



O3b mPOWER Overview

UNLEASHING THE POTENTIAL OF AN EMPOWERED WORLD

O3b mPOWER is a unique system of advanced communication satellites and innovative ground infrastructure, fully integrated with the existing SES fleet and extended through an ecosystem of partners, to empower exponentially more people, communities, and businesses with opportunities created by truly global cloud-scale connectivity.

The O3b mPOWER Vision

The passion of the SES Networks team has always been to connect more people with more opportunities. We've proven that we can transform lives around the world, as well as the satellite industry itself. As part of SES, we have both the experience and the resources to continue delivering on this vision, and with O3b mPOWER we're taking it to the next level.

With O3b mPOWER, SES Networks is laying out its blueprint to transform the communications industry and unlock pent-up demand for high-growth data services. The original O3b MEO constellation was always envisioned as the first step in a bold and strategic evolution in global data services, and now O3b mPOWER facilitates the rapid shift to a cloud-based world – anywhere in the world.

To meet the demand, O3b mPOWER scales the proven O3b model to deliver a ubiquitous, low-latency “virtual fibre” network to 30,000+ endpoints while seamlessly integrating with all other network infrastructure – from GEO satellites to fibre to microwave and for innovations from service and content providers aimed at connecting more people than ever.

O3b mPOWER challenges the conventional wisdom of what satellite services can do. As a high-powered, highly distributed network and system, O3b mPOWER has the ability to provide millions more people, businesses, content, cell towers and data centres with high-performance cloud-scale connectivity. As a result, it expands the role of satellite in an increasingly seamless global networking environment, and it opens a world of digital opportunity for people and organisations of all sizes regardless of their location or application requirements.

In short, O3b mPOWER is the highest-capacity, farthest-reaching, and most flexible satellite-based communications system ever. And it has the potential to empower more people with the opportunities that come with high-performance connectivity than ever before.

O3b mPOWER TECHNOLOGY

A system unlike any other, O3b mPOWER includes step change technology advancements, including a new constellation of advanced MEO satellites converged with innovative, ground infrastructure and new software intelligence. The result is low latency, cloud-scale connectivity for application-aware services that is available virtually anywhere in the world.

SATELLITE INNOVATION

O3b mPOWER sets new industry benchmarks across multiple performance metrics:

- Capacity – capable of delivering multiple terabits of throughput globally and can scale to tens of terabits
- Flexibility – intelligent beamforming enables the ability to shape, moderate, route, shift and switch beams to tailor and deliver bandwidth virtually anywhere
- Coverage – more than 30,000 formed beams systemwide provide unrivaled coverage of +/- 50 degrees latitude for nearly 400 million km², with full global coverage possible via inclined planes
- Productivity – with market-leading capacity, flexibility and coverage, O3b mPOWER is highly focused on visible earth and is capable of being fully productive 100% of the time – directing bandwidth to customers, not empty territory

CUSTOMER EDGE TERMINALS

O3b mPOWER introduces a new concept in network endpoints: Customer Edge Terminals. Bringing together application-specific antennas, storage, compute and routing resources, virtualised network functions and network intelligence in a small device that is fast and simple to install, O3b mPOWER puts high-performance data services in reach for more kinds of customers and in more places than ever before.

INTELLIGENT SOFTWARE

Software-defined networking capabilities enable O3b mPOWER to deliver services that are automated, agile and assured. In addition to the introduction of software-defined WAN services, the software behind O3b mPOWER provides the ability to route traffic by application over GEO, MEO and terrestrial links for intelligent resiliency. These advanced capabilities drive efficiency, reliability, and flexibility for customers and their end-users.

CUSTOMERS & MARKETS

Data services are the growth engine for the industry as customers across markets look to low-latency networks to facilitate the massive shift from local storage to cloud-based, network-centric operations. O3b mPOWER is designed to meet the global demand for an “on-demand” experience in the digital economy.



Telco and Enterprise – managed applications, intelligent traffic routing and more pervasive, high-performance connectivity designed for cloud-based applications



Mobile Network Operators – high-performance, rapidly deployable solutions to expand network footprints, connect more towers, and migrate toward 5G



Maritime/Aero – brings a premium, virtual fibre experience to more routes, smaller vessels, and commercial fleets, and brings the benefits of MEO-based service to the mass aero market



Government – secure, flexible and ubiquitous connectivity for today's high-tech military and its network-centric operations, as well as humanitarian operations

PARTNER ECOSYSTEM

O3b mPOWER represents an open invitation and a major business opportunity for the entire industry to innovate and grow. From leading technology providers to value-add service partners, SES Networks envisions an ecosystem of suppliers that will collaborate and leverage the capabilities of O3b mPOWER to create the most compelling, cost-effective, end-to-end experience for customers.

Learn more about SES Networks' full portfolio of services and solutions.
Website: ses.com/networks

