



Office of Spectrum Management: Overview

USTTI Spectrum Management Course

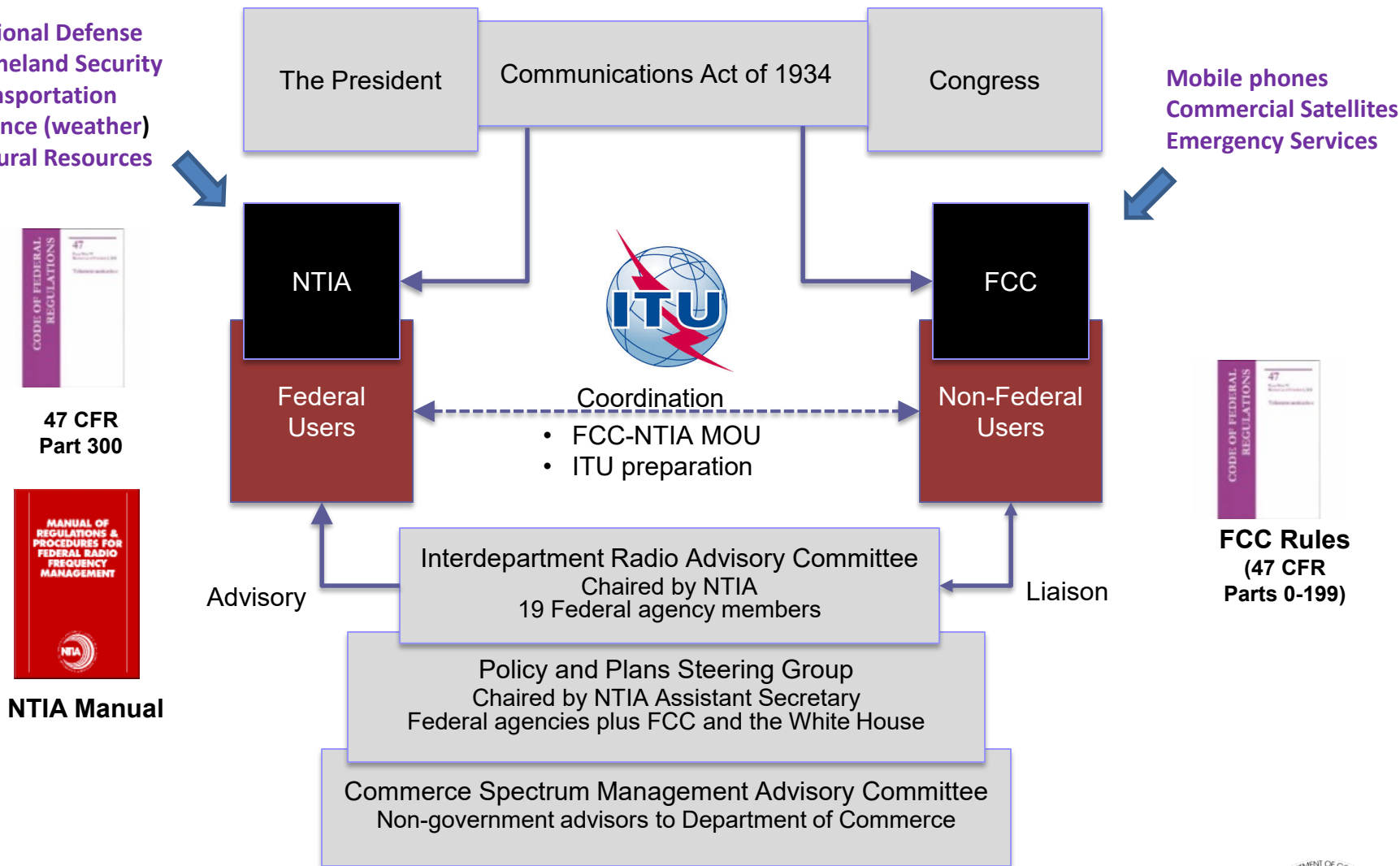
September 2019

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NTIA Office of Spectrum Management

