

ARRL Technical Relations Office

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ARRL Board Meeting July 19 – 20, 2019

RA-19, WRC-19, CPM 23-1 October 21 – November 26, 2019

Most efforts continue to focus on preparations for the three International Telecommunication Union (ITU) – Radiocommunication (ITU-R) meetings which will be held consecutively in Sharm el Sheik, Egypt, from October 21 to November 26, 2019:

- Radiocommunication Assembly (RA-19)
- World Radiocommunication Conference 2019 (WRC-19)
- First Conference Preparatory Meeting 2023 (CPM 23-1)

WRC-19 has several agenda items and other “issues” identified in WRC-15 Resolution 809 which may impact Amateur Radio. The major issues ARRL is tracking to prepare for WRC-19 are a possible allocation of 50-54 MHz to the Amateur Service in Region 1, International Mobile Telecommunications 2020 (IMT) or 5G, and Wireless Power Transmission (WPT) (both for electric vehicles and for mobile charging devices). Other issues ARRL is monitoring include Intelligent Transportation Systems (ITS); Railway: train – trackside (Mobile Service allocations); Wireless Access Systems (WAS/RLAN); Space Operation Service (non-GSO satellites); and 275 – 450 GHz.

ITU-R CPM 19-2 February 2019 Geneva

The Conference Preparatory Meeting (CPM) for WRC-19 held its Second Session (CPM 19-2) in Geneva from 18 to 28 February 2019. The CPM report, officially titled the *2nd Session of the Conference Preparatory Meeting for WRC-19; CPM Report on technical, operational and regulatory/procedural matters to be considered by the World Radiocommunication Conference 2019*, is 897 pages in length.

Chapter 5 of the CPM Report covers WRC-19 agenda item 1.1 (50 – 54 MHz):

1.1 to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution 658 (WRC-15);

Four methods are provided to satisfy the agenda item including the No Change method:

- **Method A:** An allocation to the amateur service on a primary basis in Region 1 in the band 50-54 MHz, or part thereof;
- **Method B:** An allocation to the amateur service on a secondary basis in Region 1 in the band 50.080-50.280 MHz, (**Method B1**), or in the band 50-52 MHz (**Method B2**);
- **Method C:** An allocation to the amateur service in Region 1 on a partly primary and partly secondary basis in all or part of the frequency band 50-54 MHz;
- **Method D:** No changes in the frequency band 50-54 MHz.

Regulatory text is also provided for implementation of the proposed methods.

(from page 703)

Regarding WRC-19 agenda item 1.13 (IMT), and the 47 - 47.2 GHz Amateur allocation, the CPM states the following (from page 181):

2/1.13/3.2.6 Frequency range 47-47.2 GHz

The frequency range 47-47.2 GHz, or parts thereof, is allocated to the ARS and ARSS.

The details of these allocations and those of the adjacent frequency bands can be found in RR Article 5.

No studies for this band were performed in ITU-R.

ITU-R WP5ABC April-May 2019 Geneva

- Working Party 5A (WP 5A) - Land mobile service above 30 MHz* (excluding IMT); wireless access in the fixed service; amateur and amateur-satellite services
* including the exact frequency of 30 MHz
- Working Party 5B (WP 5B) - Maritime mobile service including Global Maritime Distress and Safety System (GMDSS); aeronautical mobile service and radiodetermination service
- Working Party 5C (WP 5C) - Fixed wireless systems; HF and other systems below 30 MHz in the fixed and land mobile services

ITU-R Working Party 5A (WP 5A) is responsible for “Land mobile service above 30 MHz (excluding IMT); wireless access in the fixed service; amateur and amateur-satellite services”. WP 5A held its twenty-second (22nd) meeting from 29 April to 9 May 2019 in Geneva. The meeting participants included 245 participants from 43 countries representing 40 administrations, 6 recognized operating agencies, 13 scientific or industrial organizations, 1 United Nations, its specialized agencies and the International Atomic Energy Agency, 2 regional and other international organizations, 1 regional telecommunication organization, 1 other entity dealing with telecommunication matters, 2 associates, 1 academia, universities and research establishments, and the BR.

WP 5A proposed draft new Report ITU-R M.[AMATEUR_50_MHz] – *Spectrum needs for the amateur service in the frequency band 50-54 MHz in Region 1 and sharing with mobile, fixed, radiolocation and broadcasting services* to ITU-R.

Study Group 5 meets September 2 – 3, 2019 in Geneva.

