



Downlink real-time sensor data immediately without contact gaps.



Continuous relay contact from LEOs directly to user terminals.



Up to 100s of Mbps per link from 100s of simultaneous contacts.



Waveform-agnostic and flexibility to support a range of customer security, transport and CONOPs needs.



Direct connectivity to cloud-based data processing and analytics systems.



LEO link latency and SWaP advantages relative to GEO.



Automated control for establishing relay contact with your satellites.

## Always In View Connectivity Using Space Data Relay

Real-time, on-demand and continuous LEO data relay services with O3b mPOWER and tasking/command relay services through SES's GEO C-band satellites.

Most Low Earth Orbit (LEO) observation satellites can only downlink data as they pass directly over a ground station, which can delay the delivery of mission data by hours. This limits decision-makers' access to critical real time information – often in situations where every minute counts.

SES's O3b mPOWER relay services dramatically reduce that delay. Gain persistent, real-time connectivity to your space sensor data, with the flexibility to downlink immediately, without waiting for the next ground station pass.

Building on the proven technology of SES's O3b Medium Earth Orbit (MEO)

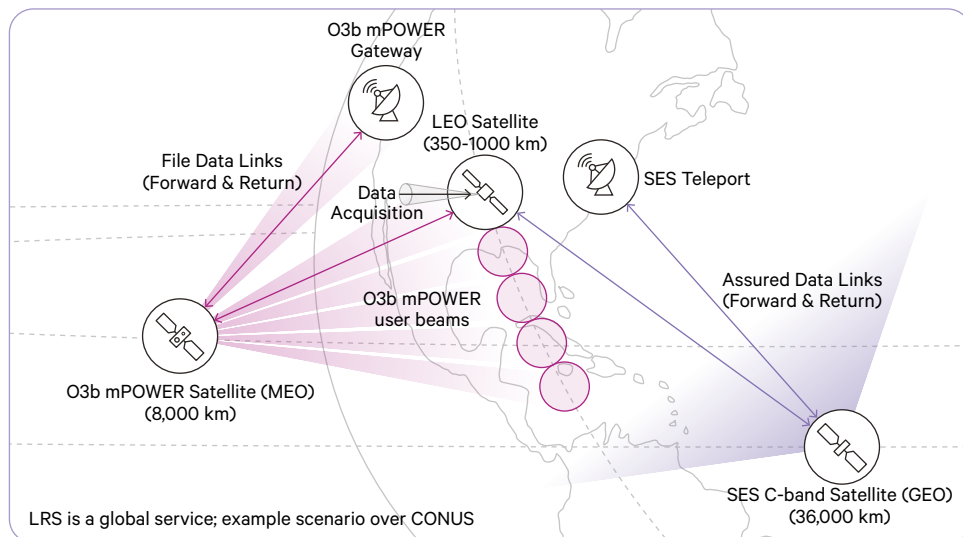
constellation, the next-generation O3b mPOWER system allows LEO data to be relayed anytime and anywhere along the LEO spacecraft's orbit. And GEO C-band allows tasking or command messages from LEO to GEO for real-time tip and queue capability for earth observation missions.

Unlock the value of real-time connectivity to your space sensor data for imagery, SAR, hyperspectral, RF, weather, global security, safety, and other situational awareness applications, as well as communications for human space flight vehicles and scientific observation.

Talk to us to learn more about our LEO Relay Service (LRS).

# Harness an All-Orbit Capability for Real-time Insights

Contact us to learn more about how we are demonstrating O3b mPOWER-enabled space relays today, and how GEO C-band provides tip and queue for Earth Observation. We can help you deliver faster insights to decision-makers, expand your data products and meet future customer missions with our LEO Relay Service (LRS).



## Real-Time Data Delivery

Continuous contact channels within each MEO region enable the immediate transfer of sensor data on capture. Downlink your mission data immediately without waiting for the next ground station pass. Eliminate contact gaps over oceans or inaccessible territories. Offer real-time data or imagery for in-theatre operations, weather, maritime, and situational awareness use cases and products. Capitalize on continuous up-link for real-time command to LEO assets or software and data upload.

## Always in View

O3b mPOWER's field of view offers continuous line-of-sight to LEO spacecraft at almost any latitude for relay to gateways and geographically dispersed user terminals.

## Waveform-Agnostic

Implement your own security and transmission standards and terminals over our waveform-agnostic Ka-band RF architecture, which can be integrated into any operational environment. Virtualize and innovate with evolving SDR waveforms.

## Resiliency & Path Diversity

Any LEO spacecraft will always have several O3b mPOWER satellites in view, allowing optimal line-of-site selection, path diversity and resiliency.

## Direct Delivery to Users in The Field

O3b mPOWER can add simultaneous return link beams for direct delivery to user terminals whether on land, at sea, in air or in space. Send data in real-time to where it's needed, including locations beyond the line of sight of gateway beams, via our low-probability of intercept (LPI) relay technology.

## Direct Cloud Connectivity

O3b mPOWER gateways are co-located with major cloud data centers, making any site just one hop to cloud-based data processing and analytics systems.

## Existing Base of User Terminals

O3b mPOWER's installed base of user terminals in the same industries that consume earth observation data — government, energy, maritime, aeronautical and transportation — simplifying access to space relay data for end users in those segments.

## MEO Architecture Advantages

MEO orbit reduces on-board LEO data relay terminal SWaP requirements and link latency compared to GEO relays. O3b mPOWER Ka-band RF relay can support entire LEO constellations simultaneously with throughput up to 100s of Mbps per LEO link.

## Secure Scheduling

Secure API-driven interfaces integrate with your existing tasking and scheduling systems, allowing automated control for establishing relay contact with your satellites. The right data, delivered at the right time, drives mission success.

## Ready for Service

O3b mPOWER satellites are in orbit and we are demonstrating relay architecture and service development with a NASA program, among others.