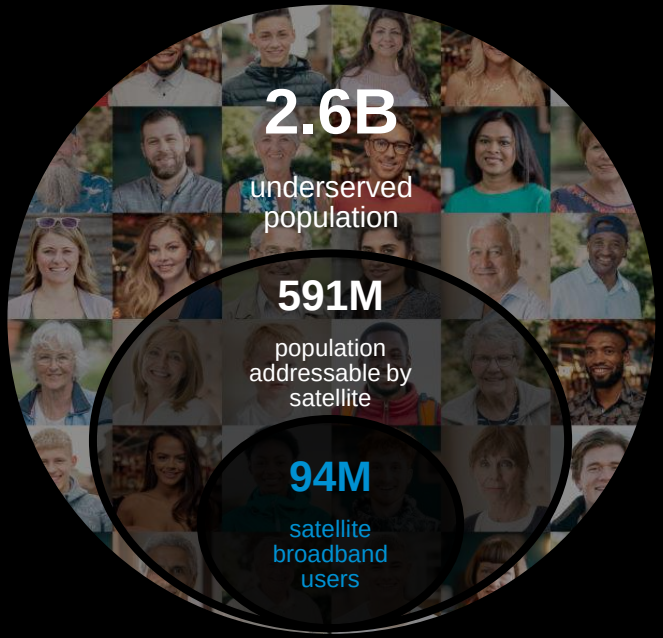
UNLOCKING GLOBAL IOT & EDGE INTELLIGENCE

