



**INMARSAT GROUP LIMITED – Inmarsat Group Limited Interim Results 2016 –  
Supplemental Disclosure 14 September 2016**

## RISK FACTORS

*The risks and uncertainties we describe below are not the only ones we face. Additional risks and uncertainties of which we are not aware or that we currently believe are immaterial may also adversely affect our business, financial condition and results of operations. If any of the possible events described below were to occur, our business, financial condition and results of operations may be materially and adversely affected.*

*This document contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including the risks described below and elsewhere in this document.*

### **Risks Relating to Our Business**

***The global communications industry is highly competitive. It is likely that we will face significant competition from other network operators, which may adversely affect end-user take-up of our services and our revenues.***

The global communications industry is highly competitive. We face competition today from a number of communications technologies in the various target sectors for our services. It is likely that we will continue to face significantly increased competition in most or all of our target sectors in the future, from the three main sources below, in particular against the background of the high number of high throughput satellite (“HTS”) systems that are scheduled to launch in the next three years. In addition, certain of our competitors are experiencing financial distress and may attempt to gain market share or cover part of their fixed costs by offering prices that are below the level that is required for a sustainable development, which may increase the pricing pressure we face.

#### *Mobile Satellite Services (MSS) operators*

Iridium Communications Inc. (“**Iridium**”), a global MSS operator, is currently investing in a new satellite constellation, Iridium NEXT, with enhanced service capability including broadband data services. In June 2010, Iridium announced a contract for new satellites with Thales and has stated it is currently expecting to begin launching the new satellites in 2016. This new constellation may enhance Iridium’s service offerings and increase the level of competition we face. Iridium also expects to launch a GMDSS service by 2018. Iridium already provides a maritime service that offers up to 128 kbps capability and competes with the low end of our FleetBroadband capability. In addition, we also face regional competition for data and voice services from regional MSS operators such as Globalstar, Inc. (“**Globalstar**”) and Thuraya Telecommunications Company (“**Thuraya**”) and to a lesser extent other regional MSS operators, which has influenced the price at which our distribution partners and service providers offer our services. Globalstar completed the launch of 24 new satellites in 2013 and has reintroduced certain two-way services that may increase the level of competition we face. Thuraya, a leader in the provision of handheld satellite phones on a regional basis, offers a 444 regional kbps mobile data communications, including for maritime applications.

#### *Fixed Satellite Services (FSS) operators*

Communications providers who operate private networks using VSAT or hybrid systems also continue to target users of MSS. Leading FSS players (such as ViaSat, Intelsat, SES and Eutelsat) are increasingly seeking growth opportunities across the mobility sector from maritime to aviation and land mobile to provide their VSAT services. As they are also progressively adopting HTS technology (also used by us in connection with our GX services) and increasing their geographic coverage, the competition from FSS operators is increasing with significant pricing pressure, in particular, on our GX broadband services. For example, Intelsat is using its new “Epic” satellite constellation to target the government, maritime and energy sectors. Other satellite operators are planning to develop HTS satellites that may increase the level of competition in our GX target markets on a regional basis. For example, O3b Networks, owned by SES, currently has a network of 12 medium earth orbit (“**MEO**”) Ka-band satellites that it expects will offer mobility services within certain geographies. In addition, SES has recently announced the procurement of an HTS Ka-band satellite and a long-term commercial agreement with Thales, which will offer in-flight connectivity services across the Americas and the Atlantic Ocean region. In addition, ViaSat is a leading HTS player in Ka-band, initially as a provider of equipment and technology and partner of other FSS operators, and soon as the operator of the ViaSat-2 satellite (expected to be launched in 2017) and the ViaSat-3 constellation (expected to be

launched in 2019) for a range of applications including mobility. We expect these operators to target, particularly but not only, the aviation sector, which will bring additional competitive pressure, particularly, for our aviation proposition. Other FSS operators such as Eutelsat and Telesat operate regional HTS satellites and payloads secondarily addressing mobility. The impact of these additional operators on the market is that they naturally increase market capacity available for customers, which has the impact of reducing costs paid for the services. Some of these operators will also have global coverage which can compete with our own.

There are also new entrants to the mobility markets expected after 2020, starting with low earth orbit (“LEO”) constellation operators such as OneWeb and, in the longer term, players using alternative technologies such as High Altitude Platforms, which operate at an altitude of up to 50 km rather than, for example, in geostationary orbit.

#### *Service Providers and System Integrators*

In respect of mobility markets, we also face indirect and/or direct competition from service providers and system integrators (e.g., Marlink, SpeedCast and KVH in the maritime sector as well as Panasonic Avionics Corp, Gogo and Global Eagle in the aviation sector). With increased consolidation among service providers, and the increasing scale and bargaining power of the largest players, competition from service providers is expected to increase.

There is also a risk of terrestrial mobile operators competing for customers, including the provision of M2M customers, and expanding their coverage areas into geographies previously only covered by satellite operators.

Any failure to compete effectively with other operators in our region of operations, continued overcapacity, any failure to adapt to new competition and new technologies or any failure to implement our business strategy and expand our business operations as planned could result in lower than anticipated revenue, a decline in our operating margins and profitability, a decline in the cash available to fund our operations and service our debt and could have a material adverse effect on our business, financial condition and results of operations.

***Reductions in spending by government customers, in particular the US Government, have decreased our revenues and increased competition for government business, and additional government spending controls could further adversely affect our revenues, profitability and results of business operations.***

As at the date of this document, the US Government is the largest user of our GX products and our GX business plan relies on a continued and growing material revenue contribution from government customers. Following significant reductions in deployed forces and the subsequent US federal budget sequestration which took effect from 1 March 2013, we have experienced a significant contraction in our US Government business unit and this trend may continue. The reduction in deployed forces resulted in a decline in operational bandwidth utilisation over the past three years. Sequestration resulted in the implementation of spending controls by the US Government and a further increase in competition for our US Government business unit. As a result, we have experienced a reduction in revenues and margins. While some of these sequestration limits have been waived in recent years, they remain in force and if additional government spending controls are implemented, government contracting opportunities may be cancelled, de-scoped or delayed which could have an adverse effect on our business, financial condition and results of operations. We have experienced similar contractions of operational bandwidth utilisation across the remainder of our global government business in addition to increased competition, and consequently lower prices being offered from other providers as governments have generally reduced their level of spend.

In addition, we face significant competition in securing bids to provide governmental services. In the US Government market, the industry saw awards for major US Navy and Air Force SATCOM contracts delayed by competitor protest actions. While we have recently been awarded a US Navy contract after two competitor protest actions, such events demonstrate the trend that major contracts have been increasingly subject to protest delays. The extension of large framework contracts in Australia, France, the UK, Canada, Germany and New Zealand also demonstrated continued competitiveness in the major global defence markets. If we are unable to secure government contracts or compete effectively in the government sector, we may experience significant declines in revenue which could have a material adverse effect on our business, financial condition and results of operations.

*We may not retain sufficient rights to the spectrum required to operate our existing satellite systems to its expected capacity in order to take full advantage of future business opportunities or to operate our proposed S-band service.*

We rely on radio spectrum to provide our services. This has historically been allocated by the International Telecommunication Union (the “ITU”) without charge, and usage has to be co-ordinated with other satellite operators in our spectrum band. In the future, we may not be successful in co-ordinating our satellite operations under applicable international regulations and procedures or in obtaining sufficient spectrum or orbital resources necessary for our operations.

We must retain rights to use sufficient L-band, S-band, C-band and Ka-band spectrum necessary for the transmission of signals between our satellites and end-user terminals and between our satellites and our control stations. Our access to L-band, S-band, C-band and Ka-band spectrum is obtained through frequency coordination under ITU procedures. The L-band coordination is governed, in part, by sharing arrangements with other satellite operators that are re-evaluated and re-established through two annual, regional multilateral meetings of those satellite operators—one for operators whose satellites cover the Americas, and a second for those whose satellites cover Europe, Africa, Asia and the Pacific. We are also dependent upon Ku-band rights held by our suppliers to allow us to offer our XpressLink service and similarly Ka-band rights held by a supplier to support our GX service in part of the world.

We agreed L-band spectrum allocations for 2016 at the most recent Europe, Africa, Asia and Pacific operators’ review meeting. We, together with Ligado Networks, also collectively have the rights to the majority of the L-band spectrum allocation in the Americas. As a result of the Cooperation Agreement we signed with Ligado Networks in December 2007 for spectrum re-use and reorganisation of our respective L-band spectrum across the Americas, we agreed allocations for the Americas with Ligado Networks for the foreseeable future. In April 2016, Ligado Networks elected for the 30 megahertz (“MHz”) option under the Cooperation Agreement (the “30 MHz Plan”), allowing them usage of our existing L-band spectrum and requiring us to provide our services across smaller allocations of spectrum, and the payment plan for future payments was finalised as part of this election. We have default rights under the Cooperation Agreement protecting our spectrum interests and we believe those rights provide sufficient spectrum to support our existing services for the duration of the agreements.

The Mexican government launched a new L-band satellite in 2015 and is seeking additional spectrum for its operation. These spectrum demands would have a direct impact on our spectrum access as we would have to give up part of our spectrum. With the support of the UK Government and spectrum regulator by the Office of Communications (“Ofcom”), we have been in negotiation with Mexico on this issue for several years, but no agreement has yet been reached. We expect to be able to retain sufficient spectrum to continue to serve our customers in the future, but there can be no assurance that our access to spectrum will not be restricted or hindered, which could have a material impact on our business.

As part of our business planning, we may need to apply for additional spectrum across all frequency bands to support our future services and existing services growth.

We have filings with the ITU in C-band in which we hold rights alongside other C-band satellites in this band. Our filings for the Inmarsat-3 and Inmarsat-4 satellites are well-coordinated and maintained. If the Inmarsat-6 satellites, which will have C-band feeder links, are deployed in different locations from our Inmarsat-3 and Inmarsat-4 satellites, we will have to coordinate C-band access at these other locations which may be difficult due to many other C-band satellites currently in service. Additionally, the C-band where we have the feeder links for our satellites has been identified for international mobile telecommunications (“IMT”) use which makes licensing of C-band gateways more difficult in many countries and introduces the risk of interference for terrestrial use.

In connection with our proposed Global Xpress service, we have a wide range of national and international authorisations allowing us to provide this Ka-band service on land, air, and at sea. Notwithstanding the progress we have made, there are still more licences and authorisations for us to obtain in order to provide this Ka-band service in all markets globally and there can be no assurance that all such approvals will be forthcoming.

In May 2009, we were selected through Decision n.2009/449/EC to operate an S-Band MSS/CGC system across Europe. We intend to use this authorisation to implement the EAN (in partnership with Deutsche Telekom) to provide mobile broadband services to aircraft flying over Europe. There is a risk that we may not obtain all the necessary licenses for us to be able to offer the service across Europe.

Once coordinated through the ITU, we retain the orbital slots for our Ka-band satellites while we use the spectrum. At each WRC meeting, which is held every four years, the satellite operators have to justify retaining all of the spectrum allocated to them against claims for use by terrestrial operators.

Competition for L-band, S-band, C-band and Ka-band spectrum from existing and/or new operators or other companies seeking to access the satellite market, or for new services, or business opportunities, or new regulations relating to spectrum allocations, could make it more difficult for us to retain rights to spectrum or to take full advantage of future business opportunities by obtaining access to further L-band, S-band, C-band and/or Ka-band spectrum. If we were unable to retain sufficient rights to L-band, S-band, C-band or Ka-band spectrum, our ability to provide our services in the future could be prejudiced, which could have a material adverse effect on our business, financial condition and results of operations.

***Sales to our key distribution partners represent a significant portion of our wholesale MSS revenues and the loss or insolvency of any of these distribution partners could adversely affect our revenues, profitability and liquidity.***

Although we derive a part of our revenue from selling our services directly to end-customers, we continue to rely to a large extent on other third-party distribution partners and service providers to sell our services to end-users and they determine the prices end-users pay. Our largest third-party distribution partner accounted for 11.5 per cent of our total revenues in the year ended 31 December 2015 and comprised 12.8 per cent. of our trade receivables balance as at 31 December 2015. Accordingly, there is a risk that our distribution partners or service providers could fail to market or distribute our services effectively, or fail to offer services at prices which are competitive, which could adversely affect our revenues, profitability, liquidity and brand image. Changes in our business model could affect the willingness of third-party distribution partners to continue to offer our services. In addition, the loss, insolvency or merger of any key distribution partners could materially affect our routes to market, increase our reliance on a few key distributors, reduce customer choice or represent a significant bad debt risk, which could have a material adverse effect on our business, financial condition and results of operations.

***The development of combined satellite and terrestrial networks, and the repurposing of satellite spectrum for terrestrial operations, could interfere with our services.***

On 29 January 2003, the Federal Communications Commission (“**FCC**”) promulgated a general ruling (the “**ATC Ruling**”) that MSS spectrum, including the L-band spectrum we use to operate some of our services, could be used by MSS operators to integrate ancillary terrestrial component (“**ATC**”) services into their satellite networks in order to provide combined terrestrial and satellite communications services to mobile terminals in the United States. Since the time of the ATC Ruling, a number of MSS operators, including Ligado Networks, have proposed or discussed such services.

More recently, the FCC has taken some actions and considered others that would permit terrestrial operations in frequency bands used by satellite services. On 11 December 2012, the FCC released an order granting DISH Network Corporation (“**DISH**”) authority to use its S-band MSS spectrum at 2000-2020 MHz and 2180-2200 MHz for terrestrial mobile operations without any requirement to integrate those operations with ongoing MSS activity. On 23 October 2015, the FCC released a Notice of Proposed Rulemaking to introduce new terrestrial mobile operations in 28 GHz, 37 GHz, and 39 GHz frequency bands currently used by satellite services. The proposed mobile operations in the 28 GHz band would operate in the same spectrum used by the Inmarsat-5 satellites for earth-to-space gateway operations.

The implementation of ATC or terrestrial services in MSS spectrum in the United States or other countries may result in increased competition for the right to use satellite spectrum, and such competition may make it difficult for us to obtain, operate or retain the spectrum resources we require for our existing and future services. The FCC’s decisions to permit integrated MSS/ATC or terrestrial services in MSS bands is based on certain assumptions, particularly relating to the level of interference that the provision of integrated MSS/ATC services would likely cause to other MSS operators, such as us. If the FCC’s assumptions with respect to the use of L-band spectrum for integrated MSS/ATC services prove inaccurate, or a significant level of integrated MSS/ATC services is provided in the United States, the provision of integrated MSS/ATC services could interfere with our satellites and user terminals, which may adversely impact our services, costs and revenues. For example, the use of certain L-band spectrum to provide integrated MSS/ATC services in the United States could interfere with our satellites providing communications services outside the United States where the satellites’ “footprint” overlaps the

United States. Such interference could limit our ability to provide services that are transmitted through any satellite visible to the United States. Two of our three Inmarsat-4 satellites and three of our four Inmarsat-3 satellites are currently visible to the United States. The Alphasat satellite is not visible to the United States. The Inmarsat-5 satellites and our S-band satellite do not have L-band capacity over the United States. In addition, users of our terminals in the United States could suffer interruptions to our services if they tried to use their terminals near ATC terrestrial base stations used to provide integrated MSS/ATC services. In the event that we anticipate significant usage of mobile user terminals near ATC terrestrial base stations, it may be necessary for the manufacturers of the mobile terminals to modify their products to make them less susceptible to interference and for us to replace or upgrade existing user terminals to avoid harmful interference. Although in the case of our Cooperation Agreement with Ligado Networks we have received payments that are intended to compensate us for the costs anticipated to protect our network from interference from the proposed Ligado Networks operations, such compensation may not be sufficient and our interference mitigation strategy may not be successful. Jurisdictions other than the United States are considering, and could implement, similar regulatory regimes in the future. In May 2004, the Canadian regulator decided in principle to allow ATC services in Canada. In July 2010, Terrestrial Solutions received an MSS-ATC authorisation which was subsequently modified in 2014 when the Canadian regulator issued technical rules permitting terrestrial only devices, but maintaining MSS in the L-band.

The FCC and other regulators are repurposing or creating “sharing” regulations for the C-band and frequencies adjacent to the L-band. To the extent the FCC or any other regulator permits new or expanded terrestrial mobile use of the 28 GHz band or other frequencies relied upon or adjacent to those used by our satellites, this could limit the capacity of our systems or otherwise negatively affect our services.

We cannot provide assurance that the development of hybrid networks in the United States, Canada or in other countries will not result in harmful interference to our operations. If we are unable to prevent such interference it could have a material adverse effect on our business, financial condition and results of operations.

***We may be subject to operational and financial risks in relation to our Cooperation Agreement with Ligado Networks.***

Our Cooperation Agreement with Ligado Networks may present us with operational and financial risks. If, and when, we transition to the 30 MHz Plan, the Cooperation Agreement will ultimately result in a reduction in available L-band spectrum for our services over North America and the need for our L-band services to coexist in North America with ATC services in adjacent frequencies. Whilst we believe that we can continue to operate our services over North America following the launch of ATC services, there is a risk that our L-band services may be congested, interrupted and/or interfered with, which could have an adverse effect on our future L-band service performance in, revenues from and on our costs in North America. In order to mitigate this risk, we will continue to encourage users to progressively upgrade to our ATC resilient terminals and services (such as our broadband and GX services). The process of migrating customers from our Existing & Evolved Services to our broadband and GX services gives rise to the risk of customers choosing to move to other competitive services, which could have an adverse effect on our business, financial condition and results of operations.

We may also face financial risk in connection with our Cooperation Agreement with Ligado Networks. In May 2012, Ligado Networks entered bankruptcy proceedings under Chapter 11 of the US Bankruptcy Code. In December 2015, Ligado Networks emerged from bankruptcy protection and raised new capital. In March 2016, Ligado Networks elected for the 30 MHz Plan. Following this election, Inmarsat and Ligado Networks agreed to defer some of the payments due from Ligado Networks to us in return for delaying the transition to the 30 MHz Plan and providing us with enhanced spectrum rights for a minimum period of two years. The deferred payments potentially amount to US\$35 million over the three-year period from 1 January 2016 to 31 December 2018 and US\$132 million for the entire amount due in 2019. From 1 January 2020, there will be no further deferral of payments. In the event Ligado Networks receives its FCC licence earlier than that date, deferrals will stop immediately. We may incur costs in the future relating to the transition to ATC resilient services which are not yet determined or costs associated with the spectrum transfer may be higher than the contractual payments owed by Ligado Networks. As at 30 June 2016, we had deferred income of US\$205.2 million in respect of the Cooperation Agreement; however, this amount may not be sufficient to meet these costs. There can be no assurance that Ligado Networks will obtain a license from the FCC, remain solvent or make future payments, which could have a material adverse effect on our business, financial condition and results of operations.



