**Report from the First Week of WRC-12**

The World Radiocommunication Conference (WRC-12) was opened on 23 January 2012.

Mr. Tariq al Awadhi of the United Arab Emirates was elected as the chairman of the Conference.

Following 7 Committees were established by WRC-12 to undertake relevant responsibilities during the conference:

Committee 1: Steering Committee

Committee 2: Credentials Committee

Committee 3: Budget Control Committee

Committee 4, 5 and 6: Specified Agenda Items Committees

Committee 7: Editorial Committee

Responsibilities of Committees 4, 5 and 6 were identified as follows:

Committee 4: WRC-12 Agenda Items 1.3; 1.4; 1.7; 1.9; 1.10; 1.14; 1.15; 1.21; 1.23; 3; 5; 8.1.1; 8.1.2.

Committee 5: WRC-12 Agenda items 1.5; 1.6; 1.8; 1.11; 1.12; 1.13; 1.16; 1.17; 1.18; 1.20; 1.24; 1.25; 3; 5; 7; 8.1.1; 8.1.2; 8.1.3.

Committee 6: WRC-12 Agenda items 1.1; 1.2; 1.19; 1.22; 2; 3; 4; 5; 6; 8.1.1; 8.1.2; 8.2.

In addition to these committees, an Ad-hoc group of the Plenary, under Canadian Chairmanship, has been created to consider possible amendments to Article 15 of Radio Regulations dealing with interferences. The work will be based on the input contribution 137 (Germany, Denmark, France, Hungary, Iceland, Italy, Monaco, Norway, the Netherlands, Portugal, Czech Republic, United Kingdom, Sweden, Switzerland, Portugal and Spain) which proposes inclusion of following additional paragraph to section 1 of Article 15:

15.1A § 1*bis*  *Member States are responsible for ending transmissions of signals originating from their territory and intended or designed to disturb or prevent the reception of other signals.*

Committees 4, 5 and 6 established 3 Working Groups each. Following points were reached at the end of the first week as the result of the work conducted by these working groups and their sub working groups:

**AI 1.1**. (WG 6B) *To consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution 26 (Rev.WRC-07);*

Addition of new footnotes which have no relation with the Agenda items of WRC-12 will not be examined by the Conference .

Deadline was set to 18.00 hours (Geneva time) on 27th January in order to consider possible addition of country names into existing footnotes provided that no objection is raised by any affected country.

The deadline for the submission of proposals for deletion of country names from footnotes was set to 18.00 hours (Geneva time) on 3 February 2012.

**AI 1.2** (WG 6A)*Taking into account the ITU‑R studies carried out in accordance with Resolution****951 (Rev.WRC‑07)****, to take appropriate action with a view to enhancing the international regulatory framework.*

The Sub-Working Group of WG 6A completed its work on Issue C (Satellite convergence) of Agenda item 1.2 and concluded that no change to the Radio Regulations is necessary under Issue C of Agenda item 1.2.

Issues A (General allocation issues) and B (Terrestrial in particular fixed and mobile convergence) are under discussion currently. Issue D (Suppression of Resolution 951 (Rev.WRC-07)) is pending the results of discussions on Issues A and B.

**AI 1.3** (WG 4B) *To consider spectrum requirements and possible regulatory actions, including allocations, in order to support the safe operation of unmanned aircraft systems (UAS), based on the results of ITU‑R studies, in accordance with Resolution****421 (WRC‑07).***

The Agenda Item 1.3 was considered in terms of terrestrial and satellite components.

For the terrestrial component, the European common proposal to allocate the frequency band 5 030 – 5 091 MHz to AM(R)S is supported by similar proposal from other regions. The principle of the allocation seems to be accepted. The detailed regulatory text has still to be discussed.

The proposal for an AM(R)S allocation in the band 15,4 – 15,5 GHz attracted heavy opposition especially from the USA and the Russian Federation, who on the other side strongly support a new Radiolocation allocation in the same band.

