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Iran (Islamic Republic of)

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

This document provides the preliminary views of the Islamic Republic of Iran on agenda items 1.13, 1.16, 9.1 (issues 9.1.1, 9.1.5, 9.1.8) of WRC-19 for discussion at the fourth meeting of the APT Preparatory Group for WRC-2019 (APG19-4), 07 – 12 January 2018, Busan, Republic of Korea.

These preliminary views are provisional and subject to any consideration until the final meeting of the APT Conference Preparatory Group to be held before WRC-19.

**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.

The draft CPM Report has been prepared on the basis of draft CPM texts developed by the responsible ITU‑R groups involved in the preparation for **WRC‑19**, during the second session of the 2019 Conference Preparatory Meeting (CPM19-2) in Geneva. It is to be noted that the methods to satisfy the agenda item 1.13 are included in Section 2/1.13/4 of draft CPM19-2 Report and have been organized by frequency bands, as follows: Item A (24.25-27.5 GHz), Item B (31.8‑33.4 GHz), Item C (37-40.5 GHz), Item D (40.5-42.5 GHz), Item E (42.5-43.5 GHz), Item F (45.5-47 GHz), Item G (47-47.2 GHz), Item H (47.2-50.2 GHz), Item I (50.4-52.6 GHz), Item J (66-71 GHz), Item K (71-76 GHz), and Item L (81-86 GHz).

The compatibility and sharing scenarios that are studied within ITU-R and reflected within CPM19-2 Report are summarized in following table:

Table 1. Compatibility and sharing scenarios
that are studied within ITU-R and reflected within CPM19-2 Report

|  |  |  |  |
| --- | --- | --- | --- |
| Frequency band (GHz) | Concerned services | Protecting IMT from | Studies left |
| In-band\* | Adjacent band |
| A: 24.25-27.5 | FS, MS, RNS, ISS, FSS↑, RLSS↓, EESS↓, SRS↓ | EESS (passive), RAS | FSS | RLS, RLSS↓, RNS |
| B: 31.8-33.4 | FS, RNS, SRS↓, ISS | EESS (passive), RAS, SRS (passive) | - | ISS |
| C: 37-40.5   | FS, FSS↓, MS, EESS↑, MSS↓, RAS, SRS↓, SRS↑ | EESS (passive), SRS (passive) | - | - |
| D: 40.5-42.5 | FS, FSS↓,BS, BSS | EESS↑, RAS | - | BS |
| E: 42.5-43.5 | FS, FSS↑, MS, RAS | - | FSS | - |
| F: 45.5-47 | MS, MSS, RNS, RNSS | ARS, ARSS | No studies were performedfor this frequency band |
| G: 47-47.2 | ARS, ARSS | - | No studies were performedfor this frequency band |
| H: 47.2-50.2 | FS, FSS↑, MS | EESS (passive), SRS (passive) | FSS | - |
| I: 50.4-52.6 | FS, FSS↑, MS | EESS (passive), SRS (passive) | FSS | - |
| J: 66-71 | ISS, MS, MSS, RNS, RNSS | - | - | RNS, RNSS, MSS↓ |
| K: 71-76 | BS, BSS, FS, FSS↓, MS, MSS↓ | ARS, ARSS, RAS, RLS | - | RAS, BS, BSS, MSS↓, ARS, ARSS |
| L: 81-86 | FS, FSS↑, MS, MSS↑, RAS | ARS, ARSS, EESS (passive), RAS, RLS, SRS (passive) | - | ARS, ARSS, MSS |

\*: '↓' and '↑' denotes downlink and uplink respectively.

Based on the conducted studies, following Methods outlined to satisfy the agenda item**1.13**:

Table 2. Methods adopted in CPM19-2 Report to satisfy the agenda item**1.13**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  MethodsFreq.Band (GHz) | No change to RR | Identification for IMT (two alternatives under LMS or MS) | Upgrading to primary MS | Allocation to primary MS | Section in CPM19-2 Report |
| A: 24.25-27.5 | A1 | A2 |  | A2 | 2/1.13/4.1 |
| B: 31.8-33.4  | B1 |  |  |  | 2/1.13/4.2 |
| C: 37-40.5 | C1 | C2 |  |  | 2/1.13/4.3 |
| D: 40.5-42.5 | D1 | D2 | D2 |  | 2/1.13/4.4 |
| E: 42.5-43.5 | E1 | E2 |  |  | 2/1.13/4.5 |
| F\*: 45.5-47 | F1 | F2 |  |  | 2/1.13/4.6 |
| G\*: 47-47.2 | G1 | G2 |  | G2 | 2/1.13/4.7 |
| H: 47.2-50.2 | H1 | H2 |  |  | 2/1.13/4.8 |
| I: 50.4-52.6 | I1 | I2 |  |  | 2/1.13/4.9 |
| J\*\*: 66-71 | J1 | J2 |  |  | 2/1.13/4.10 |
| K: 71-76 | K1 | K2 |  |  | 2/1.13/4.11 |
| L: 81-86 | L1 | L2 |  |  | 2/1.13/4.12 |

