

TRANSFORMING OIL AND GAS

Empowering smart digitalisation
in deep waters

Executive guide



TAKING OIL AND GAS OPERATIONS TO THE NEXT LEVEL

Emerging digital technologies have the potential to transform the upstream oil and gas industry via automation, improved agility, and added support for strategic decision-making.

Effective application of digital technologies can cut upstream operating costs by 3 to 5%,¹ resulting in substantial cost savings and enhanced profitability.

Offshore producers looking to tap reserves in deeper waters can maximize output while reducing the cost of production by leveraging capabilities such as analytics, mobility, and the cloud. However, deepwater project sites often lack access to traditional terrestrial networks.

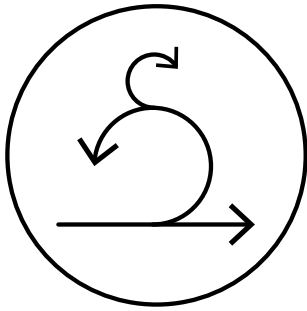
SES Networks helps deepwater drillers and producers take critical steps toward digitalisation.

Technologies like real-time condition monitoring, remote diagnostics, and process simulation rely on the existence of superior, seamless connectivity.

By providing high-quality, low-latency broadband services, SES Networks helps deepwater drillers and producers take critical steps toward digitalisation. Our ground-breaking O3b mPOWER system—the next generation of SES Networks' market-leading Medium Earth Orbit (MEO) service for energy—will serve the world's leading oil and gas producers, drillers, and service companies. O3b mPOWER is a terabit-scale satellite constellation that represents a paradigm shift for satellite-based communications, giving offshore players the freedom and flexibility to take their operations to the next level and capitalise on digital opportunities.

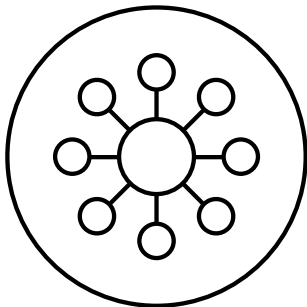


¹ Choudhry, Harsh et al. 'The next frontier for digital technologies in oil and gas.' McKinsey, August 2016. <https://www.mckinsey.com/industries/oil-and-gas/our-insights/the-next-frontier-for-digital-technologies-in-oil-and-gas>



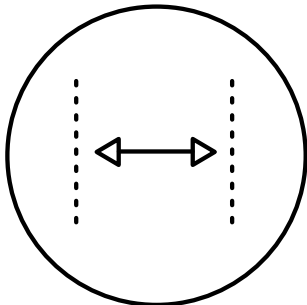
FREEDOM TO CREATE AND DIFFERENTIATE

In the offshore sector, low-latency broadband can enable optimisation of cloud-based digital applications and Software as a Service (SaaS) models. By delivering connectivity comparable to terrestrial networks, O3b mPOWER will provide remote sites access to the same enterprise services and applications as onshore facilities, while also providing high-speed broadband access for crew entertainment and welfare. Flexible forward and return link ratios will allow individual vessels to manage upstream and downstream requirements, enabling dynamic support for applications such as video calling and the transmission of high-resolution images to centralised locations.



FREEDOM TO INTEGRATE AND OPTIMISE

O3b mPOWER gives organisations complete access to SES Networks' multi-orbit, multi-band fleet. Backward compatibility with the O3b MEO constellation allows offshore platforms, rigs, and vessels to start using high-throughput, low-latency MEO today, and seamlessly transition to O3b mPOWER in the future. O3b mPOWER is also designed to interwork with the SES Geostationary Earth Orbit (GEO) satellite fleet, providing network resilience and ensuring seamless communication regardless of location or conditions. The system's software-driven traffic identification and control technology allows for applications and services to be automatically routed over the connection best suited to individual requirements, ensuring high quality of service and efficient use of network resources.



FREEDOM TO ECONOMISE AND SCALE

Digitalisation represents an evolution for the oil and gas industry, with offshore players prioritising the adoption of new technologies that provide maximum value. O3b mPOWER enables a step-by-step approach to digital transformation, allowing organisations to invest incrementally to address the specific requirements of their digital applications.

The system provides organisations with advanced flexibility through dynamic steering. Bandwidth can be allocated dynamically among rigs and platforms, cutting down on under-used capacity, and eliminating the need to base procurement decisions on peak demand. O3b mPOWER also allows beams to be shifted to new locations in near real time and provides flexibility around how connectivity is delivered to gateways, enabling our customers to choose how their data is routed, for enhanced application performance, and compliance with regulatory requirements around how traffic is handled.

As offshore producers venture further out to sea in search of new reserves, they need a connectivity partner that can help make the journey efficient and profitable. O3b mPOWER builds on the proven commercial success of

our first-generation MEO constellation and our capabilities in the offshore energy market to provide the flexible, scalable, high-throughput bandwidth required to ensure successful implementation of digital technologies.

TAKE YOUR OIL AND GAS OPERATIONS TO THE NEXT LEVEL

Ready to empower smart digitalisation in deeper waters?

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