DATA SHEET

Sovereign Aero-ISR mPOWERED
MAXIMISE YOUR MISSION EFFECTIVENESS

INDUSTRY PERSPECTIVE

As airborne intelligence, surveillance and reconnaissance (ISR) missions deploy a growing number of sophisticated next-generation sensors, the amount of data generated and returned for analysis and dissemination is increasing too. Conventional satellite communication solutions usually throttle data on the aircraft's return link. This hampers mission planning and may result in the need to make multiple passes over a surveillance area to meet mission objectives. Longer missions increase the risk of detection, requiring the possible deployment of countermeasures.

High-speed data links enable optimised mission planning, shorter missions, and the return of higher-quality intelligence in real time.

SES | O3b mPOWER

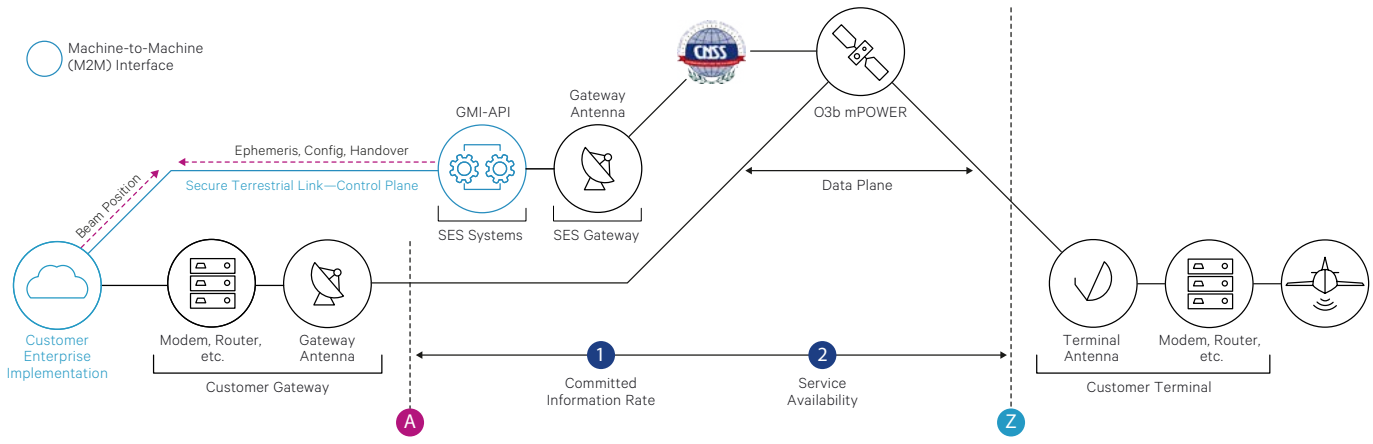
SERVICE DESCRIPTION

To support ISR aircraft engaged in government operations, Sovereign Aero-ISR mPOWERED delivers unparalleled high-performance connectivity and operational flexibility on a scalable, global basis. The service is enabled by O3b mPOWER—our next-generation Medium Earth Orbit (MEO) communications system—and supports a range of business models, including the Company Owned Company Operated (COCO) model.

Sovereign Aero-ISR mPOWERED allows customers to configure and manage uncontended, high-throughput, low-latency connectivity, with game-changing return links of up to 45Mbps per aircraft. These high-speed return links enable de-throttling of the sensors deployed on aircraft, allowing multiple, advanced sensors to operate simultaneously—at full capability. Our customers have the option to use their preferred waveforms and terminals, and land traffic at sovereign gateways, with support for private network topologies. Sovereign steerable beam (SSB) mobility can be deployed on a per-aircraft basis, with location obfuscation and the anti-jam and resiliency features inherent to MEO.

With Sovereign Aero-ISR mPOWERED, we deliver a transparent service experience with unrivalled support at every step—from ensuring expert network deployment to maintaining optimal, predictable performance throughout the service lifecycle.

Unparalleled performance, operational flexibility, and scale—with enhanced government control



