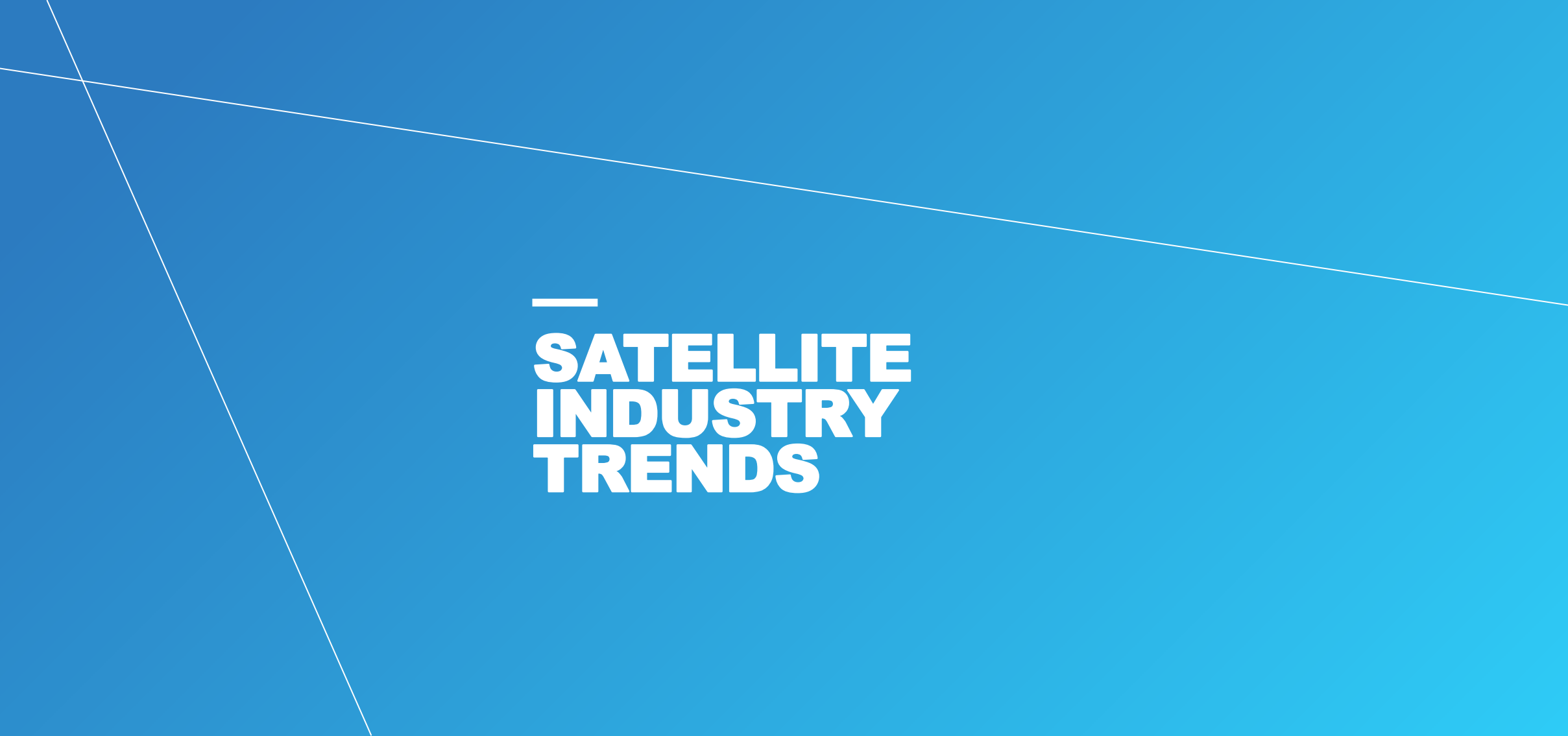




REDEFINING SATELLITE COMMUNICATIONS AND CONNECTIVITY

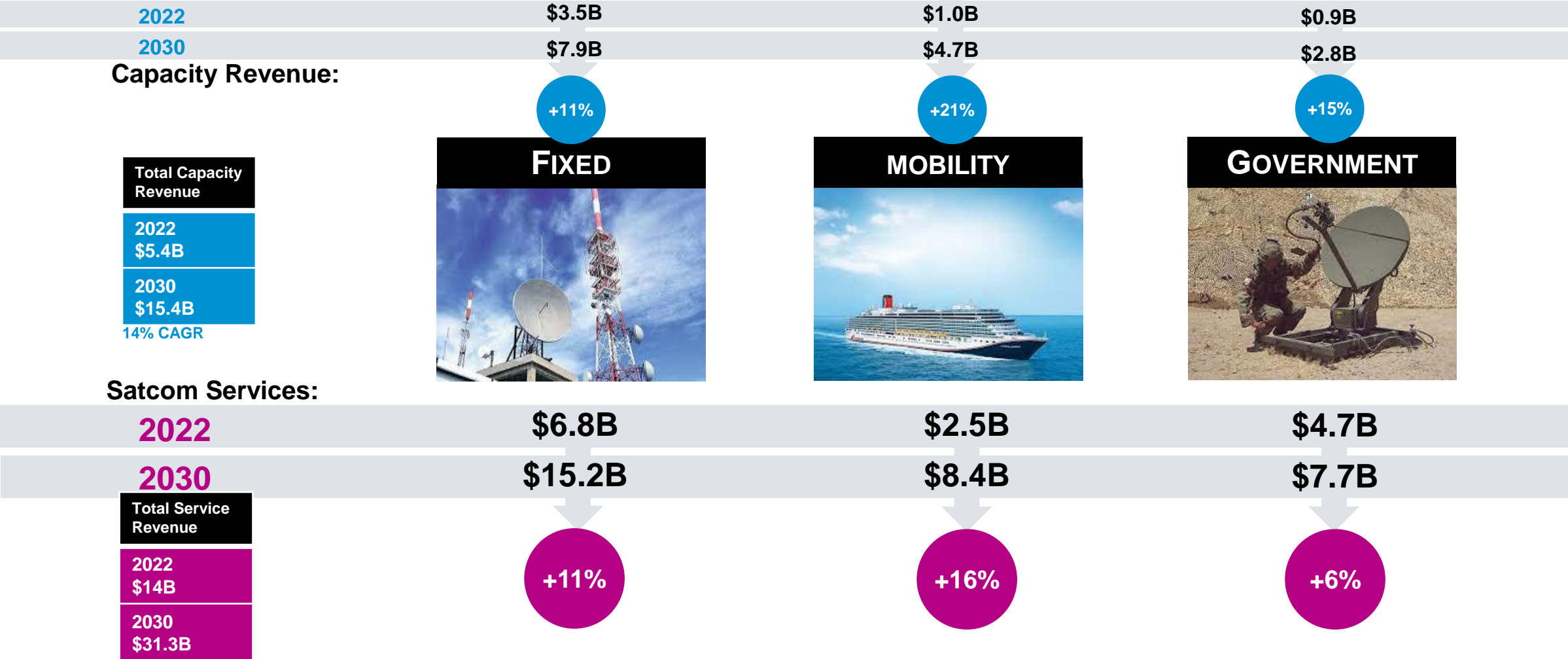
Presented by
Khayalya Aliyeva



The background of the slide is a solid blue color. It features two thin white lines: one is a diagonal line running from the top-left towards the bottom-right, and the other is a line that starts near