000—2400	
51		S	STAROBELSK	UKR	38E34 49N17	A18	5	10.4				A	120	4	0000—2400	
52		S	EREVAN	URS	44E11 40N11	A16	5	10.4				A	120	4	0000—2400	
53		S	LENINGRAD	URS	30E00 59N44	A16	60	21.2				A	120	4	0000—2400	
54		S	TARTU	URS	26E41 58N22	A18	5	10.4				A	120	4	0000—2400	



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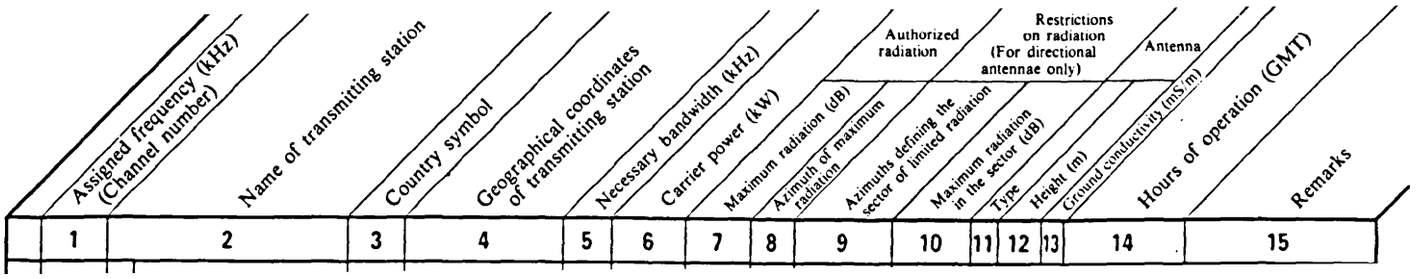
2	(116)	BOMA	ZAI	13E35 05S50	C 9	1	0.6				A	60	8	0000—2400	
3		MBALA	ZMB	31E30 09S03	A20	10	10.0				A	148	4	0200—2100	



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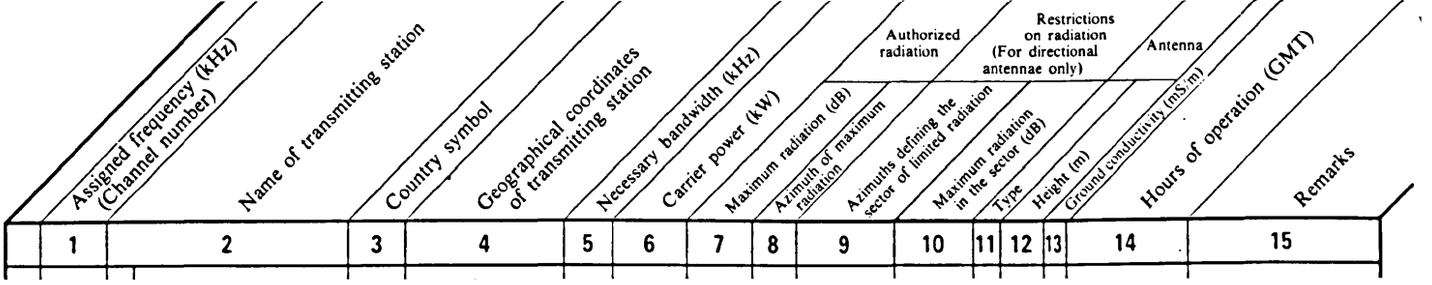
1	1575		LANDANA	AGL	12E10 05S15	A20	5	7.4				A	50	3	0000–2400	
2	(117)		EXMOUTH WA	AUS	114E00 22S00	A20	10	12.1				A		2	2100–1600	
3			WARRNAMBOOL VC	AUS	142E30 38S22	A20	10	12.1				A		2	1900–1400	
4		S	DINGXI	CHN	104E30 35N20	A20	10	10.4				A	50	4	2000–1800	
5		S	JINGTAI	CHN	104E08 37N06	A20	20	13.4				A	50	4	2000–1800	
6		S	PINGLIANG	CHN	106E38 35N18	A20	10	10.4				A	50	4	2000–1800	
7			WENZHOU	CHN	120E36 28N06	A20	10	10.4				A	50	4	2000–1800	
8		S	WUDU	CHN	104E55 33N24	A20	10	10.4				A	50	4	2000–1800	
9		S	YONGCHANG	CHN	101E58 38N15	A20	20	13.4				A	50	4	2000–1800	
10		S	YUMEN SHI	CHN	97E20 39N42	A20	100	22.0	135	70–210	10.0	B		4	2000–1800	
11			ESEKA	CME	10E48 03N40	C 9	20	15.1				A	95	5	0500–2300	
12			BOUAKE	CTI	05W00 07N40	C 9	5	9.1				A	80	7	0600–2400	
13			NEUBRANDENBURG	DDR	13E05 53N30	D 9	500	29.1				A	100	4	0000–2400	
14			CORDOBA	E	04W50 37N50	D 9	10	10.6				A	60	3	0000–2400	19
15			TCHIBANGA	GAB	11E03 02S52	C 9	15	13.9				A		5	0400–2400	
16		S	BARI	I	16E52 41N03	D 9	200	26.4				A	113	4	0000–2400	
17		S	LOCRI	I	16E14 38N13	D 9	10	10.4				A	48	5	0000–2400	
18		S	PALERMO	I	13E21 38N09	D 9	25	16.1				A	103	4	0000–2400	
19		S	PESCARA	I	14E14 42N26	D 9	50	20.4				A	111	4	0000–2400	
20		S	PORTOFINO	I	09E10 44N20	D 9	50	19.1				A	80	3	0000–2400	
21		S	REGGIO CALABR	I	15E39 38N06	D 9	2	3.6				A	62	5	0000–2400	
22		S	UDINE	I	13E15 46N03	D 9	2	5.1				A	103	5	0000–2400	
23			HISSAR 1	IND	75E48 29N00	A20	20	13.0				A	145	4	0300–0900	25
24			HISSAR 2	IND	75E48 29N00	A20	10	10.0				A	145	4	0900–0300	
25			BANEH	IRN	45E53 36N00	A20	20	15.1				A	105	3	0200–1600	
26			BANEH	IRN	45E53 36N00	A20	10	12.1				A	105	3	1600–2200	
27			GEROFIT	ISR	35E04 30N34	D 9	10	12.1				A		3	0000–2400	33
28			IWAKUNI	J	132E13 34N08	A15	1	0.4				A	49	5	0000–2400	
29			MISAWA	J	141E22 40N41	A15	0.3	−4.8				A	34	5	0000–2400	
30			NAKURU	KEN	36E05 00S07	C 9	20	15.1				A	100	4	0000–2400	
31			ONGJIN	KRE	125E22 37N56	A20	5	7.4				A	30		2000–1800	
32			CUREPIPE	MAU	57E31 20S19	C 9	10	10.4				A	50	4	0000–2400	
33			NOUADHIBOU	MTN	17W03 20N50	B20	20	15.1				A	96		0600–2400	24
34			NIAMEY	NGR	02E00 13N30	C 9	1	0.4				A	50	4	0000–2400	
35			CHRISTCHURCH	NZL	172E35 43S34	A20	10	10.4				A	50	4	0000–2400	
36			CEBU CITY	PHL	123E52 10N17	C 9	10	10.6				A	59	3	2100–1600	
37			LAE	PNG	147E00 06S44	D10	100	22.1				A	80	3	1900–1400	
38		S	BRAGA	POR	08W22 41N20	A20	10	10.6				A	60	5	0000–2400	
39		S	CHAVES	POR	07W26 41N46	A20	1	0.6				A	60	5	0000–2400	
40		S	MIRANDA DOURO	POR	06W16 41N29	A20	1	0.6				A	60	6	0000–2400	
41		S	PORTO	POR	08W38 41N11	A20	10	10.6				A	60	3	0000–2400	
42			OUM HADJER	TCD	19E42 13N17	C 9	10	12.1				A			0400–2300	
43			AYUTTHAYA	THA	100E47 14N24	A20	1000	35.0	40	160–190	27.0	B		2	2300–0900	
44			AYUTTHAYA	THA	100E47 14N24	A20	1000	35.0		260–290	27.0	B			2300–0900	
45			AYUTTHAYA	THA	100E47 14N24	A20	1000	35.0	140	210–280	27.0	B		2	0900–2300	
46			AYUTTHAYA	THA	100E47 14N24	A20	1000	35.0	0	210–280	27.0	B			0900–2300	
47			SHARJAH	UAE	55E24 25N22	C 9	50	17.4				A	45	5	0200–2100	24
48		S	FEODOSIA	UKR	35E20 45N02	A18	5	10.4				A	120	4	0000–2400	
49			BORZIA	URS	116E30 50N21	A18	5	10.4				A	120	4	0000–2400	
50			IUJNSAKHALINSK	URS	143E10 46N55	A16	5	10.4				A	120	4	0000–2400	
51		S	KALMYKOVO	URS	51E50 49N50	A18	5	10.4				A	120	4	0000–2400	
52			PROVIDENIA	URS	173W14 64N28	A18	5	10.4				A	120	4	0000–2400	
53		S	SEMIPALATINSK	URS	80E15 50N25	C10	10	13.4				A	120	4	0000–2400	
54		S	TACHKENT	URS	69E13 41N19	A16	5	10.4				A	120	4	0000–2400	

1584 kHz (118) Canal pour émetteurs de faible puissance — voir l'appendice 1
Low-power channel — see Appendix 1
Canal para transmisores de baja potencia — véase el apéndice 1

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station		Necessary bandwidth (kHz)	Carrier power (kW)	Authorized radiation: Maximum radiation (dB)	Authorized radiation: Azimuth of maximum radiation	Restrictions on radiation (For directional antennae only): Azimuths defining the sector of limited radiation	Restrictions on radiation (For directional antennae only): Maximum radiation in the sector (dB)	Antenna: Type	Antenna: Height (m)	Antenna: Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4		5	6	7	8	9	10	11	12	13	14	15
1	1593		LUANDA	AGL	13E14	08S48	C10	5	7.4				A	50	3	0500—2400	
2	(119)		JEDDAH	ARS	39E13	21N39	C10	1	0.6				A	60	3	0300—2300	24
3		S	GYMPIE QLD	AUS	152E41	26S13	A20	2	3.4				A	36	4	1900—1400	
4		S	MUSWELLBRK NSW	AUS	150E55	32S14	A20	2	3.4				A		4	1900—1400	
5		S	RENMARK SA	AUS	140E37	34S16	A20	2	3.4				A	37	2	1900—1400	
6		S	SOUTHPORT QLD	AUS	153E26	28S02	A20	2	3.4				A	33	4	1900—1400	
7		S	STREAKY BAY SA	AUS	134E11	32S45	A20	2	3.4				A		2	1900—1400	
8		S	WOLLONGONG NSW	AUS	150E52	34S32	A20	5	7.4				A	26	3	1900—1400	
9			BEIJING	CHN	116E27	39N57	A20	10	10.4				A	50	4	2000—1800	
10		S	HABAHE	CHN	87E03	48N04	A20	10	10.4				A	50	4	2000—1800	
11			JIAMUSI	CHN	130E30	46N40	A20	10	10.0	230	10— 90	0.0	B		4	2000—1800	
12		S	JINGSHAN	CHN	113E06	31N02	A20	50	17.4				A	50	4	2000—1800	
13		S	TAXKORGAN	CHN	75E08	37N42	A20	10	12.0	130	270—350	2.0	B		4	2000—1800	
14		S	URUMQI SHI	CHN	87E30	43N35	A20	100	22.0	150	270— 50	10.0	B		4	2000—1800	
15		S	WUFENG	CHN	110E40	30N12	A20	40	16.4				A	50	4	2000—1800	
16		S	XIANNING	CHN	114E17	29N52	A20	20	13.4				A	50	4	2000—1800	
17			BANGANGTE	CME	10E30	05N08	C 9	20	15.1				A	94	4	0500—2300	
18			BETARE OYA	CME	14E00	05N59	C 9	10	12.1				A	94	4	0500—2300	
19			LANGENBERG	D	07E08	51N21	D 9	800	29.0				A	165	4	1700—0800	
20			KETOU	DAH	02E33	07N27	C10	5	7.4				A	47	4	0500—2400	
21		S	EL MINYA	EGY	30E33	28N07	D 9	20	15.1				A	100	3	0000—2400	24
22		S	IDFU	EGY	32E49	25N00	D 9	20	15.1				A	100	3	0000—2400	24
23		S	SOHAG	EGY	31E43	26N27	D 9	20	15.1				A	100	3	0000—2400	24
24			KOUNDARA	GUI	13W15	12N41	C 9	20	13.4				A	47	4	0000—2400	
25			MISKOLC	HNG	20E49	48N06	D 9	20	13.6				A	60	4	0000—2400	
26			MOSONMOVAR	HNG	17E16	47N52	D 9	5	7.6				A	60	3	0000—2400	
27			BOBO DIOULASSO	HVO	04W17	11N10	A20	10	10.4				A	39	4	0000—2400	
28			BHOPAL	IND	77E36	23N16	A20	20	15.1				A	105	3	0000—2400	
29			CHHATARPUR	IND	79E33	24N52	A20	20	15.1				A	105	3	0300—0900	25
30			DHARWAR	IND	74E59	15N27	A20	20	16.4				A	110	3	0300—1000	25
31			KOHIMA	IND	94E03	25N43	A20	20	15.1				A	105	4	0300—0900	25
32			PALGHAT	IND	76E42	10N48	A20	20	15.1				A	105	4	0300—1000	25
33			ISFAHAN	IRN	51E40	32N37	A20	100	22.1				A	93	3	0100—2200	
34			MATSUE	J	132E45	35N22	A15	10	10.0				A	136	4	0000—2400	
35			NIIGATA	J	138E55	37N51	A15	10	10.0				A	136	4	0000—2400	
36			NAKURU	KEN	36E05	00S07	C 9	5	9.1				A	100	4	0000—2400	
37			KANGGYE	KRE	126E37	40N57	A16	5	7.4				A	30		2000—1800	
38			ANTSIRABE	MDG	47E01	19S56	C 9	5	9.1				A	94	4	0300—2000	
39			MARRAKECH	MRC	08W00	31N40	C 9	1	0.6				A	60	4	0600—2400	24
40			AUCKLAND	NZL	174E54	36S56	A20	5	10.0	290	30—160	3.0	B		3	0000—2400	
41			DIGOS DAVAO	PHL	125E21	06N45	C 9	10	10.6				A	59	3	0000—2400	
42		S	AITAPE	PNG	142E20	03S08	D10	2	3.4				A	30	3	1900—1300	
43		S	AMANAB	PNG	141E13	03S36	D10	2	3.4				A	30	3	1900—1300	
44		S	VANIMO	PNG	141E17	02S42	D10	10	12.1				A	80	5	1900—1300	
45			LISBOA	POR	09W06	38N24	A20	10	10.6				A	60	3	0000—2400	
46		S	BANEASA	ROU	27E45	44N07	A20	15	12.2				A	43	5	0000—2400	
47		S	MIERCUREA CIUC	ROU	25E48	46N23	A20	15	12.2				A	43	5	0000—2400	
48		S	ORADEA	ROU	21E58	47N03	A20	7.5	9.2				A	43	4	0000—2400	
49		S	SIBIU	ROU	24E10	45N47	A20	7.5	9.2				A	43	5	0000—2400	
50		S	VULCAN	ROU	23E13	45N15	C 9	7.5	10.9				A	78	5	0000—2400	
51			KOUNGHEUL	SEN	14W47	13N58	C 9	1	0.4				A	50	4	0600—2400	
52			HRADEC KRALOVE	TCH	15E50	50N14	A20	14	11.9				A	50	4	0400—1700	
53			HRADEC KRALOVE	TCH	15E50	50N14	A20	3	5.2				A	50	4	1700—0400	



1593 kHz (119)
1602 kHz (120)

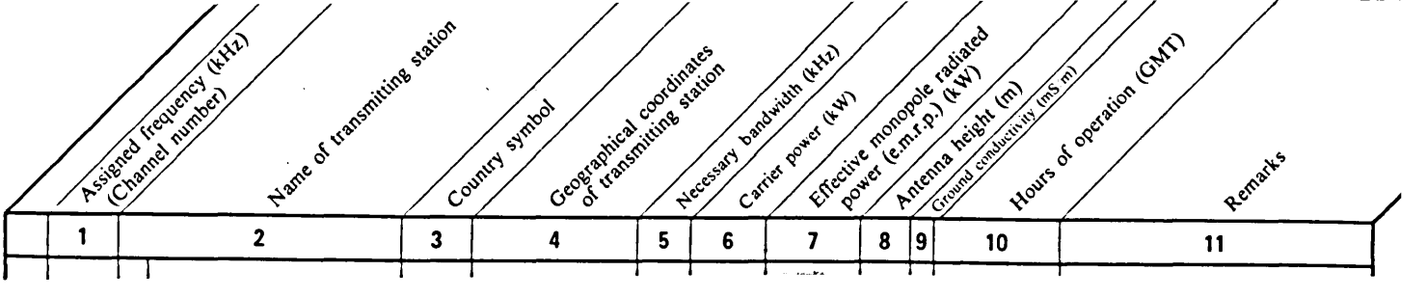
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1593		LIBEREC	TCH	15E05 50N45	A20	30	15.2				A	50	5	0400—1700	
2	(119)		LIBEREC	TCH	15E05 50N45	A20	3	5.2				A	50	5	1700—0400	
3			MOR BUDEJOVICE	TCH	15E48 49N04	A20	30	15.2				A	50	5	0400—1700	
4			MOR BUDEJOVICE	TCH	15E48 49N04	A20	7	8.9				A	50	5	1700—0400	
5			OLOMOUC	TCH	17E15 49N45	A20	30	15.2				A	50	4	0400—1700	
6			OLOMOUC	TCH	17E15 49N45	A20	7	8.9				A	50	4	1700—0400	
7			USTI NAD LABEM	TCH	14E02 50N39	A20	14	11.9				A	50	5	0400—1700	
8			USTI NAD LABEM	TCH	14E02 50N39	A20	3	5.2				A	50	5	1700—0400	
9			LAMPHUN	THA	99E00 18N26	A20	50	17.4				A	47	5	0000—2400	
10			RANONG	THA	98E06 09N09	A20	10	10.4				A	44	3	0000—2400	
11		S	DNEPROPETROVSK	UKR	35E44 48N48	A16	5	10.4				A	120	4	0000—2400	
12		S	BAKU	URS	49E45 40N24	A16	5	10.4				A	120	4	0000—2400	
13		S	DJAR KURGAN	URS	67E40 37N30	A18	5	10.4				A	120	4	0000—2400	
14		S	DUCHANBE	URS	68E49 38N34	A16	5	10.4				A	120	4	0000—2400	
15			IRKUTSK	URS	104E18 52N18	A16	50	22.0	330	170—250	9.0	B		4	0000—2400	
16			KHABAROVSK	URS	135E10 48N33	A16	5	12.0	320	180—240	—6.0	B		4	0000—2400	
17		S	KICHINIOV	URS	28E52 47N00	A16	5	10.4				A	120	4	0000—2400	
18		S	KURGAN	URS	65E17 55N29	C10	20	16.4				A	120	4	0000—2400	
19		S	RIGA	URS	24E05 56N57	A16	10	13.4				A	120	4	0000—2400	
20		S	TCHIMKENT	URS	69E37 42N18	A18	5	10.4				A	120	4	0000—2400	
21		S	LIVNO	YUG	16E58 43N49	D 9	10	12.1				A	90	5	0000—2400	
22			LIBENGE	ZAI	18E37 03N38	C 9	1	0.6				A	60	8	0000—2400	

1602 kHz (120) Canal pour émetteurs de faible puissance — voir l'appendice 1
Low-power channel — see Appendix 1
Canal para transmisores de baja potencia — véase el apéndice 1

APPENDIX 1 TO THE PLAN

Frequency Assignments to Stations in the Low-Power Channels

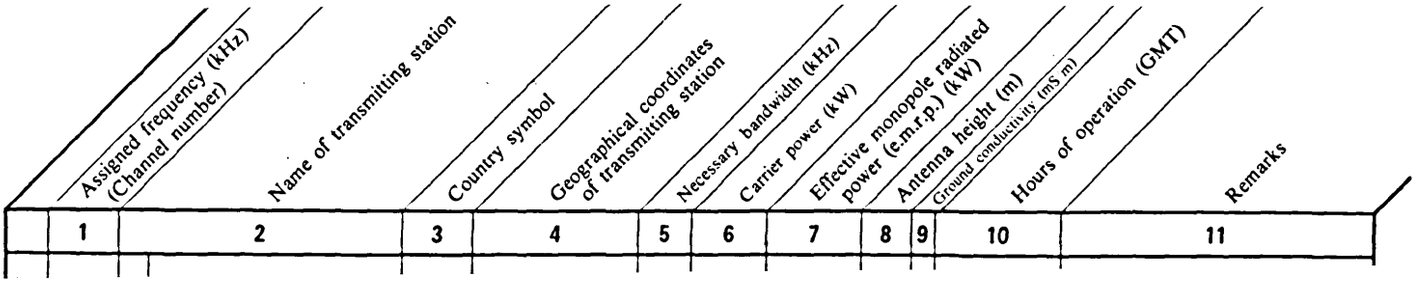
(See also Resolution No. 2)



	1	2	3	4	5	6	7	8	9	10	11
1	1485	ANDKHOY	AFG	65E01 36N08	A 9	1	1.00	47	4	0000—2400	3
2	(107)	GERESHK	AFG	64E06 31N07	A 9	1	1.00	47	4	0000—2400	
3		GHORE	AFG	64E03 34N01	A 9	1	1.00	47	4	0000—2400	
4		ISLAMQALA	AFG	61E01 34N06	A 9	1	1.00	47	4	0000—2400	3
5		KUNDOOZ	AFG	69E00 36N09	A 9	1	1.00	47	4	0000—2400	
6		LAGHMAN	AFG	70E05 34N05	A 9	1	1.00	47	4	0000—2400	3
7		LOGAR	AFG	69E00 33N09	A 9	1	1.00	47	4	0000—2400	3
8		UREZGAN	AFG	66E09 33N00	A 9	1	1.00	47	4	0000—2400	
9		DUNDO	AGL	20E50 07S20	A10	1	1.00	50	3	1100—2200	3
10		LUANDA	AGL	13E14 08S48	A10	1	1.00	50	3	0000—2400	
11		MOCAMEDES	AGL	12E09 15S14	A10	1	1.00	58	3	0600—2300	
12		BAJRAM CURRI	ALB	20E05 42N20	A20	1	0.63	50	6	0400—2300	
13		SARANDE	ALB	20E00 39N48	A20	1	0.79	65	5	0400—2300	3
14		AIN SEFRA	ALG	00W45 32N45	A20	1				0600—2400	
15		BISKRA	ALG	05E44 34N48	A20	1				0600—2400	
16		ASCENSION I	ASC	14W21 07S57	A20	0.5	0.25	38	5	0000—2400	
17		HUGHENDEN QLD	AUS	144E11 20S51	A20	0.1		45	3	1900—1400	
18		LITHGOW NSW	AUS	150E09 33S29	A20	0.2		37	5	1900—1400	
19		ABTENAU	AUT	13E21 47N34	D 9	0.1	0.10	15	6	0000—2400	
20		ACHENKIRCH	AUT	11E43 47N32	D 9	0.1	0.10	15	6	0000—2400	
21		AIGEN	AUT	13E58 48N39	D 9	0.1	0.10	15	6	0000—2400	
22		BAD AUSSEE	AUT	13E47 47N37	D 9	0.1	0.10	15	6	0000—2400	
23		BAD ISCHL	AUT	13E38 47N42	D 9	0.1	0.10	15	6	0000—2400	
24		EISENKAPPEL	AUT	14E35 46N29	D 9	0.1	0.10	15	6	0000—2400	
25		HIEFLAU	AUT	14E45 47N36	D 9	0.1	0.10	15	6	0000—2400	
26		HOPFGARTEN	AUT	12E10 47N27	D 9	0.1	0.10	15	6	0000—2400	
27		KAPPL	AUT	10E23 47N04	D 9	0.1	0.10	15	6	0000—2400	
28		KINDBERG	AUT	15E27 47N30	D 9	0.1	0.10	15	6	0000—2400	
29		KOETSCHACH	AUT	13E00 46N41	D 9	0.1	0.10	15	6	0000—2400	
30		MALLNITZ	AUT	13E10 46N59	D 9	0.1	0.10	15	6	0000—2400	
31		MARIA ZELL	AUT	15E19 47N46	D 9	0.1	0.10	15	6	0000—2400	
32		MAYRHOFEN	AUT	11E52 47N10	D 9	0.1	0.10	15	6	0000—2400	
33		MITTERSILL	AUT	12E29 47N17	D 9	0.1	0.10	15	6	0000—2400	
34		MURAU	AUT	14E11 47N07	D 9	0.1	0.10	15	6	0000—2400	
35		OBDACH	AUT	14E42 47N04	D 9	0.1	0.10	15	6	0000—2400	
36		OETZ	AUT	10E54 47N12	D 9	0.1	0.10	15	6	0000—2400	
37		REUTTE	AUT	10E43 47N29	D 9	0.1	0.10	15	6	0000—2400	
38		S MICHAEL L	AUT	13E39 47N06	D 9	0.1	0.10	15	6	0000—2400	
39		SAALFELDEN	AUT	12E51 47N26	D 9	0.1	0.10	15	6	0000—2400	
40		SCHEIFLING	AUT	14E25 47N09	D 9	0.1	0.10	15	6	0000—2400	
41		SCHWARZACH	AUT	13E10 47N19	D 9	0.1	0.10	15	6	0000—2400	
42		SPITTAL DRAU	AUT	13E29 46N48	D 9	0.2	0.20	15	6	0000—2400	
43		TRIEBEN	AUT	14E29 47N29	D 9	0.1	0.10	15	6	0000—2400	
44		WINDISCHGARSTN	AUT	14E20 47N43	D 9	0.1	0.10	15	6	0000—2400	
45		S CRUZ 2	AZR	28W01 39N03	A20	1	1.00	60	4	0000—2400	
46		FARIDPUR	BGD	89E50 23N38	A20	1	1.00	50	3	0000—1800	
47		DIEGO GARCIA	BIO	72E22 07S16	A20	0.3	0.30	50	4	0000—2400	
48		BREST	BLR	23E54 52N18	A20	1	1.00	120	4	0000—2400	
49		GRODNO	BLR	24E00 53N54	A20	1	1.00	120	4	0000—2400	
50		MIADEL	BLR	26E54 54N53	A20	1	1.00	120	4	0000—2400	
51		MINSK	BLR	27E34 53N56	A20	1	1.00	120	4	0000—2400	
52		MOGHILEV	BLR	30E17 53N55	A20	1	1.00	120	4	0000—2400	
53		MOZYR	BLR	29E25 52N10	A20	1	1.00	120	4	0000—2400	
54		PINSK	BLR	26E10 52N10	A20	1	1.00	120	4	0000—2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11

	1		2	3	4	5	6	7	8	9	10	11
1	1485		SLONIM	BLR	25E20 53N03	A20	1	1.00	120	4	0000–2400	
2	(107)		UCHACHI	BLR	28E30 55N20	A20	1	1.00	120	4	0000–2400	
3			GHANZI	BOT	21E40 21S40	A20	1	0.79	40	4	0300–2100	3
4			MAUN	BOT	23E26 19S58	A20	1	0.79	40	4	0300–2100	
5			ORAPA	BOT	25E26 21S20	A20	1	0.79	40	4	0300–2100	
6			SELEBE PIKWE	BOT	27E50 22S01	A20	1	0.79	40	4	0300–2100	3
7		S	CHABLA	BUL	28E30 43N30	A18	1	1.00	30	5	0000–2400	
8		S	GOTZE DELTCHEV	BUL	23E45 41N39	A18	1	1.00	30	5	0000–2400	
9		S	KULA	BUL	22E45 44N51	A18	1	1.00	30	5	0000–2400	
10		S	MITCHOURIN	BUL	27E52 42N09	A18	1	1.00	30	5	0000–2400	
11			BAMBIO	CAF	17E00 03N56	A 9	1	1.00	20	3	0400–2300	
12			KOUANGO	CAF	19E58 05N01	A 9	1	1.00	20	3	0400–2300	
13			NDELE	CAF	20E49 08N25	A 9	1	1.00	20	5	0400–2300	
14			OUADDA	CAF	22E24 08N04	A 9	1	1.00	20	5	0400–2300	
15			YALINGA	CAF	23E15 06N30	A 9	1	1.00	20	5	0400–2300	
16			ZEMIO	CAF	26E50 05N00	A 9	1	1.00	20	5	0400–2300	
17			YAP	CAR	138E15 09N35	A10	0.1	0.10	64	2	2000–1400	
18			BAICHENG	CHN	122E50 45N37	A20	1	1.00	60	4	2000–1800	
19			BAODING	CHN	115E33 38N51	A20	0.1	0.10	70	4	2000–1800	
20			BAOTOU	CHN	109E56 40N40	A20	0.5	0.50	120	4	2000–1800	
21			BEIAN	CHN	126E40 48N18	A20	1	1.00	60	4	2000–1800	
22			CHANGCHUN	CHN	125E24 43N48	A20	0.2	0.20	60	4	2000–1800	
23			CHENGDU	CHN	104E00 30N42	A20	1	1.00	90	4	2000–1800	
24			FUSHUN SHI	CHN	123E53 41N51	A20	1	1.00	90	4	2000–1800	3
25			FUZHOU 1	CHN	119E24 26N06	A20	0.5	0.50	120	4	2000–1800	
26			HAIKOU	CHN	110E15 20N02	A20	0.5	0.50	90	4	2000–1800	
27			HAILAR	CHN	119E45 49N02	A20	1	1.00	50	4	2000–1800	
28			HARBIN	CHN	126E52 45N49	A20	1	1.00	90	4	2000–1800	
29			HUANGSHI	CHN	115E06 30N13	A20	0.5	0.50	90	4	2000–1800	
30			JILIN SHI	CHN	126E30 43N48	A20	1	1.00	50	4	2000–1800	
31			JINGDEZHEN	CHN	117E11 29N17	A20	1	1.00	50	4	2000–1800	
32			JINZHOU	CHN	121E07 41N07	A20	1	1.00	90	4	2000–1800	3
33			JIUJIANG SHI	CHN	116E10 29N39	A20	0.5	0.50	90	4	2000–1800	
34			KAIFENG SHI	CHN	114E32 34N46	A20	1	1.00	70	4	2000–1800	
35			LIUZHOU	CHN	109E12 24N18	A20	0.5	0.50	90	4	2000–1800	3
36			LUDA	CHN	121E30 38N54	A20	1	1.00	60	4	2000–1800	3
37			MEI XIAN	CHN	116E00 24N20	A20	0.5	0.50	120	4	2000–1800	
38			NANJING	CHN	118E54 32N06	A20	0.2	0.20	90	3	2000–1800	
39			NANPING	CHN	118E12 26N45	A20	0.5	0.50	50	4	2000–1800	
40			NANTONG SHI	CHN	120E40 32N05	A20	1	1.00	50	3	2000–1800	
41			QINGDAO	CHN	120E20 36N03	A20	1	1.00	60	4	2000–1800	
42			SHANGHAI	CHN	121E29 31N15	A20	0.5	0.50	70	3	2000–1800	
43			SHENYANG	CHN	123E36 41N54	A20	0.5	0.50	90	4	2000–1800	3
44			SIPING	CHN	124E20 43N10	A20	1	1.00	50	4	2000–1800	3
45			TAIYUAN	CHN	112E33 37N45	A20	0.5	0.50	90	4	2000–1800	
46			TIANJIN	CHN	117E09 39N09	A20	0.5	0.50	60	4	2000–1800	
47			TONGCHUAN	CHN	109E09 35N06	A20	1	1.00	70	4	2000–1800	
48			WUXI SHI	CHN	120E26 31N33	A20	0.1	0.10	90	3	2000–1800	
49			XIAN	CHN	108E54 34N12	A20	0.5	0.50	50	4	2000–1800	
50			XUZHOU	CHN	117E20 34N14	A20	1	1.00	50	3	2000–1800	
51			YICHANG SHI	CHN	111E12 30N48	A20	0.5	0.50	70	4	2000–1800	
52			YINCHUAN	CHN	106E12 38N30	A20	0.3	0.30	70	4	2000–1800	
53			ZIGONG	CHN	104E40 29N27	A20	1	1.00	50	4	2000–1800	
54			BATTICALOA	CLN	81E40 07N45	A20	1	1.00	50	5	0000–1800	



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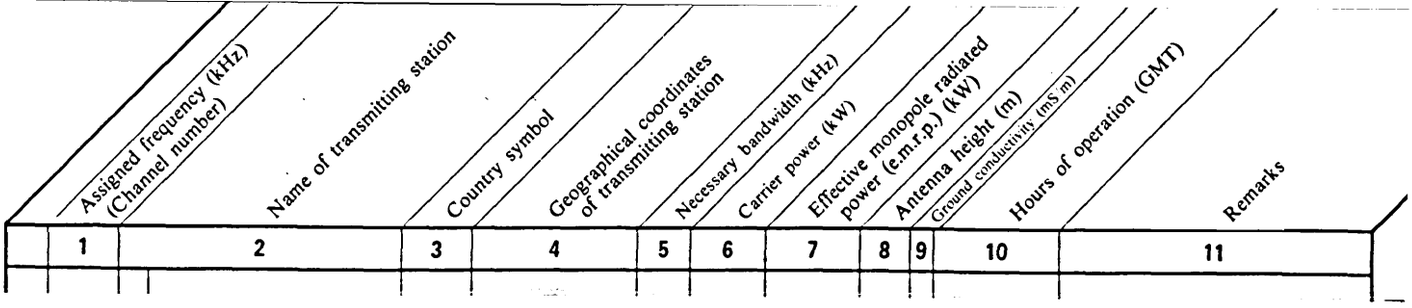
2	(107)	COLOMBO	CLN	79E50 06N55	A20	1	1.00	50	5	0000–1800	
3		MANNAR	CLN	79E53 09N05	A20	1	1.00	50	5	0000–1800	3
4		MATARA	CLN	80E27 06N00	A20	1	1.00	50	5	0000–1800	
5		MULLAITIVU	CLN	80E45 09N15	A20	1	1.00	50	5	0000–1800	3
6		PUTTALAM	CLN	79E50 08N10	A20	1	1.00	50	5	0000–1800	3
7		TAFFNA	CLN	80E10 09N47	A20	1	1.00	50	5	0000–1800	3
8		TRINCOMALEE	CLN	81E15 08N30	A20	1	1.00	50	5	0000–1800	3
9		AMBAM	CME	11E12 02N28	A 9	1			5	0500–2300	
10		DJOUM	CME	12E42 02N45	A 9	1			5	0500–2300	
11		DOUALA	CME	09E47 04N04	A 9	1			4	0500–2300	3
12		TIBATI	CME	12E37 06N25	A 9	1			4	0500–2300	
13		ARRECIFE	CNR	13W35 28N55	A20	1	0.79	30	5	0000–2400	
14		LOS LLANOS	CNR	17W55 28N40	A20	1	0.63	30	5	0000–2400	
15		S SEBASTIANGOM	CNR	17W05 28N05	A20	1	0.63	30	5	0000–2400	
16		VALVERDE	CNR	17W55 27N45	A20	1	0.63	30	5	0000–2400	
17		DIVENIE	COG	12E05 02S40	A20	1	0.50		5	0000–2400	
18		DONGOU	COG	18E00 02N30	A20	1	0.50			0000–2400	
19		KELLE	COG	14E30 00S10	A20	1	0.50		5	0000–2400	
20		ADZOPE	CTI	03W51 06N06	A 9	1			7	0600–2400	
21		BOUNDIALI	CTI	06W28 09N32	A 9	1			7	0600–2400	
22		SOUBRE	CTI	06W36 05N46	A 9	0.1			7	0600–2400	
23		TOUBA	CTI	07W41 08N17	A 9	1			7	0600–2400	
24		VAVOUA	CTI	06W45 07N22	A 9	0.1			7	0600–2400	
25		LIMASSOL	CYP	33E00 34N42	A 9	1	1.00	50	4	0000–2400	4/GRC
26		ADELSHEIM	D	09E24 49N25	D 9	0.2	0.20	41	4	0000–2400	
27		ANSBACH	D	10E35 49N17	D 9	0.3	0.30	67	4	0000–2400	11/USA
28		AUGSBURG	D	10E51 48N21	D 9	1	1.00	61	4	0000–2400	11/USA
29		BAD DUERRHEIM	D	08E31 48N00	D 9	1	1.00	100	4	0000–2400	
30		BADEN BADEN	D	08E15 48N46	D 9	1	1.00	100	4	0000–2400	
31		BERCHTESGADEN	D	12E59 47N37	D 9	0.3	0.30	34	4	0000–2400	11/USA
32		BETZDORF	D	07E55 50N45	D 9	1	1.00	100	4	0000–2400	
33		CRAILSHEIM	D	10E03 49N09	D 9	0.3	0.30	65	4	0000–2400	11/USA
34		EIFEL	D	06E25 50N12	D 9	1	1.00	100	4	0000–2400	
35		FREIBURG	D	07E48 48N01	D 9	1	1.00	100	4	0000–2400	
36		FULDA	D	09E43 50N32	D 9	1	1.00	50	4	0000–2400	
37		GARMISCHPARTEN	D	11E03 47N29	D 9	0.3	0.30	30	4	0000–2400	11/USA
38		HOF SAALE	D	11E53 50N19	D 9	0.4	0.40	50	4	0000–2400	
39		HOHENFELS	D	11E50 49N13	D 9	0.3	0.30	40	5	0000–2400	11/USA
40		KAISERSLAUTERN	D	07E46 49N28	D 9	1		100	4	0000–2400	
41		KASSEL ROTHWES	D	09E31 51N24	D 9	0.3	0.30	45	4	0000–2400	11/USA
42		KOBLENZ	D	07E34 50N23	D 9	1		100	4	0000–2400	
43		LANDAU	D	08E08 49N05	D 9	1	1.00	100	4	0000–2400	
44		LOERRACH	D	07E36 47N36	D 9	1	1.00	100	4	0000–2400	
45		MARBURG	D	08E47 50N49	D 9	1	1.00	50	4	0000–2400	
46		MUENSTER	D	07E34 51N58	D 9	0.8	0.80	45	4	0000–2400	
47		RAVENSBURG	D	09E31 47N47	D 9	1	1.00	100	4	0000–2400	
48		REGENSBURG	D	12E07 49N00	D 9	0.3	0.30	20	4	0000–2400	
49		REUTLINGEN	D	09E07 48N32	D 9	1	1.00	100	4	0000–2400	
50		TRIER	D	06E39 49N45	D 9	1	1.00	100	4	0000–2400	
51		WUERZBURG	D	09E54 49N47	D 9	0.2	0.20	110	4	0000–2400	
52		LOKOSSA	DAH	01E44 06N32	A10	1	1.00	46	4	0800–1800	
53		NIKKI	DAH	02E36 09N55	A10	1	1.00	51	4	0500–2400	
54		PARAKOU	DAH	02E38 09N20	A10	1	1.00	46	4	0800–1800	



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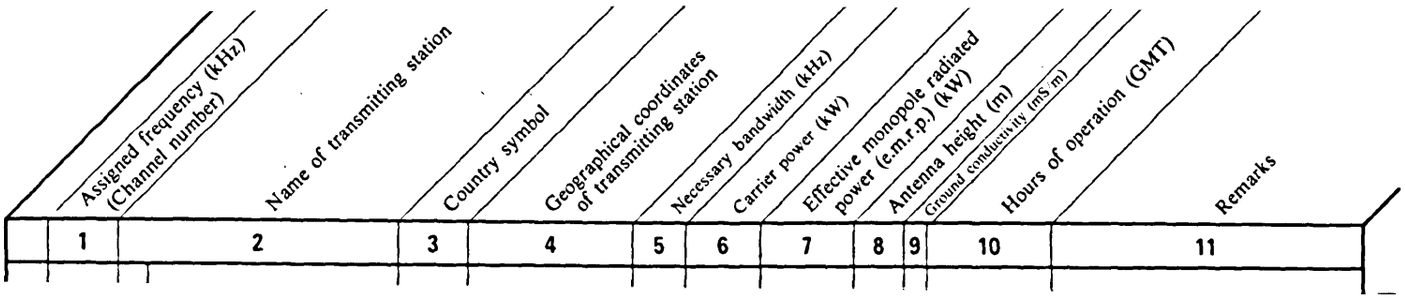
1	1485	ANKLAM	DDR	13E42 53N51	D 9	1		20	4	0000—2400	4/S
2	(107)	BERNBURG	DDR	11E48 51N58	D 9	1	1.00	20	4	0000—2400	
3		DEMMIN	DDR	13E03 53N55	D 9	1		20	4	0000—2400	4/S
4		ERFURT	DDR	11E00 51N00	D 9	1	1.00	20	4	0000—2400	
5		KAMENZ	DDR	14E49 51N19	D 9	1		20	4	0000—2400	
6		LUEBZ	DDR	12E05 53N26	D 9	1		20	4	0000—2400	
7		NEUBRANDENBURG	DDR	13E17 53N33	D 9	1		20	4	0000—2400	
8		NEURUPPIN	DDR	12E48 52N56	D 9	1		20	4	0000—2400	
9		PASEWALK	DDR	14E00 53N30	D 9	1		20	4	0000—2400	
10		SONNEBERG	DDR	11E11 50N21	D 9	1		20	4	0000—2400	
11		TETEROW	DDR	12E35 53N46	D 9	1		20	4	0000—2400	4/S
12		WORBIS KEULA	DDR	10E22 51N26	D 9	1		20	4	0000—2400	
13		ADRA	E	03W00 36N45	D20	0.3	0.19	30	5	0000—2400	
14		ALBACETE	E	01W50 39N00	D20	1	0.63	30	5	0000—2400	
15		ALCALA LA REAL	E	03W55 37N30	D20	0.3	0.19	30	4	0000—2400	
16		ALICANTE	E	00W30 38N20	D20	1	0.63	30	5	0000—2400	
17		ALMERIA	E	02W30 36N50	D20	1	0.63	30	5	0000—2400	
18		ARANDA DUERO	E	03W40 41N40	D20	0.3	0.19	30	4	0000—2400	
19		ASTORGA	E	06W03 42N27	D20	0.3	0.19	40	5	0000—2400	
20		AVILA	E	04W40 40N40	D20	0.5	0.32	30	5	0000—2400	
21		BADAJOZ	E	07W00 38N50	D20	1	0.63	30	5	0000—2400	
22		BARBASTRO	E	00E10 42N00	D20	0.3	0.19	30	4	0000—2400	
23		BAZA	E	02W45 37N30	D20	0.3	0.19	30	4	0000—2400	
24		BEASAIN	E	02W11 43N03	D20	0.3	0.19	40	5	0000—2400	
25		BERGA	E	01E50 42N10	D20	0.3	0.19	30	5	0000—2400	
26		CACERES	E	06W20 39N30	D20	1	0.63	30	5	0000—2400	
27		CADIZ	E	06W20 36N30	D20	1	0.63	30	3	0000—2400	
28		CALATAYUD	E	01W40 41N20	D20	0.3	0.19	30	4	0000—2400	
29		CANGAS DE ONIS	E	05W05 43N20	D20	0.3	0.19	30	5	0000—2400	
30		CARAVACA	E	01W50 38N05	D20	0.3	0.19	30	4	0000—2400	
31		CASTELLON	E	00W00 40N00	D20	1	0.63	30	5	0000—2400	
32		CIUDADELA	E	03E50 40N00	D20	0.3	0.19	30	4	0000—2400	
33		ECIJA	E	05W05 37N30	D20	0.3	0.19	30	4	0000—2400	
34		EL FERROL	E	08W15 43N30	D20	1	0.63	30	5	0000—2400	
35		FIGUERAS	E	02E55 42N15	D20	0.3	0.19	30	4	0000—2400	
36		MARBELLA	E	04W50 36N30	D20	0.3	0.19	30	5	0000—2400	
37		PALENCIA	E	04W30 42N00	D20	0.5	0.32	30	5	0000—2400	
38		REINOSA	E	04W10 43N00	D20	0.3	0.19	30	5	0000—2400	
39		RIBADEO	E	07W00 43N30	D20	0.3	0.19	30	5	0000—2400	
40		SALAMANCA	E	05W40 41N00	D20	1	0.63	30	5	0000—2400	
41		TARREGA	E	01E10 41N40	D20	0.3	0.19	30	5	0000—2400	
42		VERIN	E	07W30 41N55	D20	0.3	0.19	30	5	0000—2400	
43		VITORIA	E	02W40 42N50	D20	1	0.63	30	5	0000—2400	
44		AYAT	EGY	31E12 29N40	A20	1	1.00	47	4	0000—2400	
45		ISMALIA	EGY	32E18 30N15	A20	1	1.00	47	4	0000—2400	
46		ISNA	EGY	32E33 25N17	A20	1	1.00	49	4	0000—2400	
47		KOM OMBO	EGY	32E55 24N27	A20	1	1.00	47	4	0000—2400	
48		MAGHAGHA	EGY	30E51 28N38	A20	1	1.00	47	4	0000—2400	
49		MALLAWY	EGY	30E51 27N45	A20	1	1.00	47	4	0000—2400	
50		MATRUH	EGY	27E09 31N19	A20	1	1.00	47	4	0000—2400	
51		MUT	EGY	28E55 25N30	A20	1	1.00	47	4	0000—2400	
52		NAJ HAMADI	EGY	32E10 26N00	A20	1	1.00	47	4	0000—2400	
53		RAS GHAREB	EGY	30E00 28N20	A20	1	1.00	47	4	0000—2400	
54		RASHID	EGY	30E25 31N15	A20	1	1.00	47	4	0000—2400	



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2	(107)		ASSAB	ETH	42E46 13N01	A 9	1	1.00	50	3	0000–2400	
3			NEGHELLI	ETH	39E41 09N17	A 9	1	1.00	50	3	0000–2400	
4			TESSENAI	ETH	36E14 15N07	A 9	1	1.00	50	3	0000–2400	
5			BORDEAUX V	F	00W40 44N50	D 9	1	1.00	50	7	0000–2400	
6			BREST V	F	04W30 48N25	D 9	1	1.00	50	7	0000–2400	
7			DIJON V	F	05E03 47N20	D 9	1	1.00	50	7	0000–2400	
8			GRENOBLE V	F	05E44 45N11	D 9	1	1.00	50	7	0000–2400	
9			LE MANS V	F	00E15 48N00	D 9	1	1.00	50	7	0000–2400	
10			LILLE V	F	03E03 50N38	D 9	1	1.00	50	7	0000–2400	
11			MARSEILLE V	F	05E20 43N18	D 9	1	1.00	50	7	0000–2400	
12			NANCY V	F	06E10 48N40	D 9	1	1.00	50	7	0000–2400	
13			REIMS V	F	04E05 49N15	D 9	1			7	0000–2400	
14			ROUEN V	F	01E05 49N25	D 9	1	1.00	50	7	0000–2400	
15			TOULOUSE V	F	01E25 43N35	D 9	1	1.00	50	7	0000–2400	
16			TOURS V	F	00E42 47N23	D 9	1	1.00	50	7	0000–2400	
17			LABASA	FJI	179E22 16S25	A20	1	0.63	30	3	1700–1200	
18			SIGATOKA	FJI	177E31 18S09	A20	1	0.63	30	3	1700–1200	
19			FORSSA	FNL	23E38 60N49	A20	1	1.00	50	5	0000–2400	
20			HANKO	FNL	23E00 59N50	A20	1	1.00	50	5	0000–2400	
21			IMATRA	FNL	28E46 61N10	A20	1	1.00	50	5	0000–2400	
22			JOENSUU	FNL	29E47 62N36	A20	1	1.00	50	5	0000–2400	
23			KEMI	FNL	24E34 65N44	A20	1	1.00	50	5	0000–2400	
24			KEMIJARVI	FNL	27E23 66N43	A20	1	1.00	50	7	0000–2400	
25			KOKKOLA	FNL	23E11 63N50	A20	1	1.00	50	5	0000–2400	
26			KOTKA	FNL	26E56 60N30	A20	1	1.00	50	5	0000–2400	
27			LAHTI	FNL	25E39 60N58	A20	1	1.00	50	5	0000–2400	
28			MIKKELI	FNL	27E14 61N40	A20	1	1.00	50	5	0000–2400	
29			NOKIA	FNL	23E31 61N28	A20	1	1.00	50	5	0000–2400	
30			PORI	FNL	21E52 61N28	A20	1	1.00	50	5	0000–2400	
31			RAAHE	FNL	24E31 64N41	A20	1	1.00	50	5	0000–2400	
32			RAISIO	FNL	22E11 60N28	A20	1	1.00	50	5	0000–2400	
33			SUOMENLINNA	FNL	24E59 60N08	A20	1	1.00	50	5	0000–2400	
34			VAASA	FNL	21E38 63N06	A20	1	1.00	50	4	0000–2400	
35		S	BOURNEMOUTH	G	01W52 50N44	A20	2	0.40	30	4	0000–2400	
36			BRIGHTON	G	00W15 50N50	A20	1	0.79	82	4	0000–2400	
37		S	DUNDEE	G	02W58 56N28	A20	2	0.50	21	4	0000–2400	
38		S	EDINBURGH	G	03W15 55N58	A20	1.5	0.95	38	4	0000–2400	
39		S	GLASGOW	G	04W19 55N50	A20	1.5	0.95	38	4	0000–2400	
40			HULL	G	00W14 53N43	A20	1.5	0.95	38	3	0000–2400	
41			OXFORD	G	01W11 51N47	A20	0.5	0.63		3	0000–2400	
42		S	TORQUAY	G	03W33 50N29	A20	0.5	0.10	18	4	0000–2400	
43			WALLASEY	G	03W04 53N26	A20	2	1.00	46	3	0000–2400	
44			KOULAMOUTOU	GAB	12E26 01S14	A 9	0.1			5	0400–2400	
45			AMFILOCHIA	GRC	21E08 38N50	A 9	1	0.63	40	4	0000–2400	
46			CHIOS	GRC	26E05 38N20	A 9	1	0.79	50	5	2300–2200	
47			CHORA SFAKION	GRC	24E13 35N14	A 9	1	0.79	50	5	0400–2400	
48			KASTORIA	GRC	21E15 40N30	A 9	1	0.79	50	5	0400–2400	4/YUG
49			MAKROS	GRC	24E11 41N16	A 9	1	0.79	50	4	0400–2400	
50			NEA MAKRI	GRC	24E01 38N09	A 9	1	0.79	27	3	0000–2400	
51			PATRAI	GRC	21E45 38N15	A 9	1	0.79	50	5	2300–2200	
52			PYRGOS	GRC	21E29 37N42	A 9	1	0.79	50	4	0400–2400	
53			SPARTI	GRC	22E33 37N02	A 9	1	0.79	50	4	0400–2400	
54			VALTOS	GRC	26E22 41N32	A 9	1	0.79	50	3	0400–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1	1485	VOLOS	GRC	22E57 39N21	A 9	1	0.79	50	4	0400–2400	
2	(107)	BOKE	GUI	14W18 10N56	A 9	1	1.00	50		0000–2400	
3		DALABA	GUI	12W12 10N47	A 9	1	1.00	45		0000–2400	
4		FORECARIAH	GUI	13W06 09N28	A 9	1	1.00	45		0000–2400	4/LBR SEN
5		KANKAN	GUI	09W17 10N20	A 9	1	1.00	50		0000–2400	
6		LELOUMA	GUI	12W42 11N27	A 9	1	1.00	45		0000–2400	
7		YOMOU	GUI	09W20 07N40	A 9	1	1.00	45		0000–2400	
8		AJKA	HNG	17E32 47N07	D18	1	1.00	60	4	0000–2400	
9		ALMASFUZITO	HNG	18E14 47N45	D18	1	1.00	60	4	0000–2400	
10		DEBRECEN	HNG	21E33 47N31	D18	1	1.00	60	4	0000–2400	
11		HODMEZOVASARH	HNG	20E20 46N26	D18	1	1.00	60	4	0000–2400	
12		KAPUVAR	HNG	17E02 47N35	D18	1	1.00	60	4	0000–2400	
13		KAZINCBARCIKA	HNG	20E31 48N16	D18	1	1.00	60	4	0000–2400	
14		MOHACS	HNG	18E42 46N00	D18	1	1.00	60	4	0000–2400	
15		SALGOTARJAN	HNG	19E12 48N07	D18	1	1.00	60	4	0000–2400	
16		SGRAVENHAGE	HOL	04E20 52N05	D 9	2	1.00	30	5	0000–2400	
17		TILBURG	HOL	05E05 51N25	D 9	2	1.00	30	5	0000–2400	
18		DJIBO	HVO	01W38 14N04	A20	1	1.00		4	0000–2400	
19		GOROM GOROM	HVO	00E15 14N26	A20	1	1.00		4	0000–2400	
20		KANTCHARI	HVO	01E28 12N39	A20	1	1.00		4	0000–2400	
21		NDORALA	HVO	04W56 11N50	A20	1	1.00		4	0000–2400	
22		SEBBA	HVO	00E30 13N30	A20	1	1.00		4	0000–2400	
23		TOMA	HVO	02W56 12N44	A20	1	1.00		4	0000–2400	
24		TOUGOURI	HVO	00W25 13N15	A20	1	1.00		4	0000–2400	
25		AQUILA	I	13E24 42N21	D 9	1	1.00	50	5	0000–2400	
26		ASCOLIPICENO	I	13E34 42N51	D 9	1	1.00	50	5	0000–2400	
27		BELLUNO	I	12E13 46N08	D 9	1	1.00	50	5	0000–2400	
28		CAMPOBASSO	I	14E39 41N34	D 9	1	1.00	50	5	0000–2400	
29		CARRARA	I	10E06 44N05	D 9	1	1.00	50	5	0000–2400	
30		CATANZARO	I	16E35 38N54	D 9	1	1.00	50	5	0000–2400	
31		COSENZA	I	16E15 39N18	D 9	1	1.00	50	5	0000–2400	
32		FROSINONE	I	13E22 41N39	D 9	1	1.00	50	5	0000–2400	
33		LIVORNO	I	10E19 43N33	D 9	1	1.00	50	5	0000–2400	
34		MACERATA	I	13E28 43N18	D 9	1	1.00	50	5	0000–2400	
35		MATERA	I	16E37 40N39	D 9	1	1.00	50	5	0000–2400	
36		NUORO	I	09E20 40N19	D 9	1	1.00	50	5	0000–2400	
37		PERUGIA	I	12E23 43N07	D 9	1	1.00	50	5	0000–2400	
38		POTENZA	I	15E48 40N38	D 9	1	1.00	50	5	0000–2400	
39		SIRACUSA	I	15E18 37N03	D 9	1	1.00	50	5	0000–2400	
40		TERNI	I	12E39 42N34	D 9	1	1.00	50	5	0000–2400	
41		TRENTO	I	11E08 46N05	D 9	1	1.00	50	5	0000–2400	
42		VITERBO	I	12E07 42N24	D 9	1	1.00	50	5	0000–2400	
43		ADILABAD	IND	78E30 19N48	A20	1		100	3	0000–2400	
44		AGARTALA	IND	91E23 23N50	A20	1		100	3	0000–2400	
45		AGRA	IND	78E05 27N10	A20	1		100	3	0000–2400	
46		AHMEDABAD	IND	72E38 23N02	A20	1		100	3	0000–2400	
47		AHMEDNAGAR	IND	74E48 19N05	A20	1		100	3	0000–2400	
48		AHWA	IND	73E35 20N50	A20	1		100	3	0000–2400	
49		AIJAL	IND	92E43 23N43	A20	1		100	4	0000–2400	
50		AJMER	IND	74E42 26N27	A20	1		100	4	0000–2400	
51		AKOLA	IND	77E02 20N42	A20	1		100	3	0000–2400	
52		ALEPPEY	IND	76E23 09N30	A20	1		100	4	0000–2400	
53		ALIBAGH	IND	72E54 18N40	A20	1		100	4	0000–2400	
54		ALIGARH	IND	78E06 27N54	A20	1		100	3	0000–2400	

	1	2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1485	ALIPORE	IND	88E20 22N30	A20	1		100	4	0000–2400	
2	(107)	ALLAHABAD	IND	81E54 25N28	A20	1		100	3	0000–2400	
3		ALMORA	IND	79E38 29N35	A20	1		100	4	0000–2400	
4		ALONG	IND	94E50 28N10	A20	1		100	4	0000–2400	
5		ALWAR	IND	76E38 27N34	A20	1		100	4	0000–2400	
6		AMARPUR	IND	91E40 23N32	A20	1		100	3	0000–2400	
7		AMBALA	IND	77E55 30N40	A20	1		100	4	0000–2400	
8		AMBIKAPUR	IND	83E04 23N10	A20	1		100	4	0000–2400	
9		AMRAVATI	IND	77E47 20N56	A20	1		100	3	0000–2400	
10		AMRELI	IND	71E10 21N40	A20	1		100	3	0000–2400	
11		AMRITSAR	IND	74E50 31N30	A20	1		100	4	0000–2400	
12		ANANTAPUR	IND	77E35 14N40	A20	1		100	3	0000–2400	
13		ANANTNAG	IND	75E10 33N25	A20	1		100	4	0000–2400	
14		ANINI	IND	95E52 28N40	A20	1		100	4	0000–2400	
15		ARRAH	IND	84E50 25N30	A20	1		100	3	0000–2400	
16		AURANGABAD	IND	75E18 19N54	A20	1		100	3	0000–2400	
17		AZAMGARH	IND	83E13 26N03	A20	1		100	4	0000–2400	
18		BADAUN	IND	79E10 28N03	A20	1		100	3	0000–2400	
19		BAHRAICH	IND	81E38 27N34	A20	1		100	4	0000–2400	
20		BALAGHAT	IND	80E20 21N50	A20	1		100	4	0000–2400	
21		BALASORE	IND	86E54 21N30	A20	1		100	3	0000–2400	
22		BALLIA	IND	84E11 25N44	A20	1		100	4	0000–2400	
23		BALURGHAT	IND	88E47 25N14	A20	1		100	4	0000–2400	
24		BANDA	IND	80E22 25N20	A20	1		100	4	0000–2400	
25		BANGALORE	IND	77E38 12N58	A20	1		100	3	0000–2400	
26		BANKURA	IND	87E12 23N15	A20	1		100	4	0000–2400	
27		BANSWARA	IND	74E25 23N35	A20	1		100	3	0000–2400	
28		BARABANKI	IND	82E12 26N56	A20	1		100	4	0000–2400	
29		BARAMULA	IND	74E45 34N30	A20	1		100	3	0000–2400	
30		BARIPADA	IND	86E45 21N58	A20	1		100	3	0000–2400	
31		BARMER	IND	71E18 25N45	A20	1		100	4	0000–2400	
32		BARODA	IND	73E16 22N17	A20	1		100	3	0000–2400	
33		BASTI	IND	82E46 26N48	A20	1		100	4	0000–2400	
34		BELGAUM	IND	74E30 15N50	A20	1		100	3	0000–2400	
35		BELLARY	IND	77E00 15N00	A20	1		100	3	0000–2400	
36		BERHAMPUR	IND	88E30 24N08	A20	1		100	4	0000–2400	
37		BETUL	IND	77E50 21N50	A20	1		100	3	0000–2400	
38		BHAGALPUR	IND	87E02 25N15	A20	1		100	3	0000–2400	
39		BHANDARA	IND	79E42 21N09	A20	1		100	3	0000–2400	
40		BHARATPUR	IND	77E30 27N15	A20	1		100	3	0000–2400	
41		BHATINDA	IND	74E55 30N20	A20	1		100	3	0000–2400	
42		BHAVANI PATNA	IND	83E18 19N54	A20	1		100	3	0000–2400	
43		BHAVNAGAR	IND	72E15 21N40	A20	1		100	3	0000–2400	
44		BHILWARA	IND	74E40 25N21	A20	1		100	3	0000–2400	
45		BHIND	IND	78E40 27N00	A20	1		100	3	0000–2400	
46		BHOPAL	IND	77E29 23N16	A20	1		100	3	0000–2400	
47		BHUBANESWAR	IND	85E52 20N15	A20	1		100	3	0000–2400	
48		BHUJ	IND	69E43 23N15	A20	1		100	3	0000–2400	
49		BIDAR	IND	77E30 17N50	A20	1		100	3	0000–2400	
50		BIJAPUR	IND	75E30 16N50	A20	1		100	3	0000–2400	
51		BIJNOR	IND	78E11 29N23	A20	1		100	3	0000–2400	
52		BIKANER	IND	73E22 28N01	A20	1		100	4	0000–2400	
53		BILASPUR	IND	82E10 22N10	A20	1		100	3	0000–2400	
54		BIR	IND	75E46 18N59	A20	1		100	3	0000–2400	

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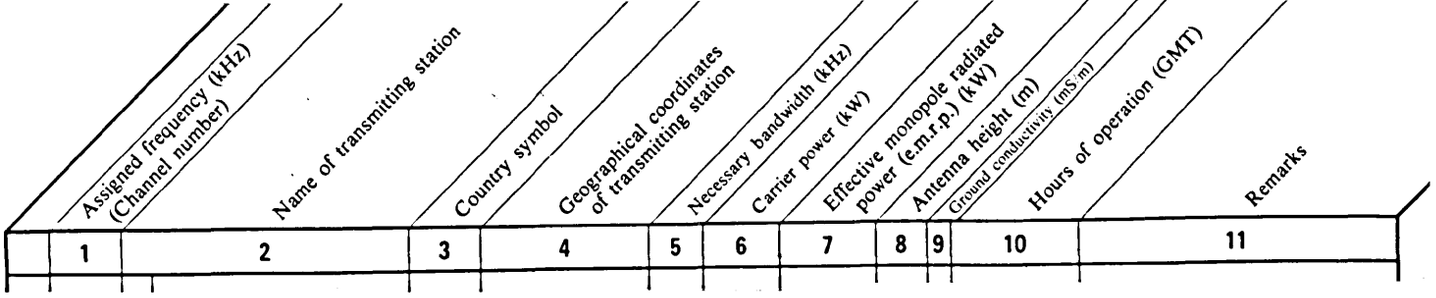
	1	2	3	4	5	6	7	8	9	10	11

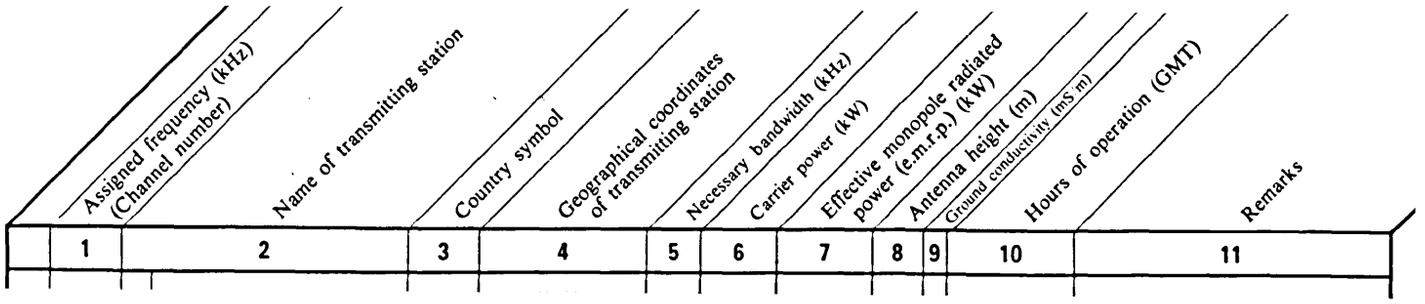
	1	2	3	4	5	6	7	8	9	10	11
1	1485	BOLANGIR	IND	83E30 20N45	A20	1		100	3	0000–2400	
2	(107)	BOMBAY	IND	72E54 18N53	A20	1		100	3	0000–2400	
3		BOMDILA	IND	92E30 27N20	A20	1		100	4	0000–2400	
4		BROACH	IND	73E01 21N41	A20	1		100	3	0000–2400	
5		BULANDSHAHR	IND	77E54 28N24	A20	1		100	3	0000–2400	
6		BULDANA	IND	76E10 21N05	A20	1		100	3	0000–2400	
7		BULSAR	IND	72E50 20N40	A20	1		100	3	0000–2400	
8		BUNDI	IND	75E41 25N27	A20	1		100	3	0000–2400	
9		BURDWAN	IND	87E50 23N15	A20	1		100	3	0000–2400	
10		CANNANORE	IND	75E36 11N54	A20	1		100	4	0000–2400	
11		CHAIBASA	IND	85E50 22N45	A20	1		100	3	0000–2400	
12		CHAMOLI	IND	78E30 30N20	A20	1		100	4	0000–2400	
13		CHANDA	IND	79E20 19N58	A20	1		100	3	0000–2400	
14		CHAPRA	IND	84E50 25N45	A20	1		100	3	0000–2400	
15		CHHATARPUR	IND	79E33 24N52	A20	1		100	3	0000–2400	
16		CHINDWARA	IND	78E55 22N05	A20	1		100	4	0000–2400	
17		CHINGLEPUT	IND	80E01 12N42	A20	1		100	3	0000–2400	
18		CHINSURA	IND	88E25 22N55	A20	1		100	4	0000–2400	
19		CHITORGARH	IND	74E50 24N50	A20	1		100	3	0000–2400	
20		CHITRADURGA	IND	76E20 14N10	A20	1		100	3	0000–2400	
21		CHITTOOR	IND	79E10 13N15	A20	1		100	3	0000–2400	
22		CHURACHANDPUR	IND	93E40 24N20	A20	1		100	4	0000–2400	
23		CHURU	IND	74E58 28N18	A20	1		100	4	0000–2400	
24		COIMBATORE	IND	77E06 11N00	A20	1		100	4	0000–2400	
25		COOCH BEHAR	IND	89E25 26N30	A20	1		100	4	0000–2400	
26		CUDDALORE	IND	79E49 11N43	A20	1		100	3	0000–2400	
27		CUDDAPAH	IND	78E49 14N29	A20	1		100	3	0000–2400	
28		CUTTACK	IND	85E55 20N35	A20	1		100	3	0000–2400	
29		DAKAONK	IND	93E41 07N02	A20	1		100	4	0000–2400	
30		DALTONGANJ	IND	84E05 24N05	A20	1		100	3	0000–2400	
31		DAMOH	IND	79E29 23N50	A20	1		100	3	0000–2400	
32		DARBHANGA	IND	85E56 26N09	A20	1		100	3	0000–2400	
33		DARJEELING	IND	88E20 27N15	A20	1		100	4	0000–2400	
34		DATIA	IND	78E30 25N30	A20	1		100	4	0000–2400	
35		DEHRA DUN	IND	78E04 30N19	A20	1		100	4	0000–2400	
36		DELHI	IND	77E12 28N38	A20	1		100	3	0000–2400	
37		DEORIA	IND	83E42 26N33	A20	1		100	3	0000–2400	
38		DEWAS	IND	76E00 21N50	A20	1		100	4	0000–2400	
39		DHANBAD	IND	86E24 23N48	A20	1		100	3	0000–2400	
40		DHAR	IND	75E10 22N30	A20	1		100	3	0000–2400	
41		DHARMAPURI	IND	78E13 12N08	A20	1		100	3	0000–2400	
42		DHARWAR	IND	74E59 15N27	A20	1		100	3	0000–2400	
43		DHENKANAL	IND	85E40 20N44	A20	1		100	3	0000–2400	
44		DHULIA	IND	74E47 20N58	A20	1		100	3	0000–2400	
45		DIBRUGARH	IND	94E58 27N29	A20	1		100	3	0000–2400	
46		DIPHU	IND	93E20 25N50	A20	1		100	3	0000–2400	
47		DIU	IND	71E01 20N42	A20	1		100	4	0000–2400	
48		DNHAVELI	IND	73E00 20N05	A20	1		100	3	0000–2400	
49		DODA	IND	75E20 33N40	A20	1		100	4	0000–2400	
50		DUMKA	IND	87E20 24N30	A20	1		100	3	0000–2400	
51		DUNGARPUR	IND	73E36 23N48	A20	1		100	4	0000–2400	
52		HISSAR	IND	75E48 29N00	A20	1		100	4	0000–2400	
53		PALGHAT	IND	76E42 10N48	A20	1		100	4	0000–2400	
54		RAISEN	IND	77E40 23N20	A20	1		100	3	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11
1	1485	VIDISHA	IND	77E50 23N30	A20	1		100	3	0000–2400	
2	(107)	AMBON	INS	128E10 03S41	A18	0.5	0.50	25	4	0000–2400	
3		BANDJARMASIN	INS	114E33 03S22	A18	0.5	0.50	25	4	0000–2400	
4		BANDUNG	INS	107E36 06S55	A18	0.5	0.50	75	3	0000–2400	
5		BANGIL	INS	112E46 07S36	A18	0.5	0.50	25	4	0000–2400	
6		BANJUWANGI	INS	114E23 08S13	A18	0.5	0.50	25	4	0000–2400	
7		BENGKULU	INS	102E20 03S46	A18	0.5	0.50	25	4	0000–2400	
8		BIAK	INS	136E04 01S11	A18	0.5	0.50	25	4	0000–2400	
9		BOGOR SEMPLAK	INS	106E47 06S35	A18	0.5	0.50	25	4	0000–2400	
10		BOJONEGORO	INS	111E03 07S09	A18	0.5	0.50	75	3	0000–2400	
11		BONDOWOSO	INS	113E49 07S54	A18	0.5	0.50	25	4	0000–2400	
12		BUKITTINGGI	INS	100E32 00S18	A18	0.5	0.50	75	3	0000–2400	
13		CIANJUR	INS	107E18 06S49	A18	0.5	0.50	25	4	0000–2400	
14		CIKAMPEK	INS	107E28 06S25	A18	0.5	0.50	25	4	0000–2400	
15		DENPASAR	INS	115E13 08S39	A18	0.5	0.50	25	4	0000–2400	
16		DJAKARTA	INS	106E50 06S10	A18	0.5	0.50	25	4	0000–2400	
17		DJEMBER	INS	113E42 08S10	A18	0.5	0.50	75	3	0000–2400	
18		FAKFAK	INS	132E17 02S55	A18	0.5	0.50	25	4	0000–2400	
19		GARUT	INS	107E53 06S42	A18	0.5	0.50	75	3	0000–2400	
20		GRESIK	INS	112E39 07S09	A18	0.5	0.50	75	3	0000–2400	
21		KALIUNGU	INS	110E14 06S57	A18	0.5	0.50	25	4	0000–2400	
22		KEDIRI	INS	112E02 07S53	A18	0.5	0.50	25	4	0000–2400	
23		KENDAL	INS	110E12 06S55	A18	0.5	0.50	75	3	0000–2400	
24		KENDARI	INS	122E36 03S57	A18	0.5	0.50	25	4	0000–2400	
25		KLATEN	INS	110E36 07S42	A18	0.5	0.50	75	3	0000–2400	
26		KLUNGKUNG	INS	115E24 08S32	A18	0.5	0.50	75	3	0000–2400	
27		KRAWANG	INS	107E17 06S18	A18	0.5	0.50	25	4	0000–2400	
28		MADIUN	INS	111E31 07S37	A18	0.5	0.50	75	3	0000–2400	
29		MAGELANG	INS	110E12 07S30	A18	0.5	0.50	75	3	0000–2400	
30		MAJALENGKA	INS	108E13 06S50	A18	0.5	0.50	25	4	0000–2400	
31		MALANG	INS	112E37 07S59	A18	0.5	0.50	25	4	0000–2400	
32		MEDAN	INS	98E40 03N30	A18	0.5	0.50	25	4	0000–2400	
33		MENADO	INS	124E55 01N32	A18	0.5	0.50	75	3	0000–2400	
34		PADANG	INS	100E23 00S57	A18	0.5	0.50	25	4	0000–2400	
35		PALENGKARAJA	INS	113E11 02S02	A18	0.5	0.50	25	4	0000–2400	
36		PALU	INS	119E53 00S54	A18	0.5	0.50	25	4	0000–2400	
37		PANDJANG	INS	105E22 05S33	A18	0.5	0.50	75	3	0000–2400	
38		PASURUAN	INS	112E54 07S38	A18	0.5	0.50	25	4	0000–2400	
39		PATI	INS	111E02 06S45	A18	0.5	0.50	25	4	0000–2400	
40		PAYAHKUMBUH	INS	100E38 00S13	A18	0.5	0.50	25	4	0000–2400	
41		PEKALONGAN	INS	109E40 06S53	A18	0.5	0.50	75	3	0000–2400	
42		PLADJU	INS	104E49 03S00	A18	0.5	0.50	75	3	0000–2400	
43		PONOROGO	INS	111E28 07S52	A18	0.5	0.50	25	4	0000–2400	
44		PONTIANAK	INS	109E20 00S05	A18	0.5	0.50	25	4	0000–2400	
45		PROBOLINGGO	INS	113E13 07S45	A18	0.5	0.50	75	3	0000–2400	
46		PURWOKERTO	INS	109E15 07S26	A18	0.5	0.50	25	4	0000–2400	
47		PURWOREJO	INS	110E30 07S43	A18	0.5	0.50	25	4	0000–2400	
48		RANGKASBITUNG	INS	106E15 06S22	A18	0.5	0.50	75	3	0000–2400	
49		SAMARINDA	INS	117E09 00S30	A18	0.5	0.50	25	4	0000–2400	
50		SEMARANG	INS	110E25 06S58	A18	0.5	0.50	25	4	0000–2400	
51		SENKANG	INS	119E39 05S02	A18	0.5	0.50	25	4	0000–2400	
52		SERANG	INS	106E09 06S07	A18	0.5	0.50	75	3	0000–2400	
53		SIBOLGA	INS	98E48 01N42	A18	0.5	0.50	25	4	0000–2400	
54		SIDOARJO	INS	112E43 07S28	A18	0.5	0.50	25	4	0000–2400	



	1	2	3	4	5	6	7	8	9	10	11
1	1485	SINGARADJA	INS	115E05 08S06	A18	0.5	0.50	25	4	0000–2400	
2	(107)	SOLOK SUMATRA	INS	100E39 00S48	A18	0.5	0.50	25	4	0000–2400	
3		SORONG	INS	131E17 00S50	A18	0.5	0.50	25	4	0000–2400	
4		SUBANG	INS	107E45 06S34	A18	0.5	0.50	75	3	0000–2400	
5		SUKABUMI	INS	106E55 06S50	A18	0.5	0.50	25	4	0000–2400	
6		SUMENEP	INS	113E51 07S00	A18	0.5	0.50	75	3	0000–2400	
7		SURABAJA	INS	112E45 07S15	A18	0.5	0.50	25	4	0000–2400	
8		SURAKARTA	INS	110E49 07S34	A18	0.5	0.50	25	4	0000–2400	
9		TANDJUNGKARANG	INS	105E15 05S24	A18	0.5	0.50	75	3	0000–2400	
10		TASIKMALAJA	INS	108E13 07S19	A18	0.5	0.50	25	4	0000–2400	
11		TEGAL	INS	109E08 06S52	A18	0.5	0.50	25	4	0000–2400	
12		TEMANGGUNG	INS	110E10 07S19	A18	0.5	0.50	25	4	0000–2400	
13		TERNATE	INS	127E23 00N48	A18	0.5	0.50	25	4	0000–2400	
14		TJIAMIS	INS	108E20 07S19	A18	0.5	0.50	25	4	0000–2400	
15		TJIREBON	INS	108E34 06S42	A18	0.5	0.50	75	3	0000–2400	
16		TOMOHON	INS	124E50 01N19	A18	0.5	0.50	75	3	0000–2400	
17		TONDANO	INS	124E45 01N22	A18	0.5	0.50	25	4	0000–2400	
18		UJUNGPANDANG	INS	119E25 05S09	A18	0.5	0.50	25	4	0000–2400	
19		WONOSOBO	INS	109E59 07S21	A18	0.5	0.50	75	3	0000–2400	
20		DRUMGRIFFIN	IRL	09W01 53N23	A20	1	1.00	50	4	0000–2400	
21		SLIGO	IRL	08W28 54N17	A20	1	1.00	50	4	0000–2400	
22		TRIM	IRL	06W49 53N39	A20	1	1.00	50	4	0000–2400	
23		YOUGHAL	IRL	07W50 51N57	A20	1	1.00	50	4	0000–2400	
24		ABADEH	IRN	52E50 29N08	A20	1	1.00	50	5	0200–2200	
25		BAM	IRN	58E22 29N08	A20	1			3	0100–2200	
26		DAMGHAN	IRN	54E22 36N09	A20	1	1.00	50	4	0200–2200	
27		DARREH GAZ	IRN	59E08 37N22	A20	1	1.00	50	4	0200–2200	
28		DEZFUL	IRN	48E23 32N26	A20	1	1.00	50	4	0200–2200	
29		JAHROM	IRN	53E32 28N20	A20	1	1.00	50	5	0200–2200	
30		JOLFA	IRN	45E38 38N57	A20	1			3	0100–2200	
31		MALAYER	IRN	48E45 34N20	A20	1	1.00	50	4	0200–2200	
32		MIANEH	IRN	47E42 37N27	A20	1	1.00	55	3	0200–2100	
33		NAIN	IRN	53E05 32N52	A20	1	1.00	50	4	0200–2200	
34		SABZEVAR	IRN	56E60 36N10	A20	1	1.00	50	4	0200–2200	
35		SANANDAJ	IRN	47E01 35N18	A20	1	1.00	50	4	0200–2200	
36		SHAHREKORD	IRN	52E34 31N10	A20	1	1.00	50	4	0200–2200	
37		KEFLAVIK	ISL	22W37 64N00	A10	0.3	0.19	21	4	0000–2400	
38		ATLIT	ISR	34E58 32N45	A 9	1	1.00	40	3	0000–2400	3
39		MIZPE RAMON	ISR	34E48 30N46	A 9	1	1.00	40	3	0000–2400	3
40		SEDOM	ISR	35E23 31N10	A 9	1	1.00	40	4	0000–2400	3
41		ASAMAI	J	140E30 39N15	A15	0.1	0.13	66	5	0000–2400	
42		ENA	J	137E27 35N27	A15	0.1	0.13	67	5	0000–2400	
43		FUKAURA	J	139E55 40N38	A15	0.1	0.13	67	5	0000–2400	
44		FUKUCHIYAMA	J	135E08 35N18	A15	0.1	0.13	58	5	0000–2400	
45		GERO	J	137E14 35N49	A15	0.1	0.13	68	5	0000–2400	
46		HACHINOHE	J	141E28 40N30	A15	1	1.00	51	5	0000–2400	
47		HAGI	J	131E25 34N25	A15	1	1.00	51	5	0000–2400	
48		HASHIMOTO	J	135E35 34N18	A15	0.1	0.10	48	5	0000–2400	
49		KARATSU	J	129E59 33N28	A15	0.1	0.13	67	5	0000–2400	
50		KARUIZAWA	J	138E37 36N20	A15	0.1	0.13	45	5	0000–2400	
51		KUMANO	J	136E05 33N52	A15	0.1	0.13	69	5	0000–2400	
52		MIYOSHI	J	132E51 34N48	A15	0.1	0.16	76	5	0000–2400	
53		NAOETSU	J	138E15 37N09	A15	1	1.00	51	5	0000–2400	
54		NASU	J	139E58 36N53	A15	0.1	0.16	88	5	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11
1	1485	NICHINAN	J	131E23 31N37	A15	0.1	0.13	67	5	0000—2400	
2	(107)	OBIHIRO	J	143E12 42N57	A15	0.1	0.20	83	4	0000—2400	
3		OFUNATO	J	141E45 39N02	A15	0.1	0.13	67	5	0000—2400	
4		OMUTA	J	130E26 33N02	A15	0.1	0.10	48	5	0000—2400	
5		SHIOZAWA	J	138E51 37N01	A15	0.1	0.20	85	5	0000—2400	
6		TAKACHIHO	J	131E19 32N42	A15	0.1	0.13	67	5	0000—2400	
7		TAKAYAMA	J	137E16 36N09	A15	0.1	0.13	54	5	0000—2400	
8		TOTTORI	J	134E14 35N29	A15	0.1	0.13	58	5	0000—2400	
9		TOYOHASHI	J	137E24 34N45	A15	0.1	0.13	53	5	0000—2400	
10		UENO	J	136E07 34N45	A15	0.1	0.13	68	5	0000—2400	
11		YAMANAKA	J	136E22 36N14	A15	0.1	0.10	31	5	0000—2400	
12		YONEZAWA	J	140E05 37N56	A15	0.1	0.13	56	5	0000—2400	
13		YUKUHASHI	J	131E01 33N44	A15	0.1	0.13	62	5	0000—2400	
14		HEBRON	JOR	35E06 31N32	A 9	1	1.00	52	4	0300—2300	3
15		IRBID	JOR	35E51 32N33	A 9	1	1.00	52	7	0300—2300	3
16		KARAK	JOR	35E42 31N11	A 9	1	1.00	52	7	0300—2300	3
17		NABLUS	JOR	35E17 32N13	A 9	1	1.00	52	7	0300—2300	3
18		QALQILIYA	JOR	34E58 32N11	A 9	1	1.00	52	4	0300—2300	3
19		GALOLE	KEN	40E02 01S30	A 9	1	1.00	50	4	0200—2100	
20		KITUI	KEN	38E00 01S22	A 9	1	1.00	50	4	0200—2100	
21		LODWAR	KEN	35E35 03N05	A 9	1		130	4	0200—2100	
22		WAJIR	KEN	40E02 01N42	A 9	1		100	4	0200—2100	
23		GAPYEONG	KOR	127E31 37N48	A10	1	1.00	80	6	0000—2400	3
24		GONGJU	KOR	127E07 36N27	A10	1	1.00	80	4	0000—2400	3
25		GUNWI	KOR	128E33 36N14	A10	1	1.00	120	6	0000—2400	
26		JANGSEONG	KOR	129E00 37N01	A10	1	1.00	80	4	0000—2400	
27		KAPSAN	KRE	128E16 41N05	A16	1	1.00	30		2000—1800	3
28		KUWAIT	KWT	48E20 29N34	A 9	1	1.00	50	8	0000—2400	
29		TUBMANBURG	LBR	11W28 08N15	A20	1	1.00	50	5	0500—2400	3
30		BRAK	LBY	14E10 27N45	A20	1	1.00	47	5	0400—2400	
31		EL MARG	LBY	21E00 32N00	A20	1	1.00	47	5	0400—2400	
32		EL THAHRA	LBY	17E50 29N20	A20	1	1.00	47	5	0400—2400	
33		ELBREGA	LBY	19E30 30N10	A20	1	1.00	47	5	0400—2400	
34		JEFREN	LBY	12E31 32N03	A20	1	1.00	100	6	0400—2400	
35		SAMAH	LBY	19E10 28N10	A20	1	1.00	47	5	0400—2400	
36		ZAGOUT	LBY	17E20 28N20	A20	1	1.00	47	5	0400—2400	
37		BUTHA BUTHE	LSO	28E15 28S45	A20	1	1.00	45	4	0400—2200	3
38		MARAKABEI	LSO	28E07 29S34	A20	1	1.00	45	4	0400—2200	3
39		QACHAS NEK	LSO	28E39 30S05	A20	1	1.00	45	4	0400—2200	3
40		CUREPIPE	MAU	57E31 20S19	A20	1	1.00	50	4	0000—2400	
41		ANOSIBE	MDG	48E12 19S26	A 9	1	1.00	73	4	0300—2000	
42		ANTALAHA	MDG	50E15 14S54	A 9	1	1.00	50	4	0300—2000	
43		ANTSALOVA	MDG	44E38 18S40	A 9	1	1.00	86	4	0300—2000	
44		BEFANDRIANA	MDG	48E30 15S12	A 9	1	1.00	47	4	0300—2000	
45		BEKILY	MDG	45E19 24S16	A 9	1	1.00	114	4	0300—2000	
46		BESALAMPY	MDG	44E29 16S45	A 9	1	1.00	60	4	0300—2000	
47		FANDRIANA	MDG	47E22 20S14	A 9	1	1.00	87	4	0300—2000	
48		FARATSIHO	MDG	46E56 19S24	A 9	1	1.00	47	4	0300—2000	
49		FENERIVE EST	MDG	49E26 17S22	A 9	1	1.00	47	4	0300—2000	
50		IHOSY	MDG	46E07 22S24	A 9	1	1.00	59	4	0300—2000	
51		MAROVOAY	MDG	46E38 16S08	A 9	1	1.00	50	4	0300—2000	
52		MIARINARIVO	MDG	46E54 18S57	A 9	1	1.00	50	4	0300—2000	
53		MOROMBE	MDG	43E23 21S47	A 9	1	1.00	47	4	0300—2000	
54		MORONDAVA	MDG	44E18 20S17	A 9	1	1.00	101	4	0300—2000	



