

**SUBJECT: Radio Frequency Spectrum Management for Effective and Efficient
Telecommunications Service**

1. PURPOSE. This Order updates U.S. Department of Transportation (DOT) policy for using the radio frequency spectrum and for requesting funds for systems requiring radio frequency support.
2. CANCELLATIONS. This Order cancels and supersedes DOT Order 5421.1, dated September 3, 2004, titled "Radio Frequency Spectrum Management for Effective and Efficient Telecommunications Service."
3. SCOPE. This Order applies to the Office of the Secretary, DOT's Operating Administrations, and all other DOT components.
4. EFFECTIVE DATE. This Order is effective upon signature.
5. BACKGROUND.
 - a. The Communications Act of 1934 (the Act), as amended, provides for the regulation of communications by radio. The use of radio frequencies by radio stations belonging to and operated by the U.S. Government is established under Presidential Authority contained in Section 305 of the Act (47 U.S.C. § 305 (a)). This authority was delegated to the Administrator of the National Telecommunications and Information Administration (NTIA) by Reorganization Plan No. 1 of 1977, and implemented by Executive Order 12046 of March 1978, as amended. The Federal Communications Commission (FCC) controls non-Federal government use under the provisions of the Act. NTIA, an agency within the Department of Commerce, controls Federal spectrum use in collaboration with DOT and other Executive Branch components.
 - b. DOT is engaged in a wide variety of operations and projects in which the use of radio frequencies is essential. Such use plays a vital role in all aspects of aviation, maritime, highway, transit, and rail transportation. In addition to its regulatory and operational roles, through grants-in-aid, DOT supports organizations that make use of non- government frequencies and is therefore concerned with both government and non- government aspects of radio frequency management.
 - c. Policies, regulations, and technical standards governing the use of the radio frequency spectrum by Federal agencies, and the administrative procedures to be followed in frequency management matters, are promulgated by NTIA in the Manual of Regulations and Procedures for Federal Radio Frequency Management (NTIA

Manual). The NTIA Manual stipulates:

- (1) Prior authorization by NTIA is required for the use of any portion of the radio frequency spectrum by a Federal agency, whether for experimental, developmental, or operational purposes.
 - (2) Requests from Federal agencies for radio frequency assignments or other frequency management actions are processed through the Inter-department Radio Advisory Committee (IRAC), chaired by NTIA. The IRAC is responsible for assisting NTIA in assigning frequencies to Federal radio stations, and in developing the Executive Branch policies, programs, procedures, and technical criteria pertaining to the allocation, management, and use of the radio spectrum.
- d. Office of Management and Budget (OMB) Circular A-11, "Preparation, Submission and Execution of the Budget," provides guidance on radio frequency spectrum use.
- (1) Section 31.12(c), "Spectrum Certification," requires spectrum certification by NTIA prior to submission of estimates for the development or procurement of major radio frequency spectrum-dependent systems.
 - (2) Section 51.18, "Radio spectrum-dependent communications-electronics systems," requires comparison and evaluation of spectrum efficiency and effectiveness for various alternatives considered, utilizing the methodology described in section 31.12, or another methodology developed by the agency and approved by OMB.

6. POLICY.

- a. Use of the radio frequency spectrum is vital to the support of DOT programs, operations, and services. Sound engineering and administrative practices, consistent with governing law, NTIA policies, spectrum regulations, and the need for efficient use of resources, shall be applied throughout DOT in the management and use of the radio frequency spectrum.
- b. Use of the radio frequency spectrum shall only be as authorized by NTIA or other competent frequency management authority within DOT, as in the case of foreign and emergency operations.
- c. The approval of programs and funding for any system, service, or equipment of an experimental, operational, or developmental nature requiring the assignment and protection of radio frequencies for their implementation or use should be withheld by the DOT Operating Administration, pending assurance that such frequency support can be provided.
- d. Budget estimates for major systems must include certification that spectrum is available and will ensure that all requirements of OMB Circular A-11, secs. 31.12 and 51.18, have been met.