\*: For the frequency bands F and G in the Table, no studies have been carried out therefore no identification of the frequency band for the terrestrial component of IMT was proposed in the CPM Report

\*\*: For the frequency band J a Method J3 proposed to continue studies with an associated WRC Resolution

Moreover, sharing and compatibility studies were conducted by other Working Parties (WP) for overlapping agenda item **1.14** in band A, agenda item **1.6** in bands C, D, H and I and agenda item **9.1** (issue **9.1.9**) in band I. In case of AI **1.14** study was not completed and for the time being a separation distance of 55 km is required from HAPS nadir to protect IMT stations. **WP 4A** has conducted no study on protection of IMT stations from non-GSO FSS, however, **TG5/1** has studied FSS interference on IMT for bands H and I. **WP 4A** also, for AI **9.1** (issue **9.1.9**), has conducted studies for addition of FSS uplink in the band 51.4-52.6 GHz. The study shows that a separation distance of 260 and 330 meters is enough to protect IMT stations.

**2. Preliminary Views of I.R. of Iran**

In line with the outcome of APG19-3 for the agenda item **1.13**, this administration continues to 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 **238 (WRC-15)**.

This Administration also support continuation ITU-R studies on remaining items of sharing and compatibility studies in accordance with Resolution **238 (WRC-15)**. 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.

This administration has a preference in prioritizing considerations for IMT identification in the 24.25-27.5 GHz frequency band or portions thereof.

As a matter of principal of not constraining existing services, this Administrations take into account potential constraints to IMT in the frequency band, because of the potential deployment of ubiquitous high-density applications in the FSS in the frequency band 39.5-42 GHz (40-40.5 GHz for Region 3) as per RR No. **5.516B.**

This Administration is of the view that Region 3 countries neighboring to Region 1, need to carefully take into account potential constraints that Region 1 countries might impose to Region 3 IMT identification in the frequency bands allocated to exclusive-Region 1 HFDSS (bands C and H),in accordance with RR No. **5.516B.**

This Administration is not in favor of IMT identification in the frequency bands F and G that are not studied within ITU-R.

Moreover, this Administration propose not to support non-implementable conditions for achieving compatibility that are proposed under several Options of Methods of this agenda item in draft CPM19-2 Report, such as imposing condition on elevation angle of the antenna main beam of IMT base stations.

Regarding the overlapping issue of the frequency bands within the scope of agenda item **1.13** associated with Resolution **238 (WRC-15)** and those within the scope of agenda items **1.6**, **1.14** and **9.1** (issue **9.1.9**), this Administration is of the view that the remained studies should be conducted and finalized before **WRC19**.

This Administration wishes also to emphasize that the protection of the services to which the frequency band subject to this agenda item is mandatory and shall be dealt with by the Conference. Consequently, this Administration categorically rejects notion of “No Condition for protection” or option of “non-mandatory/optional” protection of the incumbent services. In addition, it is worth to mention that:

* It has been a long agreed practice in ITU that, whenever, there is not adequate criteria or uncertainty to protect an incumbent service the concept of “use of the incoming service in the frequency band in question is subject to the agreement to be obtained from the concerned administrations” or subject to application of RR No. 9.21.
* The protection of incumbent services shall be subject to ITU-R Recommendations yet to be prepared and agreed upon due to the fact that :

a) ITU-R Recommendations, unless is incorporated by reference, have non mandatory nature and

b) ANY SUCH INTENDED ITU-R Recommendation(s) may never be approved due to the fact that one State Member could object to its adoption.

**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* ***239 (WRC-15)****.*

**1. Background**

RR No. **5.446A** specifies that the use of the bands 5 150-5 350 MHz and 5 470-5 725 MHz by the stations in the mobile, except aeronautical mobile, service shall be in accordance with Resolution **229 (Rev.WRC-12)**.

