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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| PLENARY MEETING | **Addendum 24 to Document 107-E** |
|  | **19 October 2015** |
|  | **Original: English** |
|  | |
| India (Republic of) | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 10 | |

10to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention,

Introduction

Agenda item 1.1 of WRC-15 through Resolution 233 (WRC-12), is considering additional spectrum allocations for the mobile service on a primary basis, and identification of additional frequency bands for International Mobile Telecommunications (IMT). The conference will also give the opportunity to determine whether future mobile spectrum can be discussed at the following WRC in 2019 through a new agenda item.

Discussion

Within the work already being carried out by the ITU’s Radiocommunication Bureau (ITU-R), responsible for spectrum planning, there have been a number of research documents highlighting the need to identify spectrum for 2020 and beyond.

Proposals

Considering that in accordance with No. 118 of the ITU Convention, the general scope of the agenda for a world radiocommunication conference should be established four to six years in advance and a final agenda shall be established by the Council two years before the conference, India proposes that a new agenda item be created for the WRC-2019 to identify the spectrum for 2020 and beyond.

SUP IND/107A24/1

RESOLUTION 806 (WRC‑07)

Preliminary agenda for the 2015 World Radiocommunication Conference

SUP IND/107A24/2

RESOLUTION 807 (WRC‑12)

Agenda for the 2015 World Radiocommunication Conference

SUP IND/107A24/3

RESOLUTION 808 (WRC‑12)

Preliminary agenda for the 2018 World Radiocommunication Conference

ADD IND/107A24/4

Draft New Resolution [IND-A10-WRC-19\_AGENDA] (WRC-15)

Agenda for the 2019 World Radiocommunication Conference

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that, in accordance with No. 118 of the ITU Convention, the general scope of the agenda for a world radiocommunication conference should be established four to six years in advance and that a final agenda shall be established by the Council two years before the conference;

*b)* Article 13 of the ITU Constitution relating to the competence and scheduling of world radiocommunication conferences and Article 7 of the Convention relating to their agendas;

*c)* the relevant resolutions and recommendations of previous world administrative radio conferences (WARCs) and world radiocommunication conferences (WRCs),

recognizing

*a)* that WRC‑15 has identified a number of urgent issues requiring further examination by WRC‑19;

*b)* that, in preparing this agenda, some items proposed by administrations could not be included and have had to be deferred to future conference agendas,

resolves

to recommend to the Council that a world radiocommunication conference be held in 2019 for a maximum period of four weeks, with the following agenda:

1 on the basis of proposals from administrations, taking account of the results of WRC‑15 and the Report of the Conference Preparatory Meeting, and with due regard to the requirements of existing and future services in the bands under consideration, to consider and take appropriate action in respect of the following items:

ADD IND/107A24/5

1.1 to consider identification of frequency bands for IMT including possible additional allocations to the mobile service on a primary basis in accordance with Resolution **[IND-B10- IMT\_ABOVE\_6GHz] (WRC-15)** (Attachment 1);

ADD IND/107A24/6

1.2 to consider identification of frequency bands for ISM applications including possible additional allocations to the ISM on a primary basis around 60 GHz and higher bands;

**Reasons:** The requirements for short range, large data rate applications by citizens for various purposes, e.g. Wireless Computer Networks, Near Field Communications, Machine-to-Machine communications, etc. are increasing exponentially. Hence, allocations in higher frequency bands around 60 GHz and above are required for this purpose. Some countries are learnt to have already allowed such operations in their countries. A global allocation would allow further developments as well as economies of scale.

3 to consider such consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the Conference;

4 in accordance with Resolution **95 (Rev.WRC‑07)**, to review the resolutions and recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

5 to review, and take appropriate action on, the Report from the Radiocommunication Assembly submitted in accordance with Nos. 135 and 136 of the Convention;

6 to identify those items requiring urgent action by the Radiocommunication Study Groups in preparation for the next world radiocommunication conference;

7 to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution **86 (Rev.WRC‑07)** to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary‑satellite orbit;

8 to consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution **26 (Rev.WRC‑07)**;

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;

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations; and

9.3 on action in response to Resolution **80 (Rev.WRC‑07)**;

10to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention,

resolves further

to activate the Conference Preparatory Meeting,

invites the Council

to finalize the agenda and arrange for the convening of WRC‑19, and to initiate as soon as possible the necessary consultations with Member States,

instructs the Director of the Radiocommunication Bureau

to make the necessary arrangements to convene meetings of the Conference Preparatory Meeting and to prepare a report to WRC‑19,

instructs the Secretary-General

to communicate this Resolution to international and regional organizations concerned.