***We rely on our third parties to provide ground infrastructure for our services.***

We sell our Existing & Evolved Services to third-party distribution partners, some of whom operate the land-earth stations (“LESs”) that transmit and receive those services to and from our satellites. If any of these distribution partners fail to provide or maintain these facilities, we would be forced to migrate the affected traffic to our own LES facilities. Although in such an event we have plans in place to migrate traffic to our own facilities, our Existing & Evolved Services would likely be interrupted whilst the migration takes place, which could adversely affect our business, financial condition and results of operations. We have third parties who provide the ground infrastructure for the EAN and our Global Xpress services. The failure of third parties to provide or maintain these services could also adversely affect our business, financial condition and results of operations.

***We rely on third parties to manufacture and supply terminals for end-users to access our services and, as a result, we cannot control the availability, cost and quality of such terminals.***

Terminals used to access our services are built by a limited number of independent manufacturers. Although we provide manufacturers with key performance specifications for the terminals, these manufacturers could do one of the following:

- reduce production of, or cease to manufacture, some of the terminals that access our services;
- manufacture defective terminals that fail to perform to our specifications;
- fail to build or upgrade terminals that meet end-users’ operational and cost requirements within our target sectors;
- fail to meet delivery schedules or to market or distribute terminals effectively; or
- sell some of our terminals at prices that end-users or potential end-users do not consider attractive.

If any of these third parties decides to cease manufacturing the terminals used to access our services, we may not be able to immediately find a replacement supplier on favourable terms, if at all. In addition, if any of our suppliers have difficulty manufacturing or obtaining the necessary parts or material to manufacture our products, our business may be adversely affected. For example, in 2015, we experienced a manufacturing quality issue with a third-party supplier in relation to our IsatPhone 2 voice service, which resulted in a temporary suspension of sales in the third quarter of 2015. As a result, satellite phone sales decreased by US\$6.1 million to US\$14.0 million in the year ended 31 December 2015 compared to US\$20.2 million in the year ended 31 December 2014 and have continued to be negatively affected in the first six months of 2016. In addition, we may have limited control over availability, quality and delivery. If key manufacturers or suppliers fail to meet our requirements, we may not deliver best value for our business. Any of the foregoing could adversely affect the ability of our distribution partners to sell our services, which, in turn, could have a material adverse effect on our business, financial condition and results of operations.

***The impact of the UK’s withdrawal from the EU may impact our business operations and prospects***

The UK’s decision in June 2016 to leave the EU (“**Brexit**”) may have a negative impact on our business, financial condition and results of operations. We may find that some of our skilled workforce may not be able to easily remain in the UK which could affect our ability to run the company efficiently or we may experience difficulties hiring employees from the EU. We may also find that there are impacts on our tax position, negotiating position against competitors for business opportunities and we may become subject to tariffs which are not applicable at the moment, which could have a material adverse effect on our business, financial condition and results of operations.

***We may not be able to recruit and retain the number and calibre of management or employees necessary for our business, which may adversely affect our revenues, profitability and liquidity.***

Technological competence and innovation are critical to our business and depend, to a significant degree, on the work of technically skilled employees. The market for the services of these types of employees is competitive and we depend on the capabilities of skilled and knowledgeable staff across the business generally. We may not be able to attract and retain these employees. If we are unable to attract and retain adequate technically skilled employees, including those supporting the development and provision of our higher bandwidth services and those staff who have expert skills in specific areas of the

business, this could have an adverse effect on our business, financial condition and results of operations. The British vote to leave the EU may have an impact on the retention, or recruitment, of some employees with key skills. Accordingly, the impact from Brexit on our employment base remains uncertain.

While Brexit has not yet occurred and the UK's negotiations with the EU have not yet started, any of the above could have a material adverse effect on our business, financial conditions and results of operations.

***We are subject to foreign exchange risk.***

We use the US dollar as our functional and reporting currency. While most of our revenues are denominated in US dollars, a substantial portion of our operating expenses and, from time to time, a proportion of our capital expenditures, are denominated in currencies other than the US dollar. We expect the proportion of our revenues and costs that are not US dollar denominated to rise over the medium-term. Since 1 January 2016, we no longer hedge our interest rate, foreign exchange rate and other risk exposures, other than in respect of selected long-term risks (such as our contractual obligations relating to the construction of two proposed Inmarsat-6 satellites). We may review whether we put in place a hedging strategy in the future. There is no assurance that we will be able to adequately manage our foreign currency exposure or that our business, financial condition and results of operations would not be affected by fluctuations of the US dollar against pound sterling.

Although we believe we are relatively well placed to withstand market challenges relating to the exit of the United Kingdom from the European Union, the economic impact following the vote remains uncertain and may have a material negative impact on our cost base, and subsequently our operating profit, in the future. Accordingly, there can be no assurance that our results of operations will not be affected by fluctuations in exchange rates. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

***We may be required to record impairment charges that would adversely affect our profitability.***

Accounting standards require the regular testing of the value of intangible assets, including goodwill, at the level of individual cash-generating-units ("CGUs"). In each of the years ended 31 December 2015, 2014 and 2013, we have recorded impairment charges relating to intangible assets held in CGUs across each of our business units. As our business evolves, further organisational, contractual and other changes may result in the requirement to record further impairment charges. Whilst these would not directly affect any cash outflow for us, they could have a material adverse effect on our business, financial condition and results of operations.

***Our product and service innovation may fail to meet market and customer expectations.***

Our strategy is focused on the implementation of major global technology platforms including Global Xpress, the EAN, Inmarsat Gateway and future services on the Inmarsat-6 L- and Ka-band hybrid satellite. Our products and services may fail to meet market and customer expectations. We may fail to critically assess our market, technological changes, customer requirements and competitors' strategy and to exploit market opportunities. We may develop next-generation services that will not meet these market opportunities impacting our market position, revenue or returns on investment. These services are being developed and are subject to implementation risk. Any delay in the implementation of these services could have a material adverse effect on our business, financial condition and results of operations.

**Risks Relating to Our Technology and the Operation and Development of Our Network**

***Our satellites are subject to significant operational risks while in orbit which, if they were to occur, could adversely affect our revenues, profitability and liquidity.***

Satellites are subject to significant operational risks while in orbit. These risks include malfunctions, commonly referred to as "anomalies", which have occurred in our satellites and the satellites of other operators as a result of various factors, such as satellite manufacturers' errors, problems with the power or control systems of the satellites and general failures resulting from operating satellites in the harsh environment of space.



Although we work closely with satellite manufacturers to determine and eliminate the cause of anomalies in new satellites and provide redundancy for many critical components in our satellites, we may experience anomalies in the future, either of the types described above or arising from the failure of other systems or components.

Any single anomaly or series of anomalies could materially adversely affect our operations, as well as our ability to attract new customers for our services. Anomalies could also terminate or reduce the expected useful life of a satellite, thereby reducing the revenue that we could generate with that satellite, or create additional expenses due to the need to provide replacement or back-up satellites. The occurrence of future anomalies could materially adversely affect our ability to insure our satellites at commercially reasonable premiums, if at all.

Meteoroid events pose a potential threat to all in-orbit satellites. The probability that a meteoroid will damage a satellite increases significantly when the Earth passes through the particulate stream left behind by comets. Occasionally, increased solar activity poses a potential threat to all in-orbit satellites and there has been an increase in solar activity in recent years. While we have designed our satellites to withstand such solar events, there can be no assurance that high levels of solar activity will not degrade satellite performance in the future.

Some decommissioned spacecraft are in uncontrolled orbits that pass through the geostationary belt at various points, and present hazards to operational spacecraft, including our satellites. The loss, damage or destruction of any of our satellites as a result of collision with meteorites, space debris, solar activity, malfunction or other events could have a material adverse effect on our business, financial condition and results of operations.

***We may be unable to obtain and maintain insurance for our satellites, and any insurance we do obtain may not cover all losses we experience. Even if our insurance were sufficient, delays in launching a replacement satellite could adversely affect our revenues, profitability and liquidity.***

The price, terms and availability of insurance have fluctuated significantly since we began offering commercial satellite services. The cost of obtaining insurance can vary as a result of either satellite failures or general conditions in the insurance industry. Insurance policies for satellites may not continue to be available on commercially reasonable terms, or at all. In addition to higher premiums, insurance policies may provide for higher deductibles, shorter coverage periods and additional satellite health-related policy exclusions. An uninsured failure of one or more of our primary satellites could have a material adverse effect on our financial condition, revenue, profitability and liquidity. In addition, higher premiums on insurance policies would increase our costs, thereby reducing our operating income.

Even where we have obtained in-orbit insurance for a satellite, this insurance coverage will not protect us against all losses that might arise as a result of a satellite failure. Our current in-orbit insurance policies contain, and any future policies can be expected to contain, specified exclusions and material change limitations customary in the industry at the time the policy is written. These exclusions typically relate to losses resulting from acts of war, insurrection or military action, or government confiscation, as well as lasers, directed energy beams, or nuclear or anti-satellite devices or radioactive contamination.

In addition, should we decide to launch another satellite to replace a failed operational satellite, the timing of such launch would be dependent on the completion of manufacture of such a replacement satellite and prior commitments made by potential suppliers of launch services to other satellite operators. In this case, our insurance does not protect us against lost or delayed revenue, business interruption or lost business opportunities.

We also maintain third-party liability insurance. This insurance may not be adequate or available to cover all third-party damages that may be caused by any of our satellites, and we may not in the future be able to renew our third-party liability cover on reasonable terms and conditions, if at all. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

***The capacity of our satellites is limited and our network can be subject to congestion due to concentrated usage in a specific geography. Continuing congestion could damage our reputation for service availability and harm our results of operations.***

As the majority of the customer traffic on our network is mobile in nature, the utilisation of our network capacity fluctuates and can be concentrated based on geography and other factors, such as the time of day or major events. For example, key shipping routes will tend to experience higher average traffic volumes than oceanic areas generally. Our ability

to serve concentrated levels of traffic is limited by the capacity of our satellites and our ability to move capacity around our network. Although we have designed our current and future networks to accommodate expected geographic patterns, peak demand and unexpected events, our network could become congested if concentrated demand exceeds our expectations. Such congestion on a sustained basis could damage our reputation for service availability and could have a material adverse effect on our business, financial condition and results of operations.

***Our ground networks are subject to significant operational risks, including IT-related risks, which, if they were to occur, could adversely affect our revenues, profitability and liquidity.***

Our L-band satellite control structure includes six tracking, telemetry and control stations located at different points around the globe. If two or more of these stations were to fail at the same time, our ability to operate our satellites effectively may be limited, which could adversely affect our revenues, profitability or liquidity. We also operate three satellite access stations (“SASs”) for our broadband services via our three Inmarsat-4 satellites and one Alphasat satellite. Two of these SASs provide service redundancy for the EMEA region, our busiest traffic area. The third SAS, located in Hawaii, currently provides services to two Inmarsat-4 satellites over the Americas and Asia-Pacific regions. While significant on-site redundancy has been incorporated into the Hawaii SAS, only one redundant site is currently available in case of a failure of the Hawaii SAS for one satellite. As a result, a failure of our Hawaii SAS could result in a material adverse effect on our business, financial condition and results of operations for our Inmarsat-4 satellites. The remaining backup site for the Hawaii facility is currently being established and we expect to have it available in 2017. In addition, we operate LESs for our Existing & Evolved Services in the Netherlands, Canada, Australia and New Zealand. Whilst we do not have site redundancy for the landing of this traffic in our sites, this traffic can be landed at the LESs operated by our third-party distributors. Migrating our traffic to LESs operated by third-party distributors could be disruptive, which could have an adverse effect on our business, financial condition and results of operations, despite agreements and procedures being in place to support this migration.

Our S-band network which will provide the EAN service will consist of a SAS in Greece and multiple air-to-ground antennas operated by Deutsche Telekom. Our Ka-band Global Xpress satellite constellation utilises three sets of SASs, two SAS sites are in operation for each of the Inmarsat-5 satellites with locations in Greece and Italy covering the Indian Ocean region satellite; Lino Lakes in the US and Winnipeg in Canada for the Atlantic Ocean region satellite and two sites in New Zealand for the Pacific Ocean region satellite. We expect to have additional SASs operating to support the Inmarsat-5 F4 satellite once it is launched. The resilience of our IT systems, voice and data networks and associated infrastructure is essential to the operation of our satellite networks. We face a variety of hazards that could cause significant interruptions to the delivery of our services, including component failure, physical attack, fire, explosion, and other occurrences. These could lead to an interruption of our services which could affect our ability to process orders and invoices, leading to reduced user traffic and reduced revenue which could affect our business operations, customer satisfaction, our revenues, financial position and our brand reputation. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

***Our Global Xpress and EAN services are subject to implementation risk.***

We are currently in the process of implementing two major investment programmes, Global Xpress and the EAN. These programmes include the deployment of an additional Ka-band satellite and one S-band satellite. These programmes, which also include ground networks, terminals, our Inmarsat Gateway platform and related services, and for the EAN service, the launch of the S-band satellite and the deployment of an air-to-ground complementary ground network by Deutsche Telekom, may be subject to delays and/or material cost overruns. There can be no assurance that the development of new satellites, ground networks, or terminals and/or the introduction of new services will proceed according to anticipated schedules or cost estimates, or that the level of demand for the new services will justify the cost of setting up and providing such new services. Failure or a delay in the completion by us or third parties with whom we contract for the provision of their services of such networks and/or services and/or the launch or deployment or operation of such satellites and/or new services, or increases in the associated costs, could have a material adverse effect on our business, financial condition and results of operations. For example, due to successive Proton launch failures, the launch schedules for our second and third Inmarsat-5 satellites were delayed. This resulted in a subsequent delay of the launch of our global GX services by approximately nine months. In addition, under a roadmap towards the launch of the EAN agreed with the European Commission in 2013 (the “Roadmap”),

we are required to achieve certain milestones. While we have achieved all relevant milestones so far, we expect to miss a 1 December 2016 deadline set for the launch of the S-band satellite delivering the EAN and commercial launch of the EAN. Although the Roadmap is not a binding EU document, as a result of such delay we may still face the risk of fines or other sanctions.

Furthermore, as we are relying on contractual counterparties to perform under our contracts relating to the development and launch of these programmes, we are at risk that these parties may not perform as anticipated and disputes may arise as to their contractual obligations.

Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

***Our networks, IT operating systems and those of our distribution partners may be vulnerable to security risks, cyber crime and fraud.***

We expect the secure transmission of confidential information over our networks to continue to be a critical element of our operations. Our network and those of our distribution partners have in the past been, and may in the future be, vulnerable to security risks from unauthorised access, computer viruses, denial of services and other security problems. Persons who circumvent our security measures could wrongfully obtain or use information on our network or cause interruptions, delays or malfunctions in our operations, any of which could have a material adverse effect on our revenues, profitability and liquidity. We are subject to the risk of actual or attempted IT security breaches from parties with criminal or malicious intent. We may be required to expend significant resources to protect against the threat of security breaches or to alleviate problems, including reputational harm and litigation, caused by any such breaches. Our customers may not use our services if we are unable to demonstrate that our services are reliable and meet certain cyber security requirements. These actions could result in a material adverse effect on our business, financial condition, results of operations and brand reputation.

Although we have implemented and intend to continue to implement industry-standard security measures, in response to emerging threats such as cyber crime and fraud, these measures may prove to be inadequate and may result in system failures and delays that could have a material adverse effect on our business, financial condition and results of operations.

***New or proposed satellites, such as Inmarsat-5 F4, the S-band satellite and the proposed Inmarsat-6 satellites are subject to construction and launch delay and launch failures, including a launch that fails to deliver a satellite to its designated orbital location after launch, or other satellite damage or destruction during launch, which could result in a total or partial satellite loss, the occurrence of which could have an adverse effect on our business, financial condition and results of operations.***

We currently expect to launch our Inmarsat-5 F4 satellite by the end of 2016, subject to confirmation from SpaceX as to the availability of a launch vehicle. Additionally, our S-band satellite is currently expected to be launched in the first half of 2017. Each of these launches is subject to confirmation from SpaceX as to the availability of a launch vehicle. SpaceX recently reported an anomaly which resulted in the loss of the launch vehicle and its satellite. We currently expect our Inmarsat-6 satellites to be launched in the early 2020s. The construction and launch of satellites requires significant capital expenditure and is subject to the risk of delay and other problems. We may experience delays in the construction of satellites and launch vehicles, the periodic unavailability of reliable launch opportunities, possible delays in obtaining regulatory approvals and launch failures. For example, failures of successive Proton launches resulted in a delay to the launch schedules for Inmarsat-5 F2 and F3. This resulted in a subsequent delay of the launch of our global GX services by approximately nine months. A delay of our Inmarsat-5 F4, S-band or Inmarsat-6 satellites could adversely affect our operations and our revenues. A delay caused by a launch failure may also preclude us from achieving our expected market penetration in Ka-band or S-band and undermine our ability to implement our business strategy. Launch vehicles may also underperform, in which case the satellite may still come into service by using on-board propulsion systems to reach the desired orbital location, but which would result in a material reduction in the satellite's service life. The failure to implement our satellite deployment plan on schedule could have a material adverse effect on our business, financial condition and results of operations.

***If we experience shorter than expected useful lives for our satellites, our profitability could be adversely affected.***

A number of factors affect the useful lives of the satellites, including, among other things, market obsolescence, the quality of their construction, the durability of their component parts, the ability to continue to maintain proper orbit and control over the satellite's functions, the efficiency of the launch vehicle used, space weather events and the remaining on-board fuel following orbit insertion. Our Inmarsat-3 and Inmarsat-4 satellites each have a minimum design life of 13 years.

The Inmarsat-5 and Alphasat satellites have design lives of 15 years each. The S-band and Inmarsat-6 satellites are expected to have a design life of 15 years. The actual useful lives of our satellites can vary depending on their design lives. Changes in useful lives can have a significant effect on our depreciation charge and profitability. We regularly reassess the useful economic lives of our satellites for financial reporting purposes. In October 2005, we changed the useful lives of the Inmarsat-4 satellites from 13 years to 15 years to reflect the better than expected performance of the launch vehicles and the adoption of an optimised mission strategy which is expected to extend the orbital lives of these satellites beyond their initial design life. However, there can be no assurance that in the future we will not be required to shorten the useful economic lives of our current or future satellites which could have a material adverse effect on our business, financial condition and results of operations.

