



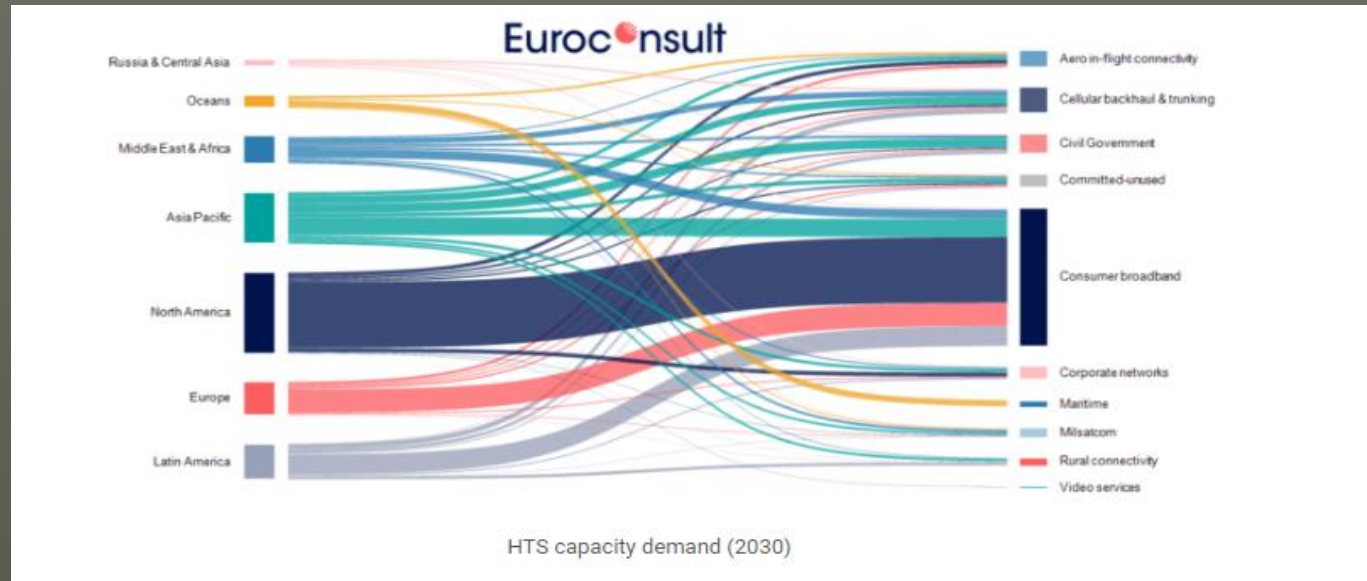
# **COMTECH**

**INNOVATE. ACCELERATE.**

**MATCHING THE HTS/VHTS CAPABILITIES WITH GROUND  
INFRASTRUCTURE REALITY.  
AN UPDATE ON TECHNOLOGICAL CHALLENGES AND  
SOLUTIONS**

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Global HTS capacity supply is expected to surpass 60Tbps within 5 years

NGSO are projected to account for 90% of capacity supply by 2026

Software-defined satellite platforms represent more than 80% of GEO-HTS orders in 2021 alone. (Euroconsult 2022)

# Ground Infrastructure Challenges



The ground station segment to remain stable over the 2022 – 2031 period

Year-on-year growth of 1.4% and a forecasted market value of \$3.6 Billion by 2031



Massive ground infrastructure investment

Very large EIRP on teleports

Most existing teleports not adequate

Will require complex traffic orchestration between GEO-MEO-LEO- 5G Terrestrial

Fast satellite acquisition (< 50 msec)

High Doppler Resilience, low jitter

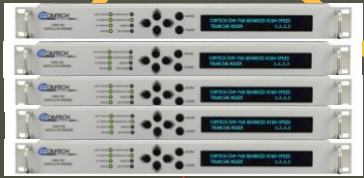
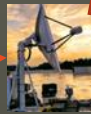
Blind acquisition in GPS denied environments

Traffic resilience, security, anti jamming capabilities



Traditional Point to Point High-Capacity Link  
250 MHz transponders with frequency agility  
500 Msps modems  
256 APSK