the top-left and extends horizontally towards the right, slightly angled downwards. These lines intersect to form a large, irregular shape on the left side of the slide.

SATELLITE INDUSTRY TRENDS

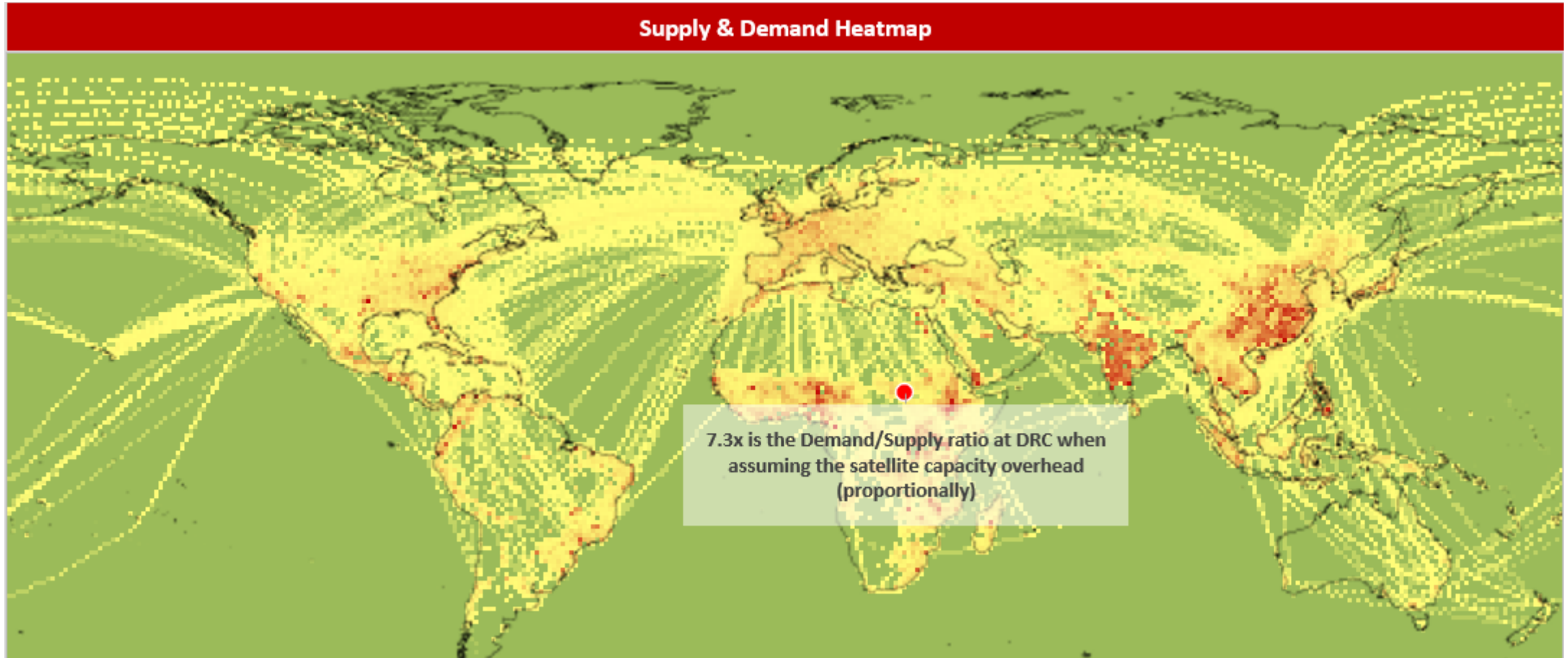
Market Size And Growth Projections



Satcom Market Outlook: Service and Capacity revenues. Excl. Consumer BB and MSS Source: NSR