Amateur and amateur-satellite services

Working Group 5A - 1 (Amateur Services) was chaired by Dale Hughes, AUS/VK1DSH.

The work on the sharing and compatibility studies required for WRC-19 agenda item 1.1 (preliminary draft new Report ITU-R M.[AMATEUR_50_MHz]) was completed and was submitted to WP 5A. Reviewed and revised the ‘*Guide to the use of ITU-R texts relating to the amateur and amateur-satellite services*’.

ARRL’s Jon Siverling (USA/WB3ERA) serves as the Rapporteur for ITU Region 2 (the Americas) in WP 5A. His report (*Liaison Rapporteur’s Report on Relevant Activities in Certain Countries in Region 2*) emphasized World Amateur Radio Day (April 18, 2019) marking the 94th anniversary of the International Amateur Radio Union (IARU), founded in Paris in 1925.

Siverling also included a brief summary of ITU-R-Amateur Radio WinLink collaboration with ITU. Last year, the Honduras National Telecommunications Commission (CONATEL) delivered Amateur Radio equipment to COPECO— a government disaster-organization coordination agency — for use in an International Telecommunication Union (ITU) pilot project that aims to take wider advantage of the *Winlink* HF email system for emergency communication. The ITU pilot project includes Central America and the Caribbean with the aim of achieving implementation throughout South America. *Winlink* already enjoys wide usage in North America by Amateur Radio Emergency Service (ARES) teams. ITU donated the equipment.

Next ITU-R block of meetings of WP 5A, 5B, and 5C will be April 27 - May 8, 2020.

ITU-R WP 1ABC SG1 May June 2019 Geneva

- Study Group 1 (SG 1) – Spectrum Management
- Working Party 1A (WP 1A) - Spectrum engineering techniques
- Working Party 1B (WP 1B) - Spectrum management methodologies and economic strategies
- Working Party 1C (WP 1C) - Spectrum monitoring

The ITU-R block of meetings of WP 1A, 1B, 1C and SG 1 was held May 28 – June 7, 2019 in Geneva. The report [WPT-IMPACT] was completed. The report on WPT 100 – 148.5 kHz was completed (low power devices for charging mobile phones), and elevated to a Draft New Report. It is now called “WPT-Technical characteristics and impact analyses of non-beam inductive Wireless Power Transmission (WPT) for mobile devices”. In the Conclusion section, it is stated that “Emissions modelling and measurements were used to analyze the impact from WPT for mobile and portable devices on radiocommunications services. The report analyzed the interference impact on AM Broadcasting, Amateur Radio and Aeronautical Radionavigation (ADF/NDB). WPT devices for charging mobile and portable devices operating in the 100-148.5 kHz frequency range require adequate separation distance from radiocommunication service receivers in order not to cause interference.” And that “. . . For the Amateur Radio service this distance was between 15.3 m and 40.8m depending on the scenario.”

The Draft New Recommendation ITU-R SM.[WPT_MOBILE] (Guidance on frequency ranges for operation of non-beam wireless power transmission systems for mobile and portable devices) has revised Table 1 (Frequency ranges for operation of non-beam WPT systems for mobile and portable devices) to include 100 – 148.5 kHz for inductive technology.

Question 210 (regarding technical, regulatory and operations issues for WPT) was extended to 2023 to allow work to continue. Working document [WPT UNWANTED] has been renamed [WPT-EMISSIONS]. WPT-Beam (wireless power transmission at a distance) will include future work that may impact the bands 902-928 MHz, 2400-2500 MHz, 5725-5875 MHz for charging mobile/portable devices; and 915-930 MHz, 5470-5770 MHz for wireless powered sensor networks.

CITEL 33rd PCC.II April 2019 Monterrey

The 33rd meeting of CITEL's Permanent Consultative Committee II: Radiocommunications (PCC.II) met in Monterrey, Mexico April 8 – 12, 2019.

The CITEL “No Change” (NOC) in Region 2 Inter-American Proposal (IAP) for WRC-19 agenda item 1.1 (50 – 54 MHz, Region 1) now has support from 13 countries in the America's Region (ARG, B, BAH, CAN, CLM, CTR, DOM, ECU, HND, MEX, PRG, URG, USA). This IAP will be sent to the ITU.

A “No Change” Draft Inter-American Proposal (DIAP) for the 47 - 47.2 GHz band under WRC-19 agenda item 1.13 currently has the support of three administrations (ARG, MEX, USA).

From my April 17 report regarding our 47 – 47.2 GHz band.