Since **WRC-03**, the demand for mobile broadband applications especially for WAS/RLANs has been growing rapidly. Resolution **239 (WRC-15)** states “that the results of ITU-R studies indicate that the minimum spectrum need for WAS/RLAN in the 5 GHz frequency range in the year 2018 is estimated at 880 MHz; this figure includes 455-580 MHz already utilized by non-IMT mobile broadband applications operating within the 5 GHz range resulting in 300-425 MHz additional spectrum being required”.

One issue **WRC-15** examined was the possibility of additional global allocations to the mobile service (MS) for terrestrial mobile broadband applications, including in the 5 GHz range, to facilitate contiguous spectrum for WAS/RLAN. This is to enable the use of wider channel bandwidths to support higher data throughput. The studies performed by ITU-R in preparation for **WRC-15** indicated that if the WAS/RLAN mitigation measures were limited to the regulatory provisions of Resolution **229 (Rev.WRC-12)**, sharing between WAS/RLAN and the Earth exploration-satellite service (EESS) (active) systems in the frequency band 5 350 to 5 470 MHz may not be feasible, as well as being insufficient to ensure protection of certain radar types in this frequency band. For these cases, sharing may only be feasible if additional WAS/RLAN mitigation measures are implemented. However, no agreement was reached on the applicability of any additional WAS/RLAN mitigation techniques (see section 1/1.1/3.2.11 of the [Report of the CPM to **WRC-15**](https://www.itu.int/md/R15-WRC15-C-0003/en)).

No agreement was reached on the conclusions of the studies for the frequency band 5 725‑5 850 MHz (see section 1/1.1/3.2.12 of the [Report of the CPM to **WRC-15**](https://www.itu.int/md/R15-WRC15-C-0003/en)). As such, **WRC‑15** concluded no change (NOC) for these frequency bands and established a **WRC-19** agenda item to continue the work.

Resolution **239 (WRC‑15)**, calls for ITU-R to:

– study WAS/RLAN technical characteristics and operational requirements in the 5 GHz frequency range;

– perform sharing and compatibility studies between WAS/RLAN applications and incumbent services in the frequency bands 5 150-5 350 MHz, 5 350-5 470 MHz, 5 725‑5 850 MHz and 5 850-5 925 MHz while ensuring the protection of incumbent services including their current and planned use;

– consider enabling outdoor WAS/RLAN operations in the frequency band 5 150-5 350 MHz;

– consider potential MS allocations to accommodate WAS/RLAN operations in the 5 350‑5 470 MHz and 5 725‑5 850 MHz frequency bands; and

– identify potential WAS/RLAN use in 5 850‑5 925 MHz frequency band.

ITU-R studies of the agenda item **1.16** were completed and results were summarized in draft CPM19-2 Report. Studies show that no consensus achieved in case of frequency band 5 150-5 250 MHz. It was confirmed that the current WAS/RLAN operating conditions in the 5 250‑5 350MHz frequency band are sufficient for the operating needs of WAS/RLAN users. For the frequency band 5 350-5 470 MHz, it was concluded that there are no feasible mitigation techniques to facilitate sharing of this frequency band by RLAN with EESS (active) and different radar systems. Therefore the frequency band 5 350-5 470 MHz would not be allocated to MS. The insufficiency situation of current DFS techniques and result of conducted studies is not in favour of new MS allocation in the frequency band 5 725-5 850 MHz. Finally, Based upon the results of studies for the band 5 850-5925 MHz, conclusions could not be reached.

Based on the compatibility and sharing scenarios that are summarized within draft CPM19-2 Report following Methods outlined to satisfy the agenda item**1.16**:

|  |  |
| --- | --- |
| Frequency band (MHz) | Methods |
| A: 5 150-5 250 | A1: NOCto the Radio RegulationsA2: Revision of Resolution 229, outdoor RLANA3: Revision of Resolution 229, outdoor RLAN, same as for 5250-5350A4: Revision of Resolution 229, in-vehicle RLAN |
| B: 5 250 -5 350 | B: NOC to the Radio Regulations |
| C: 5 350-5 470 | C: NOC to the Radio Regulations |
| D: 5 725-5 850 | D1: NOC to the Radio RegulationsD2: Allocate for Indoor onlyD3: Allocation by footnote |
| E: 5 850-5 925 | E1: NOC to the Radio Regulations |

**2. Preliminary Views of I.R. of Iran**

This Administration support conducted studies in ITU-R in accordance with Resolution **239 (WRC-15).**

