|  |  |  |
| --- | --- | --- |
| APTlogogreen3 | ASIA-PACIFIC TELECOMMUNITY | **Document No:**  |
| **The 4th Meeting of the APT Conference Preparatory Group for WRC-19 (APG19-4)** | **APG19-4/INP-75 (Rev.1)** |
| 7 – 12 January 2019, Busan, Republic of Korea | **28 December 2018** |

Korea (Rep. of)

**preliminary views on WRC-19 agenda items 1.13, 1.16 AND 9.1 (ISSUE 9.1.1, 9.1.5, 9.1.8)**

**Agenda Item 1.13:**

*to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15)****;*

Resolution **238 (WRC-15)** – *Studies on frequency-related matters for International Mobile Telecommunications identification including possible additional allocations to the mobile services on a primary basis in portion(s) of the frequency range between 24.25 and 86 GHz for the future development of International Mobile Telecommunications for 2020 and beyond*

**1. Introduction**

At APG19-3 meeting, a preliminary views on WRC-19 agenda item (AI) 1.13 has been updated based on inputs and views from APT Members. As decided at APG19-3 meeting, following provisional objectives and expected outcomes of APG19-4 ([APG19-3/OUT-34](https://www.apt.int/sites/default/files/2018/03/APG19-3-OUT-34_APG19-4_Provisional_Objctives_and_Outcomes_0.docx)) should be handled at this APG19-4 meeting.

* to continue developing APT preliminary views for WRC-19 Agenda items based on input contributions from APT Members;
* to review the draft CPM Report and develop APT Views on proposed modification(s) to draft CPM Report, as appropriate, for submission to CPM19-2;
* to review the activities of other regional organisations, in particular, their preliminary views/position with a view to fostering inter-regional cooperation,

 and,

* Updated APT preliminary views on WRC-19 Agenda Items and issues associated with WRC-19 Agenda items;
* APT Views on proposed modification(s) to draft CPM Report, as appropriate, for submission to CPM19-2.

Recently some regional preparatory groups for WRC-19 have developed their position and views on WRC-19 AI 1.13, including some issues such as unwanted emission limits and so on. These issues will be discussed at coming CPM19-2 to be held in February 2019. In order for APT to facilitate internal discussions and to actively participate in discussions at CPM19-2, therefore, it is required that APG as one of the regional preparatory groups for WRC-19 should develop preliminary views and positions as early as possible regarding not only supporting bands but also some issues and its methods, taking into account activities from other regional preparatory groups and results conducted by ITU-R TG 5/1.

On the other hand, current draft CPM Report still has many areas with square brackets, TBD and a range of values, which certainly require final decision of WRC-19. Considering the discussion during ITU-R TG 5/1, it is not foreseen clearly whether CPM19-2 would be able to agree to provide the results without square brackets, TBD or more definitive values for the consideration of ITU Members and WRC-19.

Furthermore, currently there are diverged views among the regional preparatory groups on some issues, which were also questioned whether all regional preparatory groups would be able to reach concise solutions at CPM19-2. This also might be the case for APT members during APG19-4.

**2. Proposal**

Taking into account above, the Republic of Korea proposes the way how APG19-4 would develop APT preliminary views during APG19-4 and also proposes the updated version of the APT preliminary views developed at the APG19-3.

* The preliminary views of APG19-4 should endeavor to address APT views, particularly those areas which are in square bracket in the draft CPM Report. If APT Members agree to certain values easily, the value should be addressed as APT preliminary views and also be proposed to CPM19-2. If APT Members face to difficulty to have a single value, then APT preliminary views should be developed to have a range of value which would then facilitate discussion of APT Members in APG19-5 and also facilitate APT Members to discuss with other regional preparatory groups during CPM19-2.
* And also the updated APT preliminary views are proposed as attached.

**ATTACHMENT 1**

Source: [APG19-3/OUT-08](https://www.apt.int/sites/default/files/2018/03/APG19-3-OUT-08_PV_AI1.13_0.docx)

**PRELIMINARY VIEWs on WRC-19 agenda item 1.13**

**Agenda Item 1.13:**

*to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution****238 (WRC‑15)****;*

**1. Background**

IMT systems are now being evolved to provide diverse usage scenarios and applications such as enhanced mobile broadband (eMBB), massive machine-type (mMTC) and ultra-reliable and low-latency communications (URLLC) requiring larger contiguous blocks of spectrum than currently available bandwidth to realize those applications, as described in Recommendation ITU-R M.2083.

