

## ARRL Technical Relations Office

Jon Siverling, WB3ERA

ARRL Board Meeting January 17 – 18, 2020

**RA-19, WRC-19, CPM 23-1** (October 21 – November 26, 2019 Sharm El Sheikh)  
Three International Telecommunication Union – Radiocommunication (ITU-R) meetings were held 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)

The IARU/ARRL Team for these meetings was:

IARU President Tim Ellam (VE6SH), IARU Secretary Dave Sumner (K1ZZ), Dave Court (EI3IO), Chairman of the Region 1 Spectrum & Regulatory Liaison Committee. The other 11 members of the IARU team were on their national delegations: IARU Vice President Ole Garpestad (LA2RR), Norway; Ulli Mueller (DK4VW), and Bernd Mischlewski (DF2ZC), Germany; Murray Niman (G6JYB), UK; Ken Yamamoto (JA1CJP), Japan; Hans Blondeel Timmerman (PB2T), Netherlands; Flavio Archangelo, (PY2ZX) Brazil; Bryan Rawlings (VE3QN), Canada; Dale Hughes (VK1DSH), and Peter Pokorny (VK2EMR), Australia; and Jon Siverling (WB3ERA/ARRL Technical Relations Office), USA.

The four most significant results for Amateur Radio from WRC-19 were:

- to a large extent, the decisions of the WRC will not impact Amateur Radio - this is a huge success, considering the forces arrayed against us.
- the WRC identified 17.25 GHz of spectrum for International Mobile Telecommunications (IMT)\* – this is a huge chunk of spectrum; still, we were successful in taking our two Primary allocations in the 47 – 47.2 GHz band **\*off\*** the table. This band was **\*not\*** identified as a candidate band for IMT.  
\*24.25 – 27.5 GHz, 37 – 43.5 GHz, 45.5 – 47 GHz, 47.2 – 48.2 GHz and 66 - 71 GHz  
(prior to WRC-19, there was only 1.9 GHz of spectrum identified for IMT).
- the 1240 – 1300 MHz band/Galileo issue was blocked from becoming an agenda item (but it remains a “topic” for studies)
- Region 1 will now have 6 meters\*\* (with several footnotes).

### **6 meters allocation for Region 1**

The allocation, as it will appear in the International Table of Frequency Allocations, will be for a two-megahertz secondary allocation in 50 to 52 MHz. Through footnotes (see pages 6 - 7 of this report) there will be explicit references to protecting analog television broadcasters, wind-profiler radar systems and fixed and mobile systems in 50 to 54 MHz.

The following countries have added their name to a footnote allocating 50.0 to 50.5 MHz on a PRIMARY basis: Austria, Cyprus, Croatia, Denmark, Spain, Finland, Hungary, Latvia, the Netherlands, the Slovak Republic, Slovenia, the Czech Republic, the United Kingdom and the Vatican City State.

The Russian Federation have identified 50.080 to 50.280 MHz for a secondary allocation.

A footnote acknowledges an allocation of 50 to 52 MHz on a PRIMARY basis in Lebanon.

The primary allocations in the existing Footnote 5.169 for 50 to 54 MHz to Botswana, Eswatini (Swaziland), Lesotho, Malawi, Namibia, Rwanda, South Africa, Zambia and Zimbabwe will be continued, as will the 50 to 51 MHz PRIMARY allocation for Senegal.

The following countries have added their names to a new footnote for a PRIMARY allocation in 50 to 54 MHz: Angola, Bahrain, Burkina Faso, Burundi, Gambia, Jordan, Kenya, Kuwait, Mauritius, Mozambique, Oman, Qatar, Saudi Arabia, South Sudan, Tanzania, the United Arab Emirates and Uganda. In Guinea-Bissau the PRIMARY allocation is 50.0 to 50.5 MHz and in Djibouti it is 50 to 52 MHz. All these new allocations are, however, subject to explicit references to protecting analog television broadcasters, wind-profiler radar systems and fixed and mobile systems in 50 to 54 MHz.

