

# World Radiocommunication Conference

International and U.S. Preparatory  
Processes

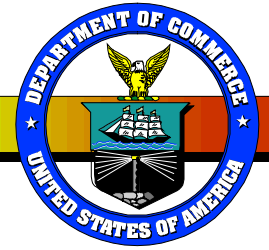
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National Telecommunication  
and Information Administration

# Introduction

## World Radiocommunication Conferences

- International Forum for world agreement
- Review and revise the Radio Regulations
- Held every 4 years
- Operates by consensus, voting on occasion
- Sets the world stage for future technological development
- Greater emphasis on consolidated regional positions and proposals

**NTIA**

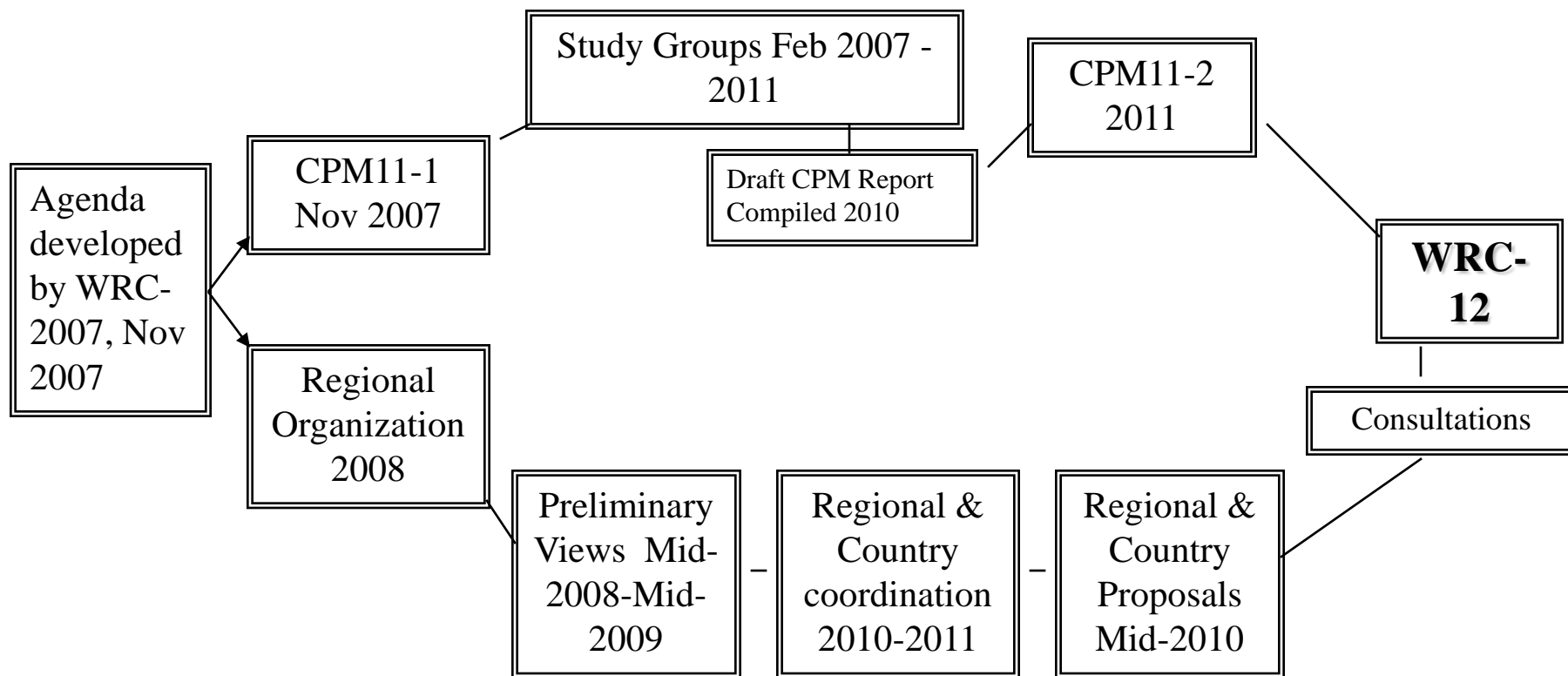


# Opening of WRC-07



## International Preparatory Process

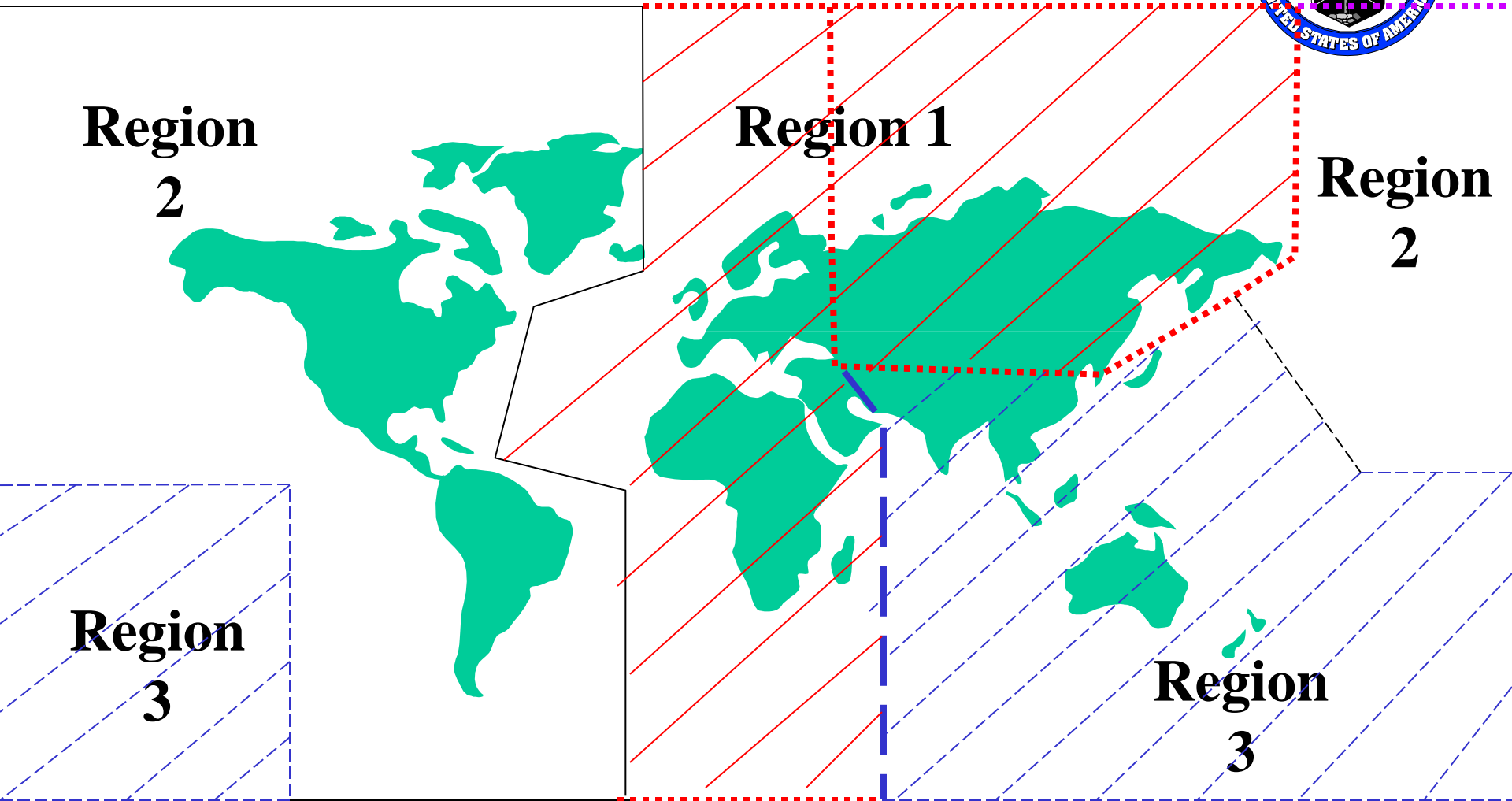
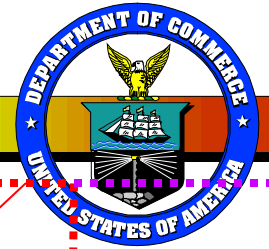
### Technical Preparations



