NTIA EMERGENCY PLANNING AND PUBLIC SAFETY DIVISOIN

NTIA

USTTI - Radio Frequency Spectrum Management Course

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Washington, DC

NTIA OFFICE OF SPECTRUM MANAGEMENT

- **Emergency Planning & Public Safety Division**
- Domestic Spectrum Policy & IRAC Support Div
- International Spectrum Plans & Policy Div
- Strategic Spectrum Planning & Reform Div
- Spectrum Engineering & Analysis Div
- Spectrum Services Div
- Information Technology Div

Overview

- EPPSD Areas of Responsibility
  - Public Safety
  - Continuity of Operations
  - Emergency Plans
  - Spectrum Support During Emergencies

Public Safety

Public Safety

- The term `public safety agency' means any Federal, State, local, or tribal government entity whose sole or principal purpose is to protect the safety of life, health, or property.

Important Aspects of Public Safety Communications

- Policy
- Interoperability
- Spectrum

Public Safety

Policy

EPPSD personnel participate in various bodies involved with public safety policy:

- IRAC Ad Hoc 214, Public Safety
- Emergency Communications Preparedness Center (ECPC)
- National public safety technical and policy committees, standards bodies, and forums, e.g., NPSTC, APCO, and TR8 Project 25/34

Public Safety

Interoperability

- Interoperability refers to the ability of emergency responders to communicate seamlessly with other systems without any special effort.
- Wireless communications interoperability specifically refers to the ability of emergency response officials to share information via voice and data signals on demand, in real time, when needed, and as authorized.

Public Safety

Interoperability

- Horizontal
  - State-to-State
  - Local-to-local
  - Federal-to-Federal
- Vertical
  - Local-to-State
  - State-to-Federal

Public Safety

Funding

- Surveys have shown that funding is the #1 obstacle to achieving interoperability
- Many local agencies still rely on fund raisers to buy equipment

Public Safety

Factors That Hinder Interoperability

- Incompatible and aging communications equipment;
- Budget cycles and funding;
- Limited planning and coordination;
- Equipment standards;
- Fragmented radio spectrum.

Public Safety

Public Safety Bands Used in the U.S.

- 30-50 MHz (low-band VHF)
- 150-174 MHz (high-band VHF)
- 406.1-420 MHz (UHF)
- 450-470 MHz (UHF)
- 470-512 MHz (T-Band)
- 764-776 and 794-806 MHz (700 MHz)
- 806-821, 851-866, 821-824, and 866-869 MHz (800 MHz)
- 4940-4990 MHz (4.9 GHz) bands

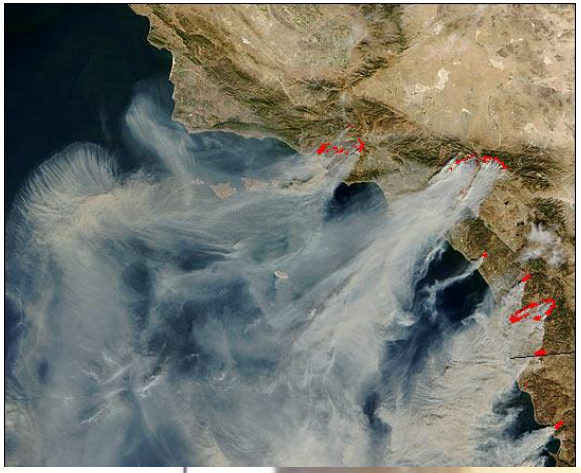
Public Safety

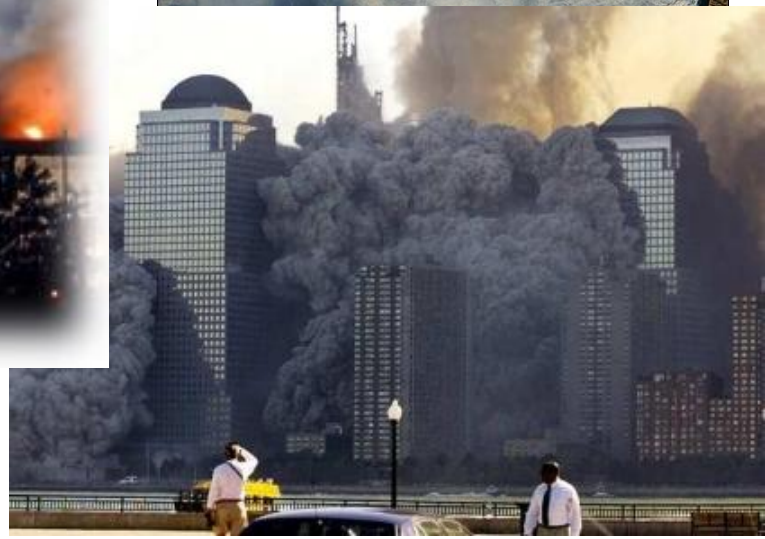
Technology

- Technology can increase spectrum efficiency
  - The US has implemented a narrowband solution for voice communications in the public safety bands
  - Federal users: P25 standard