Capacity Supply Heat Map

Demand will still outpace supply in key areas



Terrestrial Technologies Evolution

5G Subscription Uptake Expected to be Faster than 4G

Figure 1: Mobile subscriptions by technology (billion)

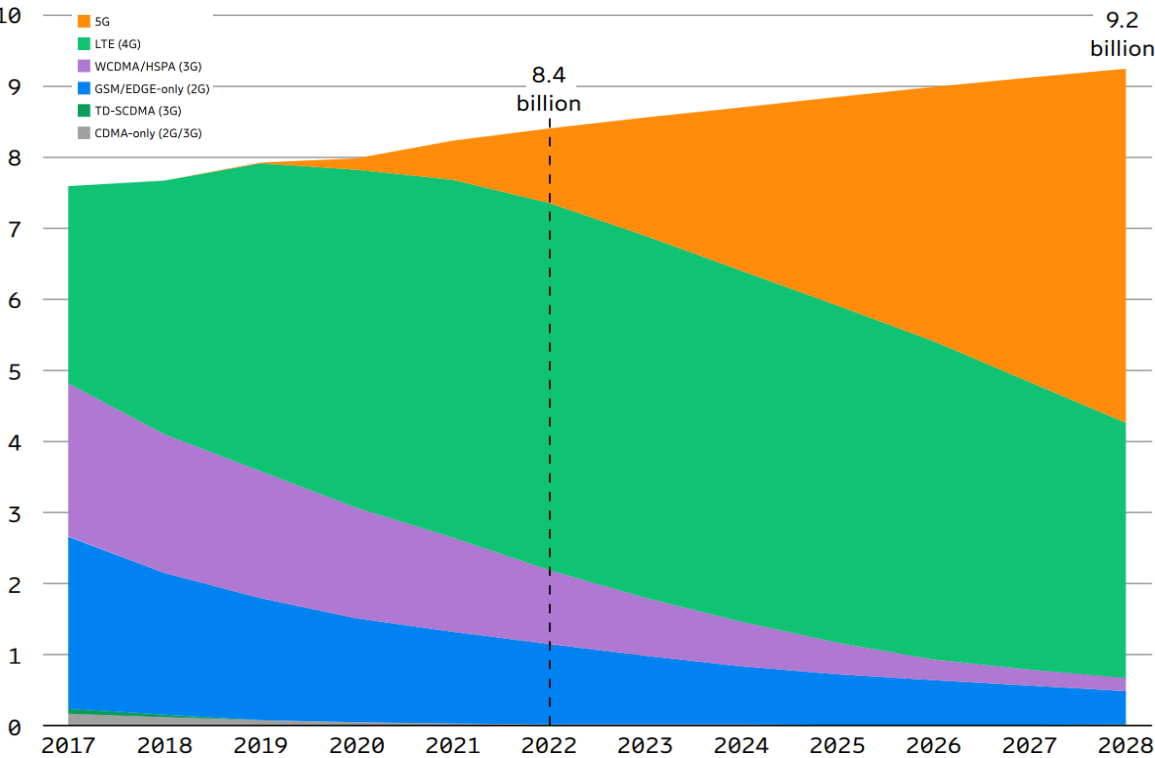
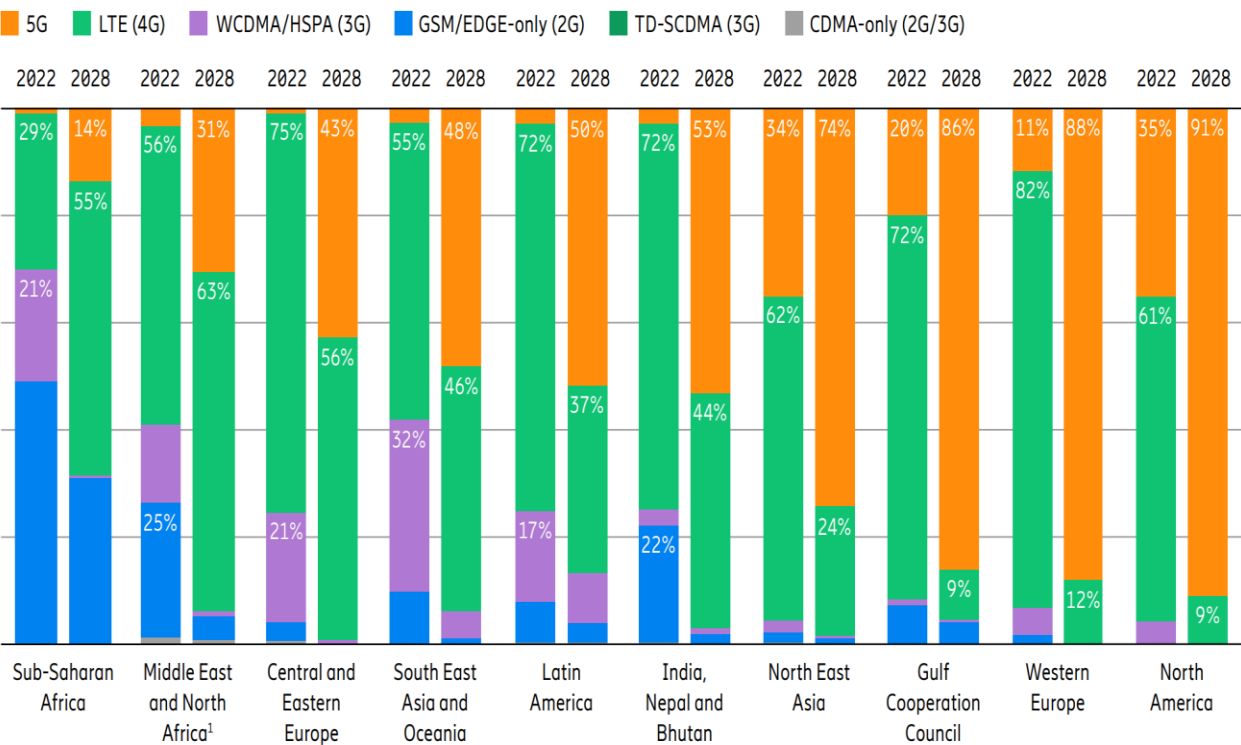


