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|  | ASIA-PACIFIC TELECOMMUNITY | Document No: |
| **The 2nd Meeting of the APT Conference Preparatory Group for WRC-23 (APG23-2)** | **APG23-2/INF-07** |
| 19 – 23 April 2021, Virtual/Online Meeting | 23 March 2021 |

Chairman, DG on AI 9.1.C

**brief on wrc-23 agenda item 9.1.C**

(Note: *This brief was developed for information purpose only. It does not necessarily express the view of APG-23*)

**Agenda Item 9.1.C:**

*to study the use of International Mobile Telecommunication system for fixed wireless broadband in the frequency bands allocated to the fixed services on primary basis, in accordance with Resolution* ***175 (WRC-19)****;*

**Relevant Resolutions and Responsible/Contributing ITU-R Groups**

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| Resolution 175**(Rev.WRC‑19)**Use of International Mobile Telecommunications systems for fixed wireless broadband in the frequency bands allocated to the fixed service on a primary basis | *resolves to invite the ITU Radiocommunication Sector* to conduct any necessary studies on the use of IMT systems for fixed wireless broadband in the frequency bands allocated to the fixed service on primary basis, taking into account the relevant ITU-R studies, Handbooks, Recommendations and Reports,*instructs the Director of the Radiocommunication Bureau* to report to WRC-23 on the results of these studies, *invites administrations* to participate in these studies in the process of preparation for WRC-23. |

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| **Responsible group** | **Contributing group** |
| **WP 5A** and **WP 5C**Note: This is a joint activity and a joint plenary may be held if required. WP 5A will provide the draft text on the results of studies to the CPM Chapter co-Rapporteurs | **WP 1B, WP 4A, WP 4C, WP 5D, WP 6A, WP 7B, WP 7C, WP 7D** |

**1. Background Information**

* At WRC-19, Bahrain (Kingdom of), Kuwait (State of), Tunisia and United Arab Emirates proposed a new agenda item for WRC-23 on “Study of the use of IMT for Fixed Wireless Broadband in accordance with the primary allocation of the frequency band 10.7-11.7 GHz to the fixed service, taking into account the relevant ITU-R studies” as shown in [Document 64](https://www.itu.int/md/R16-WRC19-C-0064/en). After the extensive discussion at WRC-19, WRC-23 agenda item 9.1, topic c) was agreed.
* ITU-R Working Party (WP) 5A is responsible for the fixed wireless access applications in the fixed service and WP 5C is responsible for all the other applications of fixed wireless systems, according to the assignment of work by Study Group 5 to its working parties.
* The published Recommendations, Reports and Handbook on Fixed Wireless Access are summarized in the following tables, which are based on the information presented in Section 2 and Annex 1 of Document [5A/19](https://www.itu.int/md/R19-WP5A-C-0019/en).

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| Vocabulary of terms |
| Number | Title |
| Rec. ITU-R F.592 | Vocabulary of terms for the fixed service |
| Rec. ITU-R F.1399 | Vocabulary of terms for wireless access  |

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| Frequency |
| Number | Title |
| Rec. ITU-R F.748 | Radio-frequency arrangements for systems of the fixed service operating in the 25, 26 and 28 GHz bands |
| Rec. ITU-R F.749 | Radio-frequency arrangements for systems of the fixed service operating in sub-bands in the 36-40.5 GHz band |
| Rec. ITU-R F.1402 | Frequency sharing criteria between a land mobile wireless access system and a fixed wireless access system using the same equipment type as the mobile wireless access system |
| Rec. ITU-R F.1488 | Frequency block arrangements for fixed wireless access systems in the range 3 400-3 800 MHz |
| Rec. ITU-R F.1489 | A methodology for assessing the level of operational compatibility between fixed wireless access and radiolocation systems when sharing the band 3.4-3.7 GHz |
| Rec. ITU-R F.1518 | Spectrum requirement methodology for fixed wireless access and mobile wireless access networks using the same type of equipment, when coexisting in the same frequency band |
| Rec. ITU-R F.1519 | Guidance on frequency arrangements based on frequency blocks for systems in the fixed service   |
| Rec. ITU-R F.1613 | Operational and deployment requirements for fixed wireless access systems in the fixed service in Region 3 to ensure the protection of systems in the Earth exploration-satellite service (active) and the space research service (active) in the band 5 250-5 350 MHz   |