***New technologies introduced by our competitors may reduce demand for our services or render our technologies obsolete, which may have a material adverse effect on the cost structure and competitiveness of our services, possibly resulting in a negative effect on our revenues, profitability and liquidity.***

The space and communications industries are subject to rapid advances and innovations in technology. We expect to face competition in the future from companies using new technologies and new satellite and terrestrial systems. Advances or innovations in technology could render our technologies obsolete or less competitive by satisfying consumer demand in more attractive or cost-effective ways, or by introducing standards that are incompatible with ours. Obsolescence of the technologies that we use could have a material adverse effect on our business, financial condition and results of operations.

***Our business relies on intellectual property, some of which third parties own, and we may inadvertently infringe upon their patents and proprietary rights.***

Many entities, including some of our competitors, currently (or may in the future) hold patents and other intellectual property rights that cover or affect products or services related to those that we offer. We cannot provide assurance that we are aware of all intellectual property rights that our products may infringe upon. In general, if a court were to determine that one or more of our products infringe upon intellectual property held by others, we may be required to cease developing or marketing those products, to obtain licences from the holders of the intellectual property or to redesign those products in such a way as to avoid infringing upon others' intellectual property. We cannot estimate the extent to which we may be required in the future to obtain intellectual property licences or the availability and cost of any such licences. To the extent that we are required to pay royalties to third parties to whom we are not currently making payments, these increased costs of doing business could negatively affect our profitability or liquidity.

In addition, if a competitor holds intellectual property rights, it may not allow us to use its intellectual property at any price, which could have a material adverse effect on our business, financial condition and results of operations.

## **Regulatory Risks**

***Our business is subject to regulation and we face an increasing regulatory burden with respect to the transmission of our satellite signals and the provision of our MSS in some countries, which could require us to incur additional costs, could expose us to fines and could limit our ability to provide existing and new services in some countries.***

The maintenance and expansion of our business is dependent upon, among other things, our ability (and/or the ability of our distribution partners and/or their service providers) to obtain required government licences and authorisations in a timely manner, at reasonable costs and on satisfactory terms and conditions.

Our business is subject to the regulatory authority of the UK government and the national authorities of the countries in which we operate, as well as to the regulations of various international organisations. Government authorities generally regulate, among other things, the construction, launch and operation of satellites, the use of satellite spectrum at specific orbital locations, the licensing of earth stations and mobile terminals, and the provision of satellite services.

In particular, under the UK Outer Space Act 1986, we must obtain licences to conduct our business, including for the launch of our satellites. The terms of these licences provide that we indemnify the UK government without limit for any claim brought against it as a result of our licensed activities or in respect of any loss suffered by the UK government as a result of any breach of the terms of the licence. We also must maintain insurance of Euro 60 million per event to be used to pay any sums to the UK government in respect of this indemnity.

The use of the radio spectrum and the satellite orbit is subject to the application of an international treaty stewarded by the ITU (referred to as the “**Radio Regulations**”). The Radio Regulations establish rights and obligations for each country; for example, Article 18.1 of the Radio Regulations states that no transmitting station may be operated by any enterprise without an appropriate licence. The Radio Regulations also stipulate a schedule of fees to be paid by the country responsible for the satellite network for the treatment by the ITU secretariat of filings submitted in application of the Radio Regulations for that particular network; payments not received on time result in the cancellation of the filings and loss of rights. We cover these costs by reimbursing the countries that make filings to the ITU on our behalf. These costs are currently not high and there is a risk that the ITU could increase them in the near future.

In this respect, we note that our most valuable competitive assets, the rights to use certain frequency bands in certain orbital slots, are dependent on the ITU allocation and filing procedures, which is subject to a cycling review process every three to four years. Changes aiming to improve the regulatory framework, or making it more equitable in relation to the access to the spectrum and orbit resource for the countries, tend to make the regulations more cumbersome and the processes more complex. On the frequency allocation side, the continuous claims by terrestrial operators for more spectrum, increasingly also in the high frequency bands, is a threat to the amount of spectrum satellite operators will be able to maintain as exclusive allocation (i.e., free of frequency sharing constraints). In respect of our L-band services (e.g., in our Alphasat Inmarsat-4 F4 satellite), a recent decision to identify the bands adjacent to ours for broadband mobile terrestrial services creates the risk of affecting the performance of our receiving terminals. We have also seen that some countries are taking decisions to assign our L-band spectrum to other uses, jeopardising our ability to offer services in these countries. Moreover, a recent trend has appeared where several low and medium Earth orbit satellite projects claim to be able to use the same spectrum as that traditionally utilised by the geostationary satellite systems, but with a relaxation to the constraints to protect the geostationary systems so far imposed on them by the Radio Regulations.

Increasingly, regulatory authorities are imposing fees and introducing new regulatory requirements on businesses that use spectrum or offer communications services. This could significantly adversely affect our business. In addition to the licences issued to us by the UK government for the launch and operation of our satellites, to date we have obtained specific telecommunications, network or frequency licences with respect to our existing services in most countries where this sort of licence is required, and are currently discussing terms and conditions with several other countries. Additional countries are considering whether to implement such licence requirements or to introduce or increase licensing fees. These licence requirements and fees could require us to incur new and unforeseen additional costs, could expose us to fines if we were unable to obtain or retain any licences or meet all regulatory requirements, and could limit our ability to provide existing or new services in some countries, which could adversely affect our revenues, profitability or liquidity. While we have in the past been able to negotiate exemptions or fees that are nominal or proportionate to our business and the amount of spectrum actually used in a country, this cost could be higher in countries served by multiple beams, particularly in Ka-band or through a combination of L- and Ka-band.

We have initiated actions to adopt licensing frameworks for our Global Xpress Ka-band services based on the approach that we used to obtain our existing licenses in Europe, where a class or blanket licence instead of individual licences would be applicable to domestic earth stations and free circulation of visiting terminals would be accepted on the basis of mutual recognition agreements. We cannot provide assurance that this approach will be accepted in all relevant countries, and, therefore, whether we will be successful in receiving licenses in all locations where we wish to offer our services. In some countries, the use of the Ka-band has not yet been regulated for satellite use on a national basis, creating an additional complication.

It is also possible that regulatory authorities in some countries may require us to establish a gateway or a point of presence in their countries as a condition to distributing our services in those countries. For example, we are required to operate SASs in China and Russia to comply with our licenses in these countries. This is also a barrier to entry in India. Some countries may also require us to provide traffic reports on a regular basis or maintain a domestic billing database for their country. In addition, there is a trend towards stricter legal intercept requirements. To the extent we own and/or operate the earth stations for our broadband GSPS services and Global Xpress, we are required to obtain licences for the operation of those stations as network facilities, and also will need to obtain rights to C- band and/or Ka-band spectrum for communications between the stations and our satellites. Approval of the offering of our services or operation of earth stations will be contingent upon us or our distribution partners providing services to any countries as they may so require, with the ability to monitor calls made to or from such countries and/or to intercept traffic. Although we believe that we will be able to address the concerns of many of these countries as they arise, there is no assurance that we (and/or our distribution partners



and/or their service providers) will be able to do so. In addition, some countries in which we or our distribution partners, or their service providers, operate have laws and regulations relating to privacy and the protection of data which may impair our ability to obtain licences or offer our services on a timely basis. Furthermore, we need to ensure full compliance with UK Data Protection regulations when addressing these concerns.

With respect to our S-band network, we are currently in the process of obtaining national CGC authorisations. As the use of MSS for an integrated satellite/terrestrial EAN service is a recent development, some regulators are still finalising their national frameworks. As a result, obtaining a CGC authorisation is subject to the risk of delays, failure to obtain the necessary licenses, uncertain fees and unclear operating conditions.

Laws, policies and regulations affecting the satellite industry are subject to change in response to industry developments, new technology or political considerations. Legislators or regulatory authorities in various countries are considering, and may in the future adopt, new laws, policies and regulations or changes to existing regulations regarding a variety of matters that could, directly or indirectly, affect our operations or the operations of our distribution partners, or increase the cost of providing services over our system. Changes to current laws, policies or regulations or the adoption of new regulations could affect our ability to obtain or retain required government licences and authorisations or could have a material adverse effect on our business, financial condition and results of operations.

We also face competition from other operators and third-parties for government licences. If we are unsuccessful in acquiring such licences, we may suffer a material adverse effect on our business, financial condition and results of operations.

***Our contractual relationships with our distribution partners may be subject to regulatory challenge, which could require us to renegotiate the contractual relationships and could result in the imposition of fines.***

Our overall relationship with our distribution partners is governed by our Distribution Agreements and our VAR Agreements. There is a risk that regulatory authorities or other third parties could challenge the Distribution and VAR Agreements, for example under European Union competition laws. It is not possible to obtain an exemption from European Union competition rules, and parties must make their own assessment as to whether their agreements fulfil European Union competition requirements. We have previously conducted a regulatory review of the terms of our Distribution Agreements, and of our competitive position in the sectors in which we operate. We do not believe that we are party to any agreement that is, in the current competitive environment, anticompetitive, or otherwise faces a significant risk of regulatory challenge. However, the competitive environment may change, and regulatory risk analysis is by its nature subjective. Therefore, we cannot assure you that either we, or the Distribution and VAR Agreements, or our distribution partners face no risk of challenge. For example, competition authorities could determine that we have market power in one or more business sectors, and could challenge us, or the Distribution and VAR Agreements, or our distribution partners, as anticompetitive. A successful regulatory challenge could result in portions, or all, of the Distribution and VAR Agreements being declared unenforceable, could require us to modify or replace certain provisions of the Distribution and VAR Agreements in order to achieve compliance and, in certain circumstances, could result in the imposition of fines. Competition authorities generally have powers to impose fines, including for breaches of competition laws, which in the case of the European Commission, is up to a maximum of 10 per cent. of a company's worldwide annual group revenues. In addition, third parties could initiate civil litigation claiming damages caused by alleged anticompetitive practices and agreements. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

***Our reputation and our ability to do business may be impaired by corrupt behaviour by our employees or agents or those of our subsidiaries which may have a material adverse effect on our results of operations.***

We are subject to laws in the jurisdictions in which we operate that prohibit the Group, our employees, directors, officers, agents or other intermediaries from making improper payments or offers of payment to business partners, governments and their officials and political parties for the purpose of obtaining or retaining business. Although we have in place anti-corruption policies for all our employees, directors and officers and clauses in our contracts with our agents, distribution partners, suppliers and other relevant third parties, we may be subject to government enquiries or sanctions in respect of our business activities. We rely upon our employees and other parties to follow the anti-bribery requirements and to avoid taking, making or facilitating bribery, including of government officials. We cannot be certain that any such activities are not undertaken and we cannot guarantee that our anti-bribery policies prevent situations of money laundering or bribery, including actions by employees, agents or other intermediaries or acquired businesses, for which we may be held



responsible. In addition, we have in the past acquired, and may continue to acquire in the future, entities, undertakings or businesses from third parties. We cannot provide assurance that any entity, business or undertaking, and its employees, officers and directors, acquired or to be acquired by us have always complied with all applicable anti-corruption and anti-money laundering laws and we may be held responsible for any misconduct even if it occurred prior to us acquiring such entity, undertaking or business. Any of such events may have severe consequences, including sanctions, fines, loss of customers or contracts and reputational consequences, which could have a material adverse effect on our business, financial condition and results of operations.

***We may not be aware of certain foreign government regulations.***

We, our customers and the companies with which we or our customers do business may be required to have authorisation from each country in which we or such companies provide services or provide our or their customers with the use of our satellites. We may not be aware of whether some of our customers and/or companies with which we or our customers do business do not hold the requisite licences and approvals as required in such countries.

Because regulatory schemes vary by country and evolve over time, we may be subject to regulations in foreign countries of which we are not presently aware. If that were to be the case, we could be subject to sanctions by a foreign government that could materially adversely affect our ability to operate in that country. In all jurisdictions in which we plan to offer services, our current regulatory approvals could now be (or could become) insufficient in the view of foreign regulatory authorities, any additional necessary approvals may not be granted on a timely basis (or at all) and applicable restrictions in those jurisdictions could become unduly burdensome. The failure to obtain the authorisations necessary to operate satellites internationally could have a material adverse effect on our business, financial condition and results of operations.

***Our distribution partners and service providers face increasing regulation in many countries, and end-users often require licences to operate end-user terminals. This regulatory burden could increase the costs to our distribution partners and service providers or restrict their ability to sell our products.***

Our distribution partners and service providers require licences and regulatory consents (including national type approval of Inmarsat products where applicable) to offer our services in many countries where they operate. In addition, end-users often require licences and national type approval for local partners to use our terminals. Furthermore, we expect that our distribution partners, their service providers and end-users will require licences for our L-band, Ka-band and S-band services in many jurisdictions in which they distribute our services or use our terminals, and they may fail to obtain those licences. Any delay or failure by our distribution partners, their service providers or end-users to obtain required licences in connection with the distribution of our services or use of terminals could prevent our services from being distributed, sold or used in some countries or lead to unauthorised use that could adversely affect the reputation of our brand, which could have a material adverse effect on our business, financial condition and results of operations.

***We may not be successful in coordinating our satellite operations under applicable international regulations and procedures or in obtaining spectrum and orbital resources we require for our operations.***

The use of spectrum and orbital resources by us and other satellite networks must be coordinated pursuant to the Radio Regulations in order to avoid causing harmful interference between or among the respective satellite networks. In the case of the L-band, the ITU process has been put into effect on the basis of agreements between the relevant national administrations whereby the use of frequencies by our satellite network and other satellite networks is coordinated in regional operator review meetings and negotiations. Whilst we have agreed allocations globally for the time being, it may not be possible to achieve continued agreement amongst operators in all regions. The increased competition for spectrum and orbital locations may make it difficult for us to obtain additional L-band spectrum allocations we require for our forecasted requirements. In the future, we may not be able to coordinate our satellite operations successfully under international telecommunications regulations and we may not be able to obtain or retain the spectrum and orbital resources we require to provide our existing or future services.

Competition for orbital locations in the Ka-band is intense and coordination can be challenging, in particular because we have no previous coordination rights in this band. We may not be able to successfully coordinate orbital locations for all Inmarsat-5 satellites, may experience delays in obtaining the required agreements, or may not be able to coordinate access to optimum locations. We may face the same issues for the new Inmarsat-6 satellites as we seek orbital slot locations. The Ka-

band portion of our S-band satellite, which relates to the feeder links, belongs to Hellas-Sat and Hellas-Sat completed the coordination for the orbital slot. The orbital slot for the S-band portion of the satellite was filed by the UK on our behalf following the ITU process and operates in the same way as other filings made for us.

***We may become subject to unanticipated tax liabilities that may have a material adverse effect on our results of operations.***

Changes in tax laws could adversely affect our tax position including our effective tax rate or tax payments. In addition, tax laws and regulations generally are extremely complex and are subject to varying interpretations. We often rely on generally available interpretations of tax laws and regulations in jurisdictions in which we operate, but we cannot be certain that the relevant tax authorities are in agreement with our interpretation of these laws. If our tax positions are challenged by relevant tax authorities, the imposition of additional taxes could require us to pay taxes that we currently do not collect or pay or increase the costs of our services to track and collect such taxes, which could increase the costs of our operations and have a negative effect on our business, financial condition, results of operations and cash flow.

We are the subject of current enquiries in the UK by HMRC where HMRC has indicated it is challenging and may amend certain tax positions we have adopted previously, one of which is in the process of being referred to the UK tax tribunal. We have made a provision for tax in respect of the ongoing enquiries by HMRC to cover the additional UK tax where we believe it is probable that HMRC will decide to amend the tax positions previously adopted by us (based on the progress of the enquiries at the date of this document). In the event that all enquiries were settled as currently provided for, we estimate that an amount of approximately US\$80 million would be payable, however if HMRC's position on all of these enquiries were to prevail, the additional UK tax payable by us in relation to those enquiries would exceed that amount.



## OPERATING AND FINANCIAL REVIEW

### Overview

We are a leading provider of MSS, providing data and voice connectivity to end-users worldwide, with over 37 years of experience in designing, launching and operating satellite-based networks. We have an in-orbit fleet of 11 owned and operated satellites in geostationary orbit and we provide a comprehensive portfolio of global mobile satellite communications services for use on land, at sea and in the air. These include voice and broadband data services, which support safety communications as well as standard office applications such as email, internet, secure VPN access and video conferencing. Our global sales and marketing activities are operated through five market-facing business units: Maritime, Enterprise, Aviation, US Government and Global Government. Each business unit focuses on its specific customer markets and distributes its products both through distributors and directly. Our revenues, EBITDA and operating profit for the year ended 31 December 2015 were US\$1,274.1 million, US\$726.0 million and US\$426.4 million, respectively.

We have a successful launch and operating track record. We have launched three generations of L-band satellites and a new generation of Ka-band satellites and have not experienced a satellite failure either upon launch or in orbit. Our current fleet of eight in-orbit L-band satellites includes four Inmarsat-3 satellites, launched between 1996 and 1998, and four Inmarsat-4 satellites (including Alphasat), launched in March 2005, November 2005, August 2008 and July 2013. Our Inmarsat-3 satellites have remained in commercial operation beyond their original design lives. We deorbited the first of our five Inmarsat-3 satellites in 2016 and we expect that the last of our Inmarsat-3 satellites will be in commercial operation beyond 2018. We use our Inmarsat-3 satellites to offer our Existing & Evolved Services, which include all of our services offered prior to the start of services on our Inmarsat-4 satellites. Our Inmarsat-4 satellites provide our broadband services, GPS and certain M2M services, as well as provide continuity for our Existing & Evolved Services.

In addition to our established L-band satellite services business, we have implemented a fully-funded US\$1.6 billion investment programme to provide new services in Ka-band. We refer to these services as GX. GX is designed to deliver seamless global coverage and deliver Ka-band services with broadband speeds up to 50 Mbps for users in the maritime, enterprise, energy, aviation, and government sectors. GX services are currently supported by an operational constellation of three Inmarsat-5 satellites. The first Inmarsat-5 satellite was successfully launched in December 2013 and entered commercial service in July 2014. We launched the second and third Inmarsat-5 satellites in February 2015 and August 2015, respectively, and the global commercial service introduction of GX was achieved in December 2015. The establishment of our Inmarsat-5 satellite network has added significant capacity to our global network and provides us with global Ka-band coverage, which we believe integrates seamlessly with our proven L-band network.

The construction of our fourth Inmarsat-5 satellite is being completed for us by Boeing Space and Intelligence Systems in California. We expect to launch this fourth Inmarsat-5 satellite by the end of 2016, subject to confirmation from SpaceX as to the availability of a launch vehicle. This satellite will provide in-orbit redundancy as well as incremental global Ka-band capacity.