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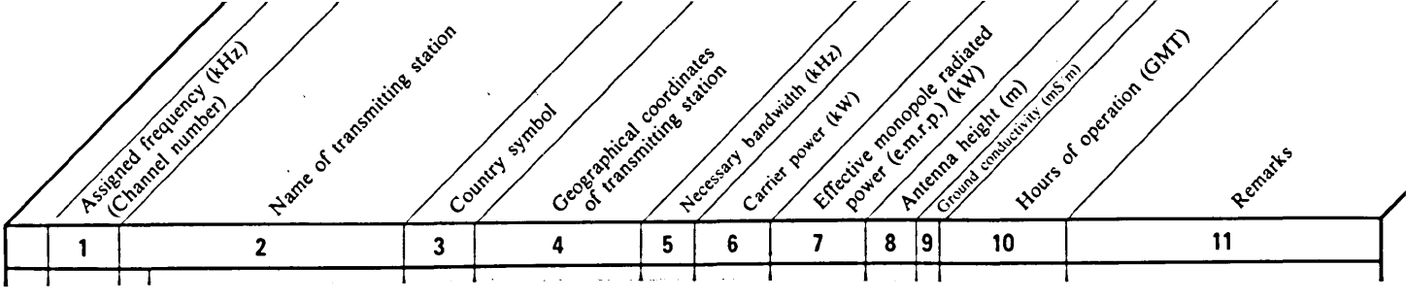
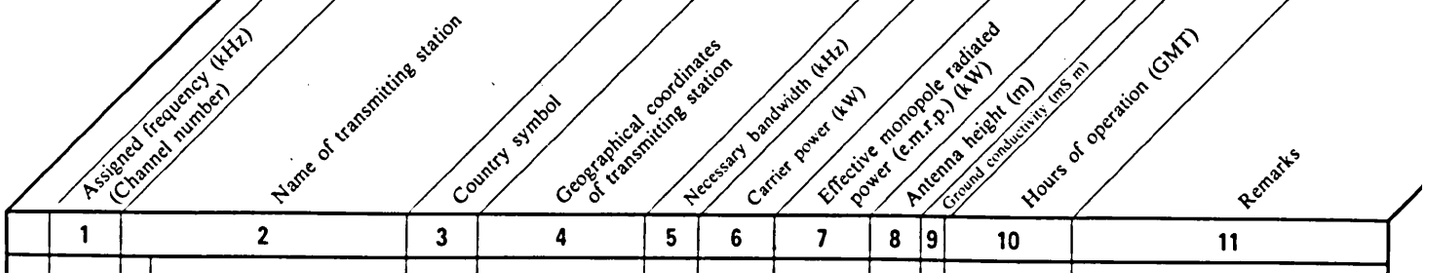
1	1485	NOSY BE	MDG	48E20 13S25	A 9	1	1.00	47	4	0300—2000	3
2	(107)	PT BERGE	MDG	47E35 15S35	A 9	1	1.00	177	4	0300—2000	
3		SAKARAHA	MDG	44E32 22S55	A 9	1	1.00	47	4	0300—2000	
4		TSARATANANA	MDG	47E40 16S48	A 9	1	1.00	82	4	0300—2000	
5		VANGAINDRANO	MDG	47E35 23S20	A 9	1	1.00	47	4	0300—2000	
6		FUNCHAL	MDR	16W55 32N43	A20	1	1.00	50	4	0000—2400	3
7		KAMPONG JABI	MLA	102E35 05N40	A20	1	1.00	50	5	2200—1700	3
8		KUALA ROMPIN	MLA	103E25 02N52	A20	1	1.00	50	5	2200—1700	
9		LONG GENG	MLA	114E08 02N30	A20	1	1.00	50	5	2200—1700	3
10		PADANG TERAP	MLA	100E40 06N15	A20	1	1.00	50	5	2200—1700	3
11		SAPULUT	MLA	116E30 04N50	A20	1	1.00	50	5	2200—1700	3
12		SLIM RIVER	MLA	101E25 03N50	A20	1	1.00	50	5	2200—1700	
13		BAFOULABE	MLI	10W50 13N48	A 9	1		101		0600—2400	
14		GOURMA RHAROUS	MLI	01W55 16N52	A 9	1		48		0600—2400	
15		KANGABA	MLI	08W32 11N40	A 9	1	1.00	50	4	0600—2400	3
16		KOUTIALA	MLI	05W28 12N23	A 9	1		152		0600—2400	
17		NARA	MLI	07W17 15N10	A 9	1		65		0600—2400	
18		BUGIBBA	MLT	14E25 35N57	D 9	1	1.00	50	4	0000—2400	4/I
19		ALTAI	MNG	96E10 46N30	A18	1	1.00	120	5	2200—1500	
20		ARWAIHER	MNG	102E20 46N20	A18	1	1.00	120	5	2200—1500	
21		BAIANHONGOR	MNG	100E40 46N10	A18	1	1.00	120	5	2200—1500	
22		BARUNURT	MNG	113E20 46N40	A18	1	1.00	120	4	2200—1500	
23		BULAGAN	MNG	103E20 48N50	A18	1	1.00	120	5	2200—1500	
24		DALANTSZADAGAD	MNG	104E30 43N38	A18	1	1.00	120	4	2200—1500	
25		DARHAN	MNG	106E00 49N00	A18	1	1.00	120	4	2200—1500	
26		KOBDO	MNG	91E48 48N10	A18	1	1.00	120	5	2200—1500	
27		MANDAL GOBI	MNG	106E10 45N40	A18	1	1.00	120	4	2200—1500	
28		MUREN	MNG	100E10 49N30	A18	1	1.00	120	5	2200—1500	
29		SAINSHAND	MNG	110E05 44N50	A18	1	1.00	120	4	2200—1500	
30		SUHE BATOR	MNG	113E10 46N50	A18	1	1.00	120	4	2200—1500	
31		TCHOIBOLSAN	MNG	114E30 48N05	A18	1	1.00	120	4	2200—1500	
32		TSETSERLIG	MNG	101E10 47N30	A18	1	1.00	120	5	2200—1500	
33		UBURKHANGAI	MNG	102E20 46N20	A18	1	1.00	120	5	2200—1500	
34		ULAN BATOR	MNG	107E00 47N55	A18	1	1.00	120	4	2200—1500	
35		ULAN GOM	MNG	92E00 50N00	A18	1	1.00	120	5	2200—1500	
36		ULGEI	MNG	89E48 49N08	A18	1	1.00	120	5	2200—1500	
37		ULIASUTAI	MNG	96E50 47N40	A18	1	1.00	120	5	2200—1500	
38		UNDERHAN	MNG	102E55 46N10	A18	1	1.00	120	4	2200—1500	
39		ESPUNGABERA	MOZ	32E48 20S28	A10	1	1.00	34	4	0400—2200	3
40		FINGOE	MOZ	31E45 15S08	A10	0.5				0400—2200	
41		NOVA FREIXO	MOZ	36E30 14S39	A10	1	1.00	34	4	0400—2200	3
42		CASABLANCA	MRC	07W36 33N36	A18	1	1.00	80	4	0600—2400	
43		OUJDA	MRC	01W51 34N40	A12	1	1.00	50	4	0600—2400	
44		ZAGORA	MRC	05W23 30N10	A20	0.1	0.10	50	6	0600—2400	
45		BIR MOGHREIN	MTN	11W36 25N13	A 9	1	1.00	60	5	0700—2300	3
46		SHARPEVALE	MWI	34E45 14S30	A20	1	1.00	92	3	0200—2300	
47		GAYA	NGR	03E30 11N50	A 9	1			4	0000—2400	
48		IFEROUANE	NGR	08E00 19N10	A 9	0.1			4	0000—2400	
49		MALBAZA	NGR	05E29 13N58	A 9	1	1.00	47	4	0000—2400	
50		TESSAOUA	NGR	08E00 13N50	A 9	1			4	0000—2400	
51		AWKA	NIG	07E03 06N15	C 9	1	1.00	83	4	0500—2200	
52		DEGEMA	NIG	06E35 04N35	C 9	1	1.00	60	4	0500—2300	
53		HADIJA	NIG	10E02 12N27	C 9	1	1.00	70	4	0500—2300	
54		ILORIN	NIG	04E32 08N30	C 9	1	1.00	71	4	0500—2300	



	1	2	3	4	5	6	7	8	9	10	11
1	1485	BAJURA	NPL	81E22 29N22	A20	1	0.50	60	5	2200–1900	
2	(107)	GORKHA	NPL	84E38 28N02	A20	1	0.50	60	5	2200–1900	
3		KAIGAON	NPL	82E48 29N02	A20	1	0.50	60	5	2200–1900	
4		RAMECHHAP	NPL	86E04 27N20	A20	1	0.50	60	5	2200–1900	
5		TWIZEL	NZL	170E03 44S15	A20	1	1.00	30	6	0000–2400	
6		BANNU	PAK	70E47 33N00	A20	1	0.79	60	4	0000–2000	
7		LAR	PAK	71E30 30N00	A20	1	0.79	48	3	0000–1400	
8		LARKANA	PAK	68E15 27N30	A20	1	0.79	50	4	0000–2000	
9		MIR JAWA	PAK	61E35 29N50	A20	1	0.79	141	4	0000–2400	
10		BAGUIO CITY	PHL	120E36 16N23	A 9	1	1.00	63	3	2100–1600	
11		KALIBO AKLAN	PHL	122E19 11N41	A 9	1	1.00	62	3	2100–1600	
12		BIELSKO BIALA	POL	19E02 49N49	A20	1	1.00	50	5	0000–2400	
13		BILGORAJ	POL	22E44 50N32	A20	1	1.00	50	5	0000–2400	
14		CEDYNIA	POL	14E12 52N53	A20	1	1.00	50	5	0000–2400	
15		CHMIELNIK	POL	20E45 50N39	A20	1	1.00	50	5	0000–2400	
16		DRAWSKO POMORS	POL	15E49 53N32	A20	1	1.00	50	5	0000–2400	
17		GIZYCKO	POL	21E47 54N03	A20	1	1.00	50	5	0000–2400	
18		GORLICE	POL	21E07 49N39	A20	1	1.00	50	5	0000–2400	
19		GOROWO ILAWIEC	POL	20E30 54N17	A20	1	1.00	50	5	0000–2400	
20		GUBIN	POL	14E44 51N57	A20	1	1.00	50	5	0000–2400	
21		KAZIMIERZ	POL	21E58 51N19	A20	1	1.00	50	5	0000–2400	
22		KEPNO	POL	17E59 51N18	A20	1	1.00	50	5	0000–2400	
23		KOLOBRZEG	POL	15E32 54N10	A20	1	1.00	50	5	0000–2400	
24		LEBA	POL	17E34 54N45	A20	1	1.00	50	5	0000–2400	4/DDR DNK URS
25		MORAG	POL	19E55 53N51	A20	1	1.00	50	5	0000–2400	
26		OSNO	POL	14E51 52N28	A20	1	1.00	50	5	0000–2400	
27		PRUDNIK	POL	17E34 50N19	A20	1	1.00	50	5	0000–2400	
28		PRZEMYSL	POL	22E47 49N48	A20	1	1.00	50	5	0000–2400	
29		SZCZECINEK	POL	16E42 53N43	A20	1	1.00	50	5	0000–2400	
30		ZAKOPANE	POL	19E59 49N19	A20	1	1.00	50	5	0000–2400	
31		ALTO DOURO	POR	07W28 41N09	A20	1	1.00	50	5	0000–2400	
32		CARAMULO	POR	08W09 40N34	A20	1	1.00	50	5	0000–2400	
33		RIBATEJO	POR	08W40 39N14	A20	1	1.00	50	3	0000–2400	
34		ALKHAISAH	QAT	51E25 25N25	C 9	1	1.00	50	5	0000–2400	
35		BIRLAD	ROU	27E50 46N35	A20	1	1.00	50	4	0300–2300	
36		BOTOSANI	ROU	26E39 47N44	A20	1	1.00	50	5	0300–2300	
37		BREZOI	ROU	24E13 45N20	A20	1	1.00	50	5	0300–2300	
38		BUZAU	ROU	26E32 45N08	A20	1	1.00	50	5	0300–2300	
39		CIULNITA	ROU	26E52 44N25	A20	1	1.00	50	4	0300–2300	
40		MARGHITA	ROU	22E30 47N25	A20	1	1.00	50	5	0300–2300	
41		MEDGIDIA	ROU	28E22 44N19	A20	1	1.00	50	6	0300–2300	
42		MEDIAS	ROU	25E27 46N05	A20	1	1.00	50	6	0300–2300	
43		PIATRA NEAMT	ROU	26E19 46N51	A20	1	1.00	50	4	0300–2300	
44		SASCUT	ROU	26E50 46N10	A20	1	1.00	50	6	0300–2300	
45		SLATINA	ROU	24E31 44N21	A20	1	1.00	50	4	0300–2300	
46		TARGU MURES	ROU	24E35 46N37	A20	1	1.00	50	5	0300–2300	
47		VISEU	ROU	24E22 47N47	A20	1	1.00	50	5	0300–2300	
48		ABRI	SDN	30E23 20N44	A20	1	1.00	50	3	0400–2400	
49		ABU HAMED	SDN	33E20 19N32	A20	1	1.00	50	3	0400–2400	
50		EDDUEIM	SDN	32E19 13N59	A20	1	1.00	50	2	0400–2400	
51		EL GEDAREF	SDN	35E24 14N02	A20	1	1.00	50	3	0400–2400	
52		ERKOWIT	SDN	37E07 18N45	A20	1	1.00	50	4	0400–2400	
53		KASSALA	SDN	36E24 15N28	A20	1	1.00	50	4	0400–2400	3
54		KHARTOUM	SDN	32E31 15N36	A20	1	1.00	50	3	0400–2400	



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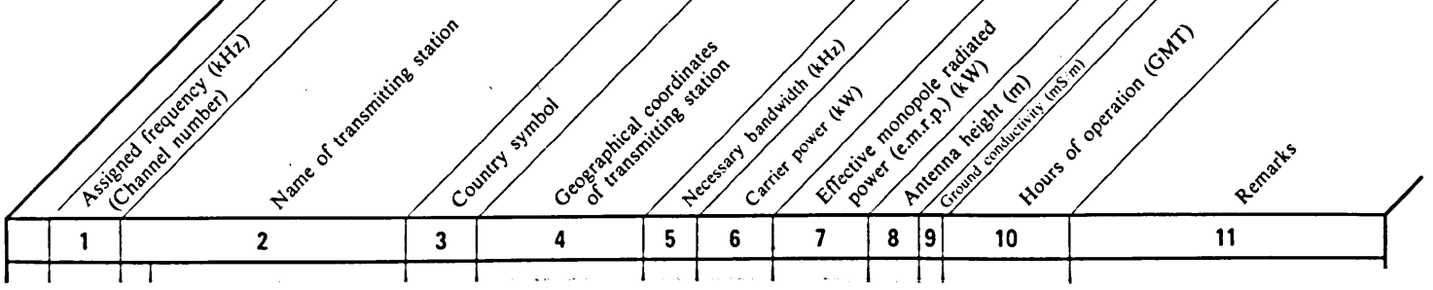
1	1485	PT SUDAN	SDN	37E13 19N37	A20	1	1.00	50	4	0400–2400	3
2	(107)	RAGA	SDN	25E41 08N28	A20	1	1.00	50	4	0400–2400	3
3		RAHAD EL BERDI	SDN	23E53 11N18	A20	1	1.00	50	3	0400–2400	3
4		RENK	SDN	32E48 11N45	A20	1	1.00	50	3	0400–2400	
5		SINGA	SDN	33E56 13N10	A20	1	1.00	50	4	0400–2400	
6		SODIRI	SDN	29E05 14N25	A20	1	1.00	50	3	0400–2400	
7		THIES	SEN	16W57 14N46	A 9	1	1.26	50	4	0600–0700	
8		SINGAPORE 2	SNG	103E50 01N25	A20	0.5	0.50	50	5	2200–1800	
9		SAVIESE	SUI	07E21 46N15	D 9	1	1.00	42	5	0500–2400	
10		DAMAS K3	SYR	36E22 33N25	A20	1	1.00	30	5	0300–2400	4/JOR TUR
11		SARAKEB 3	SYR	36E42 35N50	A20	1	1.00	50	5	0300–2400	
12		AM ZOER	TCD	21E23 14N13	A 9	0.1				0400–2300	
13		BITKINE	TCD	18E17 11N59	A 9	0.1				0400–2300	
14		HARAZE DJOMBO	TCD	19E30 13N54	A 9	0.1				0400–2300	
15		MOISSALA	TCD	17E46 08N20	A 9	0.1				0400–2300	
16		MOITO	TCD	16E38 12N35	A 9	0.1				0400–2300	
17		NDOURBALI	TCD	15E51 11N49	A 9	0.1				0400–2300	
18		BRATISLAVA	TCH	17E08 48N09	C 9	1	1.00		5	0000–2400	
19		BRNO MESTO	TCH	16E37 49N12	C 9	1	1.00		5	0000–2400	
20		BRUNTAL	TCH	17E28 50N00	A20	1	0.63	60	5	0000–2400	
21		DECIN	TCH	14E13 50N47	A20	1	0.63	60	5	0000–2400	
22		KOMARNO	TCH	18E17 47N45	A20	1	0.63	60	5	0000–2400	
23		KOSICE MESTO	TCH	21E15 48N43	C 9	1	1.00		5	0000–2400	
24		MEDZILABORCE	TCH	21E54 49N16	C 9	1	1.00	50	5	0000–2400	
25		NACHOD	TCH	16E10 50N25	A20	1	0.63	60	5	0000–2400	
26		OSTRAVA MESTO	TCH	18E18 49N50	C 9	1	1.00		5	0000–2400	
27		PRAHA MESTO	TCH	14E24 50N06	C 9	1	1.00		5	0000–2400	
28		TREBIC	TCH	15E53 49N12	A20	1	0.63	60	5	0000–2400	
29		VRCHLABI	TCH	15E36 50N38	A20	1	0.63	60	5	0000–2400	
30		BABATI	TGK	36E00 04S00	A 9	1	1.00	47	4	0300–2100	
31		KIBONDO	TGK	31E00 04S20	A 9	1	1.00	47	4	0300–2100	
32		MOROGORO	TGK	37E30 06S50	A10	1	1.00	50	4	0300–2100	
33		TUNDURU	TGK	37E30 11S00	A10	1	1.00	50	4	0300–2100	
34		SOTOBOUA	TGO	01E06 08N00	A 9	1	1.00	50	4	0500–2300	
35		TABLIGBO	TGO	01E30 06N32	A 9	1	1.00	50	4	0500–2300	
36		BANGKOK	THA	100E31 13N48	A20	1	1.00	50	2	2300–1700	
37		CHUMPHON	THA	99E12 10N36	A20	1	1.00	50	3	2300–1700	
38		KHON KAEN	THA	102E49 16N27	A20	1	1.00	50	3	2300–1700	
39		N RATCHASIMA	THA	102E00 14N56	A20	1	1.00	50	2	2300–1700	
40		NAKHON SAWAN	THA	100E18 15N16	A20	1	1.00	50	2	2300–1700	
41		PHITSANULOK	THA	100E22 16N49	A20	1	1.00	50	2	2300–1700	
42		SATUL	THA	99E55 06N50	A20	1	1.00	50	3	2300–1700	
43		SURAT THANI	THA	99E18 09N07	A20	1	1.00	30	3	2300–1500	
44		TRANG	THA	99E37 07N32	A20	1	1.00	50	3	2300–1700	
45		YALA	THA	101E17 06N32	A20	1	1.00	30	3	2300–1400	
46		BEJA	TUN	09E20 36N45	D20	1	1.00	51	4	0000–2400	
47		BIZERTE	TUN	09E50 37N15	D20	1	1.00	51	4	0000–2400	
48		KERKENNA	TUN	11E05 34N50	D20	1	1.00	51	4	0000–2400	4/I MLT
49		MEDENINE	TUN	10E30 33N20	D20	1	1.00	51	4	0000–2400	
50		MONASTIR	TUN	10E09 35N50	D20	1	1.00	51	4	0000–2400	4/I MLT
51		NEFTA	TUN	07E50 33N50	D20	1	1.00	51	4	0000–2400	
52		SELIANA	TUN	09E00 36N02	D20	1	1.00	51	4	0000–2400	
53		CESME	TUR	26E30 38N18	A20	1	1.00	43	4	0200–2300	
54		HAKKARI	TUR	43E43 37N36	A20	1	1.00	43	4	0200–2300	



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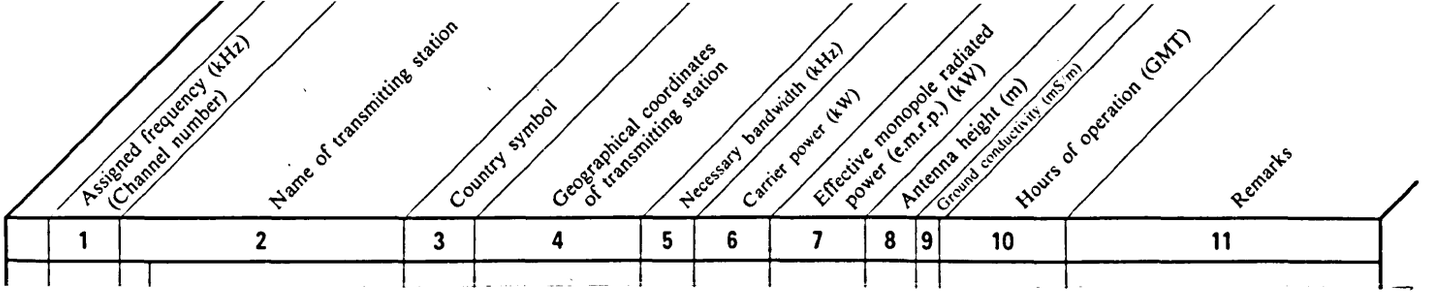
1	1485	KAS	TUR	29E41 36N13	A20	1	1.00	43	4	0200—2300	
2	(107)	ORDU	TUR	37E52 41N00	A20	1	1.00	43	4	0200—2300	
3		RIZE	TUR	40E30 41N02	A20	1	1.00	43	4	0200—2300	
4		ARUA	UGA	31E15 03N15	A 9	1	1.00	47	4	0300—2100	
5		JJINJA	UGA	33E14 00N30	A 9	1	1.00	47	4	0300—2100	
6		MASAKA	UGA	32E00 00S10	A 9	1	1.00	47	4	0300—2100	
7		DNEPROPETROVSK	UKR	35E44 48N48	A20	1	1.00	120	4	0000—2400	
8		DONETSK	UKR	37E29 47N56	A20	1	1.00	120	4	0000—2400	
9		FEODOSIA	UKR	35E20 45N02	A20	1	1.00	120	4	0000—2400	
10		IALTA	UKR	34E10 44N39	A20	1	1.00	120	4	0000—2400	
11		IZIUM	UKR	37E17 49N13	A20	1	1.00	120	4	0000—2400	
12		IZMAIL	UKR	28E51 45N20	A20	1	1.00	120	4	0000—2400	
13		JDANOV	UKR	37E31 47N06	A20	1	1.00	120	4	0000—2400	
14		JITOMIR	UKR	28E37 50N15	A20	1	1.00	120	4	0000—2400	
15		KAMYCH ZARIA	UKR	36E35 45N20	A20	1	1.00	120	4	0000—2400	
16		KHARKOV	UKR	36E14 49N58	A20	1	1.00	120	4	0000—2400	
17	S	KIEV	UKR	30E38 50N27	A16	1	1.00	120	4	0000—2400	
18		KIROVOGRAD	UKR	32E20 48N30	A20	1	1.00	120	4	0000—2400	
19		KOVEL	UKR	24E41 51N16	A20	1	1.00	120	4	0000—2400	
20		KRIVOI ROG	UKR	33E25 47N55	A20	1	1.00	120	4	0000—2400	
21		LUTSK	UKR	25E20 50N45	A20	1	1.00	120	4	0000—2400	
22		LVOV	UKR	24E00 49N50	A20	1	1.00	120	4	0000—2400	
23		NIKOLAEV	UKR	32E01 46N58	A20	1	1.00	120	4	0000—2400	
24		ODESSA	UKR	30E45 46N29	A20	1	1.00	120	4	0000—2400	
25		PODVOLOTCHISK	UKR	26E10 49N35	A20	1	1.00	120	4	0000—2400	
26		ROVNO	UKR	26E14 50N39	A20	1	1.00	120	4	0000—2400	
27		SIMFEROPOL	UKR	34E06 44N56	A20	1	1.00	120	4	0000—2400	
28		STAROBELSK	UKR	38E34 49N35	A20	1	1.00	120	4	0000—2400	
29		TCHERKASSY	UKR	32E02 49N27	A20	1	1.00	120	4	0000—2400	
30		TCHERNIGOV	UKR	31E19 51N29	A20	1	1.00	120	4	0000—2400	
31		TCHERNOVITSY	UKR	25E55 48N20	A20	1	1.00	120	4	0000—2400	
32		UJGOROD	UKR	22E20 48N38	A20	1	1.00	120	4	0000—2400	
33		VINNITSA	UKR	28E28 49N14	A20	1	1.00	120	4	0000—2400	
34		VOLOTCHISK	UKR	26E12 49N36	A20	1	1.00	120	4	0000—2400	
35		VOROCHILOVGRAD	UKR	39E15 48N32	A20	1	1.00	120	4	0000—2400	
36		AFANASIVKA	URS	57E50 56N43	A20	1	1.00	120	4	0000—2400	
37		ALDAN	URS	125E24 58N36	A20	1	1.00	120	4	0000—2400	
38		ALEKSANDROV SA	URS	142E18 50N58	A18	1	1.00	120	4	0000—2400	
39		ALMA ATA	URS	77E00 43N17	A18	1	1.00	120	4	0000—2400	
40		ANDIJAN	URS	72E27 40N47	A18	1	1.00	120	4	0000—2400	
41		BAKU	URS	49E45 40N20	A20	1	1.00	120	4	0000—2400	
42		BELGOROD	URS	36E30 50N38	A20	1	1.00	120	4	0000—2400	
43		BEREGNIKI	URS	56E15 59N24	A20	1	1.00	120	4	0000—2400	
44		BIROBIDJAN	URS	133E00 49N16	A18	1	1.00	120	4	0000—2400	
45		CHAULIAI	URS	23E15 55N56	A18	1	1.00	120	4	0000—2400	
46		CHELABINSK	URS	61E24 55N09	A20	1	1.00	120	4	0000—2400	
47		CHERLAK	URS	74E42 53N18	A20	1	1.00	120	4	0000—2400	
48		CHERSKI	URS	162E00 67N30	A20	1	1.00	120	4	0000—2400	
49	S	DAUGAVPILS	URS	26E33 55N50	A16	1	1.00	120	4	0000—2400	
50		DUDINKA	URS	86E07 69N37	A20	1	1.00	120	4	0000—2400	
51		ENISEISK	URS	92E00 58N15	A20	1	1.00	120	4	0000—2400	
52		ERBOGACHEN	URS	108E00 61N18	A20	1	1.00	120	4	0000—2400	
53		EREVAN	URS	44E30 40N11	A20	1	1.00	120	4	0000—2400	
54		FRUNZE	URS	74E37 42N54	A18	1	1.00	120	4	0000—2400	

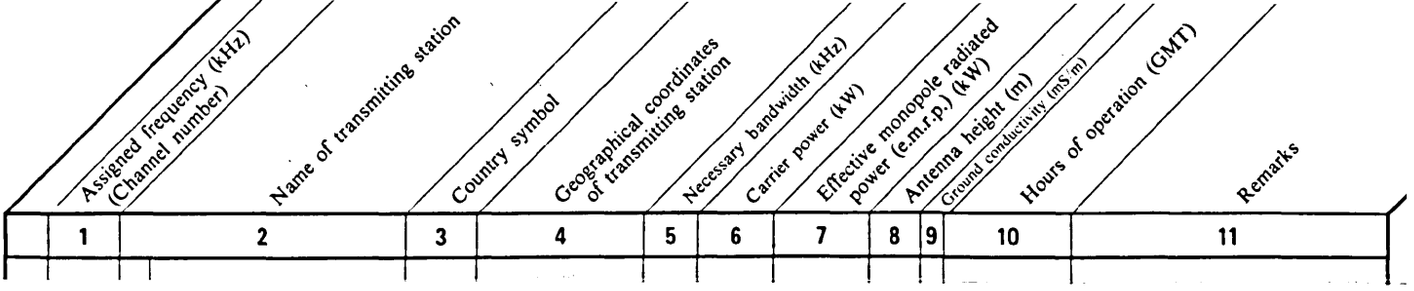
	1		2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1485		GDOV	URS	27E51 58N41	A20	1	1.00	120	4	0000–2400	
2	(107)		GORNO ALTAISK	URS	85E52 51N57	A18	1	1.00	120	4	0000–2400	
3			GREMIHA	URS	39E52 68N03	A20	1	1.00	120	4	0000–2400	
4			GROZNE	URS	45E38 43N19	A20	1	1.00	120	4	0000–2400	
5			IGAGCA	URS	86E34 67N29	A20	1	1.00	120	4	0000–2400	
6			IMAN	URS	133E43 45N56	A18	1	1.00	120	4	0000–2400	
7			INTA	URS	60E00 66N00	A20	1	1.00	120	4	0000–2400	
8			IRBIT	URS	63E02 57N43	A20	1	1.00	120	4	0000–2400	
9			IRKUTSK	URS	104E20 52N17	A18	1	1.00	120	4	0000–2400	
10			IUJNSAKHALINSK	URS	143E00 47N00	A18	1	1.00	120	2	0000–2400	
11			IVANO FRANKOVS	URS	24E32 48N36	A20	1	1.00	120	4	0000–2400	
12			KALEVALA	URS	31E11 65N13	A18	1	1.00	120	4	0000–2400	
13			KAMEN OBI	URS	81E19 54N40	A20	1	1.00	120	4	0000–2400	
14			KAMISNIN	URS	45E20 50N06	A20	1	1.00	120	4	0000–2400	
15			KAMO	URS	45E00 40N15	A20	1	1.00	120	4	0000–2400	
16			KARAVAN	URS	72E08 40N18	A20	1	1.00	120	4	0000–2400	
17			KAUNAS	URS	23E54 54N52	A18	1	1.00	120	4	0000–2400	
18			KAZAN	URS	49E08 55N47	A20	1	1.00	120	4	0000–2400	
19			KEGMA	URS	100E28 50N06	A20	1	1.00	120	4	0000–2400	
20			KEM	URS	34E00 65N00	A20	1	1.00	120	4	0000–2400	
21			KEMEROVO	URS	86E00 55N22	A20	1	1.00	120	4	0000–2400	
22			KHABAROVSK	URS	135E10 48N33	A18	1	1.00	120	4	0000–2400	
23			KHANTY MANSIJS	URS	62E00 61N00	A20	1	1.00	120	4	0000–2400	
24			KHATANGA	URS	102E30 72N00	A20	1	1.00	120	4	0000–2400	
25			KIROV	URS	49E41 58N36	A20	1	1.00	120	4	0000–2400	
26			KIROVABAD	URS	46E21 40N39	A18	1	1.00	120	4	0000–2400	
27			KIRS	URS	52E50 67N00	A20	1	1.00	120	4	0000–2400	
28			KLIUCHI	URS	160E10 56N19	A20	1	1.00	120	4	0000–2400	
29			KOKHTLA IARVE	URS	27E10 59N20	A18	1	1.00	120	4	0000–2400	
30			KOSTROMA	URS	41E00 57N50	A20	1	1.00	120	4	0000–2400	
31			KULDIGA	URS	21E58 56N58	A18	1	1.00	120	4	0000–2400	
32			KURGAN	URS	65E17 55N29	A20	1	1.00	120	4	0000–2400	
33			KUZEMA	URS	34E12 65N22	A18	1	1.00	120	4	0000–2400	
34			KYZYL	URS	94E28 51N43	A18	1	1.00	120	4	0000–2400	
35			LENDERY	URS	31E14 63N22	A18	1	1.00	120	4	0000–2400	
36			LENINABAD	URS	69E37 40N16	A18	1	1.00	120	4	0000–2400	
37			LENINOGOASK	URS	83E30 51N30	A20	1	1.00	120	4	0000–2400	
38		S	LIEPAIA	URS	21E02 56N33	A16	1	1.00	120	4	0000–2400	
39			LIPETZK	URS	39E35 52N38	A20	1	1.00	120	4	0000–2400	
40			MADONA	URS	26E13 56N49	A18	1	1.00	120	4	0000–2400	
41			MAIKOP	URS	39E50 45N00	A20	1	1.00	120	4	0000–2400	
42			MARY	URS	61E50 37N35	A18	1	1.00	120	4	0000–2400	
43			MEDVEJIEGORSK	URS	34E24 62N56	A18	1	1.00	120	4	0000–2400	
44		S	MOSKVA	URS	37E38 55N45	A16	1	1.00	120	4	0000–2400	
45			MURGAB	URS	74E02 38N11	A20	1	1.00	120	4	0000–2400	
46			NARIAN–MAR	URS	53E08 68N02	A20	1	1.00	120	4	0000–2400	
47			NEBIT DAG	URS	54E03 39N20	A18	1	1.00	120	4	0000–2400	
48			NIKOLAEVSK AMU	URS	140E42 53N10	A20	1	1.00	120	4	0000–2400	
49			NORILSK	URS	88E15 69N12	A20	1	1.00	120	4	0000–2400	
50			OIMIAKON	URS	145E00 63N15	A20	1	1.00	120	4	0000–2400	
51			OLENEK	URS	112E00 68N12	A20	1	1.00	120	4	0000–2400	
52			ORDJONIKIDZE	URS	44E21 43N01	A18	1	1.00	120	4	0000–2400	
53			ORSK	URS	58E44 51N13	A20	1	1.00	120	4	0000–2400	
54			OSINOVO	URS	90E00 61N12	A20	1	1.00	120	4	0000–2400	



	1	2	3	4	5	6	7	8	9	10	11
1	1485	PIARNU	URS	24E33 58N23	A18	1	1.00	120	4	0000–2400	
2	(107)	PORONAISK	URS	143E05 49N11	A20	1	1.00	120	4	0000–2400	
3		REZEKNE	URS	27E20 56N33	A18	1	1.00	120	4	0000–2400	
4		RIAZAN	URS	39E15 54N35	A20	1	1.00	120	4	0000–2400	
5		RIGA	URS	24E05 56N57	A20	1	1.00	120	4	0000–2400	
6		SAMBURG	URS	77E30 67N45	A20	1	1.00	120	4	0000–2400	
7		SARANSK	URS	45E06 54N12	A20	1	1.00	120	4	0000–2400	
8		SHARY	URS	45E30 58N21	A20	1	1.00	120	4	0000–2400	
9		SHVEDCHIKI	URS	54E30 43N54	A20	1	1.00	120	4	0000–2400	
10		SMOLENSK	URS	31E43 54N48	A20	1	1.00	120	4	0000–2400	
11		SOTCHI	URS	39E23 43N35	A18	1	1.00	120	4	0000–2400	
12		SPASSK–DALNI	URS	132E47 44N38	A20	1	1.00	120	4	0000–2400	
13		SUKHUMI	URS	41E00 43N00	A18	1	1.00	120	4	0000–2400	
14		SVOBODNYI	URS	128E00 51N30	A18	1	1.00	120	4	0000–2400	
15		TACHKENT	URS	69E15 41N19	A18	1	1.00	120	4	0000–2400	
16		TAISHET	URS	98E01 55N57	A20	1	1.00	120	4	0000–2400	
17		TALLIN	URS	24E46 59N24	A18	1	1.00	120	4	0000–2400	
18		TBILISI	URS	44E30 41N40	A18	1	1.00	120	4	0000–2400	
19		TCHARDJOU	URS	63E55 39N02	A18	1	1.00	120	4	0000–2400	
20		TCHITA	URS	113E20 52N02	A18	1	1.00	120	4	0000–2400	
21		TROIZSKOE	URS	136E34 49N30	A20	1	1.00	120	4	0000–2400	
22	S	TSESVAINE	URS	26E20 57N56	A16	1	1.00	120	4	0000–2400	
23		TULA	URS	37E37 54N12	A20	1	1.00	120	4	0000–2400	
24		TURUHANSK	URS	87E57 65N47	A20	1	1.00	120	4	0000–2400	
25		TYRMA	URS	132E15 50N05	A20	1	1.00	120	4	0000–2400	
26		TZAKIR	URS	103E36 50N17	A20	1	1.00	120	4	0000–2400	
27		UGLEGORSK	URS	142E10 48N59	A18	1	1.00	120	4	0000–2400	
28		URGUM	URS	49E41 58N36	A20	1	1.00	120	4	0000–2400	
29		UST BOLSHEREZK	URS	156E00 52N52	A20	1	1.00	120	4	0000–2400	
30		VALMIERA	URS	25E29 57N32	A18	1	1.00	120	4	0000–2400	
31		VECHINTOS	URS	25E00 55N40	A18	1	1.00	120	4	0000–2400	
32		VETLUGA	URS	45E44 57N51	A20	1	1.00	120	4	0000–2400	
33	S	VILNIUS	URS	25E15 54N40	A16	1	1.00	120	4	0000–2400	
34		VIZENGA	URS	63E12 67N16	A20	1	1.00	120	4	0000–2400	
35		VLADIVOSTOK	URS	131E53 43N07	A18	1	1.00	120	4	0000–2400	
36		VORKUTA	URS	63E45 67N40	A20	1	1.00	120	4	0000–2400	
37		VRINSK	URS	48E40 62N05	A20	1	1.00	120	4	0000–2400	
38		WANKAREN	URS	176E00 67N20	A20	1	1.00	120	4	0000–2400	
39		WAKE ISLAND	WAK	166E38 19N16	A 9	0.5	0.40	5	2	2300–1100	
40		KHAMER	YEM	44E02 16N03	A 9	1	1.00	55	3	0300–2200	
41		ADEN	YMS	45E00 12N50	A 9	1	1.00	55	4	0300–2200	4/YEM
42		ALGHAYDAH	YMS	52E00 16N25	A 9	1	1.00	55	4	0300–2200	
43		BEROVO	YUG	22E52 41N42	D20	1	0.50	40	5	0000–2400	
44		BOS GRADISKA	YUG	17E16 45N09	D20	1	0.50	40	3	0000–2400	
45		BRCKO	YUG	18E50 44N50	D20	1	0.50	40	3	0000–2400	
46		CETINJE	YUG	18E56 42N23	D20	1	0.50	40	5	0000–2400	4/BUL GRC I
47		DEBAR 1	YUG	20E32 41N32	D20	1	0.50	40	5	0000–2400	4/BUL GRC I
48		DRAGAS	YUG	20E39 42N04	D20	1	0.50	40	7	0000–2400	4/BUL GRC I
49		DRVAR	YUG	16E24 44N22	D20	1	0.50	40	5	0000–2400	
50		DUBROVNIK	YUG	18E07 42N39	D20	1	0.50	40	5	0000–2400	
51		GADZIN HAN	YUG	22E03 43N12	D20	0.3	0.15	40		0000–2400	
52		GOLUBAC	YUG	21E38 44N38	D20	1	0.50	40	3	0000–2400	
53		IVANJICA	YUG	20E14 43N34	D20	0.3	0.15	40	4	0000–2400	
54		JAJCE	YUG	17E19 44N23	D20	1	0.50	40	5	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1	1485	JESENICE	YUG	14E04 46N26	D20	1	0.50	40	6	0000–2400	
2	(107)	KAVADARCI	YUG	22E01 41N26	D20	1	0.50	40	4	0000–2400	
3		KICEVO	YUG	20E58 41N31	D20	1	0.50	40	6	0000–2400	4/BUL GRC I
4		KIKINDA	YUG	20E30 45N47	D20	1	0.50	40	3	0000–2400	
5		KLADOVO	YUG	22E36 44N35	D20	1	0.50	40	3	0000–2400	
6		KOS KAMENICA	YUG	21E35 42N35	D20	1	0.50	40	5	0000–2400	
7		KRIVA PALANKA	YUG	20E00 42N12	D20	1	0.50	40	6	0000–2400	
8		KUCEVO	YUG	21E40 44N29	D20	0.3	0.15	40		0000–2400	
9		LEPOSAVIC	YUG	20E49 43N06	D20	1	0.50	40	5	0000–2400	
10		LJUBUSKI	YUG	17E36 43N21	D20	1	0.50	40	5	0000–2400	
11		NIKSIC 2	YUG	18E57 42N46	D20	1	0.63	60	5	0000–2400	
12		NOVA GORICA	YUG	13E40 45N58	D20	1	0.50	40	4	0000–2400	
13		PIROT	YUG	22E33 43N08	D20	1	0.50	40	4	0000–2400	
14		PLAV	YUG	19E27 42N36	D20	1	0.50	40	5	0000–2400	4/BUL GRC I
15		PLUZINE	YUG	18E51 43N11	D20	1	0.50	40	5	0000–2400	
16		POSUSJE	YUG	17E19 43N29	D20	1	0.50	40	5	0000–2400	
17		PRIBOJ	YUG	19E33 43N33	D20	0.3	0.15	40	5	0000–2400	
18		PTUJ	YUG	15E52 46N25	D20	1	0.50	50	4	0000–2400	
19		RAB	YUG	14E45 44N45	D20	1	0.50	40	4	0000–2400	
20		RACA	YUG	20E59 44N14	D20	0.3	0.15	40	3	0000–2400	
21		RADLJE	YUG	15E13 46N37	D20	1	0.50	40	8	0000–2400	
22		RESEN	YUG	21E01 41N06	D20	1	0.50	40	6	0000–2400	4/BUL GRC I
23		RIJEKA	YUG	14E26 45N20	D20	1	0.50	40	4	0000–2400	
24		ROVINJ	YUG	13E37 45N06	D20	1	0.50	40	4	0000–2400	
25		SLUNJ	YUG	15E35 45N05	D20	1	0.50	40	5	0000–2400	
26		SPLIT	YUG	16E28 43N30	D20	1	0.50	40	5	0000–2400	
27		SREBRENICA	YUG	19E19 44N07	D20	1	0.50	40	4	0000–2400	
28		TRBOVLJE	YUG	15E03 46N10	D20	1	0.50	45	5	0000–2400	
29		TRGOVISTE	YUG	22E06 42N22	D20	1	0.50	40	5	0000–2400	
30		TUTIN	YUG	20E21 42N59	D20	0.3	0.15	40	4	0000–2400	
31		VIROVITICA	YUG	17E22 45N49	D20	1	0.50	40	4	0000–2400	
32		ZABLJAK	YUG	19E00 43N09	D20	1	0.50	40	5	0000–2400	
33		ZAGREB	YUG	15E58 45N49	D20	1	0.50	40	3	0000–2400	
34		ZAJECAR	YUG	22E18 43N55	D20	1	0.50	40	3	0000–2400	
35		BENI	ZAI	29E28 00N30	A 9	1	1.00	60	8	0000–2400	4/CAF
36		ISOKA	ZMB	32E47 10S15	A20	1	1.00	50	4	0200–2100	
37		KAOMA	ZMB	24E48 14S48	A20	1	1.00	50	4	0200–2100	
38		KASEMPA	ZMB	25E47 13S23	A20	1	1.00	50	4	0200–2100	
39		KAWAMBWA	ZMB	29E05 09S47	A20	1	1.00	50	4	0200–2100	
40		SESHEKE	ZMB	24E20 17S25	A20	1	1.00	50	4	0200–2100	



	1	2	3	4	5	6	7	8	9	10	11
1	1584	BADGHIS	AFG	63E01 35N03	A 9	1	1.00	47	4	0000–2400	3
2	(118)	KATAWAZ	AFG	68E05 32N08	A 9	1	1.00	47	4	0000–2400	3
3		LASHOJOWAIN	AFG	61E07 31N08	A 9	1	1.00	47	4	0000–2400	3
4		PARWAN	AFG	69E05 35N00	A 9	1	1.00	47	4	0000–2400	
5		QEZELQALA	AFG	68E09 37N01	A 9	1	1.00	47	4	0000–2400	3
6		SAMANGAN	AFG	68E00 36N04	A 9	1	1.00	47	4	0000–2400	
7		SAROBI	AFG	69E02 34N07	A 9	1	1.00	47	4	0000–2400	
8		SHEBERGHAN	AFG	65E09 38N08	A 9	1	1.00	47	4	0000–2400	3
9		TAJQURGHAN	AFG	67E07 36N08	A 9	1	1.00	47	4	0000–2400	
10		CACONDA	AGL	15E00 13S45	A20	1	1.00	50	3	0000–2400	
11		N LISBOA	AGL	15E45 12S47	A10	0.5	0.50	50	3	0500–2300	
12		S SALVADOR	AGL	14E00 06S20	A20	0.5	0.50	48	3	0000–2400	3
13		FUSHE AREZ	ALB	19E55 42N03	A20	1	0.63	50	6	0400–2300	
14		VLORE	ALB	19E30 40N27	A20	1	0.63	50	5	0400–2300	3
15		AFLOU	ALG	02E45 34N00	A20	1				0600–2400	
16		BEDJAIA	ALG	05E05 36N45	A20	1				0600–2400	
17		MT GAMBIER SA	AUS	140E47 37S49	A20	0.2		21	3	1900–1400	
18		WOOMERA SA	AUS	136E49 31S12	A20	0.1		21	3	1900–1400	
19		BAD AUSSEE	AUT	13E47 47N37	D 9	0.1	0.10	15	6	0000–2400	
20		BAD HOFGASTEIN	AUT	13E07 47N10	D 9	0.1	0.10	15	6	0000–2400	
21		BAD ISCHL	AUT	13E38 47N42	D 9	0.1	0.10	15	6	0000–2400	
22		BAD S LEONHARD	AUT	14E47 46N57	D 9	0.1	0.10	15	6	0000–2400	
23		EHRWALD TIROL	AUT	10E55 47N24	D 9	0.1	0.10	15	6	0000–2400	
24		EISENERZ	AUT	14E54 47N33	D 9	0.1	0.10	15	6	0000–2400	
25		HASLACH	AUT	14E03 48N35	D 9	0.1	0.10	15	6	0000–2400	
26		KNITTELFELD	AUT	14E50 47N13	D 9	0.1	0.10	15	6	0000–2400	
27		KUFSTEIN	AUT	12E11 47N35	D 9	0.1	0.10	15	6	0000–2400	
28		LAENGENFELD	AUT	10E58 47N05	D 9	0.1	0.10	15	6	0000–2400	
29		LANDECK	AUT	10E33 47N08	D 9	0.1	0.10	15	6	0000–2400	
30		NAUDERS	AUT	10E31 46N54	D 9	0.1	0.10	15	6	0000–2400	
31		NEUBERG MUERZ	AUT	15E34 47N40	D 9	0.1	0.10	15	6	0000–2400	
32		NEUMARKT	AUT	14E25 47N04	D 9	0.1	0.10	15	6	0000–2400	
33		OBERVELLACH	AUT	13E12 46N56	D 9	0.1	0.10	15	6	0000–2400	
34		RADSTADT	AUT	13E27 47N24	D 9	0.1	0.10	15	6	0000–2400	
35		ROTTENMANN	AUT	14E22 47N32	D 9	0.1	0.10	15	6	0000–2400	
36		S GALLEN	AUT	14E37 47N41	D 9	0.1	0.10	15	6	0000–2400	
37		SCHARNITZ	AUT	11E16 47N23	D 9	0.1	0.10	15	6	0000–2400	
38		UNZMARKT	AUT	14E27 47N12	D 9	0.1	0.10	15	6	0000–2400	
39		ZELL AM SEE	AUT	12E48 47N20	D 9	0.2	0.20	15	6	0000–2400	
40		ZELL AM ZILLER	AUT	11E53 47N14	D 9	0.1	0.10	15	6	0000–2400	
41		LAJES	AZR	27W09 38N43	A20	1	1.00	50	4	0000–2400	
42		GISAGARA	BDI	30E40 03S12	A 9	1	1.00	47	4	0500–0100	
43		KUSHTIA	BGD	88E55 23N56	A20	1	1.00	50	3	0000–1800	
44		BARANOVICHI	BLR	26E03 53N08	A20	1	1.00	120	4	0000–2400	
45		GOMEL	BLR	31E01 52N25	A20	1	1.00	120	4	0000–2400	
46		GRODNO	BLR	24E00 53N54	A20	1	1.00	120	4	0000–2400	
47		KLIMOVICHI	BLR	32E00 53N36	A20	1	1.00	120	4	0000–2400	
48		MINSK	BLR	27E34 53N56	A20	1	1.00	120	4	0000–2400	
49		MOZYR	BLR	29E25 52N10	A20	1	1.00	120	4	0000–2400	
50		UCHACHI	BLR	28E30 55N20	A20	1	1.00	120	4	0000–2400	
51		FRANCISTOWN	BOT	27E33 21S13	A20	1	0.79	40	4	0300–2100	3
52		GHANZI	BOT	21E40 21S40	A20	1	0.79	40	4	0300–2100	3
53		LOBATSI	BOT	25E42 25S12	A20	1	0.79	40	4	0300–2100	3
54		SEROWE	BOT	26E42 22S23	A20	1	1.00	40	4	0300–2100	

	1		2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1584	S	MALKO TARNOVO	BUL	27E36 42N00	A18	1	1.00	30	5	0000–2400	
2	(118)	S	SILISTRA	BUL	27E12 44N06	A18	1	1.00	30	5	0000–2400	
3		S	SMOLIAN	BUL	24E40 41N35	A18	1	1.00	30	5	0000–2400	
4		S	SOZOPOL	BUL	27E41 42N24	A18	1	1.00	30	5	0000–2400	
5		S	TRAN	BUL	22E47 42N39	A18	1	1.00	30	5	0000–2400	
6			BAKOUMA	CAF	22E47 05N42	A 9	1	1.00	20	5	0400–2300	
7			BIRAO	CAF	22E40 10N10	A 9	1	1.00	20	5	0400–2300	
8			BOUCA	CAF	18E16 06N30	A 9	1	1.00	20	5	0400–2300	
9			CARNOT	CAF	15E52 04N59	A 9	1	1.00	20	3	0400–2300	
10			OUANGO	CAF	22E33 04N19	A 9	1	1.00	20	3	0400–2300	
11			KOROR	CAR	134E35 07N26	A10	0.1	0.10	64	2	2100–1500	
12			BAOAN	CHN	114E05 22N38	A20	0.5	0.50	60	4	2000–1800	
13			CHENGDE SHI	CHN	117E48 41N00	A20	1	1.00	120	4	2000–1800	
14			GUANGZHOU	CHN	113E14 23N11	A20	0.1	0.10	50	4	2000–1800	
15			JINHUA	CHN	119E30 29N15	A20	0.5	0.50	90	4	2000–1800	
16			LUOYANG	CHN	112E24 34N42	A20	0.5	0.50	60	4	2000–1800	
17			NANNING	CHN	108E18 22N48	A20	0.5	0.50	90	4	2000–1800	3
18			SHANGHAI	CHN	121E29 31N15	A20	0.5	0.50	90	3	2000–1800	
19			TENGCHONG	CHN	98E20 25N00	A20	0.5	0.50	90	5	2000–1800	3
20			TIANSHUI SHI	CHN	105E30 34N30	A20	0.5	0.50	70	4	2000–1800	
21			WUYUAN	CHN	108E12 41N30	A20	0.5	0.50	90	4	2000–1800	
22			XIAMEN	CHN	118E18 24N24	A20	0.5	0.50	60	4	2000–1800	
23			XIAN	CHN	108E54 34N12	A20	0.4	0.40	50	4	2000–1800	
24			XUZHOU	CHN	117E20 34N14	A20	0.5	0.50	70	3	2000–1800	
25			YANAN	CHN	109E29 36N37	A20	1	1.00	70	4	2000–1800	
26			YANTAI	CHN	121E18 37N36	A20	0.5	0.50	70	4	2000–1800	3
27			YUANLING	CHN	110E20 28N40	A20	0.5	0.50	70	4	2000–1800	
28			ZHANGYE	CHN	100E30 38N54	A20	0.5	0.50	70	4	2000–1800	
29			ZHENGZHOU	CHN	113E42 34N42	A20	0.5	0.50	90	4	2000–1800	
30			ZUNYI SHI	CHN	106E50 27N32	A20	0.5	0.50	120	5	2000–1800	
31			BATTICALOA	CLN	81E40 07N45	A20	1	1.00	50	5	0000–1800	
32			CHILAW	CLN	79E48 07N30	A20	1	1.00	50	5	0000–1800	
33			COLOMBO	CLN	79E50 06N55	A20	1	1.00	50	5	0000–1800	
34			JAFFNA	CLN	80E10 09N47	A20	1	1.00	50	5	0000–1800	3
35			MANNAR	CLN	79E53 09N05	A20	1	1.00	50	5	0000–1800	3
36			MATARA	CLN	80E27 06N00	A20	1	1.00	50	5	0000–1800	
37			PUTTALAM	CLN	79E50 08N10	A20	1	1.00	50	5	0000–1800	3
38			TRINCOMALEE	CLN	81E15 08N30	A20	1	1.00	50	5	0000–1800	3
39			BAFOUSSAM	CME	10E25 05N27	A 9	1		50	4	0500–2300	
40			BATOURI	CME	14E21 04N27	A 9	1			5	0500–2300	
41			KUMBA	CME	09E14 05N46	A 9	1			4	0500–2300	
42			MAKARI	CME	13E09 04N40	A 9	1			4	0500–2300	
43			MBANGA	CME	09E36 04N27	A 9	1			5	0500–2300	
44			MBOUDA	CME	10E00 05N30	A 9	1			4	0500–2300	
45			MEIGANGA	CME	14E21 06N30	A 9	1			4	0500–2300	
46			MOLOUNDOU	CME	15E18 02N06	A 9	1			5	0500–2300	
47			NANGA EBOKO	CME	12E24 04N37	A 9	1			5	0500–2300	
48			ARRECIFE	CNR	13W35 28N55	A20	1	0.63	40	5	0000–2400	
49			ARUCAS	CNR	15W40 28N10	A20	1	0.63	30	5	0000–2400	
50			LOS LLANOS	CNR	17W55 28N40	A20	1	0.63	40	5	0000–2400	
51			PT ROSARIO	CNR	13W50 28N30	A20	1	0.63	30	5	0000–2400	
52			S SEBASTIANGOM	CNR	17W05 28N05	A20	1	0.63	40	5	0000–2400	
53			EPENA	COG	17E29 01N22	A20	1	0.50			0000–2400	
54			KIMONGO	COG	12E55 04S27	A20	1	0.50			0000–2400	

	1	2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1584	BONGOUANOU	CTI	04W14 06N38	A 9	1			7	0600–2400	
2	(118)	DANANE	CTI	08W08 07N22	A 9	1			7	0600–2400	
3		SEGUELA	CTI	06W55 07N56	A 9	1	1.00	47	7	0600–2400	
4		TIASSALE	CTI	04W49 06N00	A 9	1			7	0600–2400	
5		YAMOUSSOUKRO	CTI	05W27 06N58	A 9	0.1			7	0600–2400	
6		LIMASSOL	CYP	33E00 34N42	A 9	1	1.00	50	5	0000–2400	4/GRC
7		COTONOU	DAH	02E28 06N22	A10	1	1.00	47	4	0500–2400	
8		KANDI	DAH	02E56 11N08	A10	1	1.00	47	4	0500–2400	
9		BAD DOBERAN	DDR	11E53 54N07	D 9	1		20	3	0000–2400	4/D
10		BAD SALZUNGEN	DDR	10E09 50N47	D 9	1		20	4	0000–2400	
11		KARL MARX STD	DDR	12E58 50N47	D 9	1	1.00	20	4	0000–2400	
12		NORDHAUSEN	DDR	10E58 51N30	D 9	1		20	4	0000–2400	
13		PASEWALK	DDR	14E00 53N30	D 9	1		20	4	0000–2400	
14		PRITZWALK	DDR	12E12 53N09	D 9	1		20	4	0000–2400	
15		SCHLEIZ	DDR	11E49 50N34	D 9	1		20	4	0000–2400	
16		SEBNITZ	DDR	14E17 50N58	D 9	1		20	4	0000–2400	
17		WEISSWASSER	DDR	14E39 51N31	D 9	1		20	4	0000–2400	
18		BARBATE	E	05W55 36N15	D20	0.3	0.19	30	4	0000–2400	
19		BEJAR	E	05W45 40N25	D20	0.3	0.19	30	5	0000–2400	
20		BURGOS	E	03W40 42N20	D20	1	0.63	30	4	0000–2400	
21		CANGAS NARCEA	E	06W30 43N10	D20	0.3	0.19	30	5	0000–2400	
22		CARTAGENA	E	01W00 37N35	D20	1	0.63	30	5	0000–2400	
23		CUENCA	E	02W10 40N05	D20	1	0.63	30	5	0000–2400	
24		GERONA	E	02E50 42N00	D20	1	0.63	30	5	0000–2400	
25		GRANADA	E	03W35 37N10	D20	1	0.63	30	5	0000–2400	
26		HUELVA	E	06W55 37N15	D20	1	0.63	30	3	0000–2400	
27		HUESCA	E	00W20 42N10	D20	0.5	0.32	30	5	0000–2400	
28		JAEN	E	03W45 37N45	D20	1	0.63	30	5	0000–2400	
29		LA GUARDIA	E	08W50 41N55	D20	0.3	0.19	30	5	0000–2400	
30		LEON	E	05W35 42N35	D20	1	0.63	30	5	0000–2400	
31		LOGRONO	E	02W30 42N30	D20	1	0.63	30	4	0000–2400	
32		LUGO	E	07W35 43N00	D20	1	0.63	30	5	0000–2400	
33		MANACOR	E	03E15 39N35	D20	0.3	0.19	30	4	0000–2400	
34		MORON	E	05W25 37N10	D20	0.3	0.19	30	4	0000–2400	
35		OSUNA	E	05W00 37N15	D20	0.3	0.19	30	4	0000–2400	
36		REQUENA	E	01W10 39N30	D20	0.3	0.19	30	5	0000–2400	
37		S SEBASTIAN	E	02W00 43N20	D20	1	0.63	30	5	0000–2400	
38		SEGOVIA	E	04W05 40N55	D20	0.5	0.32	30	5	0000–2400	
39		SOCUELLAMOS	E	02W50 39N15	D20	0.3	0.19	30	4	0000–2400	
40		TARRAGONA	E	01E15 41N10	D20	1	0.63	30	5	0000–2400	
41		TORRELAVEGA	E	04W05 43N20	D20	1	0.63	30	5	0000–2400	
42		VIELLA	E	00E50 42N40	D20	0.3	0.19	30	5	0000–2400	
43		VITIGUDINO	E	06W25 41N00	D20	0.3	0.19	30	4	0000–2400	
44		VITORIA	E	02W40 42N51	D20	1	0.63	40	5	0000–2400	
45		VIVERO	E	07W35 43N40	D20	0.3	0.19	30	5	0000–2400	
46		ZAMORA	E	05W45 41N30	D20	0.5	0.32	30	5	0000–2400	
47		ALAMEN	EGY	28E50 30N23	A20	1	1.00	47	4	0000–2400	
48		ASSIUT	EGY	31E04 27N11	A20	1	1.00	47	4	0000–2400	
49		ASSWAN	EGY	32E57 24N04	A20	1	1.00	47	4	0000–2400	
50		BARIS	EGY	30E37 24N40	A20	1	1.00	47	4	0000–2400	
51		DEMIAT	EGY	31E45 31N15	A20	1	1.00	47	4	0000–2400	
52		EL WASTA	EGY	31E10 29N20	A20	1	1.00	47	4	0000–2400	
53		KASR EL FRAFRA	EGY	27E55 27N05	A20	1	1.00	47	4	0000–2400	
54		KOSSEIR	EGY	34E16 26N07	A20	1	1.00	47	4	0000–2400	3

1	Assigned frequency (kHz) (Channel number)	2 Name of transmitting station	3 Country symbol	4 Geographical coordinates of transmitting station	5 Necessary bandwidth (kHz)	6 Carrier power (kW)	7 Effective monopole radiated power (e.m.r.p.) (kW)	8 Antenna height (m)	9 Ground conductivity (mS/m)	10 Hours of operation (GMT)	11 Remarks
1	1584 (118)	LUXOR	EGY	32E28 25N42	A20	1	1.00	47	4	0000–2400	
2		RAS ZAFARANA	EGY	32E40 29N05	A20	1	1.00	47	4	0000–2400	
3		SIDI BARANI	EGY	26E00 30N48	A20	1	1.00	47	4	0000–2400	
4		DESSIE	ETH	39E37 11N00	A 9	1	1.00	48	3	0400–2300	
5		GHIMBI	ETH	35E49 09N11	A 9	1	1.00	48	3	0000–2400	
6		MAKALE	ETH	39E28 13N31	A 9	1	1.00	48	3	0000–2400	
7		BESANCON V	F	06E00 47N15	D 9	1	1.00	50	7	0000–2400	
8		CALVI	F	08E43 42N34	D 9	1	1.00	50	7	0000–2400	
9		DUNKERQUE V	F	02E20 51N02	D 9	1	1.00	50	7	0000–2400	
10		LE HAVRE V	F	00E06 49N10	D 9	1	1.00	50	7	0000–2400	
11		LYON V	F	04E50 45N46	D 9	1	1.00	50	7	0000–2400	
12		METZ V	F	06E10 49N06	D 9	1	1.00	50	7	0000–2400	
13		MONTPELLIER V	F	03E50 43N55	D 9	1	1.00	50	7	0000–2400	
14		MULHOUSE V	F	07E20 47N43	D 9	1	1.00	50	7	0000–2400	
15		NANTES V	F	01W29 47N03	D 9	1	1.00	50	7	0000–2400	
16		NICE V	F	07E18 43N42	D 9	1	1.00	50	7	0000–2400	
17		PERPIGNAN	F	02E53 42N42	D 9	1	1.00	50	6	0000–2400	
18		STRASBOURG V	F	07E45 48N35	D 9	1	1.00	50	7	0000–2400	
19		TOULON V	F	05E56 43N07	D 9	1	1.00	50	7	0000–2400	
20		DRASA	FJI	177E31 17S35	A20	1	0.63	90	7	1700–1200	
21		NAULU REWA	FJI	178E32 18S04	A20	1	0.63	60	5	1700–1200	
22		AANEKOSKI	FNL	25E44 62N36	A20	1	1.00	50	5	0000–2400	
23		HAMINA	FNL	27E10 60N35	A20	1	1.00	50	5	0000–2400	
24		HELSINKI	FNL	24E59 60N03	A20	1	1.00	50	5	0000–2400	
25		IISALMI	FNL	27E13 63N35	A20	1	1.00	50	5	0000–2400	
26		LAPPEENRANTA	FNL	28E13 61N03	A20	1	1.00	50	5	0000–2400	
27		LIEKSA	FNL	30E02 63N19	A20	1	1.00	50	6	0000–2400	
28		MARIEHAMN	FNL	19E55 60N05	A20	1	1.00	50	3	0000–2400	
29		OULU	FNL	25E29 65N01	A20	1	1.00	50	4	0000–2400	
30		RAUMA	FNL	21E30 61N08	A20	1	1.00	50	5	0000–2400	
31		RIIHIMAKI	FNL	24E47 60N44	A20	1	1.00	50	5	0000–2400	
32		ROVANIEMI	FNL	25E40 66N30	A20	1	1.00	50	6	0000–2400	
33		SALO	FNL	23E07 60N23	A20	1	1.00	50	5	0000–2400	
34		VAASA	FNL	21E43 63N05	A20	1	1.00	50	5	0000–2400	
35		VALKEAKOSKI	FNL	24E01 61N17	A20	1	1.00	50	5	0000–2400	
36		VARKAUS	FNL	27E54 62N19	A20	1	1.00	50	5	0000–2400	
37		DUNDEE	G	02W58 56N28	A20	0.3	0.09	21	4	0000–2400	
38		FOXDALE	G	04W39 54N10	A20	2	1.00	50	4	0000–2400	
39		LEICESTER	G	01W09 52N37	A20	0.5	0.16	30	3	0000–2400	
40		BITAM	GAB	11E28 02N05	A 9	1			4	0400–2400	
41		MITZIC	GAB	11E33 00N47	A 9	1			4	0400–2400	
42		MOUILA	GAB	11E02 01S51	A 9	0.1			4	0400–2400	
43		ANDROS	GRC	24E56 37N50	A 9	1	0.79	50	5	0400–2400	
44		ARTA	GRC	21E00 38N08	A 9	1	0.79	50	5	0400–2400	
45		ATHINAI	GRC	23E44 37N54	A 9	1	0.50	27	4	0000–2400	
46		FLORINA	GRC	21E25 40N46	A 9	1	0.79	50	4	0400–2400	4/YUG
47		GREVENA	GRC	21E25 40N06	A 9	1	0.63	40	4	0000–2400	
48		IRAKLION	GRC	25E17 35N19	A 9	0.3	0.24	45	3	0000–2400	
49		KEFALLINIA	GRC	20E32 38N11	A 9	1	0.79	50	5	0400–2400	
50		KOMOTINI	GRC	25E15 41N07	A 9	1	0.79	50	4	0400–2400	
51		KONITSA	GRC	20E42 40N01	A 9	1	0.79	50	5	0400–2400	4/YUG
52		KOS	GRC	27E05 36N47	A 9	1	0.63	40	4	0000–2400	
53		LAMIA	GRC	22E27 38N53	A 9	1	0.63	40	4	0000–2400	
54		MAVROMATI	GRC	21E55 37N09	A 9	1	0.79	50	4	0400–2400	

1	2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1584 (118)	MOLAOI	GRC	22E59 36N55	A 9	1	0.79	50	5	0400–2400	
2		MYTILINI	GRC	26E33 39N07	A 9	1	0.63	40	4	0000–2400	
3		SERRAE	GRC	23E33 41N06	A 9	1	0.79	50	4	0400–2400	
4		STAVROUPOLIS	GRC	24E30 41N15	A 9	1	0.79	50	5	0400–2400	
5		TRIPOLIS	GRC	22E20 37N30	A 9	1	0.79	50	5	2300–2200	
6		VEROIA	GRC	22E13 40N31	A 9	1	0.63	40	4	0000–2400	
7		CONAKRY	GUI	13W39 09N36	A 9	1	1.00	47	4	0000–2400	4/LBR SEN
8		FARANAH	GUI	10W45 10N02	A 9	1	1.00	45		0000–2400	
9		LABE	GUI	12W17 11N19	A 9	1	1.00	45		0000–2400	
10		MANDIANA	GUI	08W58 10N44	A 9	1	1.00	47		0000–2400	
11		BEKES	HNG	21E05 46N47	D18	1	1.00	60	4	0000–2400	
12		EGER	HNG	20E22 47N56	D18	1	1.00	60	4	0000–2400	
13		KESZTHELY	HNG	17E15 46N46	D18	1	1.00	60	4	0000–2400	
14		KISVARDA	HNG	22E05 48N19	D18	1	1.00	60	4	0000–2400	
15		KOMLO	HNG	18E13 46N10	D18	1	1.00	60	4	0000–2400	
16		KOSZEG	HNG	16E38 47N23	D18	1	1.00	60	4	0000–2400	
17		SZENTES	HNG	20E17 46N37	D18	1	1.00	60	4	0000–2400	
18		TATABANYA	HNG	18E26 47N31	D18	1	1.00	60	4	0000–2400	
19		UTRECHT	HOL	05E08 52N05	D 9	2	1.00	30	5	0000–2400	
20		ARIBINDA	HVO	00W50 14N20	A20	1	1.00	47	4	0000–2400	
21		ARLY	HVO	01E30 11N30	A20	1	1.00	47	4	0000–2400	
22		BOULSA	HVO	00W33 12N39	A20	1	1.00	47	4	0000–2400	
23		COALA	HVO	00W07 13N28	A20	1	1.00	47	4	0000–2400	
24		DJIBASSO	HVO	04W15 13N15	A20	1	1.00	47	4	0000–2400	
25		ORODARA	HVO	04W55 10N59	A20	1	1.00	47	4	0000–2400	
26		ALESSANDRIA	I	08E37 44N55	D 9	1	1.00	50	5	0000–2400	
27		AREZZO	I	11E53 43N28	D 9	1	1.00	50	5	0000–2400	
28		AVELLINO	I	14E47 40N55	D 9	1	1.00	50	5	0000–2400	
29		BELLUNO	I	12E13 46N08	D 9	1	1.00	50	5	0000–2400	
30		BERGAMO	I	09E40 45N53	D 9	1	1.00	50	5	0000–2400	
31		CAMPOBASSO	I	14E39 41N34	D 9	1	1.00	50	5	0000–2400	
32		COSENZA	I	16E15 39N18	D 9	1	1.00	50	5	0000–2400	
33		GUALDOTADINO	I	12E47 43N12	D 9	1	1.00	50	5	0000–2400	
34		NUORO	I	09E20 40N19	D 9	1	1.00	50	5	0000–2400	
35		PESARO	I	12E55 43N54	D 9	1	1.00	50	5	0000–2400	
36		TERNI	I	12E39 42N34	D 9	1	1.00	50	5	0000–2400	
37		TRENTO	I	11E08 46N04	D 9	1	1.00	50	5	0000–2400	
38		TRIESTE	I	13E48 45N39	D 9	1	1.00	50	5	0000–2400	
39		VARESE	I	08E49 45N49	D 9	1	1.00	50	5	0000–2400	
40		VICENZA	I	11E33 45N33	D 9	1	1.00	50	5	0000–2400	
41		CHAMBA	IND	76E10 32N30	A20	1		100	4	0000–2400	
42		DURG	IND	81E10 21N10	A20	1		100	3	0000–2400	
43		ELURU	IND	81E09 16N43	A20	1		100	3	0000–2400	
44		ENGLISH BAZAR	IND	88E10 25N00	A20	1		100	4	0000–2400	
45		ERNAKULAM	IND	76E15 10N00	A20	1		100	4	0000–2400	
46		ETAH	IND	78E40 27N35	A20	1		100	3	0000–2400	
47		ETAWAH	IND	79E02 26N47	A20	1		100	3	0000–2400	
48		FATEHPUR	IND	80E52 25N55	A20	1		100	3	0000–2400	
49		FEROZEPUR	IND	74E50 31N00	A20	1		100	3	0000–2400	
50		GANDHINAGAR	IND	72E45 23N15	A20	1		100	3	0000–2400	
51		GANGANAGAR	IND	73E50 29N49	A20	1		100	3	0000–2400	
52		GANGTOK	IND	88E40 27N20	A20	1		100	4	0000–2400	
53		GANJAM	IND	85E05 19N25	A20	1		100	3	0000–2400	
54		GAYA	IND	85E00 24N50	A20	1		100	3	0000–2400	

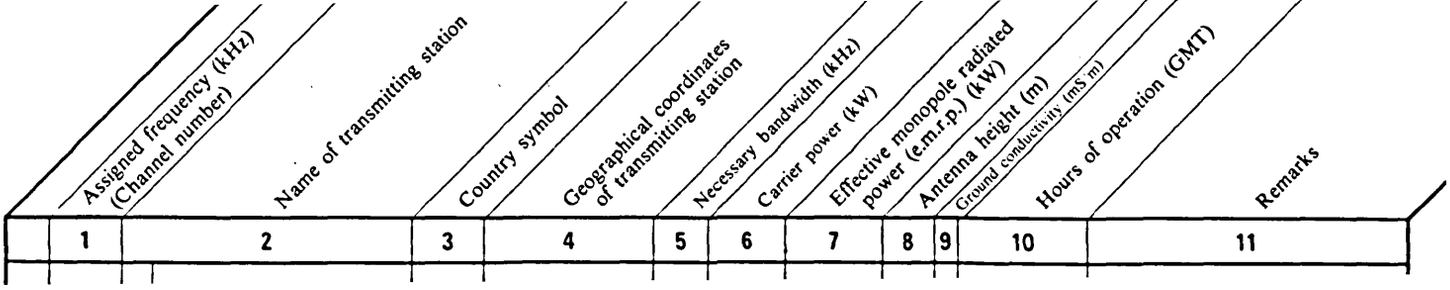
1	Assigned frequency (kHz) (Channel number)	2 Name of transmitting station	3 Country symbol	4 Geographical coordinates of transmitting station	5 Necessary bandwidth (kHz)	6 Carrier power (kW)	7 Effective monopole radiated power (e.m.r.p.) (kW)	8 Antenna height (m)	9 Ground conductivity (mS/m)	10 Hours of operation (GMT)	11 Remarks

	1	2	3	4	5	6	7	8	9	10	11
1	1584	GAZIPUR	IND	83E35 25N34	A20	1		100	3	0000–2400	
2	(118)	GOALPARA	IND	90E40 26N13	A20	1		100	3	0000–2400	
3		GODHRA	IND	73E30 22N50	A20	1		100	3	0000–2400	
4		GONDA	IND	82E01 27N28	A20	1		100	4	0000–2400	
5		GORAKHPUR	IND	83E28 26N52	A20	1		100	3	0000–2400	
6		GULBARGA	IND	76E54 17N19	A20	1		100	3	0000–2400	
7		GUNA	IND	77E10 24N50	A20	1		100	4	0000–2400	
8		GUNTUR	IND	80E03 16N13	A20	1		100	3	0000–2400	
9		GURDASPUR	IND	75E20 32N05	A20	1		100	3	0000–2400	
10		GURGAON	IND	77E00 28N50	A20	1		100	3	0000–2400	
11		GWALIOR	IND	78E10 26N14	A20	1		100	3	0000–2400	
12		HAMIRPUR	IND	80E30 25N45	A20	1		100	4	0000–2400	
13		HAPOLI	IND	93E40 27N30	A20	1		100	4	0000–2400	
14		HARDOI	IND	80E10 27N23	A20	1		100	3	0000–2400	
15		HASSAN	IND	76E10 13N00	A20	1		100	3	0000–2400	
16		HAZARIBAGH	IND	85E20 24N00	A20	1		100	3	0000–2400	
17		HIMATNAGAR	IND	72E50 23N30	A20	1		100	3	0000–2400	
18		HOSHANGABAD	IND	77E45 22N50	A20	1		100	4	0000–2400	
19		HOSHIARPUR	IND	75E50 31N20	A20	1		100	4	0000–2400	
20		HOWRAH	IND	88E23 22N35	A20	1		100	4	0000–2400	
21		HYDERABAD	IND	78E30 17N20	A20	1		100	3	0000–2400	
22		IMPHAL	IND	93E58 24N44	A20	1		100	3	0000–2400	
23		INDORE	IND	75E50 22N44	A20	1		100	3	0000–2400	
24		JABALPUR	IND	79E59 23N10	A20	1		100	3	0000–2400	
25		JAGDALPUR	IND	81E55 19N01	A20	1		100	3	0000–2400	
26		JAIPUR	IND	75E50 26N54	A20	1		100	4	0000–2400	
27		JAISALMER	IND	70E57 26N55	A20	1		100	4	0000–2400	
28		JALGAON	IND	75E31 20N55	A20	1		100	3	0000–2400	
29		JALOR	IND	72E40 25N20	A20	1		100	4	0000–2400	
30		JALPAIGURI	IND	88E50 26N50	A20	1		100	4	0000–2400	
31		JAMMU	IND	74E49 32N47	A20	1		100	4	0000–2400	
32		JAMNAGAR	IND	70E06 22N50	A20	1		100	3	0000–2400	
33		JAMSHEDPUR	IND	86E10 22N50	A20	1		100	4	0000–2400	
34		JAUNPUR	IND	82E44 25N46	A20	1		100	4	0000–2400	
35		JEYPORE	IND	82E40 18N51	A20	1		100	4	0000–2400	
36		JHABUA	IND	74E30 22N50	A20	1		100	3	0000–2400	
37		JHALAWAR	IND	76E12 24N40	A20	1		100	3	0000–2400	
38		JHANSI	IND	78E37 25N27	A20	1		100	3	0000–2400	
39		JHUNJHUNU	IND	75E25 28N06	A20	1		100	4	0000–2400	
40		JIND	IND	76E20 29N15	A20	1		100	3	0000–2400	
41		JODHPUR	IND	72E58 26N20	A20	1		100	4	0000–2400	
42		JULLUNDUR	IND	75E18 31N19	A20	1		100	3	0000–2400	
43		JUNAGADH	IND	70E25 21N20	A20	1		100	3	0000–2400	
44		KAILASHAHAR	IND	92E04 24N23	A20	1		100	3	0000–2400	
45		KAKANA	IND	92E50 09N10	A20	1		100	4	0000–2400	
46		KAKINADA	IND	82E15 17N00	A20	1		100	3	0000–2400	
47		KALPA	IND	78E10 31N30	A20	1		100	4	0000–2400	
48		KAMRUP	IND	91E47 26N11	A20	1		100	3	0000–2400	
49		KANG POKRI	IND	93E58 25N08	A20	1		100	4	0000–2400	
50		KANPUR	IND	80E19 26N28	A20	1		100	3	0000–2400	
51		KAPURTHALA	IND	75E20 31N25	A20	1		100	4	0000–2400	
52		KARAIKAL	IND	79E52 10N55	A20	1		100	3	0000–2400	
53		KAREN	IND	93E00 12N50	A20	1		100	4	0000–2400	3
54		KARGIL	IND	76E00 34N50	A20	1		100	4	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11
1	1584	KARIMNAGAR	IND	79E15 18N30	A20	1		100	3	0000–2400	
2	(118)	KARNAL	IND	77E00 29N30	A20	1		100	3	0000–2400	
3		KARWAR	IND	74E11 14N48	A20	1		100	4	0000–2400	
4		KASUMPTI	IND	77E10 31N00	A20	1		100	4	0000–2400	
5		KATHUA	IND	75E40 32N50	A20	1		100	4	0000–2400	
6		KAVARATHY I	IND	72E42 10N36	A20	1		100	4	0000–2400	
7		KEONJHARGARH	IND	85E34 21N37	A20	1		100	4	0000–2400	
8		KHAMMAM	IND	80E10 17N15	A20	1		100	3	0000–2400	
9		KHANDWA	IND	76E30 21N50	A20	1		100	3	0000–2400	
10		KHARGONE	IND	75E30 21N40	A20	1		100	4	0000–2400	
11		KHELA	IND	95E30 27N00	A20	1		100	4	0000–2400	3
12		KOHIMA	IND	94E03 25N43	A20	1		100	4	0000–2400	
13		KOLAR	IND	78E10 13N10	A20	1		100	3	0000–2400	
14		KOLHAPUR	IND	74E20 16N40	A20	1		100	4	0000–2400	
15		KOLORIANG	IND	93E27 27N52	A20	1		100	4	0000–2400	
16		KOTA	IND	75E52 25N10	A20	1		100	3	0000–2400	
17		KOTTAYAM TRAV	IND	76E30 09N30	A20	1		100	4	0000–2400	
18		KOZHIKODE	IND	75E50 11N15	A20	1		100	4	0000–2400	
19		KULU	IND	77E00 32N00	A20	1		100	4	0000–2400	
20		KURNOOL	IND	78E03 15N50	A20	1		100	3	0000–2400	
21		KYELANG	IND	77E00 32N30	A20	1		100	4	0000–2400	
22		LAKHIMPUR	IND	80E49 27N57	A20	1		100	4	0000–2400	
23		LEH	IND	77E35 34N09	A20	1		100	4	0000–2400	
24		LITTLE NICOBAR	IND	93E50 07N10	A20	1		100	4	0000–2400	
25		LUDHIANA	IND	75E50 30N55	A20	1		100	3	0000–2400	
26		LUNGLEH	IND	92E45 22N50	A20	1		100	4	0000–2400	
27		MACHILIPATNAM	IND	81E12 16N09	A20	1		100	3	0000–2400	
28		MADRAS	IND	80E17 13N04	A20	1		100	3	0000–2400	
29		MADURAI	IND	78E15 09N58	A20	1		100	3	0000–2400	
30		MAHBUBNAGAR	IND	77E58 16N45	A20	1		100	3	0000–2400	
31		MAHE	IND	75E30 11N40	A20	1		100	4	0000–2400	
32		MAINPURI	IND	79E03 27N58	A20	1		100	3	0000–2400	
33		MALAPPURAM	IND	76E05 11N05	A20	1		100	4	0000–2400	
34		MANDASOR	IND	75E00 24N05	A20	1		100	3	0000–2400	
35		MANDI	IND	77E00 31N30	A20	1		100	4	0000–2400	
36		MANDLA	IND	80E30 22N30	A20	1		100	4	0000–2400	
37		MANDYA	IND	77E00 12N30	A20	1		100	3	0000–2400	
38		MANGALORE	IND	74E48 12N48	A20	1		100	4	0000–2400	
39		MATHURA	IND	77E40 27N30	A20	1		100	3	0000–2400	
40		MEDAK	IND	78E15 18N03	A20	1		100	3	0000–2400	
41		MEERUT	IND	77E45 29N01	A20	1		100	3	0000–2400	
42		MEHSANA	IND	72E20 23N30	A20	1		100	3	0000–2400	
43		MERCARA	IND	75E42 12N24	A20	1		100	4	0000–2400	
44		MIDNAPORE	IND	87E15 22N25	A20	1		100	4	0000–2400	
45		MIRZAPUR	IND	82E37 25N10	A20	1		100	4	0000–2400	
46		MOKOKCHUNG	IND	94E30 26N19	A20	1		100	4	0000–2400	
47		MONGHYR	IND	86E40 25N20	A20	1		100	3	0000–2400	
48		MORENA	IND	78E00 26N45	A20	1		100	3	0000–2400	
49		MOTIHARI	IND	84E50 26N50	A20	1		100	3	0000–2400	
50		MURADABAD	IND	78E49 28N51	A20	1		100	3	0000–2400	
51		MUZAFFARPUR	IND	85E25 26N15	A20	1		100	3	0000–2400	
52		AMBON	INS	128E10 03S41	A18	0.5	0.50	25	4	0000–2400	
53		BANDA ATJEH	INS	95E20 05N30	A18	0.5	0.50	25	4	0000–2400	
54		BANDJARMASIN	INS	114E33 03S22	A18	0.5	0.50	25	4	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1.	1584	BANDUNG	INS	107E36 06S55	A18	0.5	0.50	25	4	0000–2400	
2	(118)	BANGIL	INS	112E46 07S36	A18	0.5	0.50	75	3	0000–2400	
3		BANJUWANGI	INS	114E23 08S13	A18	0.5	0.50	25	4	0000–2400	
4		BENGKULU	INS	102E20 03S46	A18	0.5	0.50	25	4	0000–2400	
5		BIAK	INS	136E04 01S11	A18	0.5	0.50	25	4	0000–2400	
6		BOGOR SEMPLAK	INS	106E47 06S35	A18	0.5	0.50	25	4	0000–2400	
7		BOJONEGORO	INS	111E03 07S09	A18	0.5	0.50	25	4	0000–2400	
8		BONDOWOSO	INS	113E49 07S54	A18	0.5	0.50	75	3	0000–2400	
9		BUKITTINGGI	INS	100E32 00S18	A18	0.5	0.50	25	4	0000–2400	
10		CIANJUR	INS	107E18 06S49	A18	0.5	0.50	75	3	0000–2400	
11		CIKAMPEK	INS	107E28 06S25	A18	0.5	0.50	25	4	0000–2400	
12		DENPASAR	INS	115E13 08S39	A18	0.5	0.50	25	4	0000–2400	
13		DJAKARTA	INS	106E50 06S10	A18	0.5	0.50	75	3	0000–2400	
14		DJEMBER	INS	113E42 08S10	A18	0.5	0.50	25	4	0000–2400	
15		FAKFAK	INS	132E17 02S55	A18	0.5	0.50	25	4	0000–2400	
16		GARUT	INS	107E53 06S42	A18	0.5	0.50	25	4	0000–2400	
17		GRESIK	INS	112E39 07S09	A18	0.5	0.50	25	4	0000–2400	
18		KALIWUNGU	INS	110E14 06S57	A18	0.5	0.50	75	3	0000–2400	
19		KEDIRI	INS	112E02 07S53	A18	0.5	0.50	25	4	0000–2400	
20		KENDAL	INS	110E12 06S55	A18	0.5	0.50	25	4	0000–2400	
21		KENDARI	INS	122E36 03S57	A18	0.5	0.50	25	4	0000–2400	
22		KLATEN	INS	110E36 07S42	A18	0.5	0.50	25	4	0000–2400	
23		KLUNGKUNG	INS	115E24 08S32	A18	0.5	0.50	25	4	0000–2400	
24		KRAWANG	INS	107E17 06S18	A18	0.5	0.50	25	4	0000–2400	
25		MADIUN	INS	111E31 07S37	A18	0.5	0.50	25	4	0000–2400	
26		MAGELANG	INS	110E12 07S30	A18	0.5	0.50	25	4	0000–2400	
27		MAJALENGKA	INS	108E13 06S50	A18	0.5	0.50	75	3	0000–2400	
28		MALANG	INS	112E37 07S59	A18	0.5	0.50	75	3	0000–2400	
29		MEDAN	INS	98E40 03N30	A18	0.5	0.50	75	3	0000–2400	
30		MENADO	INS	124E55 01N32	A18	0.5	0.50	25	4	0000–2400	
31		PALEMBANG	INS	104E46 03S00	A18	0.5	0.50	25	4	0000–2400	
32		PALENGKARAJA	INS	113E11 02S02	A18	0.5	0.50	25	4	0000–2400	
33		PALU	INS	119E53 00S54	A18	0.5	0.50	25	4	0000–2400	
34		PANDJANG	INS	105E22 05S33	A18	0.5	0.50	25	4	0000–2400	
35		PASURUAN	INS	112E02 07S38	A18	0.5	0.50	25	4	0000–2400	
36		PATI	INS	111E02 06S45	A18	0.5	0.50	75	3	0000–2400	
37		PAYAHKUMBUH	INS	100E38 00S13	A18	0.5	0.50	75	3	0000–2400	
38		PEKALONGAN	INS	109E40 06S53	A18	0.5	0.50	25	4	0000–2400	
39		PONOROGO	INS	111E28 07S52	A18	0.5	0.50	25	4	0000–2400	
40		PONTIANAK	INS	109E20 00S00	A18	0.5	0.50	75	3	0000–2400	
41		PROBOLINGGO	INS	113E13 07S45	A18	0.5	0.50	25	4	0000–2400	
42		PURWOKERTO	INS	109E15 07S26	A18	0.5	0.50	75	3	0000–2400	
43		PURWOREJO	INS	110E30 07S43	A18	0.5	0.50	25	4	0000–2400	
44		RANGKASBITUNG	INS	106E15 06S22	A18	0.5	0.50	25	4	0000–2400	
45		SAMARINDA	INS	117E09 00S30	A18	0.5	0.50	25	4	0000–2400	
46		SEMARANG	INS	110E25 06S58	A18	0.5	0.50	25	4	0000–2400	
47		SENKANG	INS	119E39 05S02	A18	0.5	0.50	75	3	0000–2400	
48		SERANG	INS	106E09 06S07	A18	0.5	0.50	25	4	0000–2400	
49		SIBOLGA	INS	98E48 01N42	A18	0.5	0.50	25	4	0000–2400	
50		SIDOARJO	INS	112E43 07S28	A18	0.5	0.50	75	3	0000–2400	
51		SINGARADJA	INS	115E05 08S06	A18	0.5	0.50	75	3	0000–2400	
52		SOLOK SUMATRA	INS	100E39 00S48	A18	0.5	0.50	25	4	0000–2400	
53		SORONG	INS	131E17 00S50	A18	0.5	0.50	25	4	0000–2400	
54		SUBANG	INS	107E45 06S34	A18	0.5	0.50	25	4	0000–2400	

