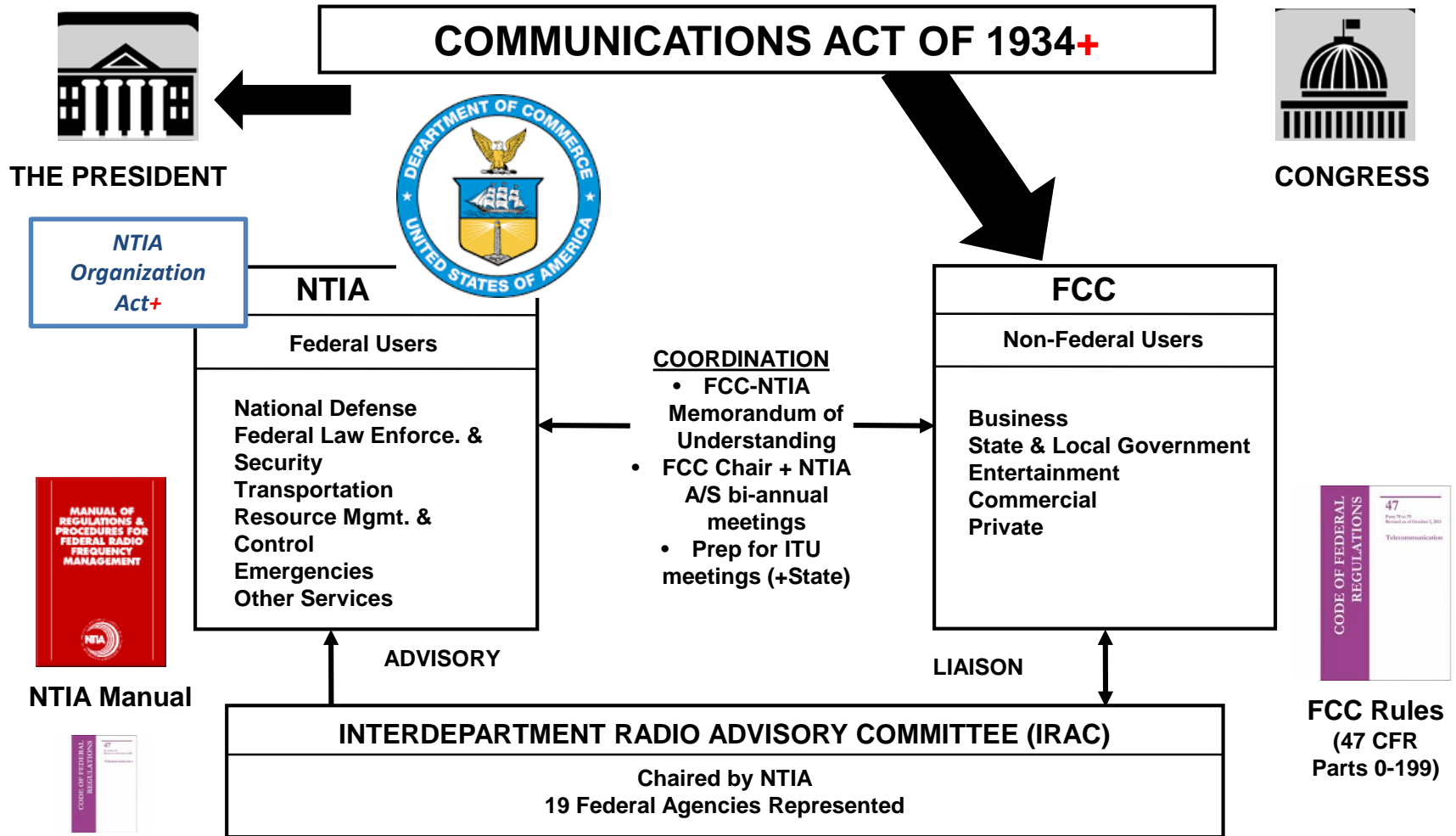# NTIA Spectrum Activities Overview

National Academy of Sciences

Committee on Radio Frequencies (CORF)

May 16, 2019

Peter Tenhula
Associate Administrator (Acting)
Office of Spectrum Management, NTIA
Chair, Interdepartment Radio Advisory Committee

Outline

- Overview of National Spectrum Policy/Management Framework(s)