In June 2014, we announced a decision to deploy an integrated telecommunications network to deliver aviation passenger connectivity services on an EU-wide basis. To achieve this, we placed an order for a new S-band satellite with Thales which will be complemented with a fully integrated air-to-ground network across the EU. This service is called the EAN. In September 2015, we announced a partnership with Deutsche Telekom to construct the CGC of the EAN, which will comprise a hybrid, integrated satellite/air-to-ground network providing high-speed data services to planes in the European airspace. The ground network will comprise approximately 300 LTE sites across Europe, each with a range of approximately 80 km, which Deutsche Telekom will build and manage. The satellite and ground networks will be integrated such that switching between them will be managed automatically by a plane's on-board systems, with no expected impact on service delivery. The EAN will be fully integrated with an S-band satellite. Construction of the S-band satellite by Thales has been completed and the satellite has been shipped to Thales' testing centre in Cannes, France for testing before it is declared ready for flight. We currently expect the commercial launch of the EAN in mid-2017.

The Group operates through five market-facing business units, comprising: Maritime, focusing on worldwide commercial maritime services; Enterprise, focusing on worldwide energy, industry, media, carriers, and M2M services; Aviation, focusing on commercial, business and general aviation services; US Government, focusing on US civil and military government services; and Global Government, focusing on worldwide civil and military government services. These five business units are supported by 'Central Services' which include satellite operations and backbone infrastructure, head office

and corporate administration and also includes our business with Ligado Networks. For the purposes of IFRS reporting, the Group has aggregated the US Government and Global Government business units into one reporting segment as the segments meet the criteria for aggregation under IFRS. Therefore, the Group's reportable segments are Maritime, Government, Enterprise, Aviation and Central Services.

## **Recent Developments**

### ***Changes in management***

In early September 2016, we implemented certain management changes. Paul Gudonis was appointed as President of our Enterprise business unit. Mr Gudonis has been with Inmarsat for nine years and has worked within the Enterprise business for almost two years. Our former President of the Enterprise Business Unit is now focused on developing another business opportunity for us and stepped down from the senior management team. Our former Chief Operations Officer, Ruy Pinto, has taken on new responsibilities to drive our commercial digital capabilities and assumed the title Chief Digital Transformation Officer. We have appointed Jason Smith to be our new Chief Operations Officer. Mr Smith joined Inmarsat on 5 September 2016 from the Rolls Royce Nuclear business.

### ***SpaceX launch failure***

On 1 September 2016, there was an explosion on the launch pad at the Kennedy Space Center in Florida, during the fueling for the test firing of a SpaceX Falcon 9 launch vehicle. SpaceX reported that during preparations for a test firing there had been an anomaly on the launch pad resulting in the loss of the launch vehicle and the satellite that it had been due to launch for a commercial customer. At this stage, we cannot confirm whether or not the incident at Cape Canaveral will have an impact on the launch schedule for our Inmarsat-5 F4 satellite. We do not have any confirmation in respect of SpaceX's subsequent plans regarding its launch programme.

### ***Convertible Bonds issued by Inmarsat plc***

On 9 September 2016, Inmarsat plc issued US\$650 million 3.875 per cent. convertible bonds due 2023. The net proceeds of the issue are being used primarily to fund the approximately US\$390 million repurchase of the outstanding US\$287.7 million 1.75 per cent. convertible bonds due 2017 at an issue price of 100 per cent. The remaining proceeds, less customary fees and expenses, are held as cash on the balance sheet by Inmarsat plc.

## **Significant Factors Affecting Our Results of Operations**

### ***Market Conditions***

We provide global mobile connectivity on land, at sea and in the air. We have structured our business units to ensure that we remain close to the needs of our Maritime, Government, Enterprise and Aviation customers so that we can continue to deliver innovative products and solutions that meet their evolving remote and mobile connectivity needs. In recent years, our business has faced difficult market conditions, particularly in respect of the Maritime, Government and Enterprise reporting segments, which have impacted our results.

*Maritime.* The commercial shipping market remains in recession, with low growth in global trade, over-capacity in the global merchant fleet, high fixed costs and low cargo rates. Recent oil price volatility and the decrease in exploration activity resulting therefrom has also continued to adversely affect our energy customers, including oil and gas offshore supply vessel activity. Connectivity nevertheless continues to be seen as an enabler of lower-cost operations and as a competitive advantage, with the return on investment in broadband communications being recognised by ship and rig operators. These factors have contributed to Maritime revenue remaining relatively flat over the past few years, with revenue of US\$595.6 million and US\$593.2 million in the years ended 31 December 2014 and 2015, respectively. In the six months ended 30 June 2016, Maritime revenue decreased by 2.5 per cent. as compared to the same period in 2015, primarily reflecting the decline in our maritime Existing & Evolved Services which was not completely offset by growth in FleetBroadband and XpressLink revenues. We continue to believe that FleetBroadband and Fleet Xpress, our Maritime GX offering, are well positioned as the shipping industry's communications services of choice and that that the smart shipping era will drive future growth in our Maritime business.

**Government.** Tight financial budgets and lower operational activity levels generally continue to put pressure on satellite operators' revenues and margins. Discretionary, rather than baseline, funding levels remain the key drivers of commercial satellite expenditure and this trend may continue. Outside of the traditional defence markets, the situation is varied, with economic and currency headwinds in some areas and growing demand for specific solutions in others. Total revenue from our Government reporting segment has declined from US\$408.3 million in the year ended 31 December 2013 to US\$319.9 million and further to US\$286.6 million in the years ended 31 December 2014 and 2015, respectively. However, the first half of 2016 has demonstrated positive market momentum in response to increased operational activity outside the US, with Government revenue for the six months ended 30 June 2016 increasing by 2.6 per cent. compared with the six months ended 30 June 2015.

**Enterprise.** In respect of the Enterprise market, the energy, non-governmental organisation and media industries continue to be depressed. Despite robust competition from terrestrial mobile operators, the M2M segment, together with emerging 'smart' sectors (particularly transportation, agriculture, cities, healthcare and education), continue to provide near-term and medium-term growth opportunities. During the period under review, revenue from our Enterprise reporting segment decreased from US\$221.6 million in the year ended 31 December 2013 to US\$166.7 million and US\$159.5 million in the years ended 31 December 2014 and 2015, respectively, and from US\$79.3 million in the six months ended 30 June 2015 to US\$72.5 million in the six months ended 30 June 2016.

**Aviation.** We believe that Aviation represents a major growth market, driven by the rapidly expanding demand for passenger connectivity, the increasing number of business and commercial aircraft and the need for more capable and sophisticated operational and safety services in the cockpit. Our GX and EAN assets are expected to enable us to compete strongly in this segment. During the period under review, we increased revenue from our Aviation reporting segment from US\$73.4 million in the year ended 31 December 2013 to US\$101.1 million and US\$126.8 million in the years ended 31 December 2014 and 2015, respectively, and to US\$64.6 million in the six months ended 30 June 2016 from US\$57.9 million in the six months ended 30 June 2015.

### **Ligado Networks Cooperation Agreement**

For the years ended 31 December 2015, 2014 and 2013, respectively, as well as for the six months ended 30 June 2016 and 2015, respectively, we received revenue under the terms of our Cooperation Agreement with Ligado Networks. The table below sets out total revenues attributable to our Cooperation Agreement for the periods indicated.

	Six months ended 30 June		Year ended 31 December		
	2016	2015	2015	2014	2013
	(US\$ in millions)				
Total revenues.....	53.4	35.0	88.6	75.4	12.3

In December 2007, we entered into a Cooperation Agreement with Ligado Networks designed to enable Ligado Networks' ATC services in North America, while protecting the continued deployment and growth of our own MSS business. Under the terms of the Cooperation Agreement, Ligado Networks agreed to make payments in quarterly instalments in exchange for spectrum rights. In May 2012, Ligado Networks filed for a reorganisation under Chapter 11 of the US Bankruptcy Code. Accordingly, from that date, we only recognised revenue from Ligado Networks when it was received in cash because payments from Ligado Networks were subject to significant uncertainty. In December 2015, Ligado Networks emerged from bankruptcy protection and raised new capital. Accordingly, from the fourth quarter of 2015, we have returned to accruals-based accounting for payments under the Cooperation Agreement.

In addition to quarterly instalments, we received a one-time payment of US\$250 million in 2010 in accordance with the terms of the Cooperation Agreement from Ligado Networks for costs to be incurred in the future to mitigate potential interference from Ligado Networks' ATC services. This amount was recognised as deferred income on our balance sheet. At the time costs are incurred, we release a portion of this deferred income and recognise an equivalent amount as revenue based on a percentage of completion methodology.

In 2013, we recognised revenue of US\$12.3 million under our Cooperation Agreement attributable to the release of deferred income. In 2014, we recognised revenue of US\$75.4 million comprising two quarterly payments from Ligado Networks and a release of US\$43.8 million from our deferred income. In 2015, we recognised revenue of US\$88.6 million,



reflecting four quarters of cash payments from Ligado Networks and one quarter of accrual based income. In the six months ended 30 June 2016, we recognised revenue of US\$53.4 million comprising two quarters of cash income of US\$49.7 million and US\$3.7 million of deferred income.

On 1 April 2016, we announced that Ligado Networks had elected the 30 MHz option under the Cooperation Agreement. Since that date, we have discussed with Ligado Networks in detail the nature and timing of transition to the 30 MHz Plan and have agreed to an amendment that we believe benefits both parties. In exchange for deferral of certain payments from Ligado Networks, we have agreed with Ligado Networks to delay the transition to the 30 MHz Plan and Ligado Networks has provided us with enhanced spectrum usage rights for our satellite operations for a minimum period of two years. Ligado Networks has agreed to make aggregate cash payments of approximately US\$108.3 million, US\$111.7 million and US\$118.5 million in 2016, 2017 and 2018, respectively, payable in quarterly instalments. Over this period, up to approximately US\$35 million of additional contracted payments will be deferred. In addition, we have granted Ligado Networks a full payment deferral in an aggregate amount of approximately US\$132.3 million for 2019. From 1 January 2020, no further payments will be deferred and quarterly payments will recommence at the level of approximately US\$136.3 million per annum, escalating at 3 per cent. per annum, in accordance with the existing terms of the Cooperation Agreement. All deferred amounts will be increased by agreed amounts and repayable on 30 June 2021 or earlier in certain circumstances. Payment deferrals will stop from the date of any FCC approval of Ligado Network's spectrum for terrestrial use.

At 30 June 2016, we had deferred income of US\$205.2 million remaining on our balance sheet. The impact of the foregoing on the deferred income balance in respect of the costs of implementation of the Cooperation Agreement is still to be determined.

#### ***Effect of Fluctuations in US Dollar Relative to Pound Sterling***

We use the US dollar as our functional and reporting currency. While almost all of our revenues are denominated in US dollars, a significant portion of our operating expenses and a proportion of our capital expenditures are denominated in currencies other than the US dollar.

Our primary exchange rate risk is against pounds sterling, and continued fluctuation in the US dollar will affect our results of operations in 2016 and future periods.

Our hedged rate between US dollar and pounds sterling for operating expenditures as at 31 December 2015 was US\$1.59/£1.00. Our hedged rate between US dollars and pounds sterling for operating expenditures as at 31 December 2014 was US\$1.54/£1.00 (as compared with US\$1.57/£1.00 as at 31 December 2013). We ceased hedging as at 31 December 2015, except for certain long-term risks such as the exposure from our obligations relating to the Inmarsat-6 programme. Accordingly, we are exposed to foreign exchange rate fluctuations.

Although a significant portion of our cost base is denominated in pounds sterling resulting in a lower US dollar value for our costs, our revenues are generally denominated in US dollars and our supply chain and customers are diversified across both geographies and industries. In addition, our long- and short-term debt funding instruments are all US dollar-denominated. To date, the impact of the British vote to leave the European Union has been a strengthening of the US dollar versus the pound sterling which is benefitting our results. The medium to long-term impact of the vote remains uncertain.

#### ***Global Xpress Programme***

Following the commercial service introduction of our global Inmarsat-5 satellite network at the end of 2015, we have made available a range of market-specific GX terminals and services. We remain very pleased by the level of customer interest in and demand for our GX products and services, across diverse market segments and geographies. However, we expect revenues from our GX products and services to increase somewhat slower than initially planned due to the need for de-bugging and testing as well as ship and airline operators having to align their installations with their respective annual service and winter layoff schedules. For example, we were negatively affected by a small delay in the launch of GX Aviation services on some airlines' platforms. These factors have played a part in reducing our GX revenue expectations for 2016. However, our medium-term target annual revenue for overall GX revenues remains unchanged at a run rate of US\$500 million of GX revenues by the end of 2020, the fifth anniversary of the global launch of GX services.



Government GX services, in particular, have been used by several governments in different geographies. For example, we supported the US Marine Corps and Republic of the Philippines forces in the 2016 Balikatan military exercise which included humanitarian assistance, maritime law enforcement and environmental protection. GX-managed service capability was used to deliver reliable core communications links during the exercise with the service being brought online within minutes, significantly faster than for traditional VSAT services.

Our Maritime GX service, Fleet Xpress, was launched at the end of March 2016, combining the high data speeds of the GX service with the seamless back-up capability of our FleetBroadband L-band service. Fleet Xpress switches automatically between Ka-band and L-band, providing an ‘always on’ connection and a high committed information rate. We recently announced major strategic partnerships with three of the world’s largest maritime VSAT resellers, Marlink, SpeedCast and Navarino. These partners commit to equipping over 5,000 vessels with Fleet Xpress over the next five years.

Work continues on the GX Aviation service which is scheduled to launch by the end of 2016. In June and July 2016, we received Supplemental Type Certificates from the European Aviation Safety Agency for the GX Aviation Ka-band antenna for the Airbus A319, A320, A321 and A340 aircraft, which form the backbone of approximately half of the world’s commercial aircraft fleets. Receiving these certifications is a key step towards facilitating our goal of achieving both line-fit and retrofit certification for the GX Aviation service on every major Airbus and Boeing airframe. In July and August 2016, we gave GX in-flight demonstrations to over 45 airlines. In October 2016, we expect the first Lufthansa short- and medium-haul aircraft to be operational using our GX Aviation service.

For Enterprise GX services, we announced in April 2016 the full type approval for Skyware’s ATOM 99 terminal for media, oil and gas and other market sectors. This lightweight, rugged portable receiver delivers high-speed broadband capability for high-quality, live broadcast and other functions in even the most inaccessible regions. This receiver completes a range of flyaway GX terminals for which we foresee a considerable appetite in the many Enterprise market sectors we serve.

### *Aviation Cabin Connectivity*

We continue to make progress towards delivering an innovative aviation cabin connectivity opportunity on both our newly launched GX platform discussed above, and on our EAN.

Construction of the S-band satellite by Thales has been completed on schedule and the satellite has been shipped to Thales’ testing centre in Cannes, France for end-to-end testing. We currently expect to launch the S-band satellite in the first half of 2017. Deutsche Telekom is responsible for the CGC and has commenced build out of the EAN tower infrastructure and expects this to be ready for network trials early in 2017. We currently expect the commercial launch of the EAN in mid-2017.

We have selected Cobham to develop and manufacture the satellite communications terminal for the EAN and Thales to develop and manufacture the CGC terminal for the EAN. Development work on both programmes is continuing with entry into full commercial service currently expected by mid-2017.

The acquisition of licences from EU Member States (“**Member States**”) and other European countries, necessary to deploy the EAN, is progressing as anticipated. We have 28 MSS licences and 20 licences or in-principle national approvals for the CGC component. We remain confident that delivery of pan-European regulatory approvals for the EAN will be completed in time to support full pan-European commercial launch in mid-2017.

We have continued to make progress with a number of major airlines and other aviation industry partners for both GX and the EAN opportunities and remain confident of advancing several current prospects into contract over the remainder of 2016. Under some of these contracts, we may be required to bear the costs for the installation of the necessary equipment on the aircraft in return for a higher share of the revenues generated by our services, whereas in other cases these costs may be borne by our airline partners. Given the high upfront costs for installing such equipment, the operating model we agree with our airline partners may have a significant impact on our capital expenditure requirements and revenue from our aviation cabin connectivity product.

We signed a Heads of Terms agreement with MCN to establish a joint venture for aircraft cabin and cockpit connectivity solutions in China’s fast-growing commercial aviation market. Our services that would be provided through the joint venture

include GX Aviation and SwiftBroadband-Safety (“SB-S”). We are continuing discussions with MCN, one of our distribution partners, to finalise the agreements.

## Results of Operations

The table below sets out our results of operations and our results of operations as a percentage of total revenues for the periods indicated.