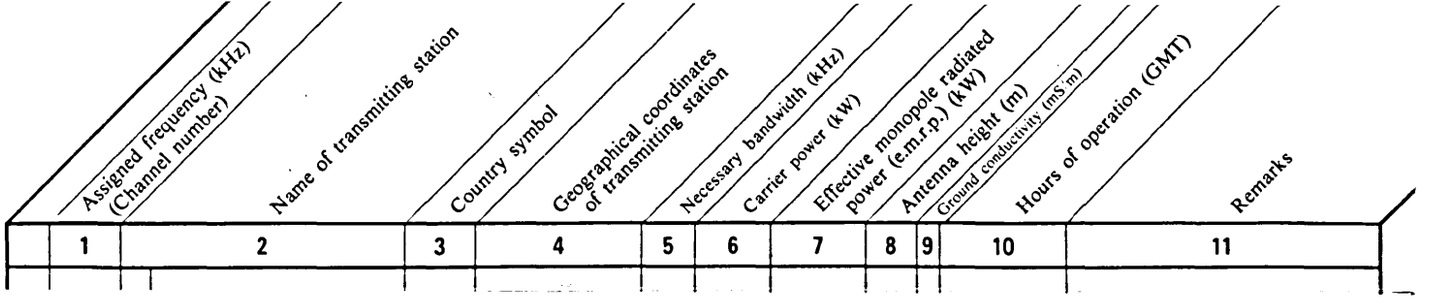


	1	2	3	4	5	6	7	8	9	10	11
1	1584	SUKABUMI	INS	106E55 06S50	A18	0.5	0.50	75	3	0000–2400	
2	(118)	SUMENEP	INS	113E51 07S00	A18	0.5	0.50	25	4	0000–2400	
3		SURABAJA	INS	112E45 07S15	A18	0.5	0.50	75	3	0000–2400	
4		SURAKARTA	INS	110E49 07S34	A18	0.5	0.50	25	4	0000–2400	
5		TASIKMALAJA	INS	108E13 07S19	A18	0.5	0.50	25	4	0000–2400	
6		TEGAL	INS	109E08 06S52	A18	0.5	0.50	75	3	0000–2400	
7		TELUKBETUNG	INS	105E16 05S27	A18	0.5	0.50	75	3	0000–2400	
8		TEMANGGUNG	INS	110E10 07S19	A18	0.5	0.50	75	3	0000–2400	
9		TERNATE	INS	127E23 00N48	A18	0.5	0.50	25	4	0000–2400	
10		TJIAMIS	INS	108E20 07S19	A18	0.5	0.50	75	3	0000–2400	
11		TJIREBON	INS	108E34 06S42	A18	0.5	0.50	25	4	0000–2400	
12		TOMOHON	INS	124E50 01N19	A18	0.5	0.50	25	4	0000–2400	
13		TONDANO	INS	124E45 01N22	A18	0.5	0.50	75	3	0000–2400	
14		UJUNGPANDANG	INS	119E25 05S09	A18	0.5	0.50	75	3	0000–2400	
15		WONOSOBO	INS	109E59 07S21	A18	0.5	0.50	25	4	0000–2400	
16		BALLINGEARY	IRL	09W10 51N50	A20	1	1.00	50	5	0000–2400	
17		BANGORERRIS	IRL	09W50 54N07	A20	1	1.00	50	5	0000–2400	
18		WEXFORD	IRL	06W25 52N12	A20	1	1.00	50	4	0000–2400	
19		BAFQ	IRN	55E21 31N35	A20	1	1.00	48	5	0200–2200	
20		BORUJERD	IRN	48E50 33N52	A20	1	1.00	48	5	0200–2200	
21		CHAHBAHAR	IRN	60E41 25N16	A20	1	1.00	48	4	0200–2200	
22		DEHLORAN	IRN	47E18 32N41	A20	1	1.00	48	5	0200–2200	3
23		HAMADAN	IRN	48E43 35N12	A20	1			3	0100–2200	
24		ILAM	IRN	46E25 33N39	A20	1			3	0100–2200	3
25		KOHKILOUYEH	IRN	50E34 30N47	A20	1	1.00	48	5	0200–2200	
26		MASJIDSULAIMAN	IRN	49E07 31N56	A20	1	1.00	48	5	0200–2200	
27		MOGHAN	IRN	48E00 39N40	A20	1			3	0100–2200	
28		SHAHROOD	IRN	55E02 36N34	A20	1	1.00	48	5	0200–2200	
29		SIRJAN	IRN	55E41 29N27	A20	1			3	0100–2200	
30		TORBATHEIDARIE	IRN	59E13 35N16	A20	1	1.00	48	4	0200–2200	
31		ZABOL	IRN	61E32 31N00	A20	1	1.00	48	5	0200–2200	
32		ATLIT	ISR	34E58 32N45	A 9	1	1.00	40	3	0000–2400	3
33		MIZPE RAMON	ISR	34E48 30N46	A 9	1	1.00	40		0000–2400	3
34		SEDOM	ISR	35E23 31N10	A 9	1	1.00	40	4	0000–2400	3
35		ATSUMI	J	139E35 38N37	A15	0.1	0.10	71	5	0000–2400	
36		ESASHI	J	140E08 41N51	A15	0.1	0.10	47	5	0000–2400	
37		FUJIYOSHIDA	J	138E49 35N30	A15	0.1	0.13	67	5	0000–2400	
38		FUKAURA AOMORI	J	139E56 40N39	A15	0.1	0.13	71	5	0000–2400	
39		HARANOMACHI	J	140E56 37N37	A15	0.1	0.13	75	5	0000–2400	
40		HIKIMI	J	132E01 34N34	A15	0.1	0.10	71	5	0000–2400	
41		HINO	J	133E24 35N13	A15	0.1	0.13	71	5	0000–2400	
42		HIRO	J	143E19 42N18	A15	0.1	0.10	71	5	0000–2400	
43		IKEDA TOKUSHIM	J	133E49 34N02	A15	0.1	0.13	67	5	0000–2400	
44		KANNONJI	J	133E41 34N08	A15	0.1	0.10	67	5	0000–2400	
45		KARATSU	J	130E00 33N27	A15	0.1	0.10	47	5	0000–2400	
46		KASUMI	J	134E38 35N38	A15	0.1	0.13	71	5	0000–2400	
47		KATSUYAMA KAN	J	136E32 36N01	A15	0.1	0.13	71	5	0000–2400	
48		KOSAKA	J	140E44 40N19	A15	0.1	0.10	71	5	0000–2400	
49		MATSUMAE	J	140E05 41N26	A15	0.1	0.13	71	5	0000–2400	
50		MIYOSHI	J	132E51 34N48	A15	0.1	0.10	71	5	0000–2400	
51		MUGI	J	134E25 33N40	A15	0.1	0.10	71	5	0000–2400	
52		NAKATOMBETSU	J	142E18 44N58	A15	0.1	0.10	71	5	0000–2400	
53		NEMURO	J	145E36 43N20	A15	0.1	0.10	67	4	0000–2400	
54		OKAYA SUWA	J	138E04 36N03	A15	0.1	0.13	67	5	0000–2400	

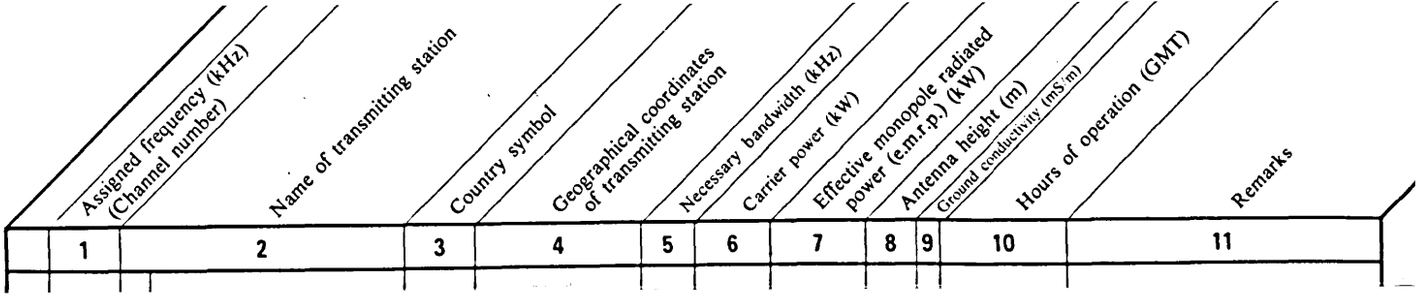
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1	1584	RUMOI	J	141E39 43N56	A15	0.1	0.10	47	5	0000–2400	
2	(118)	SHIMABARA	J	130E23 32N47	A15	0.1	0.13	71	5	0000–2400	
3		SHINKITAMI	J	143E52 43N48	A15	0.1	0.10	71	4	0000–2400	
4		SUKUMO	J	132E43 32N56	A15	0.1	0.10	71	5	0000–2400	
5		SUSAMI	J	135E30 33N33	A15	0.1	0.13	71	5	0000–2400	
6		TADAMI	J	139E22 37N18	A15	0.1	0.10	71	5	0000–2400	
7		TAKACHIHO	J	131E18 32N42	A15	0.1	0.10	71	5	0000–2400	
8		UWA	J	132E30 33N22	A15	0.1	0.10	71	5	0000–2400	
9		WAJIMA	J	136E55 37N22	A15	0.1	0.13	71	5	0000–2400	
10		YUZAWA	J	140E29 39N08	A15	0.1	0.10	71	5	0000–2400	
11		AL MAFRAQ	JOR	36E14 32N21	A 9	1	1.00	50	8	0300–2300	3
12		AQABA	JOR	35E00 29N30	A 9	1	1.00	50	8	0300–2300	3
13		BETHLEHEM	JOR	35E10 31N40	A 9	1	1.00	50	4	0300–2300	3
14		EL MUWAQQAR	JOR	36E06 31N48	A 9	1	1.00	50	8	0300–2300	3
15		RAS EN NAQB	JOR	35E42 29N49	A 9	1	1.00	50	8	0300–2300	3
16		GALOLE	KEN	40E02 01S30	A 9	1	1.00	50	4	0200–2100	
17		KITUI	KEN	38E00 01S22	A 9	1	1.00	50	4	0200–2100	
18		LODWAR	KEN	35E35 03N05	A 9	1		100	4	0200–2100	
19		LOKITAUNG	KEN	35E45 04N16	A 9	1	1.00	50	4	0200–2100	4/ETH
20		MAGADI	KEN	36E10 01S10	A 9	1	1.00	50	4	0200–2100	
21		MANDERA	KEN	41E52 03N56	C 9	1	1.00	50	4	0200–2100	4/ETH
22		MOYALE	KEN	39E12 03N32	C 9	1	1.00	50	4	0200–2100	
23		NAROK	KEN	35E57 01S07	A 9	1	1.00	50	4	0200–2100	
24		WAJIR	KEN	40E02 01N42	A 9	1		130	4	0200–2100	
25		KUCHONDONG	KOR	127E46 35N54	A10	1	1.00	80	6	0000–2400	
26		SANCHEONG	KOR	127E52 35N25	A10	1	1.00	80	4	0000–2400	
27		TANYANG	KOR	128E19 36N56	A10	1	1.00	120	6	0000–2400	
28		GBARNGA	LBR	09W28 07N28	A20	1	1.00	134		0500–2400	3
29		ZORZOR	LBR	09W15 08N30	A20	1	1.00	30	5	0500–2400	3
30		BEDA	LBY	18E50 28N10	A20	1	1.00	47	5	0400–2400	
31		MISURATA	LBY	15E05 32N46	A20	1	1.00	94	6	0400–2400	
32		MIZDA	LBY	13E10 31N10	A20	1	1.00	47	5	0400–2400	
33		MRADA	LBY	19E20 29N05	A20	1	1.00	47	5	0400–2400	
34		ZELA	LBY	17E20 28N30	A20	1	1.00	47	5	0400–2400	
35		MASHAI	LSO	28E49 29S40	A20	0.7	0.70	45	4	0400–2200	3
36		MOKHOTLONG	LSO	29E05 29S20	A20	1	1.00	40	4	0400–2200	3
37		SEMONKONG	LSO	28E03 29S52	A20	1	1.00	35	4	0400–2200	3
38		AMBATO BOENI	MDG	46E45 16S30	A 9	1	1.00	47	4	0300–2000	
39		AMBATOLAMPY	MDG	47E28 19S23	A 9	1	1.00	48	4	0300–2000	
40		AMBILOBE	MDG	49E08 13S11	A 9	1	1.00	47	4	0300–2000	
41		AMBOVOMBE	MDG	46E05 25S11	A 9	1	1.00	48	4	0300–2000	
42		ANDILAMENA	MDG	48E32 17S02	A 9	1	1.00	138	4	0300–2000	
43		ANJOZOROBE	MDG	47E52 18S24	A 9	1	1.00	48	4	0300–2000	
44		ATOFINANDRAHAN	MDG	46E47 20S31	A 9	1	1.00	59	4	0300–2000	
45		BEALANANA	MDG	48E45 14S33	A 9	1	1.00	62	4	0300–2000	
46		BELO	MDG	44E30 19S45	A 9	1	1.00	48	4	0300–2000	
47		BERORoha	MDG	45E08 21S41	A 9	1	1.00	48	4	0300–2000	
48		BETIOKY	MDG	44E23 23S42	A 9	1	1.00	60	4	0300–2000	
49		BRICKAVILLE	MDG	49E04 18S50	A 9	1	1.00	48	4	0300–2000	
50		IVOHIBE	MDG	46E58 22S30	A 9	1	1.00	216	4	0300–2000	
51		MAHANORO	MDG	48E48 19S53	A 9	1	1.00	48	4	0300–2000	
52		MANANARA	MDG	49E46 16S10	A 9	1	1.00	47	4	0300–2000	
53		MANANJARY	MDG	48E22 21S12	A 9	1	1.00	48	4	0300–2000	
54		MANDRITSARA	MDG	48E47 15S57	A 9	1	1.00	130	4	0300–2000	

	1	2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1584	MIDONGY DU SUD	MDG	47E01 23S35	A 9	1	1.00	68	4	0300–2000	
2	(118)	MORAFENOBE	MDG	44E52 17S52	A 9	1	1.00	56	4	0300–2000	
3		SAMBAVA	MDG	50E10 14S13	A 9	1	1.00	47	4	0300–2000	
4		SOALALA	MDG	45E30 16S05	A 9	1	1.00	48	4	0300–2000	
5		TSIROANOMANDID	MDG	46E03 18S46	A 9	1	1.00	47	4	0300–2000	
6		SANTANA	MDR	16W54 32N47	A20	1	1.00	50	4	0000–2400	
7		GENTING HLANDS	MLA	101E49 03N25	A20	1	1.00	47	5	2200–1700	
8		GUA MUSANG	MLA	101E57 04N55	A20	1	1.00	47	5	2200–1700	
9		KAPIT	MLA	112E50 02N02	A20	1	1.00	47	5	2200–1700	3
10		PULAU LANGKAWI	MLA	99E45 06N22	A20	1	1.00	47	5	2200–1700	3
11		TAMPASIS	MLA	116E51 05N52	A20	1	1.00	47	5	2200–1700	
12		DOUENTZA	MLI	02W57 15N00	A 9	1		65		0600–2400	
13		KE MACINA	MLI	05W22 13N58	A 9	1		222		0600–2400	
14		KIDAL	MLI	01E24 18N26	A 9	1		47		0600–2400	
15		KITA	MLI	09E29 13N02	A 9	1		47		0600–2400	
16		YELIMANE	MLI	10W37 15N07	A 9	1		98		0600–2400	
17		SAN LEONARDO	MLT	14E33 35N53	D 9	1	1.00	47	4	0000–2400	4/I
18		ALTAI	MNG	96E10 46N30	A18	1	1.00	120	5	2200–1500	
19		ARWAIHER	MNG	102E20 46N20	A18	1	1.00	120	5	2200–1500	
20		BULAGAN	MNG	103E20 48N50	A18	1	1.00	120	5	2200–1500	
21		DARHAN	MNG	106E00 49N00	A18	1	1.00	120	4	2200–1500	
22		TCHOIBOLSAN	MNG	114E30 48N05	A18	1	1.00	120	4	2200–1500	
23		TSETSERLIG	MNG	101E10 47N30	A18	1	1.00	120	5	2200–1500	
24		UBURKHANGAI	MNG	102E20 46N20	A18	1	1.00	120	5	2200–1500	
25		ULAN BATOR	MNG	107E00 47N55	A18	1	1.00	120	4	2200–1500	
26		ULAN GOM	MNG	92E00 50N00	A18	1	1.00	120		2200–1500	
27		ULGEI	MNG	89E48 49N08	A18	1	1.00	120	5	2200–1500	
28		UNDERHAN	MNG	102E55 46N10	A18	1	1.00	120	4	2200–1500	
29		FURANCUNGO	MOZ	33E40 14S56	A10	0.5				0400–2200	
30		MAPAI	MOZ	32E00 22S50	A10	1	1.00	31	4	0400–2200	3
31		MECULA	MOZ	37E38 11S06	A10	1	1.00	31	4	0400–2200	
32		V GOUVEIA	MOZ	33E11 18S04	A10	0.5				0400–2200	
33		BOUARFA	MRC	01W49 32N49	A20	0.5	0.50	50	5	0600–2400	
34		KENITRA	MRC	06W36 34N18	C 9	0.2	0.04	36	3	0000–2400	
35		NADOR	MRC	02W55 34N58	A12	1	1.00	50	4	0600–2400	
36		OURZAZATE	MRC	06W50 30N55	A18	1	1.00	50	5	0600–2400	
37		SIDIBENNOUR	MRC	08W17 32N44	A18	1	1.00	50	6	0600–2400	
38		TANGER	MRC	05W50 35N45	A12	1	1.00	50	5	0600–2400	
39		MOUDJERIA	MTN	12W19 17N52	A 9	1	1.00	54	5	0700–2300	
40		ZOMBA	MWI	35E18 15S23	A20	0.3	0.30	47	3	0200–2300	
41		ARLIT	NGR	07E20 18N50	A 9	1	1.00	47	4	0000–2400	
42		BIRNI NKONNI	NGR	05E15 13N48	A 9	1	1.00	47	4	0000–2400	
43		GOURE	NGR	10E10 14N00	A 9	1			4	0000–2400	
44		TANOUT	NGR	08E52 14N58	A 9	1	1.00	47	4	0000–2400	
45		TCHINTABADEN	NGR	07E47 15N54	A 9	1	1.00	47	4	0000–2400	
46		TILLABERY	NGR	01E28 14N12	A 9	1	1.00	47	4	0000–2400	
47		BRASS YENAGOA	NIG	06E15 04N15	C 9	1	1.00	75	4	0500–2300	
48		JOS 2	NIG	08E53 09N52	C 9	1	1.00	75	4	0500–2300	
49		KATSINA 2	NIG	07E34 12N55	C 9	1	1.00	70	4	0500–2300	
50		OKIGWI	NIG	07E20 05N50	C 9	1	1.00	71	4	0500–2200	
51		BAJURA	NPL	81E22 29N22	A20	1	0.50	60	5	2200–1900	
52		GORKHA	NPL	84E38 28N02	A20	1	0.50	60	5	2200–1900	
53		KAIGAON	NPL	82E48 29N02	A20	1	0.50	60	5	2200–1900	
54		RAMECHHAP	NPL	86E04 27N20	A20	1	0.50	60	5	2200–1900	



	1	2	3	4	5	6	7	8	9	10	11
1	1584	NAURU ISLAND	NRU	166E56 00S33	A 9	1	1.00	40	6	2000–1200	
2	(118)	DANNEVIRKE	NZL	176E08 40S12	A20	1	1.00	50	4	0000–2400	
3		DADU	PAK	67E45 26N45	A20	1	0.79	49	4	0000–2000	
4		NAHAQI	PAK	71E30 33N36	A20	1	0.79	26	4	0000–1400	
5		RATODERO	PAK	68E10 27N24	A20	1	0.79	62	4	0000–1400	
6		SHAHDAB	PAK	73E50 31N45	A20	1	0.79	27	3	0000–2000	
7		BRANIEWO	POL	19E50 54N24	A20	1	1.00	47	5	0000–2400	
8		BUSKO ZDROJ	POL	20E44 50N28	A20	1	1.00	47	5	0000–2400	
9		CHELM	POL	23E29 51N09	A20	1	1.00	47	5	0000–2400	
10		GLUBCZYCE	POL	17E49 50N12	A20	1	1.00	47	5	0000–2400	
11		HAJNOWKA	POL	23E36 52N45	A20	1	1.00	47	5	0000–2400	
12		IWONICZ ZDROJ	POL	21E48 49N35	A20	1	1.00	47	5	0000–2400	
13		KONSKIE	POL	20E25 51N11	A20	1	1.00	47	5	0000–2400	
14		KRYNICA	POL	20E59 49N26	A20	1	1.00	47	5	0000–2400	
15		LESNA	POL	15E15 51N01	A20	1	1.00	47	5	0000–2400	
16		OSTRODA	POL	19E57 53N42	A20	1	1.00	47	5	0000–2400	
17		OSTRZESZOW	POL	17E57 51N25	A20	1	1.00	47	5	0000–2400	
18		RUCIANE	POL	21E38 53N39	A20	1	1.00	47	5	0000–2400	
19		RZEPIN	POL	14E52 52N20	A20	1	1.00	47	5	0000–2400	
20		SWIDWIN	POL	15E46 53N47	A20	1	1.00	47	5	0000–2400	
21		TARNOBRZEG	POL	21E42 50N38	A20	1	1.00	47	5	0000–2400	
22		USTKA	POL	16E52 54N35	A20	1	1.00	47	5	0000–2400	4/DDR DNK URS
23		USTRZYKI	POL	22E37 49N26	A20	1	1.00	47	5	0000–2400	
24		WADOWICE	POL	19E30 49N53	A20	1	1.00	47	5	0000–2400	
25		GUARDA	POR	07W17 40N32	A20	1	1.00	50	4	0000–2400	
26		BACAU 2	ROU	26E50 46N30	A20	1	1.00	50	5	0300–2300	
27		CIMPENI	ROU	23E05 46N23	A20	1	1.00	50	5	0300–2300	
28		CRAIOVA	ROU	23E49 44N20	A20	1	1.00	50	6	0300–2300	
29		FAGARAS	ROU	24E57 45N52	A20	1	1.00	50	3	0300–2300	
30		GALATI	ROU	27E54 45N25	A20	1	1.00	50	4	0300–2300	
31		IASI	ROU	27E35 47N07	A20	1	1.00	50	4	0300–2300	
32		ILVA	ROU	24E48 47N47	A20	1	1.00	50	5	0300–2300	
33		OTELUL ROSU	ROU	22E25 45N25	A20	1	1.00	50	5	0300–2300	
34		RADAUTIPRUT	ROU	26E46 48N06	A20	1	1.00	50	5	0300–2300	
35		SF GHEORGHE	ROU	29E31 44N50	A20	1	1.00	50	3	0300–2300	
36		SIGHET	ROU	23E56 47N46	A20	1	1.00	50	6	0300–2300	
37		SINICOLAUL MAR	ROU	20E36 46N05	A20	1	1.00	50	2	0300–2300	
38		SUCEAVA	ROU	25E46 47N37	A20	1	1.00	50	5	0300–2300	
39		URZICENI	ROU	26E50 44N45	A20	1	1.00	50	4	0300–2300	
40		ZIMNICEA	ROU	25E30 43N45	A20	1	1.00	50	4	0300–2300	
41		AROMA	SDN	36E12 15N49	A20	1	1.00	47	3	0400–2400	
42		ATBARA	SDN	33E59 17N40	A20	1	1.00	47	4	0400–2400	
43		AWEIL	SDN	27E24 08N46	A20	1	1.00	47	4	0400–2400	
44		BENTIU	SDN	29E50 09N14	A20	1	1.00	47	3	0400–2400	
45		DILLING	SDN	29E39 12N03	A20	1	1.00	47	3	0400–2400	
46		ED DAMAZIN	SDN	34E24 11N39	A20	1	1.00	47	3	0400–2400	
47		KAPOETA	SDN	33E35 04N46	A20	1	1.00	47	3	0400–2400	
48		KARIMA	SDN	31E46 18N30	A20	1	1.00	47	3	0400–2400	
49		KHARTOUM	SDN	32E31 15N36	A20	1	1.00	47	3	0400–2400	
50		MARIDI	SDN	29E28 04N55	A20	1	1.00	47	3	0400–2400	
51		TOKAR	SDN	37E44 18N26	A20	1	1.00	47	4	0400–2400	
52		UMM RUWABA	SDN	31E13 12N53	A20	1	1.00	47	3	0400–2400	
53		WAD MEDANI	SDN	33E32 14N24	A20	1	1.00	47	2	0400–2400	
54		SINGAPORE 2	SNG	103E50 01N25	A20	0.5	0.50	50	5	2200–1800	

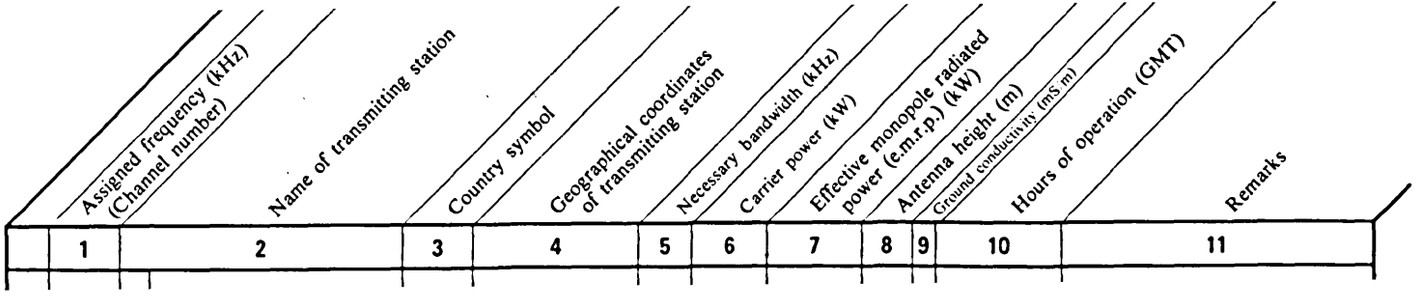


	1	2	3	4	5	6	7	8	9	10	11
1	1584	PRINCIPE	STP	07E25 01N40	A20	1	1.00	47	3	0000–2400	3
2	(118)	DEIR 3	SYR	40E12 35N25	A20	1	1.00	50	5	0300–2400	
3		HOMS 3	SYR	36E42 34N47	A20	1	1.00	50	5	0300–2400	4/JOR TUR
4		GORE DU SUD	TCD	16E38 07N56	A 9	0.1				0400–2300	
5		HARAZE	TCD	19E25 14N13	A 9	0.1				0400–2300	
6		MARO	TCD	18E47 08N24	A 9	0.1				0400–2300	
7		NGOURI	TCD	15E22 13N38	A 9	0.1				0400–2300	
8		ZOUAR	TCD	16E32 20N27	A 9	0.1				0400–2300	
9		BRATISLAVA	TCH	17E08 48N09	C 9	1	1.00		5	0000–2400	
10		BRNO MESTO	TCH	16E37 49N12	C 9	1	1.00		5	0000–2400	
11		C BUDEJOVICE	TCH	14E30 48N58	A20	1	0.63	60	5	0000–2400	
12		KOSICE MESTO	TCH	21E15 48N43	C 9	1	1.00		5	0000–2400	
13		OPAVA	TCH	17E53 49N57	A20	1	0.63	60	5	0000–2400	
14		OSTRAVA MESTO	TCH	18E18 49N50	C 9	1	1.00		5	0000–2400	
15		PARDUBICE	TCH	15E47 50N02	A20	1	0.63	60	5	0000–2400	
16		PRAHA MESTO	TCH	14E24 50N06	C 9	1	1.00		5	0000–2400	
17		ZNOJMO	TCH	16E03 48N52	A20	1	0.63	60	5	0000–2400	
18		IRINGA	TGK	35E50 07S25	A 9	1	1.00	47	4	0300–2100	
19		KALEMA	TGK	31E00 08S10	A 9	1	1.00	45	4	0300–2100	3
20		KONDOA	TGK	35E50 05S10	A 9	1	1.00	47	4	0300–2100	
21		LIWALE	TGK	38E00 09S40	A 9	1	1.00	47	4	0300–2100	
22		MASWA	TGK	34E20 02S40	A 9	1	1.00	47	4	0300–2100	
23		BASSAR	TGO	01E10 09N05	A 9	1	1.00	47	4	0500–2300	
24		NOTSE	TGO	01E10 06N45	A 9	1	1.00	47	4	0500–2300	
25		BETONG	THA	101E04 05N46	A20	1	1.00	47	3	2300–1700	
26		CHIANG MAI	THA	98E59 18N46	A20	1	1.00	30	5	2300–1500	
27		LOEY	THA	101E43 17N28	A20	1	1.00	47	3	2300–1700	4/INS MLA SNG
28		NAKHON PHANOM	THA	104E45 17N23	A20	1	1.00	47	3	2300–1700	4/INS MLA SNG
29		PATTANI	THA	101E16 06N47	A20	1	1.00	47	3	2300–1700	4/INS MLA SNG
30		PHUKET	THA	98E23 07N51	A20	1	1.00	47	3	2300–1700	
31		SURAT THANI	THA	99E20 09N09	A20	1	1.00	47	3	2300–1700	
32		GABES	TUN	10E00 33N55	D20	1	1.00	48	4	0000–2400	
33		KASSERINE	TUN	08E50 35N05	D20	1	1.00	48	4	0000–2400	
34		NABEUL	TUN	10E09 36N20	D20	1	1.00	48	4	0000–2400	4/I MLT
35		TABARKA	TUN	08E50 36N57	D20	1	1.00	48	4	0000–2400	
36		TUNIS	TUN	10E02 36N50	D20	1	1.00	48	4	0000–2400	
37		FETHIYE	TUR	29E09 36N37	A20	1	1.00	43	4	0200–2300	
38		GIRESUN	TUR	38E24 40N55	A20	1	1.00	43	4	0200–2300	
39		MARMARIS	TUR	28E16 36N52	A20	1	1.00	43	4	0200–2300	
40		PAZAR	TUR	41E00 41N11	A20	1	1.00	43	4	0200–2300	
41		KASESE	UGA	30E00 00N00	A 9	1	1.00	47	4	0300–2100	
42		MOROTO	UGA	34E39 02N30	A 9	1	1.00	47	4	0300–2100	
43		DONETSK	UKR	37E29 47N56	A20	1	1.00	120	4	0000–2400	
44		IZMAIL	UKR	28E51 45N20	A20	1	1.00	120	4	0000–2400	
45		JDANOV	UKR	37E31 47N06	A20	1	1.00	120	4	0000–2400	
46		KAMYCH ZARIA	UKR	36E35 45N20	A20	1	1.00	120	4	0000–2400	
47		KHARKOV	UKR	36E14 49N58	A20	1	1.00	120	4	0000–2400	
48		KIROVOGRAD	UKR	32E20 48N30	A20	1	1.00	120	4	0000–2400	
49		LUTSK	UKR	25E20 50N45	A20	1	1.00	120	4	0000–2400	
50		ODESSA	UKR	30E45 46N29	A20	1	1.00	120	4	0000–2400	
51		STAROBELSK	UKR	38E34 49N35	A20	1	1.00	120	4	0000–2400	
52		TCHERNIGOV	UKR	31E19 51N29	A20	1	1.00	120	4	0000–2400	
53		TCHERNOVITSY	UKR	25E55 48N20	A20	1	1.00	120	4	0000–2400	
54		VINNITSA	UKR	28E28 49N14	A20	1	1.00	120	4	0000–2400	

	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1		2	3	4	5	6	7	8	9	10	11

1584 KHZ (118)

	1		2	3	4	5	6	7	8	9	10	11
1	1584		VOLOTCHISK	UKR	26E12 49N36	A20	1	1.00	120	4	0000–2400	
2	(118)		ALEKSANDROV SA	URS	142E18 50N58	A18	1	1.00	120	4	0000–2400	
3			ALMA ATA	URS	77E00 43N17	A18	1	1.00	120	4	0000–2400	
4			ANDIJAN	URS	72E27 40N47	A18	1	1.00	120	4	0000–2400	
5			BIROBIDJAN	URS	133E00 49N16	A18	1	1.00	120	4	0000–2400	
6			CHERSKI	URS	162E00 67N30	A20	1	1.00	120	4	0000–2400	
7			ENISEISK	URS	92E00 58N15	A20	1	1.00	120	4	0000–2400	
8			EREVAN	URS	44E25 40N11	A20	1	1.00	120	4	0000–2400	
9		S	GDOV	URS	27E51 58N41	A18	1	1.00	120	4	0000–2400	
10			GREMIHA	URS	39E52 68N03	A20	1	1.00	120	4	0000–2400	
11			GROZNE	URS	45E38 43N19	A20	1	1.00	120	4	0000–2400	
12			INTA	URS	60E00 66N00	A20	1	1.00	120	4	0000–2400	
13		S	IVANOFRANKOVSK	URS	24E32 48N36	A18	1	1.00	120	4	0000–2400	
14			KALEVALA	URS	31E11 65N13	A18	1	1.00	120	4	0000–2400	
15			KAMEN OBI	URS	81E19 54N40	A20	1	1.00	120	4	0000–2400	
16			KAUNAS	URS	23E54 54N52	A18	1	1.00	120	4	0000–2400	
17			KAZAN	URS	49E08 55N47	A20	1	1.00	120	4	0000–2400	
18			KEGMA	URS	100E28 50N06	A20	1	1.00	120	4	0000–2400	
19			KEMEROVO	URS	86E00 55N22	A20	1	1.00	120	4	0000–2400	
20			KHABAROVSK	URS	135E10 48N33	A18	1	1.00	120	4	0000–2400	
21			KHATANGA	URS	102E30 72N00	A20	1	1.00	120	4	0000–2400	
22			KIROVABAD	URS	46E21 40N39	A20	1	1.00	120	4	0000–2400	
23			KURGAN	URS	65E17 55N29	A20	1	1.00	120	4	0000–2400	
24			LENDERY	URS	31E12 63N30	A18	1	1.00	120	4	0000–2400	
25			LENINOGORSK	URS	83E30 51N30	A20	1	1.00	120	4	0000–2400	
26			LIEPAJA	URS	21E02 56N39	A20	1	1.00	120	4	0000–2400	
27		S	LIPETSK	URS	39E35 52N38	A18	1	1.00	120	4	0000–2400	
28			MADONA	URS	26E13 56N49	A18	1	1.00	120	4	0000–2400	
29			MARY	URS	61E50 37N35	A18	1	1.00	120	4	0000–2400	
30			MOSKVA	URS	37E38 55N45	A20	1	1.00	120	4	0000–2400	
31			MURGAB	URS	74E02 38N11	A20	1	1.00	120	4	0000–2400	
32			NEBIT DAG	URS	54E03 39N20	A18	1	1.00	120	4	0000–2400	
33			NIKOLAEVSK AMU	URS	140E42 53N10	A20	1	1.00	120	4	0000–2400	
34			OLENEK	URS	112E00 68N12	A20	1	1.00	120	4	0000–2400	
35			ORDJONIKIDZE	URS	44E21 43N01	A18	1	1.00	120	4	0000–2400	
36			ORSK	URS	58E44 51N13	A20	1	1.00	120	4	0000–2400	
37			OSINOVO	URS	90E00 61N12	A20	1	1.00	120	4	0000–2400	
38			RIAZAN	URS	39E15 54N35	A20	1	1.00	120	4	0000–2400	
39			SAMBURG	URS	77E30 67N45	A20	1	1.00	120	4	0000–2400	
40			SHARY	URS	45E30 58N21	A20	1	1.00	120	4	0000–2400	
41			SHVEDCHIKI	URS	54E30 43N54	A20	1	1.00	120	4	0000–2400	
42		S	SMOLENSK	URS	31E43 54N48	A18	1	1.00	120	4	0000–2400	
43			SUKHUMI	URS	41E02 43N00	A18	1	1.00	120	4	0000–2400	
44			TAISHET	URS	98E01 55N57	A20	1	1.00	120	4	0000–2400	
45			TBILISI	URS	44E30 41N40	A18	1	1.00	120	4	0000–2400	
46			TROIZSKOE	URS	136E34 49N30	A20	1	1.00	120	4	0000–2400	
47			TULA	URS	37E37 54N12	A20	1	1.00	120	4	0000–2400	
48			TURUHANSK	URS	87E57 65N47	A20	1	1.00	120	4	0000–2400	
49			UGLEGORSK	URS	142E15 48N59	A18	1	1.00	120	4	0000–2400	
50			UST BOLSHEREZK	URS	156E00 52N52	A20	1	1.00	120	4	0000–2400	
51			VALMIERA	URS	25E29 57N32	A18	1	1.00	120	4	0000–2400	
52			VECHINTOS	URS	25E00 55N40	A18	1	1.00	120	4	0000–2400	
53			VILNUS	URS	25E15 54N40	A20	1	1.00	120	4	0000–2400	
54			VIZENGA	URS	63E12 67N16	A20	1	1.00	120	4	0000–2400	

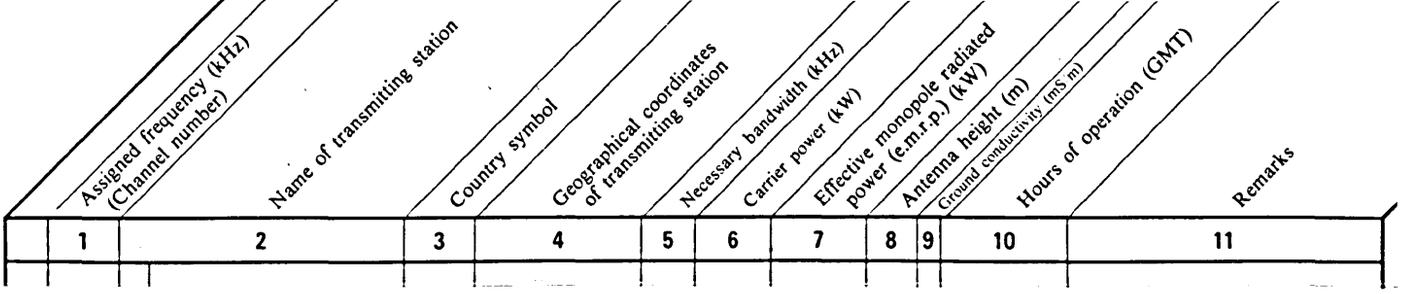


	1	2	3	4	5	6	7	8	9	10	11
1	1584	VLADIVOSTOK	URS	131E53 43N07	A18	1	1.00	120	4	0000–2400	
2	(118)	DHAMAR	YEM	44E33 14N30	A 9	1	1.00	48	3	0300–2200	
3		BEIHAN	YMS	46E17 15N00	A 9	1	1.00	48	4	0300–2200	
4		JAAR	YMS	45E20 13N75	A 9	1		48	4	0300–2200	
5		BAR	YUG	19E05 42N05	D20	1	0.63	60	3	0000–2400	
6		BELI MANASTIR	YUG	18E37 45N47	D20	1	0.50	40	3	0000–2400	
7		BOS PETROVAC	YUG	16E22 44N34	D20	1	0.50	40	5	0000–2400	
8		BOSILEGRAD	YUG	22E29 42N30	D20	1	0.50	40	5	0000–2400	
9		BOVEC	YUG	13E34 46N20	D20	0.1	0.05	40	7	0000–2400	
10		BRATUNAC	YUG	19E20 44N12	D20	1	0.50	40	4	0000–2400	
11		BREZICE	YUG	15E37 45N54	D20	1	0.50	50	4	0000–2400	
12		CAVTAT	YUG	18E15 42N37	D20	1	0.50	40	5	0000–2400	
13		DARUVAR	YUG	17E13 45N35	D20	1	0.50	40	4	0000–2400	
14		DECANI	YUG	20E18 42N32	D20	1	0.50	40	5	0000–2400	
15		DESPOTOVAC	YUG	21E27 44N05	D20	0.3	0.15	40	3	0000–2400	
16		DIMITROVGRAD	YUG	22E47 43N00	D20	1	0.50	40	5	0000–2400	
17		GLAMOC	YUG	16E51 44N06	D20	1	0.50	40	5	0000–2400	
18		HERCEGHOVI	YUG	18E32 42N27	D20	1	1.00	40	4	0000–2400	4/BUL GRC I
19		IMOTSKI	YUG	17E15 43N27	D20	1	0.50	40	5	0000–2400	
20		KNIC	YUG	20E43 44N56	D20	0.3	0.15	40	4	0000–2400	
21		KNJAZEVAC	YUG	22E16 43N33	D20	1	0.50	40	3	0000–2400	
22		KOCEVJE	YUG	14E52 45N38	D20	1	0.50	40	5	0000–2400	
23		KUMANOVO	YUG	21E44 42N09	D20	1	0.50	40	3	0000–2400	
24		KURSUMLIJA	YUG	21E16 43N07	D20	0.3	0.15	40	4	0000–2400	
25		MAJDANPEK	YUG	21E58 44N26	D20	0.3	0.15	40	5	0000–2400	
26		MARIBOR 2	YUG	15E40 46N32	D20	1	1.00	60	4	0000–2400	
27		MRKONJIC GRAD	YUG	17E05 44N25	D20	1	0.50	40	5	0000–2400	
28		NOVI PAZAR	YUG	20E31 43N10	D20	1	0.50	40	5	0000–2400	
29		OGULIN	YUG	15E14 45N13	D20	1	0.50	40	5	0000–2400	
30		OMIS	YUG	16E45 43N25	D20	0.1	0.05	40	5	0000–2400	
31		PANCEVO	YUG	20E38 44N52	D20	1	0.50	40	3	0000–2400	
32		PLOCE	YUG	17E28 43N02	D20	0.1	0.05	40	5	0000–2400	
33		PRIJEDOR	YUG	16E48 44N57	D20	1	0.50	40	4	0000–2400	
34		PRIJEPOLJE	YUG	19E40 43N24	D20	0.3	0.15	40	5	0000–2400	
35		PRILEP	YUG	21E34 41N21	D20	1	0.50	40	5	0000–2400	
36		PULA	YUG	13E50 44N50	D20	1	0.50	40	4	0000–2400	
37		RADOVIS	YUG	22E39 41N27	D20	1	0.50	40	5	0000–2400	
38		ROZAJE 2	YUG	20E10 42N50	D20	1	0.50	40	5	0000–2400	
39		SENJ	YUG	14E55 45N00	D20	1	0.50	40	7	0000–2400	
40		SEZANA	YUG	13E53 45N52	D20	1	0.50	40	4	0500–1700	
41		SL BROD	YUG	18E01 45N10	D20	1	0.50	40	4	0000–2400	
42		TETOVO	YUG	20E59 42N01	D20	1	0.50	40	6	0000–2400	
43		TOLMIN	YUG	13E45 46N11	D20	0.1	0.05	40	6	0000–2400	
44		TRZIC	YUG	14E18 46N22	D20	1	0.50	40	9	0000–2400	
45		UROSEVAC	YUG	21E10 42N22	D20	1	0.50	40	5	0000–2400	
46		VARAZDIN	YUG	16E19 46N23	D20	1	0.50	40	4	0000–2400	
47		VLADICIN HAN	YUG	22E04 42N42	D20	0.3	0.15	40	5	0000–2400	
48		VLASOTINCE	YUG	22E08 42N57	D20	0.3	0.15	40	4	0000–2400	
49		WETE	ZAN	39E50 05S10	A 9	1	1.00	47	4	0300–2100	3
50		ISOKA	ZMB	32E35 10S10	A20	1	1.00	19	4	0200–2100	
51		KAOMA	ZMB	24E48 14S48	A20	1	1.00	19	4	0200–2100	
52		LUNDAZI	ZMB	33E10 12S15	A20	1	1.00	19	4	0200–2100	
53		MWINILUNGA	ZMB	24E27 11S43	A20	1	1.00	47	4	0200–2100	
54		NAMWALA	ZMB	26E30 15S45	A20	1	1.00	19	4	0200–2100	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1	1584	SERENJE	ZMB	30E40 12S53	A20	1	1.00	19	4	0200–2100	
2	(118)	SESHEKE	ZMB	24E20 17S25	A20	1	1.00	19	4	0200–2100	

	1		2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1602		AAQCHA	AFG	66E02 37N00	A 9	1	1.00	47	4	0000–2400	3
2	(120)		GARDEZ	AFG	69E02 35N06	A 9	1	1.00	47	4	0000–2400	
3			KALAT	AFG	66E09 32N04	A 9	1	1.00	43	4	0000–2400	
4			KUNAR–HA	AFG	71E00 35N25	A 9	1	1.00	47	4	0000–2400	3
5			PULLKHOMRI	AFG	68E08 35N09	A 9	1	1.00	47	4	0000–2400	
6			SHEENDAND	AFG	62E02 33N06	A 9	1	1.00	47	4	0000–2400	
7			SPINBOLDAK	AFG	61E04 32N04	A 9	1	1.00	47	4	0000–2400	3
8			TORKHAM	AFG	71E01 34N02	A 9	1	1.00	47	4	0000–2400	3
9			HUAMBO	AGL	15E42 12S45	A10	1	1.00	50	3	0000–2400	
10			LESKOVIK	ALB	20E35 40N10	A20	1	0.63	50	5	0400–2300	3
11			RRESHEN	ALB	19E53 41N46	A20	1	0.63	50	6	0400–2300	3
12			ANNABA	ALG	07E46 36N58	A20	1				0600–2400	
13			AOULEF	ALG	01E05 27N10	A20	1				0600–2400	
14			DJELFA	ALG	02E50 34N50	A20	1				0600–2400	
15			ASCENSION I	ASC	14W24 07S57	A20	1	0.79	55	9	0000–2400	
16			COOMA NSW	AUS	149E08 36S13	A20	0.1		24	5	1900–1400	
17			LEIGH CREEK SA	AUS	138E25 30S29	A20	0.1		22	3	1900–1400	
18			WARRNAMBOOL VC	AUS	142E30 38S22	A20	0.2		30	2	1900–1400	
19			ADMONT	AUT	14E28 47N35	D 9	0.1	0.10	15	6	0000–2400	
20			BAD GOISERN	AUT	13E37 47N38	D 9	0.1	0.10	15	6	0000–2400	
21			BISCHOFSHOFEN	AUT	13E13 47N25	D 9	0.1	0.10	15	6	0000–2400	
22			EISENKAPPEL	AUT	14E35 46N29	D 9	0.1	0.10	15	6	0000–2400	
23			GMUEND KAERNT	AUT	13E31 46N55	D 9	0.1	0.10	15	6	0000–2400	
24			IMST	AUT	10E45 47N15	D 9	0.1	0.10	15	6	0000–2400	
25			JUDENBURG	AUT	14E39 47N09	D 9	0.1	0.10	15	6	0000–2400	
26			KITZBUEHEL	AUT	12E24 47N27	D 9	0.1	0.10	15	6	0000–2400	
27			LEND	AUT	13E03 47N18	D 9	0.1	0.10	15	6	0000–2400	
28			MUERZZUSCHLAG	AUT	15E40 47N36	D 9	0.1	0.10	15	6	0000–2400	
29			OBERWOELZ	AUT	14E17 47N12	D 9	0.1	0.10	15	6	0000–2400	
30			PFUNDS	AUT	10E32 46N58	D 9	0.1	0.10	15	6	0000–2400	
31			S ANTON ARLBG	AUT	10E17 47N08	D 9	0.1	0.10	15	6	0000–2400	
32			S GALLENKIRCH	AUT	09E58 47N01	D 9	0.1	0.10	15	6	0000–2400	
33			S LAMBRECHT	AUT	14E18 47N04	D 9	0.1	0.10	15	6	0000–2400	
34			WOERGL	AUT	12E04 47N30	D 9	0.1	0.10	15	6	0000–2400	
35			ZWETTL	AUT	15E10 48N36	D 9	0.1	0.10	15	6	0000–2400	
36			BUTAHANA	BDI	29E13 02S47	A 9	1	1.00	47	4	0500–0100	3
37			NOAKHALI	BGD	91E04 22N50	A20	1	1.00	50	3	0000–1800	
38			BARANOVICHI	BLR	26E03 53N08	A20	1	1.00	120	4	0000–2400	
39		S	BREST	BLR	23E54 52N18	A16	1	1.00	120	4	0000–2400	
40			GOMEL	BLR	31E01 52N25	A20	1	1.00	120	4	0000–2400	
41			KLIMOVICHI	BLR	32E00 53N36	A20	1	1.00	120	4	0000–2400	
42		S	MIADEL	BLR	26E54 54N53	A18	1	1.00	120	4	0000–2400	
43		S	MOGHILEV	BLR	30E17 53N55	A18	1	1.00	120	4	0000–2400	
44		S	PINSK	BLR	26E10 52N10	A18	1	1.00	120	4	0000–2400	
45			SLONIM	BLR	25E20 53N03	A20	1	1.00	120	4	0000–2400	
46			FRANCISTOWN	BOT	27E33 21S13	A20	1	0.79	40	4	0300–2100	3
47			LOBATSI	BOT	25E42 25S12	A20	1	0.79	40	4	0300–2300	3
48			MAUN	BOT	23E26 19S58	A20	1	0.79	40	4	0300–2100	
49			ORAPA	BOT	25E26 21S15	A20	1	0.79	40	4	0300–2100	
50			SELEBE PIKWE	BOT	27E50 22S01	A20	1	0.79	40	4	0300–2100	3
51		S	ACHTOPOL	BUL	27E54 42N06	A18	1	1.00	30	5	0000–2400	
52		S	KAVARNA	BUL	28E21 43N25	A18	1	1.00	30	5	0000–2400	
53		S	MADAN	BUL	24E57 41N33	A18	1	1.00	30	5	0000–2400	
54		S	TOUTRAKAN	BUL	26E36 44N01	A18	1	1.00	30	5	0000–2400	



	1	2	3	4	5	6	7	8	9	10	11
1	1602	BAKALA	CAF	23E41 05N25	A 9	1	1.00	20	5	0400—2300	
2	(120)	BRIA	CAF	21E25 06N00	A 9	1	1.00	20	5	0400—2300	
3		DEKOA	CAF	19E05 06N19	A 9	1	1.00	20	5	0400—2300	
4		NOLA	CAF	16E03 03N31	A 9	1	1.00	20	3	0400—2300	
5		OBO	CAF	26E29 05N24	A 9	1	1.00	20	5	0400—2300	
6		MOEN ISLAND	CAR	151E51 07N25	A10	0.1	0.10	52	2	2000—1400	
7		ANQING	CHN	117E00 30N30	A 6	1	1.00	60	4	2000—1800	
8		BAODING	CHN	115E33 38N51	A 6	1	1.00	50	4	2000—1800	
9		FUZHOU 1	CHN	119E24 26N06	A 6	1	1.00	70	4	2000—1800	
10		GUANGZHOU	CHN	113E14 23N11	A 6	0.5	0.50	70	4	2000—1800	
11		LONGJIANG	CHN	123E14 47N20	A 6	1	1.00	70	4	2000—1800	
12		NANJING	CHN	118E54 32N06	A 6	0.5	0.50	70	3	2000—1800	
13		NANTONG SHI	CHN	120E40 32N05	A 6	0.5	0.50	70	3	2000—1800	
14		QINGDAO	CHN	120E20 36N03	A 6	1	1.00	90	4	2000—1800	
15		QUANZHOU 1	CHN	118E33 24N53	A 6	0.5	0.50	60	4	2000—1800	
16		SHANGHAI	CHN	121E29 31N15	A 6	0.5	0.50	70	3	2000—1800	
17		SHANTOU	CHN	116E36 23N30	A 6	0.5	0.50	120	4	2000—1800	
18		SHIJIAZHUANG	CHN	114E40 37N50	A 6	0.5	0.50	50	4	2000—1800	
19		WENZHOU	CHN	120E36 28N06	A 6	0.5	0.50	120	4	2000—1800	
20		WUXI SHI	CHN	120E26 31N33	A 6	0.5	0.50	70	3	2000—1800	
21		BATTICALOA	CLN	81E40 07N45	A20	1	1.00	50	5	0000—1800	
22		CHILAW	CLN	79E48 07N30	A20	1	1.00	50	5	0000—1800	
23		COLOMBO	CLN	79E50 06N55	A20	1	1.00	50	5	0000—1800	
24		JAFFNA	CLN	80E10 09N47	A20	1	1.00	50	5	0000—1800	3
25		MANNAR	CLN	79E53 09N05	A20	1	1.00	50	5	0000—1800	3
26		MATARA	CLN	80E27 06N00	A20	1	1.00	50	5	0000—1800	
27		MULLAITIVU	CLN	80E45 09N15	A20	1	1.00	50	5	0000—1800	3
28		PUTTALAM	CLN	79E50 08N10	A20	1	1.00	50	5	0000—1800	3
29		TRINCOMALEE	CLN	81E15 08N30	A20	1	1.00	50	5	0000—1800	3
30		AKONOLINGA	CME	12E36 03N51	A 9	1			5	0500—2300	
31		DSCHANG	CME	09E54 05N31	A 9	1			4	0500—2300	
32		LOLODORF	CME	10E42 03N12	A 9	1			5	0500—2300	
33		POLI	CME	13E15 07N24	A 9	1			4	0500—2300	
34		TIGNERE	CME	12E36 07N24	A 9	1			4	0500—2300	
35		WUM	CME	10E05 06N23	A 9	1			4	0500—2300	
36		YABASSI	CME	09E52 04N27	A 9	1			5	0500—2300	
37		YAGOUA	CME	15E00 10N12	A 9	1			4	0500—2300	
38		GRANADILLA	CNR	16W35 28N10	A20	1	0.63	30	5	0000—2400	
39		ICOD	CNR	16W45 28N20	A20	1	0.63	30	5	0000—2400	
40		PT ROSARIO	CNR	13W50 28N30	A20	1	0.63	40	5	0000—2400	
41		VALVERDE	CNR	17W55 27N45	A20	1	0.63	40	5	0000—2400	
42		INONI	COG	15E39 03S04	A20	1	0.50			0000—2400	
43		SEMBE	COG	14E36 01N39	A20	1	0.50			0000—2400	
44		PRAIA	CPV	23W30 14N55	A18	1	1.00	40	6	1900—2400	
45		DABAKALA	CTI	04W07 08N08	A 9	1			7	0600—2400	
46		MANKONO	CTI	06W11 08N03	A 9	1	1.00	47	7	0600—2400	
47		TOULEPLEU	CTI	08W24 06N32	A 9	1			7	0600—2400	
48		ZUENOULA	CTI	06W03 07N26	A 9	1	1.00	47	7	0600—2400	
49		NICOSIA	CYP	33E23 35N09	A 9	1	1.00	50	5	0000—2400	4/GRC
50		PAPHOS	CYP	32E22 34N52	A 9	1	1.00	50	5	0000—2400	4/GRC
51		ABOMEY	DAH	02E00 07N14	A10	1	1.00	47	4	0500—2400	
52		ANGERMUENDE	DDR	13E00 53N01	D 9	1		20	3	0000—2400	
53		ANKLAM	DDR	13E42 53N51	D 9	1		20	4	0000—2400	4/S
54		BAUTZEN	DDR	14E25 51N12	D 9	1		20	4	0000—2400	

1	Assigned frequency (kHz) (Channel number)	2 Name of transmitting station	3 Country symbol	4 Geographical coordinates of transmitting station	5 Necessary bandwidth (kHz)	6 Carrier power (kW)	7 Effective monopole radiated power (e.m.r.p.) (kW)	8 Antenna height (m)	9 Ground conductivity (mS/m)	10 Hours of operation (GMT)	11 Remarks
1	1602	DEMMIN	DDR	13E03 53N55	D 9	1		20	4	0000–2400	4/S
2	(120)	EISENHUETTENST	DDR	14E37 52N09	D 9	1		20	4	0000–2400	
3		GUESTROW	DDR	12E12 53N47	D 9	1		20	4	0000–2400	4/S
4		PLAUEN	DDR	12E09 50N36	D 9	1	1.00	20	4	0000–2400	
5		POTSDAM	DDR	12E58 52N24	D 9	1	1.00	20	4	0000–2400	
6		RIBNITZ DAMMG	DDR	12E27 54N15	D 9	1		20	3	0000–2400	4/D
7		ROEBEL	DDR	12E36 53N22	D 9	1		20	4	0000–2400	
8		SANGERHAUSEN	DDR	11E18 51N28	D 9	1		20	4	0000–2400	
9		SEELOW	DDR	14E22 52N32	D 9	1	1.00	20	3	0000–2400	
10		WORBIS KEULA	DDR	10E22 51N26	D 9	1		20	4	0000–2400	
11		AYAMONTE	E	07W25 37N15	D20	0.3	0.19	30	4	0000–2400	
12		BENAVENTE	E	05W40 42N00	D20	0.3	0.19	30	4	0000–2400	
13		CD REAL	E	03W55 39N00	D20	1	0.63	30	5	0000–2400	
14		CD RODRIGO	E	06W30 40N35	D20	0.3	0.19	30	4	0000–2400	
15		GUADIX	E	03W10 37N20	D20	0.3	0.19	30	5	0000–2400	
16		HELLIN	E	01W40 38N30	D20	0.3	0.19	30	4	0000–2400	
17		LERIDA	E	00E40 41N35	D20	1	0.63	30	5	0000–2400	
18		LOJA	E	04W10 37N10	D20	0.3	0.19	30	4	0000–2400	
19		LUARCA	E	06W30 43N30	D20	0.3	0.19	30	5	0000–2400	
20		MIRANDA EBRO	E	02W55 42N40	D20	0.3	0.19	30	4	0000–2400	
21		OLOT	E	02E30 42N10	D20	0.3	0.19	30	5	0000–2400	
22		ORENSE	E	07W50 42N20	D20	1	0.63	30	5	0000–2400	
23		PALMA MALLORCA	E	02E40 39N35	D20	1	0.63	30	5	0000–2400	
24		PAMPLONA	E	01W40 42N50	D20	1	0.63	30	5	0000–2400	
25		SANTANDER	E	03W50 43N30	D20	1	0.63	30	5	0000–2400	
26		SANTIAGO COMP	E	08W30 42N50	D20	1	0.63	30	5	0000–2400	
27		SORIA	E	02W30 41N45	D20	0.5	0.32	30	5	0000–2400	
28		TERUEL	E	01W10 40N20	D20	0.5	0.32	30	5	0000–2400	
29		VALENCIA ALCAN	E	07W15 39N25	D20	0.3	0.19	30	5	0000–2400	
30		VICH	E	02E15 41N55	D20	0.3	0.19	30	5	0000–2400	
31		VILLABLINO	E	06W20 42N55	D20	0.3	0.19	30	5	0000–2400	
32		VILLARROBLEDO	E	02W35 39N15	D20	0.3	0.19	30	4	0000–2400	
33		VINAROZ	E	00E25 40N30	D20	0.3	0.19	30	4	0000–2400	
34		ALEXANDRIA	EGY	29E52 31N11	A20	1	1.00	47	4	0000–2400	
35		BAWITI	EGY	28E50 28N22	A20	1	1.00	47	4	0000–2400	
36		EIN ZAITOUN	EGY	25E52 29N05	A20	1	1.00	47	4	0000–2400	
37		EL FAYUM	EGY	30E50 29N20	A20	1	1.00	47	4	0000–2400	
38		EL KHARGAH	EGY	30E33 25N30	A20	1	1.00	47	4	0000–2400	
39		GHARDAKA	EGY	33E45 27N35	A20	1	1.00	47	4	0000–2400	3
40		PORT SAID	EGY	32E19 31N05	A20	1	1.00	47	4	0000–2400	3
41		QUENA	EGY	32E43 26N10	A20	1	1.00	47	4	0000–2400	
42		RAS BANAS	EGY	35E45 23N55	A20	1	1.00	47	4	0000–2400	3
43		SUEZ	EGY	32E31 30N00	A20	1	1.00	47	4	0000–2400	
44		ASMARA	ETH	38E56 15N21	A 9	1	1.00	46	3	0000–2400	
45		HARRAR	ETH	42E08 09N18	A 9	1	1.00	46	3	0000–2400	
46		CAEN V	F	00W22 49N11	D 9	1	1.00	50	7	0000–2400	
47		NIMES	F	04E21 43N50	D 9	1	1.00	50	7	0000–2400	
48		RAKIRAKI	FJI	178E09 17S22	A20	1	0.63	30	5	1700–1200	
49		HAMEENLINNA	FNL	24E28 61N00	A20	1	1.00	50	5	0000–2400	
50		JYVASKYLA	FNL	25E43 62N15	A20	1	1.00	50	5	0000–2400	
51		KAJAANI	FNL	27E44 64N13	A20	1	1.00	50	6	0000–2400	
52		KASKINEN	FNL	21E15 62N22	A20	1	1.00	50	4	0000–2400	
53		KOUVOLA	FNL	26E40 60N53	A20	1	1.00	50	5	0000–2400	
54		KUOPIO	FNL	27E42 62N55	A20	1	1.00	50	5	0000–2400	

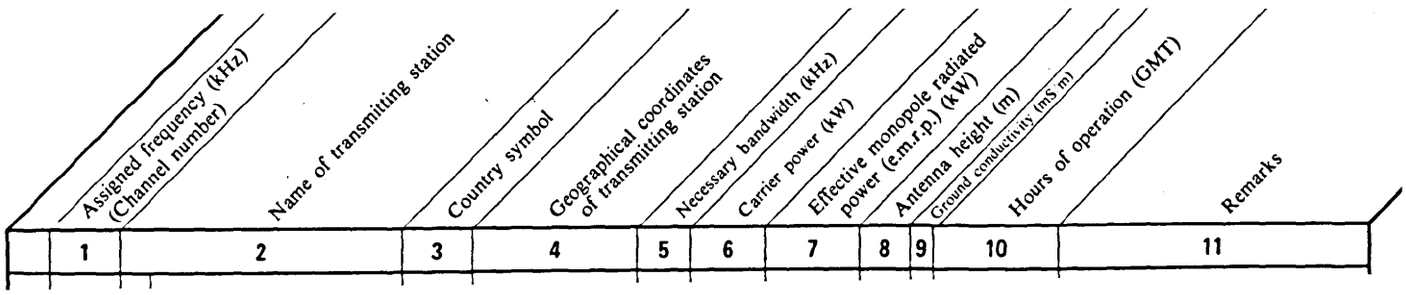
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1	1602	KUUSAMO	FNL	29E08 65N57	A20	1	1.00	50	7	0000–2400	
2	(120)	PIETARSAARI	FNL	22E42 63N41	A20	1	1.00	50	5	0000–2400	
3		PORVOO	FNL	25E41 60N23	A20	1	1.00	50	5	0000–2400	
4		SAVONLINNA	FNL	28E53 61N52	A20	1	1.00	50	5	0000–2400	
5		SEINAJOKI	FNL	22E49 62N47	A20	1	1.00	50	5	0000–2400	
6		TAMMISAARI	FNL	23E27 59N59	A20	1	1.00	50	5	0000–2400	
7		TAMPERE	FNL	23E49 61N29	A20	1	1.00	50	6	0000–2400	
8		TORNIO	FNL	24E11 65N51	A20	1	1.00	50	5	0000–2400	
9		TURKU	FNL	22E35 60N04	A20	1	1.00	50	4	0000–2400	
10		OYEM	GAB	11E36 01N40	A 9	1		20	4	0400–2400	
11		PT GENTIL	GAB	08E42 00S42	A 9	1		30	4	0400–2400	
12		ARGOS	GRC	22E43 37N39	A 9	1	0.79	50	5	0400–2400	
13		ATALANTI	GRC	23E15 38N30	A 9	1	0.79	50	5	0400–2400	
14		CHANIA	GRC	24E01 35N30	A 9	1	0.79	50	5	0400–2400	
15		IERAPETRA	GRC	25E53 35N02	A 9	1	0.79	50	5	0400–2400	
16		KALAMAI	GRC	22E07 37N02	A 9	1	0.79	50	4	0400–2400	
17		KAVALLA	GRC	24E25 40N56	A 9	1	0.79	50	4	0400–2400	
18		KOZANI	GRC	21E46 40N16	A 9	1	0.79	50	4	0400–2400	
19		LIMNOS	GRC	25E04 39N53	A 9	1	0.79	50	5	2300–2200	
20		MESSOLOGGION	GRC	21E33 38N22	A 9	1	0.79	50	3	0400–2400	
21		RODOS	GRC	28E05 36N20	A 9	1	0.79	50	5	0400–2400	
22		SAMOS	GRC	26E40 37N42	A 9	1	0.63	40	4	0000–2400	
23		SOUFLI	GRC	26E20 41N00	A 9	1	0.79	50	5	0400–2200	
24		BOFFA	GUI	14W02 10N12	A 9	1	1.00	50		0000–2400	
25		GAOUAL	GUI	13W18 11N45	A 9	1	1.00	47	4	0000–2400	
26		KOUBIA	GUI	11W55 11N30	A 9	1	1.00	50		0000–2400	
27		KOUROUSSA	GUI	09W50 10N40	A 9	1	1.00	50		0000–2400	
28		LOLA	GUI	08W29 07N52	A 9	1	1.00	47	4	0000–2400	
29		MACENTA	GUI	09W28 08N13	A 9	1	1.00	47	4	0000–2400	
30		PITA	GUI	12W15 11N05	A 9	1	1.00	50		0000–2400	
31		BALATONSZABADI	HNG	18E07 46N55	D18	1	1.00	60	4	0000–2400	
32		ESZTERGOM	HNG	18E43 47N48	D18	1	1.00	60	4	0000–2400	
33		KAPOSVAR	HNG	17E48 46N21	D18	1	1.00	60	4	0000–2400	
34		KOMADI	HNG	21E31 47N00	D18	1	1.00	60	4	0000–2400	
35		ZALAEGERSZEG	HNG	16E51 46N51	D18	1	1.00	60	4	0000–2400	
36		LEEUWARDEN	HOL	05E45 53N15	D 9	2	1.00	30	5	0000–2400	
37		BOGANDE	HVO	00W08 13N00	A20	1	1.00	47	4	0000–2400	
38		KONGOUSSI	HVO	01W35 11N20	A20	1	1.00	47	4	0000–2400	
39		MANGA	HVO	01W00 11N00	A20	1	1.00	47	4	0000–2400	
40		PAMA	HVO	00E30 13N10	A20	1	1.00	47	4	0000–2400	
41		SINDOU	HVO	05W04 10N35	A20	1	1.00	47	4	0000–2400	
42		SOLENZO	HVO	04W00 12N20	A20	1	1.00	47	4	0000–2400	
43		AGRIGENTO	I	13E36 37N18	D 9	1	1.00	50	5	0000–2400	
44		AQUILA	I	13E24 42N21	D 9	1	1.00	50	5	0000–2400	
45		ASCOLIPICENO	I	13E34 42N51	D 9	1	1.00	50	5	0000–2400	
46		BENEVENTO	I	14E47 41N08	D 9	1	1.00	50	5	0000–2400	
47		BIELLA	I	08E03 45N34	D 9	1	1.00	50	5	0000–2400	
48		BOLOGNA	I	11E21 44N30	D 9	1	1.00	50	5	0000–2400	
49		BRESCIA	I	10E14 45N33	D 9	1	1.00	50	5	0000–2400	
50		CITTA CASTELLO	I	12E16 43N27	D 9	1	1.00	50	5	0000–2400	
51		COMO	I	09E05 45N48	D 9	1	1.00	50	5	0000–2400	
52		GORIZIA	I	13E37 45N57	D 9	1	1.00	50	5	0000–2400	
53		IMPERIA	I	08E00 43N53	D 9	1	1.00	50	5	0000–2400	
54		LASPEZIA	I	09E49 44N06	D 9	1	1.00	50	5	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11
1	1602	LECCE	I	18E11 40N21	D 9	1	1.00	50	5	0000–2400	4/GRC LBY YUG
2	(120)	MATERA	I	16E37 40N39	D 9	1	1.00	50	5	0000–2400	
3		PORDENONE	I	12E40 45N59	D 9	1	1.00	50	5	0000–2400	
4		SALERNO	I	14E46 40N40	D 9	1	1.00	50	5	0000–2400	
5		SAVONA	I	08E29 44N19	D 9	1	1.00	50	5	0000–2400	
6		SIENA	I	11E20 43N19	D 9	1	1.00	50	5	0000–2400	
7		SIRACUSA	I	15E18 37N03	D 9	1	1.00	50	5	0000–2400	
8		SPOLETO	I	12E43 42N43	D 9	1	1.00	50	5	0000–2400	
9		SULMONA	I	13E57 42N04	D 9	1	1.00	50	5	0000–2400	
10		CHIKMAGALUR	IND	75E50 13N10	A20	1		100	3	0000–2400	
11		DHARMSALA	IND	76E15 32N12	A20	1		100	4	0000–2400	
12		KRISHNAGAR	IND	88E25 23N15	A20	1		100	4	0000–2400	
13		MYSORE	IND	76E42 12N18	A20	1		100	3	0000–2400	
14		NAGAUR	IND	73E40 27N11	A20	1		100	4	0000–2400	
15		NAGERKOIL	IND	77E30 08N06	A20	1		100	3	0000–2400	
16		NAGPUR	IND	79E03 21N06	A20	1		100	3	0000–2400	
17		NAHAN	IND	77E10 30N30	A20	1		100	4	0000–2400	
18		NAINITAL	IND	79E30 29N30	A20	1		100	3	0000–2400	
19		NALGONDA	IND	79E17 17N03	A20	1		100	3	0000–2400	
20		NANDED	IND	77E27 19N09	A20	1		100	3	0000–2400	
21		NARNAUL	IND	76E14 28N02	A20	1		100	4	0000–2400	
22		NARSIMHAPUR	IND	79E20 23N00	A20	1		100	3	0000–2400	
23		NASIK	IND	73E50 20N02	A20	1		100	4	0000–2400	
24		NELLORE	IND	80E00 14N30	A20	1		100	3	0000–2400	
25		NIZAMABAD	IND	78E06 18N50	A20	1		100	4	0000–2400	
26		NOWGONG	IND	92E50 26N30	A20	1		100	3	0000–2400	
27		ONGOLE	IND	80E06 15N27	A20	1		100	3	0000–2400	
28		OOTACAMUND	IND	76E47 11N24	A20	1		100	3	0000–2400	
29		OSMANABAD	IND	76E02 18N10	A20	1		100	3	0000–2400	
30		PALANPUR	IND	72E28 24N12	A20	1		100	3	0000–2400	
31		PALEL	IND	94E01 24N30	A20	1		100	4	0000–2400	3
32		PALI	IND	73E25 25N26	A20	1		100	4	0000–2400	
33		PANAJIGOA	IND	73E51 15N28	A20	1		100	4	0000–2400	
34		PANNA	IND	80E10 24N45	A20	1		100	4	0000–2400	
35		PARBHANI	IND	76E50 19N08	A20	1		100	3	0000–2400	
36		PATIALA	IND	76E30 30N25	A20	1		100	4	0000–2400	
37		PATNA	IND	85E13 25N37	A20	1		100	3	0000–2400	
38		PAURI	IND	78E50 30N15	A20	1		100	4	0000–2400	
39		PHULBANI	IND	84E15 20N28	A20	1		100	3	0000–2400	
40		PILIBHIT	IND	79E51 28N38	A20	1		100	4	0000–2400	
41		PITHORAGARH	IND	80E20 29N40	A20	1		100	4	0000–2400	
42		PONDICHERRY	IND	79E54 12N00	A20	1		100	3	0000–2400	
43		POONA	IND	73E55 18N31	A20	1		100	4	0000–2400	
44		PT BLAIR	IND	92E43 11N41	A20	1		100	4	0000–2400	
45		PT CORNWALLIS	IND	93E10 13N20	A20	1		100	4	0000–2400	3
46		PUNCH	IND	74E10 33N40	A20	1		100	4	0000–2400	
47		PURNEA	IND	87E20 25N45	A20	1		100	3	0000–2400	
48		PURULIA	IND	86E25 23N15	A20	1		100	4	0000–2400	
49		QUILON	IND	76E30 08N50	A20	1		100	4	0000–2400	
50		RAEBARELI	IND	81E16 26N14	A20	1		100	3	0000–2400	
51		RAICHUR	IND	77E30 16N10	A20	1		100	3	0000–2400	
52		RAIGARH	IND	83E30 21N50	A20	1		100	4	0000–2400	
53		RAIPUR	IND	81E41 21N15	A20	1		100	3	0000–2400	
54		RAJAURI	IND	74E30 33N10	A20	1		100	4	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

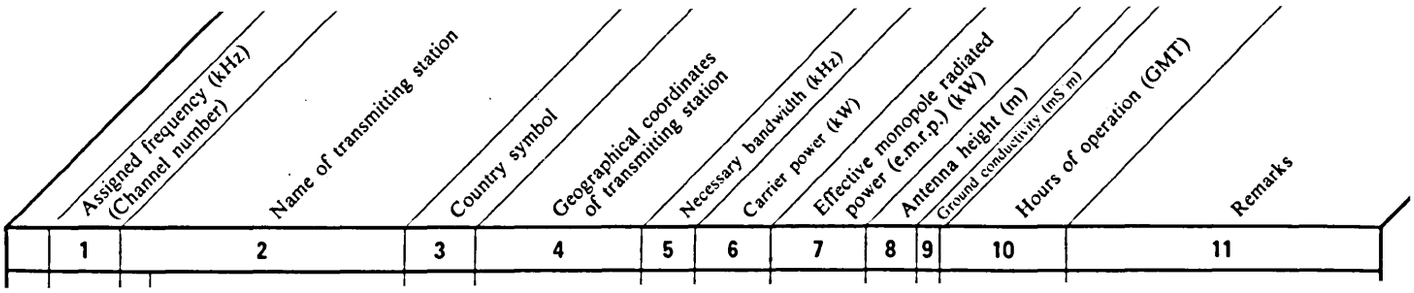
	1	2	3	4	5	6	7	8	9	10	11
1	1602	RAJGARH	IND	76E30 24N00	A20	1		100	3	0000–2400	
2	(120)	RAJKOT	IND	70E41 22N22	A20	1		100	3	0000–2400	
3		RAMANATHAPURAM	IND	78E52 09N22	A20	1		100	3	0000–2400	
4		RAMPUR	IND	79E04 28N48	A20	1		100	3	0000–2400	
5		RANCHI	IND	85E23 23N23	A20	1		100	3	0000–2400	
6		RATLAM	IND	75E00 23N25	A20	1		100	3	0000–2400	
7		RATNAGIRI	IND	73E22 17N00	A20	1		100	4	0000–2400	
8		REWA	IND	81E25 24N31	A20	1		100	4	0000–2400	
9		ROHTAK	IND	76E27 28N56	A20	1		100	3	0000–2400	
10		ROPAR	IND	76E35 30N55	A20	1		100	4	0000–2400	
11		SAGAR	IND	79E30 23N30	A20	1		100	4	0000–2400	
12		SAHARANPUR	IND	77E30 29N55	A20	1		100	3	0000–2400	
13		SAHARSA	IND	86E40 25N50	A20	1		100	3	0000–2400	
14		SALEM	IND	78E12 11N39	A20	1		100	4	0000–2400	
15		SAMBALPUR	IND	84E01 21N28	A20	1		100	3	0000–2400	
16		SANGLI	IND	74E36 16N53	A20	1		100	3	0000–2400	
17		SANGRUR	IND	75E45 30N25	A20	1		100	3	0000–2400	
18		SATARA	IND	74E02 17N42	A20	1		100	3	0000–2400	
19		SATNA	IND	80E50 24N50	A20	1		100	4	0000–2400	
20		SAWAI MADHOPUR	IND	76E30 26N00	A20	1		100	3	0000–2400	
21		SEONI	IND	79E30 22N05	A20	1		100	4	0000–2400	
22		SHAHDOL	IND	81E20 23N15	A20	1		100	4	0000–2400	
23		SHAHJAHANPUR	IND	79E57 27N54	A20	1		100	3	0000–2400	
24		SHAJAPUR	IND	76E10 23N30	A20	1		100	3	0000–2400	
25		SHILLONG	IND	91E56 25N34	A20	1		100	3	0000–2400	
26		SHIMOGA	IND	75E30 13N55	A20	1		100	3	0000–2400	
27		SHIVPURI	IND	77E30 25N30	A20	1		100	3	0000–2400	
28		SHOLAPUR	IND	75E56 17N40	A20	1		100	4	0000–2400	
29		SIBSAGAR	IND	94E50 26N55	A20	1		100	3	0000–2400	
30		SIDHI	IND	81E50 24N30	A20	1		100	4	0000–2400	
31		SIKAR	IND	75E15 27N36	A20	1		100	4	0000–2400	
32		SIMLA	IND	77E12 31N10	A20	1		100	4	0000–2400	
33		SIROHI	IND	72E48 24N42	A20	1		100	4	0000–2400	
34		SITAPUR	IND	80E43 27N32	A20	1		100	3	0000–2400	
35		SRIKAKULAM	IND	83E55 18N15	A20	1		100	4	0000–2400	
36		SRINAGAR	IND	74E49 34N04	A20	1		100	3	0000–2400	
37		SULTANPUR	IND	82E07 26N16	A20	1		100	3	0000–2400	
38		SUNDERGARH	IND	84E03 22N07	A20	1		100	4	0000–2400	
39		SURAT	IND	72E52 21N12	A20	1		100	3	0000–2400	
40		SURENDRANAGAR	IND	71E40 22N45	A20	1		100	3	0000–2400	
41		SURI	IND	87E30 23N50	A20	1		100	4	0000–2400	
42		TAMENGLONG	IND	93E30 25N00	A20	1		100	4	0000–2400	
43		TEZPUR	IND	92E42 26N48	A20	1		100	3	0000–2400	
44		TEZU	IND	96E15 27N50	A20	1		100	4	0000–2400	
45		THANA	IND	72E50 19N15	A20	1		100	3	0000–2400	
46		THANJAVUR	IND	79E10 10N47	A20	1		100	3	0000–2400	
47		TIKAMGARH	IND	78E40 24N40	A20	1		100	3	0000–2400	
48		TINNEVELLY	IND	77E44 08N44	A20	1		100	3	0000–2400	
49		TIRUCHIRAPALLI	IND	78E46 10N50	A20	1		100	3	0000–2400	
50		TONK	IND	75E50 26N08	A20	1		100	4	0000–2400	
51		TRICHUR	IND	76E15 10N35	A20	1		100	4	0000–2400	
52		TRIVANDRUM	IND	76E59 08N29	A20	1		100	4	0000–2400	
53		TUENSANG	IND	94E48 26N14	A20	1		100	4	0000–2400	3
54		TUMKUR	IND	77E00 13N30	A20	1		100	3	0000–2400	



	1	2	3	4	5	6	7	8	9	10	11
1	1602	TURA	IND	90E12 25N36	A20	1		100	3	0000–2400	
2	(120)	UDAIPUR	IND	73E47 24N30	A20	1		100	4	0000–2400	
3		UDHAMPUR	IND	75E00 32N50	A20	1		100	3	0000–2400	
4		UJJAIN	IND	75E45 23N09	A20	1		100	4	0000–2400	
5		UTTARKASHI	IND	78E30 30N50	A20	1		100	4	0000–2400	
6		VARANASHI	IND	83E00 25N20	A20	1		100	3	0000–2400	
7		VELLORE	IND	79E11 12N55	A20	1		100	4	0000–2400	
8		VIZAGAPATAM	IND	83E20 17N42	A20	1		100	4	0000–2400	
9		WARANGAL	IND	79E35 18N02	A20	1		100	3	0000–2400	
10		WARDHA	IND	78E39 20N45	A20	1		100	3	0000–2400	
11		YANAM	IND	82E20 16N40	A20	1		100	4	0000–2400	
12		YEOTMAL	IND	78E11 20N23	A20	1		100	4	0000–2400	
13		ZIRO	IND	93E50 27N34	A20	1		100	4	0000–2400	
14		AMBON	INS	128E10 03S41	A18	0.5	0.50	25	4	0000–2400	
15		BANDA ATJEH	INS	95E20 05N30	A18	0.5	0.50	25	4	0000–2400	
16		BANDJARMASIN	INS	114E33 03S22	A18	0.5	0.50	25	4	0000–2400	
17		BANDUNG	INS	107E36 06S55	A18	0.5	0.50	25	4	0000–2400	
18		BANGIL	INS	112E46 07S36	A18	0.5	0.50	25	4	0000–2400	
19		BANJUWANGI	INS	114E23 08S13	A18	0.5	0.50	75	3	0000–2400	
20		BENGKULU	INS	102E20 03S46	A18	0.5	0.50	25	4	0000–2400	
21		BIAK	INS	136E04 01S11	A18	0.5	0.50	25	4	0000–2400	
22		BOGOR SEMPLAK	INS	106E47 06S35	A18	0.5	0.50	75	3	0000–2400	
23		BOJONEGORO	INS	111E03 07S09	A18	0.5	0.50	25	4	0000–2400	
24		BONDOWOSO	INS	113E49 07S54	A18	0.5	0.50	25	4	0000–2400	
25		BUKITTINGGI	INS	100E32 00S18	A18	0.5	0.50	25	4	0000–2400	
26		CIANJUR	INS	107E18 06S49	A18	0.5	0.50	25	4	0000–2400	
27		CIKAMPEK	INS	107E28 06S25	A18	0.5	0.50	75	3	0000–2400	
28		DENPASAR	INS	115E13 08S39	A18	0.5	0.50	75	3	0000–2400	
29		DJAKARTA	INS	106E50 06S10	A18	0.5	0.50	25	4	0000–2400	
30		DJAMBI	INS	103E39 01S36	A18	0.5	0.50	20	4	0000–2400	
31		DJEMBER	INS	113E42 08S10	A18	0.5	0.50	25	4	0000–2400	
32		FAKFAK	INS	132E17 02S55	A18	0.5	0.50	25	4	0000–2400	
33		GARUT	INS	107E53 06S42	A18	0.5	0.50	25	4	0000–2400	
34		GRESIK	INS	112E39 07S09	A18	0.5	0.50	25	4	0000–2400	
35		KALIUNGU	INS	110E14 06S57	A18	0.5	0.50	25	4	0000–2400	
36		KEDIRI	INS	112E02 07S53	A18	0.5	0.50	75	3	0000–2400	
37		KENDAL	INS	110E12 06S55	A18	0.5	0.50	25	4	0000–2400	
38		KENDARI	INS	122E36 03S57	A18	0.5	0.50	25	4	0000–2400	
39		KLATEN	INS	110E36 07S42	A18	0.5	0.50	25	4	0000–2400	
40		KLUNGKUNG	INS	115E24 08S32	A18	0.5	0.50	25	4	0000–2400	
41		KRAWANG	INS	107E17 06S18	A18	0.5	0.50	75	3	0000–2400	
42		MADIUN	INS	111E31 07S37	A18	0.5	0.50	25	4	0000–2400	
43		MAGELANG	INS	110E12 07S30	A18	0.5	0.50	25	4	0000–2400	
44		MAJALENGKA	INS	108E13 06S50	A18	0.5	0.50	25	4	0000–2400	
45		MALANG	INS	112E37 07S59	A18	0.5	0.50	25	4	0000–2400	
46		MENADO	INS	124E55 01N32	A18	0.5	0.50	25	4	0000–2400	
47		PADANG	INS	100E23 00S57	A18	0.5	0.50	75	3	0000–2400	
48		PAKANBARU	INS	101E26 00N32	A18	0.5	0.50	75	3	0000–2400	
49		PALEMBANG	INS	104E46 03S00	A18	0.5	0.50	75	3	0000–2400	
50		PALENGKARAJA	INS	113E11 02S02	A18	0.5	0.50	25	4	0000–2400	
51		PALU	INS	119E53 00S54	A18	0.5	0.50	25	4	0000–2400	
52		PANDJANG	INS	105E22 05S33	A18	0.5	0.50	25	4	0000–2400	
53		PASURUAN	INS	112E54 07S38	A18	0.5	0.50	75	3	0000–2400	
54		PATI	INS	111E02 06S45	A18	0.5	0.50	25	4	0000–2400	