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| Technical related |
| Number | Title |
| Rec. ITU-R F.757 | Basic system requirements and performance objectives for fixed wireless access using mobile-derived technologies offering telephony and data communication services  |
| Rec. ITU-R F.1400 | Performance and availability requirements and objectives for fixed wireless access to public switched telephone network   |
| Rec. ITU-R F.1401 | Considerations for the identification of possible frequency bands for fixed wireless access and related sharing studies  |
| Rec. ITU-R F.1490 | Generic requirements for fixed wireless access systems |
| Rec. ITU-R F.1499 | Radio transmission systems for fixed broadband wireless access based on cable modem standard  |
| Rec. ITU-R F.1763 | Radio interface standards for broadband wireless access systems in the fixed service operating below 66 GHz |

**2. Information on on-going ITU-R Study**

* What documents are being developed by the responsible group: Revising the existing ITU-R Report(s), ITU-R Recommendation(s) or developing a PDNR or a working document
* [WRC-19 Document 64](https://www.itu.int/md/R16-WRC19-C-0064/en)
* Draft work plan/Report – [Annex 9 to Document 5A/](https://www.itu.int/md/R19-WP5A-C-0221/en)221
* Draft CPM text – [Annex 8 to Document 5A/](https://www.itu.int/md/R19-WP5A-C-0221/en)221
* Elements for a working document towards a preliminary draft new [Report/Recommendation] ITU-R F.[IMT-FWB] – [Annex 18 to Document 5A/](https://www.itu.int/md/R19-WP5A-C-0221/en)221[[1]](#footnote-1)
* Contentious issues in ITU-R meeting (list all issues up in the beginning and then update (removal or addition) later stage)
* At the joint meeting of WPs 5A and 5C in July 2020, it was clarified that the objective being investigated on this topic is the use of IMT technologies for fixed wireless broadband in the fixed service and not the deployment of mobile systems in the fixed service.
* Different opinions were expressed by administrations for the following aspects; however, no consensus was reached.
	+ whether a specific new recommendation providing guidance in the use of IMT technology in fixed wireless broadband could be developed or not on this topic,
	+ whether the possible regulatory related studies could be conducted or not on this topic.
* Hyperlink to the relevant part of the webpage of [ITU-R Preparatory Studies for WRC-23](https://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/wrc-23-studies.aspx)
* <https://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/wrc-23-studies.aspx>

**3. Position of the Regional Group (if available)**

* ATU
* ASMG(August 2020)
* Inviting ASMG administrations to consider the frequency bands that will be studied for using the IMT systems for fixed wireless broadband in the frequency bands allocated to the fixed service on a primary basis. Ensure the protection of the existing services.
* CEPT(December 2020)
* CEPT opposes to any changes to the RR in response to WRC-23 Agenda item 9.1, topic c. With this CEPT is also of the view that there is no need to consider/study specific frequency bands.
* CEPT is of the view that fixed wireless broadband applications using IMT technologies as well as other technologies in the frequency bands allocated to the fixed service can be addressed through update of appropriate existing ITU-R Recommendations/Reports/Handbooks. Development of new ITU-R Recommendations/Reports should only be considered, if necessary, based on the outcome of review of existing ITU-R deliverables. Therefore, this work falls under regular activities of Working Parties 5A and 5C.
* CITEL
* RCC(September 2020)
* The RCC Administrations consider that when making decision on IMT systems using the frequency bands allocated to the fixed service on the primary basis, IMT systems for fixed wireless broadband should protect services operating in the these or adjacent frequency bands, if necessary.

**4. Position of International Organizations (if available)**

* ICAO
* IMO
* WMO (February 2020)
* WMO is concerned about this Topic c) under Agenda item 9.1 that is very broad in scope and could hence potentially affect a large number of meteorological operations and applications, including EESS (passive) under RR No 5.340.
* WMO will monitor the work on this Topic and contribute as necessary.
* IARU R3
* Etc…
1. The text was neither reviewed nor agreed. [↑](#footnote-ref-1)