Adequate and timely availability of spectrum with appropriate regulatory provisions, as well as improved technologies, are essential to support the future growth of IMT. Harmonized worldwide frequency bands and harmonized frequency arrangements for these systems are highly desirable in order to facilitate global roaming and the benefits of economies of scale.

Regarding WRC-19 agenda item 1.13, Resolution **238 (WRC-15)** calls for studies to determine the spectrum needs for the terrestrial component of IMT in the frequency range between 24.25 GHz and 86 GHz, as well as sharing and compatibility studies, taking into account the protection of services to which the band is allocated on a primary basis, for the frequency bands:

– 24.25-27.5 GHz[[1]](#footnote-1), 37-40.5 GHz, 42.5-43.5 GHz, 45.5-47 GHz, 47.2-50.2 GHz, 50.4‑52.6 GHz, 66-76 GHz and 81-86 GHz, which have allocations to the mobile service on a primary basis; and

– 31.8-33.4 GHz, 40.5-42.5 GHz and 47-47.2 GHz, which may require additional allocations to the mobile service on a primary basis.

With respect to the studies on spectrum needs, the results are documented in the [draft CPM report](https://www.itu.int/dms_ties/itu-r/md/15/cpm19.02/c/R15-CPM19.02-C-0001%21%21MSW-E.docx) [. With respect to the sharing and compatibility studies, the results are available in the Chairman’s Report for the sixth meeting of TG 5/1 (Annexes 3-13 to Document](https://www.itu.int/md/R15-TG5.1-C-0287/en) [5-1/478](https://www.itu.int/md/R15-TG5.1-C-0478/en)[). Finally, study results, method to satisfy the agenda item and regulatory and procedural considerations are available in the](https://www.itu.int/md/R15-TG5.1-C-0287/en) [draft CPM report](https://www.itu.int/dms_ties/itu-r/md/15/cpm19.02/c/R15-CPM19.02-C-0001%21%21MSW-E.docx)

[Within APT, APT Wireless Group (AWG) is collaborating with APG in certain aspects relating to this agenda item (See Documents APG19-2/](https://www.itu.int/md/R15-TG5.1-C-0287/en)[[INP-07](https://www.itu.int/md/R15-TG5.1-C-0287/en)](http://www.apt.int/sites/default/files/2017/05/APG19-2-INP-07_LS_from_AWG.docx)[, APG19-3/](https://www.itu.int/md/R15-TG5.1-C-0287/en)[[INP-08](https://www.itu.int/md/R15-TG5.1-C-0287/en)](https://www.apt.int/sites/default/files/2018/01/APG19-3-INP-08_LS_from_AWG.docx)[, APG19-4/](https://www.itu.int/md/R15-TG5.1-C-0287/en)[INP-06](https://www.apt.int/sites/default/files/2018/10/APG19-4-INP-06_LS_from_AWG.docx)[).](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[The Republic of Korea proposes to update the APT Preliminary Views developed at the APG19-3.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

**[2. Preliminary Views](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[APT Members support the consideration of additional frequency bands for International Mobile Telecommunications (IMT), including possible additional mobile allocations on a primary basis, in accordance with Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[238 (WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[APT Members also support ITU-R studies on spectrum needs for the terrestrial component of IMT and sharing and compatibility studies in accordance with Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[238 (WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[. It is important for these sharing and compatibility studies to take into account protection of services to which the band is allocated on a primary basis.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[APT Members support following bands or portions thereof for IMT identification.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– 24.25-27.5 GHz and 37-[40.5/43.5] GHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[APT Members supports to revise Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[750 (Rev.WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [as an option of Condition A2a for the band 24.25-27.5 GHz in order to establish limits on unwanted emissions from IMT stations using the 24.25-27.5 GHz to EESS passive service using the 23.6-24 GHz band.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– -20 dB(W/200 MHz) for BS and UE in band 26.5-27.5 GHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– -32 dB(W/200 MHz) for BS and -28 dB(W/200 MHz) for UE in band 24.25-26.5 GHz.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– And this limit of unwanted emission shall be applied from [YYYY] in the case of countries where IMT systems using the band 24.25-27.5 GHz or portions thereof are introduced before WRC-19, as appropriate.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