	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1	1602	PAYAHKUMBUH	INS	100E38 00S13	A18	0.5	0.50	25	4	0000–2400	
2	(120)	PEKALONGAN	INS	109E40 06S53	A18	0.5	0.50	25	4	0000–2400	
3		PONOROGO	INS	111E28 07S52	A18	0.5	0.50	75	3	0000–2400	
4		PONTIANAK	INS	109E20 00S05	A18	0.5	0.50	25	4	0000–2400	
5		PROBOLINGGO	INS	113E13 07S45	A18	0.5	0.50	25	4	0000–2400	
6		PURWOKERTO	INS	109E15 07S26	A18	0.5	0.50	25	4	0000–2400	
7		PURWOREJO	INS	110E30 07S43	A18	0.5	0.50	75	3	0000–2400	
8		RANGKASBITUNG	INS	106E15 06S22	A18	0.5	0.50	25	4	0000–2400	
9		SAMARINDA	INS	117E09 00S30	A18	0.5	0.50	25	4	0000–2400	
10		SEMARANG	INS	110E25 06S58	A18	0.5	0.50	75	3	0000–2400	
11		SENKANG	INS	119E39 05S02	A18	0.5	0.50	25	4	0000–2400	
12		SERANG	INS	106E09 06S07	A18	0.5	0.50	25	4	0000–2400	
13		SIBOLGA	INS	98E48 01N42	A18	0.5	0.50	25	4	0000–2400	
14		SIDOARJO	INS	112E43 07S28	A18	0.5	0.50	25	4	0000–2400	
15		SINGARADJA	INS	115E05 08S06	A18	0.5	0.50	25	4	0000–2400	
16		SOLOK SUMATRA	INS	100E39 00S48	A18	0.5	0.50	75	3	0000–2400	
17		SORONG	INS	131E17 00S50	A18	0.5	0.50	25	4	0000–2400	
18		SUBANG	INS	107E45 06S34	A18	0.5	0.50	25	4	0000–2400	
19		SUKABUMI	INS	106E55 06S50	A18	0.5	0.50	25	4	0000–2400	
20		SUMENEP	INS	113E51 07S00	A18	0.5	0.50	25	4	0000–2400	
21		SURABAJA	INS	112E45 07S15	A18	0.5	0.50	25	4	0000–2400	
22		SURAKARTA	INS	110E49 07S34	A18	0.5	0.50	75	3	0000–2400	
23		TANDJUNGKARANG	INS	105E15 05S24	A18	0.5	0.50	25	4	0000–2400	
24		TANJUNGMORAWA	INS	98E50 03N30	A18	0.5	0.50	75	3	0000–2400	
25		TASIKMALAJA	INS	108E13 07S19	A18	0.5	0.50	75	3	0000–2400	
26		TEGAL	INS	109E08 06S52	A18	0.5	0.50	25	4	0000–2400	
27		TEMANGGUNG	INS	110E10 07S19	A18	0.5	0.50	25	4	0000–2400	
28		TERNATE	INS	127E23 00N48	A18	0.5	0.50	25	4	0000–2400	
29		TJIAMIS	INS	108E20 07S19	A18	0.5	0.50	25	4	0000–2400	
30		TJIREBON	INS	108E34 06S42	A18	0.5	0.50	25	4	0000–2400	
31		TOMOHON	INS	124E50 01N19	A18	0.5	0.50	25	4	0000–2400	
32		UJUNGPANDANG	INS	119E25 05S09	A18	0.5	0.50	25	4	0000–2400	
33		WONOSOBO	INS	109E59 07S21	A18	0.5	0.50	25	4	0000–2400	
34		DROGHEDA	IRL	06W18 53N45	A20	1	1.00	50	4	0000–2400	
35		WICKLOW	IRL	06W00 52N58	A20	1	1.00	50	5	0000–2400	
36		ARAK	IRN	49E35 34N05	A20	1	1.00	46	5	0200–2200	
37		ARDEBIL	IRN	48E18 38N15	A20	1	1.00	46	4	0200–2200	
38		ARDESTAN	IRN	52E25 33N22	A20	1	1.00	46	4	0200–2200	
39		BEHBEHAN	IRN	50E18 30N34	A20	1	1.00	46	5	0200–2200	
40		DAMGHAN	IRN	54E22 36N09	A20	1	1.00	46	4	0200–2200	
41		DARAB	IRN	54E33 28N45	A20	1	1.00	46	5	0200–2200	
42		GASSRE SHIRIN	IRN	45E40 34N25	A20	1	1.00	46	4	0200–2200	*)
43		GAZVIN	IRN	50E00 34N25	A20	1	1.00	46	5	0200–2200	
44		JASK	IRN	57E45 25N40	A20	0.3	0.30	46	4	0200–2200	3
45		KHASH	IRN	61E13 28N13	A20	1			4	0100–2200	
46		KHOI	IRN	45E02 38N32	A20	1	1.00	46	4	0200–2200	
47		MAHABAD	IRN	45E43 36N46	A20	1	1.00	46	4	0200–2200	
48		NEISHABOOR	IRN	58E49 36N13	A20	1	1.00	46	5	0200–2200	
49		PAVEH	IRN	46E15 35N02	A20	1	1.00	46	5	0200–2200	
50		SHAHR KORD	IRN	50E51 32N19	A20	1	1.00	45	3	0200–2100	
51		SIRJAN	IRN	55E41 29N27	A20	1		66	3	0200–2100	
52		TABAS	IRN	56E54 33N37	A20	1	1.00	46	4	0200–2200	
53		TAYYEBAD	IRN	60E45 34N44	A20	1	1.00	46	3	0200–2200	
54		ZANJAN	IRN	48E29 36N41	A20	1			3	0100–2200	



	1	2	3	4	5	6	7	8	9	10	11
1	1602	KARMIEL	ISR	35E14 32N55	A 9	0.2	0.20	40	4	0000—2400	3
2	(120)	QALQILIYA	ISR	34E50 32N20	A 9	1	1.00	40	4	0000—2400	3
3		SEDE BOQER	ISR	34E50 30N45	A 9	1	1.00	40	4	0000—2400	3
4		ASAHIKAWA	J	142E25 43N46	A15	1	1.00	71	5	0000—2400	
5		EMBETSU	J	141E48 44N43	A15	1	1.00	71	5	0000—2400	3
6		FUKUSHIMA	J	140E29 37N46	A15	1	1.00	51	5	0000—2400	
7		HAGI	J	131E24 34N25	A15	0.5	0.63	47	5	0000—2400	
8		HAGIWARA	J	137E14 35N49	A15	0.1	0.13	71	5	0000—2400	
9		HITOYOSHI	J	130E47 32N13	A15	1	1.00	71	5	0000—2400	
10		IWAIZUMI	J	141E48 39N51	A15	0.1	0.13	71	5	0000—2400	
11		KAMAISHI	J	141E53 39N16	A15	0.1	0.13	67	5	0000—2400	
12		KAWAMOTO	J	132E29 34N58	A15	0.1	0.13	71	5	0000—2400	
13		KISOFUKUSHIMA	J	137E42 35N51	A15	0.1	0.13	47	5	0000—2400	
14		KITAKYUSHU	J	130E52 33N53	A15	1	1.00	51	5	0000—2400	
15		KOFU	J	138E32 35N39	A15	1	1.00	71	5	0000—2400	
16		KOZA	J	135E50 33N31	A15	0.1	0.13	71	5	0000—2400	
17		KUMANO	J	136E06 33N53	A15	0.1	0.13	71	5	0000—2400	
18		MAIZURU	J	135E24 35N28	A15	0.1	0.13	67	5	0000—2400	
19		NAGASAKI	J	129E53 32N43	A15	1	1.00	71	5	0000—2400	
20		NASE	J	129E30 28N24	A15	1	1.00	71	5	0000—2400	
21		NICHINAN	J	131E23 31N36	A15	0.1	0.13	67	5	0000—2400	
22		NOBEOKA	J	131E41 32N34	A15	1	1.00	71	5	0000—2400	
23		ONOMICHI	J	133E11 34N23	A15	1	1.00	71	5	0000—2400	
24		TAJIMA	J	139E46 37N12	A15	0.1	0.13	71	5	0000—2400	
25		TANABE	J	135E24 33N45	A15	0.1	0.13	67	5	0000—2400	
26		TOJO	J	133E16 34N54	A15	0.1	0.13	71	5	0000—2400	
27		UEDA	J	138E16 36N24	A15	0.1	0.13	67	5	0000—2400	
28		URAKAWA	J	142E47 42N10	A15	0.1	0.13	71	5	0000—2400	
29		UWAJIMA	J	132E34 33N13	A15	1	1.00	71	5	0000—2400	
30		YOKOTE	J	140E34 39N18	A15	0.1	0.13	67	5	0000—2400	
31		AL AZRAQ	JOR	36E50 31N52	A 9	1	1.00	47	8	0300—2300	3
32		AMMAN	JOR	35E53 31N54	A 9	1	1.00	47	4	0300—2300	3
33		JERUSALEM	JOR	35E12 31N53	A 9	1	1.00	47	4	0300—2300	3
34		MAAN	JOR	35E44 30N12	A 9	1	1.00	47	8	0300—2300	3
35		ZARQA	JOR	36E06 32N04	A 9	1	1.00	47	7	0300—2300	3
36		LODWAR	KEN	35E35 03N05	A 9	1		100	4	0200—2100	
37		LOKITAUNG	KEN	35E45 04N16	A 9	1	1.00	50	4	0200—2100	4/ETH
38		MAGADI	KEN	36E10 01S10	A 9	1	1.00	50	4	0200—2100	
39		MANDERA	KEN	41E52 03N56	C 9	1	1.00	50	4	0200—2100	4/ETH
40		MOYALE	KEN	39E12 03N32	C 9	1	1.00	50	4	0200—2100	
41		NAROK	KEN	35E57 01S07	A 9	1	1.00	50	4	0200—2100	
42		WAJIR	KEN	40E02 01N42	A 9	1		100	4	0200—2100	
43		BOO ON	KOR	127E42 36N28	A10	1	1.00	120	6	0000—2400	
44		DOGYE	KOR	129E03 37N13	A10	1	1.00	80	6	0000—2400	
45		SUNCHANG	KOR	127E09 35N22	A10	1	1.00	80	5	0000—2400	
46		CHOSAN	KRE	126E47 40N50	A20	1	1.00	30		2000—1800	
47		KUWAIT	KWT	48E20 29N34	A 9	1	1.00	50	8	0000—2400	
48		BEYROUTH	LBN	35E29 33N54	A20	1	1.00	33	4	0300—2400	3
49		GANTA	LBR	08W50 07N24	A20	1	1.00	30	5	0500—2400	3
50		GRANDCES	LBR	08W45 05N10	A20	1	1.00	50	5	0500—2400	
51		EL FUGHA	LBY	16E05 27N50	A20	1	1.00	47	5	0400—2400	
52		EL WABRIA	LBY	18E05 27N20	A20	1	1.00	47	5	0400—2400	
53		EL WAHA	LBY	19E55 28N05	A20	1	1.00	47	5	0400—2400	
54		GERIAN	LBY	13E10 32N10	A20	1	1.00	47	5	0400—2400	

1	Assigned frequency (kHz) (Channel number)	2 Name of transmitting station	3 Country symbol	4 Geographical coordinates of transmitting station	5 Necessary bandwidth (kHz)	6 Carrier power (kW)	7 Effective monopole radiated power (e.m.r.p.) (kW)	8 Antenna height (m)	9 Ground conductivity (mS/m)	10 Hours of operation (GMT)	11 Remarks

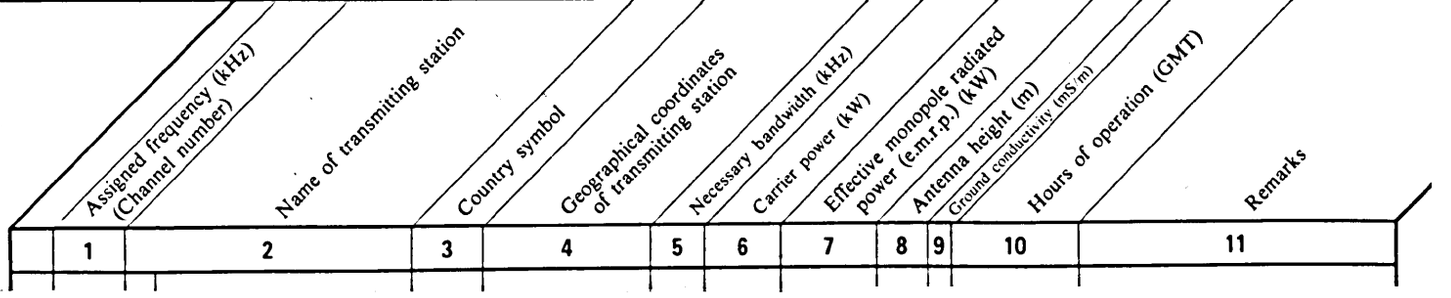
1	2	3	4	5	6	7	8	9	10	11
1	1602 GHADAMES	LBY	09E30 30N08	A20	1	1.00	140	4	0400–2200	
2	(120) KUFRA	LBY	23E18 24N11	A20	1	1.00	90	6	0400–2400	
3	OBARI	LBY	12E50 26N25	A20	1	1.00	47	5	0400–2400	
4	ZWARA	LBY	12E30 32N56	A20	1	1.00	47	5	0400–2400	
5	AMBOASARY	MDG	46E23 25S03	A 9	1	1.00	50	4	0300–2000	
6	AMBOSITRA	MDG	47E10 20S30	A 9	1	1.00	47	4	0300–2000	
7	AMPANIHY	MDG	44E35 24S41	A 9	1	1.00	89	4	0300–2000	
8	ANDAPA	MDG	49E41 14S42	A 9	1	1.00	150	4	0300–2000	
9	ANKAZOABO	MDG	44E30 22S10	A 9	1	1.00	128	4	0300–2000	
10	ANKAZOBE	MDG	47E05 18S20	A 9	1	1.00	47	4	0300–2000	
11	ANTSOHIHY	MDG	48E00 14S53	A 9	1	1.00	84	4	0300–2000	
12	BETROKA	MDG	46E06 23S16	A 9	1	1.00	116	4	0300–2000	
13	MAEVATANANA	MDG	46E49 16S58	A 9	1	1.00	157	4	0300–2000	
14	MAINTIRANO	MDG	44E02 18S03	A 9	1	1.00	96	4	0300–2000	
15	MAMPIKONY	MDG	47E37 16S05	A 9	1	1.00	46	4	0300–2000	
16	MANAKARA	MDG	48E02 22S08	A 9	1	1.00	47	4	0300–2000	
17	MANJA	MDG	44E20 21S26	A 9	1	1.00	122	4	0300–2000	
18	MAROANTSETRA	MDG	48E00 15S25	A 9	1	1.00	47	4	0300–2000	
19	MAROLAMBO	MDG	48E08 20S03	A 9	1	1.00	192	4	0300–2000	
20	MIANDRIVAZO	MDG	45E28 19S32	A 9	1	1.00	47	4	0300–2000	
21	MITSINJO	MDG	45E52 16S00	A 9	1	1.00	50	4	0300–2000	
22	MORAMANGA	MDG	48E14 18S58	A 9	1	1.00	47	4	0300–2000	
23	SAINTE MARIE	MDG	49E01 17S00	A 9	1	1.00	47	4	0300–2000	
24	SOAVINANDRIANA	MDG	46E45 19S10	A 9	1	1.00	47	4	0300–2000	
25	VATOMANDRY	MDG	49E00 19S20	A 9	1	1.00	47	4	0300–2000	
26	VOHEMAR	MDG	50E00 13S20	A 9	1	1.00	47	4	0300–2000	
27	VONDROZO	MDG	47E28 22S49	A 9	1	1.00	47	4	0300–2000	
28	BUKIT FRASER	MLA	101E45 03N45	A20	1	1.00	46	5	2200–1700	
29	CAMERON HLANDS	MLA	101E25 04N57	A20	1	1.00	46	5	2200–1700	
30	KAMPONG GAJAH	MLA	103E23 02N40	A20	1	1.00	46	5	2200–1700	
31	LONG TEBANGAN	MLA	114E55 03N10	A20	1	1.00	46	5	2200–1700	3
32	PULAU TIOMAN	MLA	104E10 02N50	A20	1	1.00	46	5	2200–1700	3
33	BOUGOUNI	MLI	07W29 11N25	A 9	1		48		0600–2400	
34	KENIEBA	MLI	11W14 12N50	A 9	1		48		0600–2400	
35	KOLOKANI	MLI	08W04 13N31	A 9	1		62		0600–2400	
36	MENAKA	MLI	02E26 15N52	A 9	1		48		0600–2400	
37	NIORO	MLI	09W35 15N13	A 9	1		64		0600–2400	
38	TOMBOCTOU	MLI	03W01 16N46	A 9	1	1.00	46	4	0600–2400	
39	BAIANHONGOR	MNG	100E40 46N10	A18	1	1.00	120	5	2200–1500	
40	BARUNURT	MNG	113E20 46N40	A18	1	1.00	120	4	2200–1500	
41	DALANTSZADAGAD	MNG	104E30 43N38	A18	1	1.00	120	4	2200–1500	
42	KOBDO	MNG	91E48 48N10	A18	1	1.00	120	5	2200–1500	
43	MANDAL GOBI	MNG	106E10 45N40	A18	1	1.00	120	4	2200–1500	
44	MUREN	MNG	100E10 49N30	A18	1	1.00	120	5	2200–1500	
45	SAINSHAND	MNG	110E05 44N50	A18	1	1.00	120	4	2200–1500	
46	SUHE BATOR	MNG	113E10 46N50	A18	1	1.00	120	4	2200–1500	
47	ULIASUTAI	MNG	96E50 47N40	A18	1	1.00	120	5	2200–1500	
48	FJNHALOURO	MOZ	34E20 23S00	A10	1	1.00	31	4	0400–2200	
49	MOCIMBOA PRAIA	MOZ	40E22 11S20	A10	1				0400–2200	
50	OLIVENCA	MOZ	35E12 11S37	A10	1	1.00	31	4	0400–2200	
51	AZILAL	MRC	06W33 31N54	A12	1	1.00	50	4	0600–2400	
52	KSARSOUK	MRC	04W24 31N55	A18	1	1.00	50	5	0600–2400	
53	TARFAYA	MRC	12W55 27N55	A18	1	1.00	50	5	0600–2400	
54	TETOUAN	MRC	05W23 35N36	A12	0.5	0.50	50	5	0600–2400	

	1		2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1602		MOUDJERIA	MTN	12W19 17N52	A 9	1	1.00	48	5	0700–2300	
2	(120)		AYOROU	NGR	00E55 14N43	A 9	1	1.00	47	4	0000–2400	
3			BILMA	NGR	13E00 18N40	A 9	0.1			4	0000–2400	
4			DAKORO	NGR	07E00 15N00	A 9	1			4	0000–2400	
5			DIFFA	NGR	12E37 15N19	A 9	1	1.00	47	4	0000–2400	
6			IN GALL	NGR	06E56 16N47	A 9	1	1.00	47	4	0000–2400	
7			MADAOUA	NGR	05E57 14N04	A 9	1	1.00	47	4	0000–2400	
8			MAGARIA	NGR	09E00 13N00	A 9	1			4	0000–2400	
9			OUALLAM	NGR	02E20 14N20	A 9	0.1			4	0000–2400	
10			KANO	NIG	08E33 12N03	C 9	1	1.00	75	4	0500–2300	
11			NSUKKA	NIG	07E22 06N52	C 9	1	1.00	73	4	0500–2200	
12			BAJURA	NPL	81E22 29N22	A20	1	0.50	60	5	2200–1900	
13			GORKHA	NPL	84E38 28N02	A20	1	0.50	60	5	2200–1900	
14			KAIGAON	NPL	82E48 29N02	A20	1	0.50	60	5	2200–1900	
15			RAMECHHAP	NPL	86E04 27N20	A20	1	0.50	60	5	2200–1900	
16			HARIHARI	NZL	170E33 43S08	A20	1	1.00	50	6	0000–2400	
17			BATTAL	PAK	73E20 33N30	A20	2	1.00	54	4	0000–1400	
18			BELA	PAK	66E30 25N50	A20	1	0.79	104	4	0000–2000	
19			JIWANI	PAK	61E46 25N01	A20	1	0.79	48	4	0000–2000	
20			KUCHLAK	PAK	66E57 30N20	A20	1	0.79	36	4	0000–1400	
21			SIALKOT	PAK	74E30 32N30	A20	1	0.79	89	4	0000–2000	
22			SUKKUR	PAK	68E55 27N50	A20	1	0.79	47	4	0000–2000	
23		S	BAYOMBONG	PHL	121E10 16N30	A 9	0.5	0.50	66	3	2100–1600	
24		S	BONTOC	PHL	121E00 17N05	A 9	0.5	0.50	66	3	2100–1600	
25		S	LUBUAGAN	PHL	121E11 17N20	A 9	0.5	0.50	66	3	2100–1600	
26			OLONGAPO	PHL	120E42 14N24	A10	0.3	0.48	15	3	0100–2400	
27			CIESZYN	POL	18E38 49N46	A20	1	1.00	47	5	0000–2400	
28			DABROWA BIAL	POL	23E20 53N39	A20	1	1.00	47	5	0000–2400	
29			GORZOW WIELKOP	POL	15E15 52N45	A20	1	1.00	47	5	0000–2400	
30			GRAJEWO	POL	22E27 53N39	A20	1	1.00	47	5	0000–2400	
31			LEBORK	POL	17E43 54N34	A20	1	1.00	47	5	0000–2400	
32			LIDZBARK WARM	POL	20E36 54N08	A20	1	1.00	47	5	0000–2400	
33			MRAGOWO	POL	21E18 53N52	A20	1	1.00	47	5	0000–2400	
34			POLANIEC	POL	21E16 50N28	A20	1	1.00	47	5	0000–2400	
35			PORONIN	POL	19E59 49N22	A20	1	1.00	47	5	0000–2400	
36			RADOM	POL	21E10 51N25	A20	1	1.00	47	5	0000–2400	
37			SANOK	POL	22E13 49N34	A20	1	1.00	47	5	0000–2400	
38			SZCZEKOCINY	POL	19E48 50N38	A20	1	1.00	47	5	0000–2400	
39			ZLOCIENIEC	POL	16E00 53N33	A20	1	1.00	47	5	0000–2400	
40			CARAMULO	POR	08W09 40N34	A20	1	1.00	50	4	0000–2400	
41			DOHA	QAT	51E32 25N17	C 9	1	1.00	50	5	0000–2400	
42			ARAD	ROU	21E40 46N07	A20	1	1.00	50	5	0300–2300	
43			BIXAD	ROU	23E10 47N54	A20	1	1.00	50	5	0300–2300	
44			CALAFAT	ROU	22E55 43N53	A20	1	1.00	50	4	0300–2300	
45			CIMPULUNG MOLD	ROU	25E31 47N31	A20	1	1.00	50	5	0300–2300	
46			DARABANI	ROU	26E31 48N03	A20	1	1.00	50	4	0300–2300	
47			FOCSANI	ROU	27E18 45N38	A20	1	1.00	50	5	0300–2300	
48			HUNEDOARA	ROU	22E30 46N01	A20	1	1.00	50	6	0300–2300	
49			IASI 2	ROU	27E35 47N07	A20	1	1.00	50	5	0300–2300	
50			NASAUD	ROU	24E40 47N15	A20	1	1.00	50	5	0300–2300	
51			PIATRA NEAMT	ROU	26E19 46N51	A20	1	1.00	50	4	0300–2300	
52			RIMNICU VILCEA	ROU	24E30 45N10	A20	1	1.00	50	5	0300–2300	
53			SIGHISOARA	ROU	24E29 46N10	A20	1	1.00	50	6	0300–2300	
54			SLOBOZIA	ROU	27E25 44N40	A20	1	1.00	50	5	0300–2300	

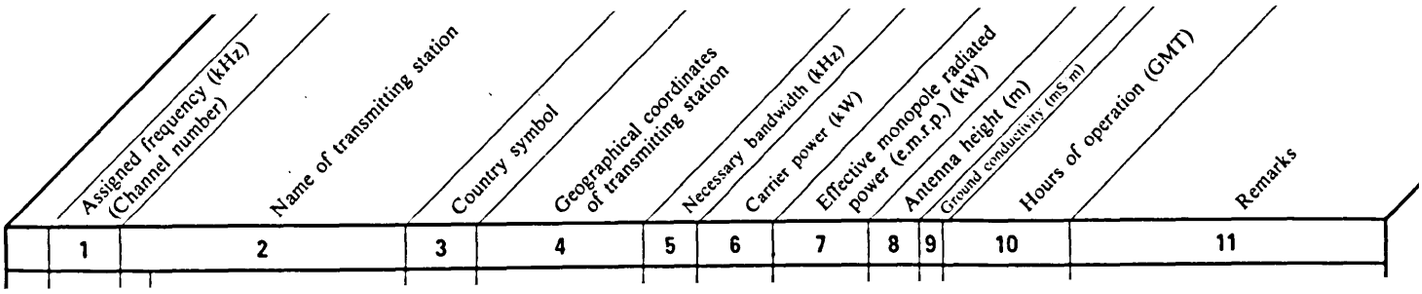
	Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
	1	2	3	4	5	6	7	8	9	10	11

	1	2	3	4	5	6	7	8	9	10	11
1	1602	TULCEA	ROU	28E45 45N12	A20	1	1.00	50	5	0300–2300	
2	(120)	TURNU MAGURELE	ROU	25E02 43N48	A20	1	1.00	50	3	0300–2300	
3		MIYAKO OKINAWA	RYU	125E17 24N49	A15	0.1	0.10	71	5	0000–2400	3
4		BOR	SDN	31E33 06N12	A20	1	1.00	46	3	0400–2400	
5		ELGENEINA	SDN	22E27 13N27	A20	1	1.00	46	3	0400–2400	
6		ELOBEID	SDN	30E14 13N11	A20	1	1.00	46	4	0400–2400	
7		HAIYA JUNCTION	SDN	36E23 18N20	A20	1	1.00	46	4	0400–2400	
8		HALFA ELGADIDA	SDN	35E39 15N20	A20	1	1.00	46	3	0400–2400	
9		KADUGLI	SDN	29E43 11N01	A20	1	1.00	46	3	0400–2400	
10		KHARTOUM	SDN	32E31 15N36	A20	1	1.00	46	3	0400–2400	
11		KOSTI	SDN	32E40 13N10	A20	1	1.00	46	2	0400–2400	
12		MEROWE	SDN	31E49 18N28	A20	1	1.00	46	3	0400–2400	
13		SHENDI	SDN	33E25 16N42	A20	1	1.00	46	4	0400–2400	
14		TAMBURA	SDN	27E28 05N36	A20	1	1.00	46	3	0400–2400	
15		KOLDA	SEN	14W59 13N47	A 9	1	1.26	30	4	0600–2400	4/GMB
16		DAMAS K2	SYR	36E22 33N25	A20	1	1.00	50	5	0300–2400	4/JOR TUR
17		BOL	TCD	14E43 13N28	A 9	1				0400–2300	
18		BRATISLAVA	TCH	17E08 48N09	C 9	1	1.00		5	0000–2400	
19		BRNO MESTO	TCH	16E37 49N12	C 9	1	1.00		5	0000–2400	
20		KOSICE MESTO	TCH	21E15 48N43	C 9	1	1.00		5	0000–2400	
21		KRNOV	TCH	17E41 50N05	A20	1	0.63	60	5	0000–2400	
22		MAR LAZNE	TCH	12E43 49N59	A20	1	0.63	60	5	0000–2400	
23		MOST	TCH	13E38 50N32	A20	1	0.63	60	5	0000–2400	
24		OSTRAVA MESTO	TCH	18E18 49N50	C 9	1	1.00		5	0000–2400	
25		PRAHA MESTO	TCH	14E24 50N06	C 9	1	1.00		5	0000–2400	
26		IFAKARA	TGK	36E50 08S10	A 9	1	1.00	45	4	0300–2100	
27		ITIGI	TGK	33E55 05S45	A 9	1	1.00	45	4	0300–2100	
28		MAFIA	TGK	39E45 07S48	A20	1	1.00	45	4	0300–2100	
29		BADOU	TGO	00E47 07N26	A 9	1	1.00	46	4	0500–2300	
30		BURIRAM	THA	103E06 14N59	A20	1	1.00	60	3	0300–1500	
31		CHIANG MAI	THA	98E58 18N48	A20	1	1.00	47	5	2300–1700	
32		N SITHAMMARAT	THA	99E48 08N10	A20	1	1.00	47	3	2300–1700	
33		NAN	THA	100E44 18N41	A20	1	1.00	47	5	2300–1700	4/INS MLA SNG
34		NARATHIWAT	THA	101E48 06N25	A20	1	1.00	47	3	2300–1700	
35		PRACHUAB	THA	99E50 11N50	A20	1	1.00	47	3	2300–1700	4/INS MLA SNG
36		TAK	THA	99E08 16N53	A20	1	1.00	47	5	2300–1700	4/INS MLA SNG
37		DJENDOUBA	TUN	08E10 36N50	D20	1	1.00	47	4	0000–2400	
38		DJERBA	TUN	10E45 33N43	D20	1	1.00	47	4	0000–2400	4/I MLT
39		KEF	TUN	08E45 36N09	D20	1	1.00	47	4	0000–2400	
40		SIDI BOUZID	TUN	09E00 35N10	D20	1	1.00	47	4	0000–2400	
41		ARTVIN	TUR	41E45 41N12	A20	1	1.00	43	4	0200–2300	
42		AYVALIK	TUR	26E43 39N18	A20	1	1.00	67	4	0200–2300	
43		BODRUM	TUR	27E26 37N04	A20	1	1.00	43	4	0200–2300	
44		KOYCEGIZ	TUR	28E41 36N58	A20	1	1.00	43	4	0200–2300	
45		USAK	TUR	29E25 38N41	A20	1	1.00	43	4	0200–2300	
46		MUBENDE	UGA	31E20 00N30	A 9	1	1.00	47	4	0300–2100	
47		DNEPROPETROVSK	UKR	35E44 48N48	A20	1	1.00	120	4	0000–2400	
48		FEODOSIA	UKR	35E20 45N02	A20	1	1.00	120	4	0000–2400	
49		IALTA	UKR	34E10 44N39	A20	1	1.00	120	4	0000–2400	
50		IZIUM	UKR	37E17 49N13	A20	1	1.00	120	4	0000–2400	
51		JITOMIR	UKR	28E37 50N15	A20	1	1.00	120	4	0000–2400	
52		KIEV	UKR	30E49 50N30	A20	1	1.00	120	4	0000–2400	
53		KOVEL	UKR	24E41 51N16	A20	1	1.00	120	4	0000–2400	
54		KRIVOI ROG	UKR	33E25 47N55	A20	1	1.00	120	4	0000–2400	

	1		2	3	4	5	6	7	8	9	10	11
	Assigned frequency (kHz) (Channel number)		Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Effective monopole radiated power (e.m.r.p.) (kW)	Antenna height (m)	Ground conductivity (mS/m)	Hours of operation (GMT)	Remarks
1	1602		LVOV	UKR	24E00 49N50	A20	1	1.00	120	4	0000–2400	
2	(120)		NIKOLAEV	UKR	32E01 46N58	A20	1	1.00	120	4	0000–2400	
3			PODVOLOTCHISK	UKR	26E10 49N35	A20	1	1.00	120	4	0000–2400	
4			ROVNO	UKR	26E14 50N39	A20	1	1.00	120	4	0000–2400	
5			SIMFEROPOL	UKR	34E06 44N56	A20	1	1.00	120	4	0000–2400	
6			TCHERKASSY	UKR	32E02 49N27	A20	1	1.00	120	4	0000–2400	
7			UJGOROD	UKR	22E20 48N38	A20	1	1.00	120	4	0000–2400	
8			VOROCHILOVGRAD	UKR	39E15 48N32	A20	1	1.00	120	4	0000–2400	
9			AFANASIVKA	URS	57E50 56N43	A20	1	1.00	120	4	0000–2400	
10			ALDAN	URS	125E24 58N36	A20	1	1.00	120	4	0000–2400	
11			BAKU	URS	49E45 40N20	A20	1	1.00	120	4	0000–2400	
12			BELGOROD	URS	36E30 50N38	A20	1	1.00	120	4	0000–2400	
13			BEREGNIKI	URS	56E15 59N24	A20	1	1.00	120	4	0000–2400	
14			CHAULIAI	URS	23E15 55N56	A18	1	1.00	120	4	0000–2400	
15			CHELABINSK	URS	61E24 55N09	A20	1	1.00	120	4	0000–2400	
16			CHERLAK	URS	74E42 53N18	A20	1	1.00	120	4	0000–2400	
17			DAUGAVPILS	URS	26E30 35N54	A20	1	1.00	120	4	0000–2400	
18			DUDINKA	URS	86E07 69N37	A20	1	1.00	120	4	0000–2400	
19			ERBOGACHEN	URS	108E00 61N18	A20	1	1.00	120	4	0000–2400	
20			EREVAN	URS	44E30 40N11	A20	1	1.00	120	4	0000–2400	
21			FRUNZE	URS	74E37 42N54	A18	1	1.00	120	4	0000–2400	
22			GORNO ALTAISK	URS	85E52 51N57	A18	1	1.00	120	4	0000–2400	
23			IGARGA	URS	86E34 67N29	A20	1	1.00	120	4	0000–2400	
24			IMAN	URS	133E43 45N56	A18	1	1.00	120	4	0000–2400	
25			IRBIT	URS	63E02 57N43	A20	1	1.00	120	4	0000–2400	
26			IRKUTSK	URS	104E18 52N18	A20	1	1.00	120	4	0000–2400	
27			IUJNSAKHALINSK	URS	143E00 47N00	A18	1	1.00	120	2	0000–2400	
28			KAMISNIN	URS	45E20 50N06	A20	1	1.00	120	4	0000–2400	
29			KAMO	URS	45E00 40N15	A20	1	1.00	120	4	0000–2400	
30			KARAVAN	URS	72E08 40N18	A20	1	1.00	120	4	0000–2400	
31			KEM	URS	34E00 65N00	A20	1	1.00	120	4	0000–2400	
32			KHANTY MANSIJS	URS	62E00 61N00	A20	1	1.00	120	4	0000–2400	
33			KIROV	URS	49E41 58N36	A20	1	1.00	120	4	0000–2400	
34			KIRS	URS	52E50 67N00	A20	1	1.00	120	4	0000–2400	
35			KLIUCHI	URS	160E10 56N19	A20	1	1.00	120	4	0000–2400	
36			KOKHTLA IARVE	URS	27E10 59N20	A18	1	1.00	120	4	0000–2400	
37			KOSTROMA	URS	41E00 57N50	A20	1	1.00	120	4	0000–2400	
38			KULDIGA	URS	21E58 56N58	A18	1	1.00	120		0000–2400	
39			KUZEMA	URS	34E12 65N22	A18	1	1.00	120	4	0000–2400	
40			KYZYL	URS	94E28 51N43	A18	1	1.00	120	4	0000–2400	
41			LENINABAD	URS	69E37 40N16	A18	1	1.00	120	4	0000–2400	
42			MAIKOP	URS	39E50 45N00	A20	1	1.00	120	4	0000–2400	
43			MEDVEJIEGORSK	URS	34E24 62N56	A18	1	1.00	120	4	0000–2400	
44			NARIAN–MAR	URS	53E08 68N02	A20	1	1.00	120	4	0000–2400	
45			NORILSK	URS	88E15 69N12	A20	1	1.00	120	4	0000–2400	
46			OIMIAKON	URS	145E00 63N15	A20	1	1.00	120	4	0000–2400	
47			PIARNU	URS	24E33 58N23	A18	1	1.00	120	4	0000–2400	
48			PORONAISK	URS	143E05 49N11	A20	1	1.00	120	4	0000–2400	
49			REZEKNE	URS	27E20 56N33	A18	1	1.00	120	4	0000–2400	
50		S	RIGA	URS	24E05 56N57	A16	1	1.00	120	4	0000–2400	
51			SARANSK	URS	45E06 54N12	A20	1	1.00	120	4	0000–2400	
52			SOTCHI	URS	39E23 43N35	A18	1	1.00	120	4	0000–2400	
53			SPASSK–DALNI	URS	132E47 44N38	A20	1	1.00	120	4	0000–2400	
54			SVOBODNYI	URS	128E00 51N30	A18	1	1.00	120	4	0000–2400	



	1		2	3	4	5	6	7	8	9	10	11
1	1602		TACHKENT	URS	69E15 41N19	A18	1	1.00	120	4	0000–2400	
2	(120)		TALLIN	URS	24E46 59N24	A18	1	1.00	120	4	0000–2400	
3			TCESVANE	URS	26E20 56N48	A20	1	1.00	120	4	0000–2400	
4			TCHARDJOU	URS	63E55 39N02	A18	1	1.00	120	4	0000–2400	
5			TCHITA	URS	115E20 52N02	A18	1	1.00	120	4	0000–2400	
6			TYRMA	URS	132E15 50N05	A20	1	1.00	120	4	0000–2400	
7			TZAKIR	URS	103E36 50N17	A20	1	1.00	120	4	0000–2400	
8			URGUM	URS	49E41 58N36	A20	1	1.00	120	4	0000–2400	
9			VETLUGA	URS	45E44 57N51	A20	1	1.00	120	4	0000–2400	
10			VORKUTA	URS	63E45 67N40	A20	1	1.00	120	4	0000–2400	
11			WANKAREN	URS	176E00 67N20	A20	1	1.00	120	4	0000–2400	
12			YRINSK	URS	48E40 62N05	A20	1	1.00	120	4	0000–2400	
13			ALBAYDA	YEM	45E30 14N00	A 9	1	1.00	47	3	0300–2200	
14			NISAB	YMS	46E28 14N33	A 9	1	1.00	47	4	0300–2200	3
15			BABUSNICA	YUG	22E26 43N05	D20	1	0.50	40	5	0000–2400	
16			BAJINA BASTA	YUG	19E34 43N58	D20	0.3	0.15	40	5	0000–2400	
17			BOS DUBICA	YUG	16E49 45N12	D20	1	0.50	40	3	0000–2400	
18			BOS GRAHOVO	YUG	16E24 44N11	D20	1	0.50	40	5	0000–2400	
19			BUDVA	YUG	18E50 42N17	D20	1	1.00	40	4	0000–2400	4/BUL GRC I
20			BUJANOVAC	YUG	21E48 42N28	D20	0.3	0.15	40	4	0000–2400	
21			BUJE	YUG	13E39 45N24	D20	1	0.50	40	4	0000–2400	
22			CAPLJINA	YUG	17E41 43N16	D20	1	0.50	40	5	0000–2400	
23			CRIKVENICA	YUG	14E45 45N10	D20	1	0.50	40	7	0000–2400	
24			CRNA TRAVA	YUG	22E20 42N50	D20	1	0.50	40	5	0000–2400	
25			CRNOMELJ	YUG	15E12 45N34	D20	1	0.50	40	4	0000–2400	
26		S	DEBAR 3	YUG	20E32 41N32	D20	1	0.50	40	6	0000–2400	4/BUL GRC I
27			DELNICE	YUG	14E50 45N22	D20	1	0.50	40	6	0000–2400	
28			G MILANOVAC	YUG	20E28 44N01	D20	0.3	0.15	40	4	0000–2400	
29			GRUDE	YUG	17E20 44N22	D20	1	0.50	40	5	0000–2400	
30			ILIRS BISTRICA	YUG	14E15 45N35	D20	1	0.50	40	8	0000–2400	
31			IVANGRAD 2	YUG	19E51 42N53	D20	1	0.50	40	5	0000–2400	
32			KARLOVAC 2	YUG	15E33 45N27	D20	1	1.00	60	3	0000–2400	
33			KICEVO 1	YUG	20E58 41N31	D20	1	0.50	40	6	0000–2400	4/BUL GRC I
34			KOBARID	YUG	13E36 46N15	D20	0.1	0.05	40	7	0000–2400	
35			KOCANI	YUG	22E25 41N55	D20	1	0.50	40	4	0000–2400	
36			KOMROVEC	YUG	15E42 46N03	D20	0.1	0.05	40	4	0000–2400	
37			KOS MITROVICA	YUG	20E52 42N53	D20	1	0.50	40	5	0500–1700	
38			LESKOVAC	YUG	21E57 43N00	D20	1	0.50	40	4	0000–2400	
39			MAKARSKA	YUG	17E06 42N45	D20	1	0.50	40	5	0000–2400	
40			NEGOTIN	YUG	22E32 44N15	D20	1	0.50	40	3	0000–2400	
41			NOVO MESTO	YUG	15E10 45N48	D20	1	0.50	40	7	0000–2400	
42			ORMOZ	YUG	16E10 46N24	D20	0.1	0.05	40	4	0000–2400	
43			PITOMACA	YUG	17E15 45N56	D20	0.1	0.05	40	4	0000–2400	
44			PLEVLJA	YUG	19E23 43N21	D20	1	0.50	40	6	0000–2400	
45			RESEN 1	YUG	21E01 41N06	D20	1	1.00	40	6	0000–2400	4/BUL GRC I
46			SANSKI MOST	YUG	16E42 44N46	D20	1	0.50	40	4	0000–2400	
47			SAVNIK 2	YUG	19E07 42N58	D20	1	0.50	40	5	0000–2400	
48			SEVNICA	YUG	15E19 46N01	D20	0.1	0.10	60	6	0000–2400	
49			SKOPJE	YUG	21E33 41N59	D20	1	1.00	60	4	0000–2400	
50			SL POZEGA	YUG	17E41 45N19	D20	1	0.50	40	4	0000–2400	
51			SLOVENJGRADEC	YUG	15E05 46N30	D20	1	0.50	40	5	0000–2400	
52			STRUGA	YUG	20E42 41N11	D20	1	0.50	40	6	0000–2400	
53			SUBOTICA	YUG	19E44 46N10	D20	1	0.50	40	3	0000–2400	
54			TIVAT	YUG	18E42 42N26	D20	1	0.63	60	4	0000–2400	



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1	1602	VALANDOVO	YUG	22E34 41N19	D20	1	0.50	40	4	0000—2400	
2	(120)	VRNJACKA BANJA	YUG	20E55 43N36	D20	0.3	0.15	40	4	0000—2400	
3		VRSAC	YUG	21E17 45N07	D20	1	0.50	40	3	0000—2400	
4		KASEMPA	ZMB	25E47 13S23	A20	1	1.00	19	4	0200—2100	
5		KAWAMBWA	ZMB	29E05 09S47	A20	1	1.00	19	4	0200—2100	
6		LUNDAZI	ZMB	33E10 12S15	A20	1	1.00	19	4	0200—2100	
7		MWINILUNGA	ZMB	24E27 11S43	A20	1	1.00	45	4	0200—2100	
8		NAMWALA	ZMB	26E30 15S45	A20	1	1.00	19	4	0200—2100	
9		SERENJE	ZMB	30E40 12S53	A20	1	1.00	19	4	0200—2100	

APPENDIX 2 TO THE PLAN

Antenna Gain (dB) for different Azimuths and Angles of Elevation

INFORMATION CONCERNING THE RADIATION CHARACTERISTICS OF TRANSMITTING ANTENNAE OTHER THAN SIMPLE VERTICAL BASE-FED ANTENNAE

Colonne 1 : *Symbol designating the country* or the geographical area in which the station is located (see Table No. 1 of the Preface to the International Frequency List).

Column 2 : *Assigned channel frequency* (kHz).

Column 3 : *Name of transmitting station.*

Column 4 : *Angle of elevation.*

Note. – The azimuths and angles of elevation are expressed in tens of degrees with related values in dB.

1	2	3	4	AZIMUTH																													
				00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
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155 KHZ

1	2	3	4	AZIMUT – AZIMUTH – ACIMUT																													
				00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
D	155	DONEBACH	0	2	2	2	2	2	1	0	0	-1	-2	-2	-3	-2	-2	-1	0	0	1	2	2	2	2	2	1	0	0	-1	-2	-2	-3	-2	-2	-1	0	0	1
D	155	DONEBACH	0	2	2	1	1	0	-2	-4	-6	-8	-10	-11	-12	-11	-10	-8	-6	-4	-2	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2
EGY	164	EL QUSIYA	0	4	4	3	1	-2	-5	-8	-10	-11	-12	-12	-10	-8	-5	-2	1	3	4	4	4	3	1	-2	-5	-8	-10	-11	-12	-11	-10	-8	-5	-2	1	3	4
EGY	164	EL QUSIYA	0	4	4	3	1	-2	-5	-8	-10	-11	-12	-12	-10	-8	-5	-2	1	3	4	4	4	3	1	-2	-5	-8	-10	-11	-12	-11	-10	-8	-5	-2	1	3	4
F	164	ALLOUIS	0	2	2	2	1	0	0	-1	-1	-1	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	0	0	-1	-1	-1	0	0	1	2	2
TUR	164	ARDAHAN	0	-10	-15	-15	-15	-15	-15	-15	-15	-15	-15	-11	-7	-4	-2	0	0	2	2	3	3	3	3	3	3	3	3	2	2	2	2	1	0	0	-2	-4	-7
HOL	173	LOPIK	0	3	3	0	-3	-6	-9	-13	-13	-13	-10	-10	-10	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	3	3	3	3	3	3	3	3	3	3	3	3	3	3
MRC	173	NADOR	0	-8	-8	-8	-8	-8	-8	-4	-3	1	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	2	1	-3	-4	-8	-8	-8	-8	-8
D	182	SAARLOUIS	0	-18	-19	-19	-20	-20	-20	-20	-17	-17	-17	-17	-16	-12	-7	-4	-1	2	3	4	4	5	5	5	5	5	5	4	3	1	-1	-4	-6	-10	-13	-15	-17
			1				-25				-17					-7						3				5					3				-6			-22
			2				-24				-17					-7						2				4					2				-7			-22
			3				-23				-17					-8						1				3					1				-8			-22
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			6				-21				-19					-14						-8				-6					-8				-14			-21
			7				-22				-21					-17						-13				-11					-13				-18			-23
			8				-25				-25					-24						-22				-20					-21				-23			-27
			9				-30				-30					-30						-30				-30					-30				-30			-30
ISL	182	RAUFARHOEFN	0	0	0	0	0	-1	-3	-3	-3	-1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	1	1	1	1	0	0	0	0
S	182	KIRUNA	0	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	0	-1	-2	-4	-6	-6	-6	-4	-2	-1	0	1	1
E	191	MADRID	0	-2	-4	-7	-10	-17	-19	-19	-19	-19	-19	-19	-19	-17	-10	-7	-4	-2	0	1	2	3	3	3	3	3	3	3	3	3	3	3	3	2	1	0	-1
I	191	S SEVERO	0	-16	-16	-16	-16	-16	-16	-14	-11	-7	-4	-2	0	2	4	5	5	5	5	5	4	4	2	0	-3	-6	-11	-14	-17	-17	-17	-17	-17	-17	-17	-16	-16
S	191	GOTLAND	0	1	1	1	0	0	0	-1	-2	-3	-4	-5	-5	-5	-5	-4	-3	-2	-1	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1
URS	191	TBILISI	0	-2	1	1	2	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	2	2	1	1	-2	-3	-5	-5	-5	-5	3
ALG	200	EL GOLEA	0	-20	-20	-20	-20	-19	-19	-13	-8	-5	-1	1	3	3	6	6	7	7	7	7	7	7	6	6	3	3	1	-1	-5	-8	-13	-19	-19	-20	-20	-20	-20
EGY	200	EL QUSIYA	0	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	2	3	4	4	5	5	5	4	4	3	2	2	1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10
D	209	MUENCHEN ERCH	0	3	2	2	0	-1	-4	-8	-20	-20	-12	-8	-5	-4	-3	-3	-3	-4	-5	-8	-12	-20	-15	-8	-4	-1	0	2	2	3	3	3	3	3	3	3	3
MCO	218	MONTE CARLO	0	-6	-6	-5	-5	-5	-5	-5	-5	-4	-3	-1	-1	-1	-1	-1	-1	-3	-4	-5	-5	-5	-5	-6	-8	-6	-5	-3	2	4	4	4	4	4	3	2	-6

218 KHZ

1	2	3	4	AZIMUTH																																			
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1	2	3	4	AZIMUT – AZIMUTH – ACIMUT																																			
				00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
E	227	BARCELONA	0	0	-2	-8	-17	-17	-17	-14	-8	-2	0	0	0	1	1	1	2	2	2	3	3	4	4	5	5	4	4	3	3	2	2	2	1	1	1	0	0
E	227	BILBAO	0	0	0	0	-10	-19	-19	-19	-17	-10	0	0	0	1	1	1	2	2	2	3	3	3	4	4	4	4	4	4	3	3	3	2	2	2	1	1	1
E	227	LINARES	0	0	0	-3	-11	-11	-11	-8	-3	0	0	0	1	1	1	2	2	2	3	3	3	4	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0
E	227	LUGO	0	0	0	-2	-7	-12	-12	-12	-10	-7	-2	0	0	0	1	1	1	2	2	2	3	3	3	4	4	3	3	3	2	2	2	1	1	1	0	0	0
EGY	227	ABIS	0	-11	-10	-6	-3	-1	0	1	2	3	3	4	4	4	4	4	4	4	4	4	3	3	2	1	0	-1	-3	-6	-10	-11	-11	-11	-12	-12	-12	-11	-11
TUR	227	VAN	0	-13	-14	-15	-15	-12	-6	-2	0	1	2	3	3	3	2	1	0	-1	-1	-1	-1	-2	-1	0	1	2	3	3	3	3	2	1	0	-2	-5	-10	-11
LBY	236	JEFREN	0	-20	-24	-24	-24	-24	-20	-10	-8	-3	-2	1	2	3	3	3	3	2	2	1	1	1	1	1	1	2	2	3	3	3	3	2	1	-2	-3	-8	-10
			1																						2														
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			8																						-19														
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LUX	236	JUNGLINSTER	0	-17	-20	-24	-30	-30	-30	-30	-30	-21	-18	-16	-9	-10	-11	-10	-6	-3	0	2	3	4	5	5	5	5	4	4	3	1	-1	-5	-9	-11	-11	-16	-15
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			6			-16			-16			-16			-17			-19			-13			-9			-8			-9			-13			-19			-17
			7			-21			-21			-21			-23			-23			-19			-16			-15			-16			-19			-23			-23
			8			-29			-29			-29			-29			-29			-27			-25			-24			-25			-27			-29			-29
			9			-30			-30			-30			-30			-30			-30			-30			-30			-30			-30			-30			-30
I	245	TUSCANIA	0	-16	-16	-16	-16	-16	-16	-12	-9	-7	-5	-3	-1	1	2	2	3	3	4	4	4	4	4	4	3	3	2	2	1	-1	-2	-4	-7	-9	-12	-16	-16
FNL	254	TURKU 1	0	0	0	0	0	0	0	0	0	0	0	0	-1	-3	-6	-6	-3	-1	0	0	-1	-2	-4	-4	-4	-3	-3	-3	-3	-1	0	0	0	0	0	0	0
IRL	254	TULLAMORE 2	0	0	0	-2	-4	-7	-7	-7	-7	-4	-2	0	0	-2	-4	-7	-7	-7	-7	-7	-7	-4	-2	0	0	0	0	0	0	2	2	2	0	0	0	0	0
SYR	254	SARAKEB 2	0	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-15	-10	-5	-2	0	2	3	4	5	5	5	5	5	4	3	2	0	-2	-5	-10	-15	-25	-25	-25	-25
ISR	281	TEL AVIV 1	0	-1	1	3	4	4	4	3	1	-1	-6	-11	-20	-20	-20	-20	-20	-11	-6	-1	1	3	4	4	4	3	1	-1	-6	-11	-20	-20	-20	-20	-20	-11	-6
ISR	281	TEL AVIV 1	0	-1	1	3	4	4	4	3	1	-1	-6	-11	-20	-20	-20	-20	-20	-11	-6	-1	1	3	4	4	4	3	1	-1	-6	-1.1	-20	-20	-20	-20	-20	-11	-6
TUN	281	TUNIS DJEDEIDA	0	-3	-7	-15	-21	-21	-21	-21	-21	-21	-17	-10	-6	-4	-1	0	1	2	3	3	3	3	3	3	3	2	2	2	2	2	3	3	2	1	1	0	-2

1	2	3	4	AZIMUTH																													
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ARS	531	GIZAN	0	-9	-9	-9	-8	-7	-7	-6	-3	0	2	3	4	5	5	5	5	5	5	5	4	3	2	0	-3	-6	-7	-7	-8	-9	-9	-9	-9	-9	-9	-9	-9
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AUS	531	INNISFAIL QLD	0	3	-2	-12	-12	-14	-14	-10	-5	-2	-1	-1	-3	-6	-12	-13	-20	-15	-7	-1	3	5	5	4	2	-1	-6	-7	-8	-7	-6	-3	0	3	5	4	5
AUS	531	KEMPSEY NSW	0	4	5	4	3	1	-1	-3	-5	-6	-7	-5	-3	-1	1	2	4	4	4	3	-1	-5	-9	-13	-7	-3	-2	-1	-1	-1	-2	-5	-10	-14	-6	-1	3
AUS	531	WARRAGUL VIC	0	-1	-2	-1	-9	-13	-9	-3	1	3	4	5	5	6	6	5	5	5	5	5	5	5	5	5	4	2	0	-5	-11	-13	-7	-3	-1	0	0	0
CHN	531	YECHENG	0	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	0	1	1	0	0	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1
IND	531	JODHPUR	0	-7	-7	-7	-6	-4	-4	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-4	-4	-6
TGK	531	DAR ES SALAAM	0	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-2
TGK	531	DAR ES SALAAM	0	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-2
URS	531	URGHENTCH	0	4	4	3	3	2	0	-2	-3	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-3	-2	0	2	3	3	4	4	5	5	5	5	5	5	5	5	5
AUS	540	SCOTTSDALE TAS	0	-9	-4	-2	0	1	2	2	2	2	2	2	1	0	-1	-1	-4	-9	-15	-11	-5	-2	0	1	2	2	2	2	2	2	2	1	0	-1	-2	-10	-15
CHN	540	FUYUAN	0	1	0	0	-1	-1	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-1	-1	0	0	1	1	1	1	1	1
IND	540	AIJAL	0	-2	-2	-2	-1	-1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	-1	-1	-2	-2	-2	-3	-3	-3
J	540	NANAO	0	1	0	0	0	-1	-1	-2	-2	-3	-3	-3	-3	-3	-3	-4	-4	-4	-3	-3	-3	-3	-3	-2	-1	-1	-1	0	0	1	1	1	1	1	1	1	1
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J	540	YAMAGATA	0	3	3	2	1	0	-1	-2	-4	-4	-5	-5	-4	-4	-3	-2	-2	-1	-1	-2	-4	-4	-5	-5	-5	-4	-3	-2	-1	1	2	2	3	3	3	3	3
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KWT	540	SULAIBIYA	0	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-11	-2	1	3	5	6	7	7	7	6	5	4	2	0	-3
MNG	540	TSETSERLIG	0	2	2	2	3	3	3	3	2	2	1	0	-2	-5	-10	-13	-13	-13	-13	-13	-13	-13	-13	-13	-10	-5	-2	0	1	2	2	3	3	3	3	2	2
MRC	540	SIDI BENNOUR	0	0	0	2	3	3	3	3	2	2	1	1	0	0	0	0	1	1	1	2	3	3	3	3	3	2	2	1	0	-2	-6	-10	-10	-6	-3	0	0
NZL	540	WAIMIHA	0	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-3	-4	-5	-7	-8	-8	-8	-7	-5	-4	-3	-1	0
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TUR	540	AYDINCIK	0	-15	-15	-15	-7	-3	-1	1	2	3	2	1	-1	-3	-7	-15	-15	-15	-15	-15	-15	-15	-7	-3	-1	1	2	3	2	1	-1	-3	-7	-15	-15	-15	-15
ARS	549	DUBA	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	2	6	7	8	8	8	7	6	2	-8
ARS	549	GIZAN	0	-15	-15	-15	-13	-11	-10	-5	2	3	4	4	5	5	5	4	4	3	2	-5	-10	-11	-13	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
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D	549	RECKLINGHAUSEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	-6	-8	-8	-8	-8	-8	-8	-8	-8	-6	-2	0	0	0	0	0	0
LBN	549	TELZNOUB	0	-4	-2	0	2	2	3	3	3	2	2	1	0	0	0	0	1	1	2	2	3	3	2	2	1	-1	-3	-6	-10	-14	-14	-14	-14	-14	-14	-10	-4
THA	549	LAMPANG	0	3	3	3	3	3	2	1	0	-1	-3	-5	-7	-10	-15	-15	-15	-15	-15	-15	-15	-15	-10	-7	-5	-2	-1	0	1	2	2	3	3	3	3	3	3

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URS	549	ALMA ATA	0	4	4	4	4	4	3	3	3	2	2	2	2	1	−2	−4	−5	−5	−5	−5	−4	−2	1	2	2	2	2	3	3	3	4	4	4	4	4	4	4
URS	549	KICHINIOV	0	−4	−3	−2	−1	1	2	2	3	3	3	3	3	3	2	1	1	0	−1	−2	−4	−6	−6	−5	−4	−3	−2	−2	−1	−1	−1	−1	−2	−3	−4	−5	−4
AUS	558	ATHERTON QLD	0	3	0	−4	−8	−4	0	0	3	3	3	3	3	2	0	−4	−8	−3	2	3	4	3	1	−3	−7	−8	−5	−4	−3	−3	−6	−8	−6	−2	1	3	4
FNL	558	PORVOO	0	2	2	3	3	2	2	2	1	1	1	1	0	−1	−1	−1	−2	−2	−2	−3	−3	−3	−3	−3	−3	−2	−2	−2	−1	−1	−1	0	1	1	1	1	2
J	558	KOBE	0	3	3	3	3	3	3	3	3	3	3	2	2	1	0	−1	−2	−4	−5	−6	−6	−6	−6	−6	−6	−6	−6	−6	−6	−5	−4	−2	−1	0	1	2	2
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KOR	558	POHANG	0	3	3	1	−1	−5	−10	−13	−13	−13	−13	−13	−13	−13	−13	−10	−6	−2	1	2	3	4	4	4	4	3	3	3	3	3	3	3	4	4	4	4
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LBY	558	TRIPOLI KM16	0	5	5	5	4	4	3	3	2	1	0	−5	−14	−15	−24	−24	−24	−24	−24	−24	−24	−15	−14	−5	0	1	2	3	3	4	4	5	5	5	5	5	5
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ROU	558	TARGU JIU	0	-10	-10	-10	-8	-5	-3	-2	0	1	1	2	2	3	3	3	3	3	3	2	2	1	1	0	-2	-3	-5	-8	-10	-10	-10	-10	-10	-10	-10	-10	-10
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THA	558	SONGKHLA	0	-15	-15	-15	-15	-15	-15	-15	-15	-10	-7	-5	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	1	0	-1	-3	-5	-7	-10
TUR	558	TAVAS	0	5	5	5	5	4	3	2	0	-2	-3	-3	-3	-3	-2	0	2	3	4	5	5	5	5	4	3	2	0	-2	-3	-3	-3	-3	-2	0	2	3	4
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URS	558	UGLEGORSK	0	4	4	5	5	5	5	5	5	5	5	5	5	4	4	3	2	1	1	0	0	-1	-4	-6	-6	-6	-6	-6	-4	-1	0	0	1	1	2	3	3
AUS	567	CHARLEVIL QLD	0	3	4	4	3	2	0	-2	-5	-7	-8	-8	-6	-3	0	1	3	4	4	3	1	-2	-8	-15	-7	-2	-1	0	1	0	0	-2	-5	-15	-14	-5	0
AUS	567	JULIA CK QLD	0	6	6	6	6	6	5	5	4	3	1	-1	-3	-7	-11	-14	-16	-16	-16	-16	-14	-11	-7	-3	-1	1	3	4	5	5	6	6	6	6	6	6	6
CHN	567	QINHUANGDAO	0	-1	-1	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-1	-1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0
I	567	AOSTA	0	-2	-1	0	1	1	1	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	1	1	1	0	-1	-2	-4	-5	-6	-6	-7	-6	-6	-5	-4
I	567	BOLZANO	0	-1	-1	0	0	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	0	0	-1	-1	-2	-3	-3	-4	-4	-4	-4	-4	-3	-3	-2
I	567	CALTANISSETTA	0	-2	-1	-1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	-1	-1	-2	-2	-3	-3	-3	-3	-3	-2
I	567	FIRENZE	0	-2	-1	-1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	-1	-1	-2	-2	-3	-3	-3	-3	-3	-2
I	567	FOGGIA	0	-4	-2	-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-2	-4	-5	-7	-8	-9	-10	-9	-8	-7	-5
I	567	SASSARI	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0	-2	-3	-3	-2	-1	-1	0	0	0	0	0	0	0	-1	-1	-2	-3	-3	-2	0

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ROU	567	BRASOV	0	-10	-5	-1	1	2	1	-1	-5	-10	-10	-10	-10	-10	-10	-10	-6	-3	-1	1	2	2	2	1	-1	-3	-6	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
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ROU	567	SATU MARE	0	-10	-8	-5	-3	-2	0	1	1	2	3	3	3	3	3	3	3	2	1	1	0	-2	-3	-5	-8	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
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SYR	567	HOMS TERMALEY	0	-5	-5	-5	-5	-5	-5	-5	-4	-4	-2	1	3	4	5	5	5	5	4	3	3	3	3	4	4	5	5	5	5	4	1	-2	-3	-4	-5	-5	-5
ALG	576	BECHAR	0	-5	-5	-5	-10	-10	-10	-10	-5	-5	-5	-5	-5	-5	-8	-8	-8	-8	-8	-3	1	3	4	5	5	4	3	1	-3	-8	-8	-8	-8	-5	-5	-5	-5
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BUL	576	VIDIN	0	-7	-6	-5	-4	-3	-1	1	3	4	4	5	5	5	5	5	5	4	3	1	0	-2	-4	-5	-7	-8	-9	-10	-10	-10	-10	-10	-10	-10	-10	-10	-9
D	576	STUTTGART MLKR	0	-7	-8	-9	-10	-10	-10	-9	-8	-6	-4	-2	-1	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	0	-1	-2	-4
DDR	576	SCHWERIN	0	-1	-2	-4	-6	-12	-12	-12	-6	-3	-1	0	1	2	2	2	2	2	1	0	-1	-3	-6	-9	-12	-12	-9	-6	-3	-1	0	0	1	1	1	1	0
IRN	576	ABADAN	0	-3	-5	-6	-9	-10	-8	-5	-2	0	1	2	3	3	4	4	4	4	4	4	4	3	3	2	0	-2	-4	-6	-9	-8	-5	-3	-2	-2	-2	-2	-2
URS	576	RIGA	0	5	4	4	4	4	5	5	5	5	5	4	3	3	1	-1	-3	-7	-12	-15	-15	-15	-15	-15	-15	-15	-12	-5	-1	1	3	3	4	5	5	5	5

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ARS	585	RIYADH	0 1 2 3 4 5 6 7 8 9	2 1 0 -1 -3 -5	-7-11-15-15-15	-15-15-15-15-15	-15-11 -7 -5 -3	-1 0 1 2 2	3 3 3 3 3 3 -1 -3 -7 -8 -15 -15 -15 -15	3 3 3 3 2
URS	585	SVOBODNYI	0	4 4 4 5 5 5	5 4 3 1 -1	-4 -6 -8-12-12	-12-12-12-12-12	-12-12 -8 -6 -4	-1 1 3 4 5	5 5 4 4 4
VTN	585	NHATRANG	0	-1 -2 -3 -5 -6 -6	-6 -6 -6 -6 -6	-6 -6 -6 -6 -5	-3 -2 0 0 1	2 2 3 3 3	3 3 3 3 3	3 2 2 1 0
BRU	594	BUKIT PUAN	0	-7-10-15-10 -5 -4	-3 -2 -2 -1 -1	0 1 1 2 3	3 3 3 3 2	1 1 0 -1 -1	-2 -2 -3 -4 -5	-10-15-15 -7 -6
BUL	594	PLEVEN	0	-5 -5 -5 -5 -5 -5	-4 -3 -2 -1 -1	0 1 1 1 2	2 2 2 2 2	2 2 1 1 1	0 -1 -1 -2 -3	-4 -5 -5 -5 -5
CHN	594	LHASA	0	1 1 1 1 1 1	1 2 2 2 2	1 1 -1 -1 -2	-2 -2 -3 -3 -3	-3 -3 -3 -3 -2	-2 -1 -1 1 1	2 2 2 2 1
CHN	594	WENCHENG	0	-21-21-17-12 -7 -4	-2 0 1 2 2	2 3 3 3 3	3 3 3 3 3	2 2 1 0 -1	-2 -4 -7-12-17	-21-21-21-21-21
CLN	594	WEERAKETIYA	0 1 2 3 4 5 6 7 8 9	-7 -5 -3 -1 0 1	1 1 1 1 0	-1 -3 -5 -7 -9	-10-10-10 -9 -7	-3 1 3 3 3 3 2 0 -3 -9 -12 -15 -15 -15	3 3 1 -3 -7	-9-10-10-10 -9
D	594	FRANKFURT MAIN	0 1 2 3 4 5 6 7 8 9	-4-10-11 -6 -3 -1	-1 0 -1 -2 -4 -1 -2 -5 -16 -16 -16 -16 -16 -16	-10-11-10 -2 1 -7 -6 -6 -6 -7 -8 -10 -15 -16	3 4 4 4 3	2 1 0 -1 -2	-1 0 1 2 3	4 4 3 2 0
D	594	HOHER MEISSNER	0	-6 -6 -6 -6 -6 -6	-5 -4 -3 -2 -1	0 0 1 2 2	3 3 4 4 4	4 4 3 3 2	2 1 1 0 -2	-3 -3 -3 -4 -5
IND	594	MADRAS 2	0	3 3 3 3 3 3	2 2 1 0 -1	-3 -4 -8-12-18	-18-18-18-18-18	-18-12 -8 -4 -3	-1 0 1 2 2	3 3 3 3 3

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NMB	594	KHORIXAS	0	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-3	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0	-3	-5	-6
PHL	594	MALOLOS BUL	0	2	-1	-5	-9	-10	-10	-10	-10	-10	-10	-9	-5	-1	2	3	3	3	3	2	-1	-5	-9	-10	-10	-10	-10	-10	-10	-9	-5	-1	2	3	3	3	3
TUR	594	MALATYA	0	0	0	-1	-3	-7	-15	-10	-3	0	2	3	3	1	-1	-4	-9	-10	-12	-15	-12	-10	-9	-4	-1	1	3	3	2	0	-3	-10	-15	-7	-3	-1	0
URS	594	IJEVSK	0	-2	0	1	2	3	4	4	4	5	5	5	5	5	5	5	5	5	4	4	4	3	2	1	0	-2	-4	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4
AUS	603	GYMPIE QLD	0	0	1	1	0	-2	-6	-13	-12	-5	0	2	4	4	4	2	0	-1	-5	-7	-8	-7	-6	-3	-1	1	3	4	4	3	1	-2	-11	-11	-6	-2	-1
EGY	603	RAS BANAS	0	5	6	6	6	6	6	6	6	6	6	6	5	4	3	-1	-8	-10	-10	-6	-4	-3	-4	-5	-5	-5	-4	-3	-3	-4	-6	-10	-10	-9	-1	0	4
FNL	603	MARIEHAMN 1	0	2	2	2	2	2	2	1	1	0	-1	-2	-2	-3	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	-2	-2	-1	-1	0	1	1
KOR	603	NAM YANG	0	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-5	-6	-7	-7	-7	-7	-7	-7	-7	-6	-5	-4	-3	-2	-1	0	1	1	2	2	2	2	2	2
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NIG	603	ABAFON	0	-7	-6	-7	-8	-10	-6	-2	1	3	4	3	2	-1	-6	-10	-5	-2	0	1	1	1	0	-2	-6	-10	-5	0	2	4	4	3	1	-2	-6	-9	-8
VTN	603	DANANG	0	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-3	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-3	-5	-6
ARS	612	GURIAT	0	7	4	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-1	5	7	8	8	8	8	8
IND	612	BANGALORE	0	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4
IRN	612	QASR SHIRIN	0	-2	-3	-7	-14	-20	-14	-14	-8	-8	-8	-8	-8	-14	-14	-20	-14	-7	-3	-2	0	1	2	3	4	4	4	4	4	4	4	4	4	3	2	1	0
IRN	612	QASR SHIRIN	0	-2	-3	-7	-14	-20	-14	-14	-8	-8	-8	-8	-8	-14	-14	-20	-14	-7	-3	-2	0	1	2	3	4	4	4	4	4	4	4	4	4	3	2	1	0
ISR	612	EZYON	0	-10	-10	-10	-10	-10	-9	-9	-9	-8	-8	-6	-5	-4	-3	-2	0	2	3	4	5	5	5	4	3	2	0	-2	-3	-4	-5	-6	-8	-8	-9	-9	-9
PAK	612	GWADAR	0	-10	-7	-4	-3	-2	-2	-2	-2	-3	-3	-4	-7	-9	-9	-9	-9	-8	-6	-4	-3	1	2	3	4	4	4	3	3	2	0	-3	-6	-9	-10	-11	-11
PAK	612	GWADAR	0	-10	-7	-4	-3	-2	-2	-2	-2	-3	-3	-4	-7	-9	-9	-9	-9	-8	-6	-4	-3	1	2	3	4	4	4	3	3	2	0	-3	-6	-9	-10	-11	-11
URS	612	BAKU	0	5	5	5	4	4	3	3	2	1	0	-1	-2	-3	-4	-5	-6	-7	-7	-7	-7	-7	-7	-7	-6	-5	-2	1	3	3	4	5	5	5	5	5	5
EGY	621	BATRA	0	0	2	3	4	4	4	4	5	5	6	6	6	6	5	5	5	4	4	2	1	0	-1	-2	-4	-5	-7	-6	-5	-4	-3	-3	-3	-4	-4	-3	-1
I	621	C SPULICO	0	0	2	3	4	4	4	3	2	0	-2	-5	-7	-10	-11	-10	-7	-5	-2	0	2	3	4	4	3	2	0	-2	-5	-8	-10	-11	-10	-8	-5	-2

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I	621	CITTA CASTELLO	0	-3	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-3	-6	-9	-10	-10	-9	-6
IND	621	PATNA	0	-1	-3	-5	-6	-7	-6	-5	-3	-1	0	1	2	3	3	3	2	1	0	-1	-3	-5	-6	-7	-6	-5	-3	-1	0	1	2	3	3	3	2	1	0
J	621	ASAHIKAWA	0	2	2	2	2	2	2	2	2	1	1	0	0	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	0	1	1	2	2	2
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THA	621	UDON THANI	0	2	2	3	3	3	3	3	3	3	3	3	3	3	2	1	0	-1	-3	-5	-7	-10	-15	-15	-15	-15	-15	-15	-15	-15	-10	-7	-5	-2	-1	0	1
URS	621	KEMEROVO	0	4	3	3	2	1	1	0	0	-1	-2	-3	-3	-3	-3	-3	-3	-2	-1	0	0	1	1	2	3	3	3	4	4	5	5	5	5	5	5	5	4
URS	621	MAKHATCHKALA	0	2	0	-2	-3	-4	-5	-5	-5	-5	-5	-5	-5	-5	-4	-3	-2	0	1	2	3	3	4	4	5	5	5	5	5	5	5	5	5	4	4	3	3
IND	630	TRICHUR	0	-6	-4	-3	-2	-1	0	1	1	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7
IND	630	TRICHUR	0	-6	-4	-3	-2	-1	0	1	1	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7
NZL	630	OPAPA	0	-1	1	2	3	3	3	2	1	0	-1	-3	-6	-7	-8	-8	-7	-5	-3	-1	1	2	3	3	3	2	1	0	-1	-3	-6	-7	-8	-8	-7	-5	-3
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ROU	630	TIMISOARA	0	-1	0	1	2	2	3	3	3	3	3	3	3	2	2	1	0	-1	-2	-4	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-4	-2
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TUR	630	CUKUROVA	0	-6	-1	1	3	4	5	6	6	6	6	5	4	3	1	-1	-6	-15	-15	-6	-1	1	3	4	5	6	6	6	6	5	4	3	1	-1	-6	-15	-15

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URS	630	KHABAROVSK	0	2	3	4	5	5	5	5	5	5	5	5	5	5	4	3		2	1	0	-4	-9	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-9	-4	0	1
IRL	639	SLANE	0	1	0	-2	-4	-6	-10	-13	-13	-13	-14	-14	-14	-13	-13	-13	-10	-6	-4	-2	0	1	2	3	4	4	4	4	4	4	4	4	4	4	3	2
PAK	639	KARACHI	0	1	2	3	4	4	4	3	3	2	0	-3	-6	-9	-10	-11	-11	-10	-7	-4	-3	-2	-2	-2	-2	-3	-3	-4	-7	-9	-9	-9	-9	-8	-6	-4	-3
VTN	639	QUINHON	0	-2	-3	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-3	-2	-1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	2	1	0	-1
ARS	648	JEDDAH	0	-15	-15	-15	-15	-13	-11	-7	-1	2	3	4	4	5	5	5	4	4	3	2	-1	-7	-11	-13	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
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GMB	648	BONTO 1	0	-1	1	2	3	3	3	3	3	3	3	3	3	3	3	2	1	-1	-3	-5	-6	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-6	-5	-3
TGK	648	NACHINGWEA	0	0	-1	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0
URS	648	IMAN	0	4	4	4	4	5	5	5	5	5	4	3	2	0	-2	-4	-9	-14	-14	-14	-14	-14	-14	-14	-9	-4	-2	0	2	3	4	5	5	5	5	5	4
URS	648	URGHENTCH	0	3	3	3	3	3	3	3	3	3	3	0	-1	-5	-7	-10	-10	-10	-10	-10	-10	-10	-7	-5	-1	0	3	3	3	3	3	3	3	3	3	3	3
AUS	657	BYROCK NSW	0	4	4	4	3	3	1	-2	-4	-9	-15	-15	-15	-15	-15	-15	-10	-8	-4	-1	1	2	3	4	4	4	3	3	3	2	2	1	1	2	3	3	4
IND	657	CALCUTTA	0	-1	-1	0	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	0	-1	-1	-2	-2	-2	-3	-4	-3	-2	-2	-2
NIG	657	IBADAN	0	2	2	2	3	3	3	4	4	4	3	1	2	1	0	-2	-4	-6	-8	-9	-9	-8	-7	-6	-3	-1	0	1	2	3	4	4	4	4	3	3	3
TGK	657	DAR ES SALAAM	0	0	-1	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0
TUR	657	URLA	0	-20	-20	-20	-20	-20	-20	-20	-20	-20	-15	-6	-3	-1	0	2	3	3	4	4	4	3	3	2	0	-1	-3	-6	-15	-20	-20	-20	-20	-20	-20	-20	-20
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UAE	657	AL AIN	0	-20	-20	-20	-16	-12	-8	-5	-3	-1	0	1	2	2	2	3	3	3	3	3	3	3	3	3	2	2	2	1	0	-1	-3	-5	-8	-10	-15	-20	-20

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666 KHZ

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ALG	666	TINDOUF	0	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-12	-12	-11	-10	-10	-8	-6	-4	-2	0	2	4	4	4	2	0	-2	-4	-6	-8	-10	-10	-11	-12	-12
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			9																							-10												
AUS	666	GLEN INNES NSW	0	3	3	2	0	-2	-5	-7	-9	-9	-7	-6	-3	-1	1	2	3	3	2	0	-3	-7	-14	-12	-7	-4	-3	-2	-3	-4	-6	-10	-15	-6	-2	1	3
D	666	BODENSEESENDER	0	0	0	-1	-4	-8	-9	-5	-3	-2	-3	-5	-7	-7	-8	-7	-5	-4	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRC	666	TRIKALA	0	-15	-15	-15	-15	-11	-7	-4	-3	-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-3	-4	-7	-11	-15	-15	-15	-15	-15
IND	666	DELHI	0	-10	-10	-10	-10	-10	-10	-10	-10	-10	-8	-5	-3	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-3	-5	-8
SDN	666	KASSALA	0	-9	-13	-15	-15	-15	-15	-15	-15	-15	-15	-15	-14	-8	-6	-3	-1	0	1	2	3	3	3	4	4	4	4	4	4	4	3	2	1	0	-2	-3	-6
URS	666	KOMSOMOLSKAMUR	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	-3	-7	-10	-10	-10	-10	-7	-3	0	3	3	3	3	3	3	3	3
URS	666	SKOVORODINO	0	5	5	5	5	5	5	3	2	1	0	-1	-2	-3	-5	-7	-7	-7	-7	-7	-5	-3	-2	-2	-1	0	1	2	3	5	5	5	5	5	5	5	5
ZMB	666	CHIPATA	0	-4	-8	-4	-4	-2	-2	0	0	0	0	0	-2	-2	-4	-4	-8	-4	-2	0	2	3	4	5	5	6	6	6	6	6	6	5	4	4	2	1	-2
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			7									-14																	-14									
			8									-14																	-14									
			9									-14																	-14									
BRU	675	KG SERASA	0	-5	-5	-5	-6	-7	-15	-6	-5	-3	-2	-2	-1	-1	0	1	1	2	3	3	3	3	3	2	1	1	0	-1	-1	-2	-2	-3	-5	-6	-15	-7	-6
IND	675	ITANAGAR	0	3	2	2	1	0	-1	-2	-4	-6	-8	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-8	-6	-4	-2	-1	0	1	2	2	3	3	3	3	3	3
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675 KHZ

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675 KHZ

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IRL	675	DUNGARVAN 2	0	0	-2	-4	-6	-10	-10	-10	-10	-10	-11	-10	-10	-10	-10	-10	-6	-4	-2	0	1	2	3	4	4	4	4	4	4	4	4	4	4	4	3	2	1
J	675	HAKODATE	0	2	1	1	1	0	0	-1	-1	-1	-1	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-1	-1	-1	-1	0	0	1	1	2	2	2	2	2
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			8																																		-15		
			9																																		-15		
VTN	675	NHATRANG	0	-1	-2	-3	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-3	-2	0	0	1	2	2	3	3	3	3	3	3	3	3	3	3	2	2	1	0
GMB	684	BONTO 2	0	-1	1	2	3	3	3	3	3	3	3	3	3	3	3	2	1	-1	-3	-5	-6	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-6	-5	-3
IRN	684	MASHHAD	0	0	0	-1	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J	684	MORIOKA	0	4	4	4	4	3	3	2	2	1	1	0	-2	-3	-3	-3	-4	-5	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	0	0	1	2	2	3	3	4
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URS	684	NIKOLAEVSKAMUR	0	5	5	5	5	4	4	3	2	1	0	-2	-4	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4	-2	0	1	2	3	4	4	5	5	5	5	5	5
URS	684	TSELINOGRAD	0	5	5	5	5	5	4	4	4	3	2	1	0	-2	-3	-5	-5	-5	-5	-5	-5	-5	-5	-5	-3	-2	0	1	2	3	4	4	4	5	5	5	5
AUS	693	BRISBANE QLD	0	3	1	0	-9	-15	-11	-6	-4	-3	-3	-3	-5	-9	-15	-12	-4	0	2	3	4	4	4	3	1	0	-1	-2	-2	-2	-1	1	2	3	4	4	4
AUS	693	STREAKY BAY SA	0	-10	-12	-9	-7	-6	-6	-8	-12	-10	-5	-1	2	3	4	4	3	1	-3	-8	-12	-10	-8	-6	-6	-8	-11	-12	-5	-1	2	3	4	4	3	0	-3
IND	702	JULLUNDUR	0	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4

702 KHZ

1	2	3	4	AZIMUTH																											
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IRN	702	RASHT	0	3	2	1	-2	-6	-8	-13	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-15	-16	-16	-16	-16	-16	-16	-16	-16	-12	-6	-5	-2	1	2	3	3
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MCO	702	MONTE CARLO	0	0	-4	-7	-15	-17	-17	-17	-17	-17	-17	-17	-17	-17	-12	-7	-4	0	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2
PHL	702	VALENZUELA BUL	0	2	-2	-5	-9	-10	-10	-10	-10	-10	-10	-9	-5	-2	2	2	2	2	2	2	-2	-5	-9	-10	-10	-10	-10	-10	-10	-9	-5	-2	2	2	2	2	2
AUS	711	KELSO TAS	0	-20	-20	-18	-11	-6	-3	0	2	4	5	5	6	6	5	4	4	3	3	3	3	4	4	5	5	5	5	5	5	4	2	0	-3	-7	-18	-20	-20
AUS	711	S GEORGE QLD	0	7	6	5	4	2	-1	-5	-18	-18	-10	-6	-4	-2	-1	-1	-1	-2	-5	-8	-10	-10	-6	-2	1	3	4	5	6	6	7	7	7	7	7	7	7
IND	711	SILIGURI	0	-2	-3	-4	-6	-7	-7	-7	-6	-4	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1
ISR	711	EZYON	0	-10	-10	-10	-10	-10	-9	-9	-9	-8	-8	-6	-5	-4	-3	-2	0	2	3	4	5	5	5	4	3	2	0	-2	-3	-4	-5	-6	-8	-8	-9	-9	-9
LBR	711	MONROVIA	0	2	3	3	3	3	3	3	2	2	1	1	0	-2	-4	-6	-8	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-6	-4	-3	-1	1	1	2
MRC	711	TARFAYA	0	-6	-5	-4	-3	-2	-1	2	2	3	3	3	3	3	3	2	2	2	2	2	2	3	3	3	3	3	3	3	2	2	2	-1	-2	-3	-4	-5	-6
PAK	711	MULTAN II	0	-6	-4	-3	-2	0	1	2	2	3	3	4	4	4	4	4	4	4	4	4	3	3	2	2	1	0	-2	-3	-4	-6	-8	-8	-10	-10	-10	-10	-8
THA	711	SISAKET	0	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	1	0	-1	-3	-5	-7	-10	-15	-15	-15	-15	-15	-15	-15	-15	-10	-7	-5	-2
URS	711	VLADIVOSTOK	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	-1	-3	-5	-7	-10	-10	-10	-10	-7	-5	-3	-1	1	3	3	3	3	3	3
YEM	711	MOCHA	0	-10	-10	-10	-10	-10	-10	-7	-6	-5	-3	-1	0	2	3	4	5	5	5	5	5	5	5	4	3	2	0	-1	-3	-5	-6	-7	-10	-10	-10	-10	-10
CHN	720	BEIJING	0	-4	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-4	-3	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-2	-3	-4
D	720	HOLZKIRCHEN	0	0	3	6	7	7	7	6	3	0	-5	-10	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-10	-5
IND	720	MADRAS	0	-6	-7	-7	-7	-6	-4	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4

