Meeting Report 2007 World Radiocommunication Conference Geneva, Switzerland 22 October-16 November 2007

WRC-07 met in Geneva for four weeks to consider an agenda of 21 items unique to this conference and several standing agenda items. According to a provisional list of participants dated 12 November there were 2464 delegates from Member States and 294 participants from other organizations. These included seven representing the IARU, not all full time:

Larry Price, W4RA Tim Ellam, VE6SH Dave Sumner, K1ZZ Reinaldo Leandro, YV5AMH Ken Pulfer, VE3PU Paul Rinaldo, W4RI Hans Zimmermann, HB9AQS

A number of other radio amateurs were in national delegations and those of regional or international organizations. This is not necessarily a complete list, but they included:

Hans Blondeel-Timmerman, PB2T (Netherlands)
Jim Dean, VE3IQ (Canada)
Tafa Diop, 6W1KI (African Telecommunications Union)
Ole Garpestad, LA2RR (Norway)
Peter Lake, ZL2AZ (New Zealand)
Keith Malcolm, VK1ZKM (Australia)
Jay Oka, JA1TRC (Japan)
Walt Ireland, WB7CSL (USA)
Joong-Geun Rhee, HL1AQQ (Republic of Korea)
Jonathan Siverling, WB3ERA (USA)
Colin Thomas, G3PSM (United Kingdom)

Objectives of the IARU team were as follows:

- ◆ Expansion of 7 MHz to worldwide status and defense of existing Amateur Service and Amateur-Satellite Service allocations
- ◆ A secondary allocation around 5 MHz, and failing that an agenda item for a future conference
- ♦ A secondary allocation in the band 135.7-137.8 kHz
- ♦ Improvements in certain "country" footnotes limiting the Amateur Service in some bands, including 160 and 80 m
- ♦ A WRC-11 Agenda item for a band around 500 kHz
- ♦ A WRC-11 Agenda item for the band 50-54 MHz in Region 1
- ♦ Preservation of our access to bands above 275 GHz

The following Agenda items were of particular concern:

1.1 requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, in accordance with Resolution 26 (Rev, WRC97);

- 1.4 to consider frequency-related matters for future development of IMT-2000 and systems beyond IMT-2000 taking into account the results of ITU-R studies in accordance with Resolution **228 (Rev.WRC-03)**;
- 1.13 taking into account Resolutions **729** (WRC-97), **351** (WRC-03) and **544** (WRC-03), to review the allocations to all services in the HF bands between 4 MHz and 10 MHz, excluding those allocations to services in the frequency range 7 000-7 200 kHz and those bands whose allotment plans are in Appendices **25**, **26** and **27** and whose channelling arrangements are in Appendix 17, taking account of the impact of new modulation techniques, adaptive control techniques and the spectrum requirements for HF broadcasting
- 1.15 to consider a secondary allocation to the amateur service in the frequency band 135.7-137.8 kHz;
- 7.2 to recommend to the Council items for inclusion in the agenda for the subsequent conference and on possible agenda items for future conferences, taking into account Resolution 803 (WRC-03).

There were proposals from various administrations and regional organizations supporting the above Agenda items. Notably, there were proposals from CEPT, Mexico and Cuba with different approaches to a 5 MHz allocation, either at this or a future conference. There were proposals in support of Agenda item 1.15 from CEPT, CITEL, APT and others.

The results of the allocation actions were as follows:

Agenda item 1.1: The following modified or added footnotes are of interest to the Amateur Services:

MOD COM5/264/7 (B6/268/7) (R3/292/7)

5.98 *Alternative allocation:* in Angola, Armenia, Azerbaijan, Belarus, Belgium, Cameroon, Congo (Rep. of the), Denmark, Egypt, Eritrea, Spain, Ethiopia, the Russian Federation, Georgia, Greece, Italy, Kazakhstan, Lebanon, Lithuania, Moldova, the Syrian Arab Republic, Kyrgyzstan, Somalia, Tajikistan, Tunisia, Turkmenistan, Turkey and Ukraine, the band 1 810-1 830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-07)

[Bulgaria removed itself from **5.98**.]

MOD COM5/264/8 (B6/268/8) (R3/292/8)

5.99 *Additional allocation:* in Saudi Arabia, Austria, Iraq, the Libyan Arab Jamahiriya, Uzbekistan, Slovakia, Romania, Serbia, Slovenia, Chad, and Togo, the band 1 810-1 830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-07)

[Bosnia and Herzegovina, and Montenegro removed themselves from **5.99**.]

MOD COM5/264/9 (B6/268/9) (R3/292/9)

5.102 Alternative allocation: in Bolivia, Chile, Mexico, Paraguay, Peru and Uruguay, the band 1 850-2 000 kHz is allocated to the fixed, mobile except aeronautical mobile, radiolocation and radionavigation services on a primary basis. (WRC-07)

[Argentina and Venezuela removed themselves from **5.102**.]