This Administration is of the view that the protection of incumbent services including their current and planned use in the frequency bands 5 150-5 350 MHz, 5 350-5 470 MHz, 5 725-5 850 MHz and 5 850-5 925 MHz needs be ensured. However, since the 5 250-5 350 MHz frequency band is adjacent to the 5 150-5 250 MHz frequency band and discrimination between indoor and outdoor RLAN applications in real world is always mixed with ambiguity, this Administration is of the view that the conditions of these sub-bands fully be as such that full protection of incumbent services should also to be ensured

In the frequency band 5 350-5 470 MHz, 5 725-5 850 MHz and 5 850-5 925 MHz, this Administration support NOC to the Radio Regulations for the use of WAS/RLAN to protect incumbent services.

**Agenda Item 9** *to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with* ***Article 7*** *of the Convention:*

**9.1.** *on the activities of the Radiocommunication Sector since* ***WRC-15****;*

**Issue 9.1.1: Resolution 212 (Rev.WRC-15)**

*Implementation of International Mobile Telecommunications in the frequency bands 1885-2025 MHz and 2110 -2200 MHz*

**1. Background**

Resolution **212 (Rev.WRC-15)** invites ITU-R to study possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1 980–2 010 MHz and 2 170–2 200 MHz where those frequency bands are shared by the mobile service and the mobile-satellite service in different countries, in particular for the deployment of independent satellite and terrestrial components of IMT and to facilitate development of both the satellite and terrestrial components of IMT.

The technical and operational studies were conducted by the ITU-R and concluded results were summarized in draft CPM19-2 Report. The studies considered the issue of coexistence and compatibility of terrestrial (composed of base station(s) (BS(s)) and user equipment (UE) and later on referred to as IMT BS(s) and IMT UE(s)) and satellite (composed of MSS space stations and mobile earth station(s) (MES(s)) and later on referred to as IMT space station(s) and IMT MES(s)) components of IMT in neighboring countries/different concerned countries/adjacent geographical areas across different countries for four interference scenarios, and concluded as follows:

– **For Scenario A1**, in the 1 980-2 010 MHz frequency band, it was observed that the level of potential interference from IMT BS into IMT space stations is high, while the level of potential interference from IMT UE into IMT space stations is low. The studies have identified technical and operational measures to mitigate the potential interference from IMT BS and IMT UE. For IMT UEs, the measures can wholly eliminate the potential excess interference. For IMT BSs, there is no agreement on whether the measures can wholly eliminate the potential excess interference.

– **For Scenario A2**, in the frequency band 2 170-2 200 MHz, it was observed that potential interference from IMT BS into IMT MES may occur. The potential interference may be mitigated by one or more of: assessment of terrain and clutter effects and system characteristics, deployment environments, and separation distance. Given the varying characteristics of the border area across various countries, administrations can bilaterally determine the appropriate mitigation techniques on a case-by-case basis.

– **For Scenario B1**, in the frequency band 1 980-2 010 MHz, potential interference from IMT MESs to IMT BSs and IMT UEs, could be managed by bilateral/multilateral negotiation, in which actual technical/operational characteristics and mitigation measures for satellite and terrestrial components of IMT could be taken into account.

– **For Scenario B2**, in the frequency band 2 170-2 200 MHz, potential interference from the IMT space stations to IMT UEs, could be managed by bilateral/multilateral negotiation, in which actual technical/operational characteristics and mitigation measures for satellite and terrestrial components of IMT could be taken into account.



Details of studies are documented in the working document towards a PDN [Recommendation or Report] ITU-R M.[MSS&IMT-ADVANCED SHARING].

Based on the discussion and conducted studies in draft CPM19-2 Report, following conclusions outlined for each scenario:

* **For Scenario A1** (Interference from IMT BSs and IMT UEs to IMT space stations):
The implementation of mitigation measures may be considered on a case-by-case basis by administrations.
* **For Scenario A2** (Interference from IMT BSs to IMT MESs):
Given the varying characteristics of the border area across various countries, administrations can bilaterally determine the appropriate mitigation techniques on a case-by-case basis.
* **For Scenario B1**(Interference from IMT MESs to IMT BSs and IMT UEs):
Potential interference from IMT MESs to IMT BSs and IMT UEs could be managed by bilateral/multilateral negotiation, in which actual technical/operational characteristics and mitigation measures for satellite and terrestrial components of IMT could be taken into account.
* **For Scenario B2** (Interference from IMT space stations to IMT UEs):
Potential interference from IMT space stations to IMT UEs could be managed by bilateral/multilateral negotiation, in which actual technical/operational characteristics and mitigation measures for satellite and terrestrial components of IMT could be taken into account.

