

Unlocking Global Connectivity

Understanding Direct-to-Device (D2D) Communications



Direct-to-Device (D2D) communications bridge the connectivity gap by providing satellite connectivity to complement existing terrestrial networks. This approach is particularly beneficial in underserved areas, including rural, remote, urban, and suburban regions, leveraging economies of scale to enhance connectivity.

Comparing D2D Approaches



MSS Spectrum Approach

- Uses existing MSS spectrum
- Feasible within current regulatory frameworks
- Leverages 3GPP work on non-terrestrial networks (NTN)



Terrestrial Spectrum Approach

- Utilizes spectrum allocated to terrestrial services and licensed to mobile operators
- Requires significant changes to regulatory frameworks
- Potential interference and coexistence issues



Benefits of MSS-based D2D

- Preserves mobile network operator (MNO) spectrum, eliminating interference risk
- Leverages existing spectrum and satellite coverage to complement existing MNO infrastructure
- Connects underserved/unserved areas, including short-term, urgent requirements like disaster response
- Quick and cost-effective deployment



Regulatory Advantages

- No need for new regulations in most administrations
- Streamlined capacity procurement from MSS operators
- Reduced administrative burdens for MNOs

Ready for the future of global mobile connectivity?

We're here to help you stay connected to any device, anytime, anywhere.

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