



**The IARU:
What it is.
What it does.
Why it's important.**

For the ARRL Board of Directors

July 18, 2019

Tonight's agenda



- Overview of IARU – its history (what it is)
- IARU today and its work (what it does)
- Why ARRL's continued support is important
- Your questions

The radio spectrum



- In ever-increasing demand
- Traded at very high prices
- Pressure on users to release spectrum (esp. government & military)
- Amateur Radio cannot “buy” spectrum
- Amateur spectrum is only acquired and retained through professional level advocacy and well-researched argument



Spectrum allocation today

- Last “DC to daylight” conference was 1979; agendas now are very specific
- Administrations now see spectrum as revenue source
- Emerging role of the RTOs – Regional Telecommunications Organisations (6)
- Each RTO tries to develop common positions representing the dominant views of its members
- ITU now works by consensus – one stubborn country can block a decision
- Difficult environment in which to make progress



The ITU and global spectrum allocation

- **ITU is the United Nations specialized agency for information and communication technologies – ICTs.**

It allocates global radio spectrum and satellite orbits, develops the technical standards that ensure networks and technologies seamlessly interconnect, and strives to improve access to ICTs to underserved communities worldwide.



ITU Structure

- Plenipotentiary Conference every 4 years
 - Elects Secretary-General, Deputy, 3 Directors, Council, RRB
- Council meets annually
- SG and DSG: overall management (Houlin Zhao, Malcolm Johnson)
- Radiocommunication (ITU-R): Mario Maniewicz
 - Study Groups, Working Parties
- Development (ITU-D): Doreen Bogdan-Martin, KD2JTX
 - Study Groups
- Telecommunication Standardization (ITU-T): Chaesun Lee

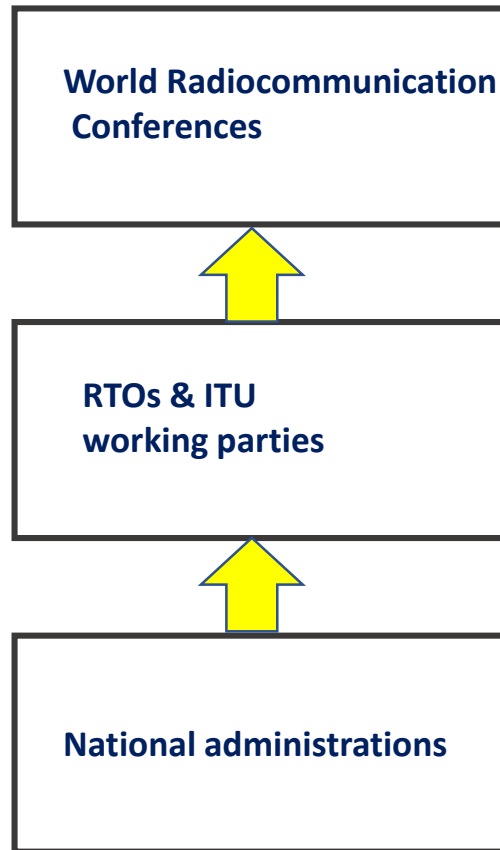
Spectrum “Regulators”



- ITU and six Regional Telecommunications Organisations:
 - APT – Asia Pacific
 - ASMG – Arab states
 - ATU – Africa
 - CEPT – Europe
 - CITELE – Americas
 - RCC – Commonwealth of Independent States (of the former Soviet Union)



Achieving agreement on allocations



International Amateur Radio Union - Working for the future of amateur radio

The many contributions to the studies and Consensus reached on the CPM report with the possible solutions to satisfy WRC-19 agenda indicates the importance attached to the WRC preparatory process by the ITU membership

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AGENDA OF THE MEETING

Item	Discussion Period
1. Opening of the meeting	10:00-10:30
2. Approval of the Agenda	10:30-11:00
3. Approval of the minutes of the previous meeting of the WRC	11:00-11:30
4. Consideration of the consolidated version of the Report of the CPM	11:30-12:00
5. Closing remarks	12:00-12:30

AGENDA FOR THE MEETING

10:00-10:30

10:30-11:00

11:00-11:30

11:30-12:00

12:00-12:30

TURKISH
NTT Communications Corporation

Motorola Solutions Inc.

IARU

What is IARU?



