RECOMMENDATION ITU-R M.633-5[[1]](#footnote-1)\*

Transmission characteristics of a satellite emergency position-indicating   
radio beacon (satellite EPIRB) operating  
through a satellite system in the 406.0-406.1 MHz band

(1986-1990-2000-2004-2010-2023)

Scope

This Recommendation provides transmission characteristics of a satellite emergency position-indicating radio beacon system (satellite EPIRBs) operating in the 406.0-406.1 MHz band.

Keywords

Satellite, EPIRB, beacon

Abbreviations/Glossary

SOLAS Safety of Life at Sea

EPIRB Emergency position-indicating radio beacon

ELT Emergency locator transmitter

PLB Personal locator beacon

**Related ITU Recommendations, Reports**

Recommendation ITU-R [M.1478](https://www.itu.int/rec/R-REC-M.1478/en) – Protection criteria for Cospas-Sarsat search and rescue instruments in the band 406-406.1 MHz

Report ITU-R [M.2359](https://www.itu.int/pub/R-REP-M.2359) – Protection of the 406-406.1 MHz band

The ITU Radiocommunication Assembly,

considering

*a)* that satellite EPIRBs can be used for distress alerting in the maritime, land and aeronautical environments;

*b)* that satellite EPIRBs with similar transmission characteristics (but other design differences) may be employed in diverse operating environments (where they may be known as EPIRBs in the maritime environment, emergency locator transmitters (ELTs) in the aviation environment, and personal locator beacons (PLBs) when designed for being carried on a person);

*c)* that satellite EPIRBs are one of the prime distress-alerting means in the Global Maritime Distress and Safety System (GMDSS) of the International Maritime Organization (IMO);

*d)* that all ships to which Chapter IV of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, applies, are required to carry a satellite EPIRB operating in the 406.0-406.1 MHz band;

*e)* that all aeroplanes and helicopters for which Parts I, II and III of Annex 6 of the Convention on International Civil Aviation apply, are required to carry at least one satellite EPIRB operating in the 406.0-406.1 MHz band (referred to as ELT in the ICAO documentation),

noting

*a)* the current and planned availability of operational Cospas-Sarsat satellites in orbit;

*b)* the current and projected availability of the Cospas-Sarsat ground system,

recommends

that the transmission characteristics and data formats for a satellite EPIRB operating through a satellite system in the 406.0-406.1 MHz band should be in accordance with either the Specification for Cospas-Sarsat 406 MHz Distress Beacons, as provided in Cospas-Sarsat document C/S T.001, as amended, or the Specification for Second-Generation Cospas-Sarsat 406 MHz Distress Beacons, as provided in Cospas-Sarsat document C/S T.018, as amended.

NOTE 1 – A copy of the latest version of amended documents C/S T.001 and/or C/S T.018 can be obtained free of charge from the Cospas-Sarsat Secretariat ([mail@cospas**-**sarsat.int](mailto:mail@cospas-sarsat.int)) or the Cospas-Sarsat website (<http://www.cospas-sarsat.int>).

1. \* This Recommendation should be brought to the attention of the International Maritime Organization (IMO), the International Civil Aviation Organization (ICAO), the International Mobile Satellite Organization (IMSO) and the Cospas-Sarsat Secretariat. [↑](#footnote-ref-1)