

# NSTAC REPORT TO THE PRESIDENT on Communications Resiliency

## May 6, 2021

The President's National Security Telecommunications Advisory Committee

Link: [https://www.cisa.gov/sites/default/files/publications/NSTAC\\_Report\\_to\\_the\\_President\\_on\\_Communications\\_Resiliency.pdf](https://www.cisa.gov/sites/default/files/publications/NSTAC_Report_to_the_President_on_Communications_Resiliency.pdf)

### Potential Resiliency Stressors to the Future Network

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THREAT	SOLUTION
Wide-Scale Electromagnetic Pulse	<p>Cites 2019 Executive Order 13865, Coordinating National Resilience to Electromagnetic Pulse and "initial preparatory work", the document "makes no further recommendations pending this prospective engagement on this topic."</p> <p>In other words: we don't have a solution right now.</p>
Position Navigation and Timing Disruption	<p>Notes efforts to inform people of the risks; notes eLoran (in discussion for years, with no forward progress)...encourages funding to create a timing architecture.</p> <p>In other words: We don't have a solution and we don't have any solid effort toward one, either.</p>
Long-Term [Electrical Grid] Outage (30+days)	<p>The solution recommended is to categorize governmental fuel caches and decide if industry should have access to them (to keep comms going).</p>
Supply-Chain Based Cyber Attack	<p>The report indicates how attackers can produce malicious equipment and insert it into the supply chain. The document encourages collaboration with private industry to reduce the chances and impacts.</p>
Evolutions in Secure Internet Routing The greatest risk to internet security is the hijacking of routing and domain tables used to move information from point A to point B. Malicious hijacking is being used by adversaries to monitor and steal information. The two internet protocols with the greatest risk from hijacking or manipulation are Border Gateway Protocol (BGP) and Domain Name	<p>Doesn't seem to be a strong effort to adopt any solutions.</p>

System (DNS). The IETF standardized security extensions for both protocols, known as BGPsec and Domain Name System Security Extensions (DNSSEC), to ensure the authenticity of protocol messages to prevent hijacking. However, the cost and complexity of these protocols have slowed adoption on the internet

Internet Bifurcation: Digital Silk Road -- a Chinese Internet that is a Digital Iron Curtain separating large sections of the world from the remainder of the Internet.