

U.S. Government Disaster Communications

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Scott E. Jackson Chairperson - Emergency Planning Subcommittee Office of Spectrum Management

Overview

- Mission
- National Spectrum Management
- NTIA Regulations Supporting Emergency Response
- NTIA Plans for Federal Interoperability
- NTIA Support to the State, Local, Tribal and Territorial
- NTIA Response Role Emergency Support Function #2
- NTIA Deployments



NTIA's Mission

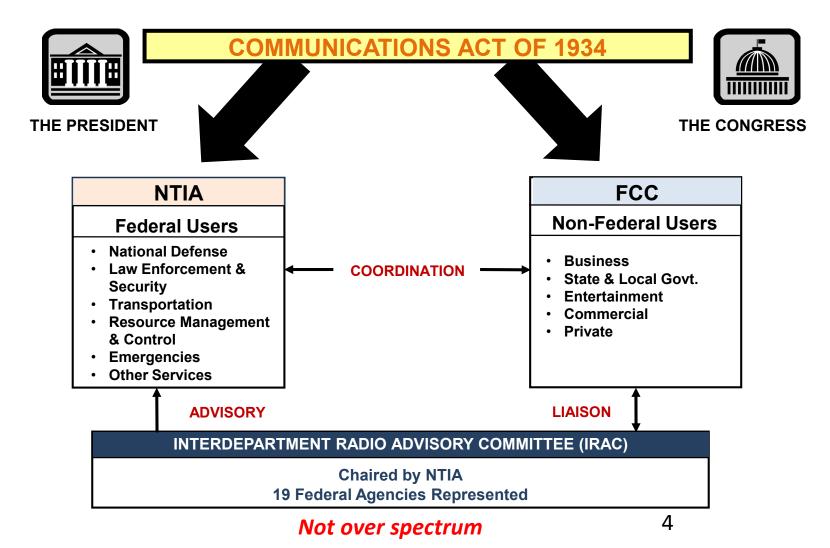
NTIA is the Executive Branch agency that is principally responsible for advising the President on telecommunications and information policy issues.

NTIA's programs and policymaking focus largely on expanding broadband Internet access and adoption in America, expanding the use of spectrum by all users, and ensuring that the Internet remains an engine for continued innovation and economic growth.



National Spectrum Management

The law provides FCC and NTIA authority over users



NTIA Regulations Supporting Emergencies

Rules in the NTIA Manual of Regulations & Procedures for Federal Radio Frequency Management

https://www.ntia.doc.gov/page/2011/manual-regulations-andprocedures-federal-radio-frequency-management-redbook

- Section 7.3 Use of Frequencies for National Security and Emergency Preparedness (NS/EP)
- Section 7.3.4 Emergency Communications for which an Immediate Danger Exists to Human Life or Property
- Section 7.3.6 Emergency Use of Non-Federal Frequencies
- Section 8.3.3 Coordination of Frequencies Used for Communication with Non-Federal Stations Licensed Under Part 90 of the FCC Rules
- Section 8.2.47 Shared Federal/Non-Federal Radio Systems



7.3 Use of Frequencies for National Security and Emergency Preparedness (NS/EP)

The procedures contained in this section relate to any emergency occasion, instance, or situation which requires a federal response not covered by normal spectrum management policies and procedures. Specific NTIA policies for spectrum use and management in support of a response to emergency situations include:

- Continuing, insofar as possible, use of existing frequency assignments;
- Continuing to coordinate frequency assignments through Headquarters NTIA;
- Emphasizing the need to preplan the use and management of radio spectrum before emergencies arise;
- Ensuring that all agency communications are electromagnetically compatible with other users to reduce the possibility of interference;
- Providing for federal, military, and civil, spectrum needs determined by a competent authority;
- Assuring use of the radio spectrum conforms to national priorities established by the Director of the Office of Science and Technology Policy (OSTP) as stated in the NTIA *Emergency Readiness Plan for the Use of the Radio Frequency Spectrum* (ERP), or by other competent authority;
- Providing, with minimal disruption to other services, radio spectrum resources as necessary to satisfy federal emergency response requirements; and
- Recommending adjustments to spectrum use when situations require.