1	2	3	4	AZIMUTH																													
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720 KHZ

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IRN	720	TAYBAD	0	–1	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	2	1	0	–1	–4	–7	–10	–13	–16	–16	–16	–16	–16	–16	–15	–12	–8	–5	–2
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IRN	720	TAYBAD	0	–1	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	2	1	0	–1	–4	–7	–10	–13	–16	–16	–16	–16	–16	–16	–15	–12	–8	–5	–2
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S	720	KIRUNA	0	2	2	2	2	2	2	2	2	2	2	1	0	–2	–3	–5	–8	–8	–8	–8	–5	–3	–2	0	1	2	2	2	2	2	2	2	2	2	3	3
TUN	720	SFAX	0	–10	–10	–10	–10	–10	–10	–10	–10	–7	–5	–4	–3	–2	–2	–1	0	0	0	0	0	0	0	0	0	0	0	0	0	–1	–2	–2	–3	–4	–5	–7	–10
URS	720	IUJNSAKHALINSK	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	3	2	–3	–7	–9	–13	–15	–20	–20	–20	–20	–20	–20	–15	–13	–9	–7	3	2	4	4
URS	720	KRASNOVODSK	0	4	4	4	5	5	5	5	5	4	3	2	0	–2	–5	–5	–11	–11	–11	–11	–11	–11	–11	–11	–5	–2	0	2	3	4	5	5	5	5	5	4	4
NCL	729	NOUMEA 2	0	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	3	2	0	–2	–5	–5	–8	–8	–8	–8	–8	–8	–8	–5	–5	–2	0	2	3
URS	729	ACHKHABAD	0	4	4	4	4	2	1	0	–1	–3	–4	–5	–6	–10	–10	–10	–10	–8	–6	–5	–4	–3	–2	0	1	2	3	3	4	4	4	4	4	4	4	4	4
ALG	738	IN AMENAS	0	–7	–6	–6	–4	–3	–1	1	3	4	5	4	3	1	–1	–3	–4	–6	–6	–7	–8	–10	–10	–12	–13	–13	–13	–13	–13	–13	–13	–13	–13	–12	–10	–10	–8
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738 KHZ

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738 KHZ

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J	738	TOYAMA	0	0	1	2	2	2	2	2	2	1	1	0	-2	-5	-6	-6	-4	-2	-1	0	1	2	2	2	2	2	2	1	1	-1	-2	-5	-6	-6	-4	-3	-1
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POL	738	POZNAN	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
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VTN	738	QUINHON	0	-2	-3	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-3	-2	-1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	2	1	0	-1
IRN	747	BANDAR SHAH	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-3	-5	-7	-11	-15	-15	-15	-15	-15	-15	-15	-15	-14	-11	-7	-5	-3	-2	0
NMB	747	RUNTU	0	-7	-7	-7	-7	-7	-7	-7	-6	-5	-3	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0	-3	-5	-6	-7	-7	-7	-7	-7	-7
SDN	747	PT SUDAN	0	-15	-15	-15	-15	-15	-15	-14	-12	-8	-5	-3	-1	0	1	2	3	3	4	4	4	4	4	4	4	3	3	2	1	0	-1	-3	-6	-9	-14	-15	-15
AUS	756	TAREE NSW	0	0	2	4	4	3	2	0	-4	-8	-12	-14	-14	-10	-6	-2	1	3	4	4	3	2	-2	-10	-14	-5	-1	1	2	2	2	1	0	-2	-14	-15	-6
D	756	BRAUNSCHWEIG	0	2	2	2	2	1	1	0	-1	-2	-3	-5	-6	-6	-7	-6	-6	-5	-3	-2	-1	0	1	1	2	2	2	2	2	1	1	1	1	1	1	1	2
D	756	RAVENSBURG	0	2	1	1	0	-1	-2	-3	-5	-6	-6	-7	-6	-6	-5	-3	-2	-1	0	1	1	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2
I	756	BOLOGNA	0	-2	-2	-2	-2	-2	-2	-3	-4	-4	-4	-3	-2	-1	1	2	2	2	3	3	3	3	3	3	3	2	2	2	1	-1	-2	-3	-4	-4	-4	-3	-3
IND	756	JAGDALPUR	0	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4
IRQ	756	SALMAN PAK	0	3	1	-1	-3	-5	-6	-6	-6	-5	-3	-1	1	3	3	4	4	4	3	3	1	-1	-3	-5	-6	-6	-6	-5	-3	-1	1	3	3	4	4	4	3

756 KHZ

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ROU	756	LUGOJ	0	3	3	3	2	-1	-4	-10	-10	-10	-10	-10	-10	-10	-10	-10	-4	-1	2	3	3	3	2	-1	-4	-10	-10	-10	-10	-10	-10	-10	-10	-4	-1	2
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THA	756	N RATCHASIMA	0	2	3	4	5	5	5	5	5	4	3	2	1	-2	-5	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-5	-2	0
URS	756	URGHENTCH	0	4	4	4	4	3	3	2	2	1	0	-2	-3	-4	-6	-8	-10	-10	-10	-10	-8	-6	-4	-3	-2	0	1	2	2	3	3	4	4	4	4	4	4
ARS	765	DAMMAM	0	-8	-7	-7	-6	-3	0	3	3	4	5	5	5	5	5	5	5	4	3	3	0	-3	-6	-7	-7	-8	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
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IRL	765	ENNISCORTHY	0	2	1	0	-2	-4	-6	-10	-13	-13	-13	-14	-14	-14	-13	-13	-13	-10	-6	-4	-2	0	1	2	3	4	4	4	4	4	4	4	4	4	4	3
IRN	765	CHAHBAHAR 2	0	-8	-7	-6	-5	-4	-4	-4	-4	-4	-5	-6	-8	-8	-5	-3	-1	1	2	3	3	3	4	4	4	4	4	3	3	2	2	1	0	-2	-4	-6	-8
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J	765	KOFU	0 1 2 3 4 5 6 7 8 9	-2 -1 -1 0 0 0	1 1 1 1 1	1 1 1 1 1 1 0 -2 -3 -5 -10 -12 -15 -15	0 0 -1 -1 -1	-1 -1 -1 -1 -2	-2 -2 -2 -3 -3	-3 -3 -3 -3 -2
J	765	TOKUYAMA	0 1 2 3 4 5 6 7 8 9	-3 -3 -3 -3 -3 -3	-2 -2 -2 -1 -1	0 0 0 1 1	1 1 1 1 1 1 1 0 -1 -2 -4 -8 -12 -15	1 1 1 1 0	0 0 -1 -1 -2	-2 -3 -3 -3 -3
NZL	765	NELSON	0 1 2 3 4 5 6 7 8 9	1 2 2 3 3 3 3 2 1 0 -2 -5 -8 -12 -16	3 3 3 3 2	2 2 3 3 3	3 3 3 3 2	2 1 0 -1 -2 0 -1 -1 -2 -4 -6 -9 -14 -16	-3 -4 -5 -5 -5	-4 -3 -2 -1 0
TUR	765	SILIFKE	0	-20 -20 -13 -8 -2 1	3 4 3 1 -2	-8 -13 -20 -20 -20	-20 -20 -20 -20 -13	-8 -2 1 3 4	3 1 -2 -8 -13	-20 -20 -20 -20 -20
UKR	765	ODESSA	0	2 3 4 4 3 2	0 -1 -2 -2 -2	-2 -2 -2 -2 -2	-2 -1 0 2 3	4 4 3 2 0	-2 -6 -6 -6 -6	-6 -6 -3 -2 0

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URS	765	KIRENSK	0	4 4 4 4 4 4	3 3 2 2 2	2 1 -2 -5 -5	-5 -5 -5 -2 1	2 2 2 2 3	3 4 4 4 4	4 4 4 4 4
URS	765	TETIUKHE	0	4 4 3 3 2 2	1 0 -2 -3 -4	-6 -6 -6 -6 -6	-6 -6 -6 -6 -5	-3 -2 0 1 2	3 3 4 4 4	4 4 4 4 4
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EGY	774	ABIS	0	-9 -9 -9 -9 -3 -1	1 2 3 3 3	4 5 5 5 4	2 0 -2 -3 -6	-8 -9 -4 0 3	5 7 7 6 4	1 -2 -9 -9 -9
S	774	STOCKHOLM	0	2 2 2 2 2 2	1 1 0 -1 -3	-6 -6 -3 -1 0	1 1 2 2 2	2 2 2 2 2	2 1 1 1 1	1 1 2 2 2
YMS	774	MUKALLA	0	3 4 5 5 5 5	5 4 3 3 3	1 -1 -5-10-15	-25-25-25-25-25	-25-25-25-25-25	-25-25-25-15-10	-5 -1 1 3 3
CHN	783	BAODING	0	-4 -5 -6 -6 -6 -6	-6 -6 -6 -6 -6	-5 -4 -3 -2 -1	0 1 1 2 2	2 2 2 2 2	2 2 2 2 1	1 0 -1 -2 -3
IND	783	MADRAS 2	0	-6 -7 -7 -7 -6 -4	-3 -2 -1 0 1	1 2 2 2 2	2 2 1 1 1	1 1 2 2 2	2 2 2 1 1	0 -1 -2 -3 -4
IND	783	SILIGURI	0	-3 -3 -2 -2 -2 -1	-1 0 0 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 0 0 -1	-1 -2 -2 -2 -3
SDN	783	ATBARA	0	6 5 4 2 1 -7	-14-14 -6 -4 -2	-3 -5 -8-14-14	-14-14-14-11 -7	-4 -3 -3 -4 -8	-14-14 -3 0 3	5 6 6 6 6
SYR	783	TARTOUS	0 1 2 3 4 5 6 7 8 9	-10-10-10-10-10-10	-10-10-10-10-10 6 4 1 4 -10 -15 -15 -15 -15	-10-10-10-10-10	-5 -2 1 2 3	5 6 6 6 6	6 6 6 5 3	2 1 -2 -5-10
URS	783	ACHKHABAD	0 1 2 3 4 5 6 7 8 9	3 3 3 3 3 3	2 1 0 -1 -3 3 1 -4 -10 -14 -15 -15 -15 -15	-4 -6 -9-12-12	-12-12-12-12-12	-12-12-12-12-12	-9 -6 -4 -3 -1	0 1 2 3 3
URS	783	DJAMBUL	0	4 4 4 3 3 2	2 2 2 1 -2	-6 -6 -6 -6 -6	-2 1 2 2 2	2 3 3 4 4	4 4 4 4 4	4 4 4 4 4
URS	783	SPASSK DALNII	0	4 4 4 4 4 4	4 4 4 4 4	4 4 4 3 3	2 2 2 2 1	-2 -6 -6 -6 -6	-6 -2 1 2 2	2 2 3 3 4

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GRC	792	KAVALLA	0	6	7	7	6	5	4	2	0	-2	-5	-5	-5	-5	-2	0	2	4	5	6	7	7	6	5	4	2	0	-2	-5	-5	-5	-4	-2	0	2	4	5
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D	801	DILLBERG	0	0	0	-1	-2	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MRC	801	ALHOCEIMA	0	-10	-10	-10	-10	-10	-10	-8	-3	-1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	-1	-3	-8	-10	-10	-10	-10	-10
URS	801	BAKU	0	2	2	2	3	3	4	5	5	5	4	3	2	-1	-5	-7	-10	-15	-15	-15	-15	-15	-15	-15	-15	-15	-10	-7	-1	2	3	4	5	5	5	4	3
URS	801	DUCHANBE	0	2	3	4	5	5	5	5	5	4	4	4	3	3	2	0	0	-1	-2	-3	-7	-10	-13	-15	-15	-15	-15	-15	-15	-15	-13	-10	-7	-2	-1	0	0
URS	801	ULAN UDE	0	4	4	4	4	4	4	4	3	3	2	2	2	2	1	-2	-6	-6	-6	-6	-6	-2	1	2	2	2	2	3	3	4	4	4	4	4	4	4	4
ZAI	801	BUKAVU	0	2	2	2	1	0	-4	-6	-10	-10	-10	-10	-10	-10	-6	-4	0	1	2	2	2	2	1	0	-4	-6	-10	-10	-10	-10	-10	-10	-6	-4	0	1	2
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J	810	TOKYO	0	-23	-23	-23	-23	-23	-23	-23	-23	-10	-5	-3	-3	-2	0	1	2	3	3	3	3	3	3	3	3	2	1	0	-1	-2	-4	-6	-8	-10	-13	-15	-20
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AND	819	SUD RADIO	0	4	4	4	4	4	4	3	2	0	-2	-4	-6	-8	-8	-7	-5	-4	-3	-2	-2	-3	-3	-5	-6	-7	-8	-6	-4	-2	1	2	3	3	4	4	4
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ARS	819	DAMMAM	0	-8	-7	-7	-6	-3	0	3	3	4	5	5	5	5	5	5	5	4	3	3	0	-3	-6	-7	-7	-8	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
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IND	819	DELHI	0	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2
IRN	819	FARAHABAD SARI	0	-16	-16	-16	-16	-10	-5	-3	0	1	2	1	-1	-4	-11	-16	-9	-4	-3	-2	-2	-2	-2	-4	-7	-16	-11	-4	1	1	2	2	0	-2	-4	-9	-16
URS	819	KZYL ORDA	0	4	4	4	4	3	3	2	2	1	1	0	-1	-2	-3	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-2	0	1	2	3	3	3	4	4	4	4
URS	819	TETIUKHE	0	5	5	4	4	3	2	0	-2	-4	-8	-8	-8	-8	-8	-8	-8	-8	-8	-4	-2	0	2	3	4	4	5	5	5	4	4	4	4	4	5	5	5
ZMB	819	LUSAKA	0	6	5	4	4	2	1	-2	-4	-8	-4	-4	-2	-2	0	0	0	0	0	-2	-2	-4	-4	-8	-4	-2	0	2	3	4	5	5	6	6	6	6	6
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LBY	828	SEBHA	0	-14 -5 0 1 2 3	3 4 4 5 5	5 5 5 5 5	5 5 4 4 3	3 2 1 0 -5	-14-15-24-24-24	-24-24-24-24-15
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SYR	828	DEIR 2	0	-16-16-16-16-16 -7	0 1 2 4 5	6 7 8 8 8	7 6 5 4 2	1 0 -7-16-16	-16-16-16-16-16	-16-16-16-16-16
SYR	828	DEIR 2	0	-16-16-16-16-16 -7	0 1 2 4 5	6 7 8 8 8	7 6 5 4 2	1 0 -7-16-16	-16-16-16-16-16	-16-16-16-16-16
URS	828	GORKII	0	3 4 4 4 4 4	4 4 4 3 2	1 0 -2 -4 -7	-10-12-12-12-12	-12-12-12-12-12	-12-12-12-10 -7	-4 -2 0 1 2
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LBN	837	HAMAT	0	-6 -3 -1 1 2 3	3 3 2 2 1	1 0 0 0 0	1 2 2 3 3	3 2 1 0 -2	-4 -7-12-14-14	-14-14-14-14-11
TUR	837	EDIRNE	0	-15-15-15-15-15-15	-15-15-15-15-10	-5 -2 0 2 3	4 5 5 5 5	5 4 3 2 0	-2 -5-10-15-15	-15-15-15-15-15
YUG	837	NOVI SAD	0	-3 -1 1 2 3 3	3 2 2 2 1	1 1 1 1 2	2 2 3 3 3	2 1 -1 -3 -7	-12-15-15-15-15	-15-15-15-12 -7
PHL	846	MALOLOS BUL	0	4 3 2 1 -1 -3	-4 -5 -4 -3 -1	1 2 3 4 5	5 5 4 3 2	1 -1 -3 -4 -5	-4 -3 -1 1 2	3 4 5 5 5
TUR	846	SIVAS	0	-20-20-20-20-15-10	-8 -5 -2 0 2	3 5 3 2 0	-2 -5 -8-10-15	-20-20-20-20-20	-20-20-20-20-20	-20-20-20-20-20
ARS	855	DAMMAM	0	3 0 -3 -6 -7 -7	-8 -9 -9 -9 -9	-9 -9 -9 -9 -9	-9 -9 -8 -7 -7	-6 -3 0 3 3	4 5 5 5 5	5 5 5 4 3
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			5						-3	
			6						-7	
			7						-10	
			8						-10	
			9						-10	
CHN	855	BUSHENG	0	1 1 1 0 -1 -1	-2 -2 -2 -3 -3	-3 -5 -5 -5 -5	-5 -7 -7 -7 -7	-5 -5 -5 -5 -5	-3 -3 -2 -2 -2	-1 -1 0 1 1

1	2	3	4	AZIMUTH																													
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855 KHZ

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CHN	855	GEGYA	0	1	1	1	0	-1	-1	-2	-2	-2	-2	-2	-3	-3	-3	-6	-6	-6	-6	-6	-6	-6	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-1	-1	0	1	1
CHN	855	LHASA	0	0	0	0	0	1	1	0	0	0	1	1	0	0	-1	-1	-1	-1	-3	-3	-3	-5	-5	-7	-7	-7	-9	-9	-9	-9	-7	-7	-5	-3	-3	-1	-1
CHN	855	RUTO	0	1	1	1	0	-1	-1	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-5	-5	-5	-5	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-1	-1	0	1	1
D	855	BERLIN 2	0	4	3	3	2	1	0	-2	-6	-11	-15	-15	-15	-15	-15	-15	-15	-15	-15	-10	-3	-1	1	2	3	3	4	4	4	4	4	4	4	4	4	4	4
NIG	855	PT HARCOURT	0	6	6	6	6	5	5	4	4	3	1	-1	-3	-6	-7	-7	-6	-5	-4	-4	-4	-5	-6	-7	-7	-5	-3	0	1	4	5	5	6	6	6	6	6
SDN	855	SOBA	0	3	3	3	3	3	3	0	-2	-4	-6	-8	-10	-10	-8	-4	-2	0	2	3	3	3	3	3	2	0	-2	-4	-6	-8	-10	-10	-8	-4	-2	0	-2
SYR	855	DAMAS 2	0	-20	-20	-20	-20	-20	-20	-20	-20	-10	-10	-5	-2	-1	2	3	3	4	4	5	5	5	5	5	5	5	4	4	3	2	-1	-2	-5	-10	-20	-20	-20
SYR	855	DAMAS 2	0	-20	-20	-20	-20	-20	-20	-20	-20	-10	-10	-5	-2	-1	2	3	3	4	4	5	5	5	5	5	5	5	4	4	3	2	-1	-2	-5	-10	-20	-20	-20
ZMB	855	CHIPATA	0	-4	-8	-4	-4	-2	-2	0	0	0	0	0	-2	-2	-4	-4	-8	-4	-2	0	2	3	4	5	5	6	6	6	6	6	6	5	4	4	2	1	-2
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ARS	864	DAMMAM	0	-8	-7	-7	-6	-3	0	3	3	4	5	5	5	5	5	5	5	4	3	3	0	-3	-6	-7	-7	-8	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
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ARS	864	JEDDAH	0	-9	-8	-7	-7	-6	-3	0	3	3	4	5	5	5	5	5	5	5	4	3	3	0	-3	-6	-7	-7	-8	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
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864 KHZ

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EGY	864	GIZA	0	-20-20-20-20-20-20	-20-18-18-18-15	-12 -8 -3 0 2	4 5 6 6 6	6 6 6 6 5	4 2 0 -3 -8	-12-15-18-18-18
J	864	ASAHIKAWA	0 1 2 3 4 5 6 7 8 9	0 1 1 2 2 2	2 2 2 2 2 1 0 -2 -5 -10 -10 -20 -20 -20	1 1 1 0 0	-1 -1 -2 -2 -2	-2 -2 -2 -2 -2	-2 -2 -2 -2 -2	-1 -1 -1 -1 0
J	864	FUKUI	0 1 2 3 4 5 6 7 8 9	-6 -6 -6 -6 -6 -6	-6 -6 -6 -6 -5	-3 -2 -1 0 1	1 2 2 2 3	3 3 3 2 2 2 0 -2 -6 -10 -10 -20 -20 -20	1 1 0 -1 -2	-3 -4 -5 -6 -6
J	864	MURORAN	0 1 2 3 4 5 6 7 8 9	1 1 1 1 1 1 1 0 -1 -2 -5 -10 -15 -15 -15	0 0 0 0 -1	-2 -2 -3 -3 -3	-4 -4 -4 -4 -4	-4 -3 -3 -2 -2	-1 -1 0 0 0	0 1 1 1 1
KOR	864	GANGNEUNG	0 1 2 3 4 5 6 7 8 9	-5 -9-13-14-16-16	-16-16-14-12 -9	-5 -3 0 2 3 -3 -4 -4 -5 -6 -8 -11 -14 -16	4 4 4 4 3 4 3 1 -1 -4 -6 -11 -14 -16	2 2 1 1 2	2 3 3 4 4 4 3 1 -1 -4 -6 -11 -14 -16	4 3 2 0 -2 -3 -4 -4 -5 -6 -8 -11 -14 -16
MRC	864	KSAR ESSOUK	0	-6 -4 -3 0 1 3	4 4 4 4 4	4 4 4 4 4	2 2 4 4 4	4 3 1 0 -3	-4 -6 -6 -6 -6	-6 -6 -6 -6 -6

864 KHZ

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URS	864	KARAGANDA	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	-1	-3	-5	-8	-11	-14	-15	-15	-15	-15	-15	-15	-15	-15	-15	-14	-11	-8	-5	-3	-1
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D	873	FRANKFURT MAIN	0	-4	-10	-15	-16	-20	-20	-20	-20	-20	-15	-15	-10	-4	0	3	4	5	5	4	2	0	-2	-5	-6	-6	-6	-4	-2	0	2	4	5	5	4	3	0
MOZ	873	BEIRA	0	-10	-13	-15	-15	-16	-16	-16	-16	-15	-10	-7	-4	-2	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-2	-4	-7
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			9						-17																		-17											
SDN	873	BURAM	0	-6	-5	-3	-3	-6	-8	-12	-12	-2	2	4	5	6	6	6	6	6	5	3	0	-6	-13	-8	-6	-4	-3	-4	-6	-11	-22	-22	-22	-22	-22	-22	-22
URS	873	KICHINIOV	0	5	5	5	5	5	4	4	3	3	2	1	0	-3	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-3	0	1	2	3	3	4	4
VTN	873	SAIGON	0	4	4	4	4	6	6	6	5	5	4	3	2	1	0	-1	1	2	3	3	4	4	4	5	5	4	4	3	2	2	0	0	0	1	2	3	4
AUS	882	BRISBANE QLD	0	-5	-9	-13	-12	-10	-8	-7	-6	-6	-7	-9	-13	-13	-14	-9	-5	-4	0	1	2	3	3	4	4	4	4	4	4	4	4	4	3	2	1	0	-3
AUS	882	WARRNAMBOOL VC	0	-7	-6	-5	-6	-8	-9	-7	-4	-1	1	3	4	4	3	2	1	-1	-2	-4	-5	-6	-5	-4	-3	0	1	2	3	4	3	2	0	-2	-5	-8	-8
DDR	882	WACHENBRUNN	0	-1	1	2	3	3	2	1	-1	-3	-7	-12	-16	-19	-19	-19	-16	-12	-7	-3	-1	1	2	3	3	2	1	-1	-4	-6	-8	-8	-8	-8	-8	-6	-4
G	882	WASHFORD	0	2	2	2	2	1	1	1	0	0	-1	-1	-1	-1	-1	-1	-2	-2	-3	-3	-3	-2	-2	-1	-1	-1	-1	-1	-1	0	0	1	1	1	2	2	2
NMB	882	OHOPOHO	0	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-3	0	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	0	-3	-5	-6
URS	882	NALTCHIK	0	5	5	5	5	5	5	5	5	5	5	4	2	0	-2	-4	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-4	-2	0	2	4	5
TUR	891	ANTALYA	0	5	5	5	4	4	4	3	3	2	1	0	-1	-3	-5	-7	-12	-15	-15	-15	-15	-15	-12	-7	-5	-3	-1	0	1	2	3	3	4	4	4	5	5

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ARS	900	GURIAT	0	2	-5	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-1	3	5	6	6	6	5
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CHN	900	SHUANGYASHAN	0	0	0	0	–1	–1	–2	–3	–4	–5	–6	–6	–6	–6	–6	–6	–6	–6	–6	–6	–5	–4	–3	–2	–1	–1	0	0	0	0	0	0	0	0	0	0
J	900	HAKODATE	0	1	1	1	1	1	0	0	0	–1	–2	–2	–3	–3	–3	–4	–4	–4	–4	–4	–4	–4	–4	–4	–4	–4	–3	–2	–2	–1	–1	0	0	1	1	1	1
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J	900	KOCHI	0	–6	–5	–4	–4	–3	–3	–3	–3	–3	–3	–3	–3	–3	–3	–4	–4	–5	–6	–6	–4	–3	–2	–1	–1	0	0	0	0	0	0	–1	–1	–2	–3	–4	–5
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			9										–30																	–30								
J	900	YONAGO	0	–6	–8	–7	–5	–4	–3	–2	–1	0	0	0	–1	–2	–3	–4	–5	–7	–8	–6	–4	–2	0	1	2	2	3	3	3	3	3	3	2	1	0	–2	–4
CHN	909	KASHI	0	0	0	0	0	0	0	0	0	0	0	1	1	0	–1	–1	–1	–1	–2	–2	–2	–2	–3	–3	–3	–3	–3	–3	–3	–3	–3	–2	–2	–2	–2	0	0
D	909	MUENCHEN ISMAN	0	9	9	7	5	9	9	9	9	1	–1	–15	–15	–15	–5	0	1	0	2	3	3	3	3	2	0	–1	0	–1	–8	–15	–18	–18	–18	–18	–12	–5	5
SDN	909	YAMBIO	0	0	0	1	2	3	3	4	4	3	2	–1	–8	–12	–12	–12	–12	–12	–12	–12	–6	–2	1	3	4	4	3	3	2	1	0	0	0	0	0	0	0
URS	909	IMAN	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	2	2	2	1	–2	–6	–6	–6	–6	–6	–2	1	2	2	2	2	3	3	4
YEM	909	TAIZ 2	0	–3	–2	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	–2	–3	–6	–9	–11	–15	–15	–15	–15	–15	–15	–15	–11	–9	–6
AUS	918	CHARLEVIL QLD	0	5	5	5	5	5	5	5	5	4	3	2	1	–1	–4	–6	–12	–15	–15	–15	–8	–4	–2	0	2	3	4	4	5	5	5	5	5	5	5	5	5

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IND	918	SURATGARH	0	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-5	-6	-7	-8	-7	-6	-5	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1
J	918	YAMAGATA	0	1	1	1	1	1	0	0	0	-1	-1	-2	-2	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-3	-3	-3	-2	-2	-1	-1	0	0	0	1	1	1	1
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PHL	918	MALOLOS BUL	0	2	-1	-5	-9	-10	-10	-10	-10	-10	-10	-9	-5	-1	2	3	3	3	3	2	-1	-5	-9	-10	-10	-10	-10	-10	-10	-9	-5	-1	2	3	3	3	3
URS	918	SRETENSK	0	4	4	4	4	4	4	4	4	3	3	2	2	2	2	1	-2	-6	-6	-6	-6	-6	-2	1	2	2	2	2	3	3	4	4	4	4	4	4	4
AUS	927	GLADSTONE QLD	0	-4	-10	-11	-7	-4	-1	1	2	3	3	4	4	4	3	3	1	0	-2	-6	-12	-13	-8	-5	-2	0	2	2	3	3	4	4	3	3	2	1	-1
GRC	927	ZAKYNTHOS	0	-6	-4	-3	-2	-1	0	1	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-3	-4	-5	-6	-7	-9	-10	-10	-10	-10	-10	-9	-8	-8	-7
IND	927	VIZAGAPATAM	0	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4	-3
J	927	FUKUI	0	-6	-6	-5	-4	-3	-3	-3	-4	-5	-6	-6	-7	-7	-6	-5	-4	-3	-1	0	1	1	2	2	2	2	2	2	1	0	-1	-2	-4	-5	-6	-6	-7
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J	927	KOFU	0	-2	-1	0	0	1	1	2	2	2	2	2	2	2	2	2	1	1	1	0	-1	-1	-2	-3	-3	-4	-5	-5	-6	-6	-6	-6	-5	-4	-4	-3	-2
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TUR	927	IZMIR	0	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	3	2	0	-1	-3	-5	-7	-8	-9	-9	-8	-6	-5	-3	-1	1	2	3	4
AUS	936	AYR QLD	0	7	6	6	4	2	-2	-6	-8	-7	-7	-7	-8	-6	-2	2	4	6	6	7	6	4	1	-4	-8	-6	-2	0	1	1	-2	-6	-8	-4	1	4	6

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AUS	936	HOBART TAS	0	3	3	2	0	-1	-2	-4	-5	-7	-7	-7	-5	-5	-3	-1	0	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3
AUS	936	NAMBOUR QLD	0	4	4	4	2	0	-5	-8	-14	-14	-14	-12	-8	-4	0	2	4	4	4	2	-2	-14	-11	-3	0	2	3	3	3	3	2	0	-3	-14	-14	-2	2
CHN	936	SU XIAN	0	-3	-4	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-2
D	936	BREMEN	0	1	0	-2	-3	-3	-3	-4	-5	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	0	0	1	2	2	3	3	4	4	4	4	4	3	3	2	2	1
MOZ	936	BEIRA	0	-3	0	2	3	4	4	3	2	0	-2	-4	-8	-10	-10	-10	-8	-4	-2	0	2	3	4	4	3	2	0	-3	-6	-13	-17	-17	-17	-17	-17	-13	-6
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MRC	936	AGADIR	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	-2	-10	-10	-10	-10	-10	-10	-10	-10	-8	-4	-2	0
THA	936	NAKHON SAWAN	0	5	4	3	2	1	-2	-5	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-5	-2	0	2	3	4	5	5	5	5
UKR	936	LVOV	0	5	5	5	5	5	4	4	3	3	2	1	0	-3	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-3	0	1	2	3	3	4	4
URS	936	FT CHEVTCHENKO	0	5	5	5	5	5	5	5	4	3	2	0	0	-1	-2	-3	-7	-10	-13	-15	-15	-15	-15	-15	-15	-15	-13	-10	-7	-2	-1	0	0	2	3	4	5
ARS	945	GURIAT	0	-12	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-12	-10	-10	-5	-3	1	3	5	6	6	6	5	3	1	-3	-5	-10	-10
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CHN	945	URUMQI SHI	0	-4	-4	-3	-2	-2	-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-2	-2	-3	-4	-4	-4	-4	-4	-4	-4

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J	945	MURORAN	0	2	2	2	2	2	2	2	2	2	1	1	0	0	0	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	-1	0	0	0	1	1	1	2	2
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J	945	TOKUSHIMA	0	-7	-6	-5	-4	-4	-3	-3	-3	-3	-3	-4	-4	-5	-6	-7	-7	-6	-5	-3	-2	0	1	1	2	2	2	2	2	1	1	0	-2	-3	-5	-6	-7
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URS	945	PAVLODAR	0	4	4	4	3	3	2	2	2	2	1	-2	-6	-10	-10	-10	-10	-10	-6	-2	1	2	2	2	2	3	3	4	4	4	4	4	4	4	4	4	4
URS	945	ROSTOV NA DONU	0	1	2	3	3	3	3	3	3	3	3	3	2	1	-1	-3	-5	-7	-10	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-10	-7	-5	-3	-1
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IND	954	NAJIBABAD	0	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4	-3	-2	-1	0	1	1
QAT	954	AL ARISH	0	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-3	2	6	7	8	7	5	0	-4	-8	-10	-10
URS	954	ARALSK	0	4	4	4	4	4	3	3	3	2	1	0	-2	-3	-4	-5	-6	-6	-6	-6	-6	-6	-6	-6	-5	-3	-2	0	1	2	2	3	3	4	4	4	4
AUS	963	WARWICK QLD	0	4	2	-1	-1	-8	0	3	4	4	3	1	-2	-4	-6	-6	-4	-2	1	3	4	4	3	0	-8	-11	-1	2	4	4	4	4	4	4	4	4	4
CHN	963	AKSU	0	-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2
CHN	963	YECHENG	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-2	-4	-6	-9	-13	-13	-13	-13	-13	-13	-13	-9	-6	-3	-2	0
G	963	BLACKBURN	0	-2	-2	-2	-1	-1	-1	-1	0	0	0	0	0	-1	-1	-1	-1	-2	-2	-2	-2	-3	-4	-6	-7	-8	-9	-9	-9	-9	-9	-8	-7	-6	-4	-3	-2

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IND	963	JALGAON	0	–3	–3	–2	–2	–2	–1	–1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	–1	–1	–2	–2	–2	–3
J	963	AOMORI	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	0	0	–1	–1	–1	–1	–1	–1	0	0	1	1	1	2	2	2	2	2
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J	963	MATSUYAMA	0	–3	–4	–4	–5	–6	–5	–4	–4	–2	–1	0	1	1	1	2	2	2	2	2	1	1	1	0	–1	–3	–4	–4	–5	–5	–4	–4	–3	–3	–3	–3	–3
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SOM	963	MOGADISCIO	0	4	3	2	1	0	–1	–3	–5	–7	–8	–9	–9	–10	–10	–10	–10	–10	–9	–9	–8	–7	–5	–3	–1	0	1	2	3	4	5	5	5	5	5	5	5
URS	963	KULIAB	0	5	5	5	5	5	5	4	4	3	2	–1	–1	–2	–3	–4	–4	–4	–4	–4	–4	–4	–4	–4	–4	–3	–1	1	2	3	4	4	4	5	5	5	5
URS	963	ULAN UDE	0	3	3	3	2	2	1	0	–1	–3	–5	–6	–6	–6	–6	–6	–6	–6	–6	–6	–6	–6	–5	–3	–1	0	1	2	2	3	3	3	3	3	3	3	3
YUG	963	BEOGRAD	0	–10	–8	–5	–3	–2	–1	0	1	2	2	3	3	3	3	3	3	3	2	2	1	0	–1	–2	–3	–5	–8	–10	–15	–15	–15	–15	–15	–15	–15	–15	–15
AUS	972	MURWILLUMB NSW	0	4	4	3	–1	–14	–10	–3	1	2	3	3	3	2	0	–5	–14	–14	1	3	4	4	2	–2	–11	–14	–6	–2	–1	0	–1	–2	–6	–14	–11	–2	2
D	972	HAMBURG	0	2	1	1	0	–1	–3	–6	–7	–8	–8	–8	–7	–5	–3	–1	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
GUI	972	BOKE	0	2	2	2	2	2	2	2	2	2	2	2	1	1	0	–1	–1	–2	–3	–4	–5	–6	–6	–6	–6	–6	–6	–5	–5	–4	–3	–2	–1	0	1	1	2
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KOR	972	KIMJAE	0	2	3	3	3	3	2	2	2	2	1	2	2	2	3	3	3	3	2	1	0	4	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-6	-3	0	2
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UKR	972	NIKOLAEV	0	-7	-6	-5	-5	-3	-2	0	1	2	3	5	5	3	2	2	2	2	2	3	5	5	3	2	1	0	-2	-3	-5	-5	-6	-7	-7	-7	-7	-7	-7
CHN	981	HOTAN	0	-7	-6	-4	-3	-2	-1	-1	0	0	1	1	1	1	1	1	1	0	0	-1	-1	-2	-3	-4	-6	-7	-9	-10	-10	-10	-10	-10	-10	-10	-10	-10	-9
CHN	981	KASHI	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-3	-5	-7	-10	-14	-14	-14	-14	-14	-14	-14	-10	-7	-5	-3	-1
IND	981	RAIPUR	0	-6	-7	-7	-7	-5	-4	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4
URS	981	KRASNOIARSK	0	3	2	2	2	2	2	2	3	5	5	5	5	4	3	2	1	-4	-4	-5	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-5	-1	3	4	5	5	4
ARS	990	GURIAT	0	2	-5	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-1	3	5	6	6	6	5
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D	990	HOF SAALE	0	6	6	6	6	6	6	6	5	5	4	2	0	-4	-9	-14	-4	-1	1	1	2	2	1	0	-2	-9	-14	-11	-4	0	2	3	4	5	5	6	6
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AUS	999	BROKEN HLL NSW	0	4	4	4	4	3	2	1	-1	-4	-8	-10	-10	-6	-2	0	2	3	3	4	4	4	4	3	2	1	-1	-4	-10	-10	-10	-6	-2	0	2	3	3
AUS	999	NOWRA NSW	0	2	-1	-7	-10	-9	-4	-2	-1	-1	-3	-6	-10	-10	-4	1	3	5	5	4	2	-2	-7	-10	-10	-8	-7	-7	-10	-10	-10	-3	1	3	5	5	4
CHN	999	HENGCHUN	0	3	3	3	2	1	0	-1	-2	-4	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-4	-2	-1	0	1	2	3	3

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CHN	999	TAXKORGAN	0	1 1 0 1 1 0	0 0 0 0 1	1 0 -1 -1 -1	-1 -2 -2 -2 -2	-3 -3 -3 -3 -3	-3 -3 -3 -3 -2	-2 -2 -2 1 1
CHN	999	URUMQI SHI	0	-7 -6 -4 -3 -2 -1	-1 0 0 1 1	1 1 1 1 1	0 0 -1 -1 -2	-3 -4 -6 -7 -9	-10-10-10-10-10	-10-10-10-10 -9
G	999	NOTTINGHAM	0	-8 -5 -4 -3 -2 -1	0 0 0 0 0	0 0 0 0 -1	-2 -2 -3 -4 -5	-8-15-17-20-25	-25-20-20-22-25	-25-25-20-15-12
MLT	999	DELIMARA	0	6 5 4 2 -2 -8	-15-18-20-20-20	-20-20-20-20-20	-20-20-20-20-20	-20-20-20-20-20	-18-15 -4 0 3	4 5 6 7 7
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YEM	999	HODEIDAH	0	-6-15-15-15-15-15	-15-15-15-15-15	-15-15-15-15-15	-15-15-15-15-15	-15 -6 -2 2 4	5 6 7 7 7	6 5 4 2 -2
AUS	1008	IPSWICH QLD	0	4 5 5 4 1 -3	-8-12-11-11-12	-10 -5 0 3 4	5 5 2 -3-12	-4 1 3 4 5	5 5 5 5 4	2 -2 -9 -6 1
BLR	1008	MOZYR	0	4 3 2 2 2 2	2 2 3 5 5	5 5 4 3 2	-1 -4 -4 -5-11	-11-11-11-11-11	-11-11-11-11 -5	-1 3 4 5 5
BLR	1008	SLONIM	0	4 3 2 2 2 2	2 2 3 5 5	5 5 4 3 2	-1 -4 -4 -5-11	-11-11-11-11-11	-11-11-11-11 -5	-1 3 4 5 5
BLR	1008	SLONIM	0	4 3 2 2 2 2	2 2 3 5 5	5 5 4 3 2	-1 -4 -4 -5-11	-11-11-11-11-11	-11-11-11-11 -5	-1 3 4 5 5
BLR	1008	UCHATCHI	0	4 3 2 2 2 2	2 2 3 5 5	5 5 4 3 2	-1 -4 -4 -5-11	-11-11-11-11-11	-11-11-11-11 -5	-1 3 4 5 5
GRC	1008	KERKYRA	0	-9 -8 -7 -5 -4 -3	-1 0 0 1 1	2 2 2 2 2	2 2 2 2 1	1 0 -1 -2 -4	-5 -7 -8 -8-10	-10-10-10-10-10
KOR	1008	SOGCHO	0	1 -2 -7-12-15-15	-15-15-15-15-15	-12 -9 -7 -1 1	3 3 4 4 4	4 3 3 3 2	2 3 3 3 4	4 4 4 3 3
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MOZ	1008	LOUREN MARQUES	0	6	6	6	6	6	5	4	3	0	-3	-12	-14	-8	-4	-3	-3	-3	-4	-6	-6	-7	-7	-5	-5	-4	-3	-3	-5	-8	-14	-14	-5	0	2	4	5
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PHL	1008	ZAMBOANGA CY 1	0	-10	-10	-10	-10	-6	-3	0	2	3	3	3	2	0	-3	-6	-10	-10	-10	-10	-10	-10	-10	-6	-3	0	2	3	3	3	2	0	-3	-6	-10	-10	-10
YUG	1008	ALEKSINAC	0	-10	-8	-5	-3	-2	-1	0	1	2	2	3	3	3	3	3	3	3	2	2	1	0	-1	-2	-3	-5	-8	-10	-15	-15	-15	-15	-15	-15	-15	-15	-15
CHN	1017	MEI XIAN	0	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	-1	0	0	0	2	2	2	2	2	2	2	2	1	1	0	0	-1	-1	-2	-2	-3
AUT	1026	GRAZ DOBL	0	2	2	2	2	2	2	2	2	2	2	2	-1	-1	-1	-1	-1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
AUT	1026	LINZ KRONSTORF	0	1	1	1	1	1	1	1	1	1	1	1	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
BLR	1026	BREST	0	4	3	2	2	2	2	2	2	3	5	5	5	5	4	3	2	-1	-4	-4	-5	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-5	-1	3	4	5	5
BLR	1026	GRODNO	0	4	3	2	2	2	2	2	2	3	5	5	5	5	4	3	2	-1	-4	-4	-5	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-5	-1	3	4	5	5
BLR	1026	PINSK	0	4	3	2	2	2	2	2	2	3	5	5	5	5	4	3	2	-1	-4	-4	-5	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-5	-1	3	4	5	5
G	1026	BELFAST	0	0	0	-1	-2	-4	-5	-7	-10	-14	-15	-15	-15	-15	-15	-15	-15	-12	-9	-7	-5	-3	-2	-1	0	0	1	1	1	1	1	1	1	1	1	1	1
EGY	1035	MATRUH	0	-15	-15	-15	-15	-15	-10	-5	-2	0	2	3	2	0	-2	-6	-10	-15	-15	-15	-15	-15	-10	-6	-1	3	5	6	5	3	-1	-6	-10	-13	-15	-15	-15
YEM	1035	SANAA 3	0	2	-1	-4	-10	-24	-24	-24	-24	-24	-10	-4	-1	2	3	4	5	4	3	2	-1	-4	-10	-24	-24	-24	-24	-24	-10	-4	-1	2	3	4	5	4	3
AUS	1044	MUSWELLBRK NSW	0	6	6	6	6	6	6	6	6	5	4	3	1	-2	-6	-10	-10	-5	-2	0	1	1	1	1	0	-2	-6	-10	-8	-3	0	2	4	5	6	6	6
GRC	1044	THESSALONIKI	0	-5	-4	-2	-1	0	2	2	3	3	2	2	0	-1	-2	-4	-5	-6	-6	-5	-4	-2	-1	0	2	2	3	3	2	2	0	-1	-2	-4	-5	-6	-6
MOZ	1044	BEIRA	0	3	3	3	3	2	2	1	0	-1	-3	-6	-5	-8	-15	-17	-17	-17	-17	-17	-15	-8	-5	-6	-3	-1	0	1	2	2	3	3	3	3	3	3	3
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TUR	1044	KAHRAMANMARAS	0	-17-17-17-17-17-17	-17-17-17-17-17	-12 -7 -2 0 2	3 3 2 1 0	0 -1 -1 -1 0	0 1 2 3 3	2 0 -2 -7-12
AUS	1053	CANBERRA ACT	0	0 -3 -7-14-12 -7	-4 -3 -2 -3 -4	-6-10-15 -6 -2	1 3 3 3 2	0 -2 -5 -7 -9	-9 -8 -6 -3 -1	1 2 3 3 2
IND	1053	LEH	0	1 0 -1 -3 -4 -5	-6 -7 -7 -7 -6	-5 -4 -3 -1 0	1 2 1 0 -1	-3 -4 -5 -6 -7	-7 -7 -6 -5 -4	-3 -1 0 1 2
IND	1053	LEH	0	1 0 -1 -3 -4 -5	-6 -7 -7 -7 -6	-5 -4 -3 -1 0	1 2 1 0 -1	-3 -4 -5 -6 -7	-7 -7 -6 -5 -4	-3 -1 0 1 2
LBY	1053	TRIPOLI KM8	0	-20-20-20-20 -7 -3	0 1 2 3 4	5 6 6 6 6	6 6 6 6 6	6 6 6 5 5	4 3 2 1 0	-3 -7-20-20-20
MRC	1053	TANGER	0	-10-10-10-10-10 -7	-3 -1 0 1 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 1 -1 -3	-7-10-10-10-10
ROU	1053	IASI	0	0 -2 -3 -4 -7 -9	-11-15-11 -9 -7	-4 -3 -2 0 2	2 2 0 -2 -3	-4 -7 -9-11-15	-11 -9 -7 -4 -3	-2 0 2 2 2
URS	1053	SVOBODNYI	0	3 3 3 3 3 3	2 1 0 -1 -3	-5 -6 -7 -9-10	-10-10-10-10-10	-10 -9 -7 -6 -5	-3 -1 0 1 2	3 3 3 3 3
AUS	1062	MARYBOROUGH VC	0	2 0 -5-10-10 -2	1 2 2 2 2	2 2 2 2 2	2 1 -1 -9-10	-5 -1 2 2 2	1 0 -1 -2 -2	-1 0 1 2 2
I	1062	ANCONA	0	-4 -4 -4 -3 -3 -2	-1 0 0 0 1	1 1 1 2 2	2 2 2 2 2	2 2 1 1 1	1 0 0 -1 -1	-2 -3 -3 -4 -4
IND	1062	PASIGHAT 2	0	1 1 1 1 1 1	1 1 0 0 -1	-1 -2 -2 -2 -3	-4 -3 -2 -2 -2	-1 -1 0 0 1	1 1 1 1 1	1 1 1 2 1
URS	1062	ANDIJAN	0	3 3 3 3 2 2	2 1 1 0 -1	-2 -3 -4 -5 -6	-6 -6 -6 -6 -5	-4 -3 -2 -1 0	1 1 2 2 2	3 3 3 3 3
F	1071	MONTPELLIER	0	5 5 4 3 3 2	0 -2 -5 -9-15	-16-16-16-16-16	-16-16-16-15-12	-5 -2 0 1 3	4 4 5 5 5	5 5 5 5 5
URS	1071	USTKAMENOGORSK	0	3 3 3 3 4 5	5 5 4 3 2	-1 -4 -7-10-10	-10-10-10-10-10	-10-10 -7 -4 -1	2 3 4 5 5	5 4 3 3 3
CLN	1080	KOTUGODA	0	-10 -2 2 3 3 3	2 -2-10-12-12	-12-12-12-12-12	-12-12-12-12-12	-12-12-12-12-12	-12-12-12-12-12	-12-12-12-12-12
IRN	1080	ABADAN	0 1 2 3 4 5 6 7 8 9	-11-13-14-14-14-14	-14-13-10 -6-11	-13-14-14-14-14	-14-13-11-10 -6	-3 -1 2 3 5	6 6 6 5 3 5 4 1 -3 -6 -12 -14 -14 -14	2 -1 -3 -6 -8
KEN	1080	MOMBASA	0	3 3 3 2 2 0	-2 -3 -4 -6 -8	-8-10-10-10 -8	-6 -5 -4 -3 -2	0 2 2 3 3	3 3 3 3 3	3 3 3 3 3

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YUG	1080	BELI KRIZ 1	0	-7	-11	-15	-15	-15	-15	-15	-15	-15	-15	-12	-10	-8	-7	-6	-5	-5	-3	-3	-2	-2	1	1	0	2	3	3	3	2	0	1	1	-2	-2	-3	-3
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IRN	1098	ZABOL	0	-1	0	0	1	2	2	2	2	2	2	2	2	2	2	1	1	1	0	-1	-3	-5	-9	-12	-15	-15	-15	-15	-15	-15	-15	-15	-15	-12	-7	-5	-3
KOR	1098	CHINJU	0	-1	-1	-1	-2	-2	-3	-4	-5	-5	-6	-6	-7	-7	-8	-8	-8	-8	-7	-7	-7	-6	-6	-5	-5	-4	-3	-2	-2	-1	-1	-1	0	0	0	0	0
NCL	1098	TIEBAGHI 2	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	2	1	0	-3	-6	-10	-10	-10	-10	-10	-10	-10	-10	-10	-6	-3	0	1	2	3	4	4
AFG	1107	KABOUL	0	-2	-4	-5	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-4	-2	0	1	2	3	3	3	3	3	3	3	3	3	3	3	2	1	0
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BLR	1107	MOGHILEV	0	4	3	3	3	3	3	3	4	4	5	5	5	4	3	2	-1	-3	-7	-10	-10	-10	-10	-10	-10	-10	-10	-7	-3	-1	2	3	4	5	5	5	4
CHN	1107	HUNJIANG	0	0	0	-1	-1	-2	-3	-4	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	-1	0	0	1	1	1	1	1	1	1	1	1
EGY	1107	BATRA	0	-1	0	1	2	3	4	5	6	7	7	7	7	7	6	5	4	3	2	1	-1	-2	-4	-5	-6	-6	-6	-5	-4	-4	-5	-6	-6	-6	-5	-4	-2
G	1107	BRISTOL	0	-20	-20	-16	-13	-11	-11	-13	-15	-20	-20	-20	-13	-8	-5	-3	-2	-1	0	2	3	4	4	4	4	4	4	3	2	0	-1	-2	-3	-5	-8	-12	-20
J	1107	KAGOSHIMA	0	-4	-6	-6	-7	-7	-7	-6	-6	-5	-4	-3	-2	0	1	2	2	2	2	1	1	1	0	0	0	0	1	1	1	2	2	2	2	1	0	-2	-3
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J	1107	KANAZAWA	0	2	3	3	3	3	3	2	2	1	1	0	-1	-2	-3	-4	-5	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6	-4	-4	-3	-2	-1	0	1	1	2
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URS	1107	KAUNAS	0	3	3	3	4	4	5	5	5	4	3	2	-1	-3	-7	-10	-10	-10	-10	-10	-10	-10	-10	-7	-3	-1	2	3	4	5	5	5	4	4	3	3	3
YUG	1107	NOVI SAD	0	-10	-10	-10	-10	-10	-10	-10	-9	-7	-3	-1	1	2	3	3	3	2	2	2	1	1	1	1	1	2	2	2	3	3	3	2	1	-1	-3	-7	-9
AUS	1116	BRISBANE QLD	0	3	5	5	5	5	4	3	2	2	1	2	3	3	4	5	5	5	4	2	-1	-6	-15	-8	-3	-1	1	1	1	1	0	-2	-5	-12	-9	2	1
CLN	1116	PERKARA	0	3	3	2	1	0	-1	-2	-4	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-4	-2	-1	0	1	2	3	3	3
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J	1116	MATSUYAMA	0	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-3	-2	-1	-1	0	0	1	1	1	1	1	1	1	1	0	0	-1	-2	-3	-3	-4	-5
J	1116	NIIGATA	0	3	4	5	5	6	6	6	6	6	6	6	6	6	6	6	5	4	3	2	1	0	-2	-3	-3	-3	-3	-2	-2	-2	-3	-3	-3	-2	0	1	2
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BEL	1125	HOUDENG	0	2	2	2	2	2	2	2	1	0	-1	-2	-3	-4	-5	-4	-3	-2	-1	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
BUL	1125	STARA ZAGORA	0	-10	-10	-10	-7	-3	-1	1	2	3	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4	4	3	2	1	-1	-3	-7	-10	-10	-10	-10	-10

1125 KHZ

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CLN	1125	PERKARA	0	3	3	2	1	0	-1	-2	-4	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-4	-2	-1	0	1	2	3	3	3
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CYP	1125	C GRECO	0	-25	-16	-8	-3	1	4	6	6	6	6	5	4	3	3	2	3	3	4	5	6	6	6	6	4	1	-3	-8	-16	-25	-25	-25	-25	-25	-25	-25	-25	-25
LBY	1125	EL BEIDA	0	1	3	3	4	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	4	3	2	1	-1	-3	-7	-20	-20	-20	-20	-7	-2	0
YUG	1125	PAZIN	0	-4	-3	-2	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-2	-3	-4	-5	-8	-10	-10	-10	-10	-10	-8	-5
YUG	1125	PODRAVSLATINA	0	-15	-15	-10	-7	-5	-4	-3	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-3	-4	-5	-7	-10	-15	-15	-16	-16	-15
AUS	1134	ARMIDALE NSW	0	2	4	4	4	2	0	-2	-5	-8	-10	-10	-9	-8	-3	0	2	3	4	4	3	1	-2	-8	-10	-6	-2	-1	0	0	0	-2	-4	-9	-10	-4	0
AUS	1134	COLAC VIC	0	-1	-4	-9	-10	-10	-6	-3	-2	-1	-1	-1	-1	-2	-4	-6	-10	-10	-8	-4	-1	1	2	3	3	4	4	4	4	4	4	4	4	3	3	2	1
KOR	1134	KIMPO	0	-8	-7	-7	-7	-7	-7	-8	-8	-6	-5	-2	0	2	4	6	7	7	6	5	3	1	-2	-4	-6	-8	-8	-7	-7	-7	-7	-7	-7	-7	-8	-7	-7
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			9																-9																				
KOR	1134	KIMPO	0	-8	-7	-7	-7	-7	-7	-8	-8	-6	-5	-2	0	2	4	6	7	7	6	5	3	1	-2	-4	-6	-8	-8	-7	-7	-7	-7	-7	-7	-7	-8	-7	-7
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KWT	1134	SULAIBIYA	0	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-5	-2	2	4	5	6	7	7	7	6	5	3	1	-2	-9	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
YUG	1134	BIOGRAD NM	0	-1	-3	-5	-7	-13	-10	-7	-5	-3	-1	2	4	5	5	5	5	4	2	-1	-3	-5	-7	-10	-13	-7	-5	-3	-1	2	4	5	5	5	5	4	2

1134 KHZ

1	2	3	4	AZIMUTH																											
				00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
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CHN	**1143**	TENGCHONG	0	–1	–1	1	1	0	0	0	0	0	0	0	1	1	–1	–1	–1	–1	–2	–2	–2	–4	–4	–4	–4	–4	–6	–6	–6	–6	–4	–4	–4	–2	–2	–1	–1
I	**1143**	C VATICANO	0	–3	–4	–4	–5	–5	–5	–4	–4	–3	–2	–2	–1	0	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	0	–1	–2	–3
KOR	**1143**	JEJU	0	7	7	6	4	1	–1	–4	–6	–7	–8	–8	–7	–7	–7	–7	–7	–7	–7	–7	–7	–7	–7	–7	–7	–7	–7	–7	–8	–8	–6	–4	–2	1	4	6	7
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			9	–9																																		
PHL	**1143**	PORO LA UNION	0	–13	–16	–19	–19	–14	–9	–4	–1	0	0	–1	–2	–3	–5	–5	–5	–4	–4	–3	–2	–2	–1	0	1	3	4	4	4	3	1	0	–1	–2	–2	–3	–4
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			6																																	–5			
			7																																	–9			
			8																																	–20			
			9																																	–20			
YUG	**1143**	NOVA GRADISKA	0	1	1	1	1	1	1	1	2	2	2	2	2	1	0	–2	–3	–4	–5	–5	–5	–5	–5	–5	–5	–5	–5	–4	–3	–2	0	1	2	2	2	2	1
CHN	**1152**	TONGLIAO SHI	0	–9	–10	–10	–10	–10	–10	–10	–10	–10	–10	–9	–7	–6	–4	–3	–2	–1	–1	0	0	1	1	1	1	1	1	1	0	0	–1	–1	–2	–3	–4	–6	–7

1	2	3	4	AZIMUTH																											
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G	1152	BIRMINGHAM	0	-22	-19	-15	-10	-8	-10	-12	-15	-21	-21	-20	-25	-22	-16	-16	-9	0	3	5	7	8	8	8	8	7	5	3	0	-2	-6	-15	-16	-18	-22	-25	-20
			1	-22	-19	-15	-10	-8	-10	-12	-15	-21	-21	-20	-25	-22	-16	-16	-9	0	3	5	7	8	8	8	8	7	5	3	0	-2	-6	-15	-16	-18	-22	-25	-20
			2	-22	-20	-20	-15	-12	-15	-16	-16	-22	-22	-21	-26	-22	-17	-17	-12	-3	2	4	5	6	6	6	6	5	4	2	-3	-5	-9	-16	-17	-18	-22	-26	-21
			3	-22	-22	-22	-20	-17	-20	-20	-19	-22	-22	-21	-26	-22	-17	-17	-17	-5	1	2	3	5	5	5	5	3	2	1	-5	-6	-10	-19	-17	-19	-22	-28	-21
			4	-25	-25	-25	-25	-22	-25	-24	-20	-25	-25	-23	-26	-22	-18	-18	-22	-10	-5	-5	-2	0	0	0	0	-2	-5	-5	-10	-10	-15	-20	-18	-20	-22	-28	-23
			5	-30	-30	-30	-30	-26	-30	-27	-22	-27	-27	-30	-26	-25	-20	-20	-26	-80	-10	-11	-6	-8	-8	-8	-8	-6	-11	-10	-18	-17	-20	-22	-20	-22	-25	-28	-30
			6	-30	-30	-30	-30	-27	-30	-30	-23	-30	-30	-30	-27	-25	-25	-25	-27	-22	-15	-18	-10	-10	-10	-10	-10	-10	-18	-15	-22	-20	-22	-23	-25	-23	-26	-28	-30
			7	-30	-30	-30	-30	-30	-30	-30	-25	-30	-30	-30	-30	-26	-26	-26	-30	-25	-16	-20	-13	-13	-13	-13	-13	-13	-20	-16	-25	-22	-25	-25	-26	-25	-30	-28	-30
			8	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-20	-30	-20	-20	-20	-20	-20	-20	-30	-20	-30	-30	-30	-30	-30	-30	-30	-30	-30
			9	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-20	-20	-20	-20	-20	-20	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30
G	1152	GLASGOW	0	4	4	2	2	-3	-3	-6	-6	-17	-17	-18	-18	-18	-17	-18	-18	-18	-18	-13	-13	-4	-4	0	0	3	3	4	4	4	4	4	4	4	4	4	4
			1	4	4	2	2	-3	-3	-6	-6	-17	-17	-18	-18	-18	-17	-18	-18	-18	-18	-13	-13	-4	-4	0	0	3	3	4	4	4	4	4	4	4	4	4	4
			2	3	3	1	1	-3	-3	-6	-6	-17	-17	-19	-19	-19	-19	-19	-19	-18	-18	-13	-13	-5	-5	0	0	2	2	3	3	3	3	3	3	3	3	3	3
			3	2	2	0	0	-4	-4	-6	-6	-17	-17	-19	-19	-19	-19	-19	-19	-18	-18	-13	-13	-5	-5	0	0	1	1	2	2	2	2	2	2	2	2	2	2
			4	0	0	-2	-2	-5	-5	-6	-6	-17	-17	-20	-20	-20	-20	-20	-20	-18	-18	-13	-13	-6	-6	-2	-2	0	0	1	1	1	1	1	1	1	1	1	1
			5	-2	-2	-6	-6	-6	-6	-10	-10	-16	-16	-16	-16	-16	-16	-16	-16	-16	-18	-13	-13	-7	-7	-5	-5	0	0	0	0	0	0	0	0	0	0	0	0
			6	-5	-5	-10	-10	-10	-10	-12	-12	-16	-16	-16	-16	-16	-16	-16	-16	-16	-18	-13	-13	-8	-8	-10	-10	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
			7	-5	-5	-10	-10	-10	-10	-12	-12	-16	-16	-16	-16	-16	-16	-16	-16	-16	-18	-13	-13	-10	-10	-10	-10	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
			8	-5	-5	-10	-10	-10	-10	-12	-12	-16	-16	-16	-16	-16	-16	-16	-16	-16	-18	-13	-13	-10	-10	-10	-10	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
			9	-5	-5	-10	-10	-10	-10	-12	-12	-16	-16	-16	-16	-16	-16	-16	-16	-16	-18	-13	-13	-10	-10	-10	-10	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
G	1152	LONDON 1	0	-22	-22	-22	-22	-22	-24	-20	-12	-6	-2	1	4	5	6	7	7	7	7	7	6	5	4	1	-2	-6	-12	-20	-24	-22	-22	-22	-22	-22	-20	-20	-20
			1	-22	-22	-22	-22	-22	-24	-20	-12	-6	-2	1	4	5	6	7	7	7	7	7	6	5	4	1	-2	-6	-12	-20	-24	-22	-22	-22	-22	-22	-20	-20	-20
			2	-23	-23	-23	-23	-23	-25	-20	-13	-7	-3	0	3	4	5	5	5	5	5	5	5	4	3	0	-3	-7	-13	-20	-25	-23	-23	-23	-23	-23	-22	-22	-22
			3	-24	-24	-24	-24	-24	-25	-20	-14	-8	-4	-2	1	2	3	3	3	3	3	3	3	2	1	-2	-4	-8	-14	-20	-25	-24	-24	-24	-24	-24	-24	-24	-24
			4	-25	-25	-25	-25	-25	-26	-22	-15	-9	-6	-4	-2	0	1	1	1	1	1	1	1	0	-2	-4	-6	-9	-15	-22	-26	-25	-25	-25	-25	-25	-25	-25	-25
			5	-26	-26	-26	-27	-27	-28	-24	-17	-12	-9	-6	-5	-4	-3	-3	-3	-3	-3	-3	-3	-4	-5	-6	-9	-12	-17	-24	-28	-27	-27	-27	-27	-27	-27	-27	-27
			6	-28	-28	-28	-30	-30	-30	-25	-19	-16	-12	-11	-10	-9	-8	-8	-8	-8	-8	-8	-8	-9	-10	-11	-12	-16	-19	-25	-30	-30	-30	-30	-30	-30	-30	-30	-30
			7	-29	-29	-29	-30	-30	-30	-26	-24	-22	-18	-16	-16	-16	-15	-15	-15	-15	-15	-15	-15	-16	-16	-16	-18	-22	-24	-26	-30	-30	-30	-30	-30	-30	-30	-30	-30
			8	-30	-30	-30	-30	-30	-30	-30	-25	-25	-20	-20	-20	-20	-15	-15	-15	-15	-15	-15	-15	-20	-20	-20	-20	-25	-25	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30
			9	-30	-30	-30	-30	-30	-30	-30	-25	-25	-20	-20	-20	-20	-15	-15	-15	-15	-15	-15	-15	-20	-20	-20	-20	-25	-25	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30
G	1152	MANCHESTER	0	-19	-18	-14	-11	-10	-9	-8	-8	-8	-8	-8	-9	-10	-11	-18	-28	-24	-30	-16	-6	-2	2	4	5	6	6	6	5	4	2	-2	-6	-17	-14	-12	-14
			1	-19	-18	-14	-11	-10	-9	-8	-8	-8	-8	-8	-9	-10	-11	-18	-28	-24	-30	-16	-6	-2	2	4	5	6	6	6	5	4	2	-2	-6	-17	-14	-12	-14
			2	-20	-19	-17	-13	-12	-11	-10	-10	-10	-10	-10	-11	-12	-14	-20	-28	-25	-30	-20	-10	-6	0	0	2	4	4	4	2	0	0	-6	-10	-19	-15	-13	-15
			3	-20	-21	-18	-15	-14	-13	-13	-13	-13	-13	-13	-13	-14	-18	-26	-28	-25	-30	-26	-12	-8	-4	-2	0	0	0	0	0	-2	-4	-8	-12	-20	-16	-15	-16
			4	-21	-22	-20	-16	-16	-15	-14	-14	-14	-14	-14	-15	-16	-20	-27	-28	-25	-30	-28	-14	-10	-6	-4	-2	-2	-2	-2	-2	-4	-6	-10	-14	-22	-17	-16	-17
			5	-22	-25	-24	-22	-20	-19	-18	-18	-18	-18	-18	-19	-20	-26	-30	-28	-25	-30	-30	-22	-18	-10	-12	-10	-9	-9	-9	-10	-12	-10	-18	-22	-25	-20	-19	-20
			6	-24	-27	-26	-29	-25	-25	-25	-25	-25	-25	-25	-25	-25	-30	-30	-28	-27	-30	-30	-28	-28	-16	-20	-16	-19	-19	-19	-16	-20	-16	-28	-30	-29	-24	-23	-24
			7	-25	-30	-30	-30	-25	-25	-25	-25	-25	-25	-25	-25	-25	-30	-30	-28	-30	-30	-30	-30	-30	-20	-20	-20	-20	-20	-20	-20	-20	-20	-30	-30	-30	-25	-25	-25
			8	-25	-30	-30	-30	-25	-25	-25	-25	-25	-25	-25	-25	-25	-30	-30	-28	-30	-30	-30	-30	-30	-20	-20	-20	-20	-20	-20	-20	-20	-20	-30	-30	-30	-25	-25	-25
			9	-25	-30	-30	-30	-25	-25	-25	-25	-25	-25	-25	-25	-25	-30	-30	-28	-30	-30	-30	-30	-30	-20	-20	-20	-20	-20	-20	-20	-20	-20	-30	-30	-30	-25	-25	-25

1152 KHZ

1	2	3	4	AZIMUTH																													
				00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
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1	2	3	4	AZIMUT – AZIMUTH – ACIMUT																													
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G	1152	TYNESIDE	0	2	2	3	4	4	4	4	4	4	4	3	3	3	2	2	0	-2	-6	-8	-9	-8	-5	-4	-3	-3	-3	-3	-4	-4	-5	-8	-9	-8	-6	-2	0
			1	2	2	3	4	4	4	4	4	4	4	3	3	3	2	2	0	-2	-6	-8	-9	-8	-5	-4	-3	-3	-3	-3	-4	-4	-5	-8	-9	-8	-6	-2	0
			2	0	0	2	3	3	3	3	3	3	3	2	2	2	0	0	-2	-3	-6	-9	-10	-9	-7	-5	-4	-4	-4	-4	-5	-5	-7	-9	-10	-9	-6	-3	-2
			3	0	0	1	2	2	2	2	2	2	2	1	1	1	0	0	-3	-4	-7	-10	-11	-10	-9	-7	-6	-6	-6	-6	-7	-7	-9	-10	-11	-10	-7	-4	-3
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SOM	1152	BOSASO	0	-10	-10	-10	-10	-10	-10	-10	-10	-8	-5	-3	-2	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-2	-3	-5	-8	-10
UAE	1152	AL NAKHIL	0	0	1	3	1	-3	-6	-5	-3	-10	-10	-6	-3	-1	0	0	0	0	-1	-3	-6	-10	-3	0	2	3	3	3	1	-1	-4	-6	-10	-10	-10	-8	-4
URS	1152	KOMSOMOLSKAMUR	0	5	5	5	5	5	4	4	3	3	2	1	0	-3	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-3	0	1	2	3	3	4	4	4
AUS	1161	NARACOORTE SA	0	5	3	0	-5	-10	-10	-6	-2	-1	-1	-1	-3	-6	-10	-10	-5	1	4	6	6	6	5	4	4	3	1	0	0	0	1	2	4	5	6	6	6
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URS	1161	DUCHANBE	0	8	8	8	8	7	7	6	5	4	1	-2	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-2	1	4	5	6	7	7
ZAI	1161	MATADI	0	-10	-10	-10	-10	-10	-7	0	3	3	3	0	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	0	3	3	3	0	-7	-10	-10	-10	-10
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ARS	1170	GURIAT	0	-12	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-12	-10	-10	-5	-3	1	3	5	6	6	6	5	3	1	-3	-5	-10	-10
BLR	1170	MOGHILEV	0	-4	-3	-2	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1	0	-2	-3	-4	-5	-5	-6	-6	-6	-6	-5	-5	-4	-4

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CLN	1170	KOTUGODA	0	-10	-2	2	3	3	3	2	-2	-10	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12
KOR	1170	SOSAN	0	4	4	3	3	3	3	3	3	3	3	4	4	4	4	3	3	1	-2	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-6	-2	1	3	3	4	4
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URS	1170	ULAN UDE	0	3	3	3	3	3	2	2	2	1	0	-1	-2	-3	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-2	-1	0	1	2	2	2	3	3	3	3
YUG	1170	BELI KRIZ 2	0	-7	-8	-9	-10	-12	-12	-12	-12	-12	-12	-10	-9	-7	-5	-3	-2	-1	0	0	0	-1	-1	-1	-1	-2	-2	-2	-1	-1	-1	-1	0	0	-1	-4	-6
MLT	1179	DELIMARA	0	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-18	-15	-4	0	3	4	5	6	7	7	6	5	4	2	-2	-8	-15	-18	-20	-20
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MOZ	1179	QUELIMANE	0	3	3	2	1	1	-1	-2	-4	-7	-10	-14	-17	-17	-17	-17	-17	-17	-14	-10	-7	-4	-2	-1	1	1	2	3	3	3	3	3	3	3	3	3	3
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RYU	1179	OKINAWA 1	0	8	9	9	9	8	6	3	0	-6	-15	-15	-9	-7	-8	-9	-15	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-15	-4	0	3	5	7	8
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RYU	1179	OKINAWA 2	0	3	0	-4	-11	-18	-11	-11	-11	-12	-13	-13	-13	-14	-13	-10	-7	-3	-1	-1	-2	-4	-11	-17	-21	-17	-5	-1	2	5	7	8	9	9	8	7	6
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S	1179	SKAANE	0	1	1	1	1	1	1	1	2	2	2	1	-2	-5	-5	-5	-5	-5	-3	-3	-3	-3	-3	-3	0	1	2	2	2	1	1	1	1	1	1	1	1
KOR	1188	INCHEON	0	-2	-1	0	1	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	1	0	-1	-2	-2	-4	-5	-7	-7	-7	-7	-7	-5	-4	-2
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AUS	1197	GOLD COAST QLD	0	5	5	4	2	-1	-7	-10	-10	-8	-6	-6	-8	-10	-10	-6	-1	2	4	5	5	4	2	-1	-8	-10	-10	-7	-6	-6	-8	-10	-10	-6	-1	2	4
D	1197	MUENCHEN ISMAN	0	5	5	4	3	0	-7	-14	-5	2	4	5	5	4	4	3	2	1	1	1	0	-1	-3	-7	-15	-15	-11	-7	-4	-2	0	1	2	3	3	4	4
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J	1197	KUMAMOTO	0	-1	-2	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	1	2	3	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4	4	3	2	2	0
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J	1197	NANAO	0	4	4	3	3	2	0	-3	-6	-9	-10	-11	-11	-10	-7	-4	-3	-2	-2	-2	-2	-3	-4	-7	-9	-9	-9	-8	-6	-4	-1	1	2	3	3	4	4
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AFG	1206	MAZAR I SHARIF	0	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-4	-2	0	1	2	3	3	3	3	3	3	3	3	3	3	3	2	1	0	-2	-4	-5	-6	-6	-7
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ALB	1206	KORCE	0	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-4	-3	-2	-2	-1	0	0	1	1	1	1	1	1	1	1	1	1	0	0	-1	-2	-2	-3	-4	-6	-6
AUS	1206	CANBERRA ACT	0	-3	-11	-13	-12	-11	-7	-4	-3	-3	-4	-7	-11	-12	-13	-11	-3	2	3	3	3	3	2	2	1	0	0	0	0	1	2	2	3	3	3	3	2

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AUS	1206	GRAFTON NSW	0	4	4	3	2	1	0	-1	-1	-1	0	1	2	3	3	4	3	2	0	-3	-10	-10	-10	-5	-3	-1	-1	-1	-2	-4	-9	-10	-10	-4	-1	2	3
F	1206	BORDEAUX	0	4	2	1	-1	-1	-1	0	1	1	1	1	0	0	-1	-1	0	1	3	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	5
MOZ	1206	INHAMBANE	0	2	1	0	-2	-3	-5	-8	-12	-15	-17	-17	-17	-17	-17	-15	-12	-8	-5	-3	-2	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2
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MRC	1206	TARFAYA	0	-11	-11	-11	-11	-11	-11	-11	1	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	1	-4	-11	-11	-11	-11	-11	-11	-11	-11
MLT	1215	DELIMARA	0	-15	-4	0	3	4	5	6	7	7	6	5	4	2	-2	-8	-15	-18	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-18
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YMS	1215	HISWA	0	3	3	3	3	3	3	2	2	1	0	-1	-2	-3	-5	-10	-10	-10	-11	-11	-12	-12	-12	-12	-11	-11	-10	-10	-10	-5	-3	-2	-1	0	1	2	2
MOZ	1224	MOCIMBOA	0	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-10	-5	-1	1	3	4	5	5	5	5	5	5	5	5	5	5	4	3	1	-1	-5	-10	-17	-17	-17
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BEL	1233	LIEGE	0	-2	-3	-5	-7	-10	-15	-20	-24	-24	-24	-24	-24	-20	-15	-10	-7	-5	-3	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1

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CYP	1233	C GRECO	0	-25	-16	-8	-3	1	4	6	6	6	6	5	4	3	3	2	3	3	4	5	6	6	6	6	4	1	-3	-8	-16	-25	-25	-25	-25	-25	-25	-25	-25
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J	1233	AOMORI	0	1	2	2	2	2	2	2	2	1	1	1	0	0	-1	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	0	0	0	1	1
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MRC	1233	TANGER	0	-10	-10	-10	-10	-10	-7	-3	-1	0	1	2	2	2	1	1	0	0	0	-1	0	0	0	1	1	2	2	2	2	1	-1	-3	-7	-10	-10	-10	-10
QAT	1233	AL KHAISAH	0	-8	-8	-8	-8	-8	-6	-2	0	3	5	7	8	8	8	8	7	5	3	0	-2	-6	-15	-16	-18	-18	-18	-18	-18	-18	-15	-10	-10	-10	-10	-10	-8
AUS	1242	PT AUGUSTA SA	0	2	1	-1	-4	-8	-10	-10	-10	-10	-9	-9	-10	-10	-10	-10	-10	-5	-2	0	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
AUS	1242	SALE VIC	0	-6	-8	-10	-10	-8	-3	0	2	3	4	4	3	2	0	-2	-3	-5	-5	-4	-3	-1	1	2	3	4	4	3	2	0	-4	-10	-10	-10	-7	-5	-5
CHN	1242	JIAYIN	0	0	0	-1	-1	-2	-3	-4	-5	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-5	-4	-3	-2	-1	-1	0	0	0	1	1	1	1	1	1	1	0
CHN	1242	SHENYANG	0	-1	-2	-3	-4	-5	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-5	-4	-3	-2	-1	-1	0	0	0	1	1	1	1	1	1	1	0	0	0	-1
F	1242	MARSEILLE	0	7	7	6	5	3	1	0	-1	-1	0	0	1	1	1	1	0	0	-1	-1	0	1	3	5	6	7	7	7	7	7	7	7	7	7	7	7	7
FNL	1242	VAASA 1	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	-3	-3	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IRN	1242	JAZIREH SERRI	0	-17	-17	-17	-17	-17	-17	-17	-15	-10	-7	-4	-2	-1	1	2	2	3	3	3	3	3	3	3	3	3	3	2	2	2	1	0	-2	-4	-7	-15	-17
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THA	1242	SURAT THANI	0	-15	-15	-15	-15	-15	-15	-10	-7	-5	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	1	0	-1	-3	-5	-7	-10	-15	-15
HOL	1251	ROERMOND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-3	-3	0	0	0	0	0	0
IRN	1251	FARAHABAD SARI	0	-16	-16	-16	-15	-9	-5	-2	1	2	2	1	-1	-5	-15	-16	-9	-4	-2	-1	-1	-1	-2	-4	-9	-16	-12	-4	0	2	2	2	1	-2	-5	-13	-16
LBY	1251	TRIPOLI KM16	0	-7	-20	-20	-20	-20	-20	-20	-7	-3	0	1	2	3	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	4	3	2	1	0	-3
URS	1251	VLADIVOSTOK	0	1	2	3	4	5	5	4	3	2	1	1	1	1	1	1	0	-1	-3	-7	-9	-10	-10	-10	-10	-10	-10	-9	-7	-3	-1	0	1	1	1	1	1
URS	1251	VLADIVOSTOK	0	1	2	3	4	5	5	4	3	2	1	1	1	1	1	1	0	-1	-3	-7	-9	-10	-10	-10	-10	-10	-10	-9	-7	-3	-1	0	1	1	1	1	1
CVA	1260	S M DI GALERIA	0	-10	-20	-20	-20	-12	-6	-2	0	-2	-8	-15	-15	-15	-15	-15	-8	-2	0	1	1	1	1	0	-3	-8	-15	-15	-15	-15	-8	-3	0	1	0	-3	-7
GRC	1260	RHODOS	0	-17	-17	-22	-22	-17	-7	-1	2	4	5	6	6	6	6	6	6	6	6	5	4	2	-2	-8	-17	-22	-22	-17	-17	-17	-16	-16	-16	-16	-16	-16	-17
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IND	1260	AMBIKAPUR 2	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	0	-1	-1	-2	-2	-2	-3	-4	-3	-2	-2	-2	-1	-1
MOZ	1260	CABRAL	0	-2	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-2	-3	-5	-8	-12	-15	-17	-17	-17	-17	-17	-15	-12	-8	-5	-3
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POL	1260	BOLESLAWIEC	0	5	5	5	4	4	3	1	0	-3	-5	-10	-15	-19	-19	-19	-19	-19	-19	-19	-15	-10	-5	-3	0	1	3	4	4	5	5	5	5	5	5	5	5
POL	1260	KIELCE	0	5	5	5	5	4	4	3	1	0	-3	-5	-10	-15	-19	-19	-19	-19	-19	-19	-19	-15	-10	-5	-3	0	1	3	4	4	5	5	5	5	5	5	5
POL	1260	OPOLE	0	5	5	5	4	4	3	1	0	-3	-5	-10	-15	-19	-19	-19	-19	-19	-19	-19	-15	-10	-5	-3	0	1	3	4	4	5	5	5	5	5	5	5	5
D	1269	NEUMUENSTER	0	2	3	3	3	2	2	1	-1	-4	-7	-11	-15	-15	-15	-18	-15	-15	-15	-7	-4	-1	1	2	2	3	3	3	2	2	2	1	1	0	1	1	2

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J	1269	TOKUSHIMA	0	-1	-2	-2	-2	-2	-1	0	0	1	1	1	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	0	0
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KWT	1269	KUWAIT	0	-15	-15	-15	-15	-15	-15	-15	-15	-5	-2	2	4	5	6	7	7	7	6	5	3	1	-2	-9	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
TUR	1269	OGUZELI	0	1	2	3	3	4	4	4	5	5	5	5	5	4	4	4	3	3	2	1	0	-1	-3	-5	-7	-12	-15	-15	-15	-15	-15	-15	-12	-7	-5	-3	-1
YUG	1269	NOVI SAD	0	-11	-5	-1	1	2	3	4	4	4	4	3	2	2	2	2	2	2	2	2	3	4	4	4	4	3	2	1	-1	-5	-11	-12	-12	-12	-12	-12	-12
F	1278	STRASBOURG	0	4	5	5	5	4	3	2	-1	-5	-7	-7	-7	-7	-7	-4	-1	2	3	4	5	5	5	4	3	2	-1	-3	-5	-5	-4	-4	-5	-3	-1	2	3
IND	1278	LUCKNOW 2	0	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4
UKR	1278	ODESSA	0	5	4	4	4	4	3	3	3	2	1	-1	-3	-5	-5	-6	-6	-6	-6	-6	-6	-6	-5	-5	-3	-1	1	2	3	3	3	4	4	4	4	5	5
IND	1287	CHHATARPUR 1	0	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4	-3	-2	-1	0	1	1	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2
PHL	1287	SAN FERNANDO P	0	-8	-8	-6	-4	-2	-1	0	1	1	2	2	2	3	3	3	3	3	3	3	2	2	2	1	1	0	-1	-2	-4	-6	-8	-8	-10	-10	-10	-10	-10
AFG	1296	KANDAHAR	0	3	3	3	3	3	3	2	1	0	-2	-4	-5	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-4	-2	0	1	2	3	3	3	3	3
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AUS	1296	BRISBANE QLD	0	3	3	2	-2	-12	-7	0	2	3	2	1	-1	-3	-4	-3	-2	0	2	3	3	2	-2	-12	-7	0	2	3	2	1	-1	-3	-4	-3	-2	0	2
AUS	1296	MT GAMBIER SA	0	2	1	-1	-4	-10	-10	-7	-3	0	1	2	3	3	3	3	3	3	3	2	1	-1	-3	-10	-10	-7	-2	0	1	2	3	3	3	3	3	3	2
SDN	1296	SENNAR	0	3	3	3	2	0	-2	-4	-6	-8	-8	-8	-6	-4	-2	0	2	3	3	3	3	3	3	0	-2	-4	-6	-8	-8	-8	-8	-4	-2	0	2	3	3
BEL	1305	AYE MARCHE	0	0	-1	-2	-5	-6	-8	-10	-15	-18	-15	-10	-8	-6	-5	-2	-1	0	0	0	-1	-2	-5	-6	-8	-10	-15	-18	-15	-10	-8	-6	-5	-2	-1	0	0
CLN	1305	KOTUGODA	0	-10	-2	2	3	3	3	2	-2	-10	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12

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AUS	1314	GOSFORD NSW	0	0 0 1 1 2 3	2 2 0 -5 -11	-10 -4 -1 1 2	2 2 2 2 2	2 1 -1 -4 -14	-12 -4 0 2 2	3 2 2 1 0
UAE	1314	SADIYAT	0	-8 -4 -1 0 1 1	1 0 -1 -4 -15	-8 -3 -1 0 0	0 0 -1 -3 -8	-15 -4 -1 0 1	1 1 0 -1 -4	-8 -4 -16 -16 -14
URS	1314	STAVROPOL	0	8 8 8 7 6 6	5 3 1 -3 -8	-12 -17 -19 -20 -21	-22 -22 -22 -22 -22	-22 -22 -21 -20 -19	-17 -12 -8 -3 1	3 5 6 6 7
YUG	1314	SKOPJE 2	0	-15 -15 -15 -15 -10 -8	-5 -3 -2 -1 0	1 2 2 3 3	3 3 3 3 3	2 2 1 0 -1	-2 -3 -5 -8 -10	-15 -15 -15 -15 -15
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CHN	1323	LHASA	0	1 1 1 1 1 1	1 2 2 2 2	1 1 -1 -1 -2	-2 -2 -3 -3 -3	-3 -3 -3 -3 -2	-2 -1 -1 1 1	2 2 2 2 1
CYP	1323	ZYYI	0	-10 -10 -10 -10 -7 -5	-4 -2 -1 0 2	2 3 3 3 3	3 3 3 2 2	0 -1 -2 -4 -5	-7 -10 -10 -10 -10	-10 -10 -10 -10 -10
DDR	1323	NAUEN	0	4 4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4
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DDR	1323	NAUEN	0	4 4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4
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I	1332	ROMA	0	5 4 1 -2 -7 -15	-15 -10 -7 -7 -9	-15 -15 -9 -7 -6	-7 -9 -15 -15 -9	-7 -7 -9 -15 -15	-6 -2 1 4 5	5 5 5 5 5
I	1332	SQUINZANO	0	0 0 -2 -3 -4 -4	-4 -3 -3 -3 -3	-3 -3 -3 -3 -3	-4 -4 -4 -3 -2	-1 0 1 2 2	2 2 2 2 2	2 2 2 2 2
NGR	1332	MAINE SOROA	0	3 3 3 3 3 3	2 2 2 1 0	-2 -4 -6 -10 -12	-14 -15 -15 -15 -14	-12 -10 -6 -4 -2	0 1 2 2 2	3 3 3 3 3

