

ESOA position on WRC15 AI 10 - Candidate Bands for IMT/5G Spectrum Identification

Frequency Bands allocated to Satellite **below** 31GHz

- ⇒ ESOA opposes sharing studies in view of IMT/5G identification in satellite bands below 31GHz as they are extensively used by FSS / MSS / BSS satellite services representing circa 100 billion USD of existing and planned investments.

Frequency Bands allocated to Satellite **above** 31GHz

- ⇒ ESOA notes that there are a number of bands allocated to FSS above 31 GHz, for which satellite operators are developing future HTS satellites in order to meet the ever-increasing demand for broadband satellite services. It is also noted that Radio Regulations No 5.516B identifies a number of bands above 31 GHz for use by high-density applications in the fixed-satellite service, and as such, ESOA does not support having these bands identified for studies under a future WRC-2019 for 5G/IMT 2020.
- ⇒ Bands above 31 GHz will be needed for satellite systems, but ESOA does not oppose ITU-R sharing studies provided (a) there are alternative candidates (b) a balance of needs of future terrestrial and satellite systems would be assured and (c) sustainable and viable access in the long-term to satellite services would be enabled in these frequency bands.
- ⇒ ESOA could support proposals to study the bands 59-66 GHz, 66-71 GHz, 71-76 GHz and 81-86 GHz for which it seems to be worldwide agreement to study (these bands have also been supported by the regional groups such as APT, CEPT, CITELE and RCC) and could provide wide and largely unconstrained bandwidth for 5G/IMT.
- ⇒ Furthermore at around 60 GHz (and frequencies above), oxygen absorption is such that it would facilitate the possibility of sharing the same band between services.

Non-Satellite Frequency Bands **above** 31GHz

- ⇒ ESOA supports proposals for sharing studies for IMT/5G identification in the bands not already allocated to FSS, BSS or MSS and specifically supports the band 31.8-33.4 GHz for which it seems to be worldwide agreement to study as it is currently supported by various regional groups such as APT, CEPT, CITEL and RCC.
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