*[[Korea’s view: The 26.5-27.5 GHz within the 24.25-27.5 GHz would not cause any interferences to the EESS passive service in the 23.6-24 GHz due to sufficient guard band from the 24 GHz band. This was reason why Korea supports -20 dBW/200 MHz as unwanted emission level as defined Category A in Recommendation ITU-R SM.329. For 24.25-26.5 GHz band, the Republic of Korea could support -32 dBW/200 MHz as one of the study results conducted by ITU-R TG 5/1.]](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

[APT Members supports Option 9 of Condition A2e for protection measures for the ISS and FSS (Earth-to-space) receiving space stations for the band 24.25-27.5 GHz.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– Option 9 is defined as “No condition is necessary”.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– ITU-R TG 5/1 studies show that sharing is feasible without any additional mandatory limits.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[APT Members supports Method C2-Alternative 2 without any conditions.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– Option 9 is defined as “No condition is necessary”.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[– ITU-R TG 5/1 studies show that sharing is feasible without any additional mandatory limits. And specific regulatory measures are related to national regulatory matter.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[Regarding the overlapping issue of the frequency bands within the scope of agenda item 1.13 associated with Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[238 (WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [and those within the scope of agenda items 1.6, 1.14 and 9.1 (issue 9.1.9), APT Members are of the view that this issue would be handled by WRC-19 based on proposals submitted to the conference, discussion on these agenda items and WRC-19’s decision on use of each frequency band mentioned in the corresponding Resolutions.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[\_\_\_\_\_\_\_\_\_\_\_\_](https://www.itu.int/md/R15-TG5.1-C-0287/en)

**[Agenda Item 1.16:](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

*[to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en)* ***[239 (WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)****[;](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

[Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[239 (WRC‑15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [–](https://www.itu.int/md/R15-TG5.1-C-0287/en) *[Studies concerning Wireless Access Systems including radio local area networks in the frequency bands between 5 150 MHz and 5 925 MHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

**[1. Background](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[WRC-15 adopted WRC-19 Agenda Item 1.16 to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[239 (WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[. ITU-R Working Party 5A (WP 5A) was designated as the responsible group for the Agenda Item 1.16.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[WP 5A has been conducting sharing studies and technical characteristics of WAS/RLAN as shown below:](https://www.itu.int/md/R15-TG5.1-C-0287/en)

* + - * + [Report ITU-R M.[RLAN SHARING 5 150-5 250 MHz] - Sharing and compatibility studies of WAS/RLAN in the 5 150-5 250 MHz frequency range (](https://www.itu.int/md/R15-TG5.1-C-0287/en)[[Annex 18 to Doc. 5A/976](https://www.itu.int/md/R15-TG5.1-C-0287/en)](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0650!N23!MSW-E)[)](https://www.itu.int/md/R15-TG5.1-C-0287/en)
				+ [Report ITU-R M.[RLAN Sharing 5 350-5 470 MHz - Sharing and compatibility studies of WAS/RLAN in the 5 350-5 470 MHz frequency range (](https://www.itu.int/md/R15-TG5.1-C-0287/en)[[Annex 19 to Doc. 5A/976](https://www.itu.int/md/R15-TG5.1-C-0287/en)](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0650!N25!MSW-E)[)](https://www.itu.int/md/R15-TG5.1-C-0287/en)
				+ [Report ITU-R M.[RLAN SHARING 5 725-5 850 MHz] - Sharing and compatibility studies of WAS/RLAN in the 5 725-5 850 MHz frequency range (](https://www.itu.int/md/R15-TG5.1-C-0287/en)[[Annex 20 to Doc. 5A/976](https://www.itu.int/md/R15-TG5.1-C-0287/en)](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0650!N26!MSW-E)[)](https://www.itu.int/md/R15-TG5.1-C-0287/en)
				+ [Report ITU-R M.[RLAN REQ-PAR] - Technical characteristics and operational requirements of WAS/RLAN in the 5 GHz frequency range (](https://www.itu.int/md/R15-TG5.1-C-0287/en)[[Annex 16 to Doc. 5A/](https://www.itu.int/md/R15-TG5.1-C-0287/en)](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0650!N24!MSW-E)[976)]](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[WP 5A developed the draft CPM Report as shown below:](https://www.itu.int/md/R15-TG5.1-C-0287/en)