For the satellite component, USA, Canada and Mexico proposed the use of some bands currently allocated to the FSS. This proposal faces strong opposition from all regions. It is planned to discuss the CEPT reaction on this proposals in CEPT meeting on Monday.

***AI 1.4.*** (WG 4B) *to consider, based on the results of ITU‑R studies, any further regulatory measures to facilitate introduction of new aeronautical mobile (R) service (AM(R)S) systems in the bands 112-117.975 MHz, 960-1 164 MHz and 5 000-5 030 MHz in accordance with Resolutions****413 (Rev.WRC‑07)****,* ***417 (WRC‑07)*** *and* ***420 (WRC‑07).***

Based on ICAO/ITU-R studies, CEPT was of the opinion that no harmful interference would arise from the introduction of AM(R)S systems in the band 112-117.975 MHz into FM broadcasting receivers below 108 MHz. Resolution 413 was amended and reflecting the results of ongoing studies concerning the interference from digital broadcasting sound systems into AM(R)S. These studies will be dealt with under traditional ITU-R activities outside the WRC process.

The revised version of Resolution 413 ”Use of the band 108-117.975 MHz by the aeronautical mobile (R) service ” was the first adopted in the second reading by the Plenary. The results is in line with the CEPT position.

Discussions are ongoing on Resolution 417 and 420.

**AI 1.5** (WG 5C)*to consider worldwide/regional harmonization of spectrum for electronic news gathering (ENG), taking into account the results of ITU‑R studies, in accordance with Resolution****954 (WRC‑07)***

The majority of administrations participating to the sub-WG of 5C on ENG expressed the view that no change to RR Article 5 should be made and Res. 954 should be suppressed.

18 input contributions have been considered. The new ITU-R Resolution 59 adopted by the Radiocommunication Assembly (RA-12) last week was also taken into account.

During the discussion Australia proposed a WRC Recommendation in order to provide more specific guidance to ITU-R in the studies it would undertake in accordance with the new ITU-R Resolution.

At the meeting on Friday 27th January the sub-WG concluded that the new ITU-R Resolution is sufficient to satisfy the agenda item and no change to Article 5 of the RRs (Method C of the CPM Report) except suppression of Resolution 954 (WRC-07) is needed. Studies will continue in accordance with ITU-R Resolution 59 “Studies on availability of frequency bands and/or tuning ranges for worldwide and/or regional harmonization and conditions for their use by terrestrial electronic news gathering systems”.

Footnote 5.296 was amended by inclusion of following countries: United Arab Emirates, Bahrain and Turkey.

**AI 1.6** (WG 5A) *to review No.****5.565*** *of the Radio Regulations in order to update the spectrum use by the passive services between 275 GHz and 3 000 GHz, in accordance with Resolution****950 (Rev.WRC‑07)****, and to consider possible procedures for free-space optical-links, taking into account the results of ITU‑R studies, in accordance with Resolution****955 (WRC‑07)****;*

COM 5 agreed to the modifications of footnote 5.565. Allocation to passive services was extended up to 3000 GHz. The use of the range 275-3 000 GHz by the passive services does not preclude use of this range by active services.

Resolutions 950 and 955 were supressed. Conclusions of the COM 5 are fully in line with ECP on AI 1.5.

These modifications were agreed by the Plenary at first reading.

**AI 1.7** (WG 4B)*to consider the results of ITU‑R studies in accordance with Resolution****222 (Rev.WRC‑07)*** *in order to ensure long-term spectrum availability and access to spectrum necessary to meet requirements for the aeronautical mobile-satellite (R) service, and to take appropriate action on this subject, while retaining unchanged the generic allocation to the mobile-satellite service in the bands 1 525‑1 559 MHz and 1 626.5-1 660.5 MHz*

Drafting group finalised consideration of input contributions on this AI based on the combined document prepared by the chairman of the group. Ten separate versions have been proposed for revision of Resolution 222.

