WRC-07 decisions and follow-up

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Agenda items of interest for WMO

The World Radiocommunication Conference (WRC-07) had to cope with 21 agenda items among of which seven items concern frequency bands or issues of prime interest for meteorology :

- **Agenda item 1.2**: Extension of the 18 GHz MetSat allocation and protection of the 10.7 and 36 GHz EESS (passive) bands
- **Agenda item 1.3**: Upgrading and protection of radiolocation in the 9 GHz range, and 200 MHz extension of the Earth exploration-satellite service (EESS) allocation at 9 500-9 800 MHz
- **Agenda item 1.4**: Impact on S-Band meteorological radars and satellite C-band related to future frequency bands for IMT-2000
- **Agenda item 1.12**: Coordination and notification procedures for Earth exploration-satellite service (EESS) (active and passive) sensors
- **Agenda item 1.17**: Protection of the 1.4 GHz EESS (passive) band
- **Agenda item 1.20**: Unwanted emissions in EESS (passive) bands
- **Agenda item 7.2**: WRC-11 agenda

Agenda item 1.2

- **Extension of the 18 GHz MetSat** was agreed in the 18-18.3 GHz in Region 2 (North and South Americas) and in the 18.1-18.4 GHz in Region 1 (Europe, Africa) and Region 3 (Asia-Pacific)

- **Protection of the 36 GHz** EESS (passive) band was agreed with mandatory limits (in-band) for active services

- **Protection of the 10.6-10.68 GHz** EESS (passive) band was agreed, with recommended levels (in-band) for active services (but still with RR N°5.482 by which a number of administrations exclude themselves from any constraints)

Agenda item 1.20

- Global compromise with agenda item 1.2
- **Protection of the 24, 50 and 52 GHz** EESS (passive) bands was agreed with mandatory limits (unwanted) for active services
- **Protection of the 1.4 and 31 GHz** EESS (passive) band was agreed, with recommended levels (unwanted) for active services
- **Major achievement**, finalisation of an issue that was on the agenda of the last 3 WRCs

Agenda item 1.3

- **Upgrade to primary of the radiolocation service in the 9300-9500 MHz band** (including weather radars), but with a footnote providing a higher status for radionavigation
- Extension of the 9500-9800 MHz **EESS (active) allocation in the 9300-9500 MHz band** to accommodate systems requiring more than 300 MHz
- Extension of the 9500-9800 MHz **EESS (active) allocation in the 9800-9900 MHz** (on a secondary basis)

Agenda item 1.4

- The more difficult issue of WRC-07 (bands for IMT)
- Meteorological community was “only” interested in 2 frequency bands under consideration :
  - the **band 2700-2900 MHz band** was disregarded for IMT during thanks to a large support from almost all administrations
  - only **the band 3400-3600 MHz** has been identified for IMT systems in a large number of European, Arab and African countries (as well as in few Asiatic countries). This hence safeguard most commercial C-Band transponders and in particular those in the 3600-3800 MHz band that are currently or will be used by the meteorological community of for GEO

Agenda item 1.12 and 1.17

- the possibility of **registration of active and passive sensors** has been agreed with the consistent modifications of RR Appendix 4 (AI 1.12)

- the secondary MSS feeder link allocation close to the **1.4 GHz "passive" band** has been deleted.

Agenda item 7.2

The following agenda item for next WRC-11 were agreed (supported by WMO):

- **Agenda item 1.6** : passive bands above 275 GHz
- **Agenda item 1.15** : Oceanographic radars in the HF bands
- **Agenda item 1.16** : lightning detection below 20 kHz
- **Agenda item 1.24** : Extension of the METSAT allocation at 7.8 GHz

- Adoption of resolution 673 (WRC-07)

Conclusions and Follow-up

- WRC-07 was without any doubt a success for WMO positions and preparation
- WRC-07 decisions have been or are in the process to be translated in national regulations
- In Europe, the IMT use of C-band has currently been extended to the whole 3400-3800 MHz band, hence with potential issue with C-Band satellite receiving stations (EUMETCast, GEONetCast, …)
- Some countries (France in particular) have upgraded the “recommended” levels under agenda item 1.2 and 1.20 (1.4, 10.6 and 31 GHz band) into Mandatory limits
- Similar proposal has been made at European level, with a view to give higher confidence to the EESS(passive) users about the long term sharing scenarios. On-going. Similar initiative is to be encouraged in other parts of the world

Thank you for your attention