|  |  |
| --- | --- |
| **World Radiocommunication Conference (WRC-19) Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
|  |  |
|  |  |
| PLENARY MEETING | **Addendum 3 to Document 24(Add.24)-E** |
|  | **20 September 2019** |
|  | **Original: English** |
|  | |
| Asia-Pacific Telecommunity Common Proposals | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 10 | |

10 to 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

APT Members examined the proposed new items for inclusion in the agenda of WRC-23 and agreed to consider identification for IMT in the 7 025-7 125 MHz frequency range.

In addition to frequency band 7 025-7 125 MHz, the frequency band 5 925-6 725 MHz was also considered for which consensus is yet to be reached at this stage.

Proposal

ADD ACP/24A24A3/1

Draft New Resolution [ACP-A10-WRC23] (WRC-19)

Agenda for the 2023 World Radiocommunication Conference

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

…

1.x to consider identification for IMT in the 7 025-7 125 MHz frequency range in accordance with Resolution **[ACP-C10-IMT] (WRC-19)**;

…

**Reasons:** Proposal for a new WRC-23 agenda item to consider IMT identification in the 7 025-7 125 MHz frequency range.

ADD ACP/24A24A3/2

Draft New Resolution [ACP-C10-IMT] (WRC-19)

Studies on frequency-related matters for identification of International Mobile Telecommunications in the 7 025-7 125 MHz frequency range, or parts thereof, for the future development of International Mobile Telecommunications

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

*a)* that International Mobile Telecommunications (IMT) is key to providing broadband wireless connectivity on a worldwide scale and contributing to global economic growth and social development;

*b)* that there is continuous growth of mobile data traffic in all countries;

*c)* that the assignment of contiguous wide spectrum bandwidth reduces system complexity associated with carrier aggregation, which will improve energy efﬁciency and reduce network cost;

*d)* that adequate and timely availability of spectrum and corresponding regulatory provisions are essential to support the future development of IMT;

*e)* that protection of incumbent services from future IMT systems is to be ensured taking into account current usage and future development of the incumbent services without imposing additional constraints,

recognizing

*a)* that to realize global roaming and seize the benefits of cost-effective deployment of IMT system, it is necessary to achieve global/regional spectrum harmonization for IMT;

*b)* that incumbent services are already using parts of this 5 925-7 125 MHz frequency range and these services and future development require appropriate protection that involve substantial infrastructure investment,

noting

that compared with the low and high frequency bands, the 7 GHz frequency range can provide better balance for meeting needs for both coverage and capacity,

resolves to invite the 2023 World Radiocommunication Conference

to consider, based on the results of ITU-R studies referred to in *resolves to* *invite ITU-R* below, identification for the terrestrial component of IMT in the 7 025-7 125 MHz frequency range taking into account *recognizing b)* above,

resolves to invite ITU‑R

1 to study additional spectrum needs associated with the capabilities required for terrestrial component of IMT, taking into account:

– evolving needs to meet emerging demands for IMT;

– technical and operational characteristics of IMT systems in the 6 GHz 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 conduct sharing and compatibility studies between IMT and incumbent services, taken into account the need to ensure protection of existing services and future development without imposing additional constraint(s) which have allocations in the potential candidate bands and in adjacent bands on a primary basis;

3 to consider possible new identification for IMT within the frequency range of 7 025-7 125 MHz if the results of the sharing and compatibility studies are satisfactorily protect the existing use of incumbent services and their future development,

invites administrations

to participate actively in the studies by submitting contributions to the ITU-R.

**Reasons:** Please refer to the following table.

|  |  |
| --- | --- |
| ***Subject:***  Proposal for a new WRC-23 agenda item to consider IMT identification in the 7 025-7 125 MHz frequency range for the future development of IMT | |
| ***Origin:*** Asia-Pacific Telecommunity (APT) | |
| ***Proposal:***  To consider identification of IMT in 7 025-7 125 MHz frequency range. | |
| ***Background/reason:***  IMT-2020 technologies play important roles in society as the new engine for the digital economy. The IMT systems support various usage scenarios. In addition to enhanced Mobile Broadband (eMBB), they also support massive Machine Type Communications (mMTC) and Ultra-Reliable Low-Latency Communications (URLLC) usage scenarios which include a wide range of applications. The applications driven by IMT-2020 has been expanding into new market segments such as smart grid, e-health, intelligent transport systems (ITS), traffic control and safety. With the pace of global commercialization of IMT-2020, the market demand for IMT services and applications will be increasing, in the meantime additional spectrum is required to facilitate new IMT-2020 application scenarios, to provide the increasing network capacities in coming years.  The millimetre wave frequency range and the middle frequency range both have vital roles to meet the spectrum needs for IMT. The millimetre wave frequency range is suitable to provide ultra-high capacity communication at hot spots in urban and densely populated areas, and the middle frequency range is needed to support new IMT-2020 applications which could deliver a very good balance between coverage and capacity needs. From a global perspective, the middle frequency range provides the most important frequency bands for the first wave of large scale IMT-2020 developments all over the world.  The 7 GHz frequency range may partially meet the future IMT spectrum needs in the middle frequency range. The feasibility of compatibility between IMT and incumbent services in the same and adjacent frequency bands will be improved with the implementation of new radio characteristics of IMT which reduce the potential of interference to other services. Considering the above background, APT proposes a WRC-23 agenda item to conduct spectrum related studies to identify IMT in the 7 025-7 125 MHz frequency range. | |
| ***Radiocommunication Services concerned:***  7 025-7 125 MHz: fixed service, mobile service  6 700-7 075 MHz fixed service, fixed-satellite service (Earth-to-space), fixed-satellite service (space-to-Earth), mobile service  7 075- 7145 MHz  (adjacent services: TBD) | |
| ***Indication of possible difficulties:***  The proposed bands are widely used for terrestrial and space services on a co-primary basis. The coexistence of IMT and incumbent services needs to be considered. | |
| ***Previous/ongoing studies on the issue:***  During the study period 2012-2015 and in preparation for WRC-15, the ITU-R conducted spectrum-related studies on IMT in accordance with Resolution **238** (WRC-15).  In the frequency band of 5 925-6 425 MHz, the result of sharing and compatibility studies for IMT and other services are demonstrated in the Report ITU-R F.2326-0 (for the sharing studies with fixed service) and Report ITU-R S.2367 (for the sharing studies with FSS UL). | |
| ***Studies to be carried out by:***  ITU-R SG5 | ***with participation of:***  Administrations and Sector members of the ITU-R |
| ***ITU-R Study Groups concerned:***  SG5, SG4 and other groups | |
| ***ITU resource implications, including financial implications (refer to CV 126):***  If a dedicated task group is needed to carry out research it will require a related budget. | |
| ***Common regional proposal:***  Yes | ***Multicountry Proposal:*** No  ***Number of countries:*** |
| ***Remarks*** | |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_