Lessons Learned

- Lack of Planning
- Lack of Coordination
- Lack of Interoperability





Continuity of Operations (COOP)

Continuity of Operations (COOP)

Why COOP

- Ensure the continuity of essential functions during a national security emergency
- Develop strategies, plans, and programs …to avoid or minimize disruptions of essential services during any national security emergency

Continuity of Operations (COOP)

NTIA's COOP Plan

- Identifies responsibilities, provides policy, guidance, and operational procedures for NTIA personnel to ensure that mission essential functions are continued in the event of an emergency or threat of such an emergency.
- Overall, to ensure that the appropriate and necessary people, equipment, and information are available to perform essential functions in a new operating location or environment when the home site becomes unusable or when a failure of equipment, etc. requires emergency action(s) to be undertaken.

Continuity of Operations (COOP)

Governing directive

National Security Presidential Directive 51/Homeland Security Presidential Directive 20, National Continuity Policy

- Establishes a comprehensive national policy on the continuity of Federal Government structures and operations and a single National Continuity Coordinator responsible for coordinating the development and implementation of Federal continuity policies.
- Recognizing that each branch of the Federal Government is responsible for its own continuity programs, an official designated by the President's Chief of Staff ensures that the COOP efforts of the Executive Branch are appropriately coordinated with those of the Legislative and Judicial Branches in order to ensure interoperability and to allocate national assets efficiently to maintain a functioning Federal Government.

Continuity of Operations (COOP)

NTIA COOP Plan Concept of Operations (CONOPS)

- In an emergency, Federal spectrum management emergency employees will accomplish essential functions in the same way they normally do whenever possible.
- Federal spectrum management, processes such as the frequency assignment process will be accomplished in an all-electronic manner much the same as in normal day-to-day operations.
- Federal spectrum management will be accomplished via electronic coordination and transfer of data among the IRAC community from respective Department or Agencies alternate COOP locations.

Continuity of Operations (COOP)

A comprehensive COOP plan provides the foundation for viable COOP capability

Continuity of Operations (COOP)

A comprehensive COOP plan includes:

- Plans and Procedures
- Essential Functions
- Delegations of Authority
- Orders of Succession
- Alternate Operating Facility or Facilities
- Interoperable Communications

Continuity of Operations (COOP)

The foundation of a comprehensive COOP plan includes:

- Vital Files, Records and Databases
- Human Capital (Planning for Emergency Personnel)
- Testing, Training, and Exercising
- Devolution of Control and Direction
- Implementation (Alert, Notification, Activation, etc)
- Reconstitution plans

Emergency Plans

Emergency Plans

The Interdepartment Radio Advisory Committee's Emergency Planning Subcommittee (EPS).

- EPS assists in the review National Security and Emergency Preparedness (NSEP) planning for spectrum-dependent systems.
- Ensure emergency spectrum management planning and practices are in accordance with current NSEP telecommunications policy.

Spectrum Support During Emergencies

Spectrum Support During Emergencies

The National Response Framework (NRF)

- Provides the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies - from the smallest incident to the largest catastrophe.
- Establishes a comprehensive, national, all-hazards approach to domestic incident response.

Spectrum Support During Emergencies

The National Response Framework (NRF)

National Communications System (NCS)

- The NCS is an advisory body that assists the President, the National Security Council, the Homeland Security Council, the Director of the Office of Science and Technology Policy and the office of Management and Budget in the coordination of the planning for and the provisioning of national security and emergency preparedness communications for the Federal Government under all circumstances, including crisis or emergency, attack, recovery and reconstitution.

Spectrum Support During Emergencies

The National Response Framework (NRF)

National Communications System (NCS)

- The NCS is the coordinator for Emergency Support Function # 2 (Communications) in the NRF support structure.
- NTIA is one of several support agencies to ESF#2

Spectrum Support During Emergencies

The National Response Framework (NRF)

- NTIA provides personnel to support national communications requirements during a national security emergency preparedness situation.
- EPPSD organize, train, equip, and schedules personnel to participate as needed.
- NTIA is the Federal liaison between the State and the Federal Government on spectrum management and compatibility matters.

Summary

- EPPSD Areas of Responsibility
  - Public Safety
  - Continuity of Operations
  - Emergency Plans
  - Spectrum Support During Emergencies

QUESTIONS

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