### Proposal Preparations

# ITU Regions

**NTIA**



**Region  
2**

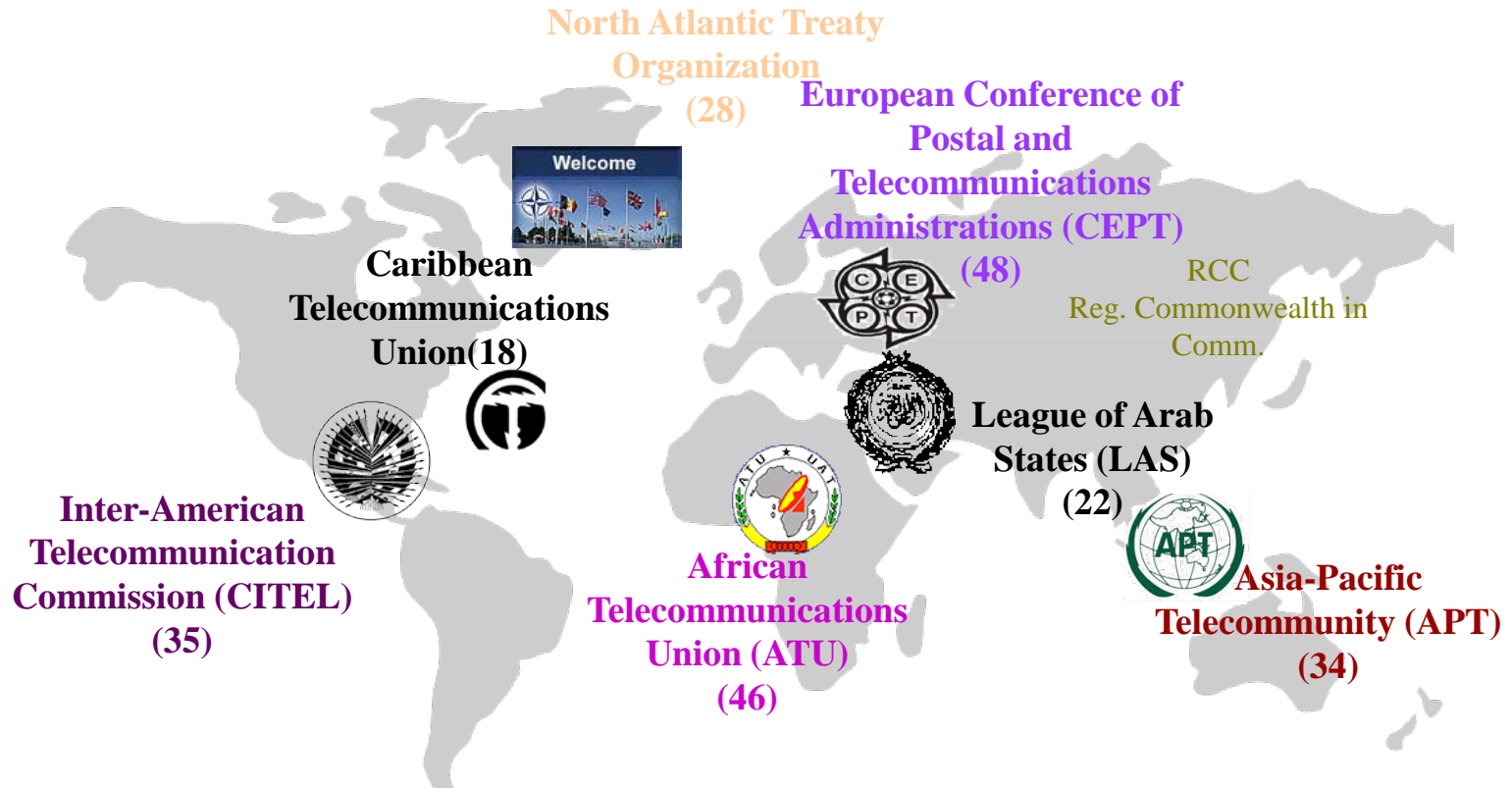
**Region  
1**

**Region  
2**

**Region  
3**

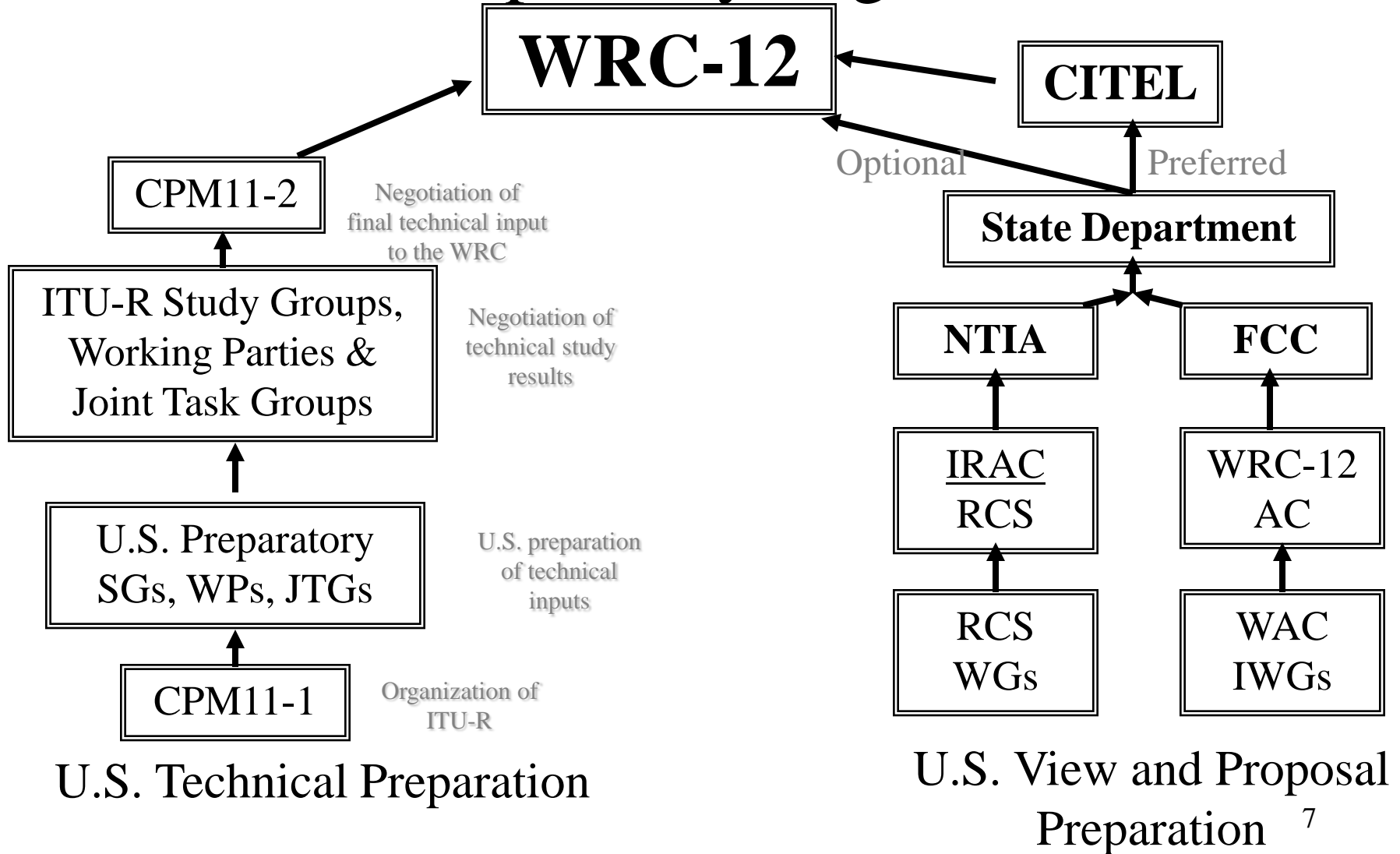
**Region  
3**

## REGIONAL SPECTRUM MANAGEMENT FORA



**Each Nation has Sovereignty Over the Use of its Spectrum**

## U.S. Preparatory Organization



**Interdepartment Radio Advisory Committee (IRAC)  
Radio Conference Subcommittee (RCS)**

**Working Groups**

**WG1 – Maritime and Aeronautical Issues**

**WG2 – Radiolocation Service**

**WG3 – Fixed, Mobile, Amateur, and  
Broadcasting Issues**

**WG4 – Science Issues**

**WG5 – Satellite Issues**

**WG6 – Future Work Program and Other Issues**

Federal Communications Commission (FCC)  
**WRC Advisory Committee (WAC)**

**Informal Working Groups (IWG)**

IWG-1: Maritime, Aeronautical and Radar Services

IWG-2: Terrestrial Services including those related to High Altitude Platform Stations