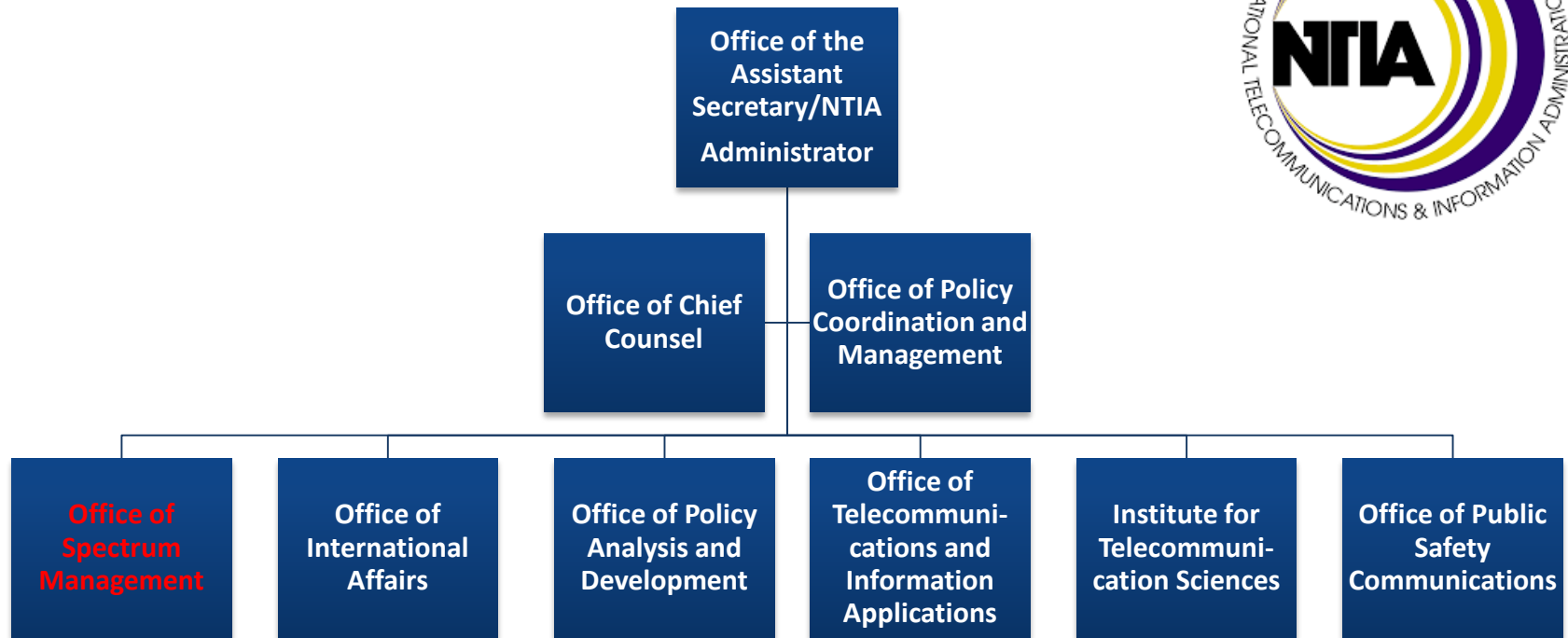
National Spectrum Management

- National Defense
- Homeland Security
- Transportation
- Science (weather)
- Natural Resources

Mobile phones
Commercial Satellites
Emergency Services



NTIA's Organization



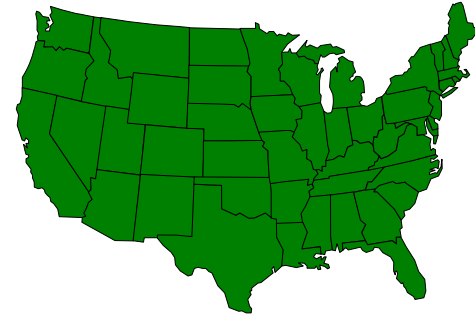
- OSM carries out NTIA's mission and role as the chief Executive Branch agency for federal spectrum policy and management