MOD COM5/264/13 (B6/268/13) (R3/292/13)

5.119 *Additional allocation:* in Honduras, Mexico and Peru, the band 3 500-3 750 kHz is also allocated to the fixed and mobile services on a primary basis. (WRC-07)

[Venezuela removed itself from **5.119**.]

MOD COM5/264/14 (B6/268/14) (R3/292/14)

5.122 Alternative allocation: in Bolivia, Chile, Ecuador, Paraguay, Peru and Uruguay, the band 3 750-4 000 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-07)

[Argentina removed itself from **5.122**.]

MOD COM5/264/22 (B6/268/22) (R3/292/22)

5.167 *Alternative allocation:* in Bangladesh, Brunei Darussalam, India, Iran (Islamic Republic of), Pakistan, Singapore and Thailand, the band 50-54 MHz is allocated to the fixed, mobile and broadcasting services on a primary basis. (WRC-07)

[Indonesia and Malaysia removed themselves from **5.167**.]

ADD COM5/264/23 (B6/268/23) (R3/292/23)

5.167A *Additional allocation:* in Indonesia, the band 50-54 MHz is also allocated to the fixed, mobile and broadcasting services on a primary basis. (WRC-07)

MOD COM5/264/42 (B6/268/46) (R3/292/46)

5.271 *Additional allocation:* in Belarus, China, India, Kyrgyzstan and Turkmenistan, the band 420-460 MHz is also allocated to the aeronautical radionavigation service (radio altimeters) on a secondary basis. (WRC-07)

[Azerbaijan, Latvia and Lithuania removed themselves from **5.271**.]

MOD COM5/264/43 (B6/268/47) (R3/292/47)

5.275 *Additional allocation:* in Croatia, Estonia, Finland, Libyan Arab Jamahiriya, The Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Slovenia, the bands 430-432 MHz and 438-440 MHz are also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-07)

[Bosnia and Herzegovina, and Latvia removed themselves from 5.275.]

MOD COM5/264/44 (B6/268/48) (R3/292/48)

5.276 Additional allocation: in Afghanistan, Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burkina Faso, Burundi, Egypt, the United Arab Emirates, Ecuador, Eritrea, Ethiopia, Greece, Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Italy, Libyan Arab Jamahiriya, Jordan, Kenya, Kuwait, Lebanon, Malaysia, Malta, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Switzerland, Tanzania, Thailand, Togo, Turkey and Yemen, the band 430-440 MHz is also allocated to the fixed service on a primary basis and the bands 430-435 MHz and 438-440 MHz are also allocated to the mobile, except aeronautical mobile, service on a primary basis. (WRC-07)

[Liechtenstein removed itself from **5.276**.]

MOD COM5/264/45 (B6/268/49) (R3/292/49)

5.277 *Additional allocation:* in Angola, Armenia, Azerbaijan, Belarus, Cameroon, Congo (Rep. of the), Djibouti, the Russian Federation, Georgia, Hungary, Israel, Kazakhstan, Mali, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, Romania, Rwanda, Tajikistan, Chad, Turkmenistan and Ukraine, the band 430-440 MHz is also allocated to the fixed service on a primary basis. (WRC-07)

[The Czech Republic removed itself from **5.277**.]

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Agenda item 1.4: The identification of spectrum for expansion of International Mobile Telecommunications (IMT) was particularly contentious and was one of the last agenda items decided at WRC-07. Attention was focused on modifying footnotes to designate some portions of the 2300-2400 MHz and 3400-4200 MHz bands for implementation of IMT by administrations wishing to do so. The following footnotes were modified:

MOD COM4/332/81 (B13/347/30) (R7/411/39) (R8/424/1)

5.384A The bands, or portions of the bands, 1 710-1 885 MHz, 2 300-2 400 MHz and 2 500-2 690 MHz, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-07)**. This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-07).

[The band 2300-2400 MHz was added to this footnote.]

MOD COM5/264/58 (B6/268/65) (R8/424/4)

5.393 Additional allocation: in Canada, the United States, India and Mexico, the band 2 310-2 360 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial sound broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution **528** (Rev.WRC-03), with the exception of *resolves* 3 in regard to the limitation on broadcasting-satellite systems in the upper 25 MHz. (WRC-07)

[Canada was added to this footnote.]

MOD COM5/264/59 (B6/268/66) (R8/424/5)

5.394 In the United States, the use of the band 2 300-2 390 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. In Canada, the use of the band 2 360-2 400 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. (WRC-07)

[In the second sentence applying to Canada, the band was narrowed from 2300-2483.5 MHz.]

In addition, there were a number of new footnotes (not reproduced below) adopted that identified parts of the band 3400-3700 MHz for use by IMT by certain countries.