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CHN	1341	YICHUN 2	0	0	0	0	0	-1	-2	-3	-4	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	0	0	0	0	0	0	0	0	0	0
IND	1341	KOHIMA 2	0	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6	-7	-7	-7	-6	-4	-3	-2	-1	0	1	1	2	2
IND	1341	SURAT 2	0	-10	-10	-10	-8	-5	-3	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-3	-5	-8	-10	-10	-10	-10	-10	-10
KWT	1341	MAGWA	0	-5	-7	-7	-11	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-10	-8	-7	-5	-2	0	1	2	3	3	3	3	3	3	3	3	2	1	0	-3
F	1350	NICE	0	-10	-8	-5	-3	-2	-2	-3	-5	-8	-10	-8	-2	2	5	6	6	6	5	4	3	1	-1	-3	-3	-1	1	3	4	5	6	6	6	5	2	-2	-8
E	1359	FIGUERAS	0	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-20	-15	-10	-6	0	3	6	7	8	8	8	8	8	8	8	8	8	3	-5	-15	-20	-20	-20	-22
G	1368	FOXDALE	0	0	2	2	2	3	3	2	1	0	-2	-3	-4	-6	-6	-6	-6	-4	-3	-2	0	1	2	2	3	3	2	2	0	-2	-4	-4	-6	-6	-4	-4	-3	-1
IRN	1368	BANDARFARAHNAZ	0	-16	-16	-16	-15	-9	-5	-2	1	2	2	1	-1	-5	-15	-16	-9	-4	-2	-1	-1	-1	-2	-4	-9	-16	-12	-4	0	2	2	2	1	-2	-5	-13	-16
ISR	1368	YAMIT	0	-9	-10	-10	-10	-10	-10	-9	-9	-9	-8	-8	-6	-5	-4	-3	-2	0	2	3	4	5	5	5	4	3	2	0	-2	-3	-4	-5	-6	-8	-8	-9	-9
J	1368	TAKAMATSU	0	-2	-2	-3	-3	-3	-3	-2	-2	-2	-2	-3	-3	-3	-2	-1	0	0	1	1	2	2	3	3	3	3	3	3	3	3	3	2	2	1	1	0	0
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URS	1368	NOVOSIBIRSK	0	4	4	3	3	3	2	1	-1	-3	-5	-5	-6	-6	-6	-6	-6	-6	-6	-5	-5	-3	-1	1	2	3	3	3	4	4	4	4	5	5	5	4	4
AUS	1377	GOULBURN NSW	0	-15	-8	-3	0	2	3	4	4	3	2	0	-1	-3	-4	-5	-4	-3	-1	0	2	3	4	4	4	2	0	-4	-9	-15	-10	-7	-5	-5	-6	-8	-13
AUS	1377	MACKAY QLD	0	5	5	5	5	5	5	5	5	5	4	3	2	1	-1	-4	-6	-12	-15	-15	-15	-8	-4	-2	0	2	3	4	4	5	5	5	5	5	5	5	5
F	1377	LILLE	0	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
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IND	1377	HYDERABAD 2	0	-7	-7	-7	-6	-4	-3	-2	-1	0	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	0	-1	-2	-3	-4	-6

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MRC	1377	ALHOCEIMA	0	-10	-10	-10	-10	-10	-10	-5	0	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	0	-5	-10	-10	-10	-10	-10
IRN	1386	AHWAZ	0	4	4	4	4	3	3	2	1	-1	-2	-4	-7	-16	-16	-12	-16	-7	-7	-7	-7	-8	-10	-16	-15	-9	-6	-3	-1	0	1	2	3	4	4	4	4
LIE	1386	VADUZ	0	3	0	-3	-7	-14	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-21	-11	-5	-1	1	3	5	6	7	7	7	7	7	7	7	6	4
ISR	1395	EZYON	0	-10	-10	-10	-10	-10	-9	-9	-9	-8	-8	-6	-5	-4	-3	-2	0	2	3	4	5	5	5	4	3	2	0	-2	-3	-4	-5	-6	-8	-8	-9	-9	-9
URS	1395	AGHINSKOE	0	3	3	3	2	2	2	1	0	-1	-3	-4	-5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-1	0	1	2	2	2	3	3
FNL	1404	HELSINKI 2	0	3	2	2	1	1	0	0	0	-1	-2	-3	-5	-7	-9	-10	-10	-10	-10	-10	-9	-7	-5	-3	-2	-1	0	0	0	1	1	2	2	3	3	3	3
GUI	1404	KIPE	0	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-1	-2	-3	-4	-5	-6	-6	-6	-6	-6	-6	-5	-5	-4	-3	-2	-1	0	1	1	2
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IRN	1404	RASHT	0	3	2	1	-2	-6	-8	-13	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-15	-16	-16	-16	-16	-16	-16	-16	-16	-16	-12	-6	-5	-2	1	2	3	3
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J	1404	HAMAMATSU	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	-1	-2	-2	-3	-3	-3	-4	-5	-6	-6	-6	-6	-4	-4	-3	-3	-2	-2	-1
J	1404	KUSHIRO	0	1	1	2	2	2	2	2	2	1	1	0	0	0	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	0	0	1	1	1
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J	1404	SHIZUOKA	0	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	-1	0	1	1	2	2	2	2	2	2	1	0	0	-1	-2	-3	-3	-3

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D	1422	SAARBRUECKEN	0	5	5	6	6	6	6	6	6	6	6	6	6	5	4	3	2	0	-1	-3	-5	-7	-7	-7	-7	-7	-7	-7	-7	-7	-5	-3	-1	1	2	3	4
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D	1422	SAARBRUECKEN	0	4	5	5	5	5	5	5	5	5	5	5	4	4	3	3	1	0	0	-1	-2	-3	-3	-1	-1	-1	-1	-2	-3	-3	-3	-3	-1	0	2	3	3
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DNK	1431	KOEBENHAVN	0	-7	-3	0	2	4	5	6	6	7	7	7	7	7	7	7	7	7	6	6	5	4	2	0	-3	-9	-27	-20	-8	-5	-4	-4	-4	-5	-7	-20	-27
J	1431	KUSHIMOTO	0	0	0	-1	-1	-1	-2	-2	-2	-2	-2	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	-2	-2	-2	-1	-1	-1	-1	0	0	1	1
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J	1431	WAKAYAMA	0	-2	-3	-4	-5	-5	-4	-3	-2	0	1	2	2	3	3	3	3	3	2	2	1	1	0	-1	-2	-4	-6	-6	-5	-4	-3	-2	-1	-1	-1	-1	-1
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ARS	1440	DAMMAM	0	-13	-11	-10	-5	1	2	3	3	4	4	4	3	3	2	1	-5	-10	-11	-13	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15

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ISR	1440	YAMIT	0	-9	-10	-10	-10	-10	-10	-9	-9	-9	-8	-8	-6	-5	-4	-3	-2	0	2	3	4	5	5	5	4	3	2	0	-2	-3	-4	-5	-6	-8	-8	-9	-9
LUX	1440	MARNACH	0	2	4	5	6	6	6	6	5	3	0	-5	-10	-9	-8	-6	-5	-3	-3	-5	-8	-11	-14	-15	-16	-16	-13	-9	-7	-8	-11	-13	-14	-11	-8	-4	-1
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LUX	1440	MARNACH	0	0	0	0	0	0	0	-1	-2	-4	-5	-7	-7	-8	-8	-8	-8	-8	-7	-7	-5	-4	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
TUR	1440	CARSAMBA	0	-15	-15	-6	-3	-1	1	2	3	3	4	4	4	3	2	2	1	-1	-3	-6	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
ARS	1449	JEDDAH	0	-9	-8	-7	-7	-6	-3	0	3	3	4	5	5	5	5	5	5	5	4	3	3	0	-3	-6	-7	-7	-8	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
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AUS	1449	MUDGEE NSW	0	3	3	3	2	1	0	-1	-2	-3	-3	-3	-2	-1	0	2	2	3	3	3	2	1	-1	-4	-7	-12	-17	-17	-17	-16	-14	-11	-7	-3	-1	1	2
I	1449	GOLFO BARATTI	0	-2	-1	-2	-4	-6	-7	-7	-7	-6	-6	-5	-3	-3	-2	-2	-3	-4	-5	-6	-7	-7	-7	-6	-4	-3	-1	1	3	4	5	5	5	5	5	4	3
IRN	1449	BANDAR SHAH	0	2	2	2	3	3	3	3	3	3	3	3	3	2	2	2	1	0	-1	-4	-5	-8	-12	-15	-16	-16	-16	-16	-16	-14	-11	-8	-5	-3	-1	0	1
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KOR	1449	ULSAN	0	-2	-2	-3	-3	-3	-4	-4	-5	-6	-7	-7	-8	-8	-8	-7	-7	-6	-5	-4	-4	-3	-3	-3	-2	-2	-2	-1	-1	-1	0	0	0	-1	-1	-1	-2

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LBY	1449	MISURATA	0	-24	-24	-15	-14	-5	0	1	2	3	3	4	4	5	5	5	5	5	5	5	5	5	4	4	3	3	2	1	0	-5	-14	-15	-24	-24	-24	-24	-24
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ISR	1458	EZYON	0	-10	-10	-10	-10	-10	-9	-9	-9	-8	-8	-6	-5	-4	-3	-2	0	2	3	4	5	5	5	4	3	2	0	-2	-3	-4	-5	-6	-8	-8	-9	-9	-9
PHL	1458	IBA ZAMBALES	0	6	4	1	-3	-6	-9	-6	-2	-6	-10	-6	-1	2	4	6	7	7	7	6	4	1	-3	-9	-5	-12	-15	-15	-10	-6	-2	2	4	5	6	7	6
MCO	1467	MONTE CARLO	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	-1	-3	-20	-3	-1	0	0	0	0	0	0	0	0	0	0
THA	1467	BANGKOK	0	-1	-2	-6	-8	-10	-15	-15	-15	-15	-15	-15	-15	-15	-10	-7	-5	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1
UKR	1467	KIEV	0	3	3	2	0	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	0	2	3	3	3	4	4	5	5	5	5	5	5	5	5	4	3
CHN	1476	WENCHENG	0	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-2	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-2	-2	-3	-3	-4	-4
IND	1476	JAIPUR	0	-10	-10	-8	-5	-3	-1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	0	-1	-3	-5	-8	-10	-10	-10	-12	-13	-12	-10
MLA	1476	TUARAN	0	-8	-3	0	2	3	4	4	3	2	0	-4	-8	-16	-22	-22	-22	-22	-22	-22	-16	-16	-22	-22	-22	-22	-22	-22	-22	-16	-16	-16	-22	-22	-16	-16	-14
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NZL	1476	AUCKLAND	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	1	0	-2	-4	-6	-7	-8	-10	-10	-10	-10	-10	-9	-7	-5	-4	-2	0	1	2	3
URS	1476	VLADIVOSTOK	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	1	0	-4	-7	-9	-10	-10	-9	-7	-4	0	1	2	3	3
AUS	1503	BATHURST NSW	0	4	2	-1	-6	-14	-4	1	3	4	5	4	4	4	4	4	4	5	5	4	2	-1	-6	-13	-3	-1	3	4	5	5	4	4	4	4	4	5	5
AUS	1503	MELBOURNE VIC	0	-10	-15	-16	-16	-16	-15	-13	-10	-5	-2	0	1	2	3	4	4	3	3	2	1	1	1	1	1	2	2	3	3	4	4	3	2	1	-1	-3	-7
EGY	1503	ISMAILIA	0	3	3	2	1	0	-2	-6	-10	-10	-10	-10	-10	-6	-2	0	1	2	3	3	3	2	1	0	-2	-6	-10	-10	-10	-10	-10	-6	-2	0	1	2	3
IRN	1503	BUSHEHR	0	1	-2	-6	-12	-16	-16	-16	-16	-16	-12	-6	-2	1	2	3	4	3	2	1	-2	-6	-12	-16	-16	-16	-16	-16	-12	-6	-2	1	2	3	4	3	2

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NZL	1503	CASTLE POINT	0	3	4	4	4	3	2	1	0	-1	-3	-4	-4	-4	-3	-1	0	1	3	3	4	4	4	3	3	1	0	-1	-3	-4	-4	-4	-3	-1	0	1	3
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POL	1503	STARGARD SZCZE	0	1	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1	1	1	1
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SOM	1503	KISMAIO	0	3	3	3	3	3	3	3	3	3	2	2	1	0	-2	-3	-5	-8	-10	-10	-10	-10	-10	-10	-10	-10	-10	-8	-5	-3	-2	0	1	2	2	3	3
ARS	1512	JEDDAH	0	-15	-15	-15	-15	-15	-15	-15	-15	-15	-13	-11	-10	-5	2	3	4	4	5	5	5	4	4	3	2	-5	-10	-11	-13	-15	-15	-15	-15	-15	-15	-15	-15
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CHN	1512	TAIZHONG SHI	0	-10	-10	-10	-10	-10	-10	-10	-10	-10	-8	-8	-6	-5	-3	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-5	-6	-8	-8
J	1512	MATSUYAMA	0	0	0	0	-1	-1	-2	-2	-2	-1	-1	0	0	1	1	2	2	2	3	3	3	2	2	2	1	1	0	0	-1	-1	-2	-2	-2	-1	-1	0	0
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ARS	1521	DUBA	0	-8	-8	-12	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-12	-8	-8	-8	-3	1	4	6	7	8	7	6	4	1	-3	-8
CHN	1521	URUMQI SHI	0	-18	-18	-14	-10	-6	0	3	5	6	5	3	0	-6	-10	-14	-18	-18	-18	-18	-18	-14	-10	-6	0	3	5	6	5	3	0	-6	-10	-14	-18	-18	-18
IRN	1521	BANDARFARAHNAZ	0	-16	-16	-16	-15	-9	-5	-2	1	2	2	1	-1	-5	-15	-16	-9	-4	-2	-1	-1	-1	-2	-4	-9	-16	-12	-4	0	2	2	2	1	-2	-5	-13	-16
KEN	1521	MOMBASA	0	3	3	3	2	2	0	-2	-3	-4	-6	-8	-8	-10	-10	-10	-8	-6	-5	-4	-3	-2	0	2	2	3	3	3	3	3	3	3	3	3	3	3	3
ARS	1530	GIZAN	0	-15	-15	-15	-15	-13	-11	-10	-5	2	3	4	4	5	5	5	4	4	3	2	-5	-10	-11	-13	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
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G	1530	HITCHIN	0	0	0	0	0	0	-1	-1	-2	-3	-4	-6	-7	-8	-9	-11	-14	-15	-15	-15	-14	-11	-9	-8	-7	-6	-4	-3	-2	-1	-1	0	0	0	0	0	0
CHN	1548	RUSHAN	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-7	-5	-4	-2	-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-2	-4	-5	-7
CLN	1548	PERKARA	0	3	3	2	1	0	-1	-2	-4	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-4	-2	-1	0	1	2	3	3	3
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G	1548	LIVERPOOL	0	-14	-7	-3	-2	0	-1	-2	-4	-9	-14	-12	-8	-7	-10	-15	-13	-3	1	4	5	6	7	7	7	6	6	5	4	1	-4	-8	-16	-11	-8	-9	-16
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G	1548	SHEFFIELD	0	-11	-11	-10	-7	-4	-2	0	3	4	5	6	6	6	6	6	6	6	5	4	3	0	-2	-4	-7	-9	-11	-11	-11	-9	-8	-5	-6	-5	-8	-10	-11
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KWT	1548	KUWAIT	0	-5	-7	-7	-11	-15	-15	-15	-15	-18	-18	-18	-5	-2	2	4	5	6	7	7	7	6	5	3	1	-2	-9	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
UKR	1548	VINNITSA	0	0	1	2	3	3	2	2	1	0	-2	-4	-7	-8	-8	-8	-8	-8	-8	-8	-8	-7	-7	-4	-2	0	1	2	2	3	3	2	1	1	0	0	0
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IND	1557	GT NICOBAR	0	-10	-19	-19	-19	-19	-19	-10	-5	-2	2	3	4	5	4	3	2	-2	-5	-10	-19	-19	-19	-19	-19	-10	-5	-2	2	3	4	5	4	3	2	-2	-5
J	1557	ATAMI	0	-9	-10	-11	-12	-12	-12	-12	-12	-12	-12	-11	-11	-10	-8	-6	-4	-2	-1	0	1	1	2	2	2	2	2	2	2	1	1	0	-1	-2	-4	-6	-7
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YUG	1557	OSIJEK	0	3	3	2	1	0	-1	-3	-5	-5	-5	-5	-5	-3	-1	0	1	2	3	3	3	1	0	-2	-6	-7	-9	-10	-10	-10	-9	-7	-6	-2	0	1	3
IND	1566	NAGPUR	0	0	0	-1	-1	-2	-2	-2	-3	-4	-3	-2	-2	-2	-1	-1	0	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1
KOR	1566	JEJU	0	-8	-8	-8	-5	-3	1	4	5	6	5	2	-1	-5	-7	-8	-8	-8	-8	-8	-8	-8	-7	-5	-2	1	4	5	6	4	2	-1	-4	-7	-8	-8	-8
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CHN	1575	YUMEN SHI	0	-10	-10	-10	-10	-9	-8	-6	-4	-2	0	0	1	2	2	2	2	2	1	0	0	-2	-4	-6	-8	-9	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
THA	1575	AYUTTHAYA	0	5	5	4	3	2	1	0	0	0	1	2	3	4	5	5	5	4	3	1	-1	-3	-4	-5	-4	-4	-3	-4	-5	-5	-4	-3	-1	1	2	4	5
THA	1575	AYUTTHAYA	0	4	5	5	5	5	5	5	5	4	4	3	2	1	0	-1	-2	-3	-4	-5	-4	-2	-1	0	0	-1	-2	-4	-5	-4	-3	-2	0	0	2	3	4
CHN	1593	JIAMUSI	0	-9	-10	-10	-10	-10	-10	-10	-10	-10	-10	-9	-7	0	-4	-3	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-2	-3	-4	-6	-7
CHN	1593	TAXKORGAN	0	-7	-5	-4	-2	-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	0	-1	-2	-4	-5	-7	-8	-8	-8	-8	-8	-8	-8	-8	-8
CHN	1593	URUMQI SHI	0	-10	-10	-10	-10	-10	-10	-9	-8	-6	-4	-2	0	0	1	2	2	2	2	2	1	0	0	-2	-4	-6	-8	-9	-10	-10	-10	-10	-10	-10	-10	-10	-10
NZL	1593	AUCKLAND	0	1	-1	-3	-7	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-7	-3	-1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2
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URS	1593	IRKUTSK	0	3	2	2	2	2	3	4	4	5	5	5	4	3	2	-1	-4	-7	-8	-8	-8	-8	-8	-8	-8	-8	-8	-7	-4	-1	2	3	4	5	5	5	5
URS	1593	KHABAROVSK	0	4	4	3	3	3	3	3	4	4	5	5	5	4	3	2	0	-4	-6	-12	-12	-12	-12	-12	-12	-12	-6	-4	0	2	3	4	5	5	5	4	4

1593 KHZ

ANNEX 2

Technical Data used in the Preparation of the Plan and to be used in the Application of the Agreement

ANNEX 2

Technical Data used in the Preparation of the Plan and to be used in the Application of the Agreement

CHAPTER 1

Definitions

Channel (in AM broadcasting)

Part of the frequency spectrum, the width of which is equal to the necessary bandwidth of the AM broadcasting emission, and which is characterized by the nominal value of the carrier frequency.

Low-power channel (LPC)

Channel used by medium frequency broadcasting stations employing a maximum e.m.r.p. of 1 kW (c.m.f. of 300 V).

Audio-frequency signal-to-interference ratio

Ratio between the values of the voltage of the wanted signal and the voltage of the interference, measured under specified conditions, at the audio-frequency output of the receiver.

This ratio is generally expressed in dB and corresponds closely to the difference in volume of sound (expressed in dB) between the wanted programme and the interference.

Audio-frequency protection ratio

Agreed minimum value of the audio-frequency signal-to-interference ratio considered necessary to achieve a subjectively defined reception quality.

This ratio may have different values according to the type of service desired.

Radio-frequency wanted-to-interfering signal ratio

Ratio between the values of the radio-frequency voltage of the wanted signal and the interfering signal, measured at the input of the receiver under specified conditions.

This ratio is generally expressed in dB.

Radio-frequency protection ratio

Value of the radio-frequency wanted-to-interfering signal ratio that enables, under specified conditions, the audio-frequency protection ratio to be obtained at the output of a receiver.

These specified conditions include such diverse parameters as spacing of the wanted and interfering carrier, emission characteristics (type of modulation, modulation depth, etc.), receiver input and output levels as well as the receiver characteristics (selectivity and susceptibility to cross-modulation, etc.).

Usable field strength (E_u)

The minimum value of the field strength necessary to permit satisfactory reception, under specified conditions, in the presence of natural noise, man-made noise and interference in a practical situation (or in one resulting from a frequency plan).

Nominal usable field strength (E_{nom})

The agreed minimum value of the field strength necessary to permit satisfactory reception, under specified conditions, in the presence of natural noise, man-made noise and interference from other transmitters.

The value of the nominal usable field strength is taken as a reference for planning purposes.

Service area (of a broadcasting transmitter)

The area in which the field strength of a transmitter is equal to or greater than the usable field strength.

Cymomotive force (c.m.f.) (in a given direction)
(See C.C.I.R. Report 618, 1974)

The product formed by multiplying the electric field strength at a given point in space, due to a transmitting station, by the distance of the point from the antenna. This distance must be sufficient for the reactive components of the field to be negligible; moreover the finite conductivity of the ground is supposed to have no effect on propagation.

The c.m.f. is a vector; when necessary it may be expressed in terms of components along axes perpendicular to the direction of propagation.

The c.m.f. is expressed in volts; it corresponds numerically to the field strength in mV/m at a distance of 1 km.

Effective monopole radiated power (e.m.r.p.)
(See C.C.I.R. Report 618, 1974)

The power supplied to an antenna multiplied by its gain in a given direction referred to that of a short vertical antenna in the horizontal plane.

Gain of an antenna (in a given direction) *referred to a short vertical antenna*

The radiation is expressed either as effective monopole radiated power (e.m.r.p.) or as cymomotive force (c.m.f.). To define the gain of an antenna, in a given direction, referred to a short vertical antenna either of the two following definitions should be adopted:

- the ratio between the c.m.f. of the actual antenna in a given direction and the c.m.f. in the horizontal plane of a short vertical antenna without losses on a perfectly conducting plane, the two antennae being supplied with the same power;

– the ratio of the power required at the input of a short vertical antenna without losses situated on a perfectly conducting horizontal plane to produce the reference e.m.r.p. of 1 kW (c.m.f. of 300 V) in the horizontal direction, to the power supplied to the actual antenna to produce the same e.m.r.p. (c.m.f.) in the given direction.

The ratio, expressed in dB, is the same for the two definitions.

Synchronized network

A group of transmitters whose carrier frequencies are identical (or differ only slightly, usually by a fraction of a Hz), and which broadcast the same programme.

CHAPTER 2

Ground-Wave Propagation

2.1 The value of the ground-wave field strength is given by the curves in Figures 1 to 9 taken from C.C.I.R. Recommendation 368-2.

The following points are to be especially noted with regard to them:

2.1.1 they refer to a smooth homogeneous earth;

2.1.2 no account is taken of tropospheric effects in the frequency bands concerned;

2.1.3 the curves refer to the following conditions:

– they are calculated for the vertical component of electric field from the rigorous analysis of Van der Pol and Bremmer;

– the transmitter is an ideal Hertzian vertical electric dipole to which a vertical antenna shorter than one quarter wavelength is nearly equivalent;

– the dipole moment is chosen so that the dipole would radiate 1 kW if the Earth were a perfectly conducting infinite plane under which conditions the radiation field at a distance of 1 km would be 3×10^5 μV/m;

– the curves are drawn for distances measured around the curved surface of the Earth;

– the inverse-distance curve A shown in the figures, to which the curves are asymptotic at short distances, passes through the field value of 3×10^5 μV/m at a distance of 1 km;

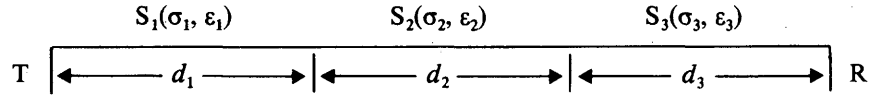
2.1.4 the propagation loss defined in C.C.I.R. Recommendation 341 (1974) for ground waves may be determined from the values of the field strength in dB relative to 1 μV/m, given in the attached curves, by the use of equation (19) of C.C.I.R. Report 112 (1974);

2.1.5 the curves should, in general, be used to determine field strength, only when it is known that ionospheric reflections at the frequency under consideration will be negligible in amplitude—for example, propagation in daylight between 150 kHz and 2 MHz and for distances of less than about 2,000 km.

2.2 *Mixed path*

2.2.1 The curves in Figures 1 to 9 may be used for the determination of propagation over mixed paths (inhomogeneous smooth earth) as follows.

Such paths may be made up of sections S_1, S_2, S_3, etc. of lengths d_1, d_2, d_3, etc. having conductivity and dielectric constant σ_1, ε_1; σ_2, ε_2; σ_3, ε_3 etc. shown below for three sections:



There are various semi-empirical methods of determining the propagation over such paths, of which that due to Millington (1949) is the most accurate and has been made to satisfy the reciprocity condition. The method assumes that curves are available for the different types of terrain in the sections S_1, S_2, S_3, etc. assumed to be individually homogeneous, all drawn for the same source T defined, for instance, by a given inverse-distance curve. The values may then finally be scaled up for any other source.

For a given frequency, the curve appropriate to the section S_1, is chosen and the field $E_1(d_1)$ in dB (1 μV/m) at the distance d_1 is then noted. The curve for the section S_2 is then used to find the fields $E_2(d_1)$ and $E_2(d_1 + d_2)$ and, similarly, with the curve for the section S_3, the fields $E_3(d_1 + d_2)$ and $E_3(d_1 + d_2 + d_3)$ are found, and so on.

A received field strength E_R is then defined by

$$E_R = E_1(d_1) - E_2(d_1) + E_2(d_1 + d_2) - E_3(d_1 + d_2) + E_3(d_1 + d_2 + d_3)$$

The procedure is then reversed, and by calling R the transmitter and T the receiver, a field E_T is obtained, given by

$$E_T = E_3(d_3) - E_2(d_3) + E_2(d_3 + d_2) - E_1(d_3 + d_2) + E_1(d_3 + d_2 + d_1)$$

The required field is given by $^1/_2$ $(E_R + E_T)$, the extension to more sections being obvious.

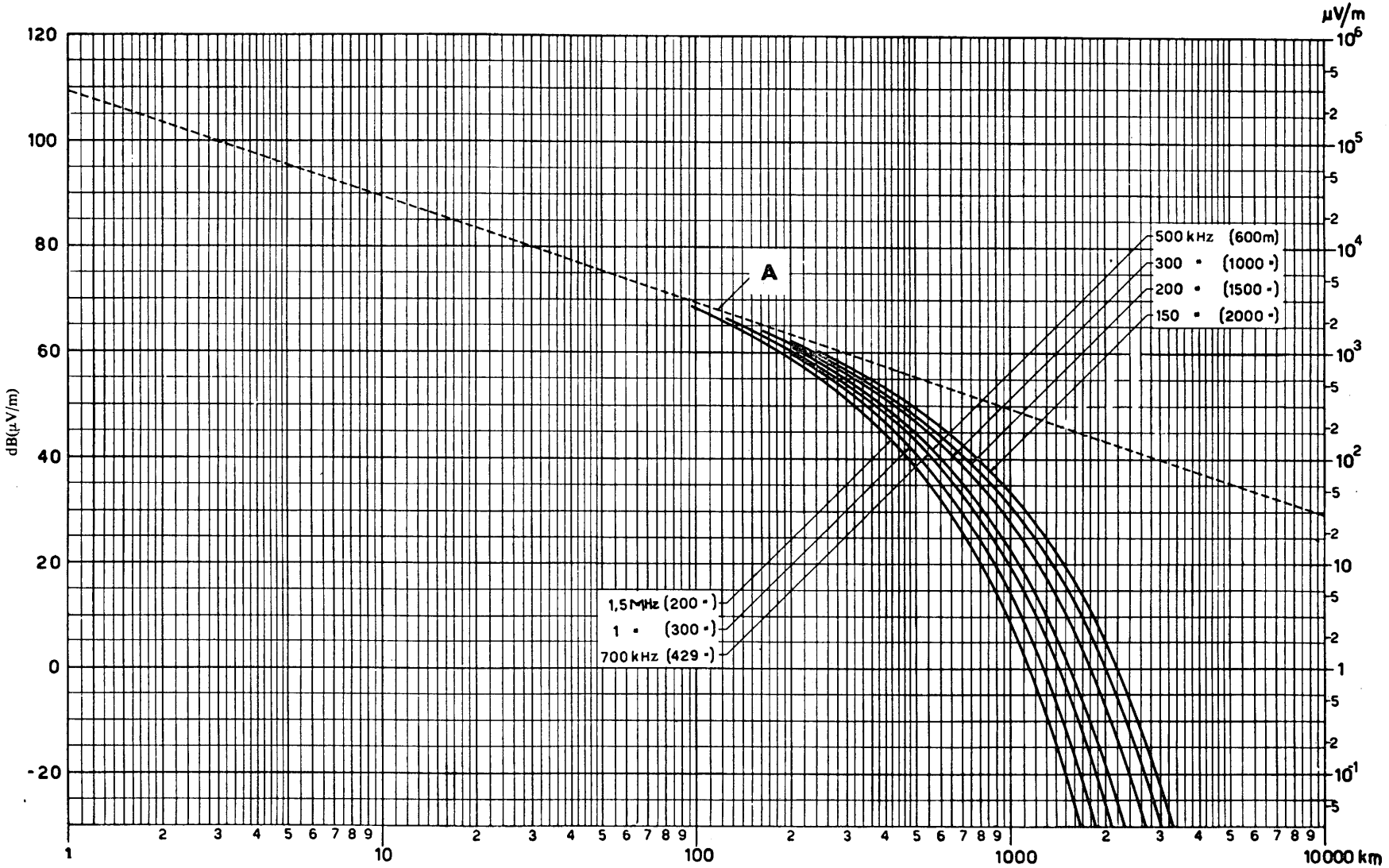


FIGURE 1

Courbes de propagation de l'onde de sol;
Mer, σ = 4 S/m, ε = 80

A: Inverse de la distance

FIGURE 1

Ground-Wave Propagation Curves;
Sea, σ = 4 S/m, ε = 80

A: Inverse distance curve

FIGURA 1

Curvas de propagación de la onda de superficie;
Mar, σ = 4 S/m, ε = 80

A: Inversa de la distancia

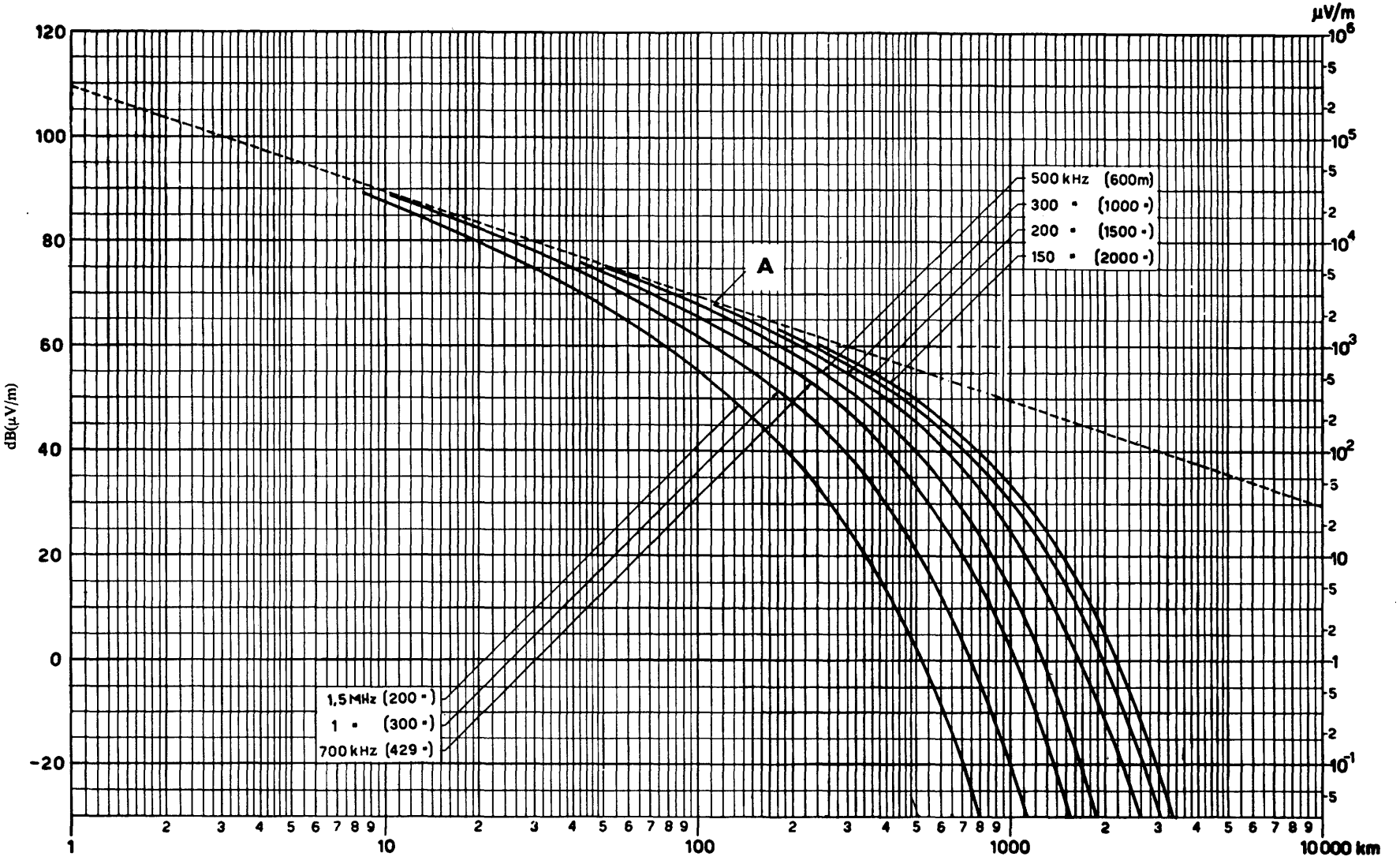


FIGURE 2

Courbes de propagation de l'onde de sol;
Terre, $\sigma = 3 \times 10^{-2}$ S/m, $\varepsilon = 4$

A: Inverse de la distance

FIGURE 2

Ground-Wave Propagation Curves;
Earth, $\sigma = 3 \times 10^{-2}$ S/m, $\varepsilon = 4$

A: Inverse distance curve

FIGURA 2

Curvas de propagación de la onda de superficie;
Tierra, $\sigma = 3 \times 10^{-2}$ S/m, $\varepsilon = 4$

A: Inversa de la distancia

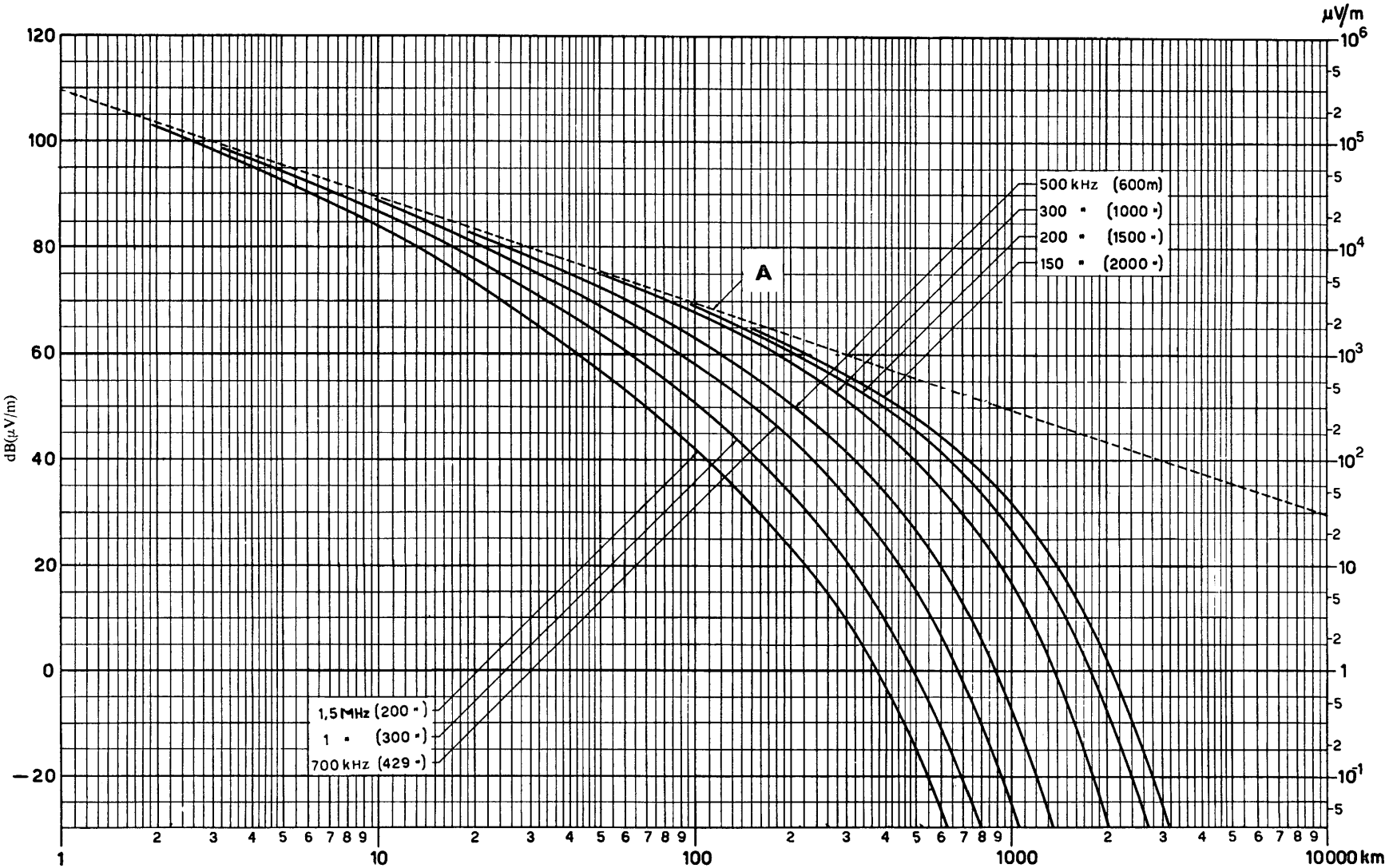


FIGURE 3

Courbes de propagation de l'onde de sol;
Terre, $\sigma = 10^{-2}$ S/m, $\varepsilon = 4$

A: Inverse de la distance

FIGURE 3

Ground-Wave Propagation Curves;
Earth, $\sigma = 10^{-2}$ S/m, $\varepsilon = 4$

A: Inverse distance curve

FIGURA 3

Curvas de propagación de la onda de superficie;
Tierra, $\sigma = 10^{-2}$ S/m, $\varepsilon = 4$

A: Inversa de la distancia

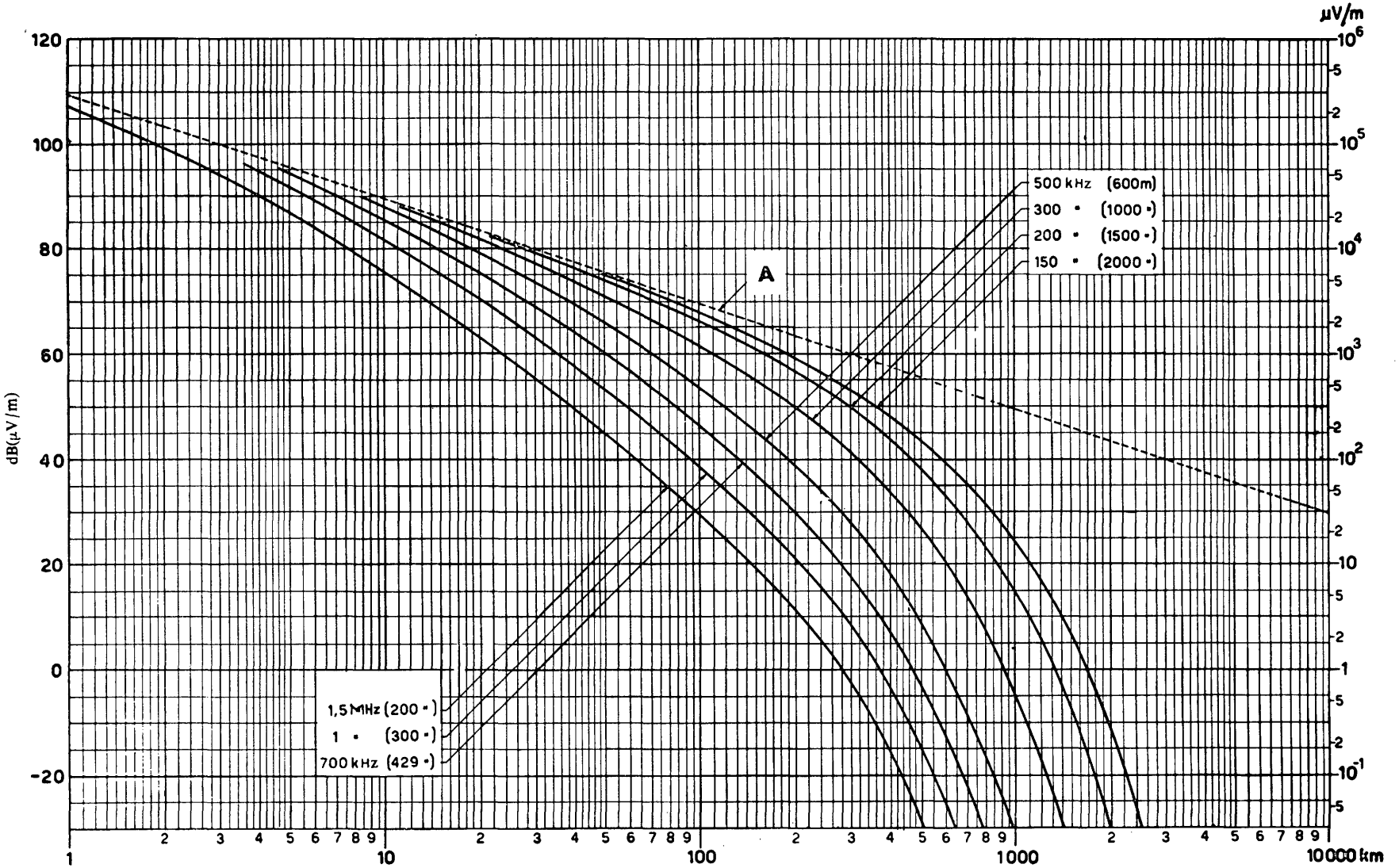


FIGURE 4

Courbes de propagation de l'onde de sol;
Terre, $\sigma = 3 \times 10^{-3}$ S/m, $\varepsilon = 4$

A: Inverse de la distance

FIGURE 4

Ground-Wave Propagation Curves;
Earth, $\sigma = 3 \times 10^{-3}$ S/m, $\varepsilon = 4$

A: Inverse distance curve

FIGURA 4

Curvas de propagación de la onda de superficie;
Tierra, $\sigma = 3 \times 10^{-3}$ S/m, $\varepsilon = 4$

A: Inversa de la distancia

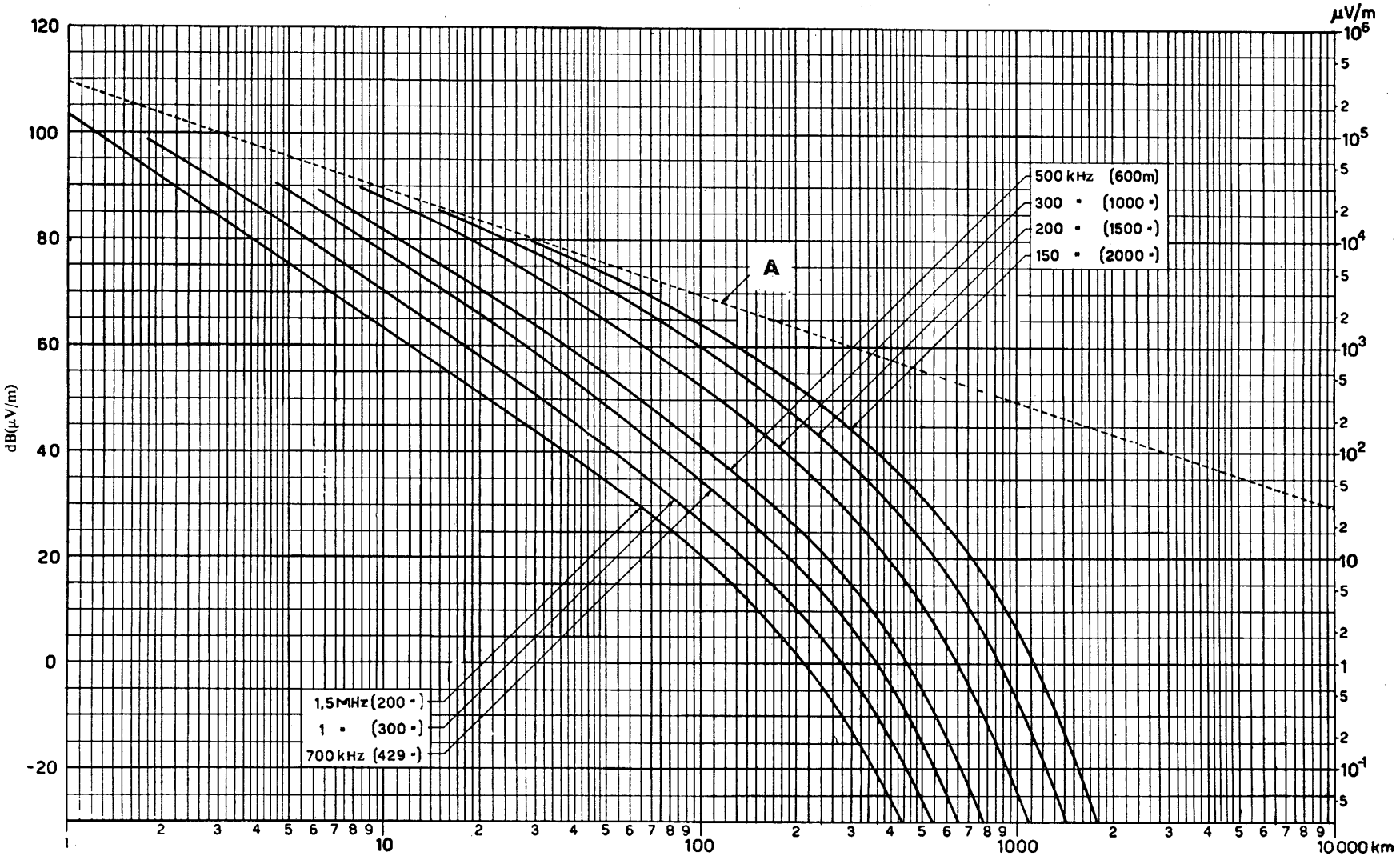


FIGURE 5

Courbes de propagation de l'onde de sol;
Terre, $\sigma = 10^{-3}$ S/m, $\varepsilon = 4$

A: Inverse de la distance

FIGURE 5

Ground-Wave Propagation Curves;
Earth, $\sigma = 10^{-3}$ S/m, $\varepsilon = 4$

A: Inverse distance curve

FIGURA 5

Curvas de propagación de la onda de superficie;
Tierra, $\sigma = 10^{-3}$ S/m, $\varepsilon = 4$

A: Inversa de la distancia

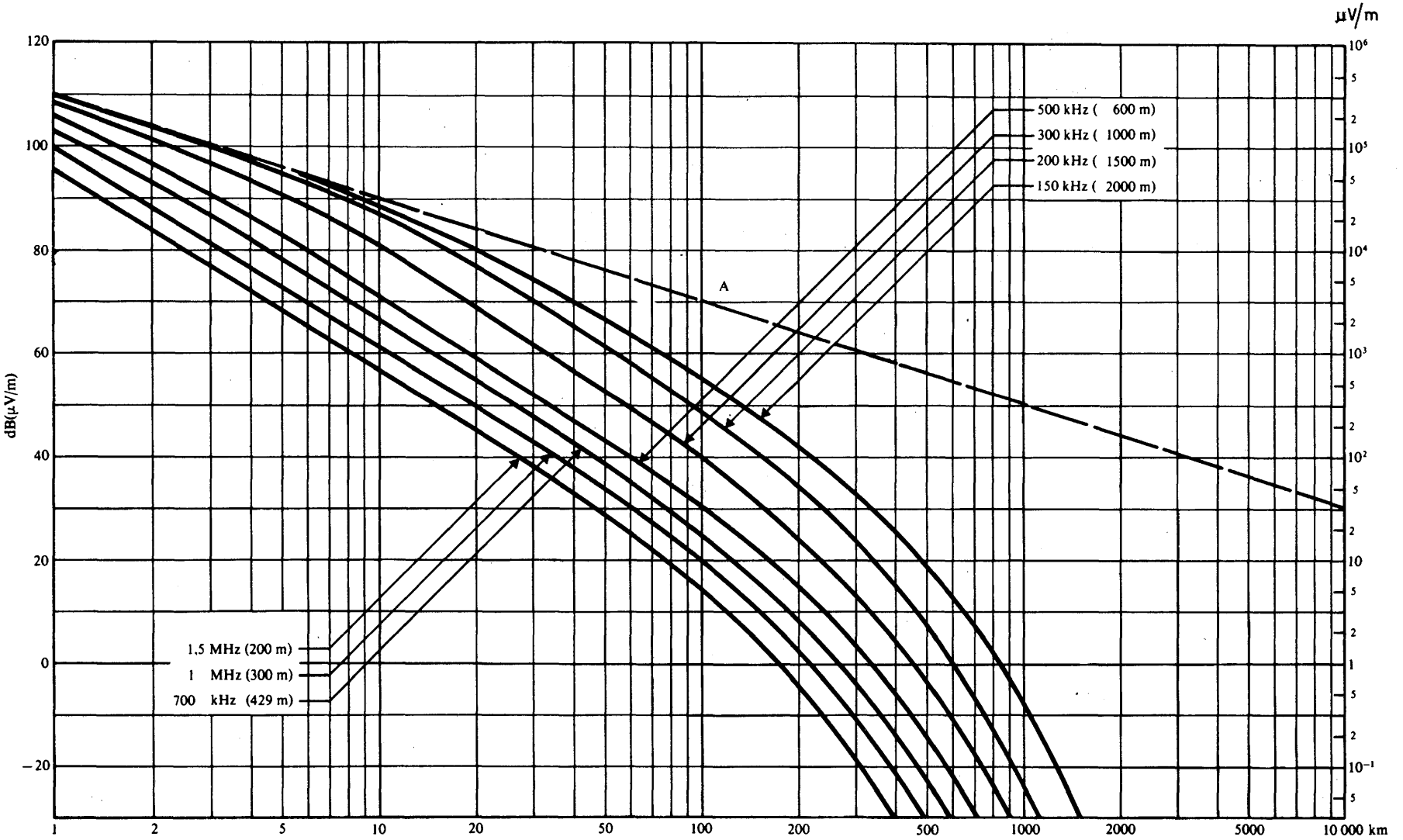


FIGURE 6

Courbes de propagation de l'onde de sol;
Terre, σ = 3 × 10⁻⁴ S/m, ε = 4

A: Inverse de la distance

FIGURE 6

Ground-Wave Propagation Curves;
Earth, σ = 3 × 10⁻⁴ S/m, ε = 4

A: Inverse distance curve

FIGURA 6

Curvas de propagación de la onda de superficie;
Tierra, σ = 3 × 10⁻⁴ S/m, ε = 4

A: Inversa de la distancia

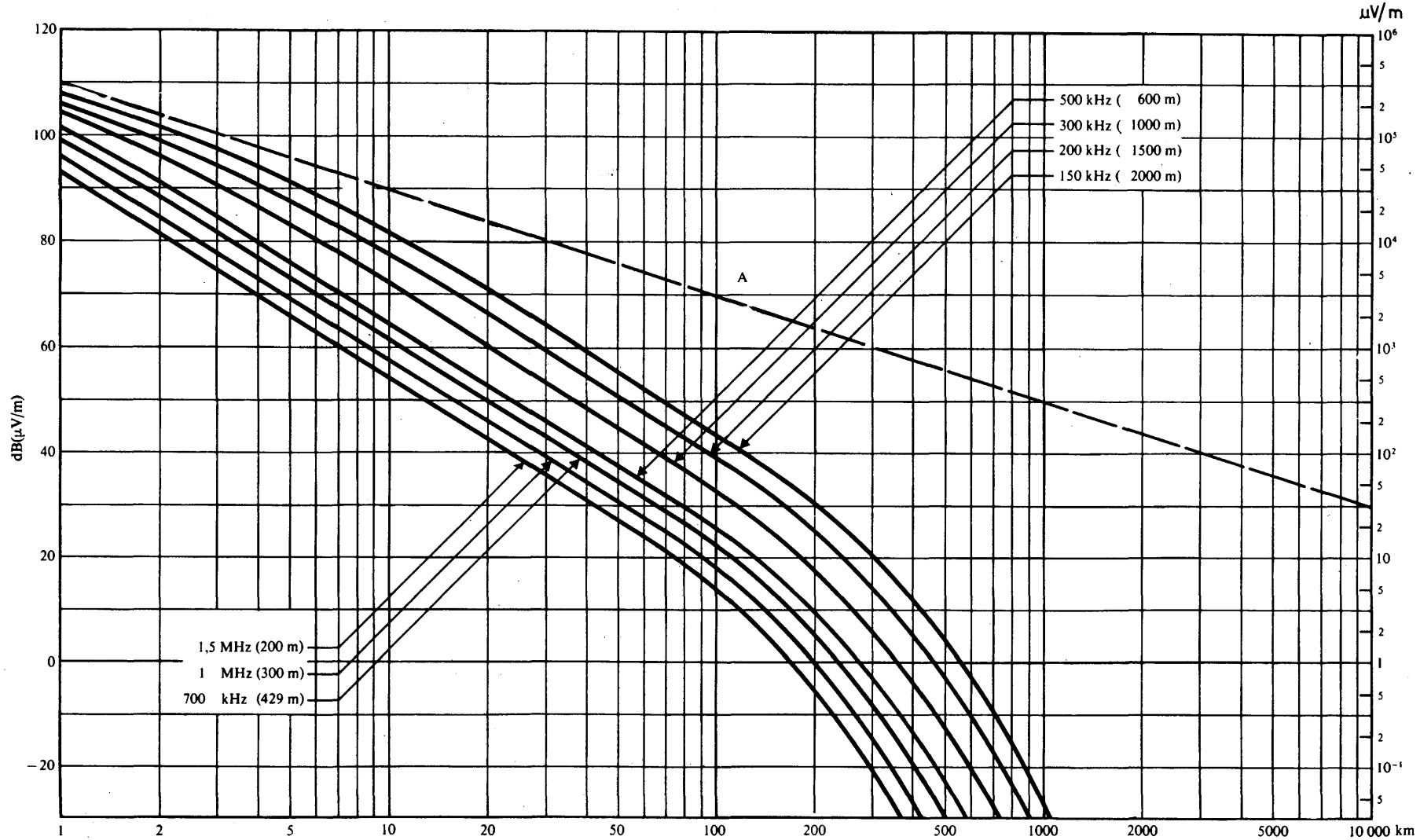


FIGURE 7

Courbes de propagation de l'onde de sol;
Terre, $\sigma = 10^{-4}$ S/m, $\varepsilon = 4$

A: Inverse de la distance

FIGURE 7

Ground-Wave Propagation Curves;
Earth, $\sigma = 10^{-4}$ S/m, $\varepsilon = 4$

A: Inverse distance curve

FIGURA 7

Curvas de propagación de la onda de superficie;
Tierra, $\sigma = 10^{-4}$ S/m, $\varepsilon = 4$

A: Inversa de la distancia

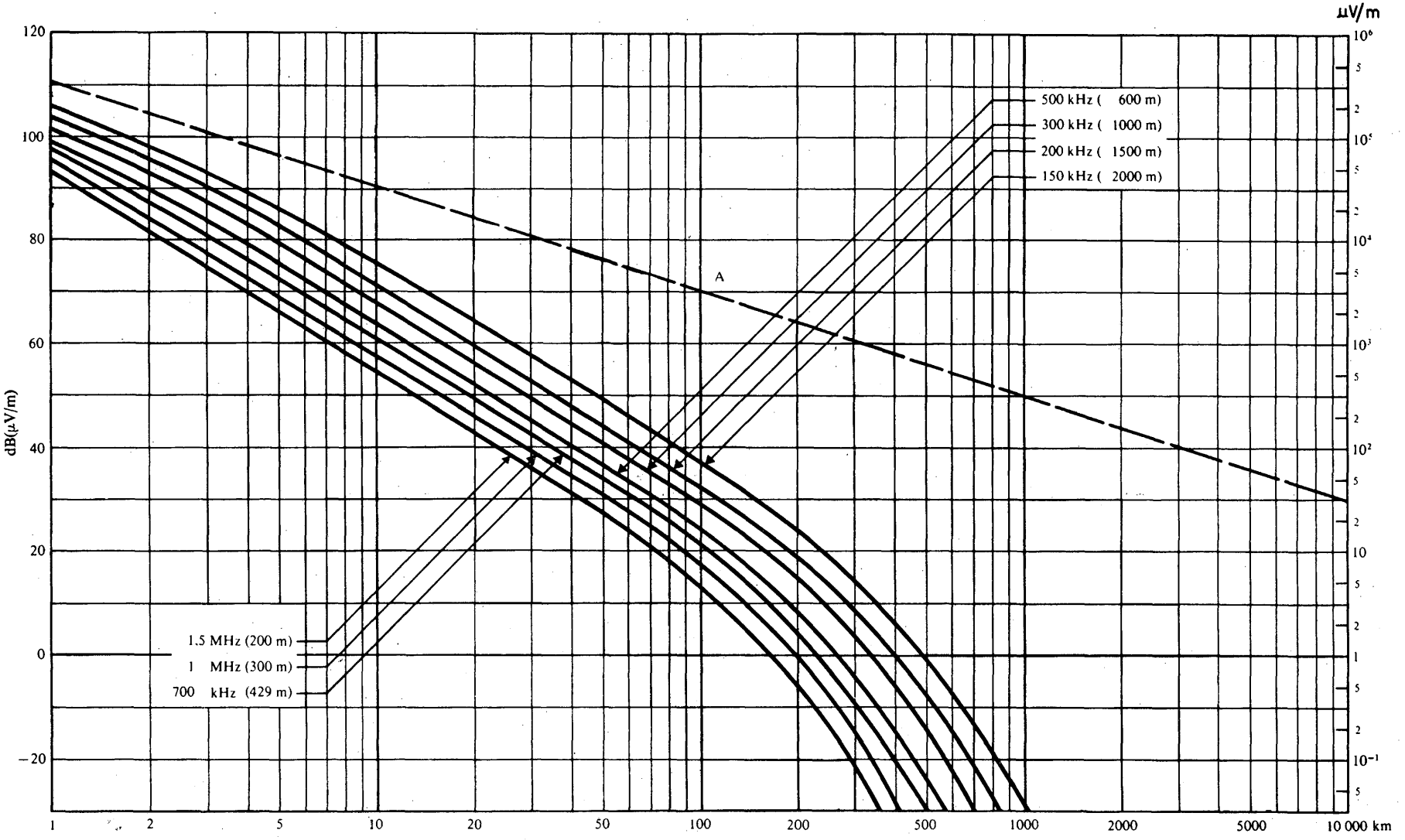


FIGURE 8

Courbes de propagation de l'onde de sol;
Terre, $\sigma = 3 \times 10^{-5}$ S/m, $\varepsilon = 4$

A: Inverse de la distance

FIGURE 8

Ground-Wave Propagation Curves;
Earth, $\sigma = 3 \times 10^{-5}$ S/m, $\varepsilon = 4$

A: Inverse distance curve

FIGURA 8

Curvas de propagación de la onda de superficie;
Tierra, $\sigma = 3 \times 10^{-5}$ S/m, $\varepsilon = 4$

A: Inversa de la distancia

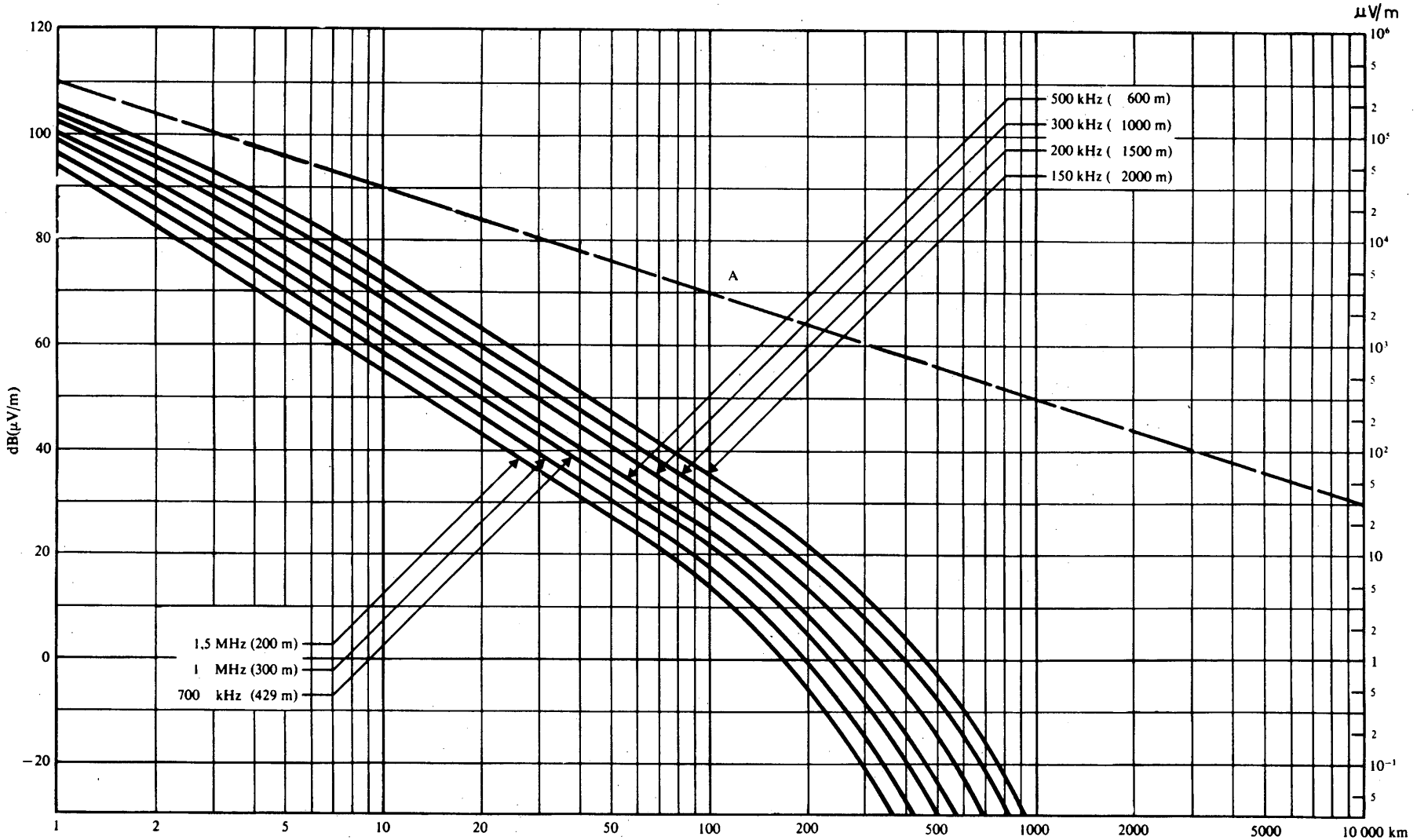


FIGURE 9

Courbes de propagation de l'onde de sol;
Terre, $\sigma = 10^{-5}$ S/m, $\varepsilon = 4$

A: Inverse de la distance

FIGURE 9

Ground-Wave Propagation Curves;
Earth, $\sigma = 10^{-5}$ S/m, $\varepsilon = 4$

A: Inverse distance curve

FIGURA 9

Curvas de propagación de la onda de superficie;
Tierra, $\sigma = 10^{-5}$ S/m, $\varepsilon = 4$

A: Inversa de la distancia

CHAPTER 3

Sky-Wave Propagation

3.1 *Introduction*

Within Region 1 the sky-wave propagation prediction method described in 3.3 should be used.

Within the Asian part of Region 3 situated North of the parallel 11°S, the sky-wave propagation prediction method described in 3.4 should be used.

Within the part of Region 3 situated South of the parallel 11°S, the method described in 3.5 should be used.

For a path with terminals in different regions, the method used should be that which applies at the mid-point of the great-circle path.

Within the whole of Regions 1 and 3 the radiation in a given direction is expressed in dB with reference to a c.m.f. of 300 V or an e.m.r.p. of 1 kW. The powers are expressed in dB relative to 1 kW.

3.2 *Symbols*

b = Solar-activity factor given in 3.3.2.6;

d = Great-circle ground distance between transmitter and receiver (km);

F_o = Annual median field strength at the reference time in dB relative to 1 μV/m;

F_c = Field strength in dB relative to 1 μV/m deduced from the Cairo North/South curve (Figure 22);

F_t = Annual median field strength in dB relative to 1 μV/m at time t;

f = Frequency (kHz);

f' = A frequency (kHz) defined in equation (6);

G = Antenna gain (dB) referred to a short vertical antenna in the direction of propagation;

G_o = Sea gain for a path terminal on the coast (dB);

G_S = Sea gain for a path terminal near the sea (dB);

h = Transmitting antenna height (in wavelengths);

h_r = Height of reflecting layer (km);

I = Magnetic dip angle (degrees);

k = Basic loss factor due to absorption in the ionosphere;

k_R = Loss factor incorporating effects of ionospheric absorption, focusing and terminal losses, and losses between hops on multi-hop paths;

L_p = Excess polarizing coupling loss (dB);

L_t = Hourly loss factor (dB);

P = Radiated power (dB relative to 1 kW);

p = Slant propagation distance (km);

Q = A sea gain parameter given in 3.3.2.3;

R = Twelve-month smoothed Zurich sunspot number (Wolf number);

s = Distance of path terminal from sea (km) measured along great-circle path;

t = Time relative to sunset or sunrise (hours);

V = Transmitter cymomotive force (dB relative to a reference cymomotive force of 300 V);

θ = Direction of propagation relative to magnetic East-West (degrees);

λ = Wavelength;

Φ = A geomagnetic latitude parameter;

Φ_T = Geomagnetic latitude of transmitter
Φ_R = Geomagnetic latitude of receiver

} in degrees, positive in Northern hemisphere, negative in Southern hemisphere.

3.3 *Sky-Wave Field-Strength Prediction Method for the Frequency Range 150 kHz to 1 605 kHz for Region 1*

3.3.1 *Introduction*

This method of prediction gives the night-time sky-wave field strength produced for a given power radiated from one or more vertical antennae, when measured by a loop antenna at ground level aligned in a vertical plane along the great-circle path to the transmitter. It applies for paths of lengths up to 12,000 km.

3.3.2 *Annual Median Night-Time Field Strength*

The predicted sky-wave field strength is given by:

$$F_o = V + G_S - L_p + (105{\cdot}3 - 20\log_{10}p) - 10^{-3}k_R p \qquad (1)$$

where F_o = annual median of half-hourly median field strengths (dB relative to 1 μV/m) at the reference time defined in 3.3.2.1.

Figure 10 shows the value of $(105{\cdot}3 - 20 \log_{10}p)$ as a function of the ground distance.

3.3.2.1 *Reference Time*

The reference time is taken as six hours after the time at which the sun sets at a point S on the surface of the earth. For paths shorter than 2,000 km, S is the mid-point of the path. On longer paths, S is 750 km from the terminal where the sun sets last, measured along the great-circle path.

3.3.2.2 *Cymomotive Force*

The cymomotive force V in the azimuth and the elevation of the direction of propagation is calculated by the formula:

$$V = P' + G \qquad (2)$$

where P', expressed in dB (kW), is the power supplied by the transmitter to the antenna transmission line, while neglecting various losses in the antenna and its transmission line,

and where G is the gain, in dB, of the antenna in the direction of propagation, referred to a short vertical antenna.

For a simple vertical antenna, without losses, this gain is given, in dB, by Figure 11.

3.3.2.3 *Sea Gain*

G_S is the additional signal gain when one or both terminals is situated near the sea. G_S for a single terminal is given by:

$$G_S = G_o - 10^{-3}\,\frac{Qsf}{G_o}\ \text{(dB)} \tag{3}$$

where G_o is the gain when the terminal is on the coast, f is the frequency in kHz and s is the distance in km of the terminal from the sea, measured along the great-circle path. $Q = 0{\cdot}44$ in the LF band and $1{\cdot}75$ in the MF band. G_o is given in Figure 12 as a function of d for the above-mentioned bands. In the MF band, $G_o = 10$ dB when $d > 6{,}500$ km. Equation (3) applies for values of s such that $G_S > 0$. For larger values of s, $G_S = 0$. If both terminals are near the sea, G_S is the sum of the values of G_S for the individual terminals.

3.3.2.4 *Excess Polarization Coupling Loss*

L_p is the excess polarization coupling loss. In the LF band, $L_p = 0$. In the MF band, at low latitudes, for $|I| \leqslant 45°$, the following formula applies for each terminal:

$$L_p = 180(36 + \theta^2 + I^2)^{-1/2} - 2\ \text{(dB)} \tag{4}$$

(See Figure 13)

where I is the magnetic dip in degrees at the terminal and θ is the path azimuth measured in degrees from the magnetic E-W direction, such that $|\theta| \leqslant 90°$. For $|I| > 45°$, $L_p = 0$. L_p should be evaluated separately for the two terminals, because of the different θ and I that may apply, and the two L_p values added. The most accurate available values of magnetic dip and declination should be used in determining θ and I (see Figures 14 and 15).

3.3.2.5 *Slant Propagation Distance*

For paths longer than 1,000 km, p is approximately equal to the ground distance d (km). For shorter paths,

$$p = (d^2 + 4h_r^2)^{1/2} \tag{5}$$

where $h_r = 100$ km if $f \leqslant f'$ and 220 km if $f > f'$, where f' (in kHz) is given by

$$f' = 350 + \left[(2{\cdot}8d)^3 + 300^3\right]^{1/3} \tag{6}$$

(See Figure 16)

Equation (5) may be used for paths of any length with negligible error.

3.3.2.6 *Loss Factor due to Absorption in the Ionosphere*

The loss factor due to absorption in the ionosphere k_R is given by

$$k_R = k + 10^{-2}bR \tag{7}$$

where

$$k = 1{\cdot}9f^{0{\cdot}15} + 0{\cdot}24f^{0{\cdot}4}\ (\tan^2 \Phi - \tan^2 37°) \tag{8}$$

(See Figure 17)

In the LF band, $b = 0$. In the MF band, $b = 1$ for Europe and 0 elsewhere.

For paths shorter than 3,000 km:

$$\Phi = 0{\cdot}5(\Phi_T + \Phi_R) \tag{9}$$

where Φ_T and Φ_R are the geomagnetic latitudes (see Figure 18) at the transmitter and receiver respectively, determined by assuming an earth-centred dipole field model with northern pole having the geographical coordinates, 78.5°N, 69°W. Φ_T and Φ_R are taken as positive in the northern hemisphere and negative in the southern hemisphere. Paths longer than 3,000 km are divided into two equal sections which are considered separately. The value of Φ for each half-path is derived by taking the average of the geomagnetic latitudes at one terminal and at the mid-point of the whole path, the geomagnetic latitude at the mid-point of the whole path being assumed to be the average of Φ_T and Φ_R. As a consequence:

$$\Phi = 0{\cdot}25(3\Phi_T + \Phi_R) \tag{10}$$

for the first half of the path and

$$\Phi = 0{\cdot}25(\Phi_T + 3\Phi_R) \tag{11}$$

for the second half.

The values of k calculated from equation (8) for the two half-paths are then averaged and used in equation (7).

If $|\Phi| > 60°$, equation (8) is evaluated for $\Phi = 60°$.

3.3.4 *Nocturnal Variation of Annual Median Field Strength*

3.3.4.1 Nocturnal variation of annual median field strength is given by:

$$F_t = F_o - L_t$$

Figure 19 shows the average of the annual median variations during the night, derived from Figure 8 of C.C.I.R. Report 264 (1974) and Figure 5 of C.C.I.R. Report 431 (1974) respectively; the time t is the time in hours relative to the sunrise or sunset reference times as appropriate. These are taken at the ground at the mid-path position for $d < 2{,}000$ km and, for longer paths, at 750 km from the terminal where the sun sets last or rises first.

3.3.4.2 The calculation of the interfering signal strength of a station is based on the method indicated in 3.3.4.1, for the lowest hourly loss factor during the common operating schedule of the wanted and interfering transmitters. The results may be extrapolated where necessary.

3.3.4.3 For daytime operation administrations by mutual agreement may use Figure 20 (for temperate zones) and Figure 21 (for the equatorial zone) as the basis of calculation; the sky-wave field strength, calculated at the reference time at the interfering station, is then reduced by 20 dB, or by 40 dB in the case of the dotted curve of Figure 21. Figures 20 and 21 refer to local mean time at the station site. This local mean time (LMT) is equal to Greenwich Mean Time plus or minus the number of hours and minutes corresponding to the longitude of the station.

3.3.5 *Day-to-Day and Short-Period Variations of Field Strength*

The field strength exceeded for 10% of the total time on a limited series of nights, during short periods centred on a specific hour is 8 dB greater in the LF band and 10 dB greater in the MF band than the values of F_o and F_t given above.

3.4 *Sky-Wave Field-Strength Prediction Method for the Frequency Range 525 kHz to 1 605 kHz for the Asian part of Region 3, North of 11° S*

3.4.1 *Propagation Curve*

In the Asian area of the Region 3 situated to the North of 11°S the Cairo North-South propagation curve referred to the annual midnight median value should be used for sky-wave predictions. This curve appears in Figure 22. This curve refers to an e.m.r.p. of 1 kW or a c.m.f. of 300 V. The field F_o, in dB, is given by

$$F_o = F_c - L_p + V \tag{12}$$

3.4.2 *Excess Polarization Coupling Loss (L_p)*

L_p is the excess polarization coupling loss. In the MF band at low latitudes for $|I| \leqslant 45°$ the following formula applies for each terminal:

$$L_p = 180(36 + \theta^2 + I^2)^{-1/2} - 2 \text{ (dB)} \tag{13}$$

(See Figure 13)

where I is the magnetic dip in degrees at the terminal and θ is the path azimuth measured in degrees from the magnetic E-W direction, such that $|\theta| \leqslant 90°$. For $|I| > 45°$, $L_p = 0$. L_p should be evaluated separately for the two terminals, because of the different θ and I that may apply, and the two L_p values added. The most accurate available values of magnetic dip and declination should be used in determining θ and I (see Figures 14 and 15).

3.4.3 *Nocturnal Variation of Annual Median Field Strength*

3.4.3.1 The nocturnal variation of the annual median field strength is given by

$$F_t = F_o - L_t \tag{14}$$

In Figure 19, time t is the time in hours relative to the sunrise or sunset reference times as appropriate. These are taken at the ground at the mid-path position for d <2,000 km and at 750 km from the terminal where the sun sets last or rises first for longer paths.

3.4.3.2 The calculation of the interfering signal strength of a station is based on the method indicated in 3.4.3.1 for the lowest hourly loss factor during the common operating schedule of the wanted and interfering transmitters. The results may be extrapolated where necessary.

3.4.3.3 For daytime operation administrations by mutual agreement may use Figure 20 (for temperate zones) and Figure 21 (for the equatorial zone) as the basis of calculation; the sky-wave field strength, calculated at the reference time at the interfering station, is then reduced by 20 dB, or by 40 dB in the case of the dotted curve of Figure 21. Figures 20 and 21 refer to local mean time at the station site. This local mean time (LMT) is equal to Greenwich Mean Time plus or minus the number of hours and minutes corresponding to the longitude of the station.

3.4.4 *Day-to-Day and Short-Period Variations of Field Strength*

The field strength exceeded for 10% of the total time on a limited series of nights, during short periods centred on a specific hour is 10 dB greater in the MF band than the values of F_o and F_t given above.

3.5 *Sky-Wave Field-Strength Prediction Method for the Frequency Range 525 kHz to 1 605 kHz for the part of Region 3, South of 11° S*

3.5.1 *Symbols*

See 3.2.

3.5.2 *Introduction*

See 3.3.1 with regard to the MF band.

3.5.3 *Annual Median Night-Time Field Strength*

The predicted sky-wave field strength is given by

$$F_o = V + G_S - L_p + 108 - 20\log_{10}p - 0{\cdot}8 \times 10^{-3}k_R p \qquad (15)$$

where F_o = annual median of half-hourly median field strengths (dB relative to 1 μV/m) at the reference time defined in 3.3.2.1.

3.5.3.1 *Reference Time*

See 3.3.2.1.

3.5.3.2 *Cymomotive Force*

See 3.3.2.2.

3.5.3.3 *Sea Gain*

See 3.3.2.3 with regard to the MF band.

3.5.3.4 *Excess Polarization Coupling Loss*

See 3.3.2.4 with regard to the MF band.

3.5.3.5 *Slant Propagation Distance*

See 3.3.2.5.

3.5.3.6 *Loss Factor due to Absorption in the Ionosphere*

The loss factor due to absorption in the ionosphere k_R is given by:

$$k_R = k + 10^{-2}bR \qquad (16)$$

where

$$k = 1{\cdot}9f^{0{\cdot}15} + 0{\cdot}24f^{0{\cdot}4}(\tan^2\Phi - \tan^2 37°) \qquad (17)$$

(See Figure 17)

In the MF band, $b = 1$.

For paths shorter than 3,000 km

$$\Phi = 0{\cdot}5(\Phi_T + \Phi_R) \qquad (18)$$

where Φ_T and Φ_R are the geomagnetic latitudes (see Figure 18) at the transmitter and receiver respectively, determined by assuming an earth-centred dipole field model with northern pole having the geographical coordinates, 78.5°N, 69°W. Φ_T and Φ_R are taken as negative in the southern hemisphere. Paths longer than 3,000 km are divided into two equal sections which are considered separately. The value Φ for each half-path is derived by taking the average of the geomagnetic latitudes at one terminal and at the mid-point of the whole path, the geomagnetic latitude at the mid-point of the whole path being assumed to be the average of Φ_T and Φ_R. As a consequence:

$$\Phi = 0{\cdot}25(3\Phi_T + \Phi_R) \tag{19}$$

for the first half of the path and

$$\Phi = 0{\cdot}25(\Phi_T + 3\Phi_R) \tag{20}$$

for the second half. The values of k calculated from equation (17) for the two half-paths are then averaged and used in equation (16).

If $|\Phi| > 60°$, equation (17) is evaluated for $\Phi = 60°$.

3.5.4 *Nocturnal Variation of Annual Median Field Strength*

See 3.3.4.

3.5.5 *Day-to-Day and Short-Period Variations of Field Strength*

The field strength exceeded for 10% of the total time on a limited series of nights, during short periods centred on a specific hour is 7 dB greater in the MF band than the values of F_o and F_t given in 3.3.4.

