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| A close up of a sign  Description automatically generated | **World Radiocommunication Conference (WRC-23)Dubai, 20 November - 15 December 2023** |  |
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| PLENARY MEETING | **Addendum 1 toDocument 65(Add.25)-E** |
|  | **29 September 2023** |
|  | **Original: English** |
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| European Common Proposals |
| Proposals for the work of the conference |
|  |
| Agenda item 9.2 |

9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the ITU Convention;

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations;[[1]](#footnote-1)1 and

Part 1: Section 3.1.9.2 of Report of the Director to WRC-23, Scaling factor

Introduction

With respect to the parameter “X” indicated in No. **21.16.6** of the Radio Regulations (RR) (a.k.a. “Scaling factor”), WRC‑19 decided (i) to call for studies by ITU‑R of the appropriateness of the equations contained in RR No. **21.16.6** for large non-GSO satellite systems; and, (ii) to issue qualified favourable findings under RR Nos. **9.35/11.31** when examining compliance of frequency assignments to non-GSO FSS satellite systems with RR Article **21** pfd limits applicable in the frequency band 17.7-19.3 GHz if the notifying administration requests the Bureau to do so. To date, the Bureau received five requests whereby qualified favourable findings have been given accordingly. Since WRC‑19 has indicated that qualified favourable finding should be applicable until the last day of WRC‑23, the Bureau expects that WRC‑23 will provide further guidance on the application of RR No. **21.16.6**. If no guidance is provided, the Bureau will consider that this provision remains applicable and previously established qualified favourable findings will be reviewed in application of this provision:

The Bureau invites the Conference “to provide guidance to the Bureau on the approach to apply No. **21.16.6**.”.

This proposal supports modifications to the Radio Regulations with respect to the parameter “X” indicated in RR No. **21.16.6** for non-GSO satellite systems whose total number of space stations is greater than 1 000.

Proposals

ARTICLE 21

Terrestrial and space services sharing frequency bands above 1 GHz

Section V − Limits of power flux-density from space stations

MOD EUR/65A25A1/1

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13 21.16.6 The function *X* is defined as a function of the number, *N*, of satellites in the non-geostationary satellite constellation in the fixed-satellite service and *Nv*, as follows:

  dB for      *N*  ≤ 50

  dB for  50 < *N* ≤ 288

  dB for       288 < *N* ≤ 999

  dB for *N* ≥ 1 000

where:

 *Nv*[[2]](#footnote-2)is the maximum number of visible space stations – considering a minimum elevation angle equal to 0 degrees – from any location on the surface of the Earth and within the service area of the non-GSO system. *Nv* does not depend on latitude; it encompasses the maximum number of visible satellites across all latitudes within the service area of the relevant non-GSO system.

In the frequency band 18.8-19.3 GHz, these limits apply to emissions of any space station in a non-geostationary-satellite system in the fixed-satellite service for which complete coordination or notification information, as appropriate, has been received by the Radiocommunication Bureau after 17 November 1995, and which was not operational by that date.     (WRC‑23)

**Reasons:** CEPT is of the view that the equation contained in RR No. **21.16.6** is not appropriate for non-GSO systems whose total number of space stations is equal to or greater than 1 000. CEPT supports the approach that considers for *N* ≥ 1 000 (where *Nv* is the maximum number of space stations visible – considering a minimum elevation angle equal to 0 degrees – from any location on the surface to the Earth and within the service area of the non-GSO system. CEPT supports no change to the scaling factor equations indicated in RR No. **21.16.6** for *N*< 1 000. Furthermore, CEPT is of the view that the Bureau shall examine – using the amended equations above – those non-GSO systems that have been given a qualified favourable finding notified by those administrations that have requested the Bureau to do so based on the decision of WRC‑19 related to the “Scaling Factor”.

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1. 1 This agenda sub-item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations. Administrations are invited to inform the Director of the Radiocommunication Bureau of any difficulties or inconsistencies encountered in the Radio Regulations. [↑](#footnote-ref-1)
2. Where *Nv* is determined as follows: *Nv*= Max(*Nv*(*j*= 0,1,2...)) with *Nv*(*j*) = Max(*Nv*(*j*(*t*)), *Nv*(*j*(*t −*1))), where *Nv*(*j*(*t*)) represents all visible satellites (with elevation ≥ 0 degrees) at each time-step (*t)* on any point on the surface of the Earth (*j*). [↑](#footnote-ref-2)