

Radio Frequency Spectrum and Emissions Management

Spectrum management in the U.S. is controlled by:

1. The FCC for public and non-Federal spectrum
2. The National Telecommunications and Information Administration (NTIA) for Federal Government use. An Inter-departmental Radio Advisory Committee, consisting of 22 agencies including the Military Services, operates a frequency assignment subcommittee.
3. The DoD Joint Spectrum Center, which conducts over 150 studies a year on RFI, NATO interoperability, RF Capacity for war fighting and government needs, Spectrum Availability and Vulnerability.

Federal Communications Commission Regulations

<http://wireless.fcc.gov/rules.html>

The FCC rules and regulations are codified in Title 47 of the Code of Federal Regulations. They are initially published in the Federal Register. The FCC does not maintain a database of its rules nor does it print or stock copies of the rules and regulations. That task is performed by the [Government Printing Office \(GPO\)](#) and this page links to their Internet site. After October 1 of each year, the GPO compiles all the changes, additions, and deletions to the FCC rules and publishes an updated Code of Federal Regulations (CFR). This page links to the October 1, 2002 edition of the CFR. The [Federal Register](#) to review rule changes since October 1, 2002.

Radio Frequency Emissions – Regulatory Issues

Title 47--Telecommunication Chapter I--Federal Communications Commission Part 15--Radio Frequency Devices http://www.access.gpo.gov/nara/cfr/waisidx_02/47cfr15_02.html

(Unfortunately, the links on this page are not working)

National Telecommunications Information Administration (NDIA)

Office of Spectrum Management

<http://www.ntia.doc.gov/osmhome/osmhome.html>

NTIA Manual of Regulations & Procedures for Federal Radio Frequency Management A [WordPerfect 2000 version](#) of the manual (5.9 Mbytes) can be downloaded in WinZip format

Joint Spectrum Center, DOD www.jsc.mil

JSC focus on TSWG Mission areas includes CBRN Countermeasures; Explosives Detection and Improvised Device Defeat, including Robotics; Infrastructure Protection - including frequency management tools, GIS signal models, and Network Planning Tools; IS&F - database management; Personnel Protection - Communications systems; Physical Security - sensors, ID systems, robotics, SCOS, and TOS - sensors, comms, etc.

Acquisition Support functions include contract management, TEMPS, Support plans, EMC Control Plans, Frequency Allocation Documentation, EME environment definition, competitive system evaluations, and identification of Electromagnetic Environmental Effects (E3) requirements, test requirements, etc. The majority of JSC work is with major weapon systems.

JSC Modeling Capabilities include prediction of propagation loss over irregular terrain, site coverage predictions, atmospheric influences, interference/jamming thresholds, both frequency or

time domain signal modeling, antenna and antenna coupling, antenna collocation interactions, satellite EMI, and environmental EMC.

The JSC has extensive experience in this area and maintains a test facility. For more information or to obtain support, contact the Acquisition Support (JSC/J8) Division Chief. [Click here](#) for contact information.