- Presidential Memorandum on National Spectrum Strategy
  - Science as a Spectrum Policy Priority

- Other Hot Topics in Radio Frequency Management
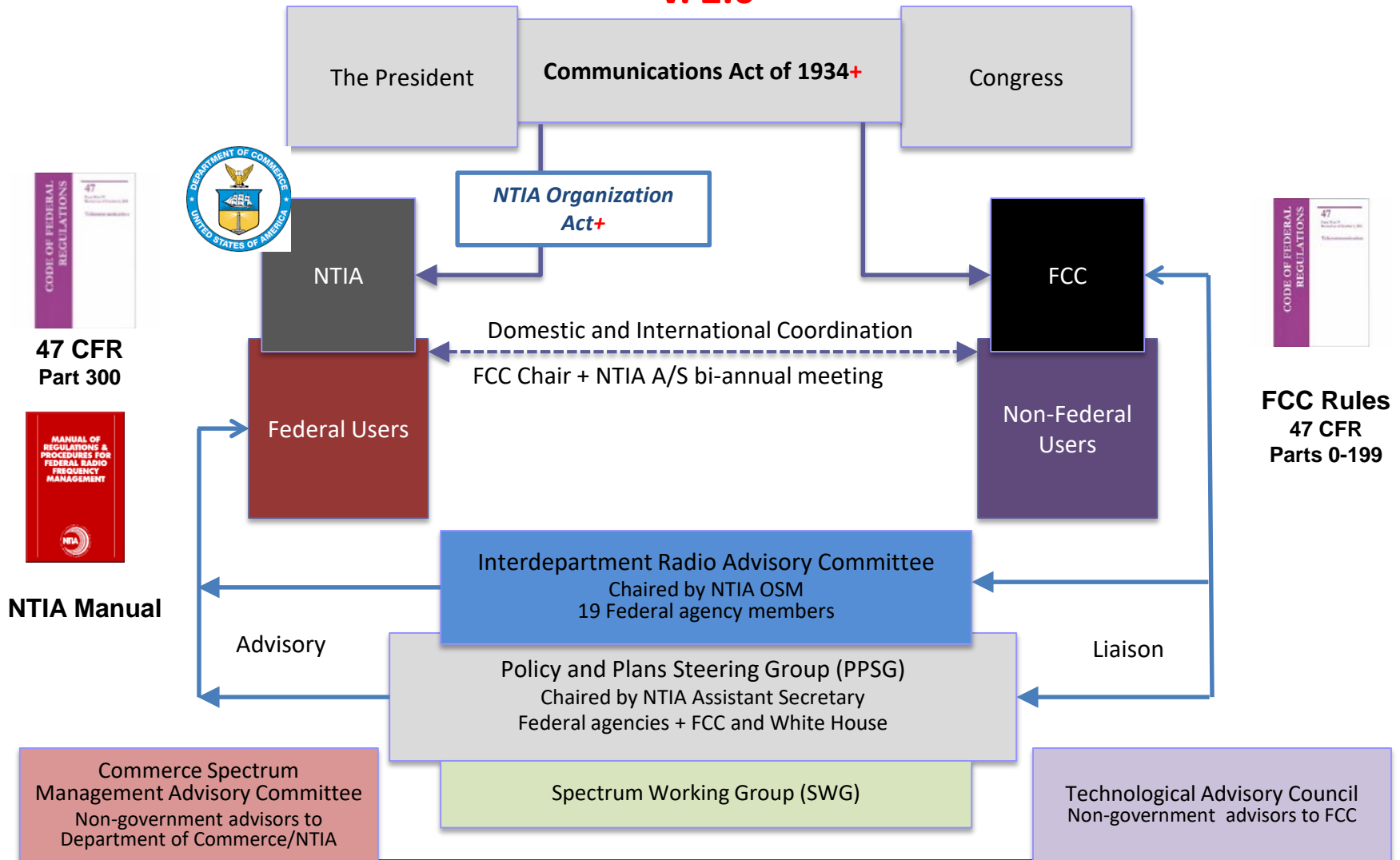
National Spectrum Management Framework

COMMUNICATIONS ACT OF 1934+

THE PRESIDENT

CONGRESS

NTIA Organization Act+

NTIA

Federal Users

National Defense
Federal Law Enforce. & Security
Transportation
Resource Mgmt. & Control
Emergencies
Other Services