* [Frequency band A, 5 150-5 250 MHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method A1:](https://www.itu.int/md/R15-TG5.1-C-0287/en) [No change to the RR](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method A2: Revision to Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[229 (Rev.WRC-12)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [to enable outdoor RLAN operations including possible associated conditions for new e.i.r.p. limits](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method A3: Revision to Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[229 (Rev.WRC-12)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [to enable outdoor RLAN operations by applying the same conditions of use as defined for the 5 250‑5 350 MHz frequency band in resolves 4 of Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[229 (Rev.WRC-12)](https://www.itu.int/md/R15-TG5.1-C-0287/en)**
* [Method A4: Revisions to Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[229 (Rev.WRC-12)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [to enable in-vehicle use of RLAN operation with e.i.r.p. up to 40 mW](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Frequency band B, 5 250-5 350 MHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method B: No change to the RR](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Frequency band C, 5 350-5 470 MHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method C:](https://www.itu.int/md/R15-TG5.1-C-0287/en) [No change to the RR](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Frequency band D, 5 725-5 850 MHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method D1: No change to the RR](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method D2: A new worldwide or Regional primary MS allocation](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method D3: Accommodate WAS/RLAN in an existing or new footnote](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Frequency band E, 5 850-5 925 MHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Method E: No change to the RR](https://www.itu.int/md/R15-TG5.1-C-0287/en)

**[2. Preliminary Views](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

* [The Republic of Korea is of the view that for RLAN operation in the frequency band 5 150-5 250 MHz, Method A3 of the draft CPM Report is preferable which is revision to Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[229 (Rev.WRC-12)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [to enable outdoor RLAN operations by applying the same conditions of use as defined for the 5 250‑5 350 MHz frequency band in resolves 4 of Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[229 (Rev.WRC-12)](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[.](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [The Republic of Korea is of the view that for accommodation of RLAN in the frequency band 5 725-5 850 MHz, Method D2 of the draft CPM Report is preferable which is the worldwide use of the band 5 725-5 850 MHz for mobile service taking into account RR](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[N](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[o.](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[5.453](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

**[Agenda Item 9:](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

*[to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

***[9.1](https://www.itu.int/md/R15-TG5.1-C-0287/en)*** *[on the activities of the Radiocommunication Sector since WRC-15;](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

***[Issue 9.1.1](https://www.itu.int/md/R15-TG5.1-C-0287/en)***[Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[212 (Rev.WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** *[- Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110 2 200 MHz](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

**[1. Background](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[ITU-R WP 4C and WP 5D which are responsible for the studies, have jointly conducted the coexistence and compatibility study between the terrestrial component of IMT and the satellite component of IMT in the frequency bands 1 980-2 010 MHz and 2 170-2 200MHz. WP 4C and WP 5D jointly developed the draft CPM Report including the possible technical and operational measures pursuant to Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[212 (Rev. WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[212 (Rev. WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [related to WRC-19 agenda item 9.1, issue 9.1.1, is limited to the study of “possible technical and operational measure” not including any regulatory considerations.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

**[2. Preliminary Views](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[The Republic of Korea is of the view that considering the scope of the WRC-19 agenda item 9.1, issue 9.1.1, limited to performing the study of technical and operational measures; it does not call for any regulatory studies or changes to the Radio Regulation.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[The Republic of Korea is also of the view that the studies of technical and operational measures show that coexistence and compatibility is possible between terrestrial and satellite components of IMT. Moreover, the studies show wide variation in the potential of interference between the two because of the unique and varying system characteristics and deployment scenarios of the satellite and terrestrial components of IMT in neighbouring countries.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[Therefore, bilateral discussions between affected administrations provides greater operational flexibility and ensures efficient utilization of the spectrum for IMT while ensuring coexistence between the two components deployed in neighbouring countries. No further regulatory studies or actions on either service based on worst-case scenario are required within ITU-R.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