- The “umbrella” federation of national amateur radio societies
- 167 national associations as member-societies
- 3 regions and the International Secretariat (ARRL)
- Team is entirely volunteer
- Its main missions are:
 - Protection and enhancement of amateur radio spectrum access, working through ITU and Regional Telecommunications Organisations
 - Advocacy for standards to mitigate spectrum pollution
- Member-societies are the “building blocks” of the IARU

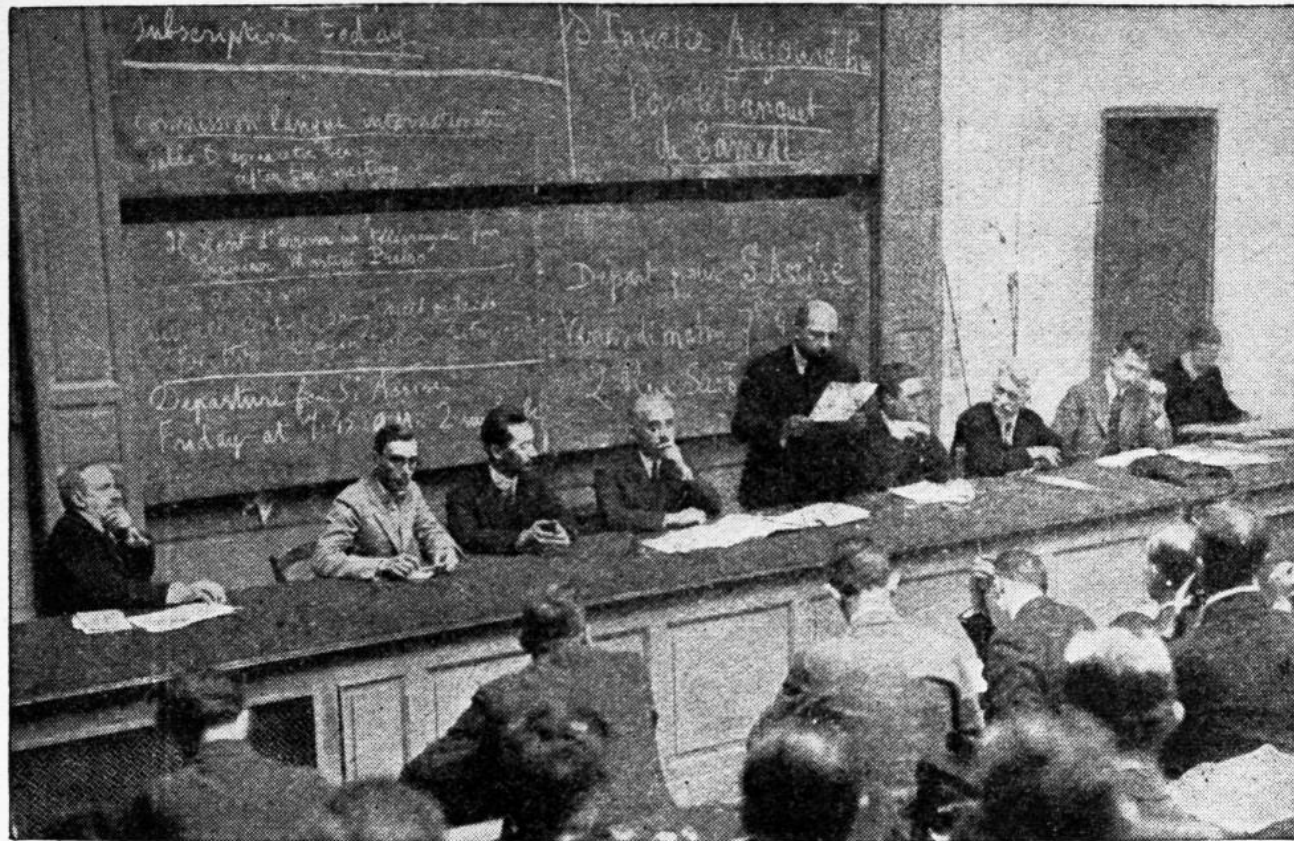
Early IARU history



- 1925 IARU founded in Paris
- 1927 IARU present at Washington Radiotelegraph Conference which set allocations
- 1932 ITU admits IARU to participation in CCIR (later the Radiocommunication Sector)
- 1938 ITU creates the three Region structure for frequency allocations
- 1950 IARU Region 1 formed
- 1962 4U1ITU station established at ITU HQ as “showcase” for amateur radio
- 1964 IARU Region 2 formed followed by Region 3 in 1968
- 1979 Last “DC to daylight” allocation conference, new “WARC-79” bands gained
- 1982 IARU Administrative Council formed with new Constitution (1984)



The first IARU Congress – Paris, 1925



Those present included:

Hiram Percy Maxim, W1AW (ARRL)

Kenneth B Warner, W1EH (ARRL)

Leon Deloy, F8AB

Gerald Marcuse, G2NM (RSGB)

William Borrett, C1DD (Canada)

Loyal S Reid, C8AR (Newfoundland)

and representatives of 23 other countries.