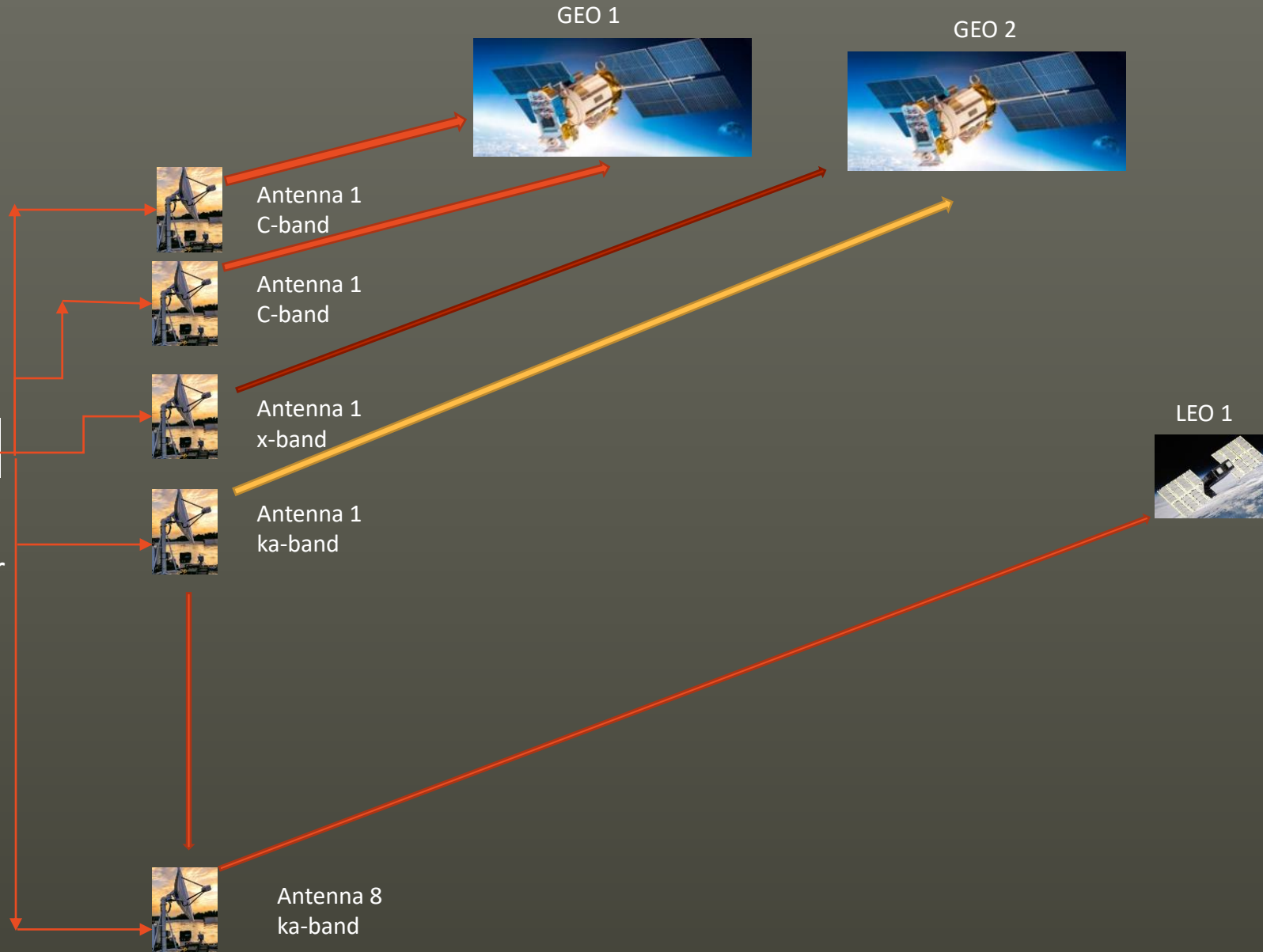


High-Capacity traffic recovery via  
Spectrum Multiplexing





High data traffic with  
Spectrum Multiplexing over  
multiple transponders and  
satellites, LEO/MEO/GEO