	Six months ended 30 June				Year ended 31 December					
	2016		2015		2015		2014		2013	
	US\$ in millions	%	US\$ in millions	%	US\$ in millions	%	US\$ in millions	%	US\$ in millions	%
MSS and other.....	575.6	91.5	581.2	94.3	1,185.5	93.0	1,210.5	94.1	1,249.6	99.0
Ligado Networks.....	53.4	8.5	35.0	5.7	88.6	7.0	75.4	5.9	12.3	1.0
<b>Total revenues .....</b>	<b>629.0</b>	<b>100.0</b>	<b>616.2</b>	<b>100.0</b>	<b>1,274.1</b>	<b>100.0</b>	<b>1,285.9</b>	<b>100.0</b>	<b>1,261.9</b>	<b>100.0</b>
Employee benefit costs .....	(129.1)	(20.5)	(129.4)	(21.0)	(260.4)	(20.4)	(237.3)	(18.5)	(244.8)	(19.4)
Network and satellite operations costs .....	(84.8)	(13.5)	(92.5)	(15.0)	(180.0)	(14.1)	(205.7)	(16.0)	(235.5)	(18.7)
Other operating costs .....	(67.6)	(10.7)	(70.6)	(11.5)	(147.2)	(11.6)	(174.1)	(13.5)	(163.1)	(12.9)
Own work capitalised.....	20.6	3.3	19.0	3.1	39.5	3.1	32.2	2.5	30.2	2.4
<b>Total net operating costs.....</b>	<b>(260.9)</b>	<b>(41.5)</b>	<b>(273.5)</b>	<b>(44.4)</b>	<b>(548.1)</b>	<b>(43.0)</b>	<b>(584.9)</b>	<b>(45.5)</b>	<b>(613.2)</b>	<b>(48.6)</b>
<b>EBITDA <sup>(1)</sup> .....</b>	<b>368.1</b>	<b>58.5</b>	<b>342.7</b>	<b>55.6</b>	<b>726.0</b>	<b>57.0</b>	<b>701.0</b>	<b>54.5</b>	<b>648.7</b>	<b>51.4</b>
Depreciation and amortisation .	(174.6)	(27.8)	(150.9)	(24.5)	(311.2)	(24.4)	(291.8)	(22.7)	(232.0)	(18.4)
Gain/(loss) on disposal of assets .....	—	n/a	9.3	1.5	9.3	0.7	(1.2)	(0.1)	(0.1)	(0.0)
Acquisition-related adjustments.....	—	—	—	—	—	—	—	—	4.6	0.4
Impairment losses .....	(1.2)	(0.2)	—	—	(0.2)	(0.0)	(1.3)	(0.1)	(185.2)	(14.7)
Share of profit of associates .....	1.3	0.2	1.1	0.2	2.5	0.2	2.6	0.2	2.3	0.2
<b>Operating profit .....</b>	<b>193.6</b>	<b>30.8</b>	<b>202.2</b>	<b>32.8</b>	<b>426.4</b>	<b>33.5</b>	<b>409.3</b>	<b>31.8</b>	<b>238.3</b>	<b>18.9</b>
Financing income.....	1.7	0.3	1.4	0.2	2.3	0.2	8.0	0.6	5.5	0.4
Financing costs.....	(32.7)	(5.2)	(24.4)	(4.0)	(63.6)	(5.0)	(95.6)	(7.4)	(27.4)	(2.2)
Net financing costs.....	(31.0)	(4.9)	(23.0)	(3.7)	(61.3)	(4.8)	(87.6)	(6.8)	(21.9)	(1.7)
<b>Profit before tax .....</b>	<b>162.6</b>	<b>25.9</b>	<b>179.2</b>	<b>29.1</b>	<b>365.1</b>	<b>28.7</b>	<b>321.7</b>	<b>25.0</b>	<b>216.4</b>	<b>17.1</b>
Tax (charge)/credit.....	(33.7)	(5.4)	(37.1)	(6.0)	(61.7)	(4.8)	10.9	0.8	(89.0)	(7.1)
<b>Profit for the period.....</b>	<b>128.9</b>	<b>20.5</b>	<b>142.1</b>	<b>23.1</b>	<b>303.4</b>	<b>23.8</b>	<b>332.6</b>	<b>25.9</b>	<b>127.4</b>	<b>10.1</b>

(1) EBITDA is a non-IFRS measure.

### Group Results for the six months ended 30 June 2016 and 30 June 2015

#### Revenues

Total Group revenue for the six months ended 30 June 2016 increased by US\$12.8 million, or 2.1 per cent., compared with the six months ended 30 June 2015. This increase was primarily due to growth in the Aviation and Government operating segments as well as additional revenue from Ligado Networks of US\$18.4 million, which is reported in Central Services, in part offset by weaker performance in the Maritime and Enterprise operating segments.

The table below sets out the components, by reporting segment, of total revenue for each of the periods indicated:

	Six months ended 30 June 2016	Six months ended 30 June 2015	Increase / (decrease)
	(US\$ in millions)		%
Maritime .....	289.7	297.1	(2.5)
Government .....	140.7	137.2	2.6
Enterprise .....	72.5	79.3	(8.6)
Aviation .....	64.6	57.9	11.6
Central Services .....	61.5	44.7	37.6
<b>Total revenue</b> .....	<b>629.0</b>	<b>616.2</b>	<b>2.1</b>

*Maritime.* Maritime revenue for the six months ended 30 June 2016 decreased by US\$7.4 million, or 2.5 per cent., compared with the six months ended 30 June 2015. This decrease was primarily due to a decline in our Existing & Evolved Services comprising typically lower margin products, which was not completely offset by growth in our FleetBroadband and VSAT (including XpressLink) services.

*Government.* Government revenue for the six months ended 30 June 2016 increased by US\$3.5 million, or 2.6 per cent., compared with the six months ended 30 June 2015. The increase was primarily due to the initial impact of our GX services following the commercial service introduction at the end of 2015 and increased operational activity in our non-US markets, as well as success in our diversification strategy.

*Enterprise.* Enterprise revenue for the six months ended 30 June 2016 decreased by US\$6.8 million, or 8.6 per cent., compared with the six months ended 30 June 2015. This decrease was primarily due to a decrease in non-MSS revenues, mainly due to lower GSPS sales in the first quarter of 2016. MSS revenues remaining broadly flat, mainly driven by a continued decline in revenue from our Existing & Evolved Services, in part offset by higher FleetBroadband fixed to mobile revenue due to price increases both this year and last year, in addition to increased M2M revenue.

*Aviation.* Aviation revenue for the six months ended 30 June 2016 increased by US\$6.7 million, or 11.6 per cent., compared with the six months ended 30 June 2015. The increase was primarily due to growth in both our SwiftBroadband and our Classic Aero services.

*Central Services.* Central Services revenue for the six months ended 30 June 2016 increased by US\$16.8 million, or 37.6 per cent., compared with the six months ended 30 June 2015. The increase was primarily driven by revenue from Ligado Networks of US\$53.4 million following Ligado Networks' exercise of the 30 MHz option.

#### Net operating costs

Total net operating costs for the six months ended 30 June 2016 decreased by US\$12.6 million, or 4.6 per cent., compared with the six months ended 30 June 2015, reflecting a further improvement in product mix towards wholesale MSS revenue, foreign currency gains due particularly to the weakness of the pound sterling which effects were only partially offset by the cost of increased investment in Aviation cabin connectivity capability.

The table below sets out the components, by reporting segment, of the Group's net operating costs for each of the periods indicated:

	Six months ended 30 June 2016	Six months ended 30 June 2015	Increase / (decrease)
	(US\$ in millions)		%
Maritime .....	62.6	66.4	(5.7)
Government .....	39.5	45.0	(12.2)
Enterprise .....	18.5	26.7	(30.7)
Aviation .....	19.4	9.6	102.1
Central Services .....	120.9	125.8	(3.9)
<b>Total net operating costs</b> .....	<b>260.9</b>	<b>273.5</b>	<b>(4.6)</b>

*Maritime.* Maritime net operating costs for the six months ended 30 June 2016 decreased by US\$3.8 million, or 5.7 per cent., compared with the six months ended 30 June 2015. The decrease was primarily due to lower revenues and a reduction in indirect costs, particularly the non-recurrence of advertising costs relating to the Volvo Ocean Race in 2015, offset in part by higher direct costs related to equipment sales and installations in the first quarter of 2016.

*Government.* Government net operating costs for the six months ended 30 June 2016 decreased by US\$5.5 million, or 12.2 per cent., compared with the six months ended 30 June 2015. The decrease was primarily due to improved revenue mix.

*Enterprise.* Enterprise net operating costs for the six months ended 30 June 2016 decreased by US\$8.2 million, or 30.7 per cent., compared with the six months ended 30 June 2015, mainly reflecting changes in the revenue mix as a result of the lower GSPS sales.

*Aviation.* Aviation net operating costs for the six months ended 30 June 2016 increased by US\$9.8 million compared with the six months ended 30 June 2015. The increase was primarily due to increased headcount and other costs associated with the pursuit and delivery of major growth opportunities in cabin connectivity. We expect further fixed and variable cost increases to be incurred as this new business develops.

*Central Services.* Central Services net operating costs for the six months ended 30 June 2016 decreased by US\$4.9 million, or 3.9 per cent., compared with the six months ended 30 June 2015. The decrease was primarily due to the significant portion of our cost base denominated in pounds sterling, resulting in lower dollar value for these costs following a decrease in the pound sterling to US dollar exchange rate. The underlying variance included additional operating costs relating to the GX infrastructure.

#### EBITDA

Group EBITDA for the six months ended 30 June 2016 increased by US\$25.4 million, or 7.4 per cent., compared with the six months ended 30 June 2015, reflecting the trends discussed above. The Group's EBITDA margin increased to 58.5 per cent. for the six months ended 30 June 2016 from 55.6 per cent. for the six months ended 30 June 2015. The following table sets out EBITDA by reporting segment for the six months ended 30 June 2016 and 2015. Maritime EBITDA, Government EBITDA, Enterprise EBITDA, Aviation EBITDA, and Central Services EBITDA represent, for each respective segment, profit before income tax, net interest payable, depreciation, amortisation, disposal of assets, acquisition related adjustments, impairment losses, and share of profit of associates.

	Six months ended 30 June 2016	Six months ended 30 June 2015	Increase / (decrease)
	(US\$ in millions)		%
Maritime .....	227.1	230.7	(1.6)
Government .....	101.2	92.2	9.8
Enterprise.....	54.0	52.6	2.7
Aviation .....	45.2	48.3	(6.4)
Central Services .....	(59.4)	(81.1)	26.8
<b>Total EBITDA .....</b>	<b>368.1</b>	<b>342.7</b>	<b>7.4</b>

*Maritime.* Maritime EBITDA for the six months ended 30 June 2016 decreased by US\$3.6 million, or 1.6 per cent., compared with the six months ended 30 June 2015. The decrease primarily reflects the issues noted above. The EBITDA margin for the six months ended 30 June 2016 increased to 78.4 per cent. from 77.7 per cent. for the six months ended 30 June 2015 for the reasons noted above.

*Government.* Government EBITDA for the six months ended 30 June 2016 increased by US\$9.0 million, or 9.8 per cent., compared with the six months ended 30 June 2015. The increase was primarily due to higher revenues and a better revenue mix. The EBITDA margin for the six months ended 30 June 2016 increased to 71.9 per cent. from 67.2 per cent. for the six months ended 30 June 2015.

*Enterprise.* Enterprise EBITDA for the six months ended 30 June 2016 increased by US\$1.4 million, or 2.7 per cent., compared with the six months ended 30 June 2015. The increase was primarily due to the impact of lower revenues being

offset by a revenue mix driven reduction in operating costs. The EBITDA margin for the six months ended 30 June 2016 increased to 74.5 per cent. from 66.3 per cent. for the six months ended 30 June 2015.

*Aviation.* Aviation EBITDA for the six months ended 30 June 2016 decreased by US\$3.1 million, or 6.4 per cent., compared with the six months ended 30 June 2015. The decrease was primarily due to additional costs incurred associated with the continued development of our cabin connectivity services. The EBITDA margin for the six months ended 30 June 2016 decreased to 70.0 per cent. from 83.4 per cent. for the six months ended 30 June 2015, primarily reflecting these additional costs.

*Central Services.* Central Services EBITDA loss for the six months ended 30 June 2016 decreased by US\$21.7 million, or 26.8 per cent., compared with the six months ended 30 June 2015. The decrease was primarily due to increased Ligado Networks revenue.

#### *Depreciation and amortisation*

Depreciation and amortisation for the six months ended 30 June 2016 was US\$174.6 million, an increase of US\$23.7 million, or 15.7 per cent., compared with the six months ended 30 June 2015. The increase primarily reflected the entry into commercial service of the Inmarsat-5 satellites at the end of 2015.

#### *Operating profit*

As a result of the factors discussed above, during the six months ended 30 June 2016, operating profit was US\$193.6 million, a decrease of US\$8.6 million, or 4.3 per cent., compared with the six months ended 30 June 2015.

#### *Net financing costs*

Net financing costs for the six months ended 30 June 2016 were US\$31.0 million, an increase of US\$8.0 million, or 34.8 per cent., compared with the six months ended 30 June 2015. The decrease was primarily due to lower capitalised interest in the period caused by a reduction in the amount of qualifying expenditure as the Inmarsat-5 satellites entered commercial service at the end of 2015.

#### *Profit before tax*

As a result of the factors discussed above, for the six months ended 30 June 2016, profit before tax was US\$162.6 million, a decrease of US\$16.6 million, or 9.3 per cent., compared with the six months ended 30 June 2015.

#### *Taxation charge*

The tax charge for the six months ended 30 June 2016 was US\$33.7 million, a decrease of US\$3.4 million, or 9.2 per cent., compared with the six months ended 30 June 2015.

The effective tax rate for the six months ended 30 June 2016 remained unchanged at 20.7 per cent., compared to the six months ended 30 June 2015. If the effects of the certain non-recurring items were removed, the effective tax rate for the six months ended 30 June 2016 would have been 19.9 per cent., compared to 20.5 per cent. for the six months ended 30 June 2015. The decrease in the adjusted effective tax rate is principally due to the impact of lower profits in overseas jurisdictions where the tax rate is higher than the UK tax rate.

We maintain tax provisions in respect of ongoing enquiries with tax authorities. In the event all such enquiries were settled as currently provided for, we estimate that the Group would incur a cash tax outflow of approximately US\$80 million. The enquiries remain ongoing at this time.

#### *Profit for the period*

As a result of the factors discussed above, profit for the six months ended 30 June 2016 was US\$128.9 million, a decrease of US\$13.2 million, or 9.3 per cent., compared with the six months ended 30 June 2015.

## Liquidity and Capital Resources

Historically, our principal uses of cash have been for capital expenditure, to fund the development, marketing and distribution of new services, to fund our working capital requirements, service our debt obligations and pay dividends to Inmarsat plc. We have funded those requirements with cash flows from our operating activities as well as from debt financing. We expect to have significant capital expenditure requirements in the coming years relating to our S-band and Inmarsat-6 programmes in particular. We expect to fund this capital expenditure from these sources.

At 30 June 2016, the Group had cash and cash equivalents of US\$183.5 million and available but undrawn borrowing facilities of US\$578.9 million under our Revolving Credit Facility and the 2014 Ex-Im Bank Facility. The availability of these facilities is subject to compliance by us with certain financial and other covenants and warranties. The Group continually evaluates sources of capital and may repurchase, refinance, exchange or retire current or future borrowings and/or debt securities from time to time in private or open-market transactions, or by any other means permitted by the terms and conditions of borrowing facilities and debt securities.

### Historical Cash Flows

The following table sets out our historical cash flows for each of the periods presented.

	For the six months ended 30 June		For the year ended 31 December		
	2016	2015	2015	2014	2013
	(US\$ in millions)				
Net cash from operating activities .....	399.1	374.8	700.9	639.1	598.4
Net cash used in investing activities .....	(139.1)	(207.9)	(460.7)	(424.4)	(583.7)
Dividends paid .....	(144.0)	(136.0)	(224.1)	(225.8)	(157.8)
Net cash from/(used in) financing activities, excluding dividends paid .....	(106.5)	(43.4)	(46.4)	75.0	(48.1)
Foreign exchange adjustment .....	0.5	0.5	0.5	(0.4)	(0.1)
<b>Net (decrease)/increase in cash and cash equivalents .....</b>	<b>10.0</b>	<b>(12.0)</b>	<b>(29.8)</b>	<b>63.5</b>	<b>(191.3)</b>

### Net Cash from Operating Activities

Net cash from operating activities represents net cash from operations, returns on investments and taxation.

Net cash from operating activities during the six months ended 30 June 2016 was US\$399.1 million as compared with US\$374.8 million during the six months ended 30 June 2015. The increase of US\$24.3 million was primarily due to an increase in EBITDA as well as improved working capital flows.

Net cash from operating activities during the year ended 31 December 2015 was US\$700.9 million as compared with US\$639.1 million during the year ended 31 December 2014. The increase of US\$61.8 million was primarily due to an increase in EBITDA as well as an improvement in the change in working capital. The improvement in working capital was primarily due to a release of US\$43.8 million of deferred income from Ligado Networks in 2014 compared to a release of nil in 2015.

Net cash from operating activities during the year ended 31 December 2014 was US\$639.1 million as compared with US\$598.4 million during the year ended 31 December 2013. The increase of US\$40.7 million was primarily due to the release of working capital of US\$43.8 million comprising deferred income of Ligado Networks in 2014 and a prepayment of future SpaceX launch fees.

### Net Cash Used in Investing Activities

Net cash used in investing activities represents cash used for capital investments, financial investments and cash movements resulting from acquisitions and disposals.



Net cash used in investing activities during the six months ended 30 June 2016 was US\$139.1 million as compared with US\$207.9 million for the six months ended 30 June 2015. The decrease of US\$68.8 million related primarily to a reduction in capital expenditure and US\$32.9 million proceeds from disposal of assets in the six months ended 30 June 2015 which did not occur in 2016.

Net cash used in investing activities during the year ended 31 December 2015 was US\$460.7 million as compared with US\$424.4 million for the year ended 31 December 2014, an increase of US\$36.3 million. The increase principally reflected an increase in capital expenditure.

Net cash used in investing activities during the year ended 31 December 2014 was US\$424.4 million as compared with US\$583.7 million for the year ended 31 December 2013, a decrease of US\$43.0 million. The decrease principally reflected a reduction in capital expenditure.

***Net Cash From/(Used in) Financing Activities, Excluding Dividends Paid***

Net cash from/(used in) financing activities, excluding dividends paid, represent cash movements that resulted in changes to the size and composition of contributed equity and borrowings, including the servicing of borrowings. Dividends paid refer to dividends paid to Inmarsat plc.

Net cash used in financing activities, excluding dividends paid, during the six months ended 30 June 2016 was US\$106.5 million. During the six months ended 30 June 2016, we paid US\$39.1 million of cash interest, repaid US\$25.7 million of our EIB Facility and US\$40.4 million of our Ex-Im Facilities and paid US\$0.3 million of fees in relation to debt drawdowns.

Net cash used in financing activities, excluding dividends paid, during the six months ended 30 June 2015 was US\$43.4 million. During the six months ended 30 June 2015, we paid US\$37.3 million of cash interest, repaid US\$25.7 million of our EIB Facility and US\$24.8 million of our Ex-Im Facilities and paid US\$3.3 million of fees in relation to debt drawdowns. This cash outflow was partially offset by a US\$46.8 million drawdown of our Ex-Im Bank Facilities.

Net cash used in financing activities, excluding dividends paid, during the year ended 31 December 2015 was US\$46.4 million. During the year ended 31 December 2015, we paid US\$74.4 million of cash interest, repaid US\$44.1 million of our EIB Facility and US\$59.5 million of our Ex-Im Facilities, and paid US\$6.9 million of fees in relation to debt drawdowns. This cash outflow was partially offset by a US\$136.7 million drawdown of our Ex-Im Bank Facilities.

Net cash from financing activities, excluding dividends paid, during the year ended 31 December 2014 was US\$75.0 million primarily reflecting our receipt of gross proceeds of US\$991.9 million on the issue of 2014 Senior Notes offset in part by US\$882.8 million used for the redemption of our 2012 Senior Notes. In addition, we had a drawdown of US\$106.9 million under our Ex-Bank Bank Facilities and received US\$13.0 million of intercompany funding. This cash inflow was partially offset by payment of US\$83.9 million for cash interest, repayment of US\$44.1 million in respect of our EIB Facility and payment of US\$13.8 million for fees in relation to debt drawdowns.