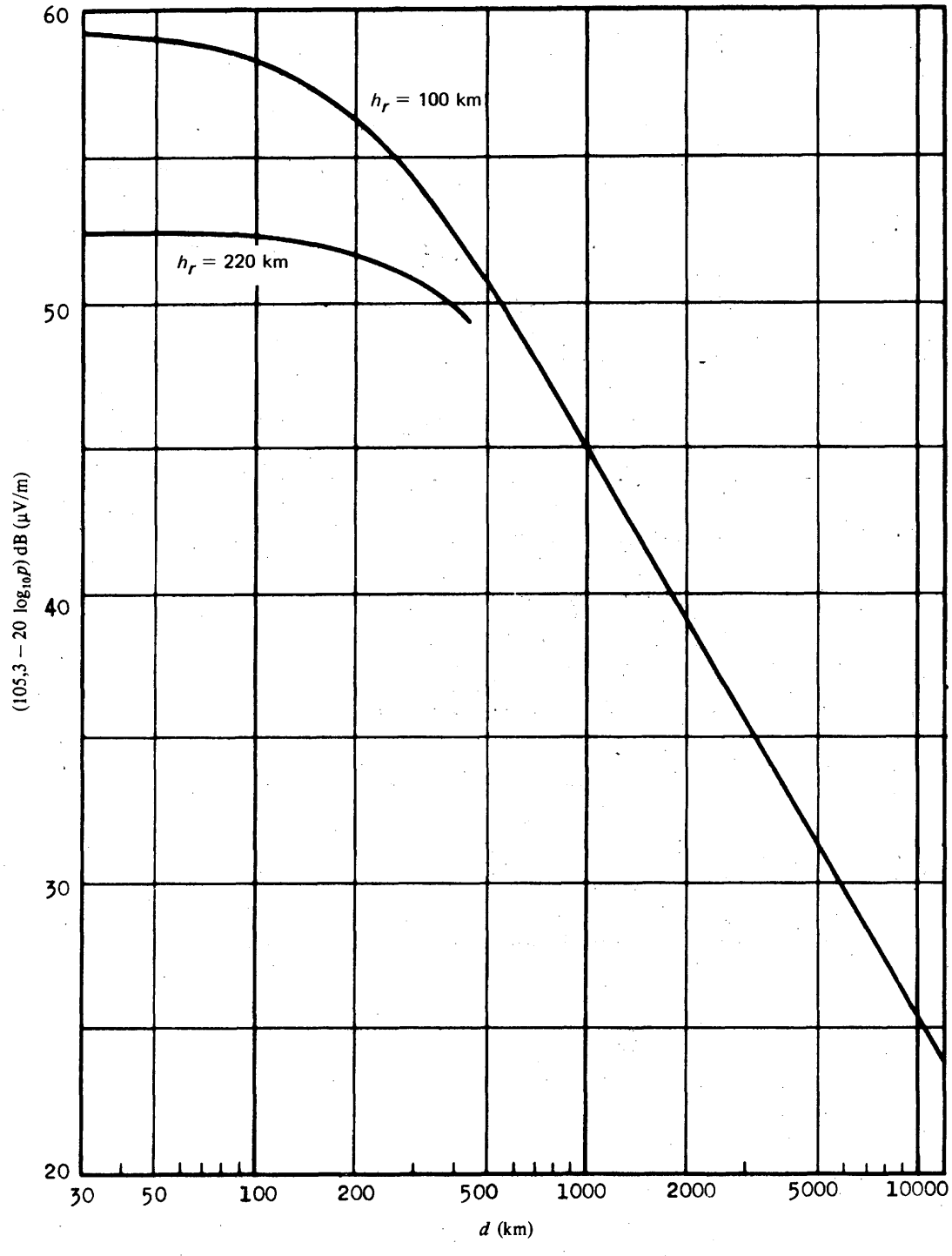


FIGURE 10

Champ de référence

Valeur de $(105{,}3 - 20\log_{10}p)$ en fonction de d où $p = (d^2 + 4h_r^2)^{1/2}$

FIGURE 10

Basic Field Strength

Value of $(105{\cdot}3 - 20\log_{10}p)$ as a function of d where $p = (d^2 + 4h_r^2)^{1/2}$

FIGURA 10

Intensidad de campo de referencia

Valor de $(105{,}3 - 20\log_{10}p)$ en función de d siendo $p = (d^2 + 4h_r^2)^{1/2}$

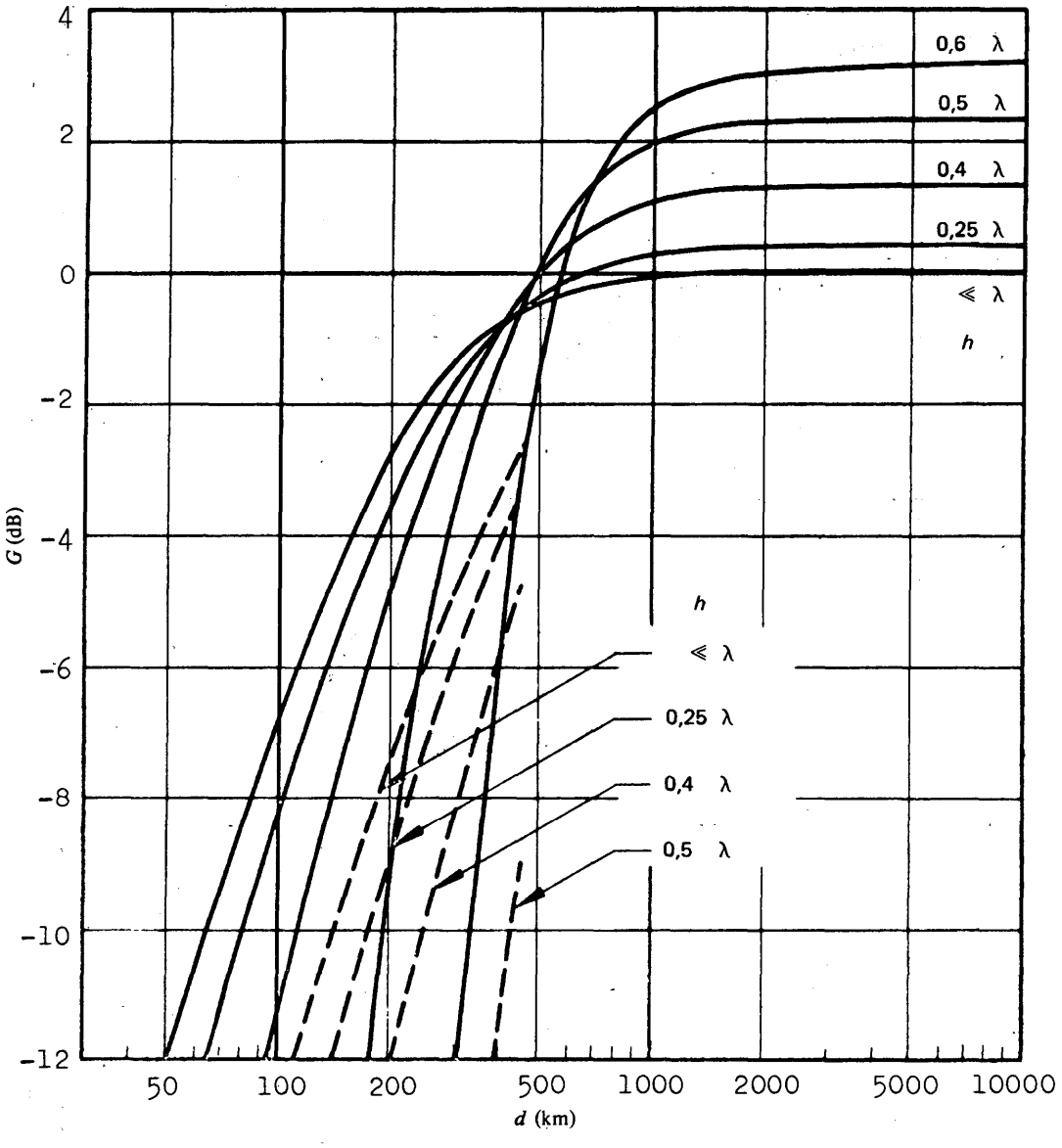


FIGURE 11

Gain de l'antenne d'émission dans le cas d'une antenne verticale simple

h = hauteur de l'antenne

——— réflexion sur la couche E (h_r = 100 km)

— — — — réflexion sur la couche F (h_r = 220 km)

FIGURE 11

Transmitting Antenna Gain for a simple Vertical Antenna

h = Antenna height

——— E layer reflection (h_r = 100 km)

— — — — F layer reflection (h_r = 220 km)

FIGURA 11

Ganancia de la antena transmisora en el caso de una antena vertical simple

h = altura de la antena

——— reflexión en la capa E (h_r = 100 km)

— — — — reflexión en la capa F (h_r = 220 km)

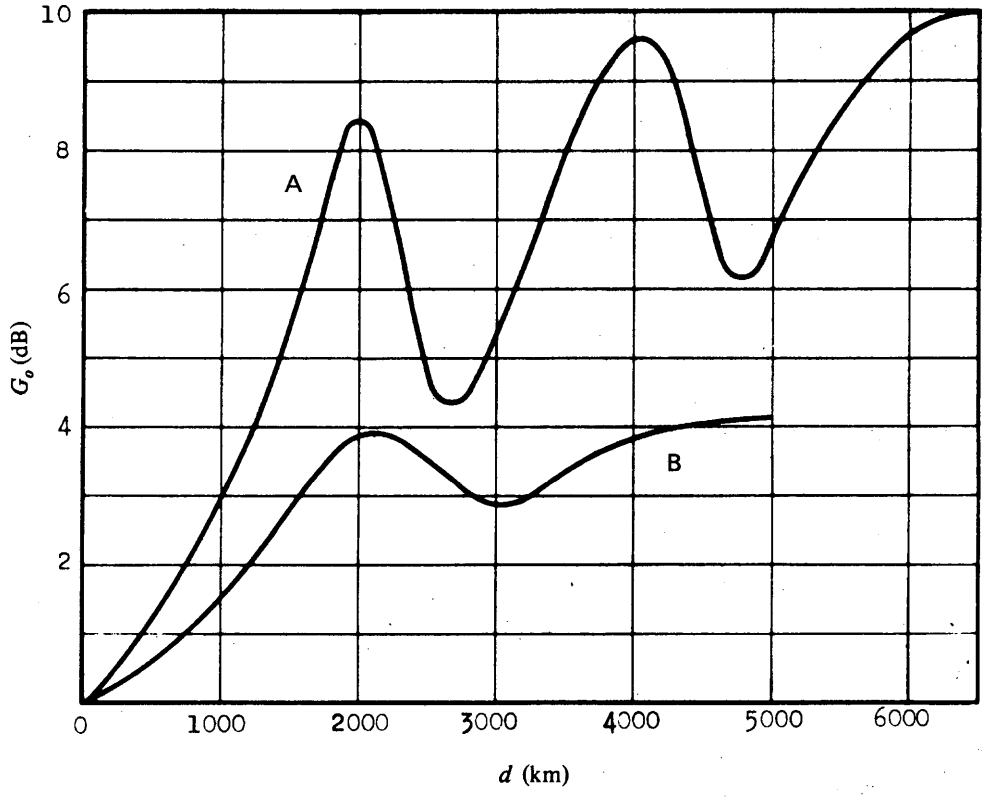


FIGURE 12

Gain dû à la proximité de la mer pour une seule extrémité située sur la côte

A = Ondes hectométriques
B = Ondes kilométriques

FIGURE 12

Sea Gain for a single Terminal on the Coast

A = MF
B = LF

FIGURA 12

Ganancia debida al mar para un solo terminal en la costa

A = Ondas hectométricas
B = Ondas kilométricas

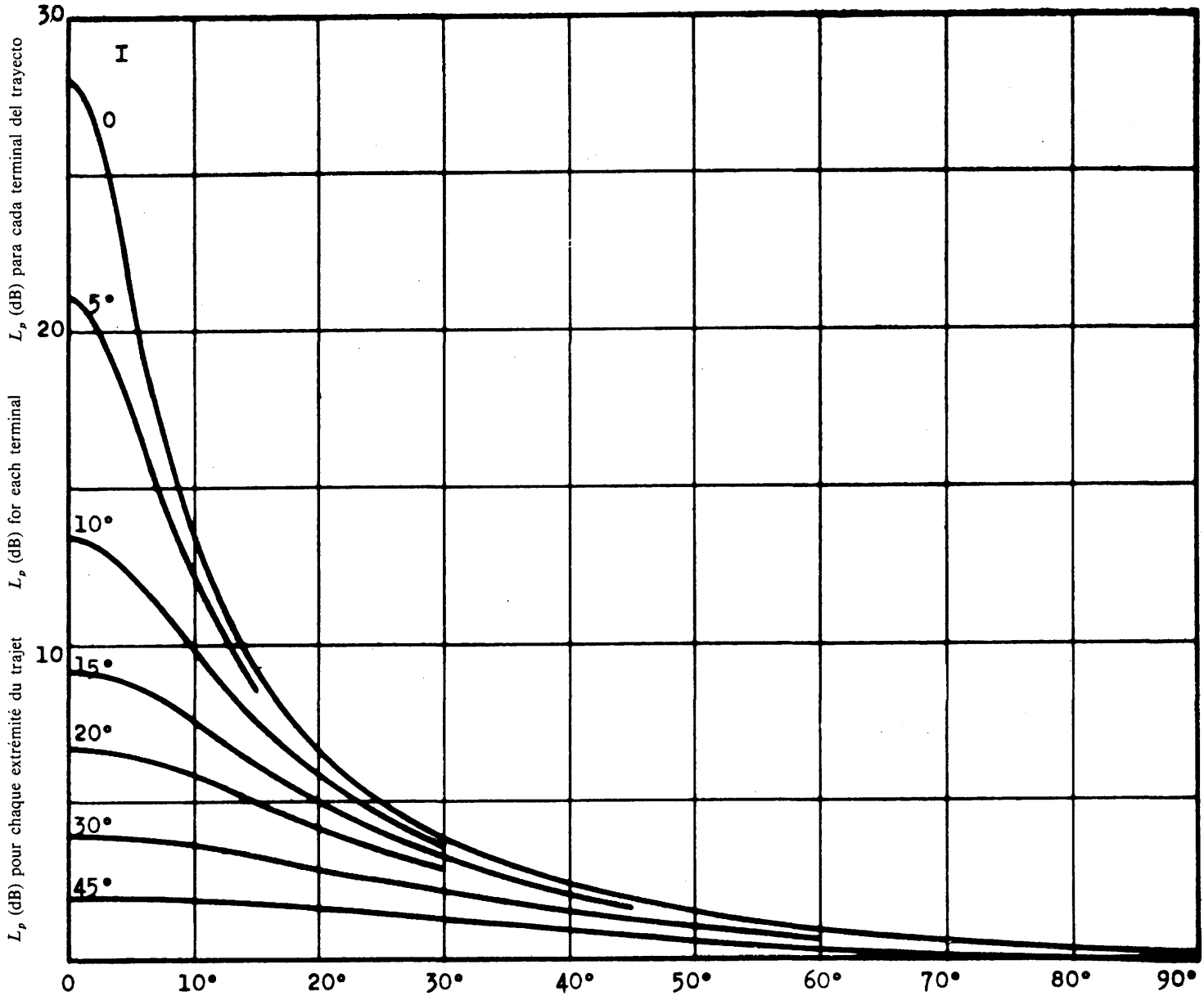


FIGURE 13

Affaiblissement supplémentaire dû au couplage de polarisation L_p

FIGURE 13

Excess Polarization Coupling Loss L_p

FIGURA 13

Pérdida suplementaria debida al acoplamiento de polarización, L_p

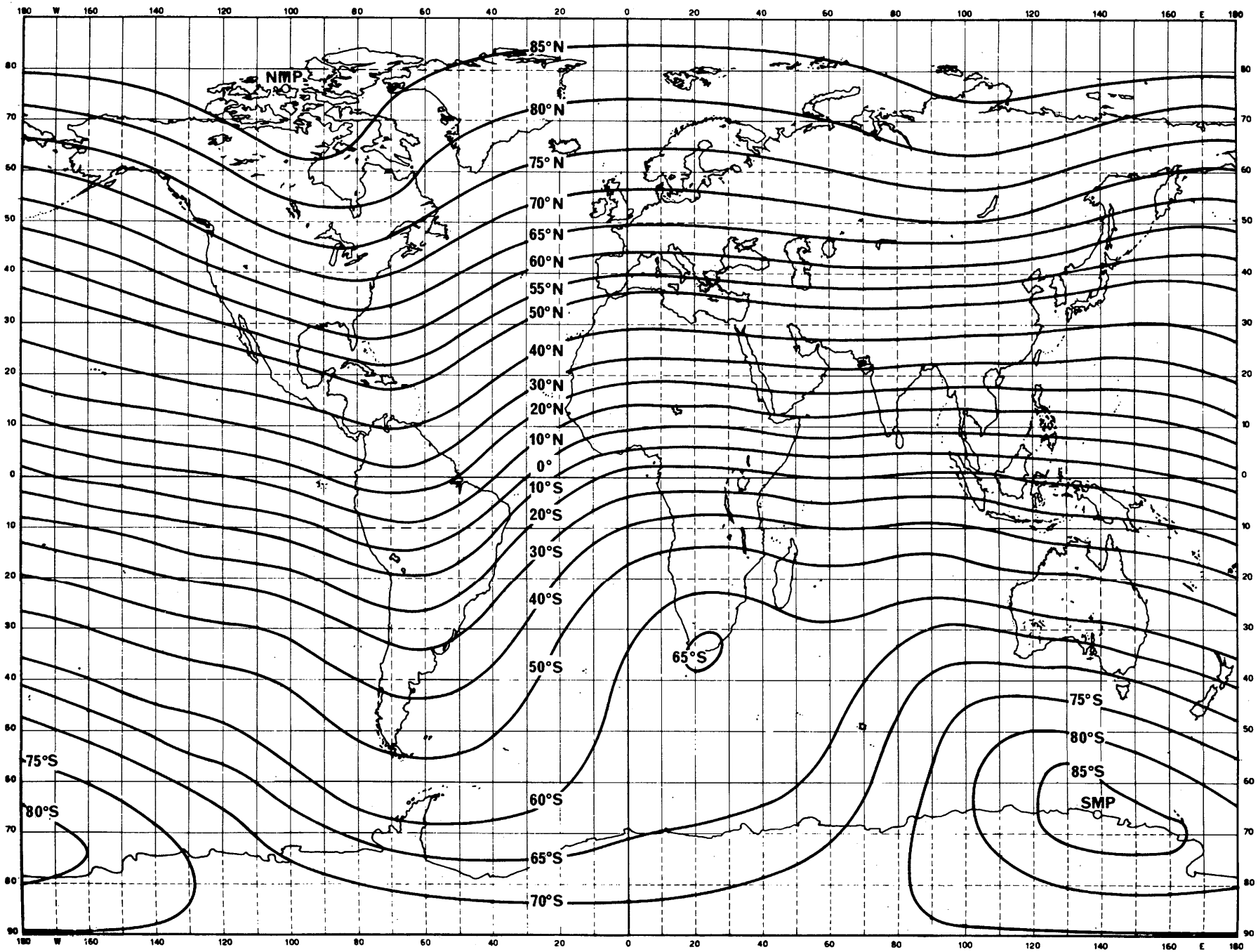


FIGURE 14 – FIGURA 14

Carte de l'inclinaison magnétique – Map of magnetic Dip – Mapa de la inclinación magnética

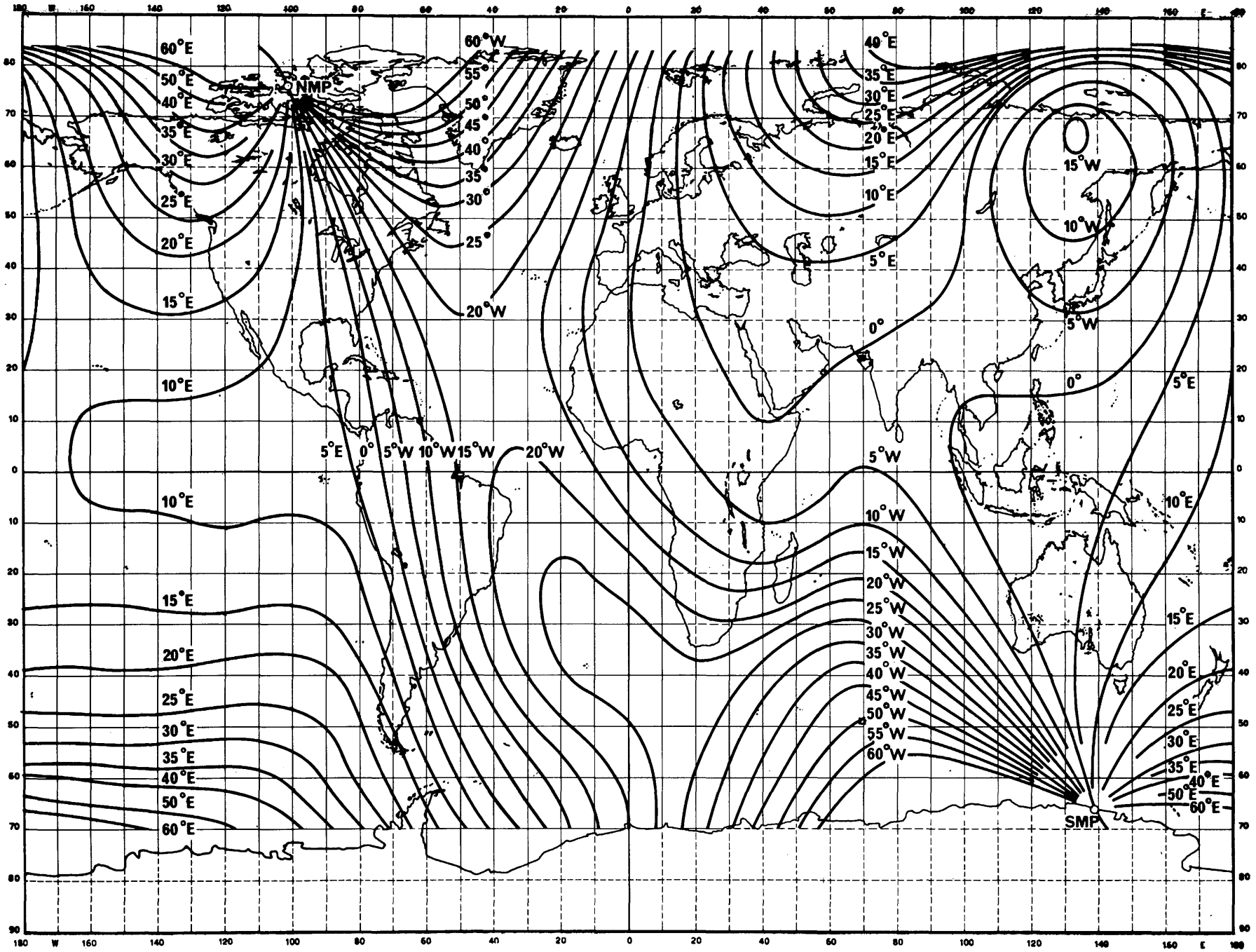


FIGURE 15 – FIGURA 15

Carte de déclinaison magnétique – Map of magnetic Declination – Mapa de la declinación magnética

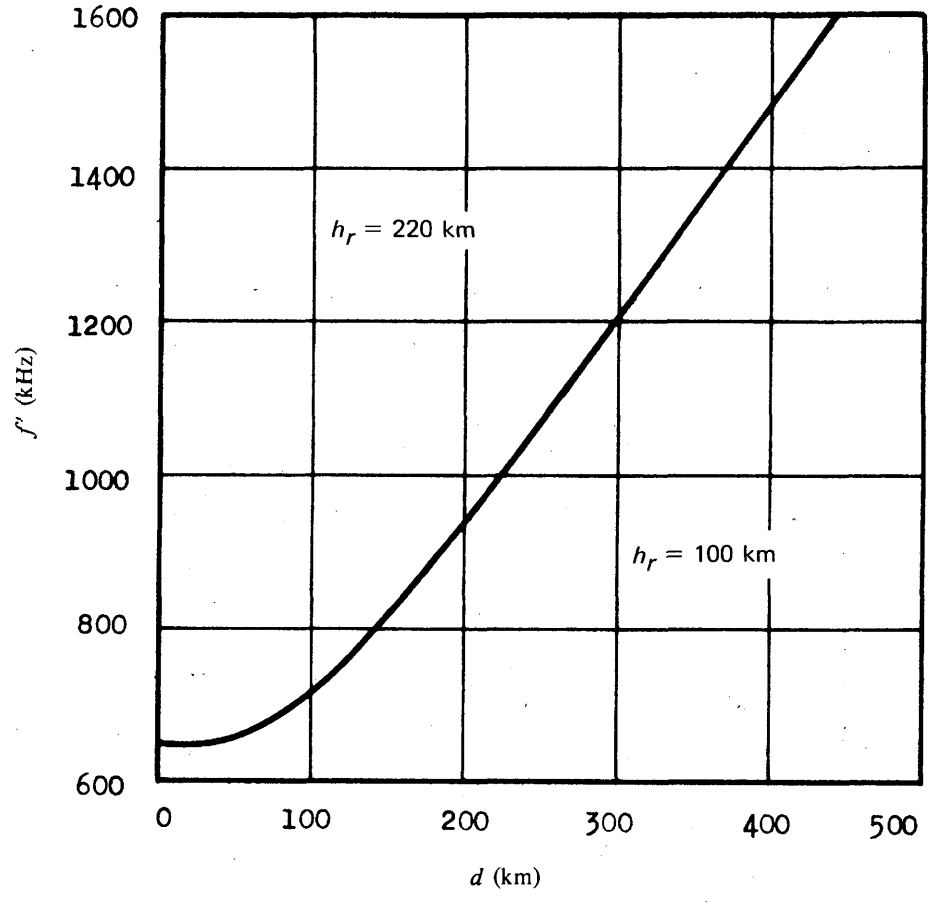


FIGURE 16

Fréquence f' définie par la formule (6)

FIGURE 16

Frequency f' defined in Equation (6)

FIGURA 16

Frecuencia f' definida por la fórmula (6)

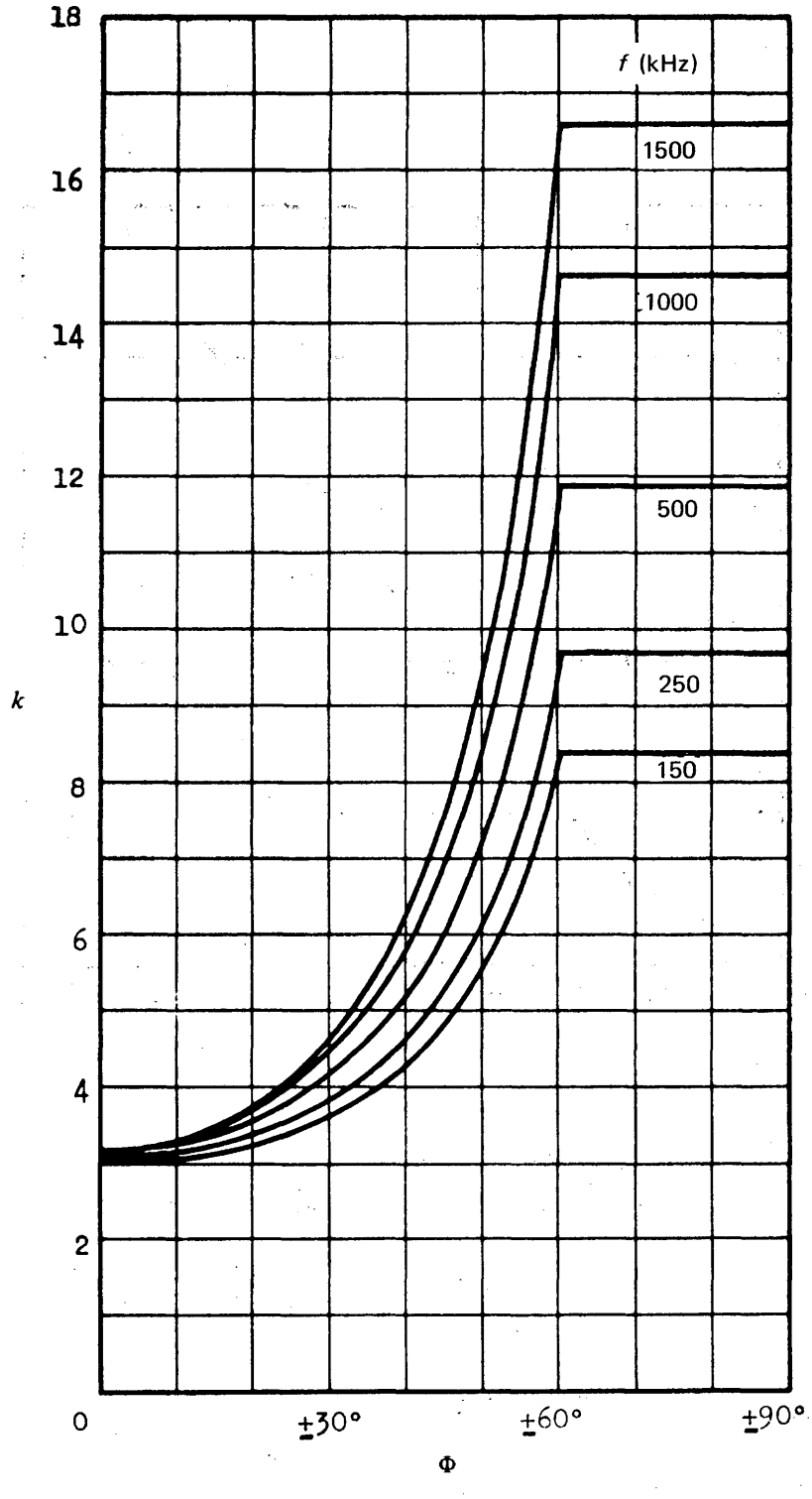


FIGURE 17

Coefficient de pertes de référence dues à l'absorption ionosphérique défini par la formule (8)

FIGURE 17

Basic Loss Factor due to Ionospheric Absorption defined in Equation (8)

FIGURA 17

Factor de pérdida debida a la absorción ionosférica definido por la fórmula (8)

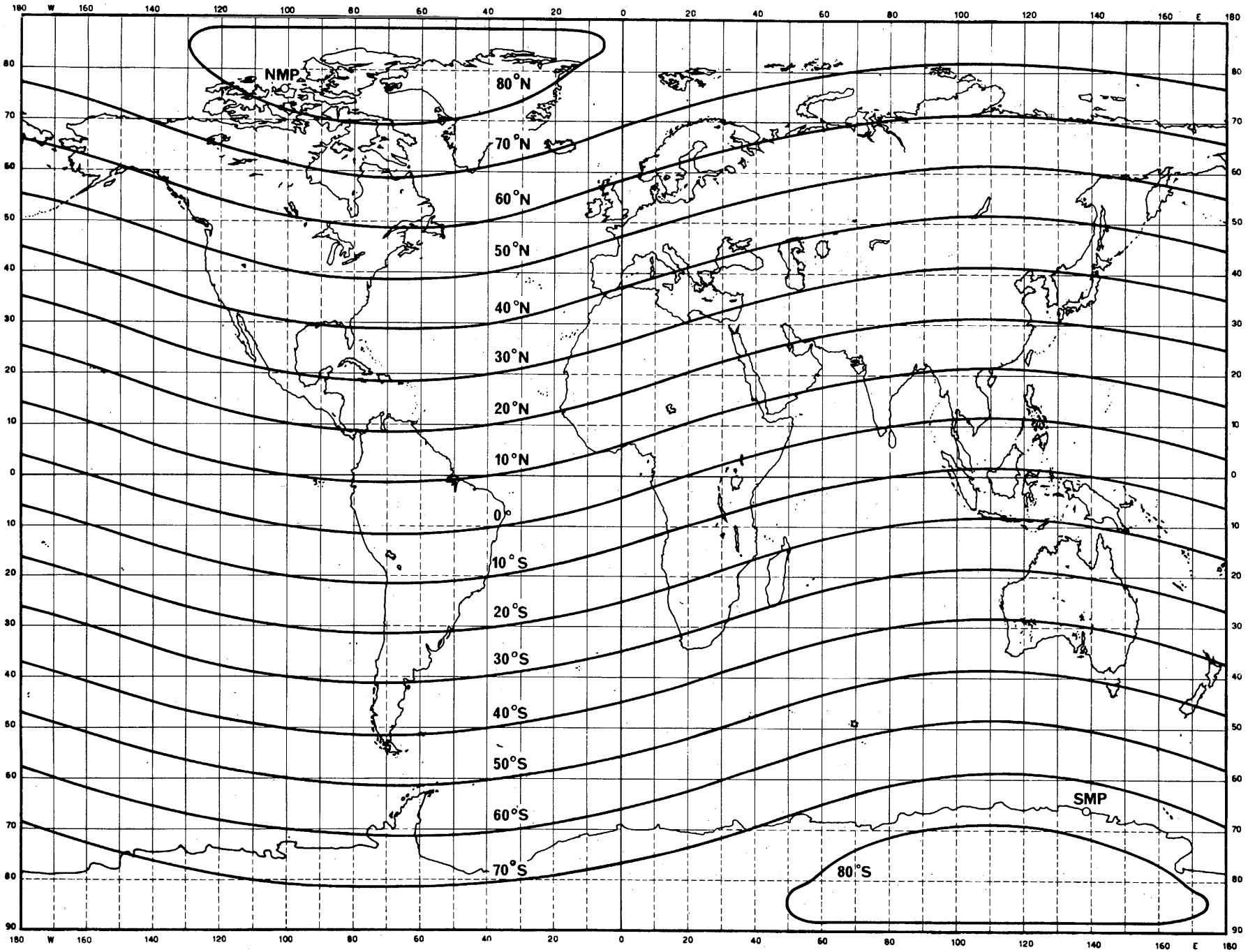


FIGURE 18 — FIGURA 18

Carte des latitudes géomagnétiques — Geomagnetic Latitude Map — Mapa de latitudes geomagnéticas

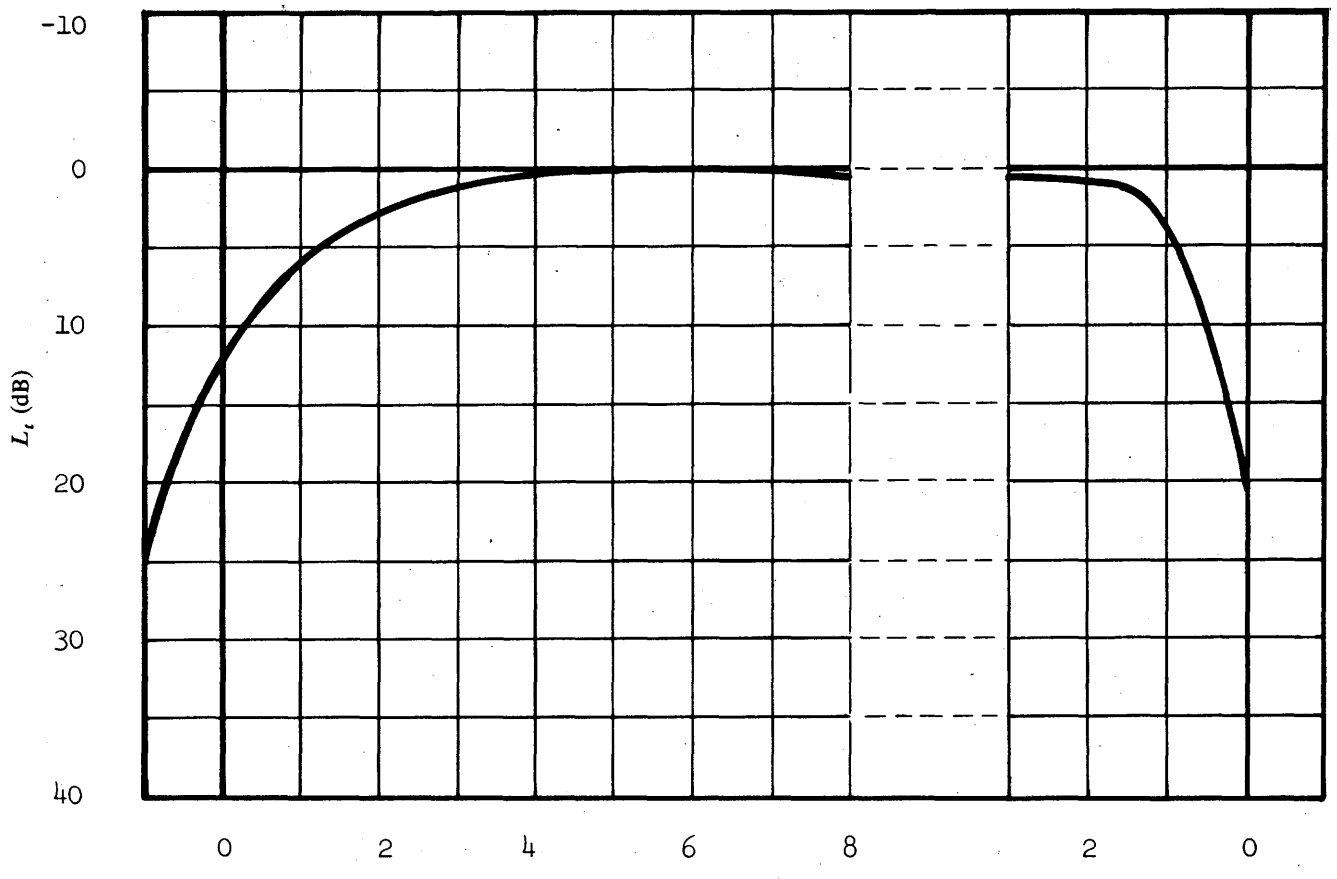
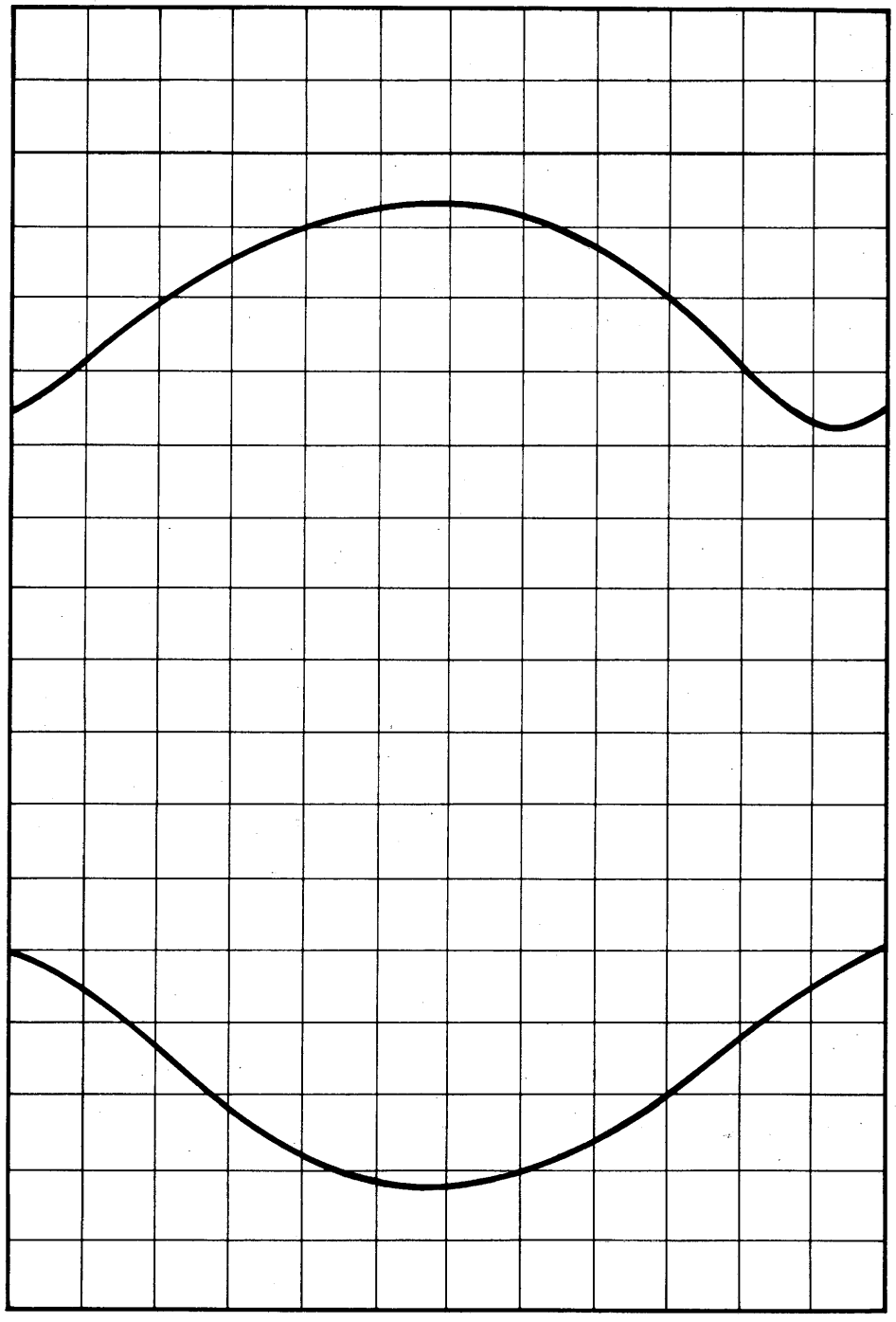


FIGURE 19 — FIGURA 19

Coefficient d'affaiblissement horaire (L_t)
(entre le coucher et le lever du soleil)
Hourly Loss Factor (L_t)
(during the night)
Factor de pérdida horaria (L_t)
(entre el ocaso y el orto)

Hémisphère Nord
Northern Hemisphere
Hemisferio norte

Jan.	Fév.	Mars	Avr.	Mai	Juin	Juil.	Août	Sept.	Oct.	Nov.	Déc.
Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
En.	Feb.	Mar.	Abr.	Mayo	Junio	Jul.	Ag.	Sept.	Oct.	Nov.	Dic.



Temps moyen local — *Local mean time* — Hora media local

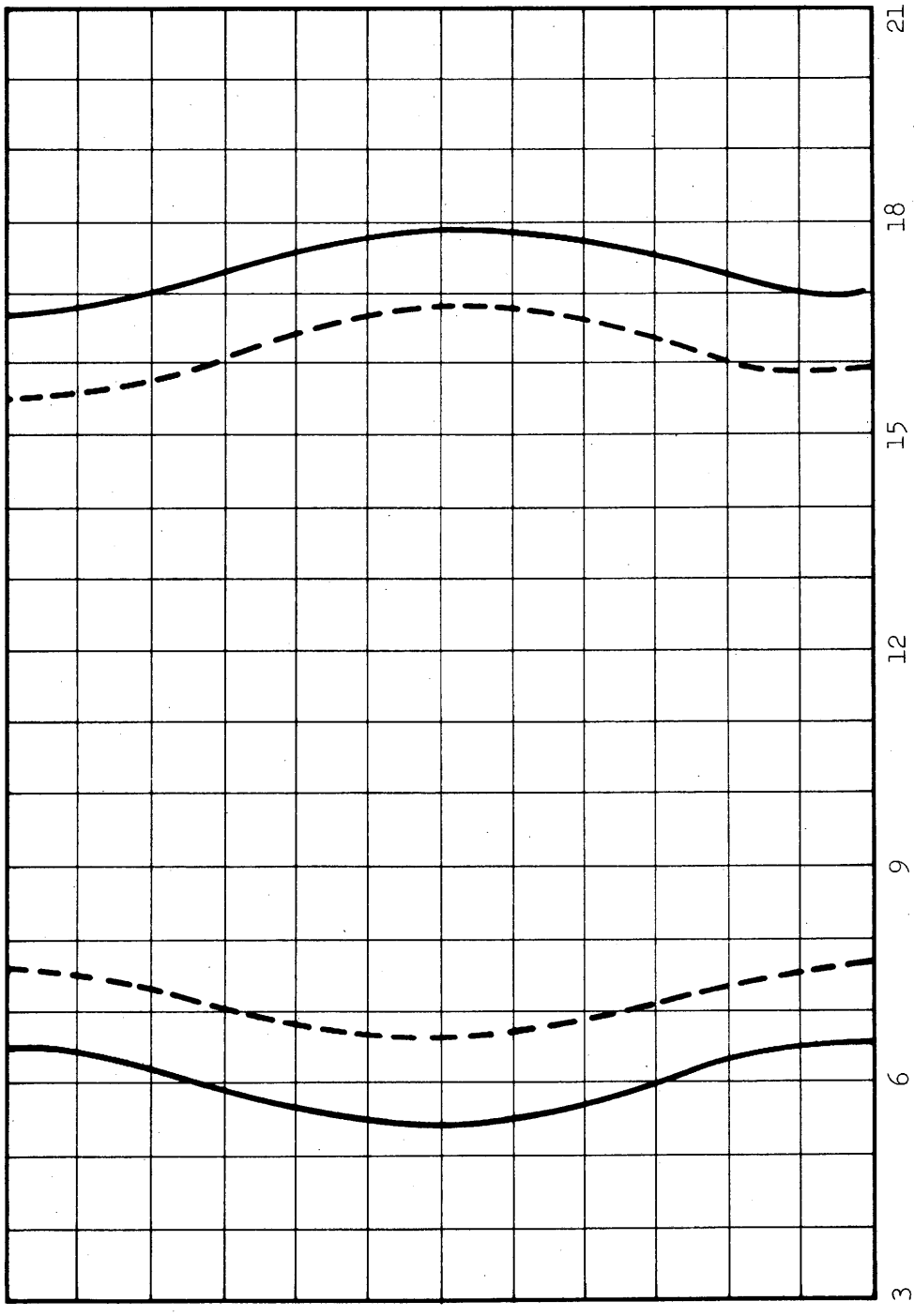
Juil.	Août	Sept.	Oct.	Nov.	Déc.	Jan.	Fév.	Mars	Avr.	Mai	Juin
Jul.	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*
Jul.	Ag.	Sept.	Oct.	Nov.	Dic.	En.	Feb.	Mar.	Abr.	Mayo	Junio

Hémisphère Sud
Southern Hemisphere
Hemisferio sur

FIGURE 20 — FIGURA 20
Limites de fonctionnement de jour aux latitudes tempérées (30° – 60°)
Limits of Daytime Operation at Temperate Latitudes (30° – 60°)
Límites de funcionamiento diurno en latitudes templadas (30° – 60°)

Hémisphère Nord
Northern Hemisphere
Hemisferio norte

Jan.	Fév.	Mars	Avr.	Mai	Juin	Juil.	Août	Sept.	Oct.	Nov.	Déc.
Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
En.	Feb.	Mar.	Abr.	Mayo	Junio	Jul.	Ag.	Sept.	Oct.	Nov.	Dic.



Juil.	Août	Sept.	Oct.	Nov.	Déc.	Jan.	Fév.	Mars	Avr.	Mai	Juin
Jul.	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*
Jul.	Ag.	Sept.	Oct.	Nov.	Dic.	En.	Feb.	Mar.	Abr.	Mayo	Junio

Hémisphère Sud
Southern Hemisphere
Hemisferio sur

Temps moyen local – *Local mean time* – Hora media local

FIGURE 21 – FIGURA 21

Limites de fonctionnement de jour aux latitudes équatoriales (0° – 30°)
Limits of Daytime Operation at the Equatorial Latitudes (0° – 30°)
Límites de funcionamiento diurno en latitudes ecuatoriales (0° – 30°)

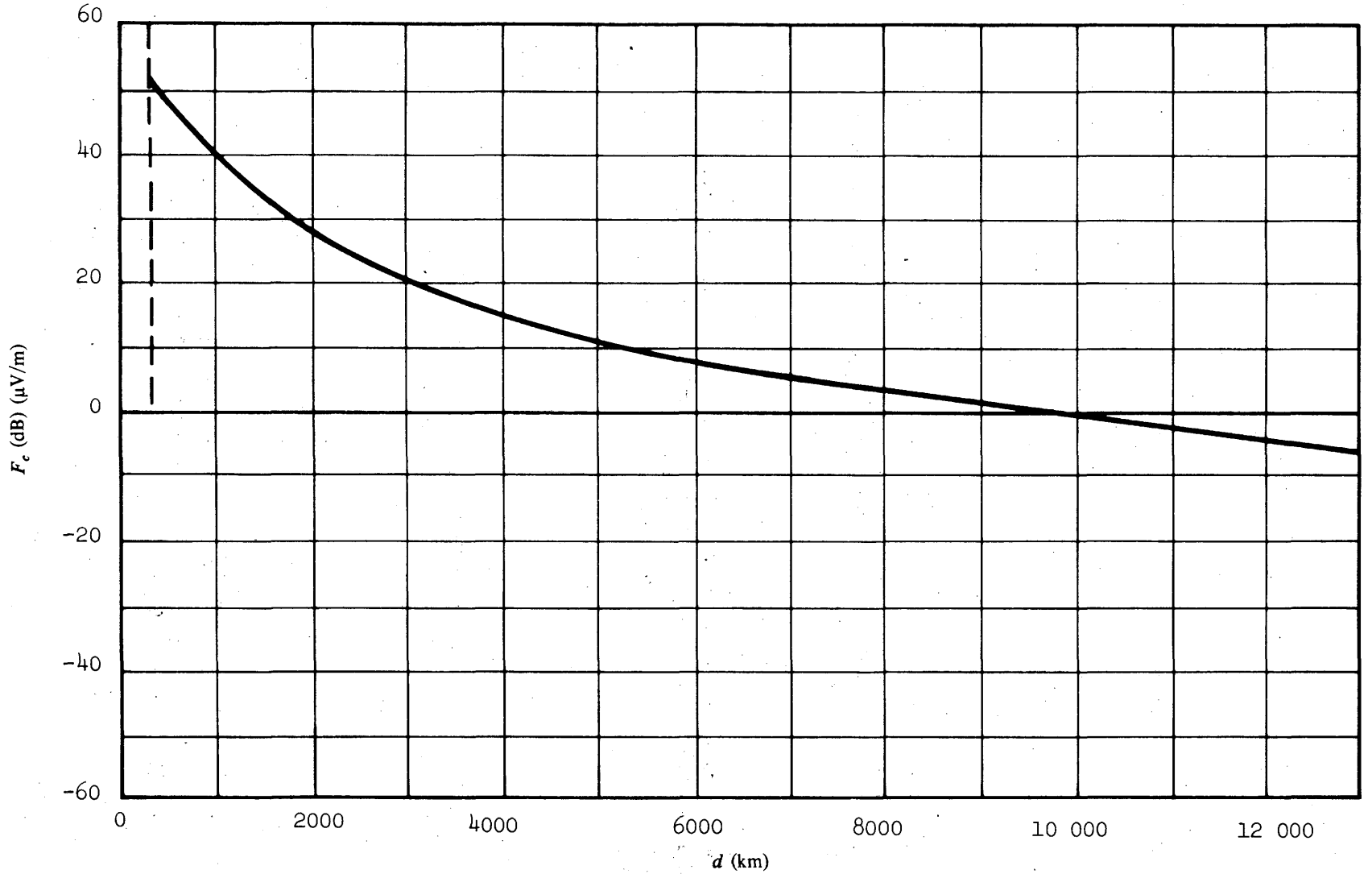


FIGURE 22

Champ de l'onde ionosphérique — valeur médiane annuelle à minuit tirée de la courbe Nord-Sud du Caire

FIGURE 22

Annual Midnight Median Value of Sky-Wave Field Strength of Cairo North/South Curve

FIGURA 22

Intensidad de campo de la onda ionosférica — valor mediano anual a medianoche obtenido de la curva Norte-Sur de El Cairo

CHAPTER 4

Broadcasting Standards

4.1 *Class of Emission*

The Plan is established for a system with double sideband amplitude modulation with full carrier (A3).

4.2 *Power*

The power of a transmitter is the carrier power in the absence of modulation.

4.3 *Radiated Power*

The radiated power is assumed to be the product of the nominal power of the transmitter and the gain of the antenna (relative to a short vertical antenna) without taking into account any losses*. It is expressed either by the cymomotive force (c.m.f. in V or in dB relative to 300 V) or by the effective monopole radiated power (e.m.r.p. in kW or in dB relative to 1 kW).

4.4 *Protection Ratios*

In applying the Agreement, the values of the co-channel and adjacent channel protection ratios given below should be used unless otherwise agreed between the administrations concerned.

In the case of fluctuating wanted or unwanted signals, the values of the protection ratio apply for at least 50% of the nights of the year at midnight.

4.4.1 *Co-Channel Protection Ratios*

30 dB for a stable wanted signal interfered with by a stable or fluctuating signal,

27 dB for a fluctuating wanted signal interfered with by a stable or fluctuating signal,

8 dB for a wanted signal interfered with by a signal from a transmitter in the same synchronized network.

4.4.2 *Adjacent Channel Protection Ratio*

4.4.2.1 For a stable wanted signal the adjacent channel protection ratio in different cases is given below:

Case A: 9 dB when a limited degree of modulation compression is applied at the transmitter input, such as in good quality transmissions, and when the bandwidth of the audio-frequency modulating signal is of the order of 10 kHz;

---

* In practice, for transmitters of nominal power equal to or less than 3 kW account may be taken of various losses if the antenna is short. However, these losses should not exceed:

5 dB for antennae of height less than 0·1 λ

2 dB for antennae of height between 0·1 and 0·2 λ

Moreover, in cyclonic zones (to be defined by the World Meteorological Organization) the nominal power of the transmitters indicated above can be up to 10 kW instead of 3 kW.

Case B: 7 dB when a high degree of modulation compression (at least 10 dB greater than in the preceding case) is applied by means of an automatic device and when the bandwidth of the audio-frequency modulating signal is of the order of 10 kHz;

Case C: 5 dB when a limited degree of modulation compression is applied and when the bandwidth of the audio-frequency modulating signal is of the order of 4·5 kHz;

Case D: 0 dB when a high degree of modulation compression is applied by means of an automatic device and when the bandwidth of the audio-frequency modulating signal is of the order of 4·5 kHz.

The above figures are only valid when the same compression is applied to the wanted and unwanted emissions.

When two stations operating in adjacent channels use different bandwidths or different degrees of compression the higher of the two corresponding protection ratios shall be used, unless the two administrations concerned agree each to use the ratio corresponding to the interfering signal.

4.4.2.2 For a fluctuating wanted signal the adjacent channel protection ratio values mentioned in paragraph 4.4.2.1 shall be reduced by 3 dB.

4.5 *Minimum Value of Field Strength*

4.5.1 The following minimum values of field strength necessary to overcome natural noise (at 1 MHz) in the three zones A, B and C have been adopted:

Zone A : +60 dB/1μVm
Zone B : +70 dB/1μVm
Zone C : +63 dB/1μVm

4.5.2 Zones A, B and C in Regions 1 and 3 shown in Figure 23 are delineated as follows:

4.5.2.1 The dividing line between zones A and B begins at the point of intersection of parallel 20°N with the western border of Region 1 (No. 126 of the Radio Regulations, 1959). Thence it follows the parallel 20°N up to the point of intersection with meridian 20°E; thence by great-circle arc to the intersection of meridian 44°E with the Equator; thence it follows the Equator up to the intersection with meridian 80°E; thence by great-circle arc to the point with coordinates 100°E, 20°N; thence it follows the parallel 20°N up to the point of intersection with the eastern border of Region 3 (No. 128 of the Radio Regulations, 1959). The territory of the Islamic Republic of Mauritania lies entirely in zone A.

4.5.2.2 The dividing line between zones B and C begins at the point of intersection of parallel 6°S with the western border of Region 1 (No. 126 of the Radio Regulations, 1959); thence it follows the parallel 6°S up to the point of intersection with meridian 20°E; thence by great-circle arc to the point with coordinates 46°E, 26°S; thence by great-circle arc up to the point with coordinates 80°E, 20°S; thence it follows the parallel 20°S up to the point of intersection with the eastern border of Region 3 (No. 128 of the Radio Regulations, 1959).

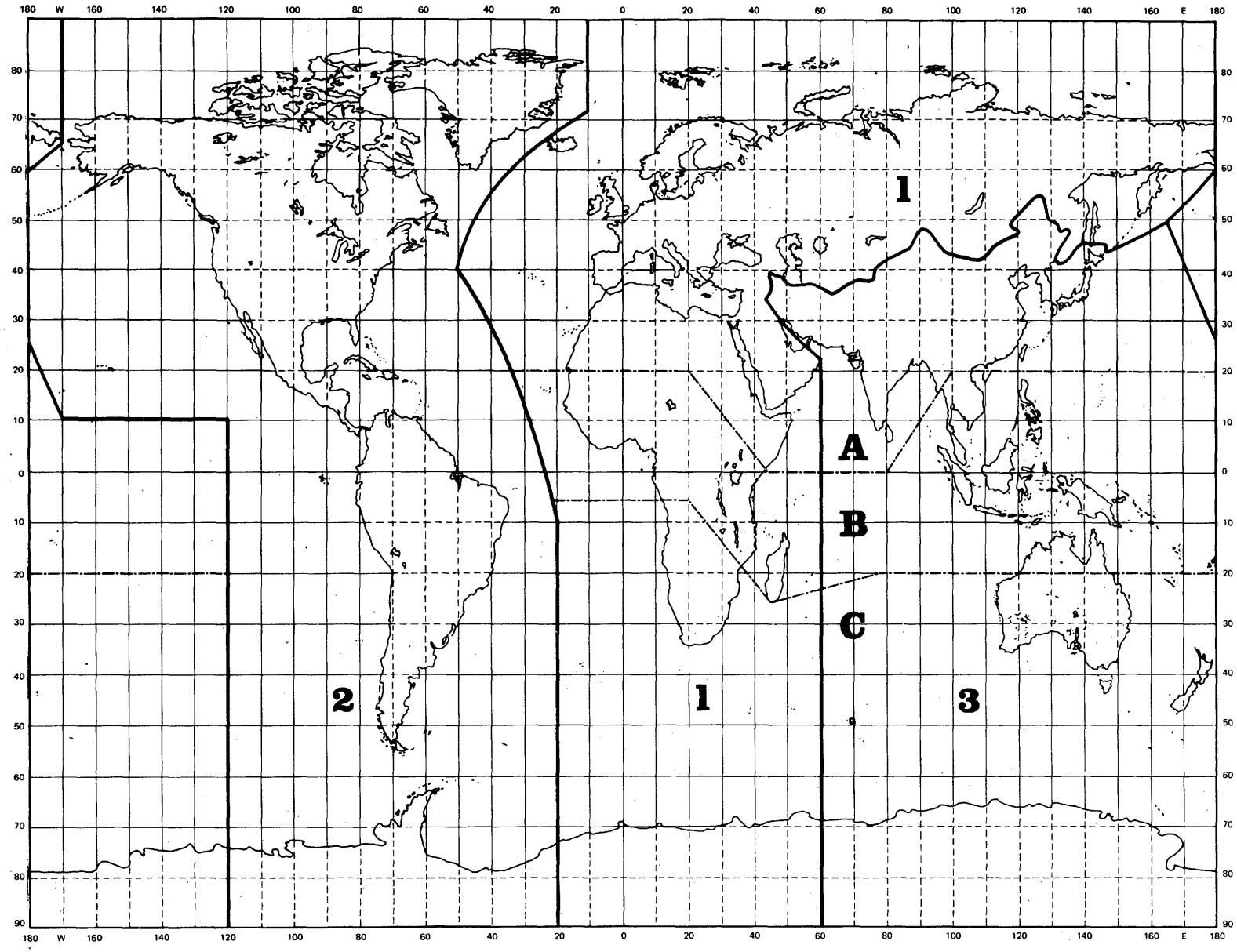


FIGURE 23 – FIGURA 23

Carte indiquant les limites des zones A, B et C dans les Régions 1 et 3
Map showing Boundaries of Zones A, B and C in Regions 1 and 3
Mapa de las zonas A, B y C en las Regiones 1 y 3

4.6 *Nominal Usable Field Strength*

The nominal usable field strength values are shown in the following table in dB relative to 1μV/m.

	Zone A	Zone B	Zone C
A. *MF*			
Daytime ground-wave service	63	73	66
Night ground-wave service*			
— rural areas**	71	81	74
— urban areas	77	87	80
Low-power channels	88	88	88
B. *LF****	77	87	80

* Where the transmitter power is sufficiently high for the ground-wave service area to be limited by fading due to the sky-wave of the same transmitter, a nominal usable field strength greater than the value given in the table may be chosen. It should not, however, be greater than the ground-wave field strength at the beginning of the fading zone. The fading zone may be defined by taking the protection ratio between the ground-wave and the sky-wave to be equal to the internal protection ratio applicable to a synchronized network i.e. 8 dB.

** Some delegations consider a nominal usable strength of 65 dB/1μV/m to be suitable for rural areas in their countries.

*** Certain delegations consider a value of E_{nom} of the order of 73 dB/1μV/m to be appropriate in non-tropical rural areas.

4.7 *Usable Field Strength*

In the presence of a group of transmitters the usable field strength is expressed by

$$E_u = \sqrt{\Sigma_i (a_i E_{ni})^2 + E_{min}{}^2}$$

where

E_{ni} : is the field strength of the i-th unwanted transmitter (in μV/m)

E_{min} : is the minimum usable field strength at the frequency in question (in μV/m) (see C.C.I.R. Recommendation 499, 1974)

a_i : is the radio-frequency protection ratio associated with the i-th unwanted transmitter, expressed as a numerical ratio of field strengths.

In the absence of data on man-made noise, the minimum field strength, E_{min}, can be calculated by correcting the minimum value given in 4.5.1 from the curve in Figure 24, which shows the variation Δa of that value with the frequency.

4.8 *Low-Power Channels*

4.8.1 The resultant field strength of a low-power transmitter network at the boundary of the territory of any other country should not exceed 0·5 mV/m, except by agreement between the administrations concerned. Where countries are separated by stretches of sea, the 0·5 mV/m field strength shall, in principle, not be exceeded at the mid-point of the over-sea path, unless the administrations concerned conclude other arrangements.

4.8.2 The resultant field strength in mV/m is calculated according to the formula:

$$\sqrt{E_1^2 + E_2^2 + E_3^2 + \ldots}$$

where E_1, E_2, E_3, ... are the values in mV/m of field strength due to each individual transmitter in a country operating in a given low-power channel. These values are determined with the aid of Figure 25 and only stations within 500 km of the border of a neighbouring country or of the mid-point of an over-sea path will be included in the calculation.

4.8.3 In the application of Article 4 (paragraph 3.3.1) of the Agreement, the table reproduced below will be used:

c.m.f. (V)	e.m.r.p. (kW)	Limiting distance (km)
300	1·0	600
260	0·75	500
212	0·5	400
150	0·25	200, 300*
95	0·1	70, 250*
67	0·05	50, 200*

* Values for a propagation path over sea.

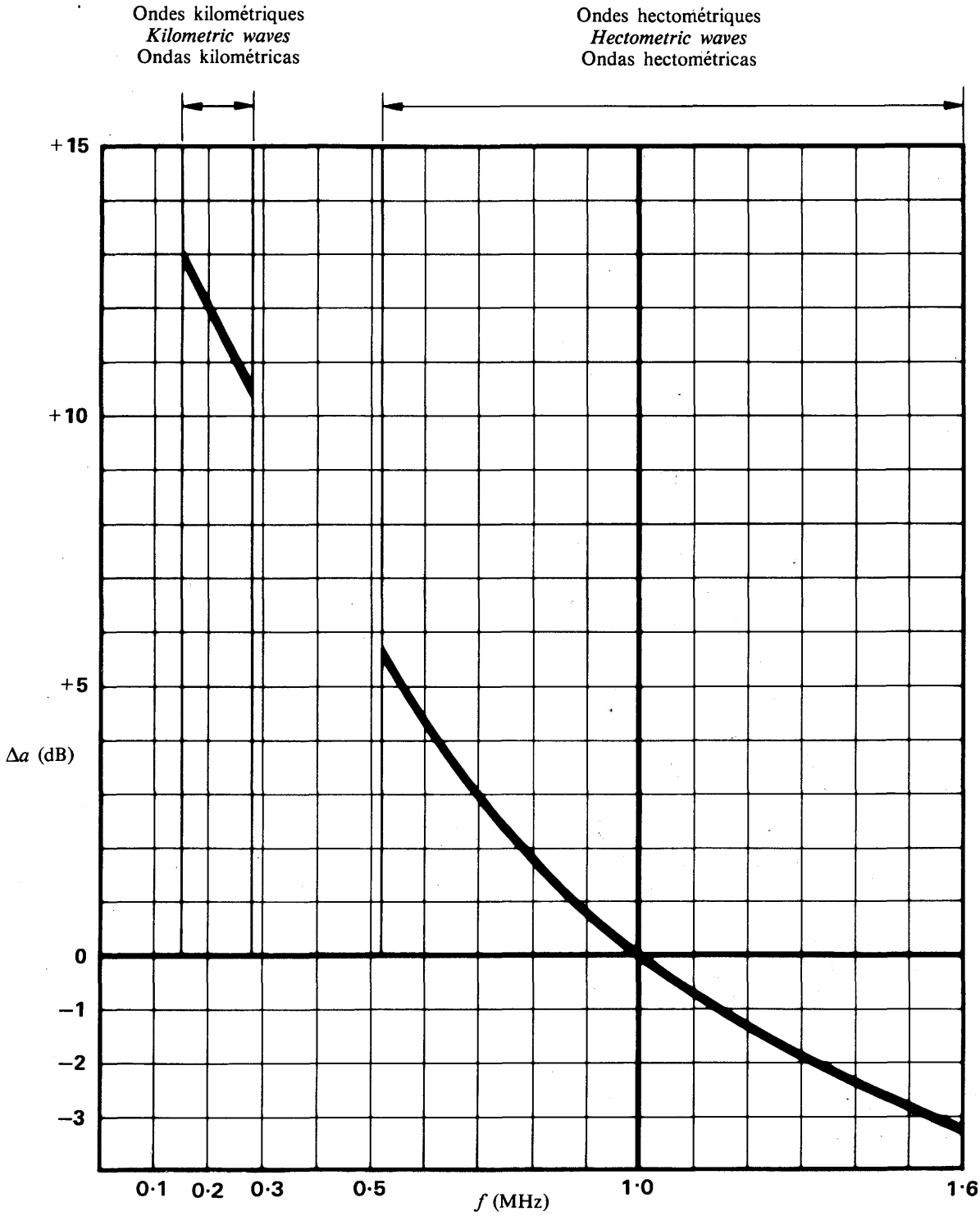


FIGURE 24 – FIGURA 24

Variation de la valeur minimale du champ en fonction de la fréquence
Variation of Minimum Value of Field Strength with the Frequency
Variación del valor mínimo de la intensidad de campo en función de la frecuencia

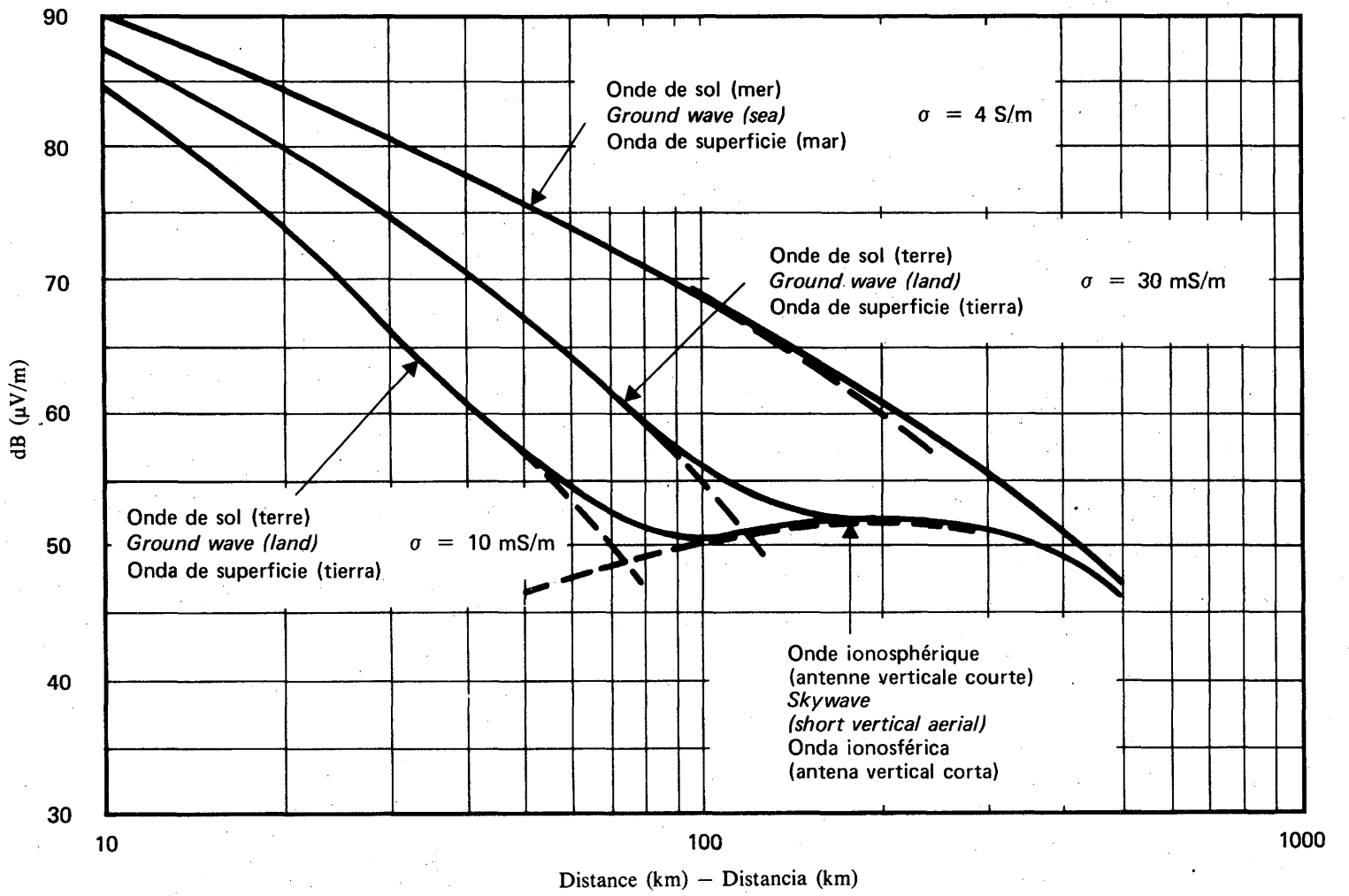


FIGURE 25 — FIGURA 25

Courbes pour la planification des canaux pour émetteurs de faible puissance (f = 1,5 MHz)
Curves for Planning Low-Power Channels (f = 1.5 MHz)
Curvas para la planificación de canales de baja potencia (f = 1,5 MHz)

Champ en dB (μV/m) pour une p.a.r.v. de 1 kW ou une f.c.m. de 300 V, dans le plan horizontal
Field strength dB (μV/m) for an e.m.r.p. of 1 kW or a c.m.f. of 300 V, in the horizontal plane
Intensidad de campo en dB (μV/m) con relación a 1 kW de p.r.a.v. (f.c.m. = 300 V) en el plano horizontal

4.9 *Transmitter Siting Tolerances*

The tolerances for the siting of transmitters are as follows:

4.9.1 Where both the interfering and the affected transmitters (on the same or adjacent channels) are situated in the part of Region 3 which is North of 11°S or where only one of them is located in this part of Region 3 but the mid-point between the two transmitters is also located in this Region, the tolerance is given in column Δd_t of table 1 relating to the MF band.

4.9.2 For other transmitters, the tolerances are as follows:

4.9.2.1 When a transmitter is situated inland, the tolerable re-siting distance is given in columns Δd_t of table 1 or table 2, as the case may be, provided that the new site is at a distance of not less than 100 km from the coast (MF band) or 200 km (LF band).

4.9.2.2 When the distance of the transmitter from the coast is, or becomes, less than 100 km for MF or 200 km for LF and if the transmitter is moved towards a station on the same or the adjacent channel in the direction of the sea, it is further required that the distance between the transmitter and the coast shall not be reduced by more than is shown in Δd_m of tables 1 and 2.

TABLE 1

MF Band

Distance between transmitters (km)		Δd_t (km)	Δd_m (km)
same channel	adjacent channel		
> 1,000	> 700	20	2
500 – 1,000	200 – 700	10	2
< 500	< 200	5	2

TABLE 2

LF Band

Distance between transmitters (km)		Δd_t (km)	Δd_m (km)
same channel	adjacent channel		
> 1,000	> 400	20	5
⩽ 1,000	⩽ 400	10	5

PROTOCOLS

FINAL PROTOCOL*

to the

Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1

At the time of signing the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1, the undersigned delegates take note of the following statements forming part of the Final Acts of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975:

No. 1

For the Kingdom of Morocco:

Among the frequency requirements dealt with by the Conference, the Delegation of the Kingdom of Morocco has noted, on the one hand, two assignments for El Ayoun and two for Villa Cisneros and, on the hand, two assignments for Sebta and Melillia submitted by Spain.

The Moroccan Delegation fully supports the principle adopted at the First Session of the Conference that all countries, large and small, have equal rights.

The Moroccan Delegation bears in mind the efforts made by the Kingdom of Morocco in its approaches to Spain and to the appropriate international authorities to restore to Morocco its lawful rights to the parts of its territory which remain under Spanish domination.

The Delegation of the Kingdom of Morocco, aware of the purely geographical nature of radio frequency assignments, declares that its participation in the preparation of the present Plan for Regions 1 and 3 and its acceptance of the frequency assignments for the stations of El Ayoun, Villa Cisneros, Sebta and Melillia in no way signify a renunciation of the claims formulated by the Government of the Kingdom of Morocco to the parts of its territory in which these stations are situated.

No. 2

For Spain:

With reference to its request for assignments for El Aaiun and Villacisneros, the Spanish Delegation wishes to state that it makes the request in accordance with Article 73 of the United Nations Charter, solely and exclusively in the interests of the inhabitants of Western Sahara, without prejudice to the results of the current process of decolonization.

As far as the Spanish stations of Ceuta and Melilla are concerned, the Spanish Delegation wishes to state that both towns are an integral part of Spanish territory and that it is not prepared to accept any discussion on that subject at all.

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* *Note by the General Secretariat:* The texts of the Final Protocol are shown in the chronological order of their deposit. In the table of contents these texts are grouped in the alphabetical order of country names.

No. 3

For the Islamic Republic of Mauritania:

Among the frequency requirements dealt with by the Conference, the Delegation of the Islamic Republic of Mauritania has noted two assignments for El Aiun and two for Villa Cisneros submitted by the Delegation of Spain.

The Delegation of the Islamic Republic of Mauritania notes that these requirements do not meet, either quantitatively or qualitatively, the broadcasting coverage needs of this part of its territory. Having regard to the principle adopted by the Conference that all countries, large and small, have equal rights, it therefore considers that these requirements may be supplemented by the Islamic Republic of Mauritania at a later stage in conformity with the provisions laid down for dealing with the frequency requirements of non-Member countries not represented at this Conference.

The Delegation of the Islamic Republic of Mauritania, aware of the purely geographical nature of frequency assignments, declares that its participation in the preparation of the present Plan for Regions 1 and 3 and its acceptance of the frequency assignments for the stations of El Aiun and Villa Cisneros in no way signify a renunciation of the claims formulated by the Government of the Islamic Republic of Mauritania to the parts of its territory in which these stations are situated.

No. 4

For the Republic of Afghanistan:

The Delegation of the Republic of Afghanistan reserves its Government's right to take any measures it may deem necessary to protect its interests if other countries fail to observe the provisions adopted by the Conference.

No. 5

For Algeria (Algerian Democratic and Popular Republic):

The Algerian Delegation, having noted the frequency assignment requirements for El-Ayoun and Villa Cisneros submitted by the Delegation of Spain, and having regard to the decolonization process now in progress under the auspices of the United Nations, declares that, by virtue of the principle of the right of peoples to self-determination, any arrangements adopted by the Conference concerning the Western Sahara cannot, when the time comes, either affect or limit the Sahraoui people in the exercise of their sovereign rights in respect of such arrangements.

No. 6

For France:

With regard to the station Sud-Radio 819 kHz, the French authorities, in conjunction with the competent administrations for the Valleys of Andorra, will seek practical means of installing a directional antenna at the Sud-Radio station in order to reduce the radiation from that station in the directions of Warsaw (sector between azimuths 45° and 55°) and Rabat (sector between azimuths 210° and 225°).

The Administrations concerned will carry out a bilateral study on these arrangements with a view to the desired coordination.

No. 7

For the Syrian Arab Republic:

A

The Administration of Syria cannot agree to the assignment of frequency 666 kHz to radio broadcasting transmitter in Greece with power 250 kW at night because it decreases the usable distance to the Syrian existing transmitter to 19 km.

The Administration of Syria reserves the right to take all requisite action with respect to the transmitter to avoid prejudice to radio broadcasting and to the economic interests connected therewith.

B

The Administration of Syria cannot agree to the assignment of frequency 954 kHz to Turkish station Trabzon which decreases the coverage area of the Syrian transmitter to 14 km with interference more than 100 dB.

C

The Administration of Syria cannot agree with the harmful interference from Bulgarian high power transmitter working on frequency 747 kHz.

The Administration of Syria requests the Administration of Bulgaria to make every effort to reduce the interference level.

No. 8

For the Federal Republic of Nigeria:

The Delegation of the Federal Republic of Nigeria notes that as a result of a proposed increase in power to 1 000 kW by the Administration of Greece of their assignment on 729 kHz contained in the Copenhagen Plan for 150 kW Nigeria's assignment in the same frequency in the African Plan (Geneva) 1966 will suffer harmful interference at a level of 88 dB.

It is recalled that this interference has been brought to the attention of the Greek delegation and that of the I.F.R.B. and appeals made to Greece to take measures to reduce it.

Since the level of interference to the assignment of Nigeria on this frequency has remained the same, the Federal Republic of Nigeria wishes to reserve its right to increase power and direct the beam of its transmission on this frequency anywhere in order to overcome this interference without any further consultation with Greece.

No. 9

For Ethiopia:

The Delegation of Ethiopia reserves for its Government the right to take any measures it sees fit to safeguard its national broadcasting coverage if other countries fail to observe the technical provisions adopted by the Conference as the means of minimizing interference.

No. 10

For New Zealand:

A

New Zealand reserves the right to take such action as it may consider necessary to safeguard its interests should any Member fail to observe the provisions of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1, or its Annexes or the Protocols attached thereto, or should reservations by other countries jeopardize its broadcasting services.

B

The Kingdom of Tonga reserves the right to take such action as it may consider necessary to safeguard its interests should any Member fail to observe the provisions of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1, or its Annexes or the Protocols attached thereto, or should reservations by other countries jeopardize its broadcasting services.

No. 11

For the United Kingdom of Great Britain and Northern Ireland:

A

To facilitate the success of the Conference the United Kingdom restricted its stated requirements to the minimum necessary to maintain the coverage of its existing services. In support of this position the United Kingdom also stated in an attachment to its submission, that in the event of increasing interference to its services it might be necessary to raise power to a level higher than set out in its submission.

B

Interference to United Kingdom services will be greatly increased by proposed new stations on 648 kHz, principally in Albania, and by a substantial increase in power by the same country on 1 089 kHz. In the face of a refusal to negotiate by Albania the United Kingdom reserves the right to make the power increases it deems necessary to maintain its present coverage on 648 and 1 089 kHz.

No. 12

For France :

With regard to the assignment to France for Sarrelouis station (Europe I) 182 kHz, 2 000 kW, the French delegation wishes to state that the problem of substantial interference in the Sarrelouis station service area caused by the Oranienburg station in the German Democratic Republic has not been satisfactorily settled during the Conference. The countries interested in the use of this channel have agreed to continue to seek a solution after the Conference.

No. 13

For Fiji:

The Delegation of Fiji reserves the right of its Government to take such action as it may consider necessary to protect its interests should any Member fail to observe the provisions as laid down in the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3, or its Annexes or the Protocols attached thereto, or should reservations by other countries jeopardize Fiji's Broadcasting Services.

No. 14

For the United Republic of Cameroon:

The Delegation of the United Republic of Cameroon, declares that its Administration reserves the right to take any action required to safeguard its interests should the reservations entered by other delegations on behalf of their administrations or failure to respect the Agreement and its Annexes and the Protocols attached to it prove prejudicial to the proper functioning of its broadcasting service.

No. 15

For France and Greece:

The French and Greek Administrations have agreed to carry out a coordinated study at a later date with a view to reducing mutual interference between their stations operating on frequencies 792, 945, 1 350, 1 404 and 1 494 kHz.

No. 16

For the Republic of the Ivory Coast:

The Delegation of the Republic of the Ivory Coast declares that it reserves the right of its Government to accept or refuse any reservations or declarations formulated in the Final Acts of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975, which might involve modification of or interference with its broadcasting services.

No. 17

For Greece:

The Delegation of Greece notes that a very large number of frequency requirements, some of them in channels used by Greece in conformity with the Copenhagen Convention Plan, are liable to create particularly difficult problems for the Greek Administration.

Since it has not been possible at the Broadcasting Conference either to elaborate a Plan based on technical principles or to coordinate frequency requirements satisfactorily, the Greek Administration finds that the service areas of its transmitters are being very substantially reduced. It is therefore under a duty to take all measures required to protect its transmitters. Particularly as regards frequency 729 kHz, the Greek Administration reserves the right *inter alia* to increase the power of the Athens transmitter in case an agreement with the Administration of the United Arab Emirates should prove impossible or fail to result in a change of the frequency claimed by that Administration.

The Greek Administration also reserves the right to use bandwidths of more than 9 kHz in case Greek transmitters should suffer interference from emissions on adjacent channels having a bandwidth of more than 9 kHz.

No. 18

For the German Democratic Republic:

The Delegation of the German Democratic Republic has the honour to state—in connection with the signature of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 and referring to the indication of frequencies of stations operated in Berlin (West)—that it will take note of these provisions only to the extent as they are in accordance with the Quadripartite Agreement of 3 September 1971.

No. 19

For the Union of Soviet Socialist Republics:

The Delegation of the Union of Soviet Socialist Republics has the honour to state—in connection with the signature of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 and referring to the indication of frequencies of stations operated in Berlin (West)—that it will take note of these provisions only to the extent as they are in accordance with the Quadripartite Agreement of 3 September 1971.

No. 20

For Mauritius:

The Delegation of Mauritius reserves its Government's right to take any measures deemed necessary to protect its interests if Members should in any way fail to observe the provisions of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975, or if reservations formulated by other countries endanger the smooth operation of its broadcasting services.

No. 21

For Algeria (Algerian Democratic and Popular Republic):

The Delegation of the Algerian Democratic and Popular Republic reserves its Government's right to take all necessary measures to protect its interests in relation to its broadcasting service.

No. 22

For Australia:

The Delegation of Australia reserves its Government's right to use the three channels designated as Low Power Channels for MF Broadcasting Services with an e.m.r.p. of greater than 1 kW (i.e. c.m.f. of greater than 300 V) while at the same time observing the interference limitations for the Low Power Channels as defined in paragraph 4.8 of Annex 2 of the Agreement.

No. 23

For Pakistan:

Considering

that it has not been possible to achieve, in general, the standards of quality set up by the First Session of the Conference, due to excessive projected requirements, which will deteriorate the interference situation on the assignments of Pakistan already in use and which enjoy a relatively better position at the present moment;

that a very large number of projected transmitters have been demanded by certain countries for the so-called exclusive daytime operations;

that the only safe manner to operate these transmitters is strictly on the basis of non-interference to other countries;

that the World Administrative Radio Conference, 1979 is likely to review the Table of Frequency Allocations in the Radio Regulations;

that the said Conference may allocate the use of the low frequency band for broadcasting in Region 3;

Pakistan

does not accept any obligations of the Agreement in *only* so far, as these relate to those assignments in the Plan, which indicate exclusive daytime operation and do not carry a commitment in the remarks column that those will be operated on the basis of non-interference to other countries;

does not recognize that the low frequency assignments existing in the Plan, have any priority over the requirements of Region 3 countries that may arise at the time of the review of this low frequency Plan in the future conference;

reserves its right to take any measure it may deem necessary to protect its interests under conditions created by the failure of the other countries to observe the provisions of the Agreement and the Plan.

No. 24

For Belgium:

The Belgian Administration points out that it had requested an LF assignment. To contribute to the success of the planning activities, it agreed to combine its requirement with that of the Netherlands. Hence the frequency of 173 kHz allocated to the Netherlands will also be used for the transmission of Belgian programmes.

This solution (173 kHz), however, is far from satisfactory, because:

– at night, the usable field strength is more than 100 dB, which drastically reduces the service area;

– by day, it will in all likelihood not always be possible to ensure adequate protection against the French stations using adjacent channels.

The Belgian Administration hopes nevertheless that it will be possible to provide an acceptable service on this channel; but it reserves the right, should experience prove it to be necessary and in keeping with the provisions of the present Agreement, to use the frequency 281 kHz, if the shared band 255-285 kHz is made available to the broadcasting service.

No. 25

For the Kingdom of Saudi Arabia and the Socialist Federal Republic of Yugoslavia:

The two Administrations have agreed on the following:

1. The corresponding diagram to be found in the Final Acts of the Conference has been taken as a basis for time schedule of the transmitter of the Kingdom of Saudi Arabia operating during daytime on frequency 612 kHz. Consequently, the abovementioned transmitter will be assigned in the Plan with the following operating hours:

a) 1 April to 31 October from 0300 – 1600 GMT

b) 1 November to 31 March from 0500 – 1400 GMT.

2. The two Administrations are willing to cooperate in investigating further improvements on the shown solution to the satisfaction and needs of both parties.

No. 26

For Lebanon:

Since the usable field strength resulting from the interference which may be caused to all the frequencies assigned to Lebanon in the Plan is very high, the Lebanese Administration reserves the right to take all useful and indispensable measures to improve the protection of its broadcasts.

No. 27

For the Republic of Korea:

1. The Delegation of the Republic of Korea, on behalf of its Government, reserves the right of its Government to take such action as it may deem necessary to safeguard its broadcasting services:

a) should any frequency incorporated in the Plan without prior consultations with the Delegation cause harmful interference to its channels in the Plan,

b) should any Contracting Member to the Agreement fail to comply with the Agreement, its Plan or the Protocols attached thereto, thus causing adverse effect to its broadcasting services, or

c) should any reservations by other countries jeopardize its broadcasting services.

2. The Delegation further reserves the right to transfer the frequencies of certain existing transmitters to the nearest new channels with the existing power within the interference limit of the Agreement, should the Conference fail to accept them into the Plan.

No. 28

For the Republic of Uganda:

The Administration of the Republic of Uganda cannot agree to a proposed increase of power to 500 kW, instead of the operating power of 100 kW, of a radio broadcasting station situated in Cyprus and operated by the United Kingdom on a frequency assignment of 639 kHz because it increases the usable field strength of a Ugandan operating station, as in the African Plan, Geneva, 1966, to 97 dB, thus reducing the usable distance to an unacceptable distance.

In the circumstances, therefore, the Administration of the Republic of Uganda reserves the right to increase the power of its station on 639 kHz frequency assignment and/or to make directional antenna, as a result of the increased interference in order to provide a broadcasting service within Uganda and to which service the people of Uganda are entitled.

No. 29

For the Kingdom of Saudi Arabia and the United Republic of Tanzania:

The Kingdom of Saudi Arabia and the United Republic of Tanzania

recognizing

the need for further discussions on frequency assignments 531 kHz and 648 kHz in which the latter suffers a high level of co-channel interference from the former;

will endeavour to do everything possible through bilateral discussions after the Conference to reach a satisfactory solution.

Should these discussions fail, the United Republic of Tanzania reserves the right to increase its power in order to ensure satisfactory coverage in its territory.

No. 30

For Greece:

The Greek Delegation wishes the following comments to be entered in the "Remarks" column of the Plan:

a) It is desirable that the Administrations of Greece and the United Arab Emirates should conduct a coordinated study of the problems which will arise from the possible operation of the Sadiyat station on the frequency 729 kHz, which has been the frequency of the Athens station since the Copenhagen Plan.

b) With regard to the frequency 1 260 kHz, the Greek Administration wishes to consider, in conjunction with the Polish Administration, the means of reducing the total field strength of the synchronized Polish network in the direction of Greece in order to obtain 85 dB at Rhodes.

c) It is likewise desirable that a coordinated study should be undertaken by the Greek and Italian Administrations with a view to reducing the mutual interference between their stations on the frequencies 1 008 and 1 116 kHz.

No. 31

For the Republic of the Senegal:

The Delegation of the Republic of the Senegal reserves the right of its Government to take all the measures it sees fit to protect the coverage of its national broadcasting service if other countries fail to observe the provisions adopted by the present Conference.

No. 32

For the Vatican City State:

The Delegation of the Vatican City State, at the conclusion of this Conference, notes with regret that the Plan annexed to the Agreement does not meet the criteria established at the First Session, and that in particular, the basic consideration of "the retention and, possibly, improvement of the coverage of the existing broadcasting stations to the maximum extent possible, having regard to the commitments of many countries" (Report of the First Session, page 24) has not been observed.

Hitherto, in fact, the Vatican City State, in agreement with a number of countries, has operated a sky-wave service, which is indispensable to it, on a frequency of 1 529 (1 530) kHz assigned to it under the Copenhagen Plan. The situation arising from the new Plan creates far less favourable conditions for the continuance of this service.

In relation to some of the more difficult outstanding problems, the Administration of the Vatican City State intends to continue negotiations with the administrations concerned with a view to reaching a less unfavourable solution.

No. 33

For the Socialist Federal Republic of Yugoslavia:

In view of the fact that the Conference has failed to put into practice the planning principles adopted at the First Session and reaffirmed at the Second Session, the Plan does not fully meet in accordance with the spirit and the letter of Chapter 9 of the Report of the First Session, the justified acknowledged requirements of certain administrations, in particular, those of the developing countries and of countries where special conditions prevail.

Being a federal, multinational State, with a number of different languages, Yugoslavia has organized its broadcasting services on the basis of its administrative subdivisions and the number of languages to be taken into account.

Furthermore, Yugoslavia is in a special geopolitical situation, lying as it does in the centre of a European broadcasting subregion and having a large number of neighbouring countries, a particularly unfavourable relief and a long and highly indented coastline, with numerous islands.

