# SES<sup>^</sup>



#### **Date**

November 2022

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

## **O3b mPOWER**

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.

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:**



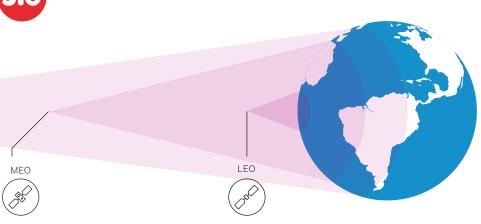






#### **Joint Venture:**







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

\* Gateway distance, ISL & ground network dependent