Figure 4: Mobile subscriptions by region and technology (percent)

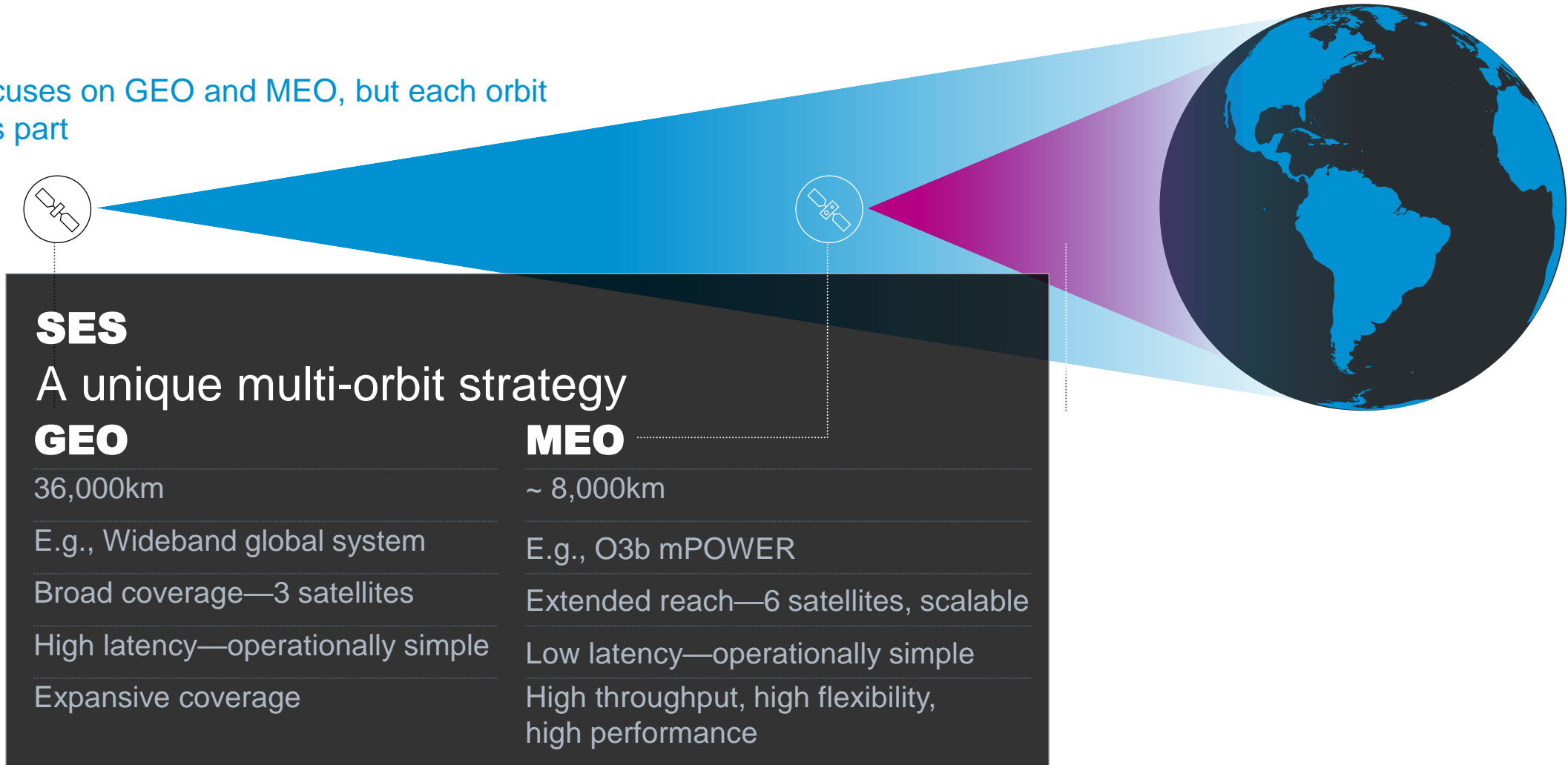


Source: Ericsson Mobility Report 2022

OPTIMAL ORBIT: **GEO, MEO, or LEO?**

Comparing orbits

SES focuses on GEO and MEO, but each orbit plays its part



GEO ASSETS FOR UZBEKISTAN REGION

NSS-12 | 57°E

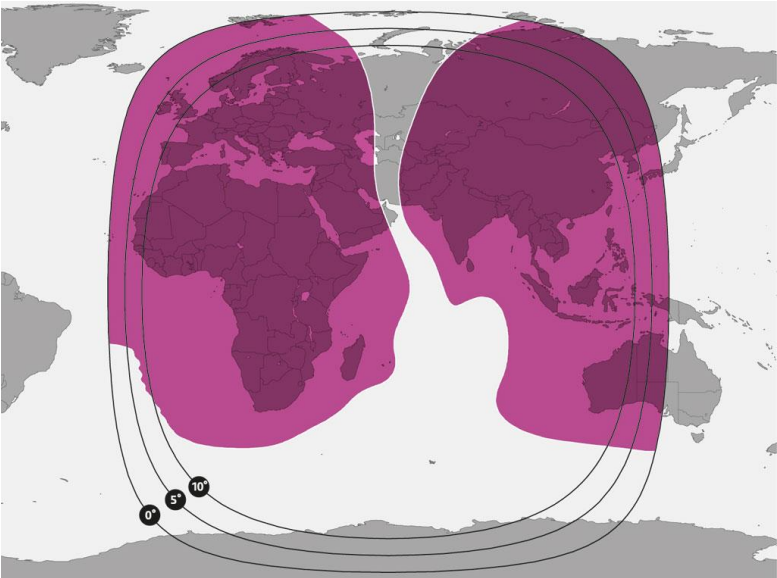
NSS-12 supports DTH (Direct-to-Home) services and delivers mobile backhaul services over the Middle East and Europe, Central and South Asia and East Africa

EXPANDING POWER AND COVERAGE OVER EUROPE, AFRICA AND ASIA

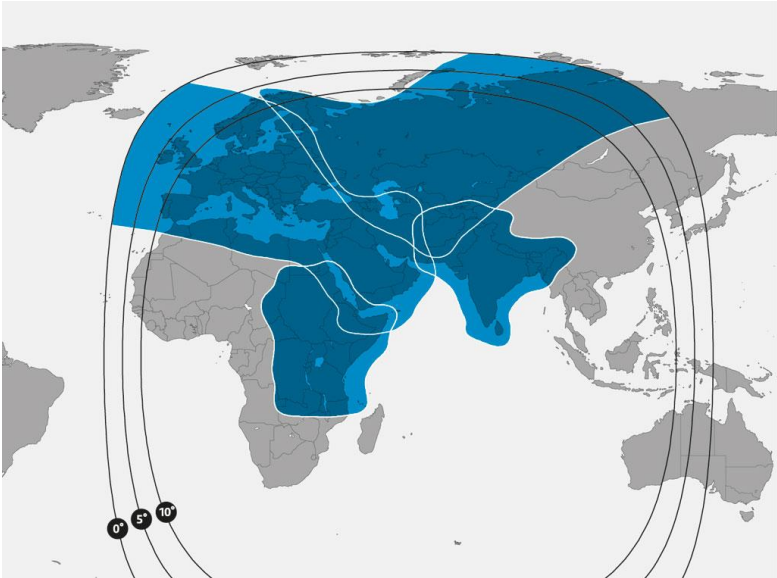