7.3.4 Emergency Communications for which an Immediate Danger Exists to Human Life or Property

- In situations where immediate danger exists to human life or property, an agency may operate temporarily on any regularly assigned frequency in a manner other than that specified in the terms of an existing assignment. Emergency operations under such situations should continue only as long as necessary to ensure that the danger to human life or property no longer exists. Emergency operations under these circumstances shall be reevaluated on a regular basis until such time as normal/routine operations can be reestablished.
- Interoperable communications for disaster/emergency response involving federal, state, local, and tribal entities shall be in conformance with Section 4.3.16 of this Manual. Additional information regarding interoperable communications can also be found in the National Interoperability Field Operations Guide (NIFOG) and the National Interoperability Frequency Guide (NIFG) promulgated by the Department of Homeland Security.



7.3.6 – Emergency Use of Non-Federal Frequencies

- The non-federal licensee has given verbal or written concurrence
- Operations are conducted in accordance with the FCC Rules and Regulations
- Use is restricted to the service area and station authorization of the licensee
- All operations are under the direct control of the licensee and shall be immediately terminated when directed by the licensee
- Operations do not exceed 60 days
- The federal agency shall provide, through the agency's FAS representative to the FCC as soon as practicable, a written report of each such use



8.3.3 Coordination of Frequencies Used for Communication with Non-Federal Stations

Licensed Under Part 90 of the FCC Rules:

- Provision is made in Section 7.12 for a federal radio station to use any frequency authorized to a non-federal radio station under Part 90 of the Rules of the Federal Communications Commission where such utilization is necessary for intercommunication with non-federal stations or required for coordination with non-federal activities, provided that, in the case of frequencies other than the non-Federal National Interoperability Channels, a mutually approved arrangement has been concluded between the federal agency concerned, the Federal Communications Commission, and the non-federal licensee involved
- Two steps are required to conclude a mutually-approved arrangement. The federal agency must obtain from the non-federal licensee a written certification that the federal operation is necessary, and, after receipt of the certification, the federal agency must coordinate the proposed usage with the FCC



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8.2.47 Shared Federal/Non-Federal Radio Systems

- The term "shared system" as used in this section means a radio system using one or more frequencies authorized by the NTIA and one or more frequencies licensed by the FCC. "Agreement" or "Agreements," as specified in this section refer to Memorandums or Letters of Understanding or Agreement between federal agencies and non-federal partners. Shared systems may be authorized under the following conditions (Operations conducted under Section 7.3.6 or Section 7.12 of the Manual, which allow a federal radio station to utilize any frequency authorized to a non-federal radio station under specified conditions, are exempt from this policy.)
- have (1) an assignment for each frequency which is allocated on a primary basis for federal use; and (2) individual assignments or a band assignment for operations allocated on a non-primary basis for federal use
- ensure that the non-federal partner has FCC licenses for operations on frequencies which are allocated on a primary basis for federal use



NTIA Plans for Federal Interoperability Channels (Section 4.3.16)

Interagency Law Enforcement and Incident Response Operations in the Bands 162-174 MHz and 406.1-420 MHz:

1. The plans shown in Tables 1 and 2 show frequencies available for assignment to all federal agencies to satisfy law enforcement, public safety, emergency response, and disaster response interoperability requirements. These frequencies will be referred to hereinafter as "Federal Interoperability Channels".

2. The Federal Interoperability Channels are available for use among federal agencies and between federal agencies and non-federal entities with which federal agencies have a requirement to operate.

3. The channels are available to federal agencies on a shared basis and will not be authorized for the exclusive use of any one federal agency.

4. The channels are available to non-federal entities to enable joint federal/non-federal operations for law enforcement, public safety, emergency response and disaster response, subject to the condition that harmful interference will not be caused to federal stations.

