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|  | ASIA-PACIFIC TELECOMMUNITY | **Document No:** |
| **The 4th Meeting of the APT Conference Preparatory**  **Group for WRC-19 (APG19-4)** | **APG19-4/OUT-27** |
| 7 – 12 January 2019, Busan, Republic of Korea | 11 January 2019 |

Working Party 2

**PRELIMINARY VIEWs on WRC-19 agenda item 9.1, ISSUE 9.1.5**

**Agenda Item 9.1, Issue 9.1.5:**

*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.*

**1. Background**

Resolution **764 (WRC‑15)** 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.

Based on different studies regarding this issue, three approaches (as alternatives for addressing the issue) were suggested in the draft CPM text. Approach A proposed to update the reference to Recommendation ITU-R M.1849-1 in RR Nos. **5.450A** and leave all other references unchanged. Approach B proposed to update both footnotes by removing the references and replacing them with the sentence “No. **5.43A** does not apply”. Approach C proposed no change to these footnotes.

Relevant ITU-R Reports/Recommendations and ongoing studies are as follows,

* 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.1849-1 - Technical and operational aspects of ground-based meteorological radars
* Annexes 12 to Working Party 5A Chairman’s Report (Doc. 5A/844) - Draft CPM text for WRC-19 agenda item 9.1, issue 9.1.5

**2. Documents**

* Input Documents: APG19-4/INP-16 (AUS), INP-23 (NZL), INP-30 (THA), INP-60 (J), INP-75(Rev.1) (KOR), INP-84 (IRN), INP-101 (CHN)
* Information Documents: APG19-4/INF-02 (WMO), INF-11 (Wireless Industry Collaboration Co., Ltd), INF-22 (CITEL), INF-23 (CEPT), INF-24 (RCC)

**3. Summary of Discussions**

**3.1 Summary of APT Members’ view**

**3.1.1 Australia -** **Document APG19-4/INP-16**

Australia is considering which approach, as outlined in the Draft CPM Report for WRC-19, will provide the most appropriate solution for agenda item 9.1 Issue 9.1.5.

Australia supports a long-term solution that requires less regulation should Recommendations ITU-R M.1638 or M.1849 be updated again in the future, while also ensuring protection of the radiolocation service, and creating no additional constraints to the mobile service.

**3.1.2 New Zealand** - **Document APG19-4/INP-23**

New Zealand is of the view that Recommendation ITU-R M.1849-1 should be referenced in RR No. **5.450A** to reflect the updated technical/operational characteristics and protection criteria for ground-based meteorological radars. Considering that this change would not impose unacceptable constraints on systems in the mobile service, in particular RLAN/WAS, New Zealand supports Approach A by referencing Recommendation ITU-R M.1849-1 in RR No. **5.450A** (applicable to the frequency band 5 470-5 725 MHz) while leaving all other references unchanged.

**3.1.3 Thailand** - **Document APG19-4/INP-30**

Thailand is of the view that any changes in RR Nos. 5.447F and 5.450A should ensure the protection of to the services to which the band is allocated without additional constraints to these services, and should also take into account the conditions defined in Resolution 229 (Rev.WRC-12).

**3.1.4 Japan -** **Document APG19-4/INP-60**

Japan supports the studies for updating the reference in the footnotes 5.447F and 5.450A to latest recommendations, while ensuring that undue constrains are not imposed on services referenced in these footnotes.

**3.1.5 Korea** - **Document APG19-4/INP-75Rev.1**

The Republic of Korea supports Approach B of the draft CPM Report to WRC-19 Agenda Item 9.1, Issue 9.1.5, to delete the second sentence of the footnotes, where the Recommendations are referenced, and introduce the sentence “No. **5.43A** does not apply”.

**3.1.6 Iran** - **Document APG19-4/INP-84**

This Administration supports ITU-R studies on this agenda item and is of view that the Approach B would be more appropriate to remove redundant conditions. By means of Approach B, the reference to the incorporated recommendations would be removed and Resolution **229 (Rev.WRC-12)** (*resolves* 6 and 8) determines the conditions of coexistence between WAS/RLAN and radars.