Managing Federal Spectrum Use

- System certification
- Frequency assignment
- Strategic planning
- Emergency planning
- Technical standards development and implementation
- Engineering and analysis to support spectrum policy-making
- International conference preparation
- Coordination with FCC



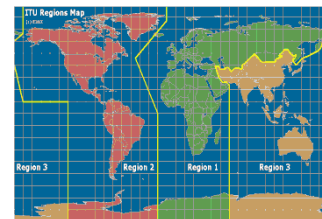
Planner



Engineer

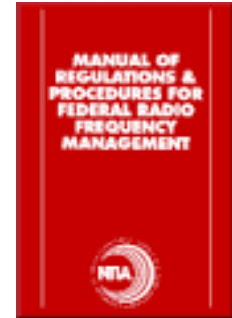


Operations Officer



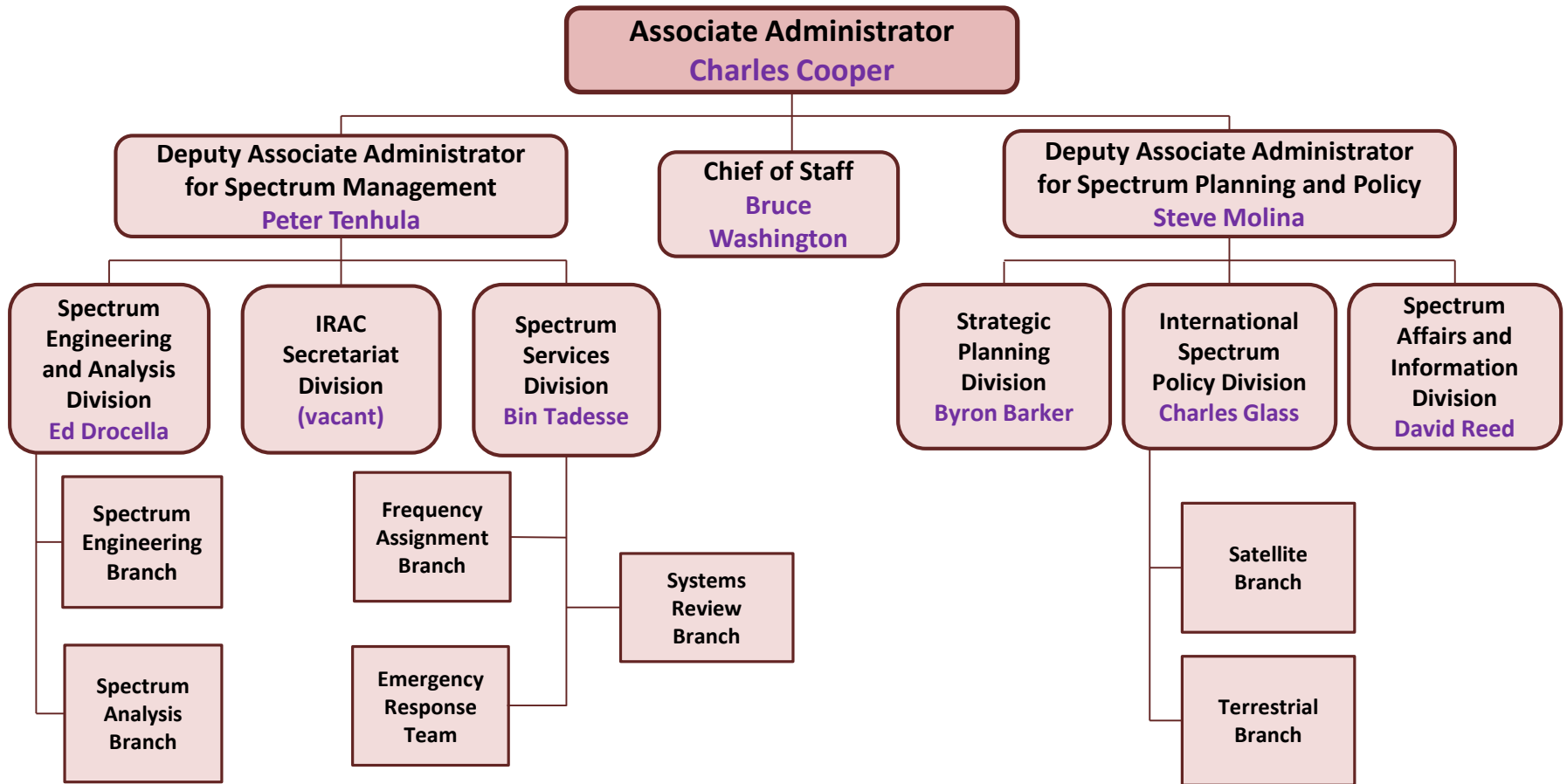
OSM's Mission and Role

- Manages all federal government use of spectrum
- Develops policy and regulations governing spectrum use by federal agencies and departments
- Supports national and international spectrum management policy initiatives and programs



OSM is meeting the increasing spectrum needs of the United States while balancing the national and economic security interests of our nation

OSM's Organization



Spectrum Management Divisions

- **Spectrum Services**
 - Reviews & authorizes federal frequency assignments
 - Maintains federal spectrum records, including the Government Master File (“GMF”)
 - Reviews new federal radio systems
- **Spectrum Engineering and Analysis**
 - Conducts in-depth spectrum use analyses
 - Helps agencies resolve interference issues
 - Establishes and improves federal standards to assure efficient spectrum use
- **IRAC Secretariat**
 - Provides management and administrative support for the Interdepartment Radio Advisory Committee (IRAC), the Executive branch advisory body for spectrum management