Coverage

Europe | Russia & the CIS | Middle East & North Africa
Sub-Saharan Africa | South Asia | Asia-Pacific | Indian Ocean Region

● Elevation angle



NSS-12 C-band coverage



NSS-12 Ku-band coverage

Launch date	Launch vehicle
29 October 2009	Ariane 5 ECA
Design life	Satellite manufacturer
15 years	Space Systems Loral
Polarisation	Total transponders
C-band: Circular	C-band: 40
Ku-band: Linear	Ku-band: 48

SES-12 | 95°E

Supporting our customers’ DTH broadcast, VSAT, mobility via Ku wide beams

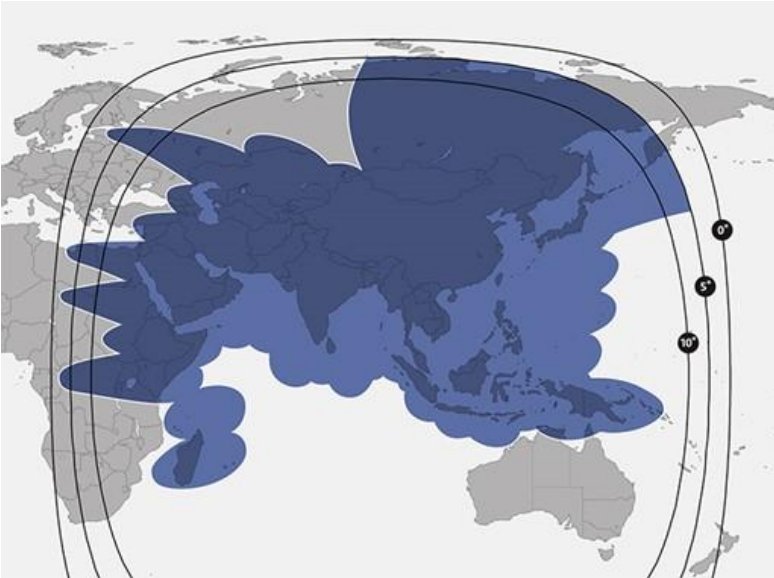
Providing HTS data connectivity via Ku spot beams

