SES[^]



DateJune 2023

O3b mPOWER is SES's secondgeneration medium earth orbit (MEO) system. It builds on the proven commercial success of SES's current O3b constellation, which has been delivering low-latency, fibre-like services since 2014. With a fleet of 20 MEO satellites, O3b supports:



Mobile networks with more than 15 million end users



Four out of the top six oil and gas super majors



Five of the top six cruise lines



And enabling the cloudscale era for millions of people worldwide

O3b mPOWER

O3b mPOWER system comprises an initial constellation of 11 highthroughput satellites that will operate 8,000km away from the Earth's surface, as well as extensive ground infrastructure. With four satellites already launched and more launching soon, O3b mPOWER services will deliver unrivalled performance to our mobility, telecom, government, and enterprise customers, enabling their most critical operations and key revenue streams with high throughput, predictable low latency, and high availability, all backed by robust service level agreements.

Built by Boeing and launched by SpaceX, the O3b mPOWER system comprises more than 30 technology partners that range from ground system partners (e.g. Intellian, AvL, Isotropic Systems, Gilat, ST Engineering iDirect, Comtech) to software development partners (e.g. Amdocs, Kythera Space Solutions, Microsoft).

Key details include:

Capacity

Terabit-level system capacity based on dynamic ability to deliver thousands of uncontended managed services from tens of Mbps up to multiple Gbps per service.

Flexibility

Route customer traffic anywhere, optimise forward and return path, bandwidth provisioning and control network resources to dynamically allocate capacity where needed.

Coverage

Expansive reach covering 96% of the global population.

O3b mPOWER

VERTICAL MARKETS & CUSTOMERS

Mobility

Cruise, commercial shipping, and aero

• Telecom

Telco, mobile network operators, and cloud providers

Government

Military, government agencies, and non-governmental organisations

• Enterprise

Oil & gas, mining, and other businesses

03b mPOWER CUSTOMERS

MNO, Cloud, and Service Partners:















Cruise:



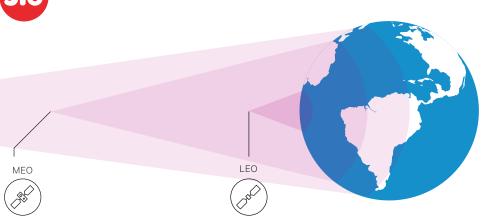






Joint Venture:





GEO	NGSO MEO	NGSO LEO
36,000km	~ 8,000km	~ 1,000km
Medium latency (~700 msec)	Low latency (~150 msec)	Very low latency (~50 msec)*
Very large Earth view	Large Earth view	Small Earth view
Few fixed gateways	Several flexible gateways	Numerous local gateways
Stationary antennas (3 satellites for global coverage)	1-hour slow tracking (6 satellites for coverage)	10-minute fast tracking (100's-1,000's needed for coverage)
Proven, deployable technology	Proven, deployable technology'	Technology still in development for satellite internet

* Gateway distance, ISL & ground network dependent



GEO