TECHNICAL SPECIFICATIONS

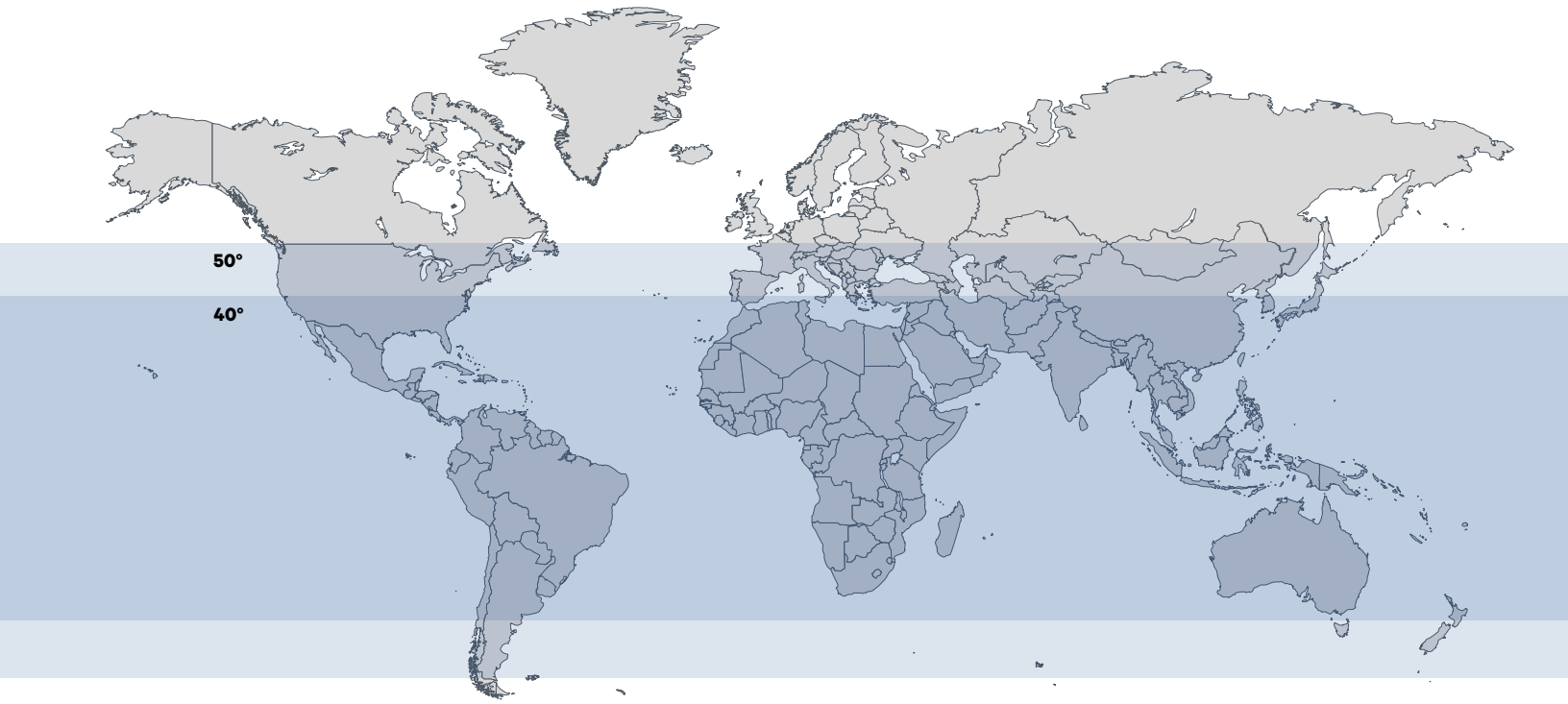
The Sovereign Aero-ISR mPOWERED service is available in three packages—Tier 1, Tier 2, and Tier 3.

Constellation	O3b mPOWER		
Service availability SLA	Option 1: 98.5%, Option 2: 99.5%		
Network latency SLA	150ms RTT		
Gateway	Customer gateway		
	Tier 1	**Tier 2**	**Tier 3**
Terminal options	Option 1 Customer-selected SES-certified modems and terminals Option 2 Get SAT or Viasat terminals, HM400 modem, one-off payment Option 3 Get SAT or Viasat terminals, HM400 modem, payment plan included in MRC	Option 1 Customer-selected SES-certified modems and terminals Option 2 Get SAT or Viasat terminals, HM400 modem, one-off payment Option 3 Get SAT or Viasat terminals, HM400 modem, payment plan included in MRC	Option 1 Customer-selected SES-certified modems and terminals Option 2 Get SAT terminals, HM400 modem or Micromodem, one-off payment Option 3 Get SAT terminals, HM400 modem or Micromodem, payment plan included in MRC
Antenna/BUC	Get SAT/25W Viasat/20W	Get SAT/25W Viasat/20W	Get SAT/8W or 25W
Capacity packages	Option 1 FWD: 512Kbps | RTN: ≤10Mbps Option 2 FWD: 1Mbps | RTN: ≤25Mbps Option 3 FWD: 1Mbps | RTN: ≤45Mbps	Option 1 FWD: 512Kbps | RTN: ≤10Mbps Option 2 FWD: 1Mbps | RTN: ≤25Mbps Option 3 FWD: 5Mbps | RTN: ≤25Mbps	Option 1 FWD: 512Kbps | RTN: ≤3Mbps Option 2 FWD: 512Kbps | RTN: ≤6Mbps
Coverage Within +/- 50° latitude	Option 1 Regional service within customer-defined operational area with radius ≤1,500km Option 2 Field of view (no intra-gateway roaming)	Option 1 Regional service within customer-defined operational area with radius ≤900km Option 2 Field of view (no intra-gateway roaming)	Option 1 Regional service within customer-defined operational area with radius ≤300km

Sovereign Aero-ISR mPOWERED offers a range of features to meet the requirements of government users:

- Flexibility to support the right form factor is especially important for unmanned aerial vehicles (UAVs). With O3b mPOWER, a software interface connects to the modem that meets the size, weight, and power (SWaP) requirements of the aerial platform in use.
- The use of customer-selected terminal hardware (subject to certification) ensures that existing equipment in your network can continue to be used to create mission-optimised ground elements.
- Ability to execute secure mobility, land traffic at sovereign gateways, define unique government private network topologies, and use the waveform and encryption of your choice.
- Sovereign steerable beams and government encryption solutions—including High Assurance Internet Protocol Encryptor (HAIPE)—with inherent anti-jam and resilience features.

GLOBAL COVERAGE MAP



REIMAGINE YOUR MISSIONS WITH SOVEREIGN AERO-ISR mPOWERED

Optimising your airborne ISR mission includes ensuring an aircraft spends as little time as possible to meet an objective, while returning the maximum amount of high-quality intelligence. By enabling ample, dynamically reconfigurable return bandwidth, Sovereign Aero-ISR mPOWERED helps you get the most from your modern intelligence-gathering aerial systems.

Learn how Sovereign Aero-ISR mPOWERED can help you maximise mission effectiveness.

For more information, please reach out to us at getconnected@ses.com

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For more information about SES, visit www.ses.com

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