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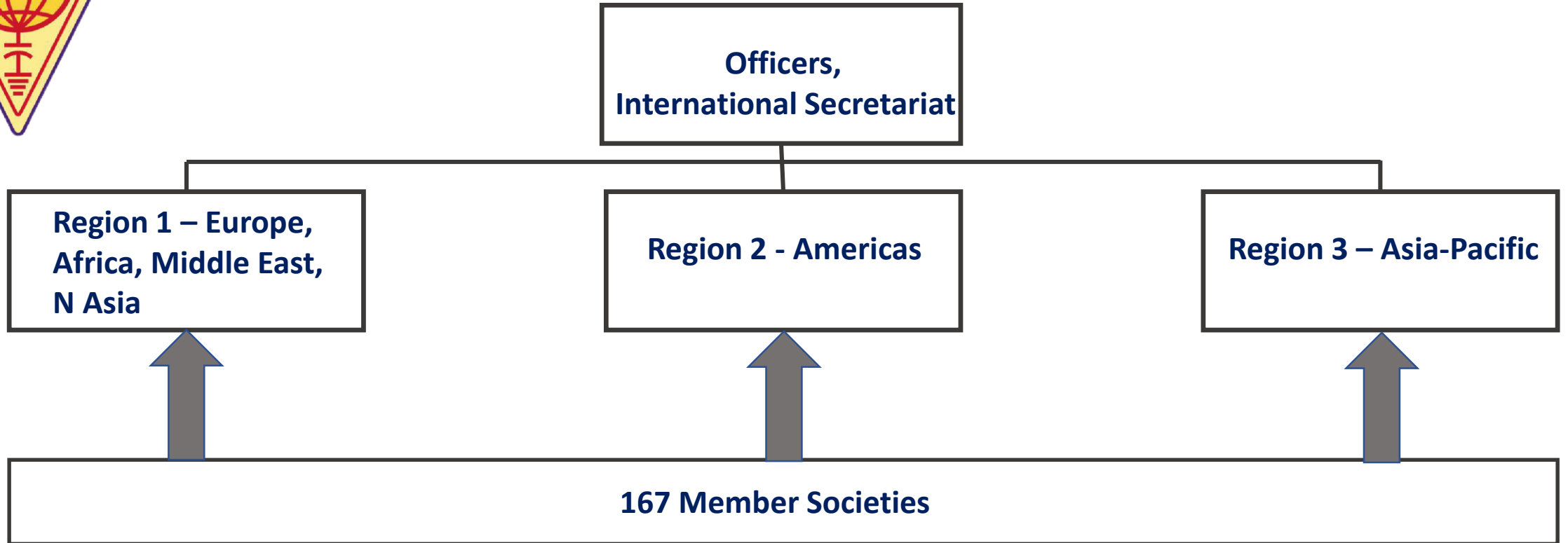
Some IARU Achievements



