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| **World Radiocommunication Conference (WRC-19) Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
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| PLENARY MEETING | **Addendum 12 to Document 11(Add.24)-E** |
|  | **13 September 2019** |
|  | **Original: English/Spanish** |
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| Member States of the Inter-American Telecommunication Commission (CITEL) | |
| Proposals for the work of the conference | |
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| 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.

A. BAND 17.3-17.7 GHz

Background

Demand for Fixed-Satellite Service (FSS) in Ka band for GSO broadband applications is ever increasing, with the arrival of High and Very High Throughput Satellites (HTS and VHTS). These systems, based on more efficient use of spectrum thanks to frequency reuse among other techniques, are providing connectivity in remote areas and contributing to close the digital divide.

The 17.3-17.7 GHz band is allocated in Region 2 on a primary basis to the Broadcasting-Satellite Service (BSS) in the space-to-Earth direction, and to the Fixed-Satellite Service (FSS) in the Earth-to-space direction limited to feeder links for the broadcasting-satellite service, subject to the application of Appendix 30A procedures (footnote No. **5.5.16** applies). The band is also allocated on a secondary basis to the Radiolocation Service. (Footnotes Nos. **5.514** and **5.515** also apply.)

Although in Region 2 the frequency band in the space-to-Earth direction is only allocated to Broadcasting-Satellite Service, other Regions already consider the Fixed-Satellite Service in this direction of transmission. It is further relevant to note that all primary services in the band, globally considered, are designed for satellite applications (BSS or FSS in different directions of transmission).

The consideration of this band in the space-to-Earth direction for FSS in addition to BSS in Region 2, would meet this increasing demand for connectivity in Ka band for broadband applications, which may not be available under a BSS allocation. This would also provide more flexibility in the design of new satellite systems and a more efficient use of spectrum.

ADD IAP/11A24A12/1

Draft New Resolution [IAP/10(L)-2023] (WRC-19)]

Preliminary Agenda for the 2023 World Radiocommunication Conference

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

…

**X.X** to consider a new primary allocation to the fixed-satellite service in the space-to-Earth in the 17.3-17.7 GHz band in Region 2, while protecting existing primary services in the band, in accordance with Resolution **[IAP/10(L)-17.3-17.7s-E] (WRC-19)**.

**Reasons:** To allow a more efficient use of the 17.3.17.7 GHz band for satellite services.

ADD IAP/11A24A12/2

Draft New Resolution [IAP/10(L)-17.3-17.7s-E] (WRC-19)]

Primary allocation to the fixed satellite service in the space-to-Earth direction in the 17.3-17.7 GHz band in Region 2

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

considering

*a)* the need to encourage the development and implementation of new technologies in the fixed-satellite service (FSS) for broadband applications;

*b)* that FSS systems based on the use of new technologies associated with geostationary (GSO) satellite system is capable of providing high-capacity and low-cost means of broadband communication even to the most isolated regions of the world;

*c)* that the Radio Regulations should enable the introduction of new applications of radiocommunication technology to ensure the operation of as many systems as possible in order to ensure efficient use of the spectrum,

recognizing

the need to preserve and protect frequencies subject to the application of Appendix **30A**,

noting

*a)* that technology has been developed to provide more efficient use of the spectrum;

*b)* that the frequency band 17.3-17.7 GHz is allocated in Region 2 on a primary basis to the broadcasting satellite service (space-to-Earth) and fixed satellite service (Earth-to-space), subject to the application of No. **5.516**;

*c)* that sharing of fixed-satellite service (Earth-to-space) and fixed-satellite service (space-to-Earth), is already considered in Region 1 for the band 17.3-17.7 GHz;

*d)* that there is no other primary service in the 17.3-17.7 GHz band apart from the fixed-satellite service and the broadcasting-satellite service,

resolves

that taking into account the results of ITU-R studies, WRC-23 consider a new primary allocation to the fixed-satellite service (space-to-Earth) in the 17.3-17.7 GHz for Region 2 without imposing any additional constraints on existing allocations to the broadcasting-satellite service (space-to-Earth) and the fixed-satellite service (Earth-to-space),

resolves to invite the ITU-R

to conduct in time for WRC-23, sharing and compatibility studies between the fixed-satellite service (space-to-Earth) and the broadcasting-satellite service (space-to-Earth) and between the fixed-satellite service (space-to-Earth) and the fixed-satellite service (Earth-to-space),

invites administrations

to participate actively in the studies and provide the technical and operational characteristics of the systems involved by submitting contributions to the ITU-R.

**Reasons:** A resolution will support the ITU-R studies needed under the relevant WRC-23 agenda item.

**ATTACHMENT**

**PROPOSAL FOR ADDITIONAL AGENDA ITEM STUDYING A NEW ALLOCATION OF THE FIXED-SATELLITE SERVICE (SPACE-TO-EARTH) IN THE 17.3-17.7 GHZ BAND**

**Subject:** Proposed future WRC agenda item for WRC-23 studying a new allocation of the fixed-satellite service (space-to-Earth) in the 17.3-17.7 GHz band.

*Proposal: to consider a new primary allocation to the fixed satellite service in the* ***space-to-Earth in the*** *17.3-17.7 GHz band in Region 2, while protecting imposing any additional constraints for existing primary services in the band, in accordance with Resolution [IAP/10(L)-17.3-17.7s-E] (WRC-19).*

***Background/reason:***

The consideration of this band in the space-to-Earth direction for FSS in addition to BSS in Region 2, would meet the increasing demand for broadband connectivity in Ka band for broadband applications, which may not be available under a BSS allocation. This would also provide more flexibility in the design of new satellite systems and a more efficient use of spectrum.

***Radiocommunication services concerned:*** Fixed satellite service, broadcasting satellite service

***Indication of possible difficulties:*** None foreseen

***Previous/ongoing studies on the issue:*** None to date

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| ***Studies to be carried out by:*** SG4 | *with the participation of:* |

***ITU-R Study Groups concerned: SG5***

*ITU resource implications, including financial implications (refer to CV126):* **Minimal**

***Common regional proposal:*** Yes/No ***Multicountry proposal:*** Yes/No

*Number of countries:*

***Remarks***

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