Yugoslavia is accordingly exposed to the effects of the broadcasting transmitters of more than 45 countries which, in view of the planning methods adopted at the Conference, makes any coordination extremely difficult.

In addition, no account has been taken of the fact that Yugoslavia submitted no frequency requirements in the LF band, which inevitably increases its requirements in the MF band.

The final result, which is clearly revealed in the solutions adopted, shows that the justified requirements of Yugoslavia in general and, more particularly, those of some parts of its territory, have not been met.

While commending the efforts of the participants in the Conference to remedy the difficult situation in the frequency spectrum, Yugoslavia will continue its own efforts to solve outstanding problems through bilateral and multilateral negotiations.

At the same time, and in the spirit of the principles adopted at the Conference, Yugoslavia reserves the right to protect its interests in broadcasting matters and, if necessary, to take any action it may deem useful and appropriate.

No. 34

For the Socialist Federal Republic of Yugoslavia:

The Delegation of the Socialist Federal Republic of Yugoslavia, in signing the Frequency Assignment Plan, regrets that it has not been possible to reach a compromise with the Spanish delegation concerning the protection of:

– the frequency 684 (683) kHz assigned to the Belgrade station as an exclusive frequency under the Copenhagen Plan and used since that time;

– the frequency 1 134 (1 133) kHz assigned to the Zagreb station as an exclusive frequency under the Copenhagen Plan and used since that time;

– the frequency 918 (917) kHz assigned to the Ljubljana station as an exclusive frequency under the Copenhagen Plan and used since that time.

The Yugoslav Delegation further notes with regret, that when the Spanish Administration put into use its Seville station on the frequency 684 (683) kHz, its synchronized station network on the frequency 1 134 (1 133) kHz, and its Oviedo station on the frequency 918 (917) kHz, it failed to coordinate with the Yugoslav Administration and that no such coordination has been effected up to the time of the Conference.

The fact that the power of the Seville station has been successively increased has compelled the Yugoslav Administration to raise the power of its Belgrade station to protect itself from the harmful interference caused by the Seville station, mainly owing to the proximity of the two stations.

In view of the above, the Socialist Federal Republic of Yugoslavia reserves the right to re-examine this question with the Spanish Administration after the Conference in the hope of being able to reach an agreement.

No. 35

For the Czechoslovak Socialist Republic:

In signing the Agreement and the Plan thereto annexed, the Czechoslovak Delegation states that it cannot agree to the assignment:

a) of the frequency 702 kHz to the stations of Andorra, 600 kW, and Umraniye (Turkey), 150 kW, for night operation, since these transmitters, which operate without regard to the international provisions relating to the coordination, registration and use of frequencies, seriously reduce the area covered by the synchronized Czechoslovak network which has already been operating on this frequency for some decades;

b) of the frequency 954 kHz, for night operation, to the station of Trabzon (Turkey), 300 kW, which is not yet in use, since the operation of this station would halve the area at present covered by another Czechoslovak synchronized network.

The Czechoslovak Delegation reserves for its country the right to take any technical measure required to ensure a satisfactory broadcasting service in the areas of Czechoslovakia concerned.

At the same time, it hopes that it will be possible, through further discussions with the countries in question, to find acceptable solutions to these problems.

No. 36

For the Islamic Republic of Mauritania:

The Delegation of the Islamic Republic of Mauritania reserves its Government's right to take any action it may deem necessary to protect its interests if other countries fail to observe the provisions adopted by the Conference.

No. 37

For the Republic of the Niger:

The Delegation of the Republic of the Niger reserves its Government's right to take any action it may deem necessary to protect its interests if other countries fail to observe the provisions adopted by the Conference.

No. 38

For Turkey:

A

The Delegation of Turkey regrets that the Conference did not respond positively to the appeal for the reduction of excessive requirements and that the criteria adopted at the First and Second Sessions of the Conference were not given due consideration in the negotiations.

Notwithstanding its low power density, the Delegation of Turkey, in a spirit of goodwill and international cooperation and in the hope of arriving at a workable Plan, has made many concessions, such as deletion of some of its requirements, reduction in power, use of synchronized networks and directional antennae to the maximum extent possible. Despite these concessions, it has not been possible to arrive at a Plan to the satisfaction of Turkey, most of whose stations have a usable field strength well above the nominal value between 90 and 100 dB, and an appreciable number above 100 dB. The Plan in its present form is neither equitable nor workable. Satisfactory reception conditions for Turkey are not at all provided.

In these circumstances, the Delegation of Turkey formally reserves for its Government the right to take any action it may consider necessary to safeguard its national interests relating to broadcasting in LF/MF bands and to bring about satisfactory reception conditions for its people.

B

In particular, the Delegation of Turkey cannot agree to the following cases, since they give rise to high usable field strengths and considerably restrict the service areas of the transmitters:

a) The insufficient protection provided by the assignment to Egypt of 200 kHz.

b) The power increase of the Roumanian station, Timisoara, operating at 630 kHz to 400 kW.

c) The power increase of the Czechoslovak synchronized network operating at 702 kHz, to an aggregate power of 1 000 kW.

d) The assignment of 702 kHz to Syria.

e) The power increase of the Egyptian station Abu Zabal from 1 062 kHz to 150 kW.

f) The assignments of 1 215 kHz and 1 557 kHz to Malta.

The Delegation of Turkey requests the above Administrations to take the necessary steps to reduce their interference. Should they, however, fail to do so, the Delegation of Turkey reserves for its Government the right to take such action as may be necessary to ensure the satisfactory coverage of its stations affected.

No. 39

For Tunisia:

1. With regard to the frequency 585 kHz shared by Austria, Spain and Tunisia, the Tunisian Administration, not satisfied with the high level of harmful interference, is prepared to consider any technical solution calculated to improve the situation in the three countries on the basis of the principle of equal rights between all countries.

2. With regard to the frequency 630 kHz, the Tunisian Administration is glad to note that the Turkish Administration is prepared to improve the situation in keeping with the traditional friendship between the two countries.

3. With regard to the frequency 963 kHz shared by Bulgaria, Cyprus and Tunisia, the Tunisian Administration does not accept the level of harmful interference, but has no doubt that the situation will be improved by the protection promised by the Delegations of Bulgaria and Cyprus.

In any case, the Tunisian Administration reserves the right to safeguard its interests with regard to broadcasting.

No. 40

For Japan:

In signing the Final Acts of the present Conference, the Delegation of Japan wishes to make the following statement:

1. The present conference has adopted a Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1.

In applying the decisions of the Conference on the subject, many difficulties can be foreseen, particularly owing to harmful interference from high power broadcasting stations in the neighbouring countries of Japan for which coordination has not successfully been made during the Conference.

Japan will make every effort to operate its broadcasting service in accordance with the provisions of the Agreement and the Plan annexed to it in cooperation with all other Member countries concerned, but the Delegation of Japan reserves the right of its Administration to take any action it considers necessary, with regard to the matters which have not been solved in the course of the Conference, to protect its broadcasting service in the medium frequency band.

2. The interferences caused by certain broadcasting stations in Region 1 operating in the low frequency band (150-285 kHz) are endangering the operation of the aeronautical radiobeacon stations in Japan. These interferences will remain when the Plan for Low Frequency Broadcasting Bands in Region 1 as drawn up by the Conference is implemented.

The Delegation of Japan therefore reserves the right of its Government to take necessary measures, in accordance with the provisions of the Convention and the Radio Regulations, to protect its radiobeacon stations from the interference caused by the low frequency broadcasting stations in Region 1.

No. 41

For the Socialist Republic of Roumania:

The Delegation of the Socialist Republic of Roumania, appreciating the efforts of the delegations participating in the Conference to establish a frequency assignment Plan in line with the technical criteria and with unanimous decisions which were made at the First and Second Sessions and which can meet the development needs of the broadcasting services of the participating countries, notes that, in the 558 kHz, 603 kHz, 855 kHz, 1 053 kHz and 1 458 kHz channels in use for decades by the Socialist Republic of Roumania, the Plan includes assignments which result in a considerable reduction of the service areas of Roumanian transmitters operating in the said channels in conformity with the Radio Regulations.

The Delegation of the Socialist Republic of Roumania expresses its regret that the negotiations conducted during the work of the Conference with the delegations of the countries whose above-mentioned assignments have led to this situation failed to produce favourable results; it is convinced that the problems in question can be solved by further negotiations after the Conference. The Delegation of the Socialist Republic of Roumania is ready to continue its collaboration with those countries with a view to reaching negotiated solutions for the reduction of the harmful interference.

At the same time, the Roumanian Delegation declares that it reserves the right of the Roumanian Government, in the event such negotiations fail to produce favourable results before the entry into force of the present Agreement, to take all necessary action to ensure that its broadcasting transmitters operating in the above-mentioned channels can ensure coverage of the national territory with broadcast programmes in proper conditions.

No. 42

For the Republic of Dahomey:

The Delegation of the Republic of Dahomey has the honour to declare that its Government reserves the right to make all provisions and take any action it may deem fit to protect its interests should any reservations expressed by other delegations on behalf of their governments or administrations, or failure by other administrations or governments to observe the provisions of the Agreement and the Annexes, Appendices, or Protocols attached thereto, or other commitments with respect to Dahomey, be such as to jeopardize the proper operation of its broadcasting service.

No. 43

For Luxembourg:

Luxembourg reserves the right to take any measures which it may deem necessary to protect its interests if another Member country fails to comply with the provisions of the Regional Agreement on the Use of Frequencies in the LF/MF Bands by the Broadcasting Service in Regions 1 and 3 and in the LF Band in Region 1, or the provisions of the Annexes or Protocols to this Agreement, or if the reservations entered by other countries are prejudicial to the broadcasting services of Luxembourg.

No. 44

For the People's Republic of Poland:

The Polish Delegation enters a reservation concerning the unwanted emissions and interference caused on the territory of the People's Republic of Poland by the Holzkirchen (D) station on the frequency 720 kHz (at present using the frequency 719 kHz) and reserves the right of its Government to take appropriate action to protect the sovereign interests of the People's Republic of Poland.

No. 45

For Portugal:

The Portuguese Delegation,

recalling

that its Administration had stated, with regard to the transmitter power entered on the Portuguese requirement notices, that this power had been based on the area to be covered and that it wished to maintain this minimum power while, however, reserving the right to increase this value if other countries should request excessive powers entailing a reduction of this service area;

that it stated in Plenary Meeting that, as Portugal was awaiting the results of the Conference, its LF/MF broadcasting services had not been sufficiently developed;

the decisions of the Second Session of the Conference, in Plenary Meeting, to allow in its planning activities for the special case of countries with insufficiently developed broadcasting services;

considering

that the Portuguese requirements were confined to the minimum necessary to ensure satisfactory coverage of its territory;

that the foregoing decisions, adopted by the Plenary Meeting, were not successfully applied in the planning activities of the Conference;

the very high values, compared with the nominal values adopted at the First Session of the Conference, of the usable field strengths of the Portuguese frequency assignments contained in the Plan and the unduly reduced service areas resulting therefrom for its assignments;

reserves for its country

the right to take any action which may prove necessary to ensure satisfactory quality of its LF/MF broadcasting services, with the sole undertaking that, when a new assignment is made or when an assignment contained in the Plan is modified, it will not afford the assignments of other countries operating in the same channel or in adjacent channels protection ratios lower than the minimum value of the protection ratio of the nominal service areas of the assignments contained in the Plan.

No. 46

For Spain:

The Delegation of Spain:

considering

1. that the usable field strengths obtained for nearly all its transmitters are much higher than the nominal field strengths fixed in paragraph 4.6 of Annex 2 to the Agreement;

2. that the service areas calculated when submitting requirements have, as a result, been substantially reduced, to such a point that satisfactory reception is no longer ensured for a large part of the population of the country;

3. that, when submitting its requirements, it stated that it reserved the right to increase, during the Conference, the values of the powers it requested if other countries requested powers in the channels in question liable to cause a reduction in the service areas of the Spanish transmitters (Note No. A020 of Annex 3 to I.F.R.B. Circular-letter No. 324 of 23 May 1975), which has in fact occurred without the Delegation of Spain being able to make this specific reservation effective;

4. that the principle of equity, approved by the Conference itself, to the effect that all countries, large and small, have equal rights, has not been applied in drawing up the Plan owing to the absence of effective standards and rules ensuring equitable planning, with the result that, in the view of the Spanish Delegation, Spain has suffered prejudice;

the Spanish Delegation consequently enters a general reservation to the Plan in respect of the frequency assignments to its country;

it similarly reserves its Government's right to take the action necessary to restore the requested service areas which ensure satisfactory reception for the people of its country.

No. 47

For the Arab Republic of Egypt:

The Administration of the Arab Republic of Egypt declares that it will get in touch with the French Administration when its LF transmitter (frequency – 164 kHz) is installed with a view to reducing, so far as possible, interference in the service area of the French station of Allouis.

No. 48

For the Kingdom of Morocco:

The Delegation of the Kingdom of Morocco reserves its Government's right to take any action it may deem necessary to protect its interests if other countries fail to observe the provisions approved by the Conference.

Furthermore, the Moroccan Delegation reserves its Government's right to take any measures required to improve the service areas of its transmitters operating on the following frequencies:

594 kHz, 648 kHz, 657 kHz, 702 kHz, 765 kHz, 774 kHz, 918 kHz, 1 017 kHz, 1 080 kHz, 1 116 kHz, 1 188 kHz, 1 206 kHz, 1 233 kHz, 1 377 kHz.

The Moroccan Delegation does not, however, rule out the possibility of conducting direct bilateral or multilateral negotiations concerning the above-mentioned frequencies with a view to arriving at a satisfactory result.

No. 49

For the Republic of Kenya:

The operation by Egypt on the assignment 558 kHz is subject to the condition that no harmful interference will be caused to Kenya operating assignment recorded both in the African Plan and in the Master Register.

No. 50

For Malaysia:

Malaysia has projected its requirements for a period considerably less than the Plan validity period agreed by the Conference. Also the existing and projected service requirements of Malaysia in the Plan have not achieved in many cases the desired service range because of incompatibilities introduced by the existing and projected services of other administrations in the region.

Malaysia, therefore, reserves the right to take such measures as it may consider necessary to safeguard its broadcasting services should other countries fail to observe the technical provisions adopted by the Conference, or agreement reached between the Delegation of Malaysia and other countries at the Second Session of the Conference.

No. 51

For the State of Israel:

A

Due to a number of aggravating factors and special conditions Israel is up to this date far from being adequately covered by its broadcasting services.

It is apparent that a further severe and unacceptable degradation of broadcast coverage in Israel must unfortunately be expected from the Plan.

Due to a shortage of time and other reasons, it was impossible to exploit in full the negotiating procedure, in order to eliminate or alleviate incompatibilities even of the most severe nature.

Notwithstanding the procedure adopted for modifications of the requirements submitted, further increases of interference have been introduced up to the final stages of the Conference.

In many cases no reduction of interference could be achieved even from planned or unregistered frequency and power requirements—even to existing and registered frequency assignments.

The Administration of Israel regretfully cannot agree to the requirements identified by frequency and, in brackets, country symbol and number of requirement: 576 (BUL-2858, SDN-1645); 657 (ARS-7151, TUR-7231); 711 (EGY-2645, UKR-5842); 738 (OMA-0090, ALG-6887); 846 (IRQ-0547, I-3672, TUR-3075); 882 (YUG-214905, EGY-7509, ARS-4319); 1 026 (IRN-2725); 1 170 (ARS-8754, URS-583403, BLR-583401, UAE-0140); 1 359 (IRQ-0551); 1 368 (IRN-2749). These represent Israel's reservations only to the severest interference contributions, and only as regards the most vital of existing services.

Thus, it is obvious that further negotiations are indispensable and that corresponding modifications will have to be effected. Such modifications regarding the above list and other requirements of Israel will have to be introduced in order to make the Plan acceptable to its Administration. It therefore welcomes the "Recommendation concerning improvements to the Plan" (Recommendation No. 1) and will follow the procedure laid down therein.

The signature of the Delegation of Israel must therefore be considered *ad referendum* and it fully reserves the position of its Administration as to the final approval of the Agreement.

Pending such approval, Israel will endeavour to follow the principles laid down in the Agreement and will do its utmost to safeguard the recognized rights of other administrations concerned. However, in view of the facts outlined above, it reserves the right to take any measures it considers necessary to secure adequate coverage of its broadcasting services.

B

The Delegation of Israel declares that its signature to this Agreement and its eventual approval by its Administration shall only be valid and binding in relation to Contracting Members who apply the provisions of the Convention in their relations with Israel.

Furthermore, it wishes formally to record that, in accordance with the established practice of the Union, the country symbols employed in the Plan have a geographical significance only and that nothing in the matter of presentation of information or in the arrangement of data in the Plan can be deemed to imply endorsement or acceptance, by the Union or by Contracting Members, of any matter affecting the status and boundaries of States and territories.

No. 52

For Thailand:

The Delegation of Thailand fully supports the principle that all countries, large and small, have equal rights.

It also bears in mind that the present Agreement shall bind Contracting Members in their relations with one another, but does not bind the Non-Contracting Countries.

As no guarantees have been given that the transmitters of Non-Contracting Countries, or unidentified stations operating without international recognition will not cause harmful interference to the broadcasting stations operating in conformity with the present Agreement, the Delegation of Thailand, in signing the Final Acts of the present Conference, reserves the right of its Government to take all necessary measures, while making every effort to avoid causing harmful interference to the broadcasting services of other Contracting Members, to safeguard the interests of Thailand and ensure its normal broadcasting services if the above-mentioned transmitters or stations cause harmful interference to broadcasting services in Thailand.

The Delegation of Thailand also reserves its Government's right to take any measure it may deem necessary to protect the interests of Thailand should any Contracting Member fail to observe the provisions of the Agreement, its Annexes and the Final Protocol annexed thereto, or should reservations by other countries jeopardize the broadcasting services in Thailand.

No. 53

For the People's Republic of China:

1. The Plan contains frequency assignments to the MF broadcasting stations at the following sites: Along (94E50, 28N10), Anini (95E52, 28N40), Bomdila (92E30, 27N20), Hapoli (93E40, 27N30), Koloriang (93E27, 27N52), Pasighat (95E20, 28N06), Tawang (91E54, 27N36), and Ziro (93E50, 27N34); these requirements were submitted by the Indian telecommunication Administration. The above sites have always been on Chinese territory. The installation of broadcasting stations in Chinese territory by the Indian authorities constitutes a violation of Chinese sovereignty and is absolutely illegal.

2. The People's Democratic Republic of Korea is the authentic representative of the Korean people. The Chinese Government does not recognize the frequency assignments made in the Plan to the broadcasting stations of the South Korean authorities.

3. Since the part relating to LF broadcasting in the Plan annexed to the present Agreement applies only to Region 1, the telecommunication Administration of the People's Republic of China reserves its position concerning this part of the Plan and will continue to reserve the right, according to the requirements of the Chinese broadcasting service, to assign frequencies to Chinese LF broadcasting stations. The telecommunication Administration of the People's Republic of China is prepared to settle, so far as possible, the problem of harmful interference which the Chinese LF broadcasting service might cause to other radiocommunication services by adopting the necessary technical measures and by friendly negotiations, on the basis of the principle of equality and mutual advantage.

4. China reserves the right to take the necessary action if, in the implementation of the Frequency Assignment Plan, any infringement of the Agreement causes interference to Chinese broadcasting stations.

No. 54

For Algeria (Algerian Democratic and Popular Republic), the Kingdom of Saudi Arabia, the Arab Republic of Egypt, the United Arab Emirates, the Hashemite Kingdom of Jordan, the State of Kuwait, Lebanon, the Libyan Arab Republic, the Kingdom of Morocco, the Islamic Republic of Mauritania, the State of Qatar, the Democratic Republic of the Sudan, Tunisia, the Yemen Arab Republic, the People's Democratic Republic of Yemen:

The above-mentioned Delegations declare that the signature, and possible subsequent ratification by their respective Governments of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 (Geneva, 1975), are not valid with respect to the Member appearing in the Agreement, Annexes and Final Protocol under the name of Israel, and in no way imply its recognition.

No. 55

For the Kingdom of Saudi Arabia, the Arab Republic of Egypt, the Hashemite Kingdom of Jordan, the State of Kuwait, the Kingdom of Morocco and Tunisia:

The Delegations of the countries cited above declare that their Administrations reserve their rights to take any necessary action to safeguard their interests in case of failure on the part of any country to respect the Agreement of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975, its Annexes and the Protocols attached to it, or in case the reservations entered by other delegations on behalf of their administrations prove prejudicial to the proper functioning of the broadcasting service of the countries signatory of this reservation.

No. 56

For the Arab Republic of Egypt:

Upon signing this Agreement the Delegation of the Arab Republic of Egypt declares that nothing in the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 (Geneva, 1975), and its Annexes or in their implementation could in any way prejudice the sovereignty and the territorial integrity of the Arab Republic of Egypt.

No. 57

For the Kingdom of Saudi Arabia:

The Delegation of the Kingdom of Saudi Arabia wishes to state that the Administration of the Kingdom of Saudi Arabia does not recognize that the low frequency assignments existing in the Plan have any priority over the requirements of other countries that may arise at the time of the review of this LF plan in any future conference.

No. 58

For the Republic of India:

1. Upon signing the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1, Geneva, 1975, the Delegation of the Republic of India reserves the right of its Government to take appropriate steps, if necessary, to ensure proper implementation of the Agreement including the Plan, should any country reserve and/or not accept the provisions of the Agreement including the Plan.

2. The Republic of India will contribute to the maximum possible extent for the success of the Plan. It sincerely hopes that other Members of the Union from Regions 1 and 3 will also do the same.

3. The Plan contains frequency assignments to Pakistan for Mirpur, Muzaffarabad, Gilgit and Skardu situated in the State of Jammu and Kashmir, which is an integral part of India. The Republic of India does not recognize these frequency assignments to Pakistan and operation of these stations by Pakistan Administration. The Indian Delegation did not wish to overburden the work of this Conference by discussing this issue on the floor as the situation arising out of Pakistan's occupation of a part of the State of Jammu and Kashmir can, in India's view, be best settled in another forum peacefully and bilaterally as envisaged in the Simla Agreement.

4. The Plan for the LF band indicates a number of frequency assignments, not in operation now, that could cause harmful interference to other radiocommunication services in India, specially to maritime and aeronautical services. This affects the safety of life at sea and in the air. Therefore, India reserves the right of its Government not to accept any such assignment that is likely to cause harmful interference to other radiocommunication services in India.

5. The frequency assignments to Sri Lanka on frequencies 675 kHz, 684 kHz, 738 kHz, 972 kHz and 1 125 kHz corresponding to I.F.R.B. Nos. 6930, 6931, 6936, 6950 and 6956 respectively, would cause harmful interference to the existing Indian assignments on these channels. These could not be removed by mutual negotiation. The Indian Delegation, therefore, reserves the right of its Government for not accepting the above assignments in the Plan.

No. 59

For Denmark:

The Delegation of Denmark is unable to accept the interference from the station Dresden of the German Democratic Republic on the frequency of 1 431 kHz with a power of 150 kW.

In view of the result of the Conference it is necessary to optimize the use of the frequency 1 431 kHz. The Administration of Denmark is prepared to accept the station if the Administration of the German Democratic Republic will reduce the radiated power in the direction of Denmark by 10 dB.

No. 60

For Italy:

The Italian Delegation notes that:

a) the First Session of the Regional Broadcasting Conference failed to establish clear and unequivocal technical standards. This has resulted in the submission of a very large number of assignment requirements, some of which have been entered in the channel which Italy uses in conformity with the 1948 Copenhagen Convention and Plan;

b) The Second Session of the said Conference has not applied the technical planning principle for the adoption of which the Italian Delegation made every possible effort, inter alia, by submitting numerous documents;

c) the arrangements at the Second Session of the said Conference rendered possible only a limited and unsatisfactory coordination of the assignment requirements.

These facts have resulted in an appreciable reduction in the service areas of Italian transmitters for the protection of which Italy will have to take any action which may prove necessary.

In particular, Italy will coordinate:

— *with the Kingdom of Saudi Arabia:* the use of the frequencies 657 kHz and 900 kHz (corresponding to the frequencies of 656 kHz and 899 kHz assigned to Italy under the Copenhagen Plan). Italy and Saudi Arabia have undertaken to continue negotiations after the Conference with a view to reaching a solution satisfactory to both countries.

In particular, with regard to the frequency of 900 kHz, assigned exclusively to Italy under the Copenhagen Plan in the European Broadcasting Area, these negotiations should take account of the following, in accordance with paragraph 9.2.1 of the Report of the First Session of the Conference:

1) the existing service of the Milan transmitter covering Italian territory by sky wave should suffer no reduction;

2) within the limits of the compatibility referred to in paragraph 1) above, Saudi Arabia's requirement for this same frequency will be met in such a way as to ensure a satisfactory signal-to-interference ratio in its service area;

— *with Greece:* the use of the frequency 1 116 kHz (corresponding to the frequency of 1 115 kHz assigned to Italy under the Copenhagen Plan) and the frequencies 999 kHz and 1 008 kHz;

— *with the Republic of Malta:* the use of the frequencies 756 kHz (Capo Vaticano) and 999 kHz.

Moreover, Italy will use a necessary bandwidth of more than 9 kHz in cases where Italian transmitters are subject to interference from broadcasts in adjacent channels having a necessary bandwidth greater than 9 kHz.

No. 61

For Malawi:

The Delegation of Malawi declares that its Administration reserves the right to take such action it considers necessary to safeguard its interests should any Member, by failure to respect the provisions of the Agreement, its Annexes and Protocols attached to it, or the reservations catered by other delegations on behalf of their administrations prove to jeopardize Malawi's broadcasting service in the MF band.

No. 62

For Nepal:

Due to the mountainous nature of the country and the difficulties experienced in the development of MF broadcasting, Nepal also submitted to this Conference a requirement in the LF band for broadcasting use, namely, 191 kHz with a power of 100 kW.

As the present LF Broadcasting Plan only applies to Region 1, the Administration of Nepal reserves the right to the use of the above-mentioned frequency in the LF band for broadcasting in Nepal, when the next World Administrative Radio Conference decides to allocate LF for such purpose in Region 3.

No. 63

For the People's Republic of Bangladesh:

1. The Delegation of Bangladesh reserves for the Government of the People's Republic of Bangladesh the right to take such action as it may deem fit, to protect its interest against any right of priority that may be desired of by any administration operating an LF broadcasting service at present, should the World Administrative Radio Conference, 1979 permit the use of LF for broadcasting in Region 3 in the future.

2. The Delegation of Bangladesh reserves also for its Government the right to take any measures it sees fit to safeguard its national broadcasting coverage if other administrations desist to observe the technical provisions and coordinations adopted in the Conference.

No. 64

For the Republic of Burundi:

The Republic of Burundi reserves the right to take any action it may deem necessary to protect its interests if any other Member country fails to observe the provisions of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the MF Bands in Regions 1 and 3, or fails to observe the provisions of the Annexes or Protocols annexed to the Agreement, or if the reservations entered by other countries cause prejudice to the broadcasting services of the Republic of Burundi.

No. 65

For Ghana:

The Delegation of Ghana reserves for its Government the right to take any measures it sees fit to safeguard its national broadcasting coverage, if other countries fail to observe the technical provisions adopted by the Conference as the means of minimizing harmful interference.

No. 66

For the Kingdom of Saudi Arabia:

The Administrations of Italy and Saudi Arabia shall continue negotiations after the Conference in order to reach a solution, satisfactory to both Administrations, concerning the utilization of the frequency 900 kHz, assigned by the Copenhagen Plan as an exclusive channel within the European Broadcasting Area to Italy. These negotiations shall take into account, in accordance with paragraph 9.2.1 of the Report of the First Session of the Conference the following:

a) that the existing sky-wave service on Italian territory as provided by the Milano transmitter shall not be degraded;

b) that within the limits of compatibility with *a)* above the stated requirements of Saudi Arabia regarding this frequency are met in such a manner as to provide satisfactory signal/interference levels in its service area.

No. 67

For the Republic of Togo:

The Delegation of the Republic of Togo declares that its Administration reserves the right to take any action it may deem fit to safeguard its interests if the reservations entered by other delegations on behalf of their Administrations or any failure to observe the Agreement and the Annexes thereto tend to jeopardize the proper functioning of its broadcasting service.

No. 68

For Austria:

1. Austria went into this Conference with the firm intention of contributing as much as possible to the work of improving the poor situation existing in the MF-band on 1 May 1975. It was in the spirit of mutual cooperation and of sound technical reasoning that the Austrian Delegation sent a letter to the Convenors of the Planning Groups concerned and to the Liaison Group of the European Broadcasting Area, the most essential parts of which read as follows:

"The Austrian requirements have been prepared by taking into account the existing situation in Europe and the powers of the high-power transmitters have been adjusted to the values of usable field strength to be expected. In order to contribute to a better overall situation, which will be given for Austria provided that the usable field strength will not exceed:

83 dBμ on 585 kHz
78 dBμ on 1 026 kHz and
78 dBμ on 1 476 kHz,

the Austrian Delegation offers the following reduction of total channel power (disregarding low power transmitters) *during night-time:*

Frequency (kHz)	Total channel power according to requirements (kW)	Reduced in night-time (kW)
585	1 430	730
630	160	90
729	20	0
774	130	60
891.	210	60
1 026	710	460

"It is understood that the offered reductions of requirements are subject to achieving the indicated values of usable field strength. If this condition will not be fulfilled, the Austrian Administration would be forced to insist on the original requirements."

For frequencies 1 026 kHz and 1 476 kHz coordination with other delegations has either been carried out successfully or is agreed to be continued after the Conference. Consequently reduced powers for Austrian transmitters on 630 kHz, 774 kHz, 891 kHz and 1 026 kHz have been entered in the Plan and the frequency 729 kHz will no longer be used by Austria. Regretfully coordination for frequency 585 kHz could not be finalized.

2. Frequency 585 kHz (formerly 584 kHz) was assigned to Austria by the Copenhagen Convention (1948) on an exclusive basis and has been operated by Austria since 1950. Later on the Spanish station, Madrid, came into the channel, thereby greatly reducing the service area in Austria. Finally, among the requirements of Tunisia, put forward at this Conference, the station Gafsa appeared with a power of 350 kW. The interference at the Austrian main station, Wien, which forms part of a synchronized network of four stations, would be greatly increased by this Tunisian station which would become the predominant source of that interference.

In the course of lengthy and complicated negotiations, carried out with the aim of reducing interference by mutual power reductions the Austrian Delegation put forward several proposals, which led to an interim technical solution, which could, however, not be confirmed finally. At the latest stage, the Austrian Delegation formally proposed power reduction to 200 kW for Spain, to 100 kW for Tunisia and to 430 kW in total for Austria (thereby going far beyond the official offer according to the letter). In addition Austria proposed to start negotiations between the three Administrations in the first half of 1976 with the aim of improving the situation, taking fully into account the requirements of Tunisia, the special situation of Spain and the protection to the maximum possible extent of the existing service as well. Agreement on this should have been laid down in a common statement of the three Administrations.

Regretfully there has been no positive response to this proposal in its entirety. Finally, Tunisia decided to take unilateral action.

3. Thus the Delegation of Austria is forced to make the following reservation:

"Austria reserves the right, as regards operation of the station Gafsa with a power of more than 100 kW and/or of the station Madrid with a power of more than 200 kW on frequency 585 kHz before coming into force of the Agreement, to take all necessary measures in order to retain the service area in Austria as of 1 May 1975.

"Moreover, Austria reserves the right, as from the date of coming into force of the Agreement, to operate on the carrier frequency 585 kHz a synchronized network with the total power of 1 430 kW in order to overcome increased interference in this channel, unless by negotiations between the Administrations of Spain, Tunisia and Austria, as proposed by the Austrian Delegation, reasonable power reductions have been agreed."

No. 69

For the People's Republic of Bulgaria:

The Delegation of the People's Republic of Bulgaria, states that it cannot agree to the high level of interference caused by the high power stations of the following countries:

Federal Republic of Germany	— frequencies 576 and 594 kHz,
Israel	— frequency 576 kHz,
Cyprus	— frequencies 963 and 981 kHz,
Libya	— frequencies 828 and 1 125 kHz,
Syria	— frequencies 747 and 828 kHz,
France	— frequency 864 kHz.

The Administration of the People's Republic of Bulgaria requests the countries listed above to take the necessary action to reduce the level of interference. In view of the difficulties caused to Bulgarian broadcasting by this interference, the Administration of the People's Republic of Bulgaria reserves the right to take all the steps necessary to ensure the normal operation of its transmitters using these frequencies.

No. 70

For the Byelorussian Soviet Socialist Republic, the People's Republic of Bulgaria, the Hungarian People's Republic, the Mongolian People's Republic, the People's Republic of Poland, the German Democratic Republic, the Ukrainian Soviet Socialist Republic, the Czechoslovak Socialist Republic and the Union of Soviet Socialist Republics:

In signing the Agreement and Plan, the above-mentioned Delegations reserve, for their Governments, the right to take all the technical measures necessary to ensure the normal operation of their broadcasting media, in the event of a violation, by the broadcasting services of other countries, of the frequency usage established by the Agreement and Plan.

No. 71

For the Republic of Nauru:

The Republic of Nauru reserves the right to take such action as it may consider necessary to safeguard its interests should any Member fail to observe the provisions of the Regional Agreement Concerning the Use of the Broadcasting Frequencies in the Medium Frequency Bands in Regions 1 and 3 or its Annexes or the Protocols attached thereto, or should reservations by other countries jeopardize Nauru's broadcasting services.

No. 72

For the Federal Republic of Germany:

The Delegation of the Federal Republic of Germany, noting the statement No. 44 of the Delegation of the People's Republic of Poland concerning the station in Holzkirchen assigned on frequency 720 kHz, wishes to state that, since the new Frequency Plan does not contain any assignments to Poland on co- or adjacent channels, this station cannot cause any interference to stations operating in Poland. The reservation is therefore considered unfounded.

No. 73

For the United Arab Emirates:

The Delegation of the United Arab Emirates, has noted that Greece made a reservation (No. 30) concerning the use of the frequency 729 kHz by the United Arab Emirates reserving the right to increase the power of the Athens transmitter. The Delegation of U.A.E. wishes to state that it has done its best to reach an acceptable solution including its readiness to consider changing the frequency which is actually in operation to another suitable frequency, if such a frequency could be found, which does not have mutual interference with another administration. Such a solution was unfortunately not possible because of the severe congestion of the band.

However, since the Athens transmitter is also causing harmful interference in the service area of the U.A.E. transmitter, the Delegation of U.A.E. also reserves the right that, should future negotiations with the Administration of Greece fail to reach agreement to reduce interference on a mutual basis, and should the Greek Administration take any steps causing more interference to the U.A.E. broadcasting service on 729 kHz, the Administration of U.A.E. shall then take any action it deems necessary, including raising the power of its transmitter to safeguard its national broadcasting coverage.

No. 74

For the Kingdom of Lesotho:

With reference to the reservation No. 28 of the Republic of Uganda, the Delegation of the Kingdom of Lesotho wishes to point out that the frequency 639 kHz has been assigned to its Administration at the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975. This frequency has also been assigned to Uganda, and to the United Kingdom for a transmitter operating in Cyprus.

In the event of harmful interference to Lesotho, resulting from increase in power or modification of the Plan by any of these and other administrations, the Kingdom of Lesotho reserves the right to take such measures as it might consider necessary to protect its broadcasting interests.

No. 75

For the Republic of India:

The Delegation of the Republic of India is surprised to see the statement No. 53 (paragraph 1) made by the delegation of the People's Republic of China regarding the frequency assignments in the Plan to India for the stations Along, Anini, Bondila, Hapoli, Koloriang, Pasig Hat, Tawang and Ziro. The above-mentioned places have been and are part of India and it is the right of the Republic of India to set up broadcasting stations in Indian territory. Broadcasting stations are already functioning at some of the above locations. India rejects the unwarranted interference in its internal affairs and attempt to question India's territorial integrity and sovereignty.

No. 76

For Iceland:

With regard to the statement No. 12 made by the Delegation of France with respect to the frequency 182 kHz, assigned to the French station of Sarrelouis and the station Oranienburg of the German Democratic Republic among others, concerning the suggested settlement of the incompatibilities between the above two stations outside the Conference, the Icelandic Delegation on behalf of its Administration reserves its right to take such action as it may consider necessary to protect its interests depending on the nature of the possible settlement between the Administrations of France and the German Democratic Republic.

No. 77

For France:

Having taken cognizance of the statement No. 48 of the Delegation of the Kingdom of Morocco relating in particular to the frequencies 1 206 kHz and 1 377 kHz, the French Delegation enters full reservations with regard to the action its Administration might find necessary to take if the service areas of its Bordeaux and Lille transmitters should be reduced as a result of unilateral decisions by the Kingdom of Morocco.

No. 78

For France:

Having taken cognizance of the statement No. 69 by the People's Republic of Bulgaria relating to several frequencies, including that of the Paris station on 864 kHz, the French Delegation observes that the Bulgarian station included in the present Plan makes the largest contribution to interference with the Paris station, to which the frequency of 863 kHz was exclusively assigned under the Copenhagen Plan.

The French Delegation accordingly reserves its Administration's right to take all appropriate action to counteract the consequences of any unilateral decisions by the People's Republic of Bulgaria.

No. 79

For Japan:

The Delegation of Japan should like to state that its Administration cannot accept the reservation No. 53 (paragraph 3) made by the Administration of the People's Republic of China relating to LF broadcasting.

The LF band is not allocated to the broadcasting service in Region 3 according to Article 5 of the Radio Regulations. Moreover, the operation of broadcasting stations in Region 3 causes harmful interference to the stations of other radiocommunication services in Region 3, in particular, the aeronautical radiobeacon stations to which interference from broadcasting stations could be so serious as to endanger the safety of human life.

The Delegation of Japan therefore states that its Administration reserves all the rights to safeguard its interest from any consequences of the reservations made by the Administration of the People's Republic of China concerning the LF broadcasting.

No. 80

For Pakistan:

In its statement No. 58 (paragraph 3), the Delegation of the Republic of India has considered it fit to make a surprising claim which is not only removed from facts but also sets an unfortunate precedent of a State trying to utilize a purely technical forum for political propaganda.

The Delegation of Pakistan would like to place on record the correct position regarding the status of the State of Jammu and Kashmir as recognized by the United Nations. The State of Jammu and Kashmir is a disputed territory, the permanent status of which has yet to be decided by the people of that State in accordance with the relevant resolutions of the United Nations. All decisions regarding broadcasting stations lying within the territory of Jammu and Kashmir State, including the part at present under the occupation of India, are without prejudice to the interim status of that State as recognized in the resolutions of the United Nations. Those stations in the Plan which fall within the area of the State of Jammu and Kashmir under Indian occupation are *not* recognized by Pakistan as being on Indian territory.

In setting the record straight, the Pakistan Delegation cannot but express its regret at this attempt by the Indian Delegation to use this forum for making political propaganda.

No. 81

For the Socialist Federal Republic of Yugoslavia:

With reference to statement No. 51, the Yugoslav Delegation cannot accept the interference caused by the Israeli transmitter Bet Hilel on frequency 882 kHz, which reduces the service area of the Yugoslav station Titograd, used by Yugoslavia in conformity with the Copenhagen Plan.

The Yugoslav Administration invites the Administration of Israel to eliminate that interference, failing which, it reserves the right to take any necessary action to eliminate the interference and to improve the existing situation.

No. 82

For the Byelorussian Soviet Socialist Republic:

The Delegation of the Byelorussian S.S.R. strongly objects to the intention expressed by Belgium (statement No. 24) to make use of the frequency 281 kHz which is assigned to a Byelorussian radio station.

The use of this frequency by Belgium was not discussed at the Conference.

No. 83

For Iran:

The Delegation of Iran refers to the statement No. 51 by Israel and announces that it cannot agree to Israel's assignment on 1 026 kHz since Iran suffers a 92 dB interference from that assignment. The indicated interference suffered by Israel on 1 368 kHz does not exist in reality since its indication was caused by a material error which has now been corrected.

No. 84

For Tunisia:

In its statement No. 24, the Belgian Delegation announces the intention of its Administration to use the frequency 281 kHz, which is assigned to Tunisia under the Plan on a shared basis with other countries.

In accordance with the statement No. 55 the Tunisian Administration wishes to affirm:

a) that it regards the use of this frequency by Belgium or other countries as a breach of the Agreement;

b) that if, despite the present statement, such a breach occurs, it will take the necessary steps to safeguard its interests..

No. 85

For the Republic of Cyprus:

Noting that certain reservations have been made regarding Cyprus stations, the Administration of Cyprus wishes to state that it has been guided by the principles laid down in the Report of the First Session of the Conference in general, and the principle of equal rights in particular.

In view of the above, the Cyprus Administration reserves its right to take all measures necessary to protect its interests in relation to its broadcasting services.

With respect to statement No. 39, paragraph 3, the Administration of Cyprus would however continue discussions with the Administration of Tunisia regarding the possibility of mutual reduction in the interference level on frequency 963 kHz in the spirit of friendship and cooperation that prevails in the relations of the two countries.

No. 86

For the Socialist Republic of Roumania:

With reference to reservation No. 38 entered by Turkey, the Delegation of the Socialist Republic of Roumania wishes to state that it cannot take account of the Turkish objection, since this assignment was not coordinated with the Roumanian Administration in time and the Roumanian station operates in accordance with the provisions of the Radio Regulations.

No. 87

For the Republic of Korea:

The Delegation of the Republic of Korea declares that reservation No. 53, paragraph 2, made by the Delegation of the People's Republic of China in connection with the representation of the Korean Delegation is without foundation and without legal effect, and infringes upon the sovereign right of the Republic of Korea to operate and regulate its telecommunications.

The Delegation of the Republic of Korea further declares that it does not recognize such frequencies of the authorities of the People's Republic of China in the Plan which interfere or will interfere harmfully with the normal operation of broadcasting services of the Republic of Korea.

No. 88

For the Federal Republic of Germany:

The Delegation of the Federal Republic of Germany, noting statement No. 69 of the Delegation of the People's Republic of Bulgaria concerning stations assigned to frequencies 576 and 594 kHz, wishes to state the following:

In reference to the frequencies in question the Federal Republic of Germany is providing 4 dB protection on 576 kHz and 15 dB on 594 kHz (Frankfurt). The power of the station Hoher Meissner working equally on 594 kHz has remained unchanged for many years and no raise of power has been requested at this Conference.

The Bulgarian reservation is therefore considered unfounded.

No. 89

For the Republic of Sri Lanka (Ceylon):

Reference paragraph five of statement No. 58 of India, the Sri Lanka Delegation wishes to point out the following:

a) The Ceylon Delegation reserves the right on behalf of its Government to consider on the same terms, similar interference to Sri Lanka's existing assignments;

b) It has been decided at this Conference recently that negotiations should be continued after the Conference, where necessary, with a view to settlement.

No. 90

For Turkey:

The Turkish Delegation reserves its Government's right to take any action it may deem necessary to protect its interests should the reservations entered by the delegations of other countries on behalf of their Administrations cause prejudice to the proper functioning of the Turkish broadcasting services.

No. 91

For the State of Israel:

The declarations No. 54 made by Algeria (Algerian Democratic and Popular Republic), the Kingdom of Saudi Arabia, the Arab Republic of Egypt, the United Arab Emirates, the Hashemite Kingdom of Jordan, the State of Kuwait, Lebanon, the Libyan Arab Republic, the Kingdom of Morocco, the Islamic Republic of Mauritania, the State of Qatar, the Democratic Republic of the Sudan, Tunisia, the Yemen Arab Republic, the People's Democratic Republic of Yemen being in flagrant contradiction to the principles and purposes of the Convention and, therefore, void of any legal validity, the Delegation of Israel, on behalf of the Government of Israel wishes to put on record that it rejects these declarations outright and will proceed on the assumption that they can have no validity as to the rights and duties of any Contracting Member.

In any case, Israel will avail itself of its rights to safeguard its interests should the Administrations of Algeria (Algerian Democratic and Popular Republic), the Kingdom of Saudi Arabia, the Arab Republic of Egypt, the United Arab Emirates, the Hashemite Kingdom of Jordan, the State of Kuwait, Lebanon, the Libyan Arab Republic, the Kingdom of Morocco, the Islamic Republic of Mauritania, the State of Qatar, the Democratic Republic of the Sudan, Tunisia, the Yemen Arab Republic and the People's Democratic Republic of Yemen in any way violate any of the provisions of the Agreement or of the Annexes and Protocols attached thereto.

No. 92

For the State of Israel:

Referring to statement No. 69 forwarded by the People's Republic of Bulgaria regarding the assignment 576 kHz (presently 575 kHz), the Delegation of the State of Israel states the following:

An unregistered high-power station of the People's Republic of Bulgaria has been put into operation lately—in contradiction to the provisions of the Radio Regulations—causing harmful interference to one of Israel's main stations, which has been in operation for many years.

There was an exchange of correspondence on this subject and the assistance of the I.F.R.B. was asked to eliminate this interference.

Discussions with the Bulgarian Delegation in the course of the Conference did not result, regretfully, in a solution of this problem. Therefore the Administration of Israel requests the Administration of Bulgaria to take the necessary steps to eliminate this interference.

If satisfactory steps are not taken, the Israel Administration reserves its right to augment the power of its station operating on this frequency, in order to secure its adequate coverage.

No. 93

For the Republic of Mali:

The Delegation of the Republic of Mali, having taken cognizance of the numerous reservations entered by certain delegations on behalf of their administrations or governments, is deeply disturbed concerning the correct application of the provisions adopted at the present Conference.

Some of these reservations appear to imply an intention to avoid the obligations imposed by the Conference.

The Delegation of the Republic of Mali accordingly reserves its Administration's right to take any action necessary to safeguard its interests should the failure of an administration to observe the provisions adopted by the Conference jeopardize the proper functioning of its broadcasting service.

No. 94

For France:

The French Delegation, having noted statement No. 19 of the U.S.S.R. declares, after consultation with the Governments of the United Kingdom and the United States of America, that nothing in the work or the Final Acts of this Broadcasting Conference is incompatible with any of the provisions of the Quadripartite Agreement of 3 September 1971.

This declaration applies also to the declarations in the Final Protocols of States which are not Parties to the Quadripartite Agreement of 3 September 1971.

No. 95

For the United Kingdom of Great Britain and Northern Ireland:

The Delegation of the United Kingdom, after consultation with the Governments of France and the United States of America, noting statement No. 19 of the U.S.S.R. states that nothing in the work or the results of the Broadcasting Conference is inconsistent with any of the provisions of the Quadripartite Agreement of 3 September, 1971.

This statement applies also to similar statements by states which are not party to the Quadripartite Agreement of 3 September, 1971.

No. 96

For Spain:

With reference to statements Nos. 39 and 68 made by Tunisia and Austria respectively in relation to the frequency 585 kHz, the Spanish Delegation wishes to state the following:

a) the Spanish Administration is willing to continue to seek a technical solution of this difficult coordination;

b) with regard to the above point, account must be taken of the fact that, owing to the comparatively short distance between Madrid and Gafsa (1 300 km), the interference caused by the Tunis station results in an unacceptable reduction of the service area of the Madrid transmitter. There are two possible solutions: to reduce the power of the Gafsa station to below 20 kW, or to change the channel;

c) with regard to technical coordination between the assignments to Austria and to the Madrid station, since the distance between the stations is of the order of 1 800 km, we believe it possible to arrive at acceptable conditions of coordination by achieving a better balance between the powers of the Austrian and Spanish stations, preferably through a reduction of the power of the assignments to Austria;

d) independently of what has been stated above, the Spanish Delegation feels compelled to add that the unfavourable situation for Spain on this frequency is common to practically all our assignments and that this, as already explained in the reservation we entered in statement No. 46 is due to the imperfect procedure applied and lack of equity shown in the preparation of the Plan.

No. 97

For Spain:

With reference to statement No. 34 made by the Socialist Federal Republic of Yugoslavia, with respect to the frequencies 684 kHz, 918 kHz and 1 134 kHz, the Spanish Delegation wishes to state the following:

1. *Frequency 684 kHz*

Bearing in mind that the Yugoslav requirement for Belgrade is for a power of 2 000 kW and that the assignment to the Spanish Seville station is for 500 kW, the Spanish Delegation has proposed, in all the negotiations that have taken place, that, in view of the fact that the distance between the two stations is 2 300 km, it should be possible to effect coordination, on technical conditions acceptable to both Administrations by achieving a better balance of the power of the Belgrade and Seville stations, preferably through a reduction of the power of the Belgrade station. The disparity of the powers included in the Plan means that the service area of the Seville station is reduced to an unacceptable degree.

2. *Frequency 918 kHz*

The power of the Yugoslav station on this frequency is 600 kW; that of the Spanish station of Oviedo is 20 kW.

Technical coordination would be possible on condition that the power of the Yugoslav station be appreciably reduced.

3. *Frequency 1 134 kHz*

The ratio of the powers assigned to Yugoslavia (1 650 kW) and to Spain (75 kW) justifies the assertion that, as in 2 above, a reduction of power by the Yugoslav Administration is the only solution for obtaining good technical coordination.

4. *Conclusion*

Independently of what has been stated above, the Spanish Delegation feels compelled to add that the unfavourable situation for Spain on the above frequencies is common to practically all the assignments of that country and that this, as already explained in reservation No. 46 is due to the imperfect and inequitable procedure followed in the preparation of the Plan.

The delegations which have signed the Agreement,
with the exception of the
Delegation of the Republic of Indonesia,
have also signed the Final Protocol

ADDITIONAL PROTOCOL I

Relating to the Abrogation of the European Broadcasting Convention (Copenhagen, 1948) and the annexed Copenhagen Plan

The delegates of the following Members of the International Telecommunication Union:

Belgium, Byelorussian Soviet Socialist Republic, People's Republic of Bulgaria, Republic of Burundi, Vatican City State, Denmark, Finland, France, Greece, Hungarian People's Republic, Ireland, Italy, Kingdom of Morocco, Monaco, Norway, Kingdom of the Netherlands, People's Republic of Poland, Ukrainian Soviet Socialist Republic, Socialist Republic of Roumania, United Kingdom of Great Britain and Northern Ireland, Confederation of Switzerland, Czechoslovak Socialist Republic, Tunisia, Union of Soviet Socialist Republics, Socialist Federal Republic of Yugoslavia

parties to the European Broadcasting Convention (Copenhagen, 1948) and meeting in Geneva for the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975, convened in accordance with the provisions of the International Telecommunication Convention (Malaga-Torremolinos, 1973),

agree that

1. the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 and the annexed Plan shall replace the European Broadcasting Convention and annexed Copenhagen Plan which shall be abrogated* save that the rights and obligations in respect of the coast stations listed in Chapter II of the Copenhagen Plan shall continue until modified by the agreement of the parties concerned or by a competent conference;

2. the abrogation of the European Broadcasting Convention and Copenhagen Plan in accordance with 1. above shall take effect on the coming into force of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 and of the annexed Plan provided that each of the contracting governments to the European Broadcasting Convention shall have deposited with the Government of the Kingdom of Denmark (the depository of the aforesaid Convention) a declaration of acceptance of the abrogation of the European Broadcasting Convention and the annexed Copenhagen Plan;

3. the aforesaid members shall take action to inform the Government of the Kingdom of Denmark that they formally agree to the abrogation of the European Broadcasting Convention and the Copenhagen Plan annexed thereto;

4. the aforesaid notification procedure shall be taken as soon as practicable before entry into force of the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 and of the annexed Plan;

5. the Government of the Kingdom of Denmark should be asked to inform the governments who are parties to the European Broadcasting Convention and the Secretary-General of the International Telecommunication Union of the notifications received in accordance with 3. above.

(The delegations of the above-mentioned countries have signed the Additional Protocol I)

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* Explanatory information about the abrogation of the European Broadcasting Convention and annexed Copenhagen Plan is recorded in Document No. 125 of this Conference.

ADDITIONAL PROTOCOL II

Abrogating the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Band in the African Broadcasting Area (Geneva, 1966), and the Plan annexed thereto

The delegates of the following countries Members of the International Telecommunication Union:

Algeria (Algerian Democratic and Popular Republic), United Republic of Cameroon, Central African Republic, People's Republic of the Congo, Republic of the Ivory Coast, Republic of Dahomey, Arab Republic of Egypt, Spain, Ethiopia, France, Gabon Republic, Ghana, Republic of Guinea, Republic of Upper Volta, Republic of Kenya, Republic of Liberia, Malawi, Malagasy Republic, Republic of Mali, Kingdom of Morocco, Mauritius, Islamic Republic of Mauritania, Republic of the Niger, Federal Republic of Nigeria, Republic of Uganda, United Kingdom of Great Britain and Northern Ireland, Republic of the Senegal, United Republic of Tanzania, Republic of the Chad, Togolese Republic, Republic of Zaire, Republic of Zambia

parties to the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Band in the African Broadcasting Area (Geneva, 1966), and meeting in Geneva for the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), convened in accordance with the provisions of the International Telecommunication Convention (Malaga-Torremolinos, 1973),

agree

that the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Band in the African Broadcasting Area (Geneva, 1966) and the Plan annexed thereto shall be abrogated and replaced by the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 on the date of entry into force of this Agreement.

(The delegations of the above-mentioned countries have signed the Additional Protocol II)

ADDITIONAL PROTOCOL III

Relating to the Use of the Frequency 522 kHz by the Broadcasting Service in Austria

The delegates of the following Members of the International Telecommunication Union:

Republic of Afghanistan, Algeria (Algerian Democratic and Popular Republic), Federal Republic of Germany, Austria, People's Republic of Bangladesh, Belgium, Byelorussian Soviet Socialist Republic, People's Republic of Bulgaria, Republic of Burundi, Republic of Cyprus, Vatican City State, Denmark, Finland, France, Republic of Upper Volta, Hungarian People's Republic, Iran, Ireland, Iceland, Italy, Hashemite Kingdom of Jordan, State of Kuwait, Kingdom of Lesotho, Lebanon, Republic of Liberia, Principality of Liechtenstein, Luxembourg, Malawi, Monaco, Federal Republic of Nigeria, Norway, Kingdom of the Netherlands, People's Republic of Poland, Portugal, German Democratic Republic, Ukrainian Soviet Socialist Republic, Socialist Republic of Roumania, United Kingdom of Great Britain and Northern Ireland, Sweden, Confederation of Switzerland, Czechoslovak Socialist Republic, Togolese Republic, Tunisia, Turkey, Union of Soviet Socialist Republics, People's Democratic Republic of Yemen

meeting in Geneva for the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975, convened in accordance with the provisions of the International Telecommunication Convention (Malaga-Torremolinos, 1973),

take note of the following:

1. by virtue of No. 185 of the Radio Regulations, Austria may keep the broadcasting station Innsbruck in the band 515-525 kHz provided that it does not cause harmful interference to the maritime mobile service;

2. for many years a synchronized network of three transmitters each of 10 kW carrier power and four transmitters of very low power have been recorded in the Master International Frequency Register on behalf of Austria on the express condition, as specified in No. 115 of the Radio Regulations, that no harmful interference is caused to services carried out by stations operating in accordance with the provisions of the Convention; the use of these transmitters on the frequency 520 kHz with a bandwidth greater than 9 kHz has not given rise to complaint;

3. Austria proposes to change the carrier frequency of the assignment in this band to the nearest multiple of 9 kHz (522 kHz) for the sake of compatibility with the channelling plan adopted by this Conference, to reduce the radiation bandwidth to 9 kHz and to increase the power of the Innsbruck station from 10 to 30 kW. It is proposed that such changes should come into force on 23 November 1978 at 0001 hours (GMT);

4. for the proposed stations on frequency 522 kHz coordination in relation only to other stations of the broadcasting service has been carried out by applying all the technical criteria adopted by this Conference (with the exception of the value of the carrier frequency). The resulting characteristics of the proposed stations on frequency 522 kHz are shown in the Annex;

5. the provisions of this Additional Protocol in no way affect the status of the stations concerned with respect to stations of the other radiocommunication services to which the frequency band 515-525 kHz is allocated and the provisions of Nos. 185 and 115 of the Radio Regulations still apply;

6. the provisions of this Additional Protocol in no way prejudge any decisions which the World Administrative Radio Conference scheduled for 1979 may make concerning No. 185 of the Radio Regulations.

Annex: 1

(The delegations of the above-mentioned countries have signed the Additional Protocol III)

ANNEX

Assigned frequency (kHz) (Channel number)	Name of transmitting station	Country symbol	Geographical coordinates of transmitting station	Necessary bandwidth (kHz)	Carrier power (kW)	Authorized maximum radiation (dB)	Antenna		Ground conduct-ivity (mS/m)	Hours of operation (GMT)
							Type	Height (m)		
1	2	3	4	5	6	7	8	9	10	11
522	MUEHLBACH HKG	AUT	13E07 47N22	D9	0.1	—10	A	15	0.3 (6)	0000-2400
522	MURAU	AUT	14E11 47N07	D9	0.1	—10	A	15	0.3 (6)	0000-2400
522	NEUKIRCHEN GRV	AUT	12E17 47N15	D9	0.1	—10	A	15	0.3 (6)	0000-2400
522	INNSBRUCK ALDR	AUT	11E27 47N15	D9	30	15	A	151	0.3 (6)	0000-2400
522	LIENZ OSTTIROL	AUT	12E47 46N49	D9	10	10	A	104	0.1 (7)	0000-2400
522	LIEZEN	AUT	14E14 47N34	D9	10	10	A	150	0.3 (6)	0000-2400

RESOLUTIONS
AND
RECOMMENDATIONS

RESOLUTION No. 1

Relating to the Updating of the Master International Frequency Register on the Date of Entry into Force of the Agreement

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

noting

a) that in accordance with Article 5 of the Agreement, administrations shall notify to the I.F.R.B., in conformity with Article 9 of the Radio Regulations, frequency assignments which will be in use at the date of entry into force of the Agreement;

b) that according to the provisions of Article 9 of the Radio Regulations, Contracting Members may possess, for their frequency assignments, certain rights attaching to the dates entered in Column 2a or 2b of the Master International Frequency Register opposite the assignments concerned with respect to other frequency assignments:

- to the broadcasting stations of non-Contracting Members, or
- stations of other radiocommunication services;

considering

a) that, under the terms of the Agreement, Contracting Members have adopted for their broadcasting stations in Regions 1 and 3 the characteristics specified in the Plan and that consequently such stations will operate from the date of entry into force of the Agreement in conformity with the characteristics specified in the Plan, except in those cases covered by Resolution No. 7;

b) that the Conference has adopted uniform channel spacing necessitating modification of the carrier frequency of most of the stations in use and that this modification may affect, in particular, stations of other radiocommunication services;

resolves

1. that, on 23 November 1978 at 0001 hours (GMT), administrations shall change the carrier frequency and the other characteristics of their existing broadcasting stations in order to bring them into conformity with the Plan, except in those cases covered by Resolution No. 7;

2. that administrations shall notify to the I.F.R.B. the frequency assignments which are so modified. This notification shall be made as soon as possible within the period specified in Article 9 of the Radio Regulations (that is, ninety days before the date of entry into force of the Agreement);

3. that in addition to the information specified in Appendix 1 to the Radio Regulations, administrations shall indicate the frequency assignments whose entries are as a consequence to be deleted from the Master Register;

4. that in accordance with the provisions of Article 9 of the Radio Regulations the I.F.R.B. shall examine these notifications with respect to existing entries in the Master Register which relate to broadcasting stations of non-Contracting Members and stations of other radiocommunication services;

5. that, according to its finding, the I.F.R.B. shall record these assignments in the Master Register with the appropriate date in Column 2a or 2b. However, when the date to be recorded in Column 2a or 2b is different from that already registered this latter date shall be transferred to Column 13c with an appropriate symbol. At the same time the I.F.R.B. shall enter another symbol in the Remarks Column to indicate that this frequency assignment is in conformity with the Plan and that as a result it shall be considered as having the same status as any other assignments in conformity with the Plan irrespective of the date these later assignments may have in Column 2a or 2b;

6. that, three months after the date of entry into force of the Agreement, the I.F.R.B. shall send to each administration a list of its frequency assignments recorded in the Master Register for which the I.F.R.B. has received no notification and it shall urge such administrations to provide the necessary information for updating the Master Register;

7. that, if in spite of its reminder the I.F.R.B. receives no reply, a symbol shall be inserted in the Remarks Column indicating that the assignment concerned is not in conformity with the Agreement;

invites the I.F.R.B.

to assist administrations in implementing the provisions of this Resolution.

RESOLUTION No. 2

Relating to Frequency Assignments in Low-Power Channels (LPC)

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

noting

a) that the planning of LPC frequency assignments is based on the criteria laid down in Annex 2 to the Agreement;

b) that the provisions of Article 4 (paragraph 3.3) of the Agreement apply to changes in or additions to LPC frequency assignments made after 23 November 1978;

considering

a) that it has not been possible, during the Conference, to examine all LPC requirements;

b) that the LPC frequency assignments might be coordinated among administrations before the entry into force of the Agreement;

resolves

1. that the LPC frequency assignments shall form Appendix 1 to the Plan;

2. that a provisional appendix established by the Conference shall contain:

- those LPC frequency assignments which do not require the agreement of any other administration, and those for which the agreement of all administrations concerned has been obtained; and
- those LPC frequency assignments for which it has not been possible to seek or obtain the agreement of all the administrations concerned during the Conference; such assignments shall have a symbol indicating this fact and a list of any countries with which agreement has already been reached;

3. that the provisions of Annex 2 (paragraph 4.8.1) to the Agreement shall be used by administrations until 1 January 1978 to coordinate the LPC frequency assignments;

instructs the I.F.R.B.

1. to prepare Appendix 1 to the Plan for publication by the Secretary-General within the time limit specified for this purpose; to this end the I.F.R.B. shall amend the provisional appendix by including therein those frequency assignments which it has been possible to coordinate and by excluding those frequency assignments which it has not been possible to coordinate;

2. to provide every assistance to administrations which so request in order to facilitate coordination;

instructs the Secretary-General

to publish by 1 May 1978 the Appendix thus prepared by the I.F.R.B.

RESOLUTION No. 3

Relating to the continued Coordination of Frequency Requirements of Countries not represented at the Conference

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

recalling

a) that it invited countries not represented at the Conference to submit their requirements and to attend the Conference in time for the necessary bilateral and multilateral negotiations;

b) that it asked the I.F.R.B., pursuant to No. 479 of the Radio Regulations, to assist countries not represented at the Conference by taking care of the requirements they submitted and which are listed in the Annex to this Resolution;

noting

a) that certain Members of the Union not represented at the Conference submitted their requirements only towards the end of the Conference;

b) that some of the requirements thus submitted were not accompanied by sufficient data to enable them to be coordinated;

c) that these requirements substantially affect the requirements of other countries;

d) that owing to the difficulties of communication experienced by the I.F.R.B. it was not possible to complete the coordination of requirements among the countries mentioned in *a)* and *c)* above;

noting moreover

that assignments to existing broadcasting stations of countries not represented at the Conference which are recorded in the Master Register or in the African Plan, Geneva, 1966, might be included in the Plan;

considering

a) that the requirements of countries not represented at the Conference for which coordination has not been completed during the Conference may be coordinated after the Conference;

b) that such coordination could possibly necessitate a change of frequencies or of other characteristics of assignments included in the Plan;

c) that such changes might affect the assignments of administrations other than those whose requirements are directly affected by the requirements of countries not represented at the Conference;

resolves

1. that the assignments to broadcasting stations of countries not represented at the Conference which are recorded in the Master Register or in the African Plan, Geneva, 1966, shall be included in the Plan on the nearest new carrier frequencies of the Plan unless they are so incompatible with the other assignments in the Plan that coordination is necessary. In that case they shall be recorded in the Plan subject to coordination in accordance with the procedure specified in 3 to 5 below;

2. that, if the said procedure is satisfactorily completed, the frequency requirements listed in the Annex to this Resolution, of countries not represented at the Conference and for which coordination was not completed during the Conference shall be transferred to the Plan;

3. that coordination of these requirements among the administrations concerned shall be continued after the Conference through the I.F.R.B. Efforts should be made to complete coordination before the date of entry into force of the Agreement;

4. that, if the above coordination requires consequential changes in assignments of other Contracting Members, the procedure provided for in Article 4 of the Agreement shall be applied. In any case, the results of the coordination shall be published in the special section of the I.F.R.B. weekly circular referred to in Article 4 (paragraph 3.2.14) of the Agreement;

5. that the administrations concerned shall endeavour to make satisfactory provision for the requirements listed in the Annex to this Resolution, for example, by agreeing to an increase in the usable field strength above the value given in Article 4 (paragraph 3.2.5) of the Agreement;

instructs the Secretary-General

1. to invite the countries Members of the Union not represented at the Conference to accede to the Agreement as soon as possible;

2. to bring the provisions of the International Telecommunication Convention to the attention of the other countries non-Members of the Union with a view to inviting them to accede to that instrument and then to this Agreement;

3. to bring this Resolution to the attention of these countries with a view to encouraging them to accede to the Agreement;

instructs the I.F.R.B.

1. to assist the administrations concerned in reaching a satisfactory solution;

2. to include in the master copy of the Plan the frequency assignments resulting from the successful application of the procedure mentioned in this Resolution.

Annex: 1 (with 1 appendix)

ANNEXE / ANNEX / ANEXO

(En ce qui concerne les renseignements inclus dans les colonnnes, voir page 12B / As far as information included in the columns is concerned, see page 12B / En lo que concierna a la información que figura en las columnas, véase la página 12B)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Angola														
1089	LUANDA	AGL	13E49 08S48	A20	100	20.4				A	75	3	0000-2400	
1368	LUANDA	AGL	13E20 08S50	A20	100	20.4				A	60	3	0000-2400	
Etat de Bahreïn / State of Bahrain / Estado de Bahrein														
558	BAHRAIN	BHR	50E28 26N09	A 9	50	17.4				A	150	5	0300-2100	
612	BAHRAIN	BHR	50E28 26N09	A 9	20	13.4				A	95	5	0300-2100	
République Socialiste de l'Union de Birmanie / Socialist Republic of the Union of Burma / República Socialista de la Unión de Birmania														
954	RANGOON	BRM	96E10 16N52	A20	50	17.6				A	122	3	0000-1600	
Cambodge / Cambodia														
999	PHNOM PENH	CBG	104E55 11N34	A10	120	21.2				A	75	3	0000-2400	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

République Populaire Démocratique de Corée / Democratic People's Republic of Korea / República Popular Democrática de Corea

540	MYONGGAN	KRE	129E31 41N16	A16	10	10.4				A	110		2000-1800	
549	JHANGJIN	KRE	127E35 40N23	A16	10	10.4				A	110		2000-1800	
585	PYONGYANG	KRE	125E48 39N21	A16	500	29.1				A	250		2000-1800	
603	YOENGHUNG	KRE	127E14 39N30	A16	100	20.6				A	150		2000-1800	
612	CHONMA	KRE	125E02 40N03	A16	100	20.6				A	150		2000-1800	
621	SARIWON	KRE	125E45 38N25	A16	1000	32.1				A	200		2000-1800	
630	BUKCHONG	KRE	128E20 40N10	A16	100	20.6				A	150		2000-1800	
639	CHONGJIN	KRE	129E43 41N55	A16	500	29.1				A	200		2000-1800	
657	KANGNAM	KRE	125E33 39N05	A16	1500	33.9				A	200		2000-1800	
684	SAMGO	KRE	126E32 38N02	A16	250	24.6				A	150		2000-1800	
702	CHONGJIN	KRE	129E41 41N55	A16	50	17.4				A	70		2000-1800	
720	WIWON	KRE	126E02 40N50	A16	500	27.6				A	150		2000-1800	
738	SINSANG	KRE	127E25 39N39	A16	100	20.6				A	115		2000-1800	
765	HYESAN	KRE	128E12 41N24	A16	50	17.4				A	70		2000-1800	
783	PYONGYANG	KRE	125E40 39N04	A16	1000	32.1				A	200		2000-1800	
801	HWADAE	KRE	129E26 40N51	A16	500	27.6				A	150		2000-1800	
810	KAESONG	KRE	126E34 37N59	A16	50	17.6				A	115		2000-1800	
819	CHONGJIN	KRE	129E43 41N52	A16	500	27.6				A	150		2000-1800	
855	SANGWON	KRE	126E06 38N51	A16	500	30.4				A	200		2000-1800	
864	SHINUIJU	KRE	124E30 40N01	A16	250	24.6				A	120		2000-1800	
882	WONSAN	KRE	127E25 39N04	A16	250	24.6				A	100		2000-1800	
927	HWANGJU	KRE	125E47 38N41	A16	50	19.1				A	150		2000-1800	
999	HAMHEUNG	KRE	127E39 39N56	A16	250	24.6				A	115		2000-1800	
1080	ONGJIN	KRE	125E22 37N56	A16	1500	33.9				A	150		2000-1800	
1116	PUKCHANG	KRE	126E20 39N35	A16	50	17.6				A	105		2000-1800	
1179	JONGJU	KRE	125E12 39N44	A16	100	22.1				A	105		2000-1800	
1224	UNSAN	KRE	125E54 40N06	A16	50	19.1				A	105		2000-1800	
1341	KIMCHAEK	KRE	129E10 40N50	A16	100	22.1				A	105		2000-1800	
1440	NAMPO	KRE	125E22 38N49	A16	100	22.1				A	105		2000-1800	
1512	KILJU	KRE	129E21 40N57	A16	30	15.2				A	50		2000-1800	
1521	PYONGYANG	KRE	125E32 39N05	A16	50	17.6				A	75		2000-1800	
1530	RYONGRIM	KRE	129E39 40N13	A16	50	17.6				A	75		2000-1800	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
République de la Guinée équatoriale / Republic of Equatorial Guinea / República de Guinea Ecuatorial														
675	BATA	GNE	09E46 01N48	A20	100	22.1				A				
République d'Iraq / Republic of Iraq / República de Iraq														
558	ANAH	IRQ	41E50 34N30	A18	600	28.2				A	123	4	0200-2300	
603	MOSUL	IRQ	43E05 36N20	A18	600	28.2				A	114	4	0200-2300	
693	BASRAH	IRQ	47E45 30N15	A20	1200					B		5	0200-2300	
846	MISAN	IRQ	47E15 31N50	A18	600	28.2				A	81	3	0200-2300	
909	ABU GHRAIB	IRQ	44E15 33N19	A20	200					B		4	0200-2300	
1035	BABEL	IRQ	44E30 32N30	A20	2000					B		4	0200-2300	
1359	KIRKUK	IRQ	44E25 35N30	A20	250	26.1				A	112	4	0200-2300	
République des Maldives / Republic of Maldives / República de las Maldivas														
1458	MALE	MLD	73E30 04N10	A 7	50	19.1				A	115	3	0100-1700	
Namibie / Namibia														
990	OSHAKATI	NMB	15E42 17S48	A20	100	20.6				A	111	3	0000-2400	
1062	OKAKARARA	NMB	17E27 20S35	A20	100	22.1				A	141	4	0000-2400	
1557	GOBABIS	NMB	18E58 22S27	A20	100	22.1				A	96	3	0000-2400	
Sultanat d'Oman / Sultanate of Oman / Sultanía de Omán														
738	IZKI	OMA	57E46 22N56	A 9	1500	33.9				A		6	0300-2100	
1035	SALALAH	OMA	54E06 17N03	A 9	100					B		4	0300-2100	
1242	SEEB	OMA	58E10 23N40	A 9	100	20.4				A	59	5	0300-2100	
1368	NIZWA	OMA	57E32 22N56	A 9	50	19.1				A		6	0300-2100	
1395	AL WASAIL	OMA	58E14 23N12	A 9	50	19.1				A		6	0300-2100	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sierra Leone / Sierra Leona														
558	SEFADU	SRL	11W45 07N58	A 9	50	17.0				A	40	2	0500-2400	
1278	KABALA	SRL	11W35 09N35	A 9	50	17.4				A	40	2	0500-2400	
République Démocratique Somalie / Somali Democratic Republic / República Democrática Somalí														
702	MERCA	SOM	44E50 01N40	A18	25	14.4				A	100	4	0300-2100	
Royaume du Swaziland / Kingdom of Swaziland / Reino de Suazilandia														
954	SIDVOKODVO	SWZ	31E26 26S38	A20	100	22.1				A	160	7	0400-2200	
République du Sud Viet-Nam / Republic of Viet-Nam (South) / República de Viet-Nam del Sur														
702	DANANG	VTN	108E17 16N04	A10	50					B		4	2100-1600	

Appendice / Appendix / Apéndice: 1

APPENDICE

Gain de l'antenne (en dB) pour différents azimuts et angles de site

(en ce qui concerne les renseignements inclus dans les colonnes, voir page 280A)

APPENDIX

Antenna Gain (dB) for different Azimuths and Angles of Elevation

(as far as information included in the columns is concerned, see page 280A)

APÉNDICE

Ganancia de antena (en dB) para diferentes acimutes y ángulos de elevación

(en lo que concierna a la información que figura en las columnas, véase la página 280A)

1	2	3	4	AZIMUT – AZIMUTH – ACIMUT																																	
				00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
République d'Iraq / Republic of Iraq / República de Iraq																																					
IRQ	693	BASRAH		0	3	2	0	−1	−3	−4	−6	−7	−8	−9	10	−9	−8	−7	−6	−4	−2	−1	0	2	3	4	5	5	5	5	5	5	5	5	5	5	5	4	4
IRQ	909	ABU GHRAIB		0	2	1	−1	−3	−5	−6	−6	−6	−5	−3	−1	1	2	2	2	2	2	2	2	1	−1	−3	−5	−6	−6	−6	−5	−3	−1	1	2	2	2	2	2
IRQ	1035	BABEL		0	−14	−18	−20	−22	−22	−22	−22	−22	−22	−22	−22	−22	−22	−22	−22	−22	−22	−20	−18	−14	−12	−10	−6	−1	3	7	−10	−11	−11	−11	−10	7	3	−1	−6	−10	−12
Sultanat d'Oman / Sultanate of Oman / Sultania de Oman																																					
OMA	1035	SALALAH		0	2	3	4	5	6	7	7	7	7	6	5	3	2	1	1	2	2	2	2	2	1	1	2	3	5	6	7	7	7	7	6	5	4	3	3	2
				1				5			7																												2
				2				5			7																												2
				3				4			6																												2
				4				3			4																												2
				5				2			3																												1
				6				0			0																												−1
				7				−3			−3																												−3
				8				−8			−8																												−8
				9				−10			−10																												−10
République du Sud Viet-Nam / Republic of Viet-Nam (South) / República de Viet-Nam del Sur																																					
VTN	702	DANANG		0	−6	−6	−6	−6	−6	−6	−6	−6	−6	−6	−6	−6	−5	−3	−1	0	1	2	2	3	3	3	3	3	3	3	3	3	3	2	2	1	0	−1	−4	−5	−6

RESOLUTION No. 4

Relating to the Determination of the Service Areas of the Stations in the Plan

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

noting

that the work of the Conference has been based on calculations made of the usable field strength of each frequency assignment in the direction of the main interfering transmitter;

considering

a) that it may be useful to know the boundaries of the service areas resulting from the Plan;

b) that time did not permit such boundaries to be determined during the Conference;

instructs the I.F.R.B.

to prepare for publication by the Secretary-General a document indicating, in 18 azimuths around each of the stations included in the Plan when its carrier power is equal to or greater than 10 kW or when a directional antenna is used, the following values:

- the usable field strength of the ground wave by day and the corresponding distance,
- the usable field strength of the ground wave by night and the corresponding distance,
- the usable field strength of the sky wave and the corresponding distance.

RESOLUTION No. 5

Relating to the Accession to the Agreement of Countries not represented at the Conference and which did not send their Frequency Requirements

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

considering

a) that the Plan annexed to the Agreement cannot be truly comprehensive unless it takes into account the requirements of all countries in Regions 1 and 3;

b) that some countries Members of the Union which were invited to the Conference have been unable, for one reason or another, to participate in its work and to inform it of their frequency requirements;

c) that countries which are not at present Members of the Union should be encouraged to accede to the Agreement after acceding to the International Telecommunication Convention;

d) that when these countries accede to the Agreement they might have some difficulty in obtaining satisfactory inclusion of their frequency requirements in the Plan;

e) that these countries should be fully informed of their rights and obligations under the Agreement;

resolves

1. that when any of the countries mentioned in considering *b)* or *c)* indicates its intention of acceding to the Agreement the Secretary-General shall immediately bring this Resolution to its notice and invite it to inform the I.F.R.B. of its frequency requirements for inclusion in the Plan;

2. that if the assistance of the I.F.R.B. is requested, it shall undertake any necessary studies or examinations and communicate the results to the administration concerned;

3. that the administration concerned shall apply, either directly or through the I.F.R.B., the procedure laid down in Article 4 of the Agreement;

4. that administrations shall endeavour to make satisfactory provision for the requirements thus expressed, for example, by agreeing to an increase in the usable field strength above the value given in Article 4 (paragraph 3.2.5) of the Agreement.

RESOLUTION No. 6

Relating to the Low Frequencies in the African Broadcasting Area

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

noting

a) that the World Administrative Radio Conference to be held in 1979 may modify the conditions governing the use of the 150-285 kHz band in Region 1;

b) that in certain parts of Region 1 this frequency band is not allocated to broadcasting;

c) that, owing to the lack of experimental data, the possibilities of using the LF band in the African Broadcasting Area are not yet known;

d) that, apart from a few requirements, the countries in the African Broadcasting Area have not expressed any needs in this band;

considering

that this should not be interpreted as meaning that these countries are willing to forgo the use of this band for broadcasting;

resolves

1. that, if one of the Contracting Members in the African Broadcasting Area proposes to bring a broadcasting station into service in the 150-285 kHz band in conformity with the Radio Regulations, the procedure laid down in Article 4 shall be applied;

2. that administrations shall endeavour to find a solution to meet these needs, for example, by accepting an increase of the usable field strength above the value laid down in Article 4 (paragraph 3.2.5) of the Agreement.

RESOLUTION No. 7

Relating to the Use of LF Bands shared between the Broadcasting Service and the other Radiocommunication Services

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

noting

that the use of the LF bands by broadcasting stations could adversely affect the stations of other radiocommunication services to which these bands are allocated in Regions 1 and 3, and particularly stations in the aeronautical radionavigation service and the maritime mobile service involving the safety of human life;

considering

a) the terms of Chapter 8 of the Report of the First Session;

b) that the Plan includes a number of new broadcasting transmitters in these bands and increases in the power of transmitters already in use, thereby considerably increasing the probability of harmful interference to the safety services;

taking into account

the provisions of Nos. 116 and 117 of the Radio Regulations;

resolves

1. that from the date of signature of the Final Acts of this Conference, new LF broadcasting transmitters shall not be brought into use nor changes be made to the characteristics of existing LF assignments until after the World Administrative Radio Conference to be held in 1979 has decided about the allocation of LF bands between the radiocommunication services concerned;

2. that if, nevertheless, such changes or additions would not increase the probability of harmful interference to the assignments of the other radiocommunication services, they may be brought into use;

3. that if such changes or additions would increase the probability of harmful interference to the assignments of the other radiocommunication services, they may be brought into use only with the agreement of the administrations whose frequency assignments to such stations, in conformity with the Table of Frequency Allocations, have been recorded in the Master Register;

4. that the administrations of Contracting Members be asked to bring this Resolution to the attention of the competent organizations in their countries responsible for other radiocommunication services and to recommend them to refrain, so far as possible, from bringing into use new stations likely to cause harmful interference to broadcasting stations operating in conformity with the Table of Frequency Allocations, pending the decisions the World Administrative Radio Conference, 1979 may make concerning the use of these shared frequency bands;

requests the Secretary-General

to bring this Resolution and Recommendation No. 2 to the notice of all administrations.

RESOLUTION No. 8

Relating to the Use of Bandwidth Saving Modulation Systems

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

considering

a) that the application of bandwidth saving modulation systems will lead to more efficient use of the LF and MF bands;

b) that the transition to such systems would pose difficulties with regard to transmitters and receivers, and frequency planning;

invites the C.C.I.R.

to expedite its studies of bandwidth saving modulation methods with particular reference to the technical and operational aspects of single-sideband and independent sideband modulation, taking into account the problems of compatibility with existing receivers;

resolves

1. that broadcasting stations may provisionally use bandwidth saving modulation methods on condition that interference in the same or adjacent channels concerned does not exceed the interference resulting from the application of double sideband modulation with full carrier (A3);

2. that any administration which envisages using these methods of emission shall seek the agreement of all affected administrations by following the procedure specified in Article 4 of the Agreement.

RESOLUTION No. 9

Relating to Member Countries not represented at the Conference and to non-Member Countries

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

considering

a) the provisions of Resolution No. 31 of the Plenipotentiary Conference (Malaga-Torremolinos, 1973) excluding the Government of the Republic of South Africa from the Plenipotentiary Conference and from all other conferences and meetings of the Union;

b) the situation of Member and non-Member countries absent from the Conference;

c) the resolutions and provisions adopted by the Conference in order to provide an appropriate solution to the different problems of those countries in connection with the Agreement and the annexed Plan;

resolves

that the provisions and resolutions adopted by the Conference for the benefit of Member and non-Member countries absent from the Conference shall not be applied to the Government of the Republic of South Africa.

RECOMMENDATION No. 1

Relating to Improvements to the Plan

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

noting

that the Conference has not produced satisfactory results for all countries because of the excessive number of frequency requirements submitted;

considering

that it has as a result not been possible to make provision in line with the criteria adopted at the First and Second Sessions of the Conference, for the justified requirements of certain countries, in particular the developing countries and countries which are faced with special conditions;

recommends

1. that administrations should continue with bilateral and multilateral negotiations after the Conference with a view to improving the situation of services in the LF and MF bands, particularly by means of mutual concessions and commonly agreed reductions in the number of assignments recorded in the Plan for regions where the usable field strength remains very high;

2. that, with this aim in view, the I.T.U. should grant the necessary assistance to administrations which so request, in accordance with the provisions of the Convention.

RECOMMENDATION No. 2

Relating to the Sharing of the LF Band between the Broadcasting Service and the other Radiocommunication Services (Region 1)

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

noting

a) that the sharing, on a basis of equality, of the band 255-285 kHz between the broadcasting service in a part of Region 1 and the aeronautical radionavigation service in practice results in harmful interference to aeronautical radiobeacons;

b) that the aeronautical radionavigation service is a safety service (No. 69 of the Radio Regulations) and its adequate protection against harmful interference is essential to the safeguarding of human life;

considering

that it would be desirable to avoid allocations which permit sharing between the broadcasting service and other services, such as the maritime mobile and aeronautical radionavigation services;

recommends

that the World Administrative Radio Conference, 1979, examine this question with due regard to the interests of each of the services concerned.

RECOMMENDATION No. 3

Relating to Methods of Predicting Sky-Wave Propagation

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

considering

that the methods of predicting sky-wave propagation used in drawing up the Plan may be improved in the future;

recommends to administrations

that in their bilateral negotiations on modifications to the Plan, they use the methods most recently adopted by the C.C.I.R. for predicting sky-wave propagation or any other methods on which they may agree.

RECOMMENDATION No. 4

Relating to the Convening of a Conference competent to revise the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

considering

a) the rapid development of broadcasting techniques;

b) the future requirements of the developing countries, which may be substantial both in the LF and in the MF bands, if these countries are to be in a position to meet the needs of their national broadcasting services;

c) that it has not been possible to accommodate in a satisfactory manner on a long term basis in the low and medium frequency bands allocated to the broadcasting service the requirements that have been submitted;

d) that consequently the Agreement has been prepared on the basis of requirements for the next fourteen years and therefore it is absolutely essential for the Agreement to be revised as soon as practicable after that period;

recommends to the Administrative Council

to arrange for the convening of a conference competent to revise the Agreement in 1989, unless it be necessary to convene such a conference earlier according to the provisions of the Convention.

RECOMMENDATION No. 5

Relating to the Publication of a Handbook of Radiation Diagrams of Directional Antennae that can be used in the Broadcasting Service

The Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975,

considering

a) that the calculation criteria adopted by the Conference, the essentials of which are contained in Annex 2 to the Agreement, require a knowledge of the antenna gain in the direction of propagation;

b) that it is useful to have up-to-date information on the characteristics of LF and MF broadcasting antennae;

c) that a handbook of radiation diagrams of directional antennae that can be used in the LF/MF broadcasting service is being prepared by the C.C.I.R. specialized secretariat in accordance with C.C.I.R. Recommendation 414 and Resolution 59;

d) that it would be useful for measured values of antenna radiation diagrams to be available for comparison with the calculated radiation diagrams;

recommends

that administrations communicate to the director of the C.C.I.R. all the results they may have of relevant measurements.

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