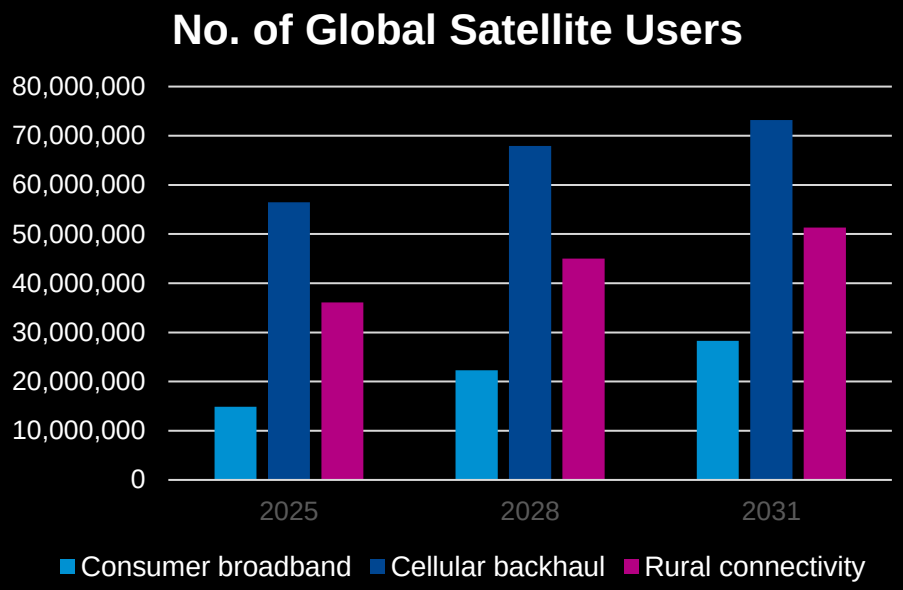
Presented by
Gonzalo de la Rocha

Multi-Orbit Satellite Networks

SES Proprietary and Confidential

THE CONNECTIVITY GAP: Addressable Market for Satellite Broadband Connectivity

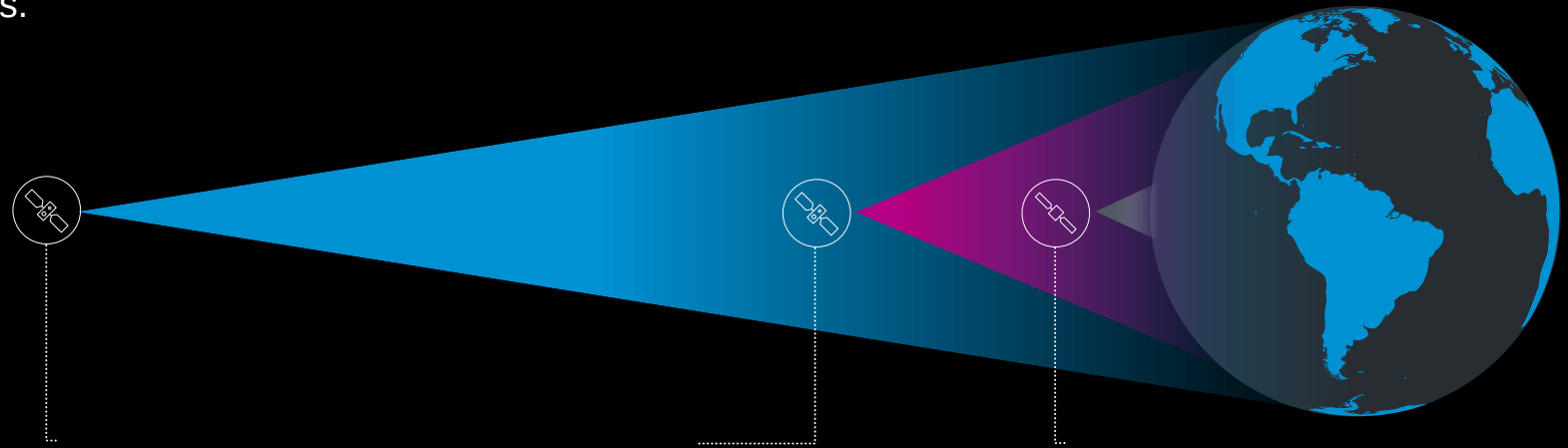




Satellite connectivity is uniquely positioned to bridge the digital divide by overcoming the limitations of terrestrial networks—especially in remote or hard-to-reach areas where fibre or mobile infrastructure is economically unviable—delivering resilient, ubiquitous coverage essential for supporting global-scale IoT deployments, automation, and industrial operations in frontier markets.

SES MULTI-ORBIT ARCHITECTURE: A NEW ERA OF GLOBAL COVERAGE

Combining orbits to optimize coverage, latency, and performance. Highlight how this enables uninterrupted connectivity for edge workloads.

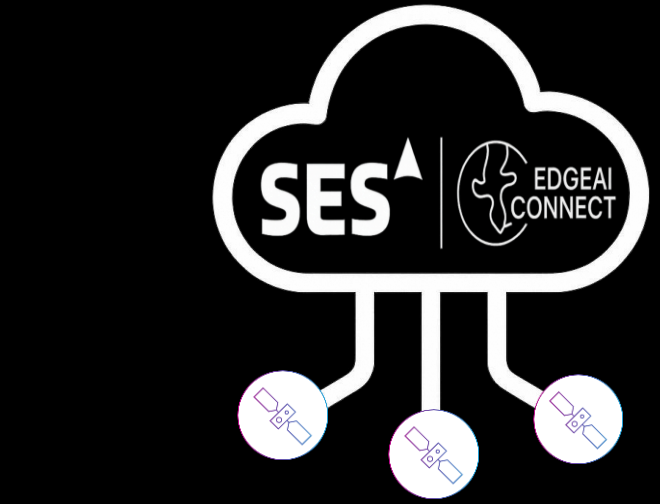


SES GEO	SES MEO	LEO (3rd party)
36,000km	~ 8,000km	~ 1,000km
E.g., SES Skala	E.g., SES O3b mPOWER	E.g., Starlink, AWS Kuiper
Broad coverage—3 satellites	Extended reach—6 satellites, scalable	hundreds of satellites
High latency—operationally simple	High throughput, higher performance	Low latency, contended bandwidth

BRINGING AI TO THE EDGE

Local Intelligence, Global Reach

- **SES EdgeAI Connect**
- **PaaS and SaaS subscription model**
- Local processing, enabling **real time analytics and AI/ML inferencing**
- Synchronization with the cloud for archiving, deep analytics and creation of digital twins
- Edge Offline capabilities for **critical 24x7 operations and in-country data sovereignty**
- Highly replicable with a central management point and edge deployments **that scale globally**



INTEGRATED E2E FABRIC: SPACE + EDGE + CLOUD

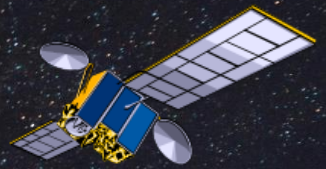
Applications & data

Edge compute apps

Customer-specific applications
Value-added services from SES
Value-added services from SES partners

Edge integration

Network



SES Multi-Orbit Orchestration (MEO/GEO/LEO)

Secure Cloud Connectivity

Cloud Integration

Public Cloud

Users

Azure AWS

Data sync & cloud apps

SES EdgeAI Connect + MEO

Remote oil operations monitoring

✓ **Early Leak and Hazard Detection with Visual Intelligence**
AI-powered cameras instantly identify leaks, gas emissions, or unsafe conditions.