ATTACHMENT 1

ADD IND/107A24/7

Draft New Resolution [IND-B10-IMT\_ABOVE\_6GHz]

Studies on frequency-related matters for IMT identification including possible additional allocations to the mobile services on a primary basis in portion(s) of the frequency range between 25.25 and 86 GHz for the future development of IMT for 2020 and beyond

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that International Mobile Telecommunications (IMT) systems have contributed to global economic and social development as the main method of providing mobile broadband applications;

*b)* that IMT systems are now being evolved to provide diverse usage scenarios and applications such as enhanced mobile broadband, massive machine type communications and ultra-reliable and low latency communications;

*c)* that ITU-R addressed the framework and overall objectives of the future development of IMT for 2020 and beyond in Recommendation ITU-R M.2083 enabling gigabit-per-second user data rate and high quality of user experience (QoE) provided by a wide contiguous bandwidth in higher frequency bands above 6 GHz;

*d)* that the technical feasibility of IMT in bands above 6 GHz is addressed in Report ITU‑R M.2376;

*e)* that it may be required to study additional spectrum requirements to meet the gigabit-per-second user data rate, high quality of user experience (QoE) and user demands in dense urban areas and/or in peak times;

*f)* that ITU-R developed a work plan, timeline, process and required deliverables for the IMT-2020 development in order to transform the above framework and overall objectives into the reality of IMT systems, which are expected to be deployed from the year 2020 onwards;

*g)* that ITU-R has started the studies on the propagation characteristics in higher frequency bands above 6 GHz;

*h)* that ITU-T has initiated the study of network standardization for IMT for 2020 and beyond;

*i)* that adequate and timely availability of spectrum and supporting regulatory provisions is essential to realize the objectives in Recommendation ITU-R M.2083;

*j)* that harmonized worldwide bands and harmonized frequency arrangements for IMT are highly desirable in order to achieve global roaming and the benefits of economies of scale;

*k)* the need to protect existing services when considering frequency bands for possible additional allocations to any service,

noting

*a)* that Question ITU‑R 229/5 seeks to address the further development of IMT;

*b)* that IMT encompasses both IMT-2000, IMT-Advanced, and IMT-2020 collectively, as described in Resolution ITU‑R 56-2;

*c)* that Resolution ITU‑R [IMT.PRINCIPLES] addresses the principles for the process of development of IMT for 2020 and beyond,

recognizing

*a)* that timely availability of spectrum is important to support the future development of IMT;

*b)* that the possibility of securing contiguous wide bandwidth in the higher frequency ranges is more promising;

*c)* the usage of relevant parts of the spectrum by other radiocommunication services, many of which involve significant investment in infrastructure or represent significant societal benefit, and the evolving needs of these services;

*d)* there should be no additional regulatory or technical constraints imposed to services to which the band is currently allocated on a primary basis;

*e)* that the preamble of the Radio Regulations provides objectives including:

– to facilitate the efficient and effective operation of all radiocommunication services; and

– to provide for and, where necessary, regulate new applications of radiocommunication technology,

resolves to invite ITU‑R

1 to study spectrum demands associated with the capabilities required for development of IMT-2020 taking into account:

– evolving needs, such as very high data rates, to satisfy user demand for IMT;

– situations with high data traffic demands, such as in dense urban areas and/or in peak times;

– technical and operational characteristics of IMT systems in the high frequency range, including the evolution of IMT through advances in technology and spectrally-efficient techniques, and their deployment;

– the time-frame in which spectrum would be needed;

2 to study potential candidate frequency bands for IMT including possible additional allocations to the mobile service on a primary basis within the ranges contained in Annex 1 to this Resolution, taking into account the results of the studies under *resolves to invite ITU‑R* 1, and to the extent practicable, the need for harmonization,

further resolves

1 to accelerate development and completion of the technical and operational characteristics required to carry out sharing and compatibility studies involving the systems referred to as IMT-2020;

2 that the studies referred to in *resolves to invite ITU‑R* 2 include sharing and compatibility studies with services already having allocations on a primary basis in the potential candidate bands and in adjacent bands, as appropriate, taking into account potential mitigation techniques that may need to be employed by IMT systems;

3 to invite WRC‑19 to consider the results of the above studies and take appropriate actions,

encourages Member States, Sector Members, Academia, and Associates

to participate in the studies by submitting contributions to ITU‑R.

ANNEX 1 TO DRAFT NEW RESOLUTION [IND-B10- IMT\_ABOVE\_6GHz]

Frequency ranges mentioned in resolves to invite ITU‑R of draft new Resolution [IND-B10-IMT\_ABOVE\_6GHz]

| From (GHz) | To (GHz) | Bandwidth (GHz) |
| --- | --- | --- |
| 6 | 10 | 4 |
| 25.25 | 25.5 | 0.25 |
| 31.8 | 33.4 | 1.6 |
| 39 | 47 | 8 |
| 47.2 | 50.2 | 3 |
| 50.4 | 52.6 | 2.2 |
| 66 | 76 | 10 |
| 81 | 86 | 5 |

**Reasons:** A draft new Resolution that supports the proposed WRC-19 agenda item for the future development of IMT for 2020 and beyond.

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