

2017 BROCHURE



# PROSPECTS FOR L-BAND, IoT & M2M MARKETS

2017 Edition | A Euroconsult **Executive Report**

A comprehensive in-depth analysis of key trends and drivers, market forecasts in revenue and terminals by vertical, geographic and application segment

- ✓ **Hundreds of graphs & tables**
- ✓ **Thousands of data points**
- ✓ **Comprehensive digital files**
- ✓ **Priced at € 4,500**

The MSS market will grow from 4.3 million terminals in 2016 to more than 12 million terminals by 2026. M2M/IoT devices will have a significant share in this subscriber growth, while their contribution to operators' revenues should be more limited. MSS wholesale revenues are expected to grow at a CAGR of 2.2% between 2016 and 2026, driven by MSS aero broadband demand, M2M/IoT applications and other services increasingly addressing lower-end segments and emerging regions, such as the promising small boats segment.

The diversification and improvement in MSS products should be enabled by recent and upcoming MSS systems including Iridium NEXT (under deployment), Inmarsat's I-6 (expected in 2020), Thuraya's next generation constellation (planned for 2020 but no satellite yet ordered) and a new generation of hybrid networks from Globalstar and Ligado Networks. These systems should allow for new, higher data-rate services, and will combine with new ground solutions and terminals.

Increasing competition from VSAT mobile solutions, due to more efficient equipment and lower capacity costs, is expected to weigh on MSS's market share in the high-end, high-ARPU markets. MSS operators will thus have to review their positioning and address new segments less addressable by VSAT solutions, such as smaller classes of ships, aircraft, not to mention potential upsides related to connected cars and IoT.

The global IoT market, including terrestrial IoT, should experience exponential growth in the coming years; MSS operators are reinforcing their positions in the segment, with the number of M2M/IoT terminals reaching over 20% growth in just the first half of 2017. Moreover, about ten constellation projects targeting IoT are currently under consideration by start-ups, intending to benefit from the momentum in the sector.

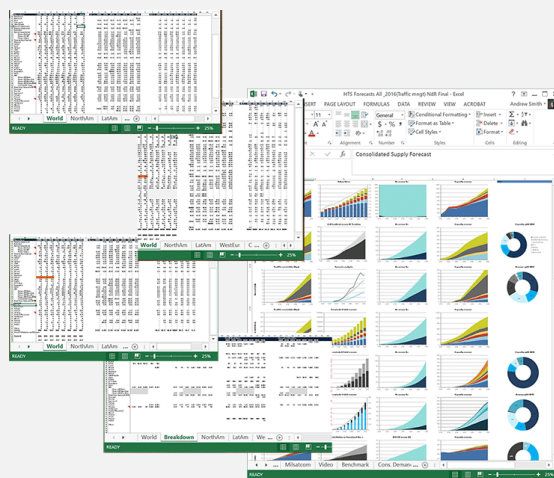
# ABOUT PROSPECTS FOR L-BAND, IoT & M2M MARKETS

An expert analysis of the mobile satellite industry, assessing key trends and drivers in this market characterized by both a number of growth opportunities and challenges for key players. It includes a complete analysis of the MSS value chain, including ten-year forecasts for MSS terminals & revenues broken down by main market segments.

All Euroconsult reports have, at their core, data derived from over 30 years of tracking all levels of the satellite/space value chain. To this we add dozens of dedicated industry interviews each year, along with the continual refinement of our data models, and the collection and interpretation of company press releases and financial filings. Our consultants have decades of experience interpreting and analyzing our proprietary databases in light of the broader value chain.

When you purchase research from Euroconsult, you receive thousands of data points and the expert interpretation of what this means for specific verticals and sectors of the satellite value chain, including forecasts based on years of data and highly refined models.

This report contains thousands of data points.



