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ITUWORKSHOPS

1st ITU Inter-regional Workshop on WRC-19 Preparation

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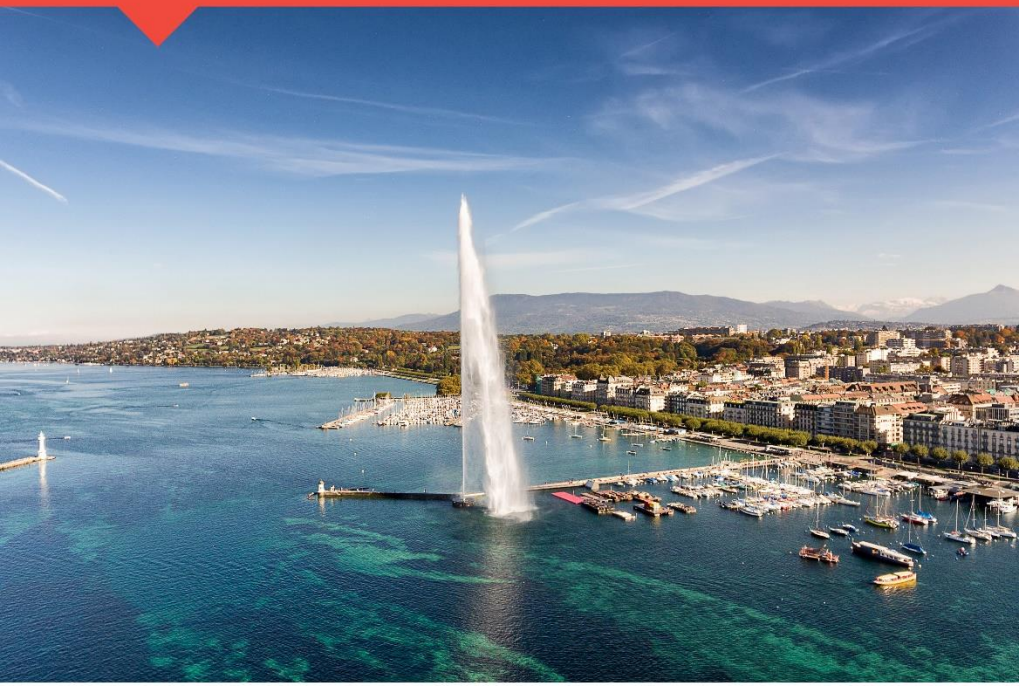

ITUWRC WORLD RADIOCOMMUNICATION CONFERENCE

Organized by:

90th Anniversary CCIR - ITU-R Study Groups (1927-2017)

ITU

1st ITU INTER-REGIONAL WORKSHOP ON WRC-19 PREPARATION (Geneva, 21-22 November 2017)

Session 2 – Terrestrial

WRC-19 agenda item 9.1, issue 9.1.5

Nos. 5.447F and 5.450A of the RR

José Costa
Chairman, ITU-R WP 5A

Outline

- WRC-19 agenda item 9.1, issue 9.1.5
- Resolution 764 (WRC-15)
- Background and motivation
- Organization of the work in WP 5A
- Status of studies (work in progress)
- References

WRC-19 issue 9.1.5 under a.i. 9.1

- Resolution **764 (WRC-15)** – Consideration of the technical and regulatory impacts of referencing Recommendations ITU-R M.1638-1 and ITU-R M.1849-1 in Nos. **5.447F** and **5.450A** of the Radio Regulations
- Responsible Group: **WP 5A**
- Contributing Groups: **WP 5B**
- Interested Groups: (WP 3M).

Resolution 764 (WRC-15)

Consideration of the technical and regulatory impacts of referencing Recommendations ITU-R M.1638-1 and ITU-R M.1849-1 in Nos. 5.447F and 5.450A of the Radio Regulations

resolves to invite ITU-R

1 to investigate the technical and regulatory impacts on the services referred to in Nos. 5.447F and 5.450A that would result from referencing Recommendation ITU-R M.1638-1 in place of Recommendation ITU-R M.1638-0 in those footnotes, while ensuring that no undue constraints are imposed on the services referenced in these footnotes;

2 to investigate the technical and regulatory impacts on the services referred to in Nos 5.447F and 5.450A that would result from adding a new reference to Recommendation ITU-R M.1849-1 to these footnotes, while ensuring that no undue constraints are imposed on the services referenced in these footnotes,

instructs the Director of the Radiocommunication Bureau

to include the results of these studies in the Director's Report to WRC-19 for consideration of any regulatory action in response to resolves to invite the ITU Radiocommunication Sector above.