**AI 1.8** (WG 5C) *to consider the progress of ITU‑R studies concerning the technical and regulatory issues relative to the fixed service in the bands between 71 GHz and 238 GHz, taking into account Resolutions****731 (WRC‑2000)*** *and****732 (WRC‑2000).***

Sub-working group held three meetings and discussed issue of destiny of Res. 731 and 732 as well as choice between options to satisfy this AI. Decision on both issues is still very tentative.

The issue of amendments of Article 5 of RR is currently under discussion.

**AI 1.9** (WG 4C) *to revise frequencies and channelling arrangements of Appendix 17 to the Radio Regulations, in accordance with Resolution****351 (Rev.WRC‑07)****, in order to implement new digital technologies for the maritime mobile service*

Sub working group 4C-1 had 6 meetings and considered the documents on agenda item 1.9. Discussions continued on CPM methods A1 and A2 to satisfy the agenda item. An informal document, covering the major proposals and methods of CPM report towards an agreement on a possible regulatory solution in case of compromise on where yes and where no channelling arrangements, is under consideration by the sub working group.

**AI 1.10** (WG 4C) *to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and associated regulatory provisions, in accordance with Resolution****357 (WRC‑07)***

Sub working group 4C-2 had 8 meetings and considered the documents on agenda item 1.10.

Issue A: Regulatory status of AIS 1 and AIS 2: allocation to the MMS (primary, co primary or secondary?) in the 162 MHz band: A draft allocation table based on possible regional compromise activities was presented by the chairman. The document is still under consideration together with proposed new footnotes. A global solution seems difficult to achieve.

Issue B: Allocation of channels 75 and 76 to the mobile-satellite service (Earth-to-space) for the transmission of AIS message 27 from ships: The Sub working group is considering two proposals for a footnote for Article 5 to cover the allocation of channels 75 and 76 for MSS. The chairman has put a proposal on the table to investigate whether a global allocation for the satellite detection of AIS might be achievable and under which conditions.

Issue C: Primary allocation to the MMS in the 495 – 505 kHz band: The sub working group agreed to an exclusive primary allocation to the maritime mobile service in the 495 – 505 kHz band.

***AI 1.11***(WG 5A) *to consider a primary allocation to the space research service (Earth-to-space) within the band 22.55-23.15 GHz, taking into account the results of ITU‑R studies, in accordance with Resolution****753 (WRC‑07)*** *(item 1.11);*

Two options are under consideration for this AI in the Drafting Group:

* Option 1 (supported by the majority of regional organisations):
  + primary allocation to the space research service (Earth-to-space) within the band 22.55-23.15 GHz should be done by inclusion of this allocation to Article 5 of RR. Footnote needs to be added dealing with separation distances of at least 54 km of earth stations in the space research service from the respective border of neighbouring administrations to protect the existing and future deployment of fixed and mobile services. Band 22.55-23.15 GHz should be included in Article 21.
* Option 2 (supported by Arab States):

No changes to Article 5 of RR. Suppression of Resolution 753.

**AI 1.12** (WG 5A) *to protect the primary services in the band 37-38 GHz from interference resulting from aeronautical mobile service operations, taking into account the results of ITU R studies, in accordance with Resolution 754 (WRC-07).*

The drafting group on 1.12 met only once, where the Administrations of CITEL expressed their rationales for the support of Method B (keep the allocation to the Aeronautical mobile in the band 37-38 GHz associated with a pfd mask). However, they did not manage to convince any of the other Regional Groups, including CEPT, which stick to their positions in favor of Method A (removal of the aeronautical mobile from the band). CITEL was asked whether they could reconsider their position in favor of method A. They will be able to provide an answer only next week.

**AI 1.13** (WG 5B) *to consider the results of ITU‑R studies in accordance with Resolution****551 (WRC‑07)*** *and decide on the spectrum usage of the 21.4-22 GHz band for the broadcasting-satellite service and the associated feeder-link bands in Regions 1 and 3*

Sub-working group 5B-1 considered the contributions on AI 1.13, together with a document summarising the Methods identified in the CPM Report for the three Issues A, B and C on this AI. Also another document compiling all contributions is under consideration by the sub working group.