IWG-3: Space Services

IWG-4: Regulatory issues



# WRC-12 Agenda Items

- **25 + Issues**

- Aeronautical - (AM(R) S) and Unmanned Aerial Systems
- Maritime – Port Security and Appendix 17 (HF)
- Radar – 3-30 MHz, 30-300 MHz and 15 GHz
- Satellite – AMS(R)S 1.5/1.6 GHz, RNSS, MSS, BSS
- Fixed, Mobile and Broadcasting – ENG, HAPS, 71-238 GHz, SRD
- Science – Passive Services 275-3000 GHz, space research, metatds, metsat
- Regulatory – Res 951, SDR/CRS
- Future Work – IBR, Res and Recs, future conference agenda



# U.S. Proposals on Aeronautical Issues

- **Agenda Item 1.3** Unmanned Aircraft Systems  
Terrestrial and Satellite Components
- **Agenda Item 1.4** Aeronautical Mobile (Route) Service to accommodate new aviation applications:
  - Ground-Based Augmentation System (GBAS)
  - Automatic Dependent Surveillance – Broadcast (ADS-B) and Universal Access Transceiver (UAT)
  - Airport RLANs



## U.S. Proposals on Maritime Issues

- **Agenda Item 1.9** Update to Appendix 17 (HF maritime) to accommodate new digital technology
- **Agenda Item 1.10** Maritime Ship and Port Security to accommodate new technologies and systems:
  - Satellite detection of Automatic Identification System (AIS)
  - Exclusive Use of AIS 1 and 2 Channels for maritime mobile and mobile satellite, and aeronautical mobile (off route) for the purpose of search and rescue



## U.S. Proposals on Radar & Science Issues

- **Agenda Item 1.6** space based optical links and passive service between 275 – 3000 GHz
- **Agenda Item 1.11** moon missions with new Earth-exploration satellite service allocations
- **Agenda Item 1.12** protect existing services from aeronautical mobile systems
- **Agenda Item 1.16** Lightning Detection Systems
- **Agenda Item 1.14** No change to accommodate VHF radars in Region 1
- **Agenda Item 1.15** HF Oceanographic Radars
- **Agenda Item 1.21** Airborne Radars
- **Agenda Item 1.24** Meteorological Satellites



## U.S. Proposals on Satellite Issues

- **Agenda Item 1.7** Aeronautical Mobile Satellite (route) Service in the 1.5/1.6 GHz range
- **Agenda Item 1.18** Radiodetermination Satellite systems in 2483.5-2500 MHz
- **Agenda Item 1.25** No additional spectrum for mobile satellite in 4-16 GHz range
- **Agenda Item 7 – Satellite Regulatory: over 25 issues**



# U.S. Proposals on Fixed & Mobile Issues

- **Agenda Item 1.5** Electronic News Gathering
- **Agenda Item 1.8** Fixed Service 71-238 GHz
- **Agenda Item 1.13** 21.4-22 GHz Broadcasting Satellite Service
- **Agenda Item 1.17** Mobile Service 790-862 MHz
- **Agenda Item 1.23** Amateur Radio Service



# U.S. Proposals on Regulatory Issues and

## Future Agenda Items

- **Agenda Item 1.2** International Regulatory Framework
- **Agenda Item 1.19** Software Defined and Cognitive Radios
- **Agenda Item 1.22** Short-Range Devices
- **Agenda Item 8.2 Future Conference Agenda**
  - Wireless Avionics Intra-Communications
  - Broadband Systems including IMT
  - 7 GHz Earth-Exploration Satellite Service
  - GMDSS and E-Nav
  - 5091-5150 MHz Fixed Satellite Service



## Summary

- **Keep up to date on U.S. WRC preparations - visit our websites:**
- [www.ntia.doc.gov](http://www.ntia.doc.gov) (click on Spectrum Management and scroll down to International Activities)
- [www.fcc.gov/ib/](http://www.fcc.gov/ib/)