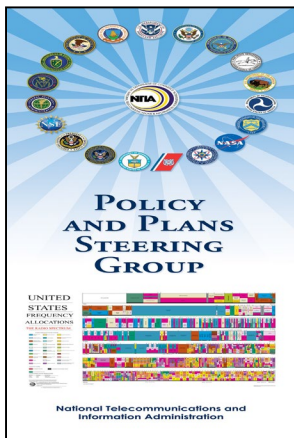
Spectrum Planning & Policy Divisions

- **Strategic Planning**
 - Develops long-range, strategic plans for federal spectrum management
 - Develops architectures for spectrum management improvements
 - Investigates advanced technologies/concepts for improved spectrum usage/sharing
- **Spectrum Affairs and Information**
 - Supports development of federal spectrum policies
 - Develops outreach strategies to articulate federal spectrum goals and policies
 - Seeks to ensure availability and reliability of information on federal spectrum uses
- **International Spectrum Policy**
 - Coordinates federal participation in international spectrum-related organizations
 - Develops federal policies/positions on global spectrum allocations and satellite orbital matters

Advice to NTIA

Interdepartment Radio Advisory Committee (IRAC)

- Organized in 1922, the oldest standing advisory committee
- Government only members appointed by 19 federal agencies
- Six permanent subcommittees, six active ad hoc groups



Policy and Plans Steering Group (PPSG)

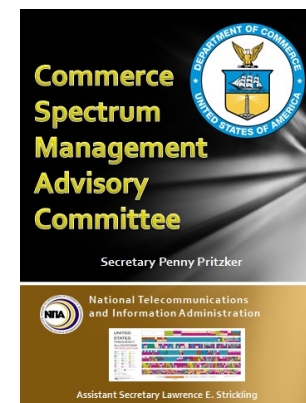
- Government-only interagency organization comprised of senior-level officials (includes White House offices - OSTP, OMB, NEC, and NSS)
- Advises NTIA on spectrum policy matters and strategic planning



Commerce Spectrum Management Advisory Committee (CSMAC)