**AI 1.14** (WG 4A)*to consider requirements for new applications in the radiolocation service and review allocations or regulatory provisions for implementation of the radiolocation service in the range 30‑300 MHz, in accordance with Resolution****611 (WRC‑07)***

It was decided to allocate on a primary basis frequency band 154 – 156 MHz in different countries of Regions 1 and 3. Protection of the fixed and mobile service stations will be ensured by the provision of 9.21. Criteria were agreed to define potentially affected administrations in Regions 1 and 3. Footnote also contains provisions to protect MMS safety systems as it was proposed by CEPT.

**AI 1.15** (WG 4A) *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****612 (WRC‑07)***

Concerning Resolution 612:

* The eirp limitation of 25 dBW was kept
* Iran proposed a *Resolves 7* limiting the use of oceanographic radars to countries having an access to the ocean. This request led to discussions on the definition of an ocean and is not solved yet.

Moreover as proposed by the CEPT, Article 19 was not modified. The related text was put in *Resolves 1* of Resolution 612.

The drafting group is currently working on the frequency allocations. They are diverging views between Administrations on the amount of spectrum to be allocated in each band. CEPT and APT proposed primary allocations in limited bands just enough to meet the needs of the oceanographic community, whereas CITEL proposes secondary allocations in broad bands in order to have some flexibility enabling the cohabitation with the incumbent services.

**AI 1.16.** (WG 5A) *to consider the needs of passive systems for lightning detection in the meteorological aids service, including the possibility of an allocation in the frequency range below 20 kHz, and to take appropriate action, in accordance with Resolution****671 (WRC‑07)***

Controversial proposal from Arab states was put forward in accordance with which only part of allocation in the band 8.3 – 11.3 kHz to meteorological aids service should be done on primary basis and the rest of the band as a footnote.

Finally group concluded that usage of frequency range 8.3-11.3 kHz by stations in the meteorological aids service is limited to passive use only. In the band 9-11.3 kHz, the meteorological aids stations shall not claim protection from stations of the radionavigation service submitted for notification to the Bureau prior the certain date. The date of entry into force of the provisions contained in the WRC-12 Final Acts is considered currently as a reference point. For sharing between stations of the meteorological aids service and stations in the radionavigation service submitted after this date the most recent version of Recommendation ITU-R RS.1881 should be applied.

**AI 1.17**. (WG 5C) *to consider results of sharing studies between the mobile service and other services in the band 790-862 MHz in Regions 1 and 3, in accordance with Resolution* ***749 (WRC‑07)****, to ensure the adequate protection of services to which this frequency band is allocated, and take appropriate action*

Arab and African countries presented a proposal to consider under AI 1.17 issue of allocation to the mobile service in the band 694 - 790 MHz. Chairman of the WRC-12 called for the meeting of heads of all regional groups. It was decided that this issue will be considered by COM 6 under AI 8.2 and AD-HOC group of COM 5 has been created to have a look into the band 694 - 790 MHz (in-band and adjacent band).

Terms of reference of the Ad-hoc group are the following:

* Taking into account the studies carried out until WRC-12, examine from a technical point of view, the possibility of use of the band 690-790 MHz for the mobile service (including IMT) in addition to the existing services, except the aeronautical mobile service, and report back to Committee 5, preferably before 3 February 2012 at the latest.

CEPT held a coordination meeting and discussed technical issue to prepare the first meeting of the

ad-hoc group .

**AI 1.18** (WG5B) *to consider extending the existing primary and secondary radiodetermination-satellite service (space-to-Earth) allocations in the band 2 483.5-2 500 MHz in order to make a global primary allocation, and to determine the necessary regulatory provisions based upon the results of ITU‑R studies, in accordance with Resolution****613 (WRC‑07)***

There are three issues currently under discussion:

* MSS service seeking an increase in protection level against new allocation for RDSS service;
* Modified footnote 5.400;
* Modification to footnote 5.399 (there is radiolocation service will be upgraded in Region 1 or only by this footnote). CEPT is of the view that it should be done via footnote while RCC position is to update in Region 1.