Net cash received from financing activities, excluding dividends paid, during the year ended 31 December 2013 were US\$48.1 million. During 2013, we paid US\$95.5 million of cash interest, repaid US\$44.0 million of our EIB Facility, paid US\$5.0 million of fees in relation to debt drawdowns and paid US\$49.2 million of intercompany funding. This cash outflow was partially offset by a US\$145.9 million drawdown of our 2011 Ex-Im Bank Facility.

***Capital Expenditure***

Capital expenditure during the six months ended 30 June 2016 was US\$139.1 million as compared with US\$240.8 million during the six months ended 30 June 2015, a decrease of US\$101.7 million. Capital expenditure may fluctuate with the timing of milestone payments on current projects.

Capital expenditure during the three years ended 31 December 2015, 2014 and 2013 was US\$493.6 million, US\$405.7 million and US\$580.5 million, respectively. The increase in 2015 compared to 2014 was primarily due to an increase of US\$97.2 million relating to major infrastructure projects consisting of satellite design, build and launch costs and ground network infrastructure costs. Expenditure on major infrastructure projects included expenditure on the fourth Inmarsat-5 satellite and the new S-band satellite and an initial investment in two Inmarsat-6 satellites. Capital expenditure in 2014

decreased by US\$175.2 million compared with 2013, primarily due to the timing of expenditure in relation to the Global Xpress programme and the completion of substantially all of our Alphasat capital expenditure by the end of 2013.

Since the year ended 31 December 2014, we present our capital expenditure further broken down into three main categories: ‘Major infrastructure projects’ capex consists of satellite design, build and launch costs and ground network infrastructure costs. ‘Success-based capex’ consists of capital equipment installed on ships, aircraft and other customer platforms. This expenditure ties closely to near term new revenues. ‘Other’ capex investments consists primarily of maintenance, IT and capitalised product and service development costs. The following table summarises our capital expenditures for the six months ended 30 June 2016 and 2015, respectively, and the years ended 31 December 2015 and 2014, respectively, broken down by category.

	Six months ended 30 June		Year ended 31 December	
	2016	2015	2015	2014
	(US\$ in million)			
Major infrastructure projects <sup>(1)</sup> .....	100.2	188.6	354.1	256.9
Success-based capex <sup>(1)</sup> .....	23.1	10.8	29.1	25.8
Other (e.g., maintenance and product development) <sup>(1)</sup> .....	34.2	33.0	78.6	100.1
Cash flow timing <sup>(2)</sup> .....	(18.4)	8.4	31.8	22.9
<b>Total Cash Capital Expenditure:</b> .....	<b>139.1</b>	<b>240.8</b>	<b>493.6</b>	<b>405.7</b>

(1) Capital expenditure is shown on an accruals basis, excluding capitalised interest.

(2) Cash flow timing represents the difference between accrued capex and the actual cash flows.

We expect capital expenditure for the remainder of 2016 and future periods to principally focus on payments relating to the new S-band satellite to support the EAN and the construction of our Inmarsat-6 satellites. The EAN will comprise a satellite component and a complementary ground component. We will only be responsible for costs to fund and launch the S-band payload on the satellite, which we estimate to fall within a range of US\$200 million to US\$250 million, and Deutsche Telekom will be responsible for investment to support the complementary ground component. We estimate costs for the construction of the new Inmarsat-6 satellites to be approximately US\$600 million. Capital expenditure for the year ending 31 December 2016 is expected to fall within a range of US\$500 million to US\$600 million.

### Free Cash Flow

We define free cash flow (“FCF”) as cash generated from operations less capital expenditure, including own work capitalised, net interest and cash tax payments. FCF is a non-IFRS measure. The table below sets out our FCF for each of the periods presented:

	Six months ended 30 June		Year ended 31 December		
	2016	2015	2015	2014	2013
	(US\$ in millions)				
Cash generated from operations.....	420.1	363.2	712.4	647.8	616.3
Capital expenditure .....	(139.1)	(240.8)	(493.6)	(405.7)	(580.9)
Net interest paid .....	(38.5)	(36.4)	(73.0)	(83.0)	(93.1)
Cash tax paid .....	(21.6)	10.7	(12.9)	(9.6)	(20.3)
<b>Free cash flow</b> .....	<b>220.9</b>	<b>96.7</b>	<b>132.9</b>	<b>149.5</b>	<b>(78.0)</b>

FCF in the six months ended 30 June 2016 was US\$220.9 million, compared with US\$96.7 million in the six months ended 30 June 2015, an increase of US\$124.2 million. The increase was driven primarily by lower capital expenditure and a reduction in working capital offset in part by an increase in taxation paid.

We generated positive FCF of US\$132.9 million in the year ended 31 December 2015, compared with a positive FCF of US\$149.5 million and a negative FCF of US\$78.0 million in the years ended 31 December 2014 and 2013, respectively. FCF for the year ended 31 December 2015 decreased by US\$16.6 million, or 11.1 per cent., compared with the FCF for the year

ended 31 December 2014. The decrease was primarily due to higher capital expenditure partially offset by more cash generated from operations. FCF for the year ended 31 December 2014 increased by US\$71.9 million, compared with the year ended 31 December 2013. The increase was primarily due to a reduction in capital expenditure and higher EBITDA in 2014.

We primarily use our FCF to fund dividends to our parent company and to meet debt repayments when due.

### Group Balance Sheet

The following table sets out the consolidated Group balance sheet for each of the periods presented:

	As at 30 June	As at 31 December		
	2016	2015	2014	2013
		(US\$ in millions)		
Non-current assets .....	3,712.9	3,712.3	3,510.9	3,356.2
Current assets .....	513.6	549.6	591.0	515.6
<b>Total assets .....</b>	<b>4,226.5</b>	<b>4,261.9</b>	<b>4,101.9</b>	<b>3,871.8</b>
Non-current liabilities .....	(1,906.4)	(1,947.4)	(1,921.8)	(1,783.3)
Current liabilities .....	(837.0)	(797.3)	(749.3)	(773.5)
<b>Total liabilities .....</b>	<b>(2,743.4)</b>	<b>(2,744.7)</b>	<b>(2,671.1)</b>	<b>(2,556.8)</b>
<b>Net assets .....</b>	<b>1,483.1</b>	<b>1,517.2</b>	<b>1,430.8</b>	<b>1,315.0</b>

*Non-current assets.* As at 30 June 2016, our non-current assets remained relatively stable at US\$3,712.9 million compared to US\$3,712.3 million as at 31 December 2015. In 2015, the increase in our non-current assets of US\$201.4 million was largely due to our ongoing investment in the GX infrastructure and the development of our new S-band programme, less depreciation. Over US\$340 million was invested in these two programmes during 2015. The increase in our non-current assets of US\$154.7 million in 2014 was largely due to our ongoing investment in the Global Xpress infrastructure and the development of the EAN through which we expect to deliver high-speed broadband services to aviation passengers across the European Union by mid-2017. We invested more than US\$330 million in these two programmes during 2014, which was offset in part by depreciation of US\$165.2 million.

*Current assets.* As at 30 June 2016, the decrease in our current assets of US\$36.0 million was largely due to a decline in trade and other receivables in part offset by an increase in cash and cash equivalents. In 2015, the decrease in current assets of US\$41.4 million was due to a number of factors including a decrease in cash and cash equivalents of US\$27.2 million to US\$175.5 million, and a decrease in assets held for sale to nil at December 2015 (2014: US\$32.9m). The prior year balance related to the SkyWave disposal that had been re-measured to fair value. Partially offsetting these was an increase in trade and other receivables by US\$25.2 million to US\$342.3 million (2014: US\$317.1m), primarily attributable to the accrual of Ligado Networks revenue due on 31 December 2015. The net increase in current assets of US\$75.4 million in 2014 was primarily due to an increase in cash and cash equivalents of US\$59.6 million to US\$202.7 million, and an increase in prepayments of US\$37.8 million, which includes SpaceX prepaid launch fees for future satellite missions, including I-5 F4. In addition, current assets at 31 December 2014 comprised assets held for sale in respect of our SkyWave disposal, re-measured to fair value of US\$32.9 million. These factors were in part offset by the disposal of assets used in our energy business to RigNet, which reduced working capital balances (specifically assets held for sale) by US\$42.8 million in 2014.

*Non-current liabilities.* As at 30 June 2016, the decrease in our non-current liabilities of US\$41.0 million was largely due to a decrease in borrowings of US\$67.4 million in part offset by an increase in deferred tax liabilities. In 2015, the increase in non-current liabilities of US\$103.4 million primarily due to an increase in non-current borrowings of US\$21.1 million to US\$1,703.7 million (2014: US\$1,682.6 million) at 31 December 2015. There were two main components of this increase; a net increase in drawdowns on the Ex-Im Bank Facilities of US\$77.2 million (a portion of which is recorded in current borrowings and discussed above) offset by a US\$44.1 million repayment and reduction in the EIB Facility. The increase in non-current liabilities of US\$138.5 million in 2014 was primarily due to an increase in non-current borrowings of US\$124.6 million to US\$1,682.6 million during the year and the issue of the 2014 Senior Notes to replace the US\$850 million of 2012 Senior Notes.

*Current liabilities.* As at 30 June 2016, the increase in our current liabilities of US\$39.7 million was largely due to an increase in trade and other payables and borrowings. In 2015, the decrease in current liabilities of US\$29.8 million was

mainly due to three issues. The current tax liability increased by US\$51.1 million, representing a current tax charge in excess of payments made in the year, principally due to a refund of corporation tax overpaid in prior years. Current borrowings increased by US\$89.1 million due to the reclassification of an intercompany loan due to Inmarsat plc of US\$77.8 million from trade and other payables and US\$11.3 million drawdowns on the 2011 Ex-Im Bank Facility which has commenced its repayment period of equal semi-annual instalments. Partially offsetting these increases was an US\$85.9 million reduction in trade and other payables. In 2014, current liabilities decreased primarily due to the disposal of the held for sale liabilities of US\$19.0 million which represented the energy assets sold to RigNet during the year and a decrease in trade and other payables of US\$23.6 million due to the release of US\$43.8 million of deferred income in relation to the Ligado Networks Cooperation Agreement.

### Debt

We had Net Borrowings gross of deferred finance costs at 30 June 2016 of US\$1,703.0 million, primarily comprising the 2014 Senior Notes, drawings on the EIB Facility of US\$106.5 million, drawings on the Ex-Im Bank Facilities of US\$673.8 million and deferred satellite payments of US\$13.5 million, net of cash and cash equivalents of US\$183.5 million.

The following table sets out the components of our Net Borrowings (gross of deferred finance costs) for each of the periods presented.

	As at 30 June	As at 31 December		
	2016	2015	2014	2013
		(US\$ in millions)		
EIB Facility.....	106.5	132.2	176.2	220.3
Ex-Im Bank Facilities .....	673.8	714.2	637.0	543.5
2012 Senior Notes.....	—	—	—	850.0
Net issuance premium on the 2012 Senior Notes .....	—	—	—	5.9
2014 Senior Notes.....	1,000.0	1,000.0	1,000.0	—
Net issuance discount on the 2014 Senior Notes .....	(6.0)	(6.5)	(7.6)	—
Deferred satellite payments <sup>(1)</sup> .....	13.5	16.3	23.3	34.2
Bank overdrafts.....	0.6	2.6	—	3.9
Intercompany loan <sup>(2)</sup> .....	98.1	77.8	—	—
<b>Total borrowings</b> .....	<b>1,886.5</b>	<b>1,936.6</b>	<b>1,828.9</b>	<b>1,657.8</b>
Cash and cash equivalents .....	(183.5)	(175.5)	(202.7)	(143.1)
<b>Net Borrowings gross of deferred finance costs <sup>(3)</sup></b> .....	<b>1,703.0</b>	<b>1,761.1</b>	<b>1,626.2</b>	<b>1,514.7</b>

(1) Deferred satellite payments represent the net present value of future payments dependent on the future performance of each satellite and are recognised in space segment assets when the satellite becomes operational.

(2) Intercompany loans are subordinated to the Senior Credit Facilities pursuant to the terms of the Intercreditor Agreement.

(3) For the purposes of this table, indebtedness is reflected at its principal amount (other than the unamortised net issuance premium/(discount) on the 2014 Senior Notes). Under IFRS, however, for the purpose of our balance sheet, indebtedness is stated as the net proceeds received (i.e., including any premium or discount, as well as and after deducting any unamortised debt issuance costs). As at 30 June 2016, the table excludes the impact of deferred financing fees related to the EIB Facility of US\$0.2 million, the Ex-Im Bank Facilities of US\$15.7 million and the 2014 Senior Notes of US\$6.7 million (which are netted against the principal outstanding under the EIB Facility, Ex-Im Bank Facilities and the 2014 Senior Notes, respectively, in the consolidated financial statements). Debt issuance costs are amortised using the effective interest rate method over the life of the debt to which they relate, approximately eight years for the EIB Facility, 12.5 years for the Ex-Im Bank Facilities, and either eight years or five years and eight months for the 2014 Senior Notes (depending on whether they relate to the original issue, or the April 2012 issue, respectively).

As at 30 June 2016, we had US\$500.5 million of borrowing availability under our Revolving Credit Facility and the 2014 Ex-Im Bank Facility. We expect our Net Borrowings to increase during 2016 due mainly to increased capital expenditure. Our Senior Credit Facilities require us to maintain specified financial ratios.

### Contractual Obligations

The following table summarises contractual obligations under our debt instruments as at 31 December 2015.

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(US\$ in millions)				
Long-term debt obligations <sup>(1)</sup> .....	1,714.9	—	293.0	204.7	1,217.2
Short-term debt obligations <sup>(2)</sup> .....	127.6	127.6	—	—	—
Operating leases <sup>(3)</sup> .....	119.5	22.9	24.0	21.5	51.1
Other non-cancellable agreements <sup>(4)</sup> .....	42.3	22.9	15.6	3.1	0.7
Interest obligations <sup>(5)</sup> .....	397.9	70.4	130.0	116.5	81.0
<b>Total contractual obligations</b> .....	<b>2,402.2</b>	<b>243.8</b>	<b>462.6</b>	<b>345.8</b>	<b>1,350.0</b>

- (1) Comprises US\$88.1 million under the EIB Facility, US\$633.3 million under the Ex-Im Bank Facilities, US\$1,000.0 million in aggregate principal amount of the 2014 Senior Notes and US\$6.5 million of discount on the 2014 Senior Notes. In addition, the values exclude interest obligations on the EIB Facility, Ex-Im Bank Facilities and the 2014 Senior Notes.
- (2) Comprises US\$44.1 million under the EIB Facility, a US\$2.6 million overdraft and US\$80.9 million current portion of the Ex-Im Bank Facilities. In addition, the value excludes interest obligations on the EIB Facility and the Ex-Im Bank Facilities.
- (3) Relates primarily to the 25-year lease of our head office building at 99 City Road, London, United Kingdom.
- (4) Relates to network service contracts and maintenance costs, which have varying terms.
- (5) Relates to interest payable on our long-term and short-term debt obligations and assumes that the Revolving Credit Facility remains undrawn at all times. For purposes of calculating our interest obligations under the EIB Facility, we have assumed no change in the floating interest rate of 1.96 per cent. per annum, being the rate as at 31 December 2015.

In addition to the foregoing, we had total capital commitments of US\$1,219.9 million as at 31 December 2015, primarily representing commitments in respect of our GX, S-band and Inmarsat-6 satellite programmes. The timing of payments in respect of our capital commitments is uncertain.

### Parent Company Obligations

**Dividends.** Our ultimate parent company, Inmarsat plc, has a dividend policy that is designed to make distributions to public shareholders from the underlying cash flow generation of all its subsidiaries. Since Inmarsat plc was listed on the London Stock Exchange in June 2005, holders of the ordinary shares have received dividend payments twice a year, usually paid in May and October.

During the six months ended 30 June 2016, the Company paid dividends of US\$143.3 million for the 2015 final dividend. The Company paid dividends during the year ended 31 December 2015 of US\$88.1 million and US\$136.0 million for the 2015 interim dividend and the 2014 final dividend, respectively. In the year ended 31 December 2014, the Company paid dividends of US\$83.7 million and US\$129.1 million for the 2014 interim dividend and the 2013 final interim dividend, respectively.

**Convertible bonds.** In 2007, Inmarsat plc issued US\$287.7 million 1.75 per cent. convertible bonds due 2017 (the “**2007 Convertible Bonds**”). On 9 September 2016, Inmarsat plc issued US\$650 million 3.875 per cent. convertible bonds due 2023 (the “**Convertible Bonds**”). The net proceeds of the issue are being used primarily to fund the repurchase of the 2007 Convertible Bonds. The Convertible Bonds are convertible into ordinary shares of Inmarsat plc and have a 3.875 per cent. per annum coupon payable semi-annually. The maximum number of ordinary shares to be issued if all bonds are converted is 22,555,650 shares and the initial conversion price at 31 August 2016 was US\$13.4093. The conversion price is subject to periodic adjustment if dividends paid on ordinary shares of Inmarsat plc exceed defined levels.

Subject to our operating performance and the terms of our indebtedness, we expect to make dividend payments to Inmarsat Holdings Limited in connection with Inmarsat plc’s dividend policy. In addition, from time to time, we may pay additional dividends to Inmarsat Holdings Limited in connection with other general corporate purposes of Inmarsat plc, including its obligations under the Convertible Bonds described above.

### Research and Development



Our research and development include costs relating to the development of our satellites and new technologies and products and related network infrastructure. Research and development costs were US\$13.6 million during the year ended 31 December 2015 as compared with US\$20.0 million and US\$14.4 million during the years ended 31 December 2014 and 2013, respectively.

### Off Balance Sheet Arrangements and Contingencies

In the ordinary course of business, we are subject to contingencies pursuant to requirements that we comply with relevant laws, regulations and standards. Failure to comply could result in restrictions in operations, damages, fines, increased tax, increased cost of compliance, interest charges, reputational damage and other sanctions. These matters are inherently difficult to quantify.

In cases where we have an obligation as a result of a past event existing at the balance sheet date, and it is probable that an outflow of economic resources will be required to settle the obligation and the amount of the obligation can be reliably estimated, a provision will be recognised based on best estimates and management judgement.

For the year ended 31 December 2014, we disclosed contingent liabilities in respect of outstanding tax issues with HMRC for which no provision had been made, totalling US\$18 million. During the year ended 31 December 2015, HMRC concluded their review relating to US\$12 million of this amount with no adjustment to the filed position. The remaining exposure is covered within the balance sheet tax provision.

