



UK Spectrum Policy Forum Cluster Event on NTN / MSS

Ofcom - International Spectrum - Spectrum Group

21 November 2024



NTN opportunities (satellite or HAPs to you and me)

- Speedy broadband to the hardest to reach households
- Temporary ‘pop up’ broadband requirements
- Extending mobile coverage, including emergency messaging & calls
- IoT “SRD”
- Aeronautical and Maritime (actually not new)
- Resilience in the event of terrestrial outages
- Backhaul for remote fixed and wireless access networks (OneWeb)

From an international perspective.....



*“to consider, based on the results of studies, possible allocations to the mobile-satellite service and possible regulatory actions in the frequency bands **1 427-1 432 MHz** (space-to-Earth), **1 645.5-1 646.5 MHz** (space-to-Earth) (Earth-to-space), **1 880-1 920 MHz** (space-to-Earth) (Earth-to-space) and **2 010-2 025 MHz** (space-to-Earth) (Earth-to-space) required for the future development of **low-data-rate** non-geostationary mobile-satellite systems”*
(AI 1.12)

From an international perspective.....



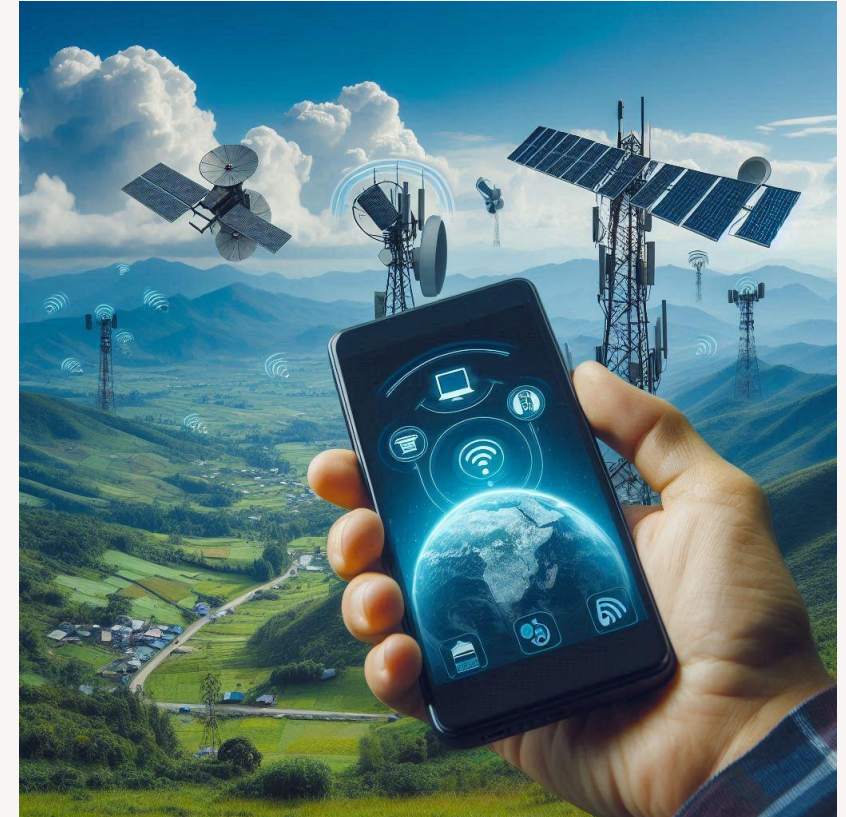
“to consider studies on possible new allocations to the mobile-satellite service for direct connectivity between space stations and International Mobile Telecommunications (IMT) user equipment to complement terrestrial IMT network coverage” (AI 1.13)

- a. Functionality and description of the MSS that provides direct connectivity to the IMT user equipment including authorization issues
- b. Technical and operational parameters of the MSS that provides direct connectivity to the IMT user equipment and the need to provide Earth-to-space link parameters
- c. Protection criterion of MSS that should be used in the sharing studies
- d. Operation outside national boundaries (including territorial waters)
- e. B6/B7 frequency arrangement inclusion to the band list.

From an international perspective.....

“to consider possible additional allocations to the mobile-satellite service” (AI 1.14)

- 2 010–2 025 MHz (Earth-to-space)
- **2 160–2 170 MHz** (space-to-Earth) in Regions 1 and 3, and
- **2 120–2 160 MHz** (Earth-to-space) in all Regions



From an international & national perspective.....

- Robust regulation or light touch?
- Coverage required or to be excluded?
- Coverage for me, not for thee?
- Conditions to protect adjacent bands?
- Radio astronomy protections?
- Allocations formally or via Article 4.4?
- Opportunities for PHY layer synergies?
- Must be via commercial agreement, or only via technical conditions?



Thank You

**Responses to our Call for input:
“Improving mobile connectivity from the sky
and space”**

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