**AI 1.19** (WG 6A) *to consider regulatory measures and their relevance, in order to enable the introduction of software-defined radio and cognitive radio systems, based on the results of ITU‑R studies, in accordance with Resolution****956 (WRC‑07)***

The Sub-Working Group on 1.19:

* has completed its work on Issue A of Agenda item 1.19 (Software defined radio) and has concluded that no change to the Radio Regulations is necessary under Issue A of Agenda item 1.19.
* has met two times. Some difference in opinions exists on Issue B (Cognitive Radio) as one regional organisation prefers to have WRC-12 Resolution on this issue.

**AI 1.20** (WG 5C)*to consider the results of ITU‑R studies and spectrum identification for gateway links for high altitude platform stations (HAPS) in the range 5 850‑7 075 MHz in order to support operations in the fixed and mobile services, in accordance with Resolution****734 (Rev.WRC‑07)***

CEPT position was in support of Method A – no change in RR. At the first week of the WRC-12 a number of countries came with proposal to add a footnote in the RR (similar to Method B of CPM-12). The problem is that this is allocation to FSS uplink.

Group held three meetings.

All the Regional organizations are supporting Method A of the CPM Report; a.i. no change to the Radio Regulations is required to satisfy this agenda item.

On the other hand, a few administrations noted that the acceptance of Method A would deny their access to a new technology within its national border.

Concerns have risen on the protection of FSS uplink (receivers) and EESS passive.

All administrations agreed to suppress Resolution 734 (Rev.WRC-07).

**AI 1.21** (WG 4A) *to consider a primary allocation to the radiolocation service in the band 15.4-15.7 GHz, taking into account the results of ITU‑R studies, in accordance with Resolution****614 (WRC‑07)***

There are currently 3 options to satisfy this agenda item is under consideration within drafting group:

Option 1: primary allocation of 300 MHz to RLS in all three regions;

Option 2: primary allocation of 300 MHz to RLS in Regions 2 and 3 and 200 MHz in Region 1;

Option 3: primary allocation of 159 MHz to RLS in Region 1 and 300 MHz in Regions 2 and 3.

CEPT supported Option 2 with a primary allocation for the radiolocation service limited to the 15.5-15.7 GHz frequency band together with a footnote to protect ARNS (see also AI 1.3).

USA and the Russian Federation support Option 1. Arab states support Option 3.

**AI 1.22** (WG 6A) *to examine the effect of emissions from short-range devices on radiocommunication services, in accordance with Resolution****953 (WRC‑07).***

The informal group decided no change to RR is needed, supress Res. 953. The only outstanding issue is whether there is a need for a WRC-12 Resolution or RA Resolution 54-1 is sufficient. This has yet to be confirmed in the Working Group.

**AI 1.23** (WG 4C) *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*

Drafting group held seven meetings. Different views expressed during the discussions. CEPT supports secondary allocation to amateur service in the range 472-480 kHz. Some other countries/regional organisations propose a secondary allocation up to 15 kHz between 472 kHz and 487 kHz. A number of regional organisations support No change to Article 5 of RR.

**AI 1.24** (WG 5A) *to consider the existing allocation to the meteorological-satellite service in the band 7 750‑7 850 MHz with a view to extending this allocation to the band 7 850-7 900 MHz, limited to non-geostationary meteorological satellites in the space-to-Earth direction, in accordance with Resolution****672 (WRC‑07)***

While considering this agenda item, the WG 5A agreed by consensus of all participants present to the following:

1. To make allocation of the band 7 850-7 900 MHz for the meteorological-satellite service, limited to non-geostationary satellites, in the space-to-Earth direction on a primary basis. Accordingly, in the light of the above and the proposals received under this agenda item, Article 5, Article 21 and Appendix 7 of the Radio Regulations are proposed to be amended as shown in Annex.
2. To suppress Resolution 672 (WRC-07).