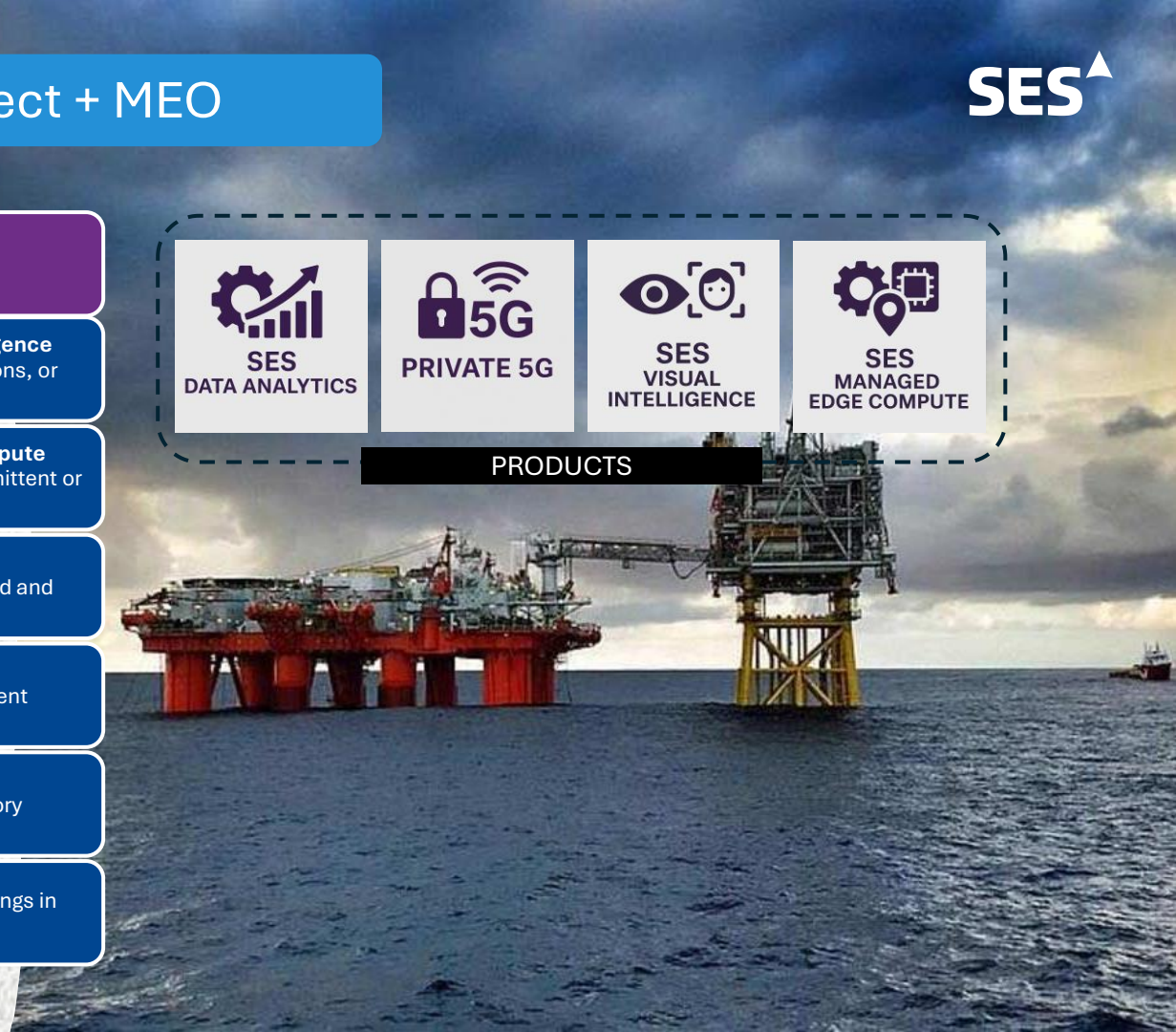
✓ **Autonomous Safety Processing with SES Edge Compute**
Operate critical safety systems locally—even with intermittent or no connectivity.