Agenda item 1.13: It came as no surprise that the IARU objective of expansion of the existing amateur band at 7 MHz to achieve a worldwide primary allocation of 300 kHz had no support from administrations. Importantly, the Region 2 allocation of 7200-7300 kHz could have been in jeopardy. During preparations for the conference we had managed to avoid proposals for its reallocation to another service, and this favorable situation was maintained throughout the conference.

A 5 MHz secondary allocation was not achieved at WRC-07, nor was the issue placed on the agenda of a future conference. There was strong opposition from most regional groups to protect their fixed and mobile (government/military) services in the band 5260-5410 kHz. Besides the opponents' fears of losing access to fixed and mobile spectrum because of amateur operation, there was particular concern that there is incompatibility between automatic link establishment (ALE) systems and amateur operations not using ALE. This concern could not be satisfied simply by making the amateur service secondary; at the current state of ALE technology the occupancy of a channel by any user – primary, secondary or unauthorized – denies its use to stations using ALE.

Agenda item 1.15: A secondary allocation was made to the Amateur Service at 135.7-137.8 kHz, effective the day after the conference:

Section IV - Table of Frequency Allocations (See No. 2.1)

MOD COM4/296/57 (B9/305/2) (R4/335/2)

110-255 kHz

Allocation to services		
Region 1	Region 2	Region 3
130-135.7	130-135.7	130-135.7
FIXED	FIXED	FIXED
BILE	MARITIME MOBILE	MARITIME MOBILE
		RADIONAVIGATION
5.64 5.67	5.64	5.64
135.7-137.8	135.7-137.8	135.7-137.8
FIXED	FIXED	FIXED
MARITIME MOBILE	MARITIME MOBILE	MARITIME MOBILE
Amateur ADD 5.4C03	Amateur ADD 5.4C03	RADIONAVIGATION
		Amateur ADD 5.4C03
5.64 5.67 ADD 5.4C04	5.64	5.64 ADD 5.4C04
137.8-148.5	137.8-160	137.8-160
FIXED	FIXED	FIXED
MARITIME MOBILE	MARITIME MOBILE	MARITIME MOBILE
5.64 5.67		RADIONAVIGATION
	5.64	5.64

ADD COM4/296/58 (B9/305/3) (R4/335/3)

5.4C03 Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67**. (WRC-07)

ADD COM4/296/59 (B9/305/4) (R4/335/4)

5.4C04 The use of the band 135.7-137.8 kHz in Algeria, Egypt, Iran (Islamic Republic of), Iraq, Libyan Arab Jamahiriya, Lebanon, Syrian Arab Republic, Sudan and Tunisia is limited to the fixed and maritime mobile services. The amateur service shall not be used in the abovementioned countries in the band 135.7-137.8 kHz, and this should be taken into account by the countries authorizing such use. (WRC-07)

Agenda item 7.2: The provisional agenda for the 2011 World Radiocommunication Conference was approved by WRC-07 contains the following items of interest to the Amateur Services:

1.6 to review No. 5.565 of the Radio Regulations to update the spectrum use by the

passive services, between 275 GHz and 3 000 GHz with Resolution **950** (Rev.WRC-07) and to consider possible procedures for free space optical-links, taking into account the result of ITU-R studies, in accordance with Resolution [COM6/9] (WRC-07);

- 1.15 to consider possible allocations in the range 3-50 MHz to the radiolocation service for oceanographic radar applications taking into account the results of ITU-R studies in accordance with Resolution [COM6/15] (WRC-07);
- 1.23 to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the amateur service on a secondary basis, taking into account the need to protect existing services;

IARU Reception

On 31 October, IARU sponsored a reception at the Montbrillant Cafeteria. Three hundred invitations were sent to heads of delegation, prominent radio amateurs and delegates involved in consideration of Amateur Service issues. About 200 people came to the reception. It was friendly gathering and helped to focus delegates' attention on the Amateur Service.

Good press for Amateur Radio:

- An article was included in the current *ITU News* bulletin, distributed to all delegates, describing what the amateur radio community hoped to gain at this WRC.
- There was a flier in every delegate's mailbox describing Amateur Radio.
- For the first 10 days of the conference there was an amateur radio emergency communications trailer parked just outside the WRC entrance displaying emergency and disaster communications equipment, manned by two German radio amateurs. The Radiocommunication Bureau provided good publicity, and there was a steady stream of delegates visiting the trailer.
- The International Amateur Radio Club operated under the special call sign 4U1WRC for the duration of the conference and made thousands of contacts.
- The most senior official in the ITU, Dr. Hamadoun Touré, the Secretary General, proudly announced in his opening address to the conference that he had just acquired his Amateur Radio license.

IARC Dinner

The International Amateur Radio Club (IARC), better known by its call sign 4U1ITU, hosted a dinner of its members and friends on 6 November. It was a special occasion to recognize Secretary-General Dr. Hamadoun Touré, HB9EHT, as a new radio amateur.

Respectfully submitted on behalf of the IARU Team:

Ken Pulfer, VE3PU

Paul Rinaldo, W4RI