inmarsat The mobile satellite company

ENABLIN he connected wo

M2M services

Key benefits

- > Enhanced situational awareness
- > Boost productivity by sharing information.
- > Reduce risk, improve compliance and enhance security
- Reduce production costs with real-time visibility of assets
- > Enable instantaneous reporting

DRIVING RAPID GROWTH

Through the Industrial Internet of Things.

It is hard to picture a new age when you are living through it. Yet the new digital age we are entering is turning everything we do and think on its head at a breath-taking pace. It really will be a new age – a Fourth Industrial Revolution – where life for all of us will be nothing like what has gone before. Advances in miniaturisation, wireless connectivity, and increased data storage capacity mean that we can transform everyday objects into a network of information that allows us to understand our world more than ever and opens up a world of new possibilities.

The Internet of Things (IoT) powered by Machine to Machine (M2M) technologies has become the vanguard ushering in this new age. It is the eyes and ears of the world around us and is enabling radical change. In the future, smart companies will use the Internet of Things to capture new growth through boosting revenues by increasing production, exploiting intelligent technologies to fuel innovation, and transforming their workforce.



ENABLING THE CONNECTED WORLD

Complete connectvitiy for maximum control and efficiency.

The basic requirements of the IoT are that all devices need to be connected wherever they happen to be. While Wi-Fi deployments, Bluetooth and terrestrial GSM networks are able to support many IoT applications, these network services cannot provide the ubiquitous and seamless coverage of satellites.

Despite the fact that 95% of the global population live within coverage of a 2G mobile network and 69% within a 3G network there are many sparsely populated areas with important industries suited for IoT related services, which do not have mobile terrestrial coverage or other forms of connectivity. Satellite technology serves as a key enabler to transform IoT connectivity across industries and geographical borders. Satellite can be used to provide communications for land transport: rail, cargo, trucks and other vehicles. Emerging self-driving systems will extensively rely on fault-tolerant M2M for daily operations. Transportation and supply chain connectivity, including autonomous trains and tankers, require SLA-demanding M2M/IoT connectivity services for tracking, security and condition monitoring purposes. Oil and gas, utility, forestry and mining companies require M2M and IoT services for asset, people and tank level tracking, on-site staff communications or SCADA telemetry and monitoring backhauls.

From tracking assets to remotely communicating with systems all over the globe, satellite connectivity helps keep machines connected, expand application reach and enable data communications virtually anywhere.

IT'S TIME TO CONSIDER SATELLITE

The global, reliable IoT solution.

The technology behind satellite networks has advanced considerably in recent years. Yet many people still believe it's expensive and requires large, power-hungry terminals that don't integrate well with other applications. Today's satellite terminals can operate on very low power, enabling them to run for long periods with minimal attention.

Installation often requires little specialised skills and they are easy to maintain and support. With flexible airtime packages based on typical usage, satellite M2M can offer better value than many people realise. With 99.9% network availability, the reliability of Inmarsat's network makes it the best option for day-to-day remote operations or as a back-up to terrestrial networks. That's why businesses are increasingly choosing Inmarsat for a whole range of different functions, whether it's to extend their reach, ensure continuous, real-time visibility over their assets or to increase the reliability of their existing networks



ENABLING YOUR SECTOR

How and where IoT can improve operations.

As companies in different industries look to exploit the benefits of IoT the first step is often to seek better visibility and control over remote assets. Remote management applications such as those that monitor sensors on pipelines, power grids and weather stations can reach further over satellite. Hybrid satellite-cellular solutions can ensure constant visibility of assets on the move, including shipping containers and the trains or trucks that move them. Infrastructure monitoring and control can protect vital services such as power lines, wind turbines or railway tracks.

Water management

Sensors and remote-controlled switches enable accurate monitoring and adjustment of water management systems. BGAN M2M enables transmission of sensor data to improve visibility of changes in water levels and water quality.

Oil and Gas pipeline monitoring

Operators can monitor for corrosion and other risks by placing sensors at intervals along a pipeline. Inmarsat IsatData Pro provides visibility of sensor data at a very low cost per site, minimising the risk of disaster while ensuring the safety and security of the surrounding area.

Asset tracking

Transporting valuable, hazardous or perishable cargo across remote regions often requires location tracking and driver monitoring for insurance purposes. IsatData Pro provides remote access to the vehicle for enhanced operator and asset security. You can even unlock a container remotely once the final destination has been confirmed.

Distribution automation

Intelligent devices on distribution lines can manage the delivery of power to consumers. BGAN M2M automates monitoring and control of remote reclosers, switches, and other distribution devices. This enables 24/7 surveillance of the distribution network for voltage fluctuations, outages and service demands



WHY CHOOSE INMARSAT?

A satellite network tailored to your needs.

As the industry leader and pioneer of mobile satellite communications, Inmarsat has been powering global connectivity for nearly four decades.

Delivering robust network availability to the world, we connect people and machines through our thriving global partnerships with expert distributors and service providers.

We deliver our world-class products, services and solutions and 24/7/365 customer support facilities through our network of more than 60 locations across every continent,

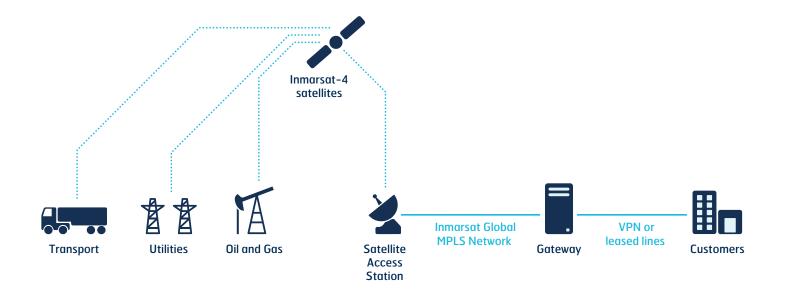
A 3G satellite network service provides full IP data connectivity supported by remote terminal management, debugging and configuration options. Using robust and lightweight hardware our M2M services enable a wide range of M2M applications. Our global L-band satellite network offers the highest payload and lowest latency of any L-band satellite store-and-forward service, providing 99.9% network availability and a ubiquitous, resilient and flexible solution for remote monitoring of fixed and mobile assets.

In the last decade, we have invested over \$3bn into our revolutionary satellite constellations. They are some of the most advanced of their kind, facilitating vital and mission-critical communications to meet the rapidly-evolving demands of government, industry and commerce.

Delivering robust network availability to the world, we connect people and machines through our thriving global partnerships with expert distributors and service providers

How it works

The needs and requirements for each customer are by their nature unique and depend on factors such as site, usage, desired outcomes and many other aspects. Inmarsat offers two primary M2M services, BGAN M2M and IsatData Pro it to suit a variety of needs and our team of dedicated Partners and engineers work with our customers to define their requirements including the range and type of specialised terminals and sensors required, the reporting frequency and data plan to ensure a successful outcome.



HOW TO BUY

Inmarsat have a range of partners to buy from. To find one that suits your needs, go to **inmarsat.com/partners**

inmarsat.com/m2m

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