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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 19 to Document 11(Add.24)-E** |
|  | **17 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 | |
|  | |
| 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.

Background

Today, satellites provide a wide range of broadband services to a rapidly growing customer base and are developing more systems to meet demand. Advances in satellite technologies allow a variety of new services including innovative broadband, video and mobile services covering all corners of the globe and providing service to places and regions not covered by traditional terrestrial services. These regions would otherwise miss out on the benefits of new and innovative telecommunications services.

The fixed satellite supports several important public interest initiatives including tele-health, tele-education and public protection and disaster relief. High throughput satellites are bringing broadband connectivity to rural and remote areas, and new state of the art satellites provide next generation satellite broadband and high quality video programming (including 3D and 4K programming).

The technological progress in radio communication enables the satellite industry to offer much more capacity today. The satellite industry takes this development into account by using the most spectrum efficient technologies, including advances in spot-beam facilitation of frequency re-use. For some satellite applications, such as gateways, operation is relatively low density, permitting sharing with radiocommunication services more easily. However, even with this efficiency, demand for the fixed-satellite service outpaces the spectrum available for this service[[1]](#footnote-1).

With C, Ku and Ka bands reaching capacity, satellite frequencies are heavily used and are nearing saturation for many applications. Therefore, satellite operators are seeking access to additional fixed-satellite service spectrum to satisfy existing and anticipated requirements for existing and new services, including broadband services.

Objective

To study spectrum needs and additional new allocations to the fixed-satellite service in the 43.5-45.5 GHz frequency band, taking into consideration the radiocommunication services already allocated in those bands, as well as the new services and applications that the WRC-19 will allocate.

ADD IAP/11A24A19/1

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

Agenda for the 2023 World Radiocommunication Conference

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

resolves

to recommend to the Council that a world radiocommunication conference be held in 2023 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‑19 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:

1.x to consider the allocation of all or part of the frequency band 43.5-45.5 GHz to the fixed-satellite service, in accordance with Resolution **[IA10/10(S)-FSS] (WRC-19)**;

…

ADD IAP/11A24A19/2

Draft New Resolution [IAP/10(S)-FSS] (WRC‑19)

Studies relating to spectrum needs and possible allocation of the frequency bands 43.5-45.5 GHz to the fixed-satellite service

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

considering

*a)* that satellite systems are increasingly being used to deliver broadband services and can help enable universal broadband access;

*b)* that next-generation fixed-satellite service technologies for broadband will increase speeds (45 Mbps is already available), with faster rates expected in the near future;

*c)* that technological developments such as advances in spot-beam technologies and frequency re-use are used by the fixed-satellite service (FSS) in spectrum above 30 GHz to increase the efficient use of spectrum;

*d)* that fixed-satellite applications in spectrum above 30 GHz, such as gateways, should be easier to share with other radiocommunication services than high-density fixed-satellite service (HDFSS) applications;

*e)* that FSS systems based on the use of new technologies above 30 GHz and associated with both geostationary (GSO) and non-geostationary (non-GSO) satellite constellations are capable of providing high-capacity and economically feasible communications even to the most isolated regions of the world,

noting

that the frequency band 43.5-45.5 GHz is allocated to the mobile, mobile-satellite, radionavigation, and radionavigation-satellite services on a primary basis,

recognizing

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

resolves to invite ITU-R

to conduct, and complete in time for WRC-23:

1 studies considering additional spectrum needs for development of the fixed-satellite service, taking into account the frequency bands currently allocated to FSS, the technical conditions of their use and the possibility of optimizing the use of these frequency bands with a view to increasing spectrum efficiency;

2 sharing and compatibility studies with existing services, on a primary basis, to determine the suitability of new primary allocations to the FSS in the frequency band 43.5-45.5 GHz,

further resolves

to invite WRC-23 to consider the results of the above studies and take appropriate actions,

invites administrations

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

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1. <https://www.sia.org/wp-content/uploads/2019/05/2019-SSIR-2-Page-20190507.pdf> [↑](#footnote-ref-1)