5. Non-federal use will be coordinated with the FCC through the Statewide Interoperability Coordinator (SWIC) or a state appointed official. The FCC will grant authority to program and use the Federal Interoperability Channels through a signed agreement between the SWIC or state appointed official and a federal user with a valid GMF assignment.

6. These channels are restricted to mobile (including portable) interoperability communications and are not authorized for routine or administrative uses.

7. These channels are authorized to operate mobile (including portable) to perform testing, training and exercises of interoperable communications, subject to the existing geographic restrictions maintained by NTIA.



NTIA Plans for Federal Interoperability Channels (Section 4.3.16)

Interagency Law Enforcement and Incident Response Operations in the Bands 162-174 MHz and 406.1-420 MHz:

8. Extended operations and congestion may lead to frequency conflicts. Coordination with NTIA is required so that interference can be avoided.

9. Only narrowband emissions are authorized on the Federal Interoperability Channels.

10. Federal agencies having a law enforcement, public safety, emergency response or disaster response requirement will ensure that their agency is added to the (*JNT) circuit remarks field in the Government Master File (GMF).

11. All federal law enforcement, public safety, emergency response, and disaster response agencies are required to have the Federal Interoperability Channels programmed into one or more zones/banks/channel groups of their mobile (including portable) radios.

12. Exceptions to the above conditions of use will be considered by the Interdepartment Radio Advisory Committee (IRAC)/Frequency Assignment Subcommittee (FAS) on a case-by-case basis.



NTIA's Support to SLTT

- Coordination of Federal telecommunications assistance to State, Local, Tribal and Territorial governments
- Through E.O 12046 and E.O 13618 help to improve interoperability and simplify access for non-federal entities to Federal Law Enforcement and Incident Response (LE/IR) spectrum



NTIA Response Role – ESF#2

NTIA's ESF #2 Federal Emergency Response Officials support the Wireless Communications Unit of the Joint Field Office:

- Facilitate request for Radio Frequency spectrum
- Advise Federal leadership on spectrum-use issues
- Resolution of interference issues
- Frequency coordination for incoming Federal responder communications assets and systems, including
 - Assisting with state, local, tribal, industry, and volunteer organization interoperability issues (Civil user coordination is conducted by the Federal Communications Commission)
 - Operational Support and coordination of Special Temporary Assignments and Assignment modification routing for Federal responders
 - Assist in interoperability and mutual aid issues as required



NTIA Response Role – ESF#2

NTIA's ESF #2 Federal Emergency Response Officials (FERO)

- Scott Jackson
- Ronnie Snider
- Lawrence Kidd

Travel

- NRF support including overtime
- COOP ERG
- NS/EP support

NTIA Deployment Kits

- specialized IT equipment for use in a field environment
- WPS enabled secure and unsecure cellular phones
- GETS cards
- tactical field gear



NTIA Response Role – ESF#2

NTIA Deployment Kits:

- Microsoft Surface Pro 4
 - > Also carry Verizon Wireless broadband card or Jetpack
- Fujitsu ScanSnap S1300
 - Portable USB Color Scanner
- HP Officejet 100 Mobile Printer
 - > Portable (Battery Power) Color Printer
 - Bluetooth Capable
- Cobra CPI-480 Power Invertor
 - For Automobile Use
- Garmin Rino530HCx
 - Portable handheld GPS
 - 2-way radio capability
 - Weather Alert capable
- Misc Cables (Scanner, Printer, Cobra Inverter Cable)
 - Automobile Use
- Drivers and Manuals for all equipment



NTIA Deployments

ESF#2 Deployments:

2008 Hurricane Gustav

2010 Haiti Earthquake

2011 Hurricane Irene

2012 Hurricane Sandy

2017 Hurricane Harvey

2017 Hurricane Maria

2012 RNC & DNC

2016 RNC & DNC

Other Deployments:

2008 Hurricane Ike

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Questions



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