

India Space Congress - 2023

# Direct to Device (D2D)

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# Direct to Device (D2D)

- ▶ Direct to Device (D2D) is a transformative technological development
- ▶ Standard smartphones and IoT devices will be able to connect seamlessly with traditional cellular base stations and satellite systems
- ▶ 570 million people, or 8.7% of the adult population - those living out of network coverage and on the 'edge' of coverage.
- ▶ IOT /M2M is another niche area
- ▶ No Dish & No Cell infra - enables improved cost and operational efficiency to mobile operators.
- ▶ \$30 billion by 2035 \*

# Direct to Device (D2D)

- ▶ 5G NTN offers the foundation
- ▶ The technical challenges of realizing chipsets for New Radio
- ▶ Dealing with the issues of Doppler shift, seamless switching
- ▶ Spectrum usage - the one used by IMT or the MSS or different or both
- ▶ Who to lead - Partnership platforms of satellite operators and telcos.
- ▶ AST SpaceMobile - Testing is a milestone

Going to be a Game Changer.

THANK YOU

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.