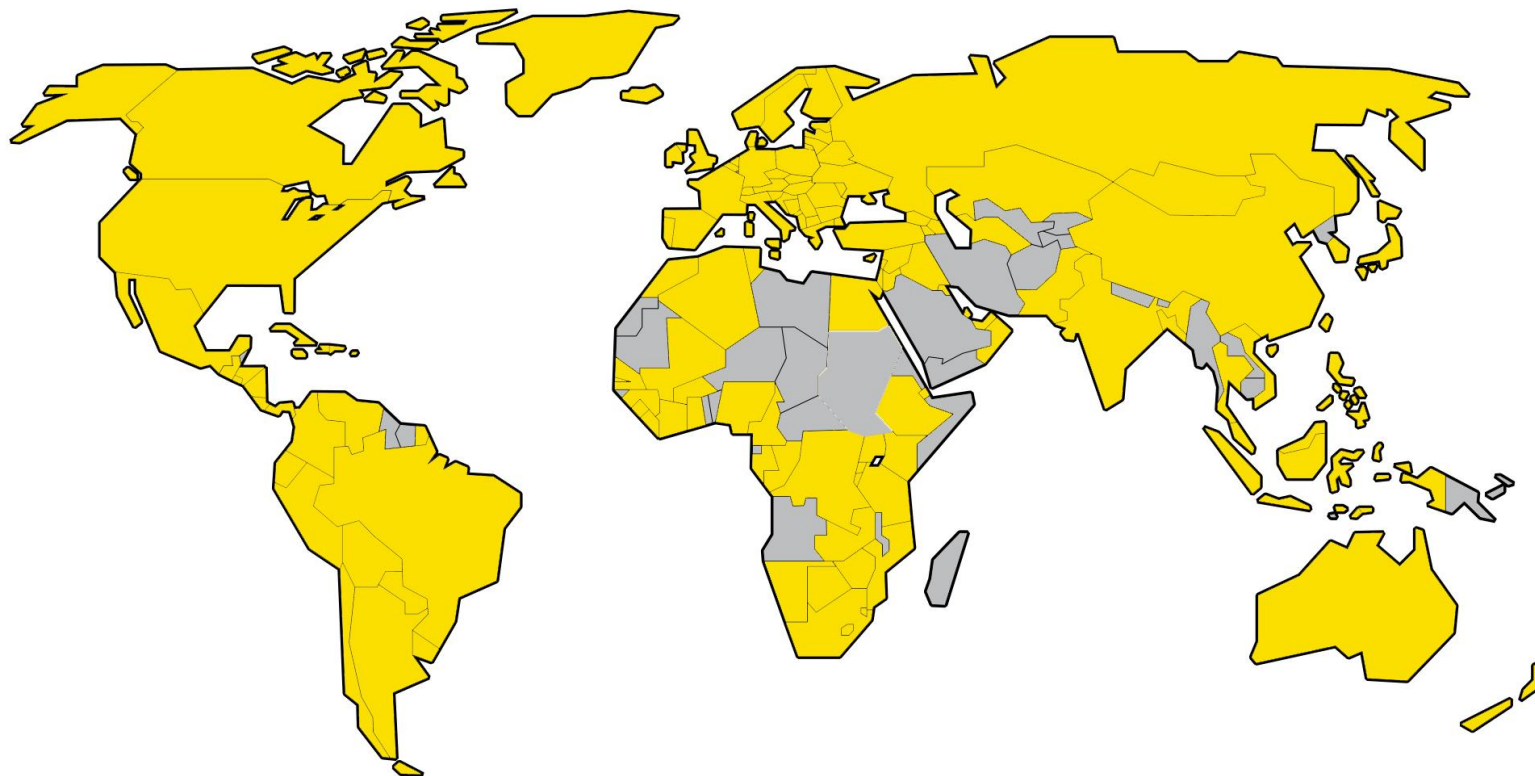
- 21 MHz band globally (WARC 1947)
- Amateur Satellite Service created (WRC-Space 1971)
- 10, 18, 24 MHz bands globally, improved 1.8 MHz band (WARC 1979)
- More amateur-satellite bands, microwave allocations (WARC 1979)
- 7 MHz extension (WRC 2003)
- Easing of some restrictions to facilitate disaster communications (WRC 2003)
- 136 kHz band globally (WRC 2007)
- 472 kHz band globally (WRC 2012)
- Small global 5 MHz band (WRC 2015)
- Improvements in international roaming for radio amateurs (CEPT & CITEL)
- Recognition of amateur emergency communications, importance of EMC standards



IARU today



IARU covers the globe



 IARU member society

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How does IARU work?



- Administrative Council sets policy and objectives
- Regions are autonomous, hold triennial conferences, represented on AC
- Technical representatives and expert consultants work together to:
 - Develop the IARU strategy for each WRC
 - Seek support from national regulators (through national member societies)
 - Coordinate the IARU strategies towards each RTO
 - Respond to inputs from national administrations in RTOs and ITU
-with the objective of securing agreement in each RTO *before* the WRC is held. “Think global – act local”

IARU officers



President, Tim Ellam, VE6SH (Canada)



**Vice President Ole Garpestad, LA2RR
(Norway)**



Secretary Dave Sumner, K1ZZ (USA)

IARU regional heads



President, Region 1, Don Beattie, G3BJ (UK)



**President, Region 2, Reinaldo Leandro, YV5AM
(Venezuela)**



**Chairman, Region 3, Wisnu Widjaja, YB0AZ
(Indonesia)**



Volunteers by the dozen!

- Regional executive committees (elected at regional conferences)
- Technical representatives and expert consultants (appointed on the basis of qualifications)
- Committee chairmen and coordinators (elected or appointed regionally)
- Member-society representatives on committees
- IARU Monitoring System
- Satellite frequency coordination
- International Beacon Project (in cooperation with NCDXF)



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ITU Development Sector

“BDT” or “the D Sector”

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BDT Mission:

Fosters international cooperation and delivery of technical assistance in the creation, development and improvement of telecommunication and ICT* equipment and networks in developing countries.

*ICT is “information and communication technologies.”



