

Date
April 2022

O3b mPOWER

O3b mPOWER 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



Four of the top five cruise lines



And enabling the cloudscale era for **millions of people worldwide**

SES's O3b mPOWER communications system comprises an initial constellation of 11 high-throughput and low-latency satellites, as well as extensive ground infrastructure across the globe. To be launched in 2022, SES's second-generation medium earth orbit (MEO) constellation will operate 8,000km away from the Earth's surface, and deliver low-latency connectivity services to mobility, telecom, government, and enterprise customers around the globe. O3b mPOWER is designed with the capacity, reach, and performance to enable the cloud-connected world on land, at sea, and in the air.

Built by Boeing and to be 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.

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

O3b mPOWER CUSTOMERS

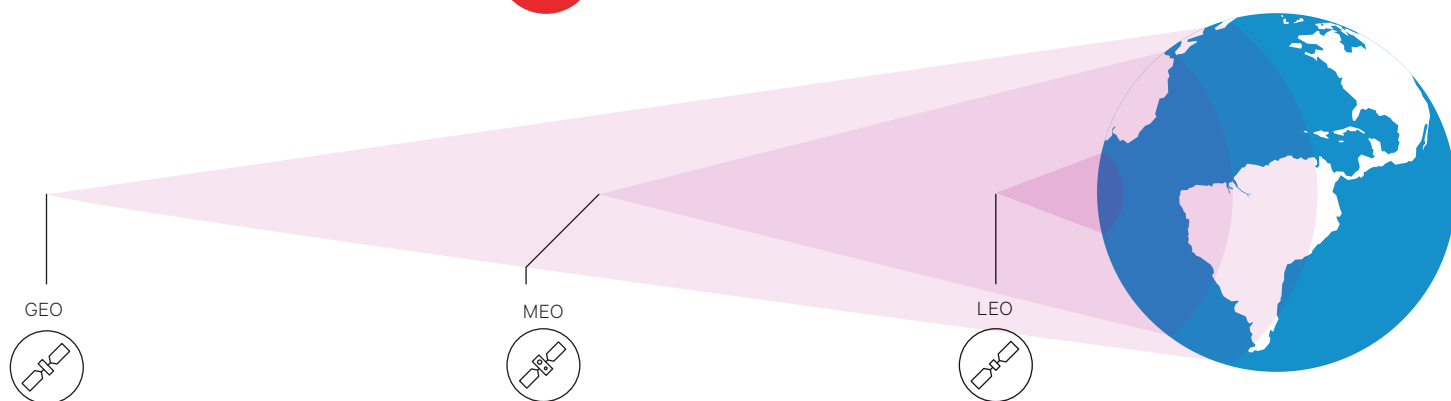
MNO, Cloud, and Service Partners:



Cruise:



Joint Venture:



GEO

36,000km

Medium latency (~700 msec)

Very large Earth view

Few fixed gateways

Stationary antennas (3 satellites for global coverage)

Proven, deployable technology

NGSO MEO

~ 8,000km

Low latency (~150 msec)

Large Earth view

Several flexible gateways

1-hour slow tracking
(6 satellites for coverage)

Proven, deployable technology'

NGSO LEO

~ 1,000km

Very low latency (~50 msec)*

Small Earth view

Numerous local gateways

10-minute fast tracking
(100's-1,000's needed for coverage)

Technology still in development
for satellite internet

* Gateway distance, ISL & ground network dependent



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

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