HTS CAPACITY
ACROSS ASIA-PACIFIC
REGION

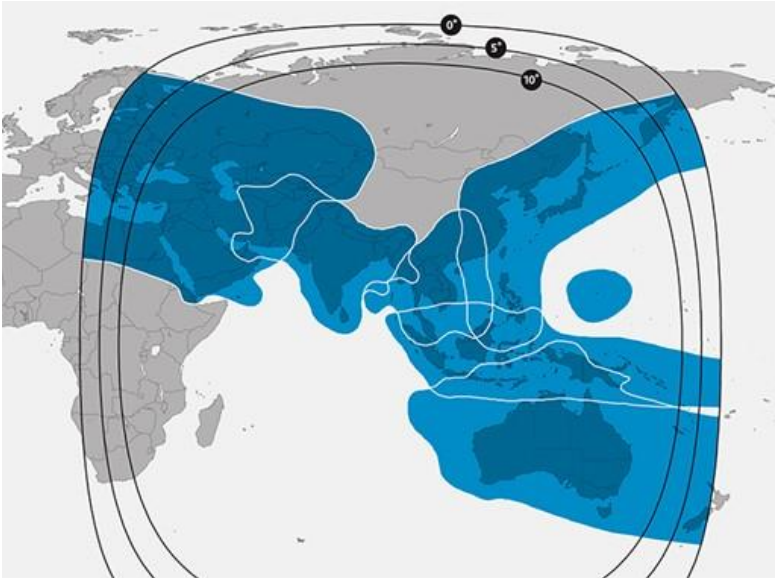
Coverage

Europe | Russia & the CIS | Middle East
Africa | Asia-Pacific | Ocean Regions

● Elevation angle



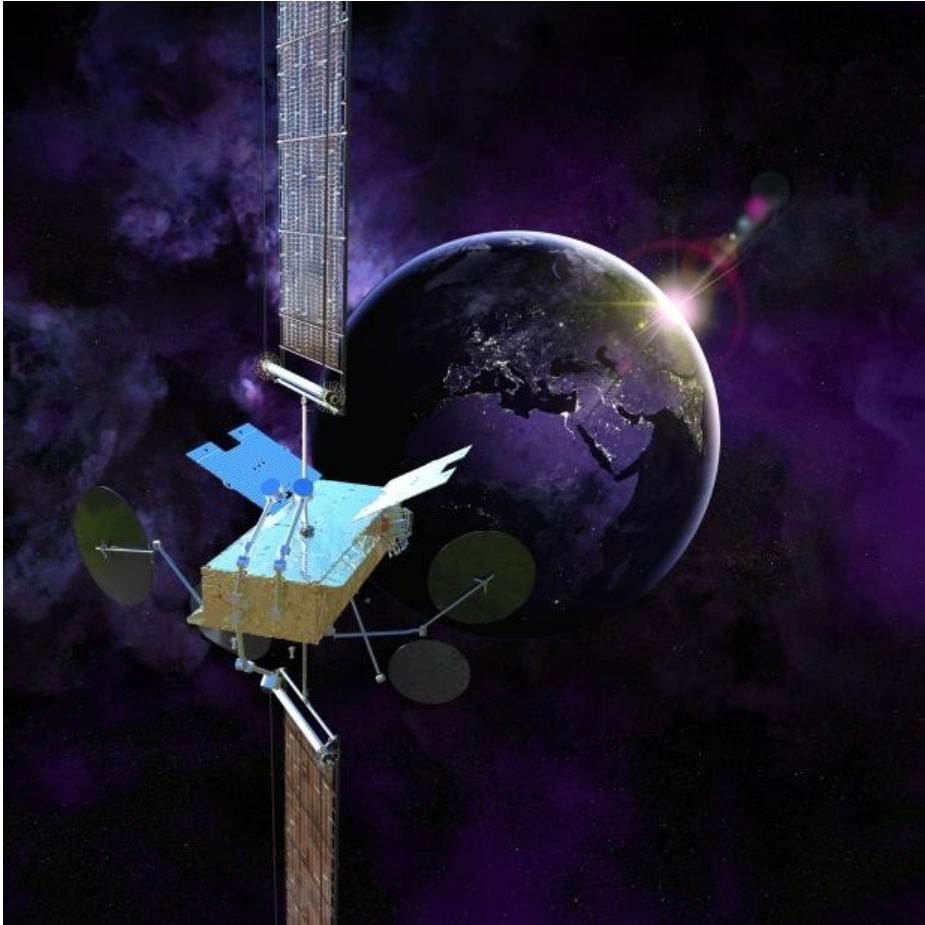
SES-12 Ku-band HTS outer contours



SES-12 Ku-band coverage

Launch date 4 June 2018	Launch vehicle Ariane 5
Design life 15 years	Satellite manufacturer Airbus Defence & Space
Polarisation Ku-band: Linear	Total transponders Ku-band: 54

Coming Soon to 57°East : SES-26



- ▲ Successor to **NSS-12**
- ▲ Fully software-defined payload for incredible **scalability**
- ▲ Coverage across Europe, Africa, Middle East, Central Asia, and Asia-Pacific
- ▲ First **Inspire** (INstant **SP**ace In-orbit **RE**configuration) satellite by Thales Alenia Space maximizes **flexibility**

“For over 20 years, satellites at 57°East have been at the centrepiece of our connectivity network bridging Europe to Africa, the Middle East and Asia. From broadcasting video content across Europe and Africa to delivering connectivity services for aviation, maritime and government, SES-26 underlines our commitment to the growth of our business and to our customers.”