FCC

Non-Federal Users

Business
State & Local Government
Entertainment
Commercial
Private

COORDINATION
- FCC-NTIA Memorandum of Understanding
- FCC Chair + NTIA A/S bi-annual meetings
- Prep for ITU meetings (+State)

NTIA Manual

ADVISORY

LIAISON

FCC Rules
(47 CFR Parts 0-199)

INTERDEPARTMENT RADIO ADVISORY COMMITTEE (IRAC)

Chaired by NTIA
19 Federal Agencies Represented

47 CFR Part 300

U.S. Department of Commerce · National Telecommunications and Information Administration

3

National Spectrum Management Framework

V. 2.0

The President — **Communications Act of 1934+** — Congress

NTIA Organization Act+

NTIA

FCC

47 CFR
Part 300

Domestic and International Coordination
FCC Chair + NTIA A/S bi-annual meeting

Federal Users

Non-Federal Users

FCC Rules
47 CFR
Parts 0-199

NTIA Manual

Interdepartment Radio Advisory Committee
Chaired by NTIA OSM
19 Federal agency members

Advisory

Liaison

Policy and Plans Steering Group (PPSG)
Chaired by NTIA Assistant Secretary
Federal agencies + FCC and White House

Commerce Spectrum
Management Advisory Committee
Non-government advisors to
Department of Commerce/NTIA

Spectrum Working Group (SWG)

Technological Advisory Council
Non-government advisors to FCC

U.S. Department of Commerce · National Telecommunications and Information Administration

IRAC Members*
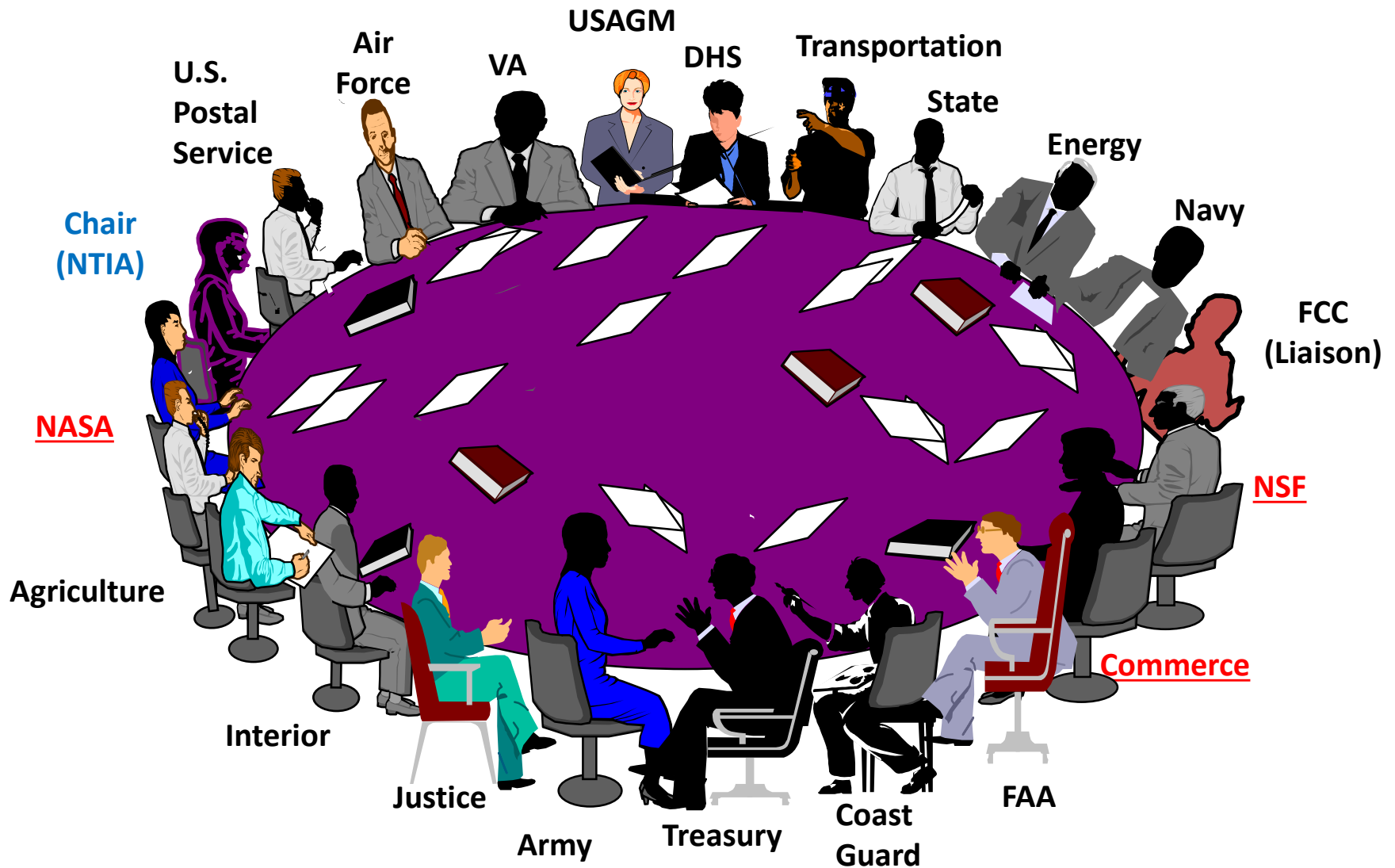
* Observers: Defense (DISA), NSA and FDA