Other than as set forth above, we do not currently have any off balance sheet arrangements other than operating leases and other unrecognised contractual commitments.

### Quantitative and Qualitative Disclosures about Market Risk

The following discussion of estimated amounts generated from a sensitivity analysis is “forward looking”, and involves risks and uncertainties. Our actual results could differ materially from those we project due to actual developments in the global financial markets. Such risks principally include country risk, legal risk and political risk that are not represented in the following analyses.

#### Foreign Exchange Risk

The US dollar is our functional currency. The vast majority of our long-term borrowings are denominated in US dollars, the majority of our revenue is earned in US dollars and the vast majority of our capital expenditure is denominated in US dollars, which are therefore not subject to risks associated with fluctuating foreign currency rates of exchange. However, in the year ended 31 December 2015, approximately 22 per cent. of our operating costs were denominated in pounds sterling. We operate internationally, resulting in approximately 2 per cent. and 43 per cent. of revenue and expenditure, respectively, for the year ended 31 December 2015, being denominated in currencies other than the US Dollar. Our exposures therefore need to be carefully managed to avoid variability in future cash flows and earnings caused by volatile foreign exchange rates. Therefore, we are exposed to the effect of a fluctuating US dollar against other currencies and our exposures are carefully managed to avoid variability in future cash flows and earnings caused by volatile foreign exchange rates. Our primary exchange rate exposure is against pounds sterling.

The following table shows information about our foreign exchange forward contracts as at 31 December 2015. We entered into all these instruments for hedging purposes, and we account for them as such under IFRS because they applied to specific expenditure. The table presents the value of the contracts at the contract exchange rate, as well as the fair value of the contracts.

	At 31 December 2015			
	Face value	Maturing within 1 year	Maturing between 1 and 2 years	Fair value (\$) <sup>(1)</sup>
	(in millions)			
<b>Outstanding forward foreign exchange contracts</b>				
GBP contracts .....	£ 10.0	£ 10.0	—	(0.3)



- (1) The fair value of foreign exchange contracts is based upon the difference between the contract amount at the current forward rate at each period end and the contract amount at the contract rate, discounted at a variable risk-free rate at the period end.

Since 1 January 2016, we have ceased hedging our foreign exchange risks except for certain long-term risks such as the exposure from our obligations relating to the Inmarsat-6 programme.

### ***Interest Rate Risk***

Given we have no significant interest-bearing assets (except cash and cash equivalents and non-current other receivables), income and operating cash flows are substantially independent of changes in market interest rates. Interest rate risk arises from long-term borrowings. Borrowings issued at variable rates expose us to cash flow interest rate risk. The Revolving Credit Facility and the EIB Facility are at a variable rate whilst the 2014 Senior Notes, the Convertible Bonds and the Ex-Im Bank Facilities are at fixed rates. Our policy is not to hedge our exposure to interest rate risks and accordingly as of 31 December 2015, we had no interest rate swap outstanding.

As at 31 December 2015, if interest rates on net borrowings changed by 100 basis points, with all other variables held constant, our profit after tax for the year would have been impacted by US\$0.9 million (2014: US\$0.3 million). This is primarily due to our exposure to movements on interest rates on our variable rate borrowings and cash and cash equivalents. The sensitivity analysis has been determined based on the exposure to interest rates for both derivatives and non-derivative instruments at the balance sheet date. For floating rate liabilities, the analysis is prepared assuming the liability outstanding at each balance sheet date was outstanding for the whole year. We believe that a 1 per cent. sensitivity rate provides a reasonable basis upon which to assess expected changes in interest rates.

### **Critical Accounting Policies**

The preparation of the consolidated financial statements in conformity with IFRS requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date and the reported amounts of revenue and expenses during the reported period. These assumptions and estimates are generally based on factors such as historical experience, trends in our industry and information available from our customers and third parties. The amounts that actually arise in future periods may differ from these estimates, with changes being recognised in the profit and loss account as and when the carrying value is changed.

Our accounting policies are more fully described in the notes to our audited consolidated financial statements. For further information on certain of our accounting policies that are particularly important to the presentation of our results of operations and require the application of significant judgment made by our management, see note 4 to our audited consolidated financial statements for the year ended 31 December 2015.

### **Recently Issued Accounting Pronouncements**

There were no new IFRS or IFRIC Interpretations that came into effect during 2015 that had a material impact on the Group. For a list of new IFRS or IFRIC accounting standards that are not yet effective but that would be expected to have a material impact on the Group, see note 2 to our audited consolidated financial statements for the year ended 31 December 2015.

#### ***IFRS 15 'Revenue from contracts with customers'***

IFRS 15 'Revenue from contracts with customers' will be effective for periods beginning on or after 1 January 2018, subject to endorsement by the EU. The standard sets out the requirements for recognising revenue from contracts with customers, and will supersede the current revenue recognition guidance including IAS 18 'Revenue', IAS 11 'Construction Contracts' and the related interpretations. IFRS 15 will require the Group to apportion revenue earned from contracts to each deliverable that qualifies as a 'performance obligation'. The transaction price receivable from customers must be allocated to each performance obligation on a relative stand-alone selling price basis, based on a five-step model. The Group is currently assessing the impact of this standard on the financial statements.

#### ***IFRS 16 'Leases'***

IFRS 16 'Leases' will be effective for periods beginning on or after 1 January 2019, subject to endorsement by the EU. The standard sets out requirements for recognising assets and liabilities in respect of leases, and will supersede the existing accounting guidance in IAS 17 'Leases' and the related interpretations. IFRS 16 will require the Group, where it is the lessee, to recognise assets and liabilities for most leases, however there is little change to IAS 17 where the Group is the lessor. The Group is currently assessing the impact of this standard on the financial statements.

## THE MOBILE SATELLITE COMMUNICATIONS SERVICES INDUSTRY

We operate in the global commercial satellite communications services industry as a leading provider of global mobile satellite services. Satellite communications operators, such as us, typically own a fleet of satellites and operate such satellites as a communications network, mainly with the assistance of satellite communications service providers worldwide. There are two primary categories of satellite operators:

- Mobile satellite services (MSS) operators, such as us, typically operate in L-, or S-frequency bands, and focus on data and voice communications for mobility, corporate and governmental markets.
- Fixed satellite services (FSS) operators operate in Ka-, Ku- and C-bands, and focus on video and data communications for media, telecoms, corporate and governmental markets.

There is an increasing overlap between the services of MSS and FSS providers through the progressive adoption by both types of HTS technology, particularly suited for broadband data communications across different markets. We have adopted HTS technology to support our Ka-band Global Xpress constellation.

MSS operators use satellites that are located either in geostationary orbit (“**GEO**”, orbiting approximately 36,900 kilometres above the Earth), MEO, orbiting approximately 8,000 to 16,000 kilometres above the Earth) or LEO, orbiting approximately 480 to 1,600 kilometres above the Earth). Our satellites are in geostationary orbit, orbiting the Earth above the equator at the same speed as the Earth rotates, and therefore remain above the same point relative to the Earth’s surface. The most common frequency bands used on geostationary satellites are as follows:

- **Ku- and Ka-bands (10-30 GHz).** Ku- and Ka-band radio frequencies have much greater bandwidth than the other frequencies discussed herein, and are typically used for direct-to-home TV broadcasting and broadband communications, as well as for VSAT services, including mobile applications. Ku- and Ka-band radio frequencies are more susceptible to atmospheric interference, and user equipment requires stabilised antennae with high-performance pointing systems to operate effectively.
- **C-band (4-8 GHz).** The C-band radio frequency has generally been used by FSS and VSAT operators for TV distribution, data and voice communications. C-band frequencies are less susceptible to terrestrial and atmospheric interference than Ku- and Ka-bands, but still require larger stabilised antennae (oriented to face at a satellite at all times) to transmit and receive signals effectively.
- **L- and S-bands (1.5-1.6 GHz and 2-2.5 GHz, respectively).** L- and S-band radio frequencies have longer wavelengths, which makes them less prone to degradation from external noise, such as rain, than services provided over the higher-frequencies discussed here. The user equipment typically does not require the same level of pointing accuracy as higher frequency services and tends to be small and portable. However, L- and S-band frequencies typically deliver less bandwidth than other frequencies discussed above.

We currently operate our services at frequencies in the L-, C- and Ka-band spectrums and plan to offer services in the S-band spectrum in due course through the EAN.

## COMPETITIVE ENVIRONMENT

According to Euroconsult, satellite operators generated approximately US\$13.9 billion in wholesale revenues globally (comprising FSS/HTS revenue of approximately US\$12.5 billion (including mobile VSAT revenue in the range of approximately US\$600-US\$700 million) and L-band MSS revenue of approximately US\$1.4 billion) in 2015. These revenues, according to Euroconsult, grew at a compound annual growth rate of approximately 1.5 per cent. between 2010 and 2015 and are expected to increase by over 3 per cent. per annum in the next ten years. Of total wholesale revenues, North America and Europe each represented a quarter of the global industry’s revenues. The charts below set out wholesale revenues for all satellite operators by region and market share in 2014.

SATELLITE OPERATORS' MARKET BY REGION, BASED ON WHOLESAL REVENUE, GLOBALLY, 2014



North America	25%
Europe	25%
Asia & Oceania	21%
Middle East & Africa	18%
Latin America	11%

Source: Euroconsult 2015

SATELLITE OPERATORS' MARKET SHARES, BASED ON WHOLESAL REVENUE, GLOBALLY, 2014



Other	35%
SES	19%
Intelsat	18%
Eutelsat	13%
Inmarsat	6%
Telesat	5%
JSAT	4%

Source: Euroconsult 2015

Approximately 35 per cent. of the industry's revenues are held by an increasing number of regional or national operators, focusing on specific geographies or vertical markets, according to Euroconsult.

The global communications industry is highly competitive. We face competition from a number of communications technologies in a number of the target sectors for our services. It is likely that we will continue to face significantly increasing competition in most or all of our target sectors in the future.

### **Mobile Satellite Services (MSS) Operators**

We currently face competition from one global MSS operator, Iridium, which operates in different frequencies to Inmarsat (the "big LEO" band of frequencies), and as a result, their operations do not interfere with our L-band operations or compete for spectrum in the L-band. Commercial MSS broadband (L-band) revenue is projected to grow at a compound annual growth rate of 9 per cent. over the next ten years (*source*: Euroconsult).

After commencing operations in 1998, Iridium filed for US bankruptcy protection in March 2000 and recommenced service in early 2001. Since then, we have faced competition from Iridium in voice and lower speed data services in the maritime and land mobile sectors. Iridium has also launched higher rate data services, OpenPort and Iridium Pilot, targeted at the maritime sector and which compete with the low end of our FleetBroadband capability.

Iridium is building a constellation of new satellites, called Iridium NEXT, with enhanced service capability including broadband data services. In June 2010, Iridium announced a contract for new satellites with Thales and has stated it is currently expecting to begin launching the new satellites in 2016. As a result, competition from Iridium in our MSS sectors could intensify after the deployment of the Iridium NEXT satellites.

We also face competition from regional and multi-regional mobile satellite competitors, including Thuraya and Globalstar.

Thuraya offers voice and data services at transmission rates of up to 444 kbps in Europe, Northern and Central Africa, the Middle East, a majority of Asia and Australia over two geostationary satellites. Thuraya also supports GSM roaming services.

Globalstar, which operates a multi-regional low-earth orbit system, began introducing commercial services in 2000. In February 2002, Globalstar filed for US bankruptcy protection, which it exited in 2004 following its acquisition by Thermo Capital Partners. Despite near-global satellite coverage, Globalstar's service is available only on a multi-regional basis as a consequence of gaps in its ground transmission facilities and the fact that, unlike the Iridium fleet, its satellites do not contain

inter-satellite links for the space-routing of transmissions to its ground transmission facilities. As a result, Globalstar's coverage of oceanic areas remains limited and affects their ability to compete in the maritime and aviation sectors.

In December 2006, Globalstar signed a contract with Thales for a new constellation of 48 satellites and in February 2013 completed the launch of the first 24 of these satellites. Although Globalstar has not announced plans for the remaining 24 satellites, it has restored certain two-way satellite services that had become unavailable due to accelerated degradation of its first generation satellite network.

### ***Fixed Satellite Services (FSS) operators***

FSS operators typically operate in Ku- and C-bands, and historically have focused on video and data communications for media, telecoms, corporate and governmental markets. More recently, FSS operators increasingly seek growth opportunities in mobility sectors from maritime to aviation and land mobile to provide VSAT services.

Leading FSS operators are progressively adopting HTS technology, mostly in Ka- and Ku-bands, which changes the cost structure of satellite connectivity by considerably increasing the capacity available and lowering the average cost per bit. This strategy creates new business opportunities and has a significant impact on the economics of satellite operators. We also use HTS technology for our Global Xpress services.

In this context, although the FSS market has traditionally been in decline, FSS operators present increased competition for us, leading to significant pricing pressure, on the cost to end-users of VSAT services. Communications services provided by VSAT operators are primarily targeted at users who have a need for high-volume or high-bandwidth data services, although new entrants into the sector are offering lower volume and bandwidth products in competition with our services. The coverage area of VSAT services is not as extensive as the coverage area of MSS services, but is growing rapidly to meet demand and is expected to be substantially global within the next few years, according to Euroconsult.

Technological innovation in VSAT equipment, together with increased C-band, Ku-band and Ka-band coverage, has increased, and will continue to increase the competitiveness of VSAT and hybrid systems in some traditional mobility sectors by permitting smaller, more flexible and less expensive VSAT systems.

Key FSS HTS competitors for us include Intelsat (in particular, through its "EPIC" HTS constellation, operating mainly in Ku-band), ViaSat (a key provider of HTS in Ka-band), SES (through O3b Networks which it owns and, in the future, a recently announced order for a Ka-band satellite) and Eutelsat (offering "KA-SAT" in Ka-band).

### ***Service Providers and System Integrators***

In respect of mobility markets, we also face indirect and/or direct competition from service providers and system integrators (e.g., Marlink, SpeedCast and KVH in the maritime sector as well as Panasonic Avionics Corp and Global Eagle in the aviation sector). These competitors operate private networks using MSS, VSAT or hybrid systems targeting priority government and commercial users. Service providers and systems integrators do not operate proprietary satellite systems but procure and commercialise services from third-party operators (FSS, MSS or others) which serve as our direct competitors, they generate indirect competition for us. They also tend to compete directly with our direct retail distribution arms.

With the consolidation of the service provider landscape, and the increasing scale and bargaining power of large players, the competition from service providers is expected to increase.

### ***Terrestrial Competitors***

We generally provide services primarily in areas that terrestrial networks do not serve at all or for which they are not the most cost effective or technologically best suited solution.

However, gradual extensions of terrestrial wireline and wireless communications networks and technologies to areas not currently served by them may reduce demand for our existing services and other services that we expect to provide. We expect that future extensions of terrestrial networks will be driven by economic returns generated by extending wireline or wireless networks. We also expect that many underdeveloped areas will be too sparsely populated to generate returns on investment required to build terrestrial communications networks. Unlike our terrestrial competitors, we can provide communications services to these underdeveloped areas at no incremental cost.

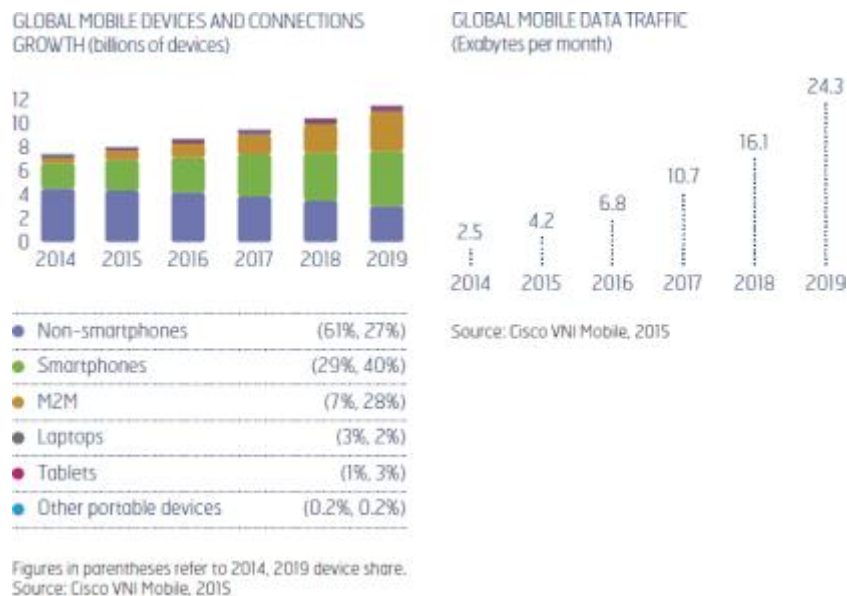
## MARKET TRENDS

### *Increased Demand for Mobile Communications Services Globally*

The increasing demand for communications globally, especially for broadband applications, is a key driver of commercial satellite services' existing revenue growth.

The number of mobile internet connections continues to rise globally. The global satellite M2M market is projected to grow at a compound annual growth rate of approximately 12 per cent. over the next five years (*source: Markets&Markets*). Personal devices and M2M connections are expected to exceed 11.5 billion by 2019 and be 1.5 times greater than the world's population (*source: Cisco*).

These devices are supported by an exponentially-growing number of solutions, services and capabilities, increasingly hosted remotely, often in the cloud. Both devices and applications are driving strong growth in mobile data traffic, estimated by Cisco to increase by approximately 57 per cent. by 2019. The charts below set out growth for mobile devices and connections and global mobile data traffic by exobytes per month between 2014 and 2019.



**Maritime:** Vessels in the global merchant maritime fleet (comprising over 68,000 vessels in 2014) are increasingly becoming floating nodes on corporate networks and over 2.5 million crew members serving on those ships are increasingly demanding to be connected with satellite broadband (*source: Euroconsult*). In 2014, the maritime sector was comprised of approximately 64,000 large fishing vessels, approximately 13,000 offshore support vessels (as at early 2015), approximately 800 rigs and platforms, approximately 420 cruise vessels, approximately 6,000 ferries, approximately 6,900 super yachts and approximately 311,000 small fishing vessels (*source: Euroconsult*). The maritime market for mobile satellite communications is estimated to reach US\$4 billion by 2025 with a compound annual growth rate expected to be approximately 9.5 per cent. over this period (*source: NSR*). According to Euroconsult, the maritime VSAT sector is projected to grow revenue at a compound annual growth rate of approximately 15 per cent. over the next ten years with the number of maritime VSATs expected to double within the next four years according to Comsys.