– Steve Collar, CEO of SES





April 2023

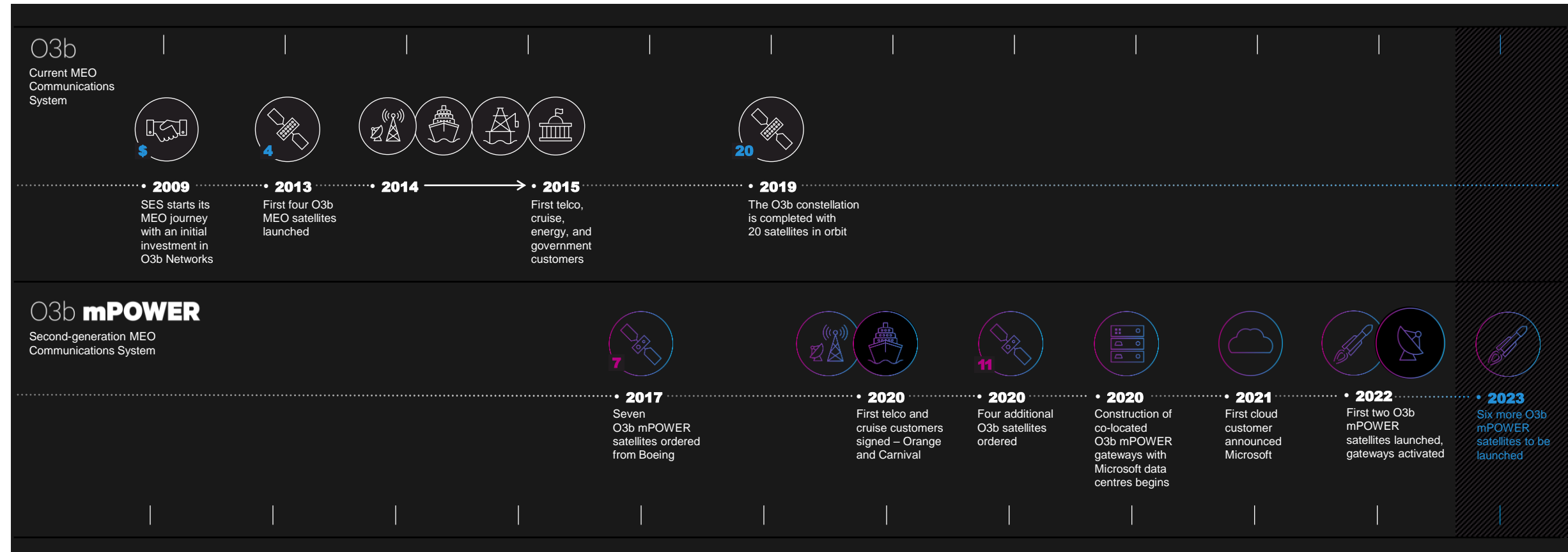
T - 00:00:10

03b mPOWER

O3b mPOWER OVERVIEW

Our Medium Earth Orbit (MEO) Journey

Reimagine connecting everyone worldwide with unprecedented high-performance networks



Learn more about O3b mPOWER: ses.com/newsroom/o3b-mpower

O3b mPOWER

PERFORMANCE ABOVE ALL



Industry-best throughput
with flexible forward and return paths

Predictable low latency
decimating jitter & packet loss

**All guaranteed
by unmatched
SLA**

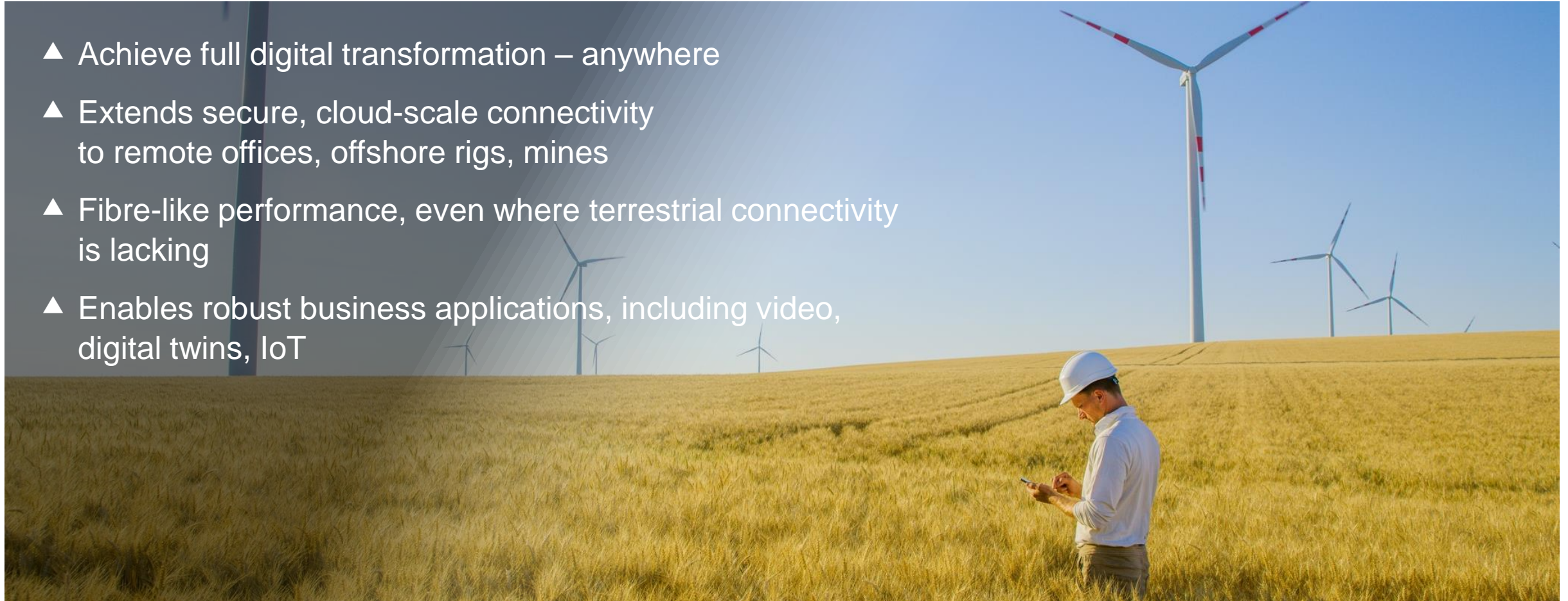
High availability
in space and on the ground