### **ITU-R CPM 23-1**

(November 25 – 26, 2019 Sharm El Sheikh)

The first (of two) Conference Preparatory Meetings for WRC-2023 (CPM 23-1) was held in Sharm El Sheikh November 25 – 26, 2019. The results of CPM 23-1 are published in ITU Administrative Circular CA/251 *Results of the first session of the Conference Preparatory Meeting for WRC-23 (CPM23-1)* (dated 19 December 2019). Annex 1 contains the Agenda for the World Radiocommunication Conference 2023 (Resolution 811) (WRC-23). The following WRC-23 agenda items are potentially harmful to the Amateur Radio Service or the Amateur Satellite Service and ARRL needs to participate in the ITU-R Working Parties as well as the Americas' regional (CITEL) preparation of proposals that address each item as they may impact Amateur Radio.

1.2 to consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution **245 (WRC-19)**;

1.10 to conduct studies on spectrum needs, coexistence with radiocommunication services and regulatory measures for possible new allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications, in accordance with Resolution **430 (WRC-19)**;

1.12 to conduct, and complete in time for WRC-23, studies for a possible new secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, including in adjacent bands, in accordance with Resolution **656 (Rev.WRC-19)**;

1.18 to consider studies relating to spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems, in accordance with Resolution **248 (WRC-19)**;

9.1\* on the activities of the Radiocommunication Sector since WRC-19:

Review of the amateur service and the amateur-satellite service allocations in the frequency band 1 240-1 300 MHz to determine if additional measures are required to ensure protection of the radionavigation-satellite (space-to-Earth) service operating in the same band in accordance with Resolution 774 (WRC-19);

\*officially not an agenda item, but a “topic” with no regulatory impact


**ITU-R Study Group 5/**







**3<sup>rd</sup> WRC-19 Inter Regional Workshop** (September 2 – 6, 2019 Geneva)

- Study Group 5 (SG 5) – Terrestrial Services  
Systems and networks for fixed, mobile, radiodetermination, amateur and amateur-satellite services.  
Draft revision of Question ITU-R 209-5/5 – Use of the mobile, amateur and the amateur-satellite services in support of disaster radiocommunications, with a number of changes to the *considering*’s and a change in date was adopted. The draft revision of the Question as modified was sent for approval by correspondence.

Document 5/168 was the report of Working Party 5A Chairman, José Costa (Canada).  
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* was adopted (Document 5/152).

- 3<sup>rd</sup> Inter-Regional WRC-19 Workshop – 1<sup>st</sup> Panel (moderator Michael Kraemer (D))  
\*very\* welcome news for Amateur Radio from all six regions regarding WRC-19 agenda item 1.13 (IMT) and the 47 – 47.2 GHz band PRIMARY allocations. \*All\* six regions proposed “no change” (\*NOC\*). (APT, ASMG, ATU, CEPT, CITEL, RCC).



	APT	ASMG	ATU	CEPT	CITEL	RCC
						
	<b>45.5-47 GHz – current regional positions</b>					
Method	F1 (NOC)	F1 (NOC)	TBD	TBD	F1 (NOC)	F1 (NOC)
	<b>47-47.2 GHz – current regional positions</b>					
Method	G1 (NOC)	G1 (NOC)	G1 (NOC)	G1 (NOC)	G1 (NOC)	G1 (NOC)

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

**CITEL<sup>1</sup> COM/CITEL** (December 4 - 6, 2019 Buenos Aires)

The 36<sup>th</sup> meeting of the Permanent Executive Committee of the Inter-American Telecommunication Commission (CITEL COM/CITEL) was held in Buenos Aires, Argentina, December 4 - 6, 2019. At this COM/CITEL, member states approved a budget for 2020 that supported all critical CITEL meetings, considered proposals to ensure CITEL’s continued financial viability, and allowed the appropriate CITEL working group to begin discussions to

<sup>1</sup> The Inter-American Telecommunication Commission or (CITEL) is the telecommunications arm of the Organization of American States (OAS), consisting of thirty-five member states and over 110 members from the private sector.

identify regional positions for the upcoming ITU World Telecommunication Standardization Assembly (WTSA-20).