“View B” to the FCC WRC-19 Advisory Committee (WAC) was adopted by USG which submitted a “NO CHANGE” (NOC) proposal for 47 - 47.2 GHz to the CITEL PCC.II meeting last week, where it was supported by ARG and MEX. So it is now a Draft Inter American Proposal (DIAP) (supported by three countries) and will go forward to the next PCC.II (Ottawa) meeting in August. Will need the support of three more countries to become an Inter-American Proposal (IAP) and be sent to the ITU for WRC-19.

Issue 9.1.6

Agenda Item 9.1.6: Urgent studies required in preparation for WRC-19 - Studies concerning Wireless Power Transmission (WPT) for electric vehicles.

WPT - It is necessary that the studies on the wireless power transmission for electric vehicles must ensure the protection of the existing, planned, and future radiocommunication services against harmful interferences, including unwanted emissions and harmonics, important conditions to be satisfied by developing applicable ITU-R Recommendations and Reports. Supported by B, CAN, CLM, DOM, MEX, PGY, USA, URG.

FMRE – IFT (Mexico)

FMRE President Alfonso “Poncho” Tamez (XE2O) had a productive meeting with the Mexican IFT, where he discussed issues such as finding a way to authorize non-Mexicans to operate in Mexico, IARP, and regulatory impediments such as “concessions” and age restrictions. IARU Region 2 Flavio Archangel and ARRL Jon Siverling monitored this meeting.

BT&P (Curaçao)

Two regulators from Curacao at the CITEL PCC.II meeting (King-Sang Lau, Inspector Radio Communications, Bureau Telecommunicatie en Post – Regulatory Authority Curacao; and Leonardo de Abreu Ladeira, Senior Policy & Market Regulation Advisor) are interested in developing Amateur Radio Emergency Communications in Curacao. I have introduced them to both BDT Directrice Doreen Bogdan-Martin as well as IARU Region 2 Flavio Archangel (Brazil).

The 34th Meeting of PCC.II will be held in Ottawa, Canada, August 12 - 16, 2019.

CITEL 34th PCC.I April-May 2019 Lima

The 34th Meeting of the Permanent Consultative Committee I: Telecommunications/Information and Communication Technologies was held in Lima, Peru, from April 29 to May 3, 2019. Under the new structure, the Rapporteurship on disaster prevention, response and mitigation, ICT and climate change, environmental protection and circular economy (Chair: Jon Siverling, USA/ARRL) is now under the Working Group 2: Working Group on Deployment of Technologies and Services (WGDTS). Based on the 7 terms of reference established for this Rapporteurship, the rapporteur group prepared a work plan for the next 4 years; in addition, contributions linked to telecommunications policies that contribute to the prevention and mitigation of disasters were developed and presented.

The ITU submitted a contribution describing the IARU/ITU Amateur Radio WinLink project for Central America and the Caribbean. This is termed the *Pilot Project for the use of ICTs in emergency and disaster situations in the Americas region* by ITU. Key to the success of this project have been ITU/BDT Staff Member Rodrigo Robles (Tegucigalpa office), IARU Region 2, particularly of the *Federación Mexicana de Radio Experimentadores* (FMRE), Mike Burton (XE2/N6KZB), Jonathan Remba (XE1BRX) and FMRE President Alfonso “Poncho” Tamez (XE2O).

The Dominican Republic submitted a contribution (available in Spanish only) highlighting the Amateur Radio WinLink/ITU BDT project. IARU, CITEL, COMTELCA and INDOTEL installed a WinLink system in the national Emergency Operations Center, which became the principal alternate emergency center for the Caribbean.

Brazil submitted a contribution (available in Spanish only) which summarized the 3rd Global Telecommunications Emergency Forum, held March 6 – 8, 2019 in Mauritius.

The ITU also submitted Global Guidelines to Develop National Emergency Telecommunication Plans, which includes a significant section devoted to Amateur Radio Emergency Communications.

The 35th Meeting of Permanent Consultative Committee I: Telecommunications/Information and Communication Technologies will be held in Asuncion, Paraguay from September 30 to October 4, 2019.

USITUA

The United States ITU Association (USITUA) (ARRL’s Jon Siverling, Board Member) hosted several events in Washington DC, to include:

- ITU 2019 Council Debrief
- WRC-19: Balancing the Equities
(keynote remarks by Grace Koh, U.S. Representative to WRC-19 and U.S. Head of Delegation)
- Roundtable Discussion featuring Dr. Chaesub Lee, Director, ITU Telecommunication Standardisation Bureau