**AI 1.25** (WG 5B) *to consider possible additional allocations to the mobile-satellite service, in accordance with Resolution 231 (WRC 07);*

Working Group 5B has completed its work on Agenda item 1.25 and concluded the following:

* No change to Article 5 of the Radio Regulations is necessary under Agenda item 1.25.
* To suppress Resolution 231 (WRC-07).

WRC-12, at its 3rd plenary session on Friday, approved the conclusions of COM 5 on A.I. 1.25 in its first reading.

The approved conclusions do match exactly with the CEPT proposals in document 5A25 (ECP on A.I.1.25).

**AI 7** (WG 5B) *to consider possible changes in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference: “Advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks”, in accordance with Resolution****86******(Rev.WRC‑07)***

SWG 5B3 has met three times working to the following categorisation of issues:

Category 1: Issues 1A, 1C, 1E, 2D, 5A, 5B, 5C, 6C, GSO/NGSO ISL

Category 2: Issues 1B, 1D, 2E, 4A, 4E, 6A

Category 3: Issues 2A, 2B, 2C, 3A, 3B, 4B, 4C, 4D, 4F, 6B

Category 4:

• MODs to No. 9.1

• AP30/30A/30B interim agreements

• Use of modern communications

• Consolidating notices

• AP30B administrations approval

• AP 30B affected administrations

• MODs to 13.6

• New WRC Resolution on force majeure

Category 5 – Other issues from Doc 4.

In Category 1, Issues 1A, 1C, 2D, 5A, 5B, 5C and 6C have been resolved and the output has been passed to WG5B.

Group dealing with Issues 1D and 2E (from Category 2) held 1 meeting (Issue 1D (Steerable beams (Annex 2 to RR App.4) and antenna gain contour covering area beyond submitted service area), 2E (API of a satellite network or system not subject to coordination)).

**AI 8.1** (WG 5A) in accordance with Article 7 of the Convention, to consider and approve the Report of the Director of the Radiocommunication Bureau

**AI 8.1.1**(WG 5A/6A) on the activities of the Radiocommunication Sector since WRC‑07 including issues relating to Resolution **673 (WRC-07)**

The Informal Group on Agenda item 8.1.1 Issue A, concluded its work on the issue dealing with the protection of radiocommunication services from interference from ISM equipment and proposes the draft revision of Resolution 63 (Rev. WRC 07).

The work is ongoing on 8.1.1 issue C, which covers possible revision of Resolution 673 with a particular focus on the earth observatories.

**AI 8.1.1** (WG 5A/6A) on the inconsistencies, errors and out of date provisions of the Radio Regulations.

The Chairmen of COM4, COM5 and COM6 identified the relevant parts of the Director’s Report to be analysed by different Working Group within each Committee.

The proposals presented by CEPT dealing with non-satellite issues are being discussed within SWG6B2. All the proposals submitted in the ECP on the substitution of IMT-2000 by IMT were already included in the Director’s Report and approved by SWG6B2. SWG6B2 is currently analysing a group of proposals presented by the Canadian administration that were not included in the Director’s Report.

The proposal for Suppression of Resolution 124 will be discussed within WG5B.

**AI 8.2** (WG 6C) *To recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, taking into account Resolution****806 (WRC‑07)***

WG 6C established 4 sub working groups to work on various issues related to AI 8.2 (Future conference agendas):

SWG 6C-1 covers all IMT related matters as to how IMT issue and the consideration of related frequency bands should be placed on the agenda of WRC-15. The work is still ongoing very heavily on IMT issue.

SWG 6C-2 deals with the possible items related to FSS-MSS on the WRC-15 agenda. The work is still ongoing very heavily on FSS-MSS issue.

SWG 6C-3 considers the issues related to science services for possible agenda items to be placed on WRC-15 agenda. The work is still ongoing.

SWG 6C-General: All other proposals for possible agenda items for the WRC-15 agenda is being dealt with by 6C-General.