However, the constant budgetary pressures on CITELE were manifest at this meeting in two proposals that could affect participation and membership by non-governmental entities. First, the Working Group on the Financial Sustainability of CITELE proposed the creation of a “Unique Membership of Associate” within CITELE which includes, among other benefits, membership in all CITELE consultative committees; the right to submit proposals for consideration at World Conferences; the right to be a member of a delegation of a Member State to a World Conference; and “preference to host lunches – workshops, receptions or any other type of sponsorship in any CITELE committee and to participate in panels and workshops organized by CITELE”. *The cost of this membership would be USD 20,000.* (emphasis added).

The *United States and other member states strongly opposed this proposal*, particularly with respect to proposed benefits that might infringe on a member state’s sovereign rights. Member states requested that the Executive Secretary of CITELE send this draft to CITELE Associate Members for their analysis and feedback prior to consideration by CITELE’s consultative committees. (emphasis added).

Second, in an attempt to recover arrears in membership fees from CITELE Associate Members, the Executive Secretary proposed revisions to the CITELE Statute and Regulations that would include “representatives of entities, organizations or institutions of the telecommunications/ICT industry that are not CITELE associate members.” The United States, Brazil, and Canada strongly opposed the proposal, arguing that the proposal encroaches on member states’ sovereign rights to determine the composition of their official delegations to CITELE meetings. While not approved, the Secretariat may continue to advocate for this position. As evidenced by the proposals, the United States will also need to fight against the CITELE Secretariat’s attempts to allow non-governmental entities to “pay-to-play” in exchange for additional resources.

COM/CITELE approved the following calendar of CITELE meetings in 2020.

36 <sup>th</sup> PCC.I	April 20 – 24, 2020	Lima, Peru
35 <sup>th</sup> PCC.II	May 11 – 15, 2020	Trinidad & Tobago
37 <sup>th</sup> PCC.I	August 17 – 21, 2020	Colombia
36 <sup>th</sup> PCC.II	September 28 to October 2, 2020	Mexico
37 <sup>th</sup> COM/CITELE	December 9 -11, 2020	Argentina

#### **CITELE 34<sup>th</sup> PCC.II** (August 12 – 15, 2019 Ottawa)

The 34<sup>th</sup> meeting of CITELE’s Permanent Consultative Committee II: Radiocommunications (PCC.II) was held in Ottawa (Ontario), Canada, August 12 - 15, 2019. This was the final regional preparatory meeting before WRC-19. A “No Change” Inter-American Proposal (IAP) for the 47 - 47.2 GHz band under WRC-19 agenda item 1.13 was approved. (Note: one administration wanted to identify this band for IMT, which would have prevented a “NOC” IAP; this result was narrowly avoided).

The 35<sup>th</sup> Meeting of PCC.II will be held in Trinidad & Tobago, May 11 – 15, 2020.

**CITEL 35<sup>th</sup> PCC.I** (September 30 – October 4, 2019 Asunción, Paraguay)

The 35<sup>th</sup> Meeting of the Permanent Consultative Committee I: Telecommunications/Information and Communication Technologies was held in Asunción, Paraguay, from September 30 to October 4, 2019. ARRL's Jon Siverling Chaired the Rapporteurship on disaster prevention, response and mitigation, ICT and climate change, environmental protection and circular economy. 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 updated 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.

The 36<sup>th</sup> Meeting of Permanent Consultative Committee I: Telecommunications/Information and Communication Technologies will be held in Peru from April 20 – 24, 2020.