Presidential Memo Implementation

- Presidential Memo (PM) released Oct 25, 2018
  - Calls for "a balanced, forward-looking, flexible, and sustainable approach to spectrum management" -- a long-term National Spectrum Strategy (by July)
- WH Spectrum Strategy Task Force coordinating implementation
- Federal Spectrum Requirements
  - April: Agencies reported on future requirements for spectrum and began reviewing current assignments and usage to include higher-fidelity information
- OSTP Reports
  - Emerging technologies and effects on consumer demand
  - R&D priorities to advance spectrum access and efficiency
- Annual NTIA Reports on Status of Spectrum Repurposing Initiatives
  - NTIA/FCC initiatives required by Spectrum Pipeline Act, MOBILE NOW Act, etc.

Strategic Objectives of the PM

- increase spectrum access for all users, including on a shared basis, through transparency of spectrum use and improved cooperation and collaboration between Federal and non-Federal spectrum stakeholders;

- create flexible models for spectrum management, including standards, incentives, and enforcement mechanisms that promote efficient and effective spectrum use, including flexible-use spectrum licenses, while accounting for critical safety and security concerns;

- use ongoing research, development, testing, and evaluation to develop advanced technologies, innovative spectrum-utilization methods, and spectrum-sharing tools and techniques that increase spectrum access, efficiency, and effectiveness;

- build a secure, automated capability to facilitate assessments of spectrum use and expedite coordination of shared access among Federal and non-Federal spectrum stakeholders; and

- improve the global competitiveness of United States terrestrial and space-related industries and augment the mission capabilities of Federal entities through spectrum policies, domestic regulations, and leadership in international forums.

Science as a Spectrum Policy Priority

- 2018 PM: U.S. policy to use radiofrequency spectrum as efficiently and effectively as possible to help meet our economic, national security, **science**, safety, and other Federal mission goals now and in the future.
  - Flexible, predictable spectrum access by USG will help ensure Federal users can meet current and future mission requirements for broad range of communications- and **non-communications**-based systems.
  - U.S. national security depends on technological excellence and USG must continue to have access to spectrum resources needed to protect the homeland, manage the national airspace, **forecast severe weather, and explore frontiers of space**.

- *See also* NTIA Manual, Chapter 2 (1965-2017)

Other Hot Topics

- MOBILE NOW Act and Spectrum Pipeline Act Implementation

- Prep for next World Radio Conference (and implementation of the last one)

- WH Space Policy Directives

- Opening up Spectrum "Frontiers" and "Horizons" (FCC)

- Sharing the 3.5 GHz band (FCC and ITS) and other "Mid-Band" Spectrum

- Improved Automation and Process Streamlining (2020 Budget Proposal)

- AWS-3 Transition

(Some more) **Hot Topics**

- Unmanned Aircraft Systems (UAS)
  - Spectrum Access and Counter-UAS
- Interference Protection and Dispute Resolution
- Small Satellite Systems
- Experimental Operations
- OMB Circular A-11 Implementation
- NTIA Manual Review and Revisions
- Spectrum Management Fees
- FCC Coordination

Thank You!

Website: spectrum.gov

Twitter: @NTIAgov

Facebook: Facebook.com/NTIAgov