## STRATEGIC ISSUES & FORECASTS

- Current demand for MSS communications
- Key trends & major applications
- Ten-year forecasts (wholesale revenue & terminals)

## OPERATORS & VALUE CHAIN

- MSS operators: Financials, strategies & positioning
- Value chain & distribution

## MARKET SEGMENTS: MARITIME, AERO, LAND, INTERNET OF THINGS, GOVERNMENT

- Supply (including key players)
- Business models, major trends, competition
- Applications & devices, regulation
- Key assumptions & forecasts to 2026

## A MUST READ FOR:

- ✓ Satellite operators
- ✓ Service providers
- ✓ Equipment manufacturers
- ✓ Banks & investors
- ✓ Telecommunications companies
- ✓ Satellite manufacturers
- ✓ Launchers
- ✓ Space & other government agencies

**EXTENSIVE FIGURES & ANALYSIS FOR THE COMING DECADE**

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- Increasing competition from VSAT services
- New generation L-band services to bring new opportunities
- Strong growth opportunities in the IoT market
- Market forecasts to 2026

## 2\ MSS VALUE CHAIN

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- Recent revenue growth trends
- Operators' strategies and positioning
- Business model of MSS service providers
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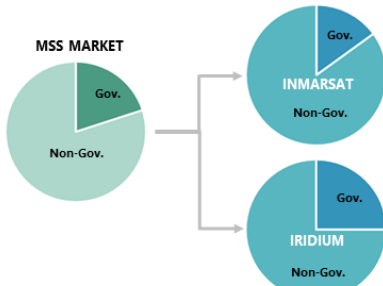
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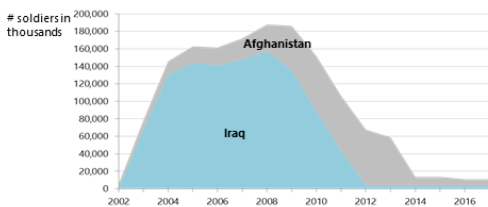
### GOVERNMENT MARKET

#### GOVERNMENT IS A KEY MARKET FOR MSS OPERATORS

##### IMPACT OF GOVERNMENT ON MSS DEMAND (REVENUES)



##### U.S. TROOPS ON IRAQ & AFGHANISTAN SOIL DURING OPERATIONS



Source: U.S. Congressional Research Service and Euroconsult estimates



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Two types of government users exist for the MSS: military and civil agencies. The two user groups differ significantly in their satellite bandwidth needs and in their service requirements. The military's need for satellite bandwidth is generally higher compared to civilian agencies, whose primary focus is on peacekeeping operations, humanitarian aid and civilian protection with peaks in the demand compared to the military. Military usage represents the majority of the satellite bandwidth demand in the government user segment today.

Civil and military demands have continuously contributed to the development of the MSS industry and significantly contributed to the call for new MSS products over time. An example is Inmarsat's BGAN, for which revenue growth in recent years was significantly driven by government users in Afghanistan and other conflict areas, although decreasing in recent years due to troop withdrawals.

Despite strong growth for MSS demand in an increasing number of commercial sectors, the government and military market remains a significant revenue source for established MSS operators. It is estimated to account almost the 20% of the MSS market today, including civilian governments. This segment accounts for approximately 15% of Inmarsat and around 25% of Iridium's revenue, which is largely dominated by U.S. defense customers.

Beyond the government's impact on MSS terminal deployments and revenues, the sector's specific requirements for flexible, reliable, on-the-move communications and the increasing necessity for data communications have also contributed to innovation in the MSS industry. Indeed, it has pushed equipment manufacturers, operators and service providers to come up with advanced products that can ultimately also be transferred to commercial markets. Almost all MSS operators now have dedicated solutions for the government/military markets. Iridium offers several products for the government and military market, including its ITT NexGen RO Tactical Radio, a tactical satellite radio solution for soldiers with push-to-talk, one-to-many capabilities, position location information and a secured satcom network. Inmarsat also offers a dedicated version of its BGAN solution for the military.

MSS services experienced significant growth over the past 15 years, which was heavily impacted by U.S. military forces' strong presence outside national territory. Despite troops withdrawals from 2008, the number of U.S. soldiers deployed in Iraq and Afghanistan is stabilized, considering the current tensions in the region.

In addition to military operations, MSS growth has also been driven by civilian government agencies. For instance, during and after emergencies, such as earthquakes, floods and hurricanes, MSS is used for disaster management.

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