Background and Motivation

- WRC-03 allocated the 5 150-5 350 MHz and 5 470-5 725 MHz frequency ranges to the mobile service on a primary basis for the implementation of Wireless Access Systems (WAS) including Radio Local Area Networks (RLANs) subject to Resolution 229. WRC-03 also decided that the radiolocation service, the Earth exploration-satellite service (active) and the space research service (active) (RR No. 5.447F) and the radiodetermination service (RR No. 5.450A) shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendations ITU-R M.1638-0 and ITU-R RS.1632-0, which were incorporated by reference. Since WRC-03, millions of RLAN devices have been widely deployed worldwide.
- During the WRC-15 study cycle, Recommendation ITU-R M.1638-0 was revised. In this revision process, several new radars with different system characteristics were included in Recommendation ITU-R M.1638-1, and the technical characteristics and protection criteria for ground based meteorological radars were removed and are not included in Recommendation ITU-R M.1638-1 and were instead relocated to Recommendation ITU-R M.1849-1 and several new meteorological radars were added to Recommendation ITU-R M.1849-1 during this revision process.
- Consistent with the provisions of Resolution 27 (WRC-07), for an ITU-R Recommendation (e.g. ITU-R M.1638), the reference in the Radio Regulations shall continue to apply to the earlier version incorporated by reference until such time as a competent WRC agrees to incorporate the new version. Given the potential impact on the widespread deployment of RLANs in the 5 250-5 350 MHz and 5 470-5 725 MHz frequency ranges and the provisions of RR Nos. 5447F and 5.450A, WRC-15 decided to study this matter under WRC-19 agenda item 9.1, issue 9.1.5.

Work in WP 5A

- Work being conducted in WG5A-4 chaired by Mr. KRAEMER Michael, Germany
- The main activities are:
  - Development of draft CPM text for issue 9.1.5 under agenda item 9.1 :
    - Draft CPM text: Annex 12 to Doc. 5A/650
    - Work plan: Annex 13 to Doc. 5A/650
- The studies carried out at previous WP 5A meetings were not updated at the November 2017 meeting of Working Party 5A; the work will still need to be concluded at the May 2018 meeting,

Status of studies (work in progress)

- [One study showed that:
  - reference to Recommendation ITU-R M.1638-0 should be kept in RR No. 5.447F since incorporation of references to updated Recommendations ITU-R M.1638-1 and ITU-R M.1849-1 in this footnote will lead to significant changes of the conditions under which the frequency band 5 250-5 350 MHz is allocated;
  - with respect to RR No. 5.450A two options can be considered: to keep the reference to Recommendation ITU-R M.1638-0 or to add the reference to Recommendation ITU-R M.1849-1. Both options do not change the conditions under which the frequency band 5 470-5 725 MHz is allocated to the mobile service.
- Another study showed that the incorporation by reference of Recommendation ITU R M.1638 0 should not be updated in RR Nos. 5.447F and 5.450A until the studies are completed.
- A further study showed that Recommendation ITU-R M.1849-1 can be referenced in RR No. 5.450A without changes to the conditions under which the frequency band 5 470-5 725 MHz is allocated to the incumbent radio services.]

References

- Recommendation ITU-R M.1638-0 “Characteristics of and protection criteria for sharing studies for radiolocation, aeronautical radionavigation and meteorological radars operating in the frequency bands between 5 250 and 5 850 MHz”.
- Recommendation ITU-R M.1638-1 “Characteristics of and protection criteria for sharing studies for radiolocation (except ground based meteorological radars) and aeronautical radionavigation radars operating in the frequency bands between 5 250 and 5 850 MHz”.
- Recommendation ITU-R M.1849-0 “Technical and operational aspects of ground-based meteorological radars”.
- Recommendation ITU-R M.1849-1 “Technical and operational aspects of ground-based meteorological radars”.