**3.1.7 China -** **Document APG19-4/INP-101**

China supports Approach A or Approach C in the draft CPM text to satisfy this issue.

**3.2 Summary of key points raised during the meeting**

* During the drafting group sessions, the meeting agreed a proposal coming from some APT Members as the APT Preliminary View and put other views into the “Other Views from APT Members” section.

**4. APT Preliminary View(s)**

* APT Members support ITU-R studies 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 and to also add a new reference to Recommendation ITU-R M.1849-1 to these footnotes. In so doing, APT Members also support to ensure the protection of the services to which the band is allocated including those which are referenced in these footnotes without any constraints to these services.
* APT Members support a long-term solution that requires less regulation should Recommendations ITU-R M.1638 or M.1849 be updated again in the future, while also ensuring protection of the radiolocation service, and creating no additional constraints to the mobile service.

**5. Other Views from APT Members**

* Some APT members support to delete the second sentence of the footnotes, where the Recommendations are referenced, and introduce the sentence “No. **5.43A** does not apply”. By means of this Approach, the reference to the incorporated recommendations would be removed and Resolution **229 (Rev.WRC-12)** (*resolves* 6 and 8) determines the conditions of coexistence between WAS/RLAN and radars.
* Some APT members are of the view that Recommendation ITU-R M.1849-1 should be referenced in RR No. **5.450A** to reflect the updated technical/operational characteristics and protection criteria for ground-based meteorological radars while leaving all other references unchanged.

**6. Issues for Consideration at Next APG Meeting**

* APT Members are encouraged to contribute to the next APG meeting on the Agenda Item 9.1, Issue 9.1.5, taking into account the outcome of APG19-4 and the results of ITU-R studies.

**7. Views from Other Organisations**

**7.1 Regional Groups**

**7.1.1 ASMG** - **Document APG19-4/INP-09 (Rev.1)**

* Follow up the studies and ensure protection of the existing services without adding any new restrictions on them.

**7.1.2 ATU - Document APG19-4/INP-09 (Rev.1)**

* The No Change approach.

**7.1.3 CEPT - Document APG19-4/INF-23**

* CEPT is investigating the potential technical and regulatory impacts of a solution which would consist of deleting the references to Recommendations ITU-R M.1638 and M.1849 in the footnotes Nos **5.447F** and **5.450A**, and replacing these references with information related to the applicability of sharing conditions and mitigation measures given in Resolution **229 (Rev. WRC-12)**.

**7.1.4 CITEL - Document APG19-4/INF-22**

* A DIAP modifying footnotes Nos **5.447F** and **5.450A** to refer to conditions in footnote **5.446A** instead of ITU-R Recommendations and a proposal supporting Approach B are under consideration.

Note:

PRELIMINARY PROPOSAL (PP): a proposal by a CITEL Member State that has not been supported by another Member State.

DRAFT INTER-AMERICAN PROPOSAL (DIAP): PP that has been supported by at least one other Member State.

**7.1.5 RCC - Document APG19-4/INF-24**

* The RCC Administrations are in favour of maintaining the conditions for the allocation of the frequency bands 5250–5350 MHz and 5470–5725 MHz by radiodetermination services.
* The RCC Administrations oppose reference to Recommendations ITU-R М.1849-1 in No. 5.447F as this would result in changing conditions for systems of the mobile (excluding the aeronautical mobile) service in the frequency band 5250-5350 MHz.
* The RCC Administrations are in favour of maintaining reference to Recommendation ITU-R M.1638-0 in Nos. 5.450 and 5.447F.

**7.2 International Organisations**

**7.2.1 ICAO - Document APG19-4/INF-04**

* None.

**7.2.2 WMO - Document APG19-4/INF-02**

* WMO supports any solution that ensures the continued protection of meteorological radars from WAS/RLAN systems operating under the mobile service allocation in the 5470-5725 MHz frequency band.

**7.2.3 IARU - Document APG19-4/INF-03**

* None

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