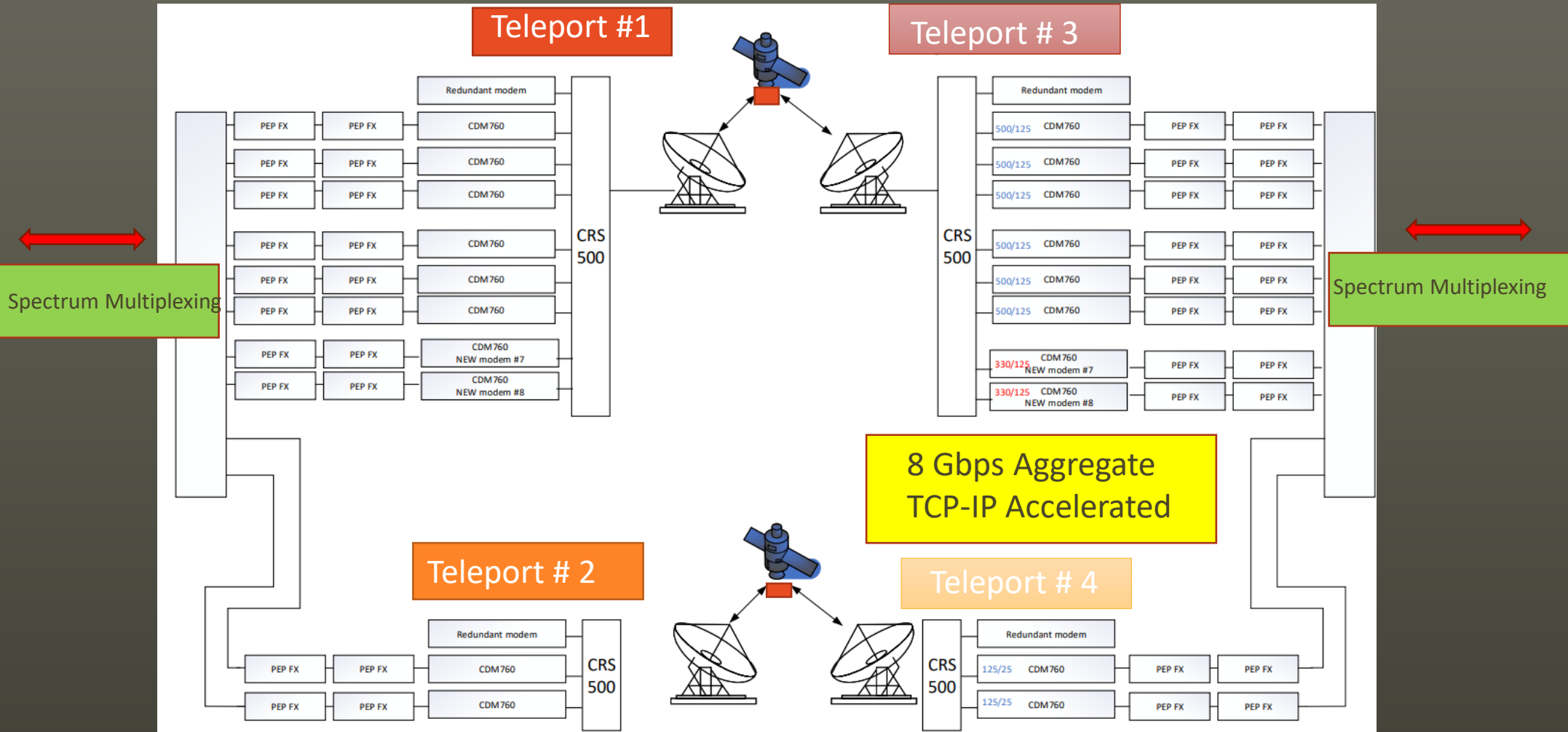








# Customer Solution for Resilient Very High Thruput





Thank you



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