Unprecedented flexibility
as an enabler of high performance

O3b mPOWER for Telcos & Enterprises

Empowering Enterprise, Energy, and Mining

- ▲ Achieve full digital transformation – anywhere
- ▲ Extends secure, cloud-scale connectivity to remote offices, offshore rigs, mines
- ▲ Fibre-like performance, even where terrestrial connectivity is lacking
- ▲ Enables robust business applications, including video, digital twins, IoT



O3b mPOWER for MNOs


Empowering LTE & 5G networks

- ▲ Brings mobile broadband, video and other content-rich services to developing markets
- ▲ Globalising LTE, futureproof to 5G
- ▲ Empowers digital inclusion initiatives
- ▲ Enables new services in underserved areas and “fill-in” coverage gaps in developed markets
- ▲ In-country gateways
- ▲ Supports advanced apps and architectures



O3b mPOWER for Military / Governments

Empowering network security and safety

- 
- ▲ Ensures secure, real-time data and communications for rapidly-deployed assets and operations anywhere
 - ▲ Multiple layers of active and inherent security
 - ▲ Dynamically allocated and formed beams follow assets moving on ground, at sea, or in air
 - ▲ Sovereign Gateways provide unrivalled Government control, security, privacy, and compliance

O3b mPOWER Customers

Industry leaders ready to leverage power of MEO services

**5 OF THE WORLD'S
TOP 6 CRUISE LINES,
INCLUDING:**



**MNO, CLOUD, AND
SERVICE PARTNERS,
INCLUDING:**



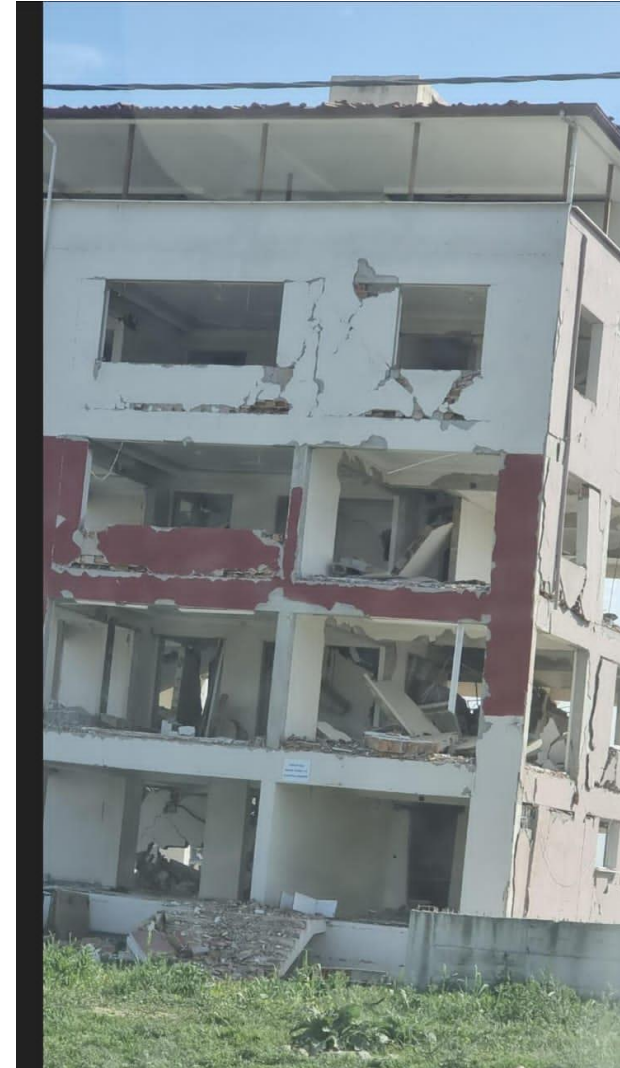
Microsoft



**LANDMARK JOINT
VENTURE PARTNERSHIP
IN INDIA:**



Earthquake relief in Turkiye



Khayalya Aliyeva

Sales Director, Middle East & Central Asia

khayalya.aliyeva@ses.com

