Indian Health Service

Radio Frequency Spectrum Management
Procedures and Processes

DOUGLAS HERBERT

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Radio Freq. Spectrum Management (RFSM) Team

FEDERAL STAFF

Phillip Wise, Director, DPMB
Acting HHS NTIA Liaison

CONTRACT STAFF

Douglas Herbert – Radio Frequency
Spectrum Coordinator

What Will Be Covered

o Overview of Radio Frequency Spectrum Management (RFSM)

o Key Procedures and Processes

o Best Practices for Processing Frequency Requests

o Coordination with National Telecommunications and Information Administration (NTIA)

o Compliance with Federal Regulations

o Important Points to Consider

o Questions & Contact Information

RFSM Overview

RFSM Overview: Background

o The IHS RFSM Program makes sure that the IHS uses its radio frequencies efficiently and effectively.

o This program is vital for maintaining reliable communication channels, especially in remote and underserved areas.

o It involves planning, coordinating, allocating, and regulating spectrum use to prevent interference and optimize resource utilization.

o RFSM team currently supports radio frequency management across 10 IHS Areas including HQ totaling over 790 individual frequency assignments.

RFSM Overview: Importance in Healthcare

- Effective RFSM is crucial for making sure that communication tools operate without interference, which is essential during medical emergencies.

- The RFSM program supports IHS Area locations, including hospitals and service units, making sure that the IHS uses frequency assignments properly. This includes coordinating with local, tribal, and state entities when needed.

- When needed, IHS obtains additional frequencies through the NTIA, an Agency that governs radio frequency spectrum use. This allows IHS Areas to communicate in locations that cellular operators do not readily cover.

RFSM Overview: Development

In recent years, the RFSM team has dedicated efforts to strengthening and expanding the RFSM program, achieving the following milestones:

○ **Formed a Support Team:** Established a dedicated support team to provide general support for RFSM-related inquiries and issues. IHSRadioFrequency@ihs.gov

○ **Developed Training Videos:** Created training videos such as "Basic Radio Etiquette" and "Introduction to Narrowbanding" to educate IHS staff on essential communication protocols.

○ **Created Step-by-Step Guides:** Produced guides like the "Step-by-Step Guide on Operating the Motorola APX 8000 Radio" to ensure effective use of radio equipment by leadership.

○ **Provided Interactive Tools:** Integrated interactive Google Maps overlays with RFA assignments to visually track and manage frequency allocations.

○ **Provided Knowledge Articles:** Created a repository of ServiceNow Knowledge Articles on topics like "Introduction to Radio Frequency Assignments" and "Radio Frequency Compliance" to make sure IHS staff uses radio equipment effectively.

The RFSM SharePoint site contains all training videos, materials, and additional resources.

RFSM Overview: Future State

The program continues to evolve and improve as we incorporate feedback from the field. We are working towards a future state that includes:

o **Enhanced Coordination:** Help provide coordination among state, local, and tribal radio users to ensure seamless communication.

o **Expanded Visibility:** Increasing visibility of who the broader HHS Operating Division radio users are to improve radio frequency allocation coordination.

o **Local Site Process Guides:** Developing site-specific guides about acquiring, maintaining, and transferring knowledge for radio frequency assignments.

o **Advanced Training Materials:** Creating new training materials and knowledge articles to help staff to provide effective radio frequency management.

Key Procedures and Processes

To effectively manage the radio frequency spectrum, the RFSM program follows these key procedures and processes:

o **Planning:** Analyzing future use of the spectrum to provide optimal allocation and prevent interference.

o **Coordination:** Managing spectrum use among various users to avoid conflicts and maximize efficiency.

o **Allocation:** Assigning specific frequencies to different services and users based on operational needs.

o **Regulation:** Enforcing rules and policies to support order and efficiency in spectrum use.

Best Practices for Frequency Requests

To help keep the frequency request process efficient and effective, follow these best practices:

o   Determine whether two-way radio is the best option to meet your communication requirements, (lead time for new frequency assignment is 2-6 months).

o   Clearly justify the need for the frequency, highlighting its importance for operational requirements.

o   Complete the "Frequency Assignment Request" form to provide detailed information on the intended use, location, and duration of the radio frequency.

o   Make sure all data on the request form is accurate and complete to meet National Telecommunications and Information Administration (NTIA) requirements.

Coordination with NTIA

Effective coordination with the NTIA involves:

o   NTIA reviewing submissions for completeness and conducts interference analyses.

o   Coordinate with other federal agencies to resolve potential conflicts.

o   Follow IHS's policy and technical parameters to make sure that the IHS meets federal regulations and assigns frequencies appropriately.

Compliance with Federal Regulations

Making sure that the IHS meets federal regulations is critical in effectively managing radio frequencies. Key aspects include:

o Follow the NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management.

o Conduct periodic reviews of frequency assignments to make sure they provide ongoing compliance and operational necessity.

o Maintain accurate records and report any changes or updates to the NTIA as required.

Important Points to Consider

As we support the use of radio frequencies, it is crucial to remember the following key points to ensure compliance and effective operation:

o Verify approved frequencies before submitting requisitions or Business Needs Cases for new or replacement equipment.

o The IHS must use NTIA-assigned frequencies. No federal agency can use FCC-licensed, unlicensed (e.g., Family Radio Service [FRS], General Mobile Radio Service [GMRS]), or GPRS frequencies.

o Tribal, local, and state entities must use FCC-licensed frequencies. Use Memoranda of Understanding (MoUs) to coordinate with these entities.

Questions?

Contact Information

If you have any questions, concerns, or suggestions, please contact us at:

IHSRadioFrequency@ihs.gov