7. RESPONSIBILITIES.

- a. Each Operating Administration determines, based on its responsibilities and National and Departmental policies, the extent to which radio frequency equipment is required to carry out its missions.
- b. DOT is authorized two representatives on the IRAC, both of whom shall be approved by the Secretary in accordance with Section 7.a.(3)(d) of DOT Order 1120.3C:
 - (1) One representative and one alternate shall be designated by the Office of the Secretary of Transportation (OST) to represent the overall spectrum interests of the Department, to include specifically the radio frequency management interests of all surface and maritime Operating Administrations, including the Federal Highway Administration, Federal Motor Carrier Safety Administration, Federal Railroad Administration, Federal Transit Administration, Maritime Administration (MARAD), National Highway Traffic Safety Administration, Pipeline and Hazardous Materials Safety Administration, and Saint Lawrence Seaway Development Corporation.
 - (2) One representative and one alternate shall be designated by the Federal Aviation Administration (FAA) to represent the frequency management interests of the FAA.
- c. The IRAC representatives are responsible for providing cognizant officials in the Operating Administrations with radio frequency management policy guidance and technical support in the determination of frequency requirements. These representatives are responsible for representing the Operating Administrations' spectrum interests to the IRAC.
- d. OST is the primary representative for the surface and maritime modes at the IRAC/Frequency Assignment Subcommittee (FAS) meetings, and for the daily activities supporting the frequency coordination process of the FAS membership. Requests for a frequency action (*i.e.*, requesting a new frequency, or modifying or deleting an existing frequency assignment) shall be sent to OST for review and placement into the NTIA frequency approval process. The request for a frequency action shall be accomplished in accordance with the provisions of section 8b, below.
- e. OST is responsible for overseeing the registration of MARAD INMARSAT terminals installed on all MARAD-owned ships. The registration process provides the Maritime Mobile Service Identifier (MMSI), which is a unique identifier for each ship. MMSI coordination must include the receipt of the MMSI through NTIA, when applicable.

8. REQUIRED ACTIONS.

- a. Each DOT Operating Administration shall issue any necessary directive(s) to comply with the policy contained in paragraph 6. Each Operating Administration shall ensure that proposals for new, improved, or expanded spectrum-dependent systems, services, or equipment receive consideration and evaluation from a spectrum engineering standpoint and assurance of spectrum support by NTIA prior to their approval or funding, if the particular service, system, or equipment requires radio frequency support.
- b. Each surface and maritime Operating Administration requiring radio frequency support, or having an interest in radio frequency management matters, shall designate within its organization one person, with an appropriate alternate(s), to serve as liaison with the OST IRAC representative. The OA liaison will be involved in actions supporting the verification of equipment currently in use, in support of the five-year review process of the IRAC/FAS. All requests for frequency management actions shall be processed through these liaison representatives and addressed to:

U.S. Department of Transportation
Office of the Assistant Secretary for Research and Technology (OST-R)
Positioning, Navigation and Timing & Spectrum Management Program
1200 New Jersey Avenue, SE
Washington, D.C. 20590
Telephone: (202) 366-8422

- c. Each surface and maritime Operating Administration is encouraged to establish internal coordination procedures for the handling of radio frequency management matters that may be referred to them from time to time by the Department's IRAC representatives. Such matters will generally be items introduced into the IRAC by FCC or other government agencies that affect DOT operations or responsibilities. Requests for coordination of aviation-related radio frequency management actions shall normally be processed through the liaison representative and addressed to:

U.S. Department of Transportation
Federal Aviation Administration
Spectrum Engineering and Policy, AJW-1C
800 Independence Avenue, SW
Washington, D.C. 20591
Telephone: (202) 267-9710

- d. A copy of all directives, instructions, or designations made pursuant to this Order shall be furnished to the OST-R Positioning, Navigation and Timing and Spectrum Management Program.

A handwritten signature in blue ink, appearing to read 'Joel Szabat', is positioned above the printed name.

Joel Szabat

Acting Under Secretary of Transportation for Policy

DISTRIBUTION: All Secretarial Offices and Heads of Operating Administrations