



SPACEX | BEREC WORKSHOP

MAY 2024



A satellite payload, likely a Starlink constellation, is shown in space. The payload consists of numerous small, white, rectangular satellites arranged in a grid-like pattern. The background is a view of Earth from space, showing the blue atmosphere and white clouds over a dark brown landmass.

ENGINEERED BY SPACEX

With both ground-to-satellite and satellite-to-satellite communications we're able to provide truly global coverage.



**PEOPLE USING STARLINK
IN INTERESTING WAYS -
EPIC AND EVERYDAY.**



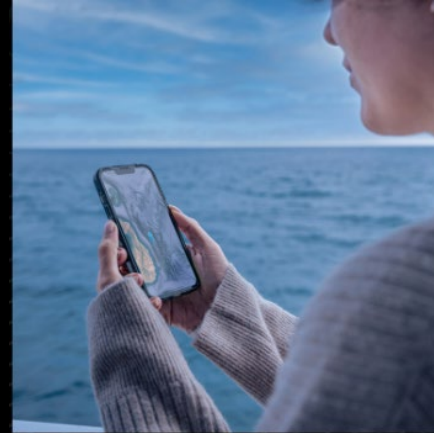


SpaceX is leveraging its experience in building rockets and spacecraft to deploy its direct to cell service and provide ubiquitous coverage from space

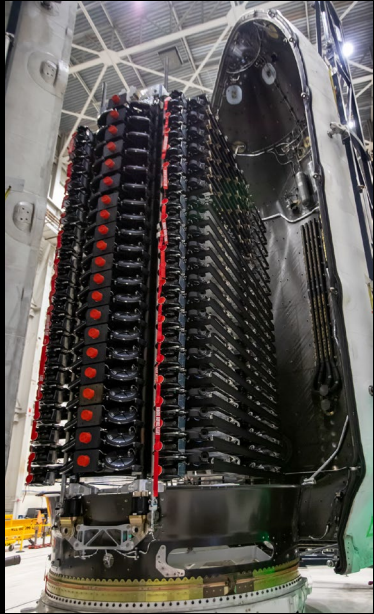


STARLINK DIRECT TO CELL

- Covering a range of frequencies to close mobile dead zones
- Extending coverage when terrestrial networks are unavailable
- No changes to device hardware or firmware required
- Partnerships announced in 7 countries



RECENT UPDATES



December 2023
Vehicle integration
(First six satellites)



January 2
First launch of direct to cell satellites

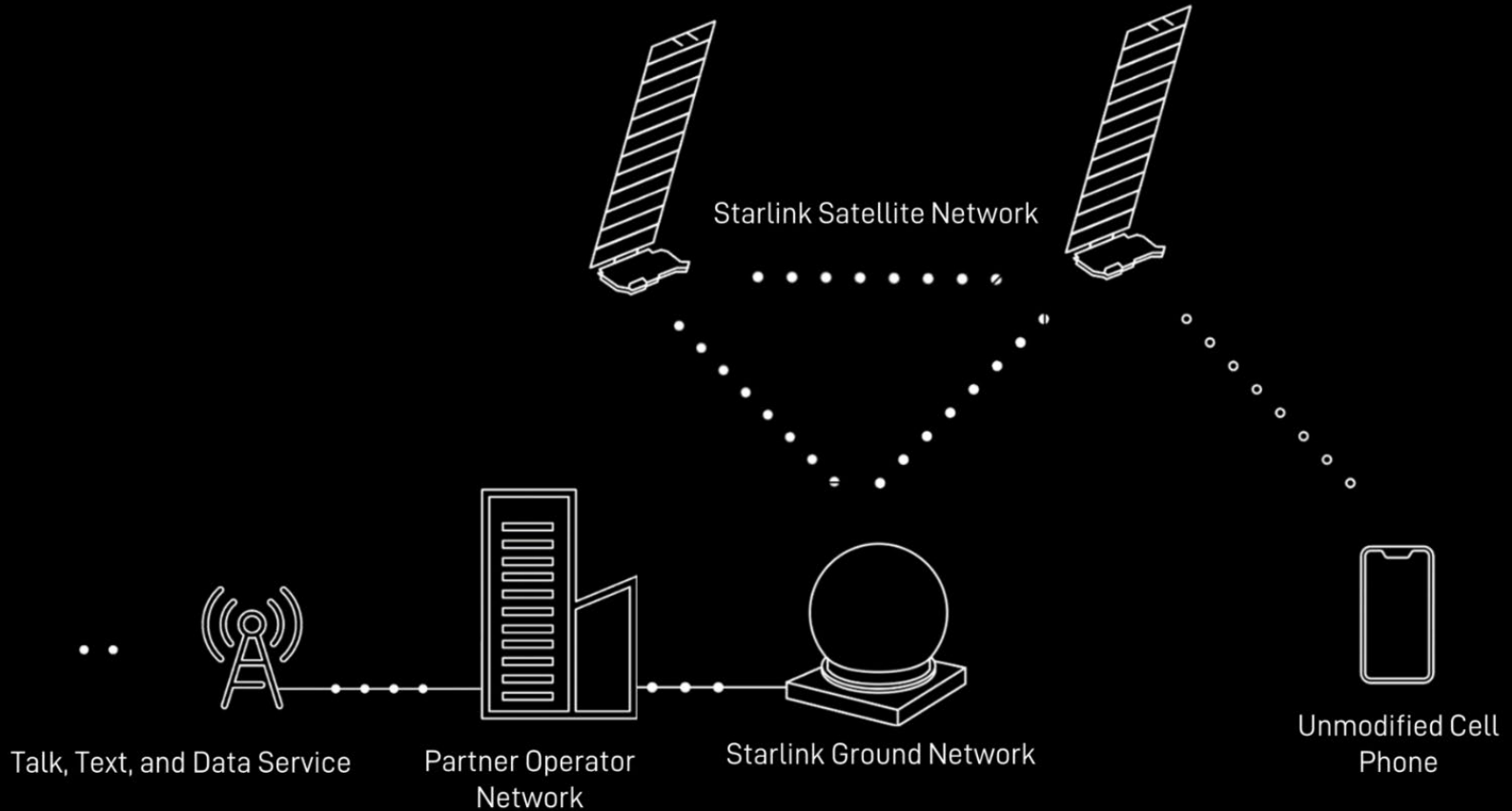


January 8 2024
Successful text exchange over
satellites in the US



April 6 & May 10 & 14 2024
Launch of direct to cell satellites
38 satellites currently enabled

DIRECT TO CELL NETWORK ARCHITECTURE



APPROACHES TO DIRECT TO CELL

- In March 2023, the US FCC announced its supplemental coverage from space draft framework - a flexible spectrum access framework to enable satellite direct to cell services using terrestrial spectrum
- These services are commonly called “supplemental coverage from space” “direct to device,” “direct to cell,” “satellite direct to mobile,” “D2C”
- The ECC, Australia, Brazil, and others are developing unique regulatory approaches to enable D2C
- WRC-27 will consider global harmonization to support direct to cell technologies in a number of spectrum bands



LOOKING AHEAD

- Existing regulatory frameworks can be considered for direct to cell
- Forward looking approaches will enable rapid deployment of this important service
- European harmonization should allow for flexibility at the national level, given unique market conditions