**LXXIV FMRE National Convention** (October 10 – 13, 2019 Chihuahua, Mexico)

FMRE President Alfonso "Poncho" Tamez (XE2O) reviewed the collaborative effort of FMRE, ARRL and IARU Region 2 working with the Mexican regulator (Federal Institute for Telecommunications – IFT) to remove the 47 - 47.2 GHz band from identification as an IMT band at WRC-19. The ITU/Amateur Radio WinLink Project was reviewed and updated, highlighting the leadership of the FMRE and IARU Region 2. 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).

**USITUA** (December 17, 2019 Washington DC)

The United States ITU Association (USITUA)

ARRL's Jon Siverling was re-elected to the USITUA Board at the Annual General Meeting in Washington, D.C. December 17, 2019. Also during this meeting, the USITUA hosted and informal discussion with Ambassador Grace Koh, U.S. Representative to WRC-19 and U.S. Head of Delegation.

\*\*50 – 52 MHz Region 1 Amateur  
 ADD 5.A11 ADD 5.B11  
 ADD 5.E11  
 5.162A 5.164 5.165  
 MOD 5.169 ADD 5.C11 ADD  
 5.D11 ADD 5.169*bis* ADD  
 5.A11*bis*

**ADD**

**5.A11** In Region 1, stations in the amateur service operating on a secondary basis shall not cause harmful interference to, or claim protection from, stations of the broadcasting service. The field strength generated by an amateur station in Region 1 in the frequency band 50-52 MHz shall not exceed a calculated value of +6 dB( $\mu$ V/m) at a height of 10 m above ground for more than 10% of time along the border of a country with operational analogue broadcasting stations in Region 1 and of neighbouring countries with broadcasting stations in Region 3 listed in Nos. **5.167** and **5.168**. (WRC-19)

**ADD**

**5.B11** In Region 1, stations in the amateur service in the frequency band 50-52 MHz, with the exception of those countries listed in No. **5.169**, shall not cause harmful interference to, or claim protection from, wind profiler radars operating in the radiolocation service under No. **5.162A**. (WRC-19)

**ADD**

**5.E11** In the Russian Federation, only the frequency band 50.080-50.280 MHz is allocated to the amateur service on a secondary basis. The protection criteria for the other services in the countries not listed in this provision are specified in Nos. **5.A11** and **5.A11*bis***. (WRC-19)

**ADD**

**5.C11** *Different category of service:* in Lebanon, the frequency band 50-52 MHz is allocated to the amateur service on a primary basis. Stations in the amateur service in Lebanon shall not cause harmful interference to, or claim protection from, stations of the broadcasting, fixed and mobile services operating in accordance with the Radio Regulations in the frequency band 50-52 MHz in the countries not listed in this provision. (WRC-19)

**ADD**

**5.D11** *Different category of service:* in Austria, Cyprus, the Vatican, Croatia, Denmark, Spain, Finland, Hungary, Latvia, the Netherlands, the Czech Republic, the United Kingdom, Slovakia and Slovenia, the frequency band 50.0-50.5 MHz is allocated to the amateur service on a primary basis. Stations in the amateur service in these countries shall not cause harmful interference to, or claim protection from, stations of the broadcasting, fixed and mobile services operating in accordance with the Radio Regulations in the frequency band 50.0-50.5 MHz in the countries not listed in this provision. For a station of these services, the protection criteria in No. **5.A11*bis*** shall also apply. In Region 1, with the exception of those countries listed in No. **5.169**, wind profiler radars operating in the radiolocation service under No. **5.162A** are authorized to operate on the basis of equality with stations in the amateur service in the frequency band 50.0-50.5 MHz. (WRC-19)