***[Issue 9.1.5](https://www.itu.int/md/R15-TG5.1-C-0287/en)***[Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[764 (WRC- 15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)***[- Consideration of the technical and regulatory impacts of referencing Recommendations ITU R M.1638 1 and ITU R M.1849 1 in Nos.](https://www.itu.int/md/R15-TG5.1-C-0287/en)* ***[5.447F](https://www.itu.int/md/R15-TG5.1-C-0287/en)*** *[and](https://www.itu.int/md/R15-TG5.1-C-0287/en)* ***[5.450A](https://www.itu.int/md/R15-TG5.1-C-0287/en)*** *[of the Radio Regulations](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

**[1. Background](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[764 (WRC‑15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)***[resolves to invite ITU-R](https://www.itu.int/md/R15-TG5.1-C-0287/en)*[:](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[1 to investigate the technical and regulatory impacts on the services referred to in Nos.](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.447F](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [and](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.450A](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [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;](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[2 to investigate the technical and regulatory impacts on the services referred to in Nos](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.447F](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [and](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.450A](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [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](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[ITU-R Working Party 5A (WP 5A) was designated as the responsible group for the Agenda Item 9.1, Issue 9.1.5 at CPM19-1 and developed draft CPM Report. Currently, the executive summary described in the draft CPM Report are as follow:](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[Based on different studies regarding the technical and regulatory impacts of referencing Recommendations ITU-R M.1638-1 and ITU-R M.1849-1 in RR Nos.](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.447F](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [and](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.450A](https://www.itu.int/md/R15-TG5.1-C-0287/en)**[, different approaches (as alternatives for addressing the issue) were suggested for regulatory examples.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

* [Approach A updates the reference to Recommendation ITU-R M.1849-1 in RR No.](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.450A](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [and leaves all other references unchanged.](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Approach B updates both footnotes by removing the references and replacing them with the sentence “No.](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.43A](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [does not apply”.](https://www.itu.int/md/R15-TG5.1-C-0287/en)
* [Approach C does not change the footnote texts at all.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[According to the ITU-R Studies, if the references to the two Recommendations remain in the footnotes, the question of the revision of RR Nos.](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.447F](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [and](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.450A](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [would have to be re-addressed in the future (e.g. under agenda item 2) to consider the future updates of Recommendations ITU-R M.1638 and ITU-R M.1849, which is possible to have the same arguments as WRC-19 agenda item 9.1, issue 9.1.5. Therefore, ITU-R studies suggested Approach B dealing with this problem.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

**[2. Preliminary Views](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[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.](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[5.43A](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [does not apply”.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

***[Issue 9.1.8](https://www.itu.int/md/R15-TG5.1-C-0287/en)***[Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[958 (WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** *[- Studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work](https://www.itu.int/md/R15-TG5.1-C-0287/en)*

**[1. Background](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[Resolution](https://www.itu.int/md/R15-TG5.1-C-0287/en) **[958 (WRC-15)](https://www.itu.int/md/R15-TG5.1-C-0287/en)** [calls for ITU-R to study technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum for narrowband and broadband machine-type communication (MTC) infrastructure in order to develop Recommendations, Reports and/or Handbooks, as appropriate.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[ITU-R Working Party 5D (WP 5D), which is a responsible group on Agenda Item 9.1 (Issue 9.1.8), developed the working document towards a preliminary draft new Report ITU-R M.[IMT. MTC] and the draft CPM Report which is concluded that there is no need to take any regulatory action in the Radio Regulations with respect to specific spectrum for the use of those applications in the Radio Regulations.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

**[2. Preliminary Views](https://www.itu.int/md/R15-TG5.1-C-0287/en)**

[The Republic of Korea is of the view that there is no need to take any regulatory action in the Radio Regulations with respect to specific spectrum for the use of those applications in the Radio Regulations.](https://www.itu.int/md/R15-TG5.1-C-0287/en)

[\_\_\_\_\_\_\_\_\_\_\_\_](https://www.itu.int/md/R15-TG5.1-C-0287/en)

1. When conducting studies in the band 24.5-27.5 GHz, to take into account the need to ensure the protection of existing earth stations and the deployment of future receiving earth stations under the EESS (space-to-Earth) and SRS (space-to-Earth) allocation in the frequency band 25.5-27 GHz. [↑](#footnote-ref-1)