✓ **Optimized Production with SES Data Analytics**
Create digital twins and uncover trends that improve yield and reduce waste.

✓ **Automated Equipment Monitoring & Alerting**
Continuously track pumps, valves, and pipelines to prevent downtime and extend asset life.

✓ **Environmental Compliance Assurance**
Proactively detect emissions and flaring to meet regulatory standards and avoid fines.

✓ 65% reduction in incident response time and 40% savings in operating costs



SES EdgeAI Connect + Multi-orbit

Mine Digitization

✓ **Instant Situational Awareness with Real-time Visualization**
Gain immediate insights into site operations, boosting responsiveness and efficiency.

✓ **Reliable Camera Connectivity via Private 5G**
Enable uninterrupted video streams across harsh, expansive mining environments.

✓ **Prevent Equipment Failures with Predictive Maintenance at the Edge**
AI models detect early signs of wear to avoid unplanned downtime and costly repairs.

✓ **Protect Workers with AI-powered Safety Monitoring**
Computer vision detects unsafe behaviors and conditions in real time—before incidents occur.

✓ **Seamless Edge-to-Cloud Data Integration**
Aggregate and analyze data at scale—locally and in the cloud—for better decisions.

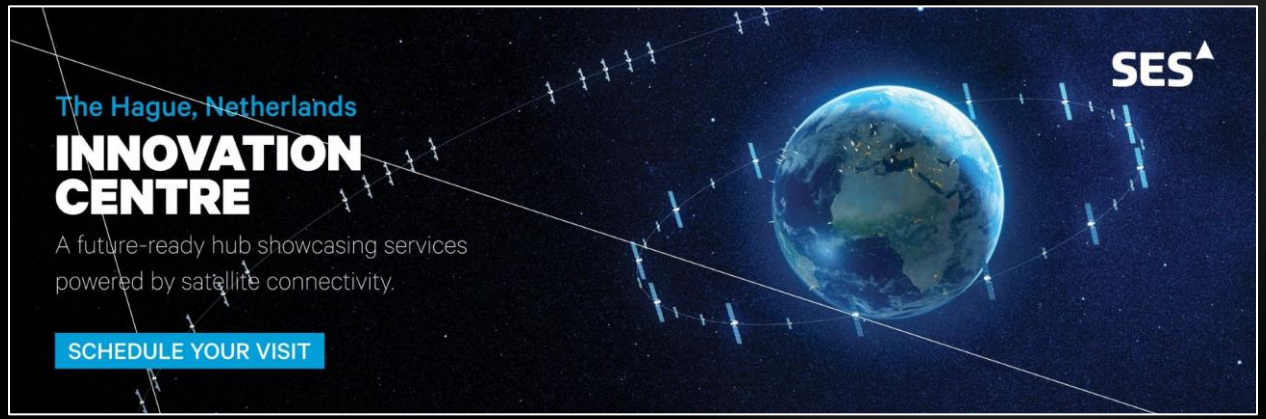
WHY IT MATTERS
Value Delivered Across Industries

		POTENTIAL ECONOMIC IMPACT
OIL & GAS	▲ Smart Operations ▲ Predictive Maintenance ▲ Local Computing Capacity	**1$B** COST SAVINGS OR PRODUCTION INCREASES
ENERGY	▲ Real-time remote monitoring ▲ Production predictability ▲ Predictive maintenance	**20-30%** OPEX SAVINGS THROUGH INTELLIGENT OPERATIONS & DOWNTIME REDUCTION
GOVERNMENT	▲ Emergency response ▲ Services for all citizens ▲ Infrastructure modernization	**50%** LESS TIME SPENT INTERACTING WITH PUBLIC ADMINISTRATION
MARITIME	▲ Operations optimization ▲ Onboard safety and well-being ▲ Regulatory and environmental compliance	**10-20%** OPEX COSTS SAVINGS, FUEL MANAGEMENT, REPAIR, PERSONNEL, ETC
MINING	▲ Operational efficiency, regulation, decarbonization ▲ Connectivity for smart devices ▲ Employee safety and well-being	**250$B** OPERATIONS MANAGEMENT

Various sources: World Economic Forum, Accenture Industry X.0, Siemens Energy case studies, Deloitte, McKinsey, IIoT World

READY FOR THE EDGE-ENABLED FUTURE?

Unlock the Future with Edge Computing, Compute Vision, IoT, and Digital Twins



GONZALO DE LA ROCHA

Gonzalo.delarocha@ses.com