**Aviation:** Approximately 26,000 commercial aircraft in operation are becoming more and more reliant on satellite broadband connectivity to operate safely and efficiently and the hundreds of millions of passengers who fly on them each year are increasingly demanding to be connected while they travel (*source: Euroconsult*). In 2014, the aviation sector was comprised of approximately 19,000 business jets and approximately 360,000 general aviation aircraft. By 2024, there are expected to be approximately 26,000 business jets and approximately 35,000 commercial aircraft (*source: Euroconsult*). The aviation market for mobile satellite communications is estimated to reach approximately US\$3 billion (*source: NSR*). Aviation wholesale satellite communications revenue is projected to grow at a compound annual growth rate of approximately 16 per cent. over the next ten years (*source: Euroconsult*) with the number of connected commercial aircraft



projected to grow from 5,300 in 2015 to greater than 23,000 by 2025 (*source*: Euroconsult 2016). The existence of multiple upside markets, such as helicopters and commercial unmanned aerial vehicles, and potential L-band solutions for more than 300,000 unconnected general aircraft provides additional opportunities for growth in aviation.

*Enterprise:* We expect that the ‘Internet of Things’ will drive an increasing demand for satellite broadband connectivity among our Enterprise customers in the energy, resources, media, aid, transport and logistics sectors. The enterprise market for mobile satellite communications is estimated to reach approximately US\$2 billion by 2025 with a compound annual growth rate of approximately 7.0 per cent. (*source*: NSR).

*Government:* Government and military users are at the forefront of all these trends, requiring highly reliable and secure, ubiquitous global connectivity wherever they go. Even when governments may decide to launch their own satellites, they will often want to use the services of a global operator to complement their own coverage. This is not just for their strategic and tactical activities, but also for the morale, welfare and recreation of their personnel, who have grown up in a fully-connected environment, and expect that to be supported in their workplace. The government market for mobile satellite communications is estimated to reach approximately US\$5 billion by 2025 with a compound annual growth rate of approximately 8.5 per cent. over this period (*source*: NSR). The government market is projected to grow due to changes in military needs. The increased adoption of the network centric warfare doctrine is projected to increase the need for ubiquitous connectivity. Large US Air Force, Navy, Army, Coast Guard and other armed forces recapitalisation contracts, coupled with a growing demand from bandwidth-hungry applications (such as unmanned aerial vehicles and special forces), in particular, present a growth opportunity in the government sector.

#### ***Increasing Integration with Terrestrial Networks and Ecosystems***

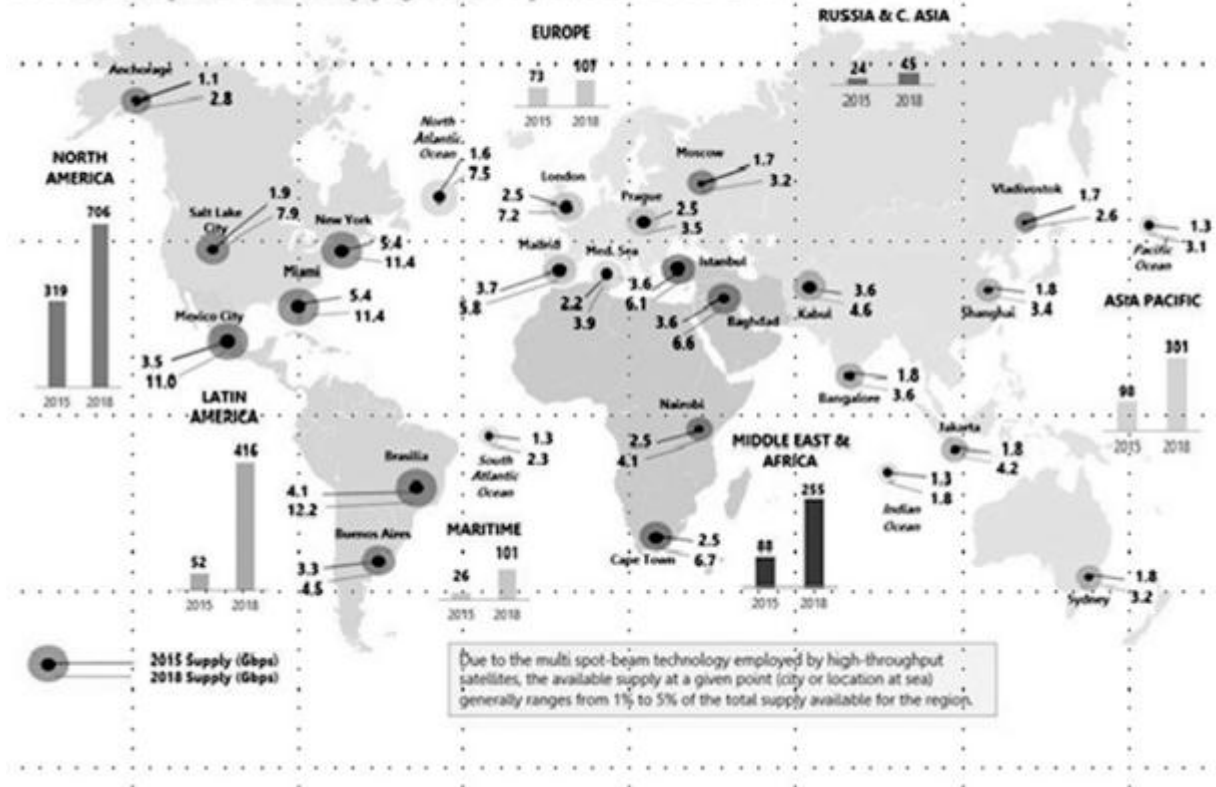
In a world increasingly reliant on coverage and connectivity to perform mission-critical tasks via applications and solutions in the cloud or a VPN, mobile satellite communications services can offer a powerful complementary capability to terrestrial networks, delivering a complete package to end users, and providing high levels of resilience. Although the reach of terrestrial networks has extended geographically, working seamlessly with a global satellite operator provides them with the end-to-end services they need. In this context, cybersecurity is a key priority of the industry at all levels of operations and in the services provided to customers.

The closer integration of satellite with broader information and communications ecosystems is also expected to lead to the increasing importance of value-added services and new business models in the industry.

#### ***Increasing HTS Technology Adoption and Material Impacts Expected on the Industry***

Satellite operators are progressively adopting HTS technology. HTS capacity is expected to grow from less than 700 gigabits per second (“Gbps”) in 2015 to approximately 3,000 Gbps in 2020 while demand is not expected to exceed 1,000 Gbps by 2020 (*source*: Euroconsult). Capacity is expected to be heavily concentrated in North America and Latin America, with each region comprising approximately 30 per cent. of net capacity additions between 2015 and 2020. Europe, which has traditionally been a key region for maritime and aviation traffic, is projected to have a marginal increase in HTS capacity between 2015 and 2020. Few operators are focusing on mobility markets that require global coverage. This capacity shortage for mobility markets is projected to be caused by specific user requirements (such as high and consistent power levels, along with tailored network management) along with the nature of traffic distribution (high traffic concentration in hot spots). The following map presents HTS supply for 2015 and expected supply for 2018 according to Euroconsult.

World map of HTS supply (in Gbps) for 2015 and 2018



HTS technology changes the cost structure of satellite connectivity, by considerably increasing the capacity available, and lowering the average cost per bit. This development is creating new business opportunities, and having a significant impact on the economics of satellite operators worldwide.

A significant number of HTS programmes are being launched or announced by operators, and this could lead to a significant increase in the volume of satellite capacity available globally over the coming years. The adoption of HTS technology is expected to create many new market opportunities, but may also alter the balance between supply and demand.

In mobile satellite communications services markets, the adoption of HTS technology may also lead to additional competition, especially from FSS operators increasingly leveraging this technology to address mobility segments of the market. For example, SES has recently announced the procurement of an HTS Ka-band satellite and a long-term commercial agreement with Thales, which will offer in-flight connectivity services across the Americas and the Atlantic Ocean region.



## BUSINESS

### Overview

We are a leading provider of MSS, providing data and voice connectivity to end-users worldwide, with over 37 years of experience in designing, launching and operating satellite-based networks. We have an in-orbit fleet of 11 owned and operated satellites in geostationary orbit and we provide a comprehensive portfolio of global mobile satellite communications services for use on land, at sea and in the air. These include voice and broadband data services, which support safety communications as well as standard office applications such as email, internet, secure VPN access and video conferencing. Our global sales and marketing activities are operated through five market-facing business units: Maritime, Enterprise, Aviation, US Government and Global Government. Each business unit focuses on its specific customer markets and distributes its products through distributors and directly. Our revenues, EBITDA and operating profit for the year ended 31 December 2015 were US\$1,274.1 million, US\$726.0 million and US\$426.4 million, respectively.

We have a successful launch and operating track record. We have launched three generations of L-band satellites and a new generation of Ka-band satellites and have not experienced a satellite failure either upon launch or in orbit. Our current fleet of eight in-orbit L-band satellites includes four Inmarsat-3 satellites, launched between 1996 and 1998, and four Inmarsat-4 satellites (including Alphasat), launched in March 2005, November 2005, August 2008 and July 2013. Our Inmarsat-3 satellites have remained in commercial operation beyond their original design lives. We deorbited the first of our five Inmarsat-3 satellites in 2016 and we expect that the last of our Inmarsat-3 satellites will be in commercial operation beyond 2018. We use our Inmarsat-3 satellites to offer our Existing & Evolved Services, which include all of our services offered prior to the start of services on our Inmarsat-4 satellites. Our Inmarsat-4 satellites provide our broadband services, GSPS and certain M2M services, as well as provide continuity for our Existing & Evolved Services.

In addition to our established L-band satellite services business, we have implemented a fully-funded US\$1.6 billion investment programme to provide new services in Ka-band. We refer to these services as GX. GX is designed to deliver seamless global coverage and deliver Ka-band services with broadband speeds up to 50 Mbps for users in the maritime, enterprise, energy, aviation, and government sectors. GX services are currently supported by an operational constellation of three Inmarsat-5 satellites. The first Inmarsat-5 satellite was successfully launched in December 2013 and entered commercial service in July 2014. We launched the second and third Inmarsat-5 satellites in February 2015 and August 2015, respectively, and the global commercial service introduction of GX was achieved in December 2015. The establishment of our Inmarsat-5 satellite network has added significant capacity to our global network and provides us with global Ka-band coverage, which we believe integrates seamlessly with our proven L-band network.

The construction of our fourth Inmarsat-5 satellite is being completed for us by Boeing Space and Intelligence Systems in California. We expect to launch this fourth Inmarsat-5 satellite by the end of 2016, subject to confirmation from SpaceX as to the availability of a launch vehicle. This satellite will provide in-orbit redundancy as well as incremental global Ka-band capacity.

In June 2014, we announced a decision to deploy an integrated telecommunications network to deliver aviation passenger connectivity services on an EU-wide basis. To achieve this, we placed an order for a new S-band satellite with Thales which will be complemented with a fully integrated air-to-ground network across the EU. This service is called the EAN. In September 2015, we announced a partnership with Deutsche Telekom to construct the CGC of the EAN, which will comprise a hybrid, integrated satellite/air-to-ground network providing high-speed data services to planes in the European airspace. The ground network will comprise approximately 300 LTE sites across Europe, each with a range of approximately 80 km, which Deutsche Telekom will build and manage. The satellite and ground networks will be integrated such that switching between them will be managed automatically by a plane's on-board systems, with no expected impact on service delivery. Construction of the S-band satellite by Thales has been completed and the satellite has been shipped to Thales' testing centre in Cannes, France for testing before it is declared ready for flight. We currently expect the commercial launch of the EAN in mid-2017.

Data rates for our services have increased with each satellite generation. Our Existing & Evolved Services are available at transmission rates of up to 128 kbps, although higher rates are possible where multiple terminals are used in conjunction with channel bonding equipment. Our broadband services include our BGAN service to enterprise customers, our FleetBroadband service to maritime customers and our SwiftBroadband service to aviation customers. Our Inmarsat-4 satellites typically provide our BGAN service at transmission rates of up to 492 kbps, and FleetBroadband and

SwiftBroadband services at transmission rates of up to 432 kbps. Our broadband services support higher-bandwidth applications, including videoconferencing, live video streaming and large file transfer, together with standard office applications such as email, internet, secure LAN access and voice telephony. These services have the same characteristics that end-users of our Existing & Evolved Services have historically enjoyed, including reliability, ease of use and security, and are supported by terminals that are smaller, more portable and less expensive than the terminals used to access our Existing & Evolved Services.

GX offers significantly increased data rates with broadband transmission rates of up to 50 Mbps. The Inmarsat-5 satellites operate with fixed narrow spot beams that enable us to deliver higher transmission rates through more compact terminals. The Inmarsat-5 satellites also have steerable beams so that additional capacity can be directed in real-time based on customer need. As at 30 June 2016, we had launched Maritime GX services (marketed as “Fleet Xpress”) and Enterprise GX services, as well as provided Ka-band capacity to the US Government and other governments. We continue to develop our Aviation GX services (to be marketed as “Jet ConneX” for business aviation), which we expect to deliver by the end of 2016.

Fleet Xpress combines the high data transmission rates of the GX services with the seamless back-up capability of our reliable FleetBroadband L-band service. As a fully integrated service, Fleet Xpress switches automatically between Ka-band and L-band, ensuring an “always on” guaranteed connection for our customers along with committed information rates backed-up by service level agreements. In July 2011, we launched XpressLink, a global broadband service for the maritime industry. XpressLink offers Ku-band coverage and bandwidth (using the network capacity of other satellite operators), combined with the global capabilities of FleetBroadband’s L-band service. We commenced the migration of our XpressLink customers to our new Fleet Xpress service.

## **History**

We were formed in 1979 as an international governmental organisation under treaty, with an initial objective to provide communications and safety services to ships at sea. We were established with a mandate to operate profitably and to generate returns on the invested capital. In 1999, we were privatised and became a private limited company under English law. As a result of privatisation, amongst other things, we became subject to normal corporate taxation, and we began funding ourselves independently in the international capital markets for the first time.

In December 2003, funds advised by Apax Partners and Permira Funds acquired a 51.7 per cent. controlling interest in us. In June 2005, Inmarsat plc, our ultimate parent company, completed an initial public offering and listed its ordinary shares on the London Stock Exchange. Subsequent to the initial public offering, the funds advised by Apax Partners and Permira Funds sold their holdings in the ordinary shares of Inmarsat plc.

In April 2009, Inmarsat plc completed the acquisition of Stratos, our largest distribution partner. In June 2010, we completed a reorganisation under which Stratos became an indirect wholly-owned subsidiary of Inmarsat Group Limited and therefore subject to the terms of our outstanding debt. Thereafter, the following acquisitions and divestitures were completed:

- In January 2010, we acquired the business assets of Segovia, which provides secure IP managed solutions and services to US Government agencies and other commercial customers. Segovia now does business as “Inmarsat Government”.
- In April 2011, we acquired Ship Equip, which provides VSAT maritime communications services to the shipping, offshore energy and fishing markets.
- In January 2012, we acquired NewWave Broadband, which sources and manages satellite capacity exclusively for Ship Equip, as well as provides maintenance services for certain Ship Equip network assets.
- In May 2013, we acquired TC Comms, which provides advanced mobile and fixed-site remote telecommunications services, customised turnkey remote telecommunications solutions, value-added services, equipment and engineering services to service providers and end-users.
- In January 2014, we acquired the business of Globe Wireless, which provides value-added maritime communications services to the shipping market.

- Also, in January 2014, we sold the majority of our retail energy business to RigNet. The sale included our microwave and WiMAX networks in the US Gulf of Mexico, our VSAT interests in the UK, the US and Canada, our telecommunications systems integration business operating worldwide and our retail L-band energy satcoms business. The Russian-based assets of our energy business, which was composed of an 80 per cent. equity holding in SJSC Moscow Teleport, were subsequently sold separately to AltegroSky, a Russian-based buyer, in June 2014.
- In January 2015, we completed the sale of our 19 per cent. holding in SkyWave to ORBCOMM Inc. The share sale was one part of a suite of agreements with ORBCOMM Inc., covering the joint ownership and future development and commercialisation of the IsatData Pro technology. As part of these agreements, we acquired SkyWave's satellite network assets, hosted at three SASs.

## Key Strengths

We are a leading provider of MSS in the global mobile satellite communications services industry, with leading positions in the maritime, land mobile, government and aviation sectors. Each of these markets has a critical need for our range of services across multiple applications, and we believe that we are able to compete effectively due to several key differentiators that distinguish our proposition from those of our peers. We see these differentiators as: (1) high levels of network capacity delivering low-cost communications services; (2) global coverage to meet customer needs for ubiquity; (3) high quality mobility management services for a user base which needs flexibility of use of product and location and (4) high reliability and security to support mission-critical applications, all under-pinned by solution-friendliness and simplicity to facilitate integration and applications compatibility. The following key strengths support our position:

- ***The breadth of our product and service range.*** We offer mobile communications services across each of our five business units. We believe our services enable us to capitalise on the growth opportunities presented by increasing customer demand for high-bandwidth mobile communications services. Our services are accessed using a variety of devices, from hand-portable satellite phones and remote site-fixed installations to vessel, vehicular and airborne mobile terminals, offering different performance options to suit the operational needs of our customers.
- ***Seamless global coverage.*** Each of our satellite constellations provide global coverage which is achieved by having a minimum of three satellites operating at geostationary orbit. This allows our customers to be able to know the service they buy from us will be consistent wherever they go across the globe and it is provided by one operator rather than multiple operators working together to provide global coverage. We have designed our Inmarsat-5 Ka-band satellites to seamlessly move traffic to and from the Inmarsat-4 L-band satellites if the signal on the Ka-band service degrades which is key to the maritime sector; this is done by using a hybrid terminal allowing both satellite signals to operate seamlessly to provide global coverage.
- ***Global, secure and mobile L- and Ka-band capabilities of our satellite network.*** We own and operate an in-orbit fleet of 11 geostationary L- and Ka-band satellites designed specifically to deliver global mobile telecommunications services. Our fleet provides a comprehensive portfolio of data and voice services on a global basis. Our L-band network, Inmarsat-4, consists of three satellites for seamless global coverage, and includes an operational fourth satellite which also provides in-orbit redundancy. We have global L-band spectrum rights which we believe would be difficult for any new market entrant to replicate. Our recently-launched Ka-band network, Inmarsat-5, consists of three satellites for seamless global coverage and enables us to offer new broadband data services to our existing L-band customer base, as well as to diversify our business into new markets that were otherwise unavailable to us. We currently expect to launch a fