World Radiocommunication Conference

International and U.S. Preparatory Processes

Dr. Darlene A. Drazenovich
ddrazenovich@ntia.doc.gov
U.S. Department of Commerce
National Telecommunication
and Information Administration

Introduction

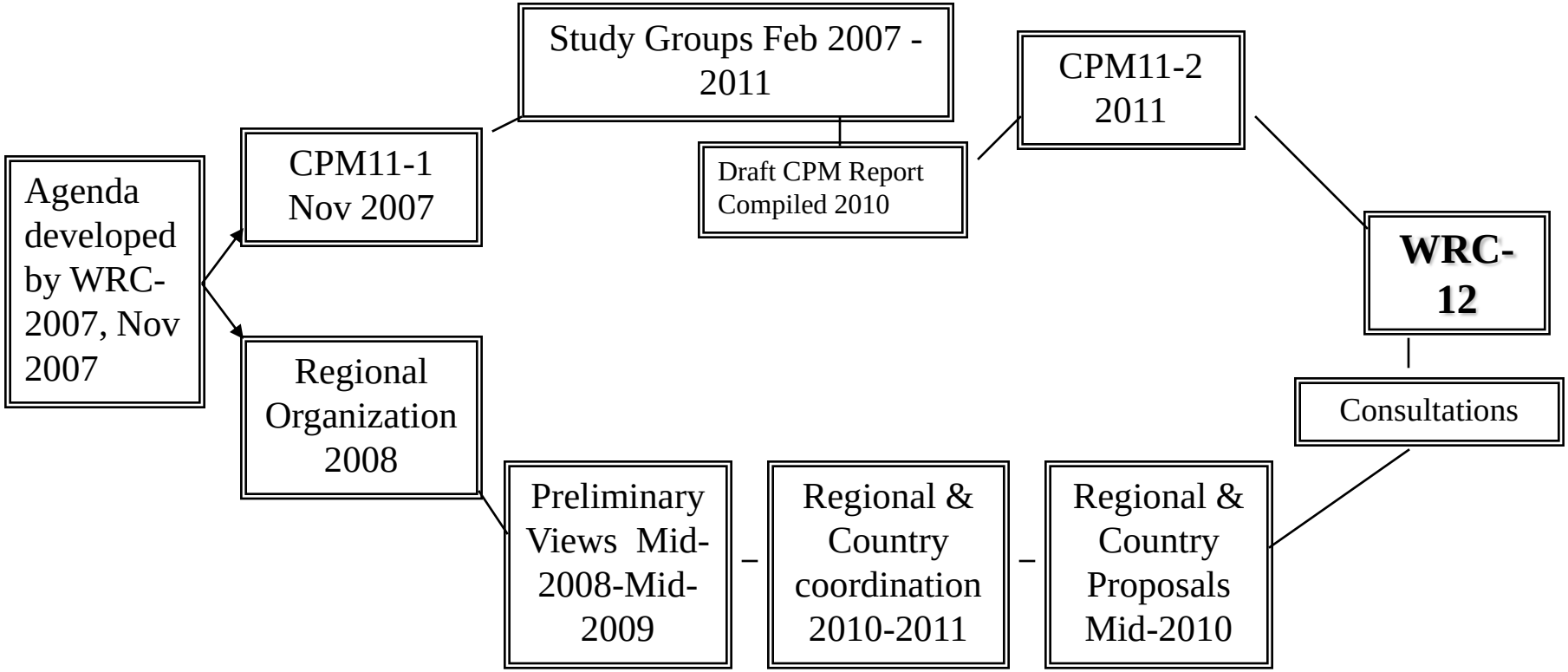
World Radiocommunication Conferences

- 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

Opening of WRC-07

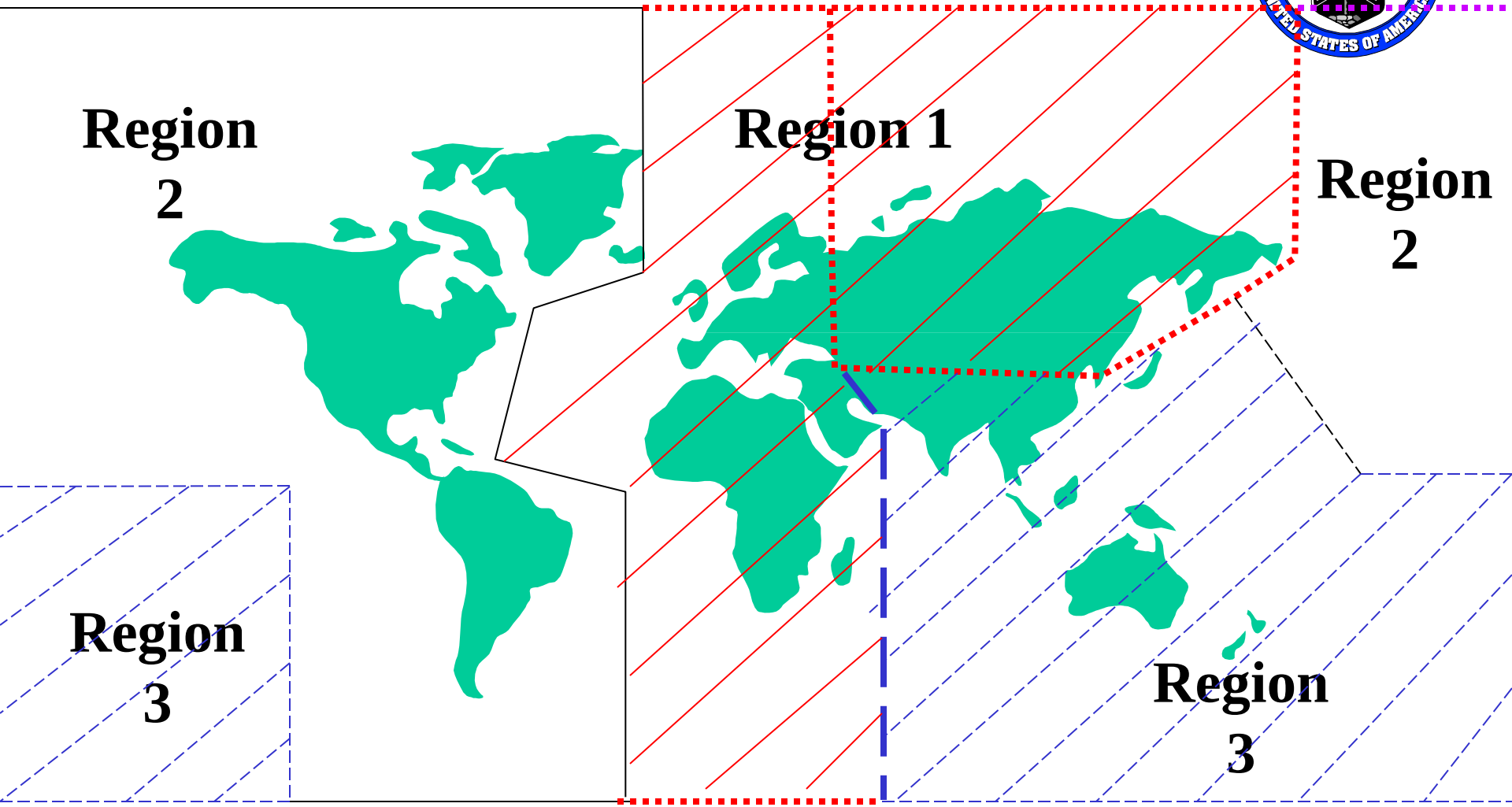
International Preparatory Process

Technical Preparations

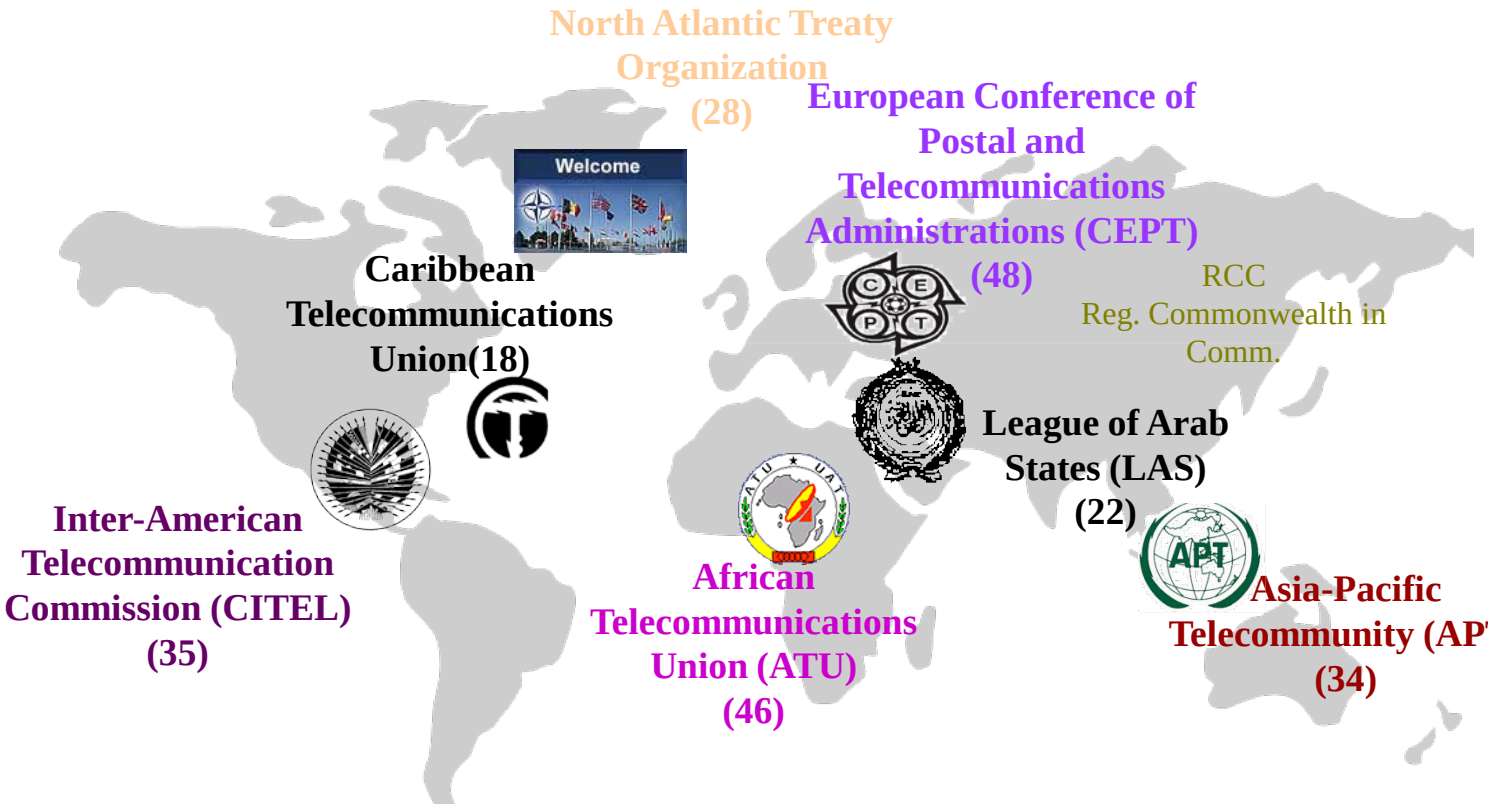


Proposal Preparations

ITU Regions

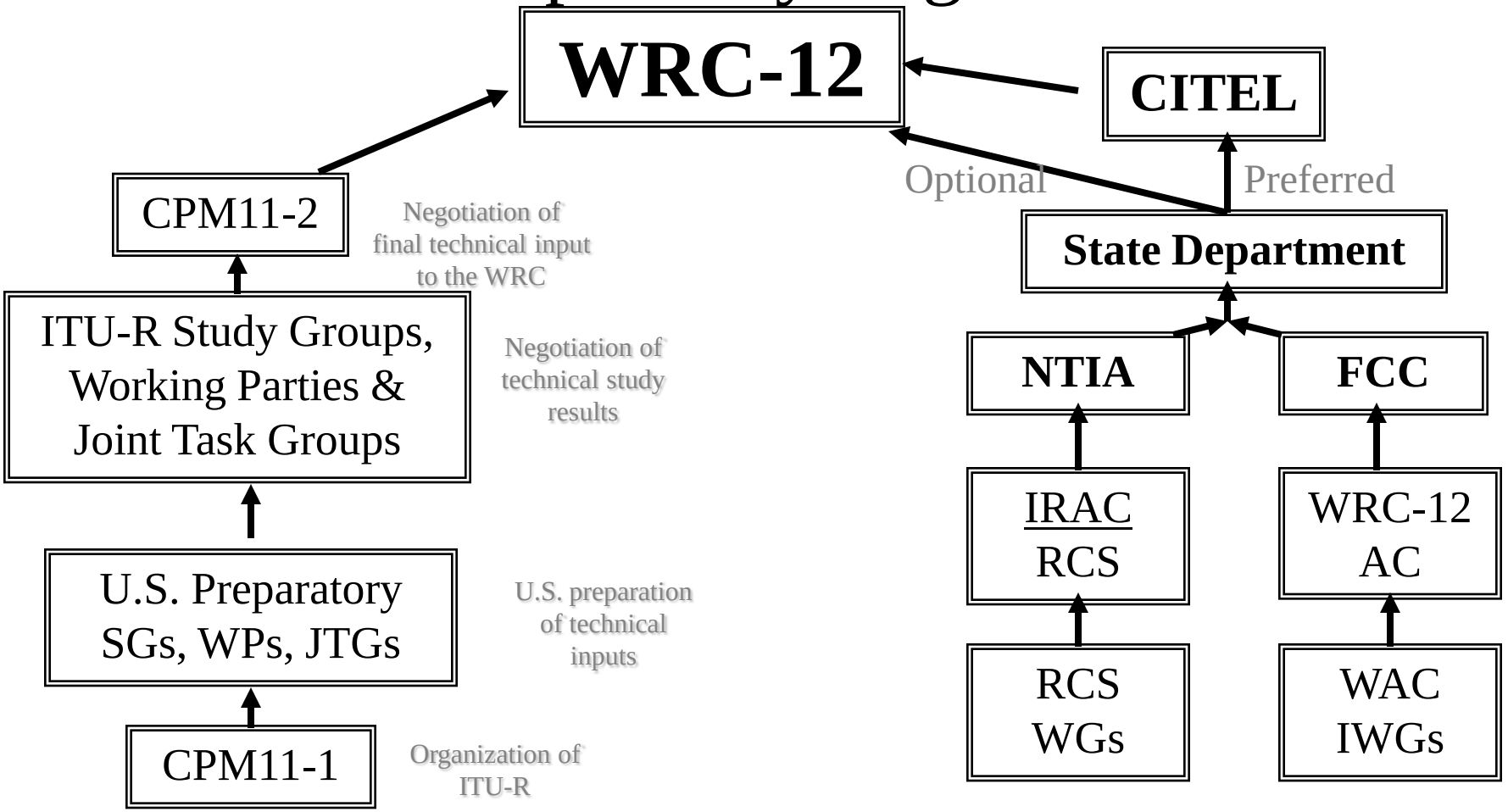


REGIONAL SPECTRUM MANAGEMENT FORA



Each Nation has Sovereignty Over the Use of its Spectrum

U.S. Preparatory Organization



U.S. Technical Preparation

U.S. View and Proposal Preparation

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, metaids, 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 sytems 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 (click on Spectrum Management and scroll down to International Activities)**
- **www.fcc.gov/ib/**