

GEO, LEO and the future of EPFD

UK SPF Cluster 4 Workshop

GEO, LEO and the future of EPFD

Different discussions under one acronym

- The EPFD framework
- Article 22 limits
- Verification of compliance using ITU-R Rec. S.1503 Algorithm
- Discussion for WRC-27 ? WRC-31 ?
- ... not forgetting non-GSO aggregate interference (Res.76) !

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1/4 - The EPFD framework

- Hard limits
 - Compliance checked by the BR with parameters provided by the notifying administration
 - Appendix 4 parameters
 - SRS Database
- Operational limits: A non-GSO system needs to meet those limits at all times
- Verifiable limits
 - Compliance with EPFD limits even if measurement is challenging
 - Compliance with parameters provided by the notifying admin (e.g alpha angle, pfd mask...)



France supports to maintain the principle of the EPFD framework

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2/4 - Article 22 limits

- Participation to studies in WP 4A as called by the minutes of WRC-23
 - How the limits were derived
 - Procedures of ITU-R S.1323
 - GSO link database
 - ...
 - Room for improvement in the GSO / NGSO sharing depending on the frequency band?
 - Protection of GSO networks



France supports those studies, with the view to adopt balanced/consistent new epfd limits ensuring the continued protection of GSO networks

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3/4 - Verification of compliance using ITU-R Rec. S.1503 Algorithm

- Use of Rec. ITU-R S.1503 (and ITU-R S.1428 / BO.1443!)
 - Participation in the studies in WP 4A
 - « Enveloppe approach » vs. « Assessment of operational interference »
 - Changes to parameters should be supported by the reality of operations
 - « Obvious » mistakes should be fixed (e.g, Worst Case Geometry issue)



France supports to better model the behaviour of non-GSO systems while ensuring balanced assumptions/modelling

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4/4 – Discussion for WRC-27 ? WRC-31 ?

- Minutes of WRC-23 (11th meeting)

« WRC-23 invites ITU-R to conduct technical studies on the epfd limits in Article 22, including the epfd limits referred to in No. 22.5K, in order to ensure the continued protection of GSO FSS and BSS networks, and to inform WRC-27 of the results of the studies, without any regulatory consequences. This work should not be submitted under agenda item 9.1. »

- Better to adopt revised consistent/balanced epfd limits at WRC-27 for facilitating innovation
- Both GSO/NGSO operators need stability: no further refinement at WRC-31

Agence nationale des fréquences

T, +33 (0)1 45 18 72 72 78, avenue du Général de Gaulle
F, +33 (0)1 45 18 73 00 94707 MAISONS-ALFORT CEDEX

www.anfr.fr

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