**ADD**

**5.169*bis*** *Alternative allocation:* in the following countries in Region 1: Angola, Saudi Arabia, Bahrain, Burkina Faso, Burundi, the United Arab Emirates, Gambia, Jordan, Kenya, Kuwait, Mauritius, Mozambique, Oman, Uganda, Qatar, South Sudan and Tanzania, the frequency band 50-54 MHz is allocated to the amateur service on a primary basis. In Guinea-Bissau, the frequency band 50.0-50.5 MHz is allocated to the amateur service on a primary basis. In Djibouti, the frequency band 50-52 MHz is allocated to the amateur service on a primary basis. With the

exception of those countries listed in No. **5.169**, stations in the amateur service operating in Region 1 under this footnote, in all or part of the frequency band 50-54 MHz, shall not cause harmful interference to, or claim protection from, stations of other services operating in accordance with the Radio Regulations in Algeria, Egypt, Iran (Islamic Republic of), Iraq, Israel, Libya, Palestine\*, the Syrian Arab Republic, the Dem. People's Republic of Korea, Sudan and Tunisia. The field strength generated by an amateur station in the frequency band 50-54 MHz shall not exceed a value of +6 dB( $\mu$ V/m) at a height of 10 m above ground for more than 10% of time along the borders of listed countries requiring protection. (WRC-19)

#### **ADD**

**5.A11bis** Except countries listed under No. **5.169**, stations in the amateur service used in Region 1, in all or part of the 50-54 MHz frequency band, shall not cause harmful interference to, or claim protection from, stations of other services used in accordance with the Radio Regulations in Algeria, Armenia, Azerbaijan, Belarus, Egypt, Russian Federation, Iran (Islamic Republic of), Iraq, Kazakhstan, Kyrgyzstan, Libya, Uzbekistan, Palestine\*, the Syrian Arab Republic, Sudan, Tunisia and Ukraine. The field strength generated by an amateur station in the frequency band 50-54 MHz shall not exceed a value of +6 dB( $\mu$ V/m) at a height of 10 m above ground for more than 10% of time along the borders of the countries listed in this provision. (WRC-19)

#### **MOD**

**5.163** *Additional allocation:* in Armenia, Belarus, the Russian Federation, Georgia, Kazakhstan, Latvia, Moldova, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the frequency bands 47-48.5 MHz and 56.5-58 MHz are also allocated to the fixed and land mobile services on a secondary basis. (WRC-19)

\* Pursuant to Resolution 99 (Rev. Dubai, 2018) and taking into account the Israeli-Palestinian Interim Agreement of 28 September 1995.

\* Pursuant to Resolution 99 (Rev. Dubai, 2018) and taking into account the Israeli-Palestinian Interim Agreement of 28 September 1995.

#### **MOD**

**5.164** *Additional allocation:* in Albania, Algeria, Germany, Austria, Belgium, Bosnia and Herzegovina, Botswana, Bulgaria, Côte d'Ivoire, Croatia, Denmark, Spain, Estonia, Eswatini, Finland, France, Gabon, Greece, Hungary, Ireland, Israel, Italy, Jordan, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Montenegro, Nigeria, Norway, the Netherlands, Poland, Syrian Arab Republic, Slovakia, Czech Rep., Romania, the United Kingdom, Serbia, Slovenia, Sweden, Switzerland, Chad, Togo, Tunisia and Turkey, the frequency band 47-68 MHz, in South Africa the frequency band 47-50 MHz, and in Latvia the frequency bands 48.5-56.5 MHz and 58-68 MHz, are also allocated to the land mobile service on a primary basis. However, stations of the land mobile service in the countries mentioned in connection with each frequency band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the frequency band. (WRC-19)

#### **MOD**

**5.165** *Additional allocation:* in Angola, Cameroon, Congo (Rep. of the), Egypt, Madagascar, Mozambique, Niger, Somalia, Sudan, South Sudan, Tanzania and Chad, the frequency band 47-68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)

#### **MOD**

**5.169** *Alternative allocation:* in Botswana, Eswatini, Lesotho, Malawi, Namibia, , Rwanda, South Africa, Zambia and Zimbabwe, the frequency band 50-54 MHz is allocated to the amateur service on a primary basis. In Senegal, the frequency band 50-51 MHz is allocated to the amateur service on a primary basis. (WRC-19)