IARU Objectives in BDT

- Promote amateur radio in LDCs and SIDS
- Promote the amateur radio role in emergency telecommunications and disaster response and mitigation
- Support the IARU effort in the Radiocommunication Sector



BDT works through 2 “Study Groups”

ITU-D Study Groups develop **Reports, Guidelines, and Recommendations** based on input received from the membership.

The Study Groups examine specific task-oriented telecommunication/ICT questions of priority to developing countries, to support them in achieving their ICT development goals.



Study Group 1

Q 1/1 -- Strategies and policies for the deployment of broadband in developing countries

Q 5/1 -- Telecommunications/ICTs for rural and remote areas

Q 7/1 -- Access to telecommunication/ICT services by persons with disabilities and other persons with specific needs



Study Group 2

Q 1/2 -- Creating smart cities and society: Employing information and communication technologies for sustainable social and economic development

Q 2/2 -- Telecommunications/ICTs for eHealth

Q 3/2 -- Securing information and communication networks: Best practices for developing a culture of cybersecurity

Q 5/2 -- Utilizing telecommunications/ICTs for disaster risk reduction and management

Q 6/2 -- ICTs and the environment (“Climate Change”)



Q 5/2 -- Utilizing telecommunications/ICTs for disaster risk reduction and management

This Q is the primary reason IARU attends SG2 meetings.

Q 5/2 examines best practices and country experiences in planning, exercising and deploying early-warning systems for disaster risk reduction.

Q 5/2 prepares emergency telecommunications plans for LDCs and SIDS.

Q 5/2 prepares guidelines for preparing and conducting disaster communications exercises and drills.

Q 5/2 promotes best practices regarding the enabling policy environment for the deployment of emergency communications systems.

Q 5/2 conducts seminars and workshops to share knowledge, information and best practices for disaster planning, response and mitigation.

Who pays for the IARU?



- Member-societies pay dues to their regional organizations
- Regional organizations fund their own activities and pass a portion of the dues to the International Secretariat
- ARRL pays dues to Region 2 (mainly) and Region 3 and also covers additional IARU expenses
- So in the US the answer is: ARRL members do. Their support of the ARRL is what makes your support of the IARU possible!

Key agenda items at WRC 19



- 1.1 Amateur allocation in Region 1 in the 50-54 MHz region
- 1.7 Non-GSO satellites
- 1.13 Spectrum for international mobile telecommunications 24-86 GHz
- 1.15 275-450 GHz mobile and fixed services
- 1.16 RLAN at 5 GHz
- 9.1.6 Wireless power transfer spectrum
- Future agenda items



Agenda items for WRC-23 and WRC-27

- No IARU plans to promote new agenda items
- Future agenda items generally require studies
 - “Devil is in the details” of Resolution accompanying agenda item
 - Three years of effort in ITU-R Working Parties
 - Sluggish consultative process (Liaison Statements)
 - Reaching consensus takes much compromise
 - Conference Preparatory Meeting finalizes report months before WRC
- Horse trading can lead to inclusion of marginal agenda items
- WRCs are about regulatory text, not about “how” to share



Concerns about possible agenda item

- French proposal to study range of frequencies for future aeronautical mobile applications, including 144-146 MHz
 - Last-minute proposal, no time for administrations to study so only limited opposition initially expressed
 - Currently being considered in CEPT, Conference Preparatory Group meets late August
 - IARU strongly opposed to study of two meter band, IARU Region 1 marshalling opposition for CPG meeting
 - Even if no European Common Proposal, France could still pursue with a few other administrations
 - IARU will also oppose in other RTOs



Other possible agenda items

- Protection for Galileo radionavigation-satellite (1260 MHz)
 - Interference from ATV repeaters in Germany
 - Tests show narrowband interference can be mitigated
 - IARU position: changes to Radio Regulations not required, ITU-R Recommendation can be developed to address mitigation
- IMT at 47-47.2 GHz
 - Insatiable demand for mobile broadband spectrum
 - No studies for WRC-19 but could resurface as future agenda item
- Short duration satellites (Cubesats, etc.)
 - Study of amateur-satellite spectrum narrowly avoided at WRC-15
 - If issue not resolved at WRC-19 will come up again



IARU needs, present and future

- A small number of experts carry the workload
- We are all getting older!
- Time demands are increasing; more meeting participation required
- IARU needs more volunteers with the skills to join this work
 - More involvement in standards organizations needed (EMC)
- Even with all-volunteer team, travel costs increase
- Succession planning is of critical importance



Thanks for listening!

- For more information: www.iaru.org (new website in development)
- Other links:
 - www.iaru-r2.org (Region 2)
 - www.itu.int (ITU)
 - www.citel.oas.org (CITEL, the Region 2 RTO)