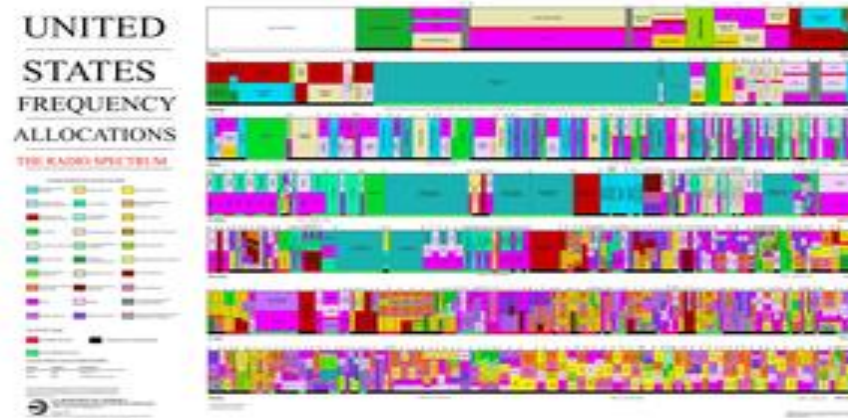
- Members are spectrum policy experts from outside government
- Up to thirty members, appointed for two-year terms, meetings open to public

<http://www.ntia.doc.gov/category/csmac>



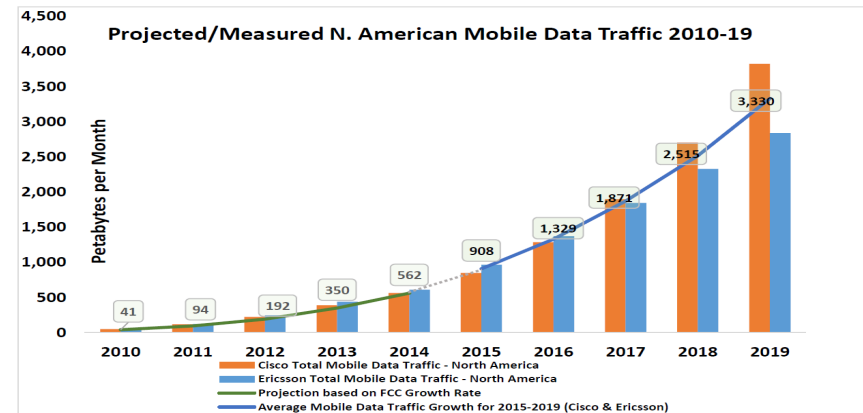
Federal Spectrum Policy

- OSM develops strategies, programs, and policies to expand spectrum access for all users
- OSM develops Executive Branch views and inputs on FCC spectrum-related proceedings
- OSM provides outreach to public and private-sector stakeholders



Balancing Commercial and Federal Spectrum Requirements

- U.S. policy priority:
Supporting wireless industry spectrum needs



- As the federal spectrum regulator, NTIA must strike a balance between commercial and federal needs
- NTIA is directed by legislation and presidential directives
- NTIA is influenced by technological change

Current Spectrum Policy Drivers

- Legislation: Spectrum Pipeline Act and proposed MOBILE NOW Act
- Sharing and Enforcement Techniques
- 3.5 GHz Radar and Commercial Sharing Framework
- 5G Technologies and High-Band Spectrum (spectrum above 24 GHz)
- Incentives for Efficiency and Sharing
- Data Accuracy and Transparency

NTIA's Role in the International Process

GOAL: International Radio Regulations support U.S. spectrum policy and enable federal uses of the spectrum

- Prepares for, participates in, and implements results of World Radiocommunication Conferences
- Represents/coordinates with the federal agencies to develop positions and proposals for Executive Branch (via the IRAC)
- Works with FCC and Department of State to ensure U.S. international spectrum needs are met
- Manages international registration of federal satellite systems (spectrum and orbits).



Domestic policy decisions need to consider international implications (and vice versa)

OSM Initiatives

NTIA will meet the increasing radio spectrum needs of the United States while balancing the national and economic security interests of our nation.

- 1) Create and institutionalize enduring processes for Increased Spectrum Access
- 2) Establish and implement Innovative Spectrum Sharing
- 3) Develop Spectrum Policy to facilitate greater spectrum access (public and private)
- 4) Launch Strategic Communications Outreach Effort to improve engagement and collaboration with industry and other stakeholders (federal and non-federal).
- 5) Position U.S. Interests in International Fora to enable federal operations worldwide and increase U.S. business market penetration
- 6) Innovate and Improve Spectrum Management Business Processes (authorizations, data accuracy and transparency, and automation) to enhance efficiency and effectiveness

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