**2. Preliminary Views of I.R. of Iran**

This Administration supports ITU-R studies on this agenda item and is of the view that the resolution of interference scenarios could be managed by bilateral/multilateral negotiation of neighbor countries under current regulatory practice within ITU-R.

**Agenda Item 9** *to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with* ***Article 7*** *of the Convention:*

**9.1.** *on the activities of the Radiocommunication Sector since* ***WRC-15****;*

**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**

**WRC-03** allocated the 5 150-5 350 MHz and 5 470-5 725 MHz frequency bands to the MS on a primary basis for the implementation of wireless access systems (WAS) including radio local area networks (RLANs) subject to Resolution **229 (Rev.WRC-12)**. **WRC-03** also decided that the RLS, the EESS(active) and the SRS(active) (RR No. **5.447F**) and the radiodetermination service (RR No. **5.450A**) shall not impose on the MS 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.

During the **WRC-15** study cycle, Recommendation ITU-R **M.1638-0** was revised. Recommendation ITU-R **M.1849-1** provides technical and operational aspects of ground-based meteorological radars. There were nine ground-based meteorological radars which were removed from Recommendation ITU-R **M.1638-0**. Eight of those radars in Recommendation ITU‑R **M.1849‑0** were retained in Recommendation ITU-R **M.1849-1**. In addition, five other ground-based meteorological radars from Recommendation ITU-R **M.1849-0** were retained and one additional new radar was added into Recommendation ITU-R **M.1849-1**, resulting in six radars that were not previously in Recommendation ITU-R **M.1638-0** being included in Recommendation ITU‑R **M.1849-1**. ITU-R also provided a summary of the radars operating in the frequency bands 5 250-5 350 MHz and 5 470-5 725 MHz as contained in Recommendations ITU-R **M.1638-0**, ITU-R **M.1638-1**, ITU‑R **M.1849-0** and ITU-R **M.1849-1**.

ITU-R studies classified, in draft CPM19-2 Report, the Methods to satisfy this agenda item in three following approaches:

* **Approach A:**
The incorporation by reference to Recommendation ITU‑R **M.1638‑0** should not be updated to Recommendation ITU‑R **M.1638‑1** in RR Nos. **5.447F**and **5.450A** until further studies are completed.
A reference to Recommendation ITU-R **M.1849-1** in RR No. **5.450A** would not impact the coexistence between radars WAS/RLAN in the frequency band 5 470-5 725 MHz;
* **Approach B:**
 To delete the second sentence of the footnotes, where the Recommendations are referenced, and introduce the sentence “No. **5.43A** does not apply.” Therefore, the coexistence between WAS/RLAN and radars is driven by Resolution **229 (Rev.WRC-12);**
* **Approach C:**
No change to the Radio Regulations

**2. Preliminary Views of I.R. of Iran**

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.

**Agenda Item 9** *to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with* ***Article 7*** *of the Convention:*

**9.1.** *on the activities of the Radiocommunication Sector since* ***WRC-15****;*

**Issue 9.1.8: Issue 3) in the Annex to Resolution 958 (WRC-15)**

*Urgent studies required in preparation for the 2019 World Radiocommunication Conference*

*3) 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.*

**1. Background**

Machine Type Communications (MTC), which are also known as Machine-to-Machine (M2M) communications or Internet of Things (IoT), describe communication between devices that do not require human intervention. An increasingly large number of MTC devices, with a range of performance and operational requirements, are expected to communicate due to further improvements of low-cost and low complexity device types requiring high reliability techniques, for instance in the field of traffic safety, traffic efficiency, smart grid, e-health, wireless industry automation, augmented reality, remote tactile control and tele-protection.

The results of ITU-R studies of the current and future spectrum use for narrowband and broadband MTC performed, as expressed in Resolution **958 (WRC-15)**, concluded that there is no need for any regulatory action in the Radio Regulations with regard to specific spectrum intended for use by those applications. Nonetheless, there are other mechanisms, which could facilitate the harmonized use of spectrum to support the implementation of narrowband and broadband MTC infrastructures, including ITU-R Recommendations or Reports.

**2. Preliminary Views of I.R. of Iran**

Identical to APT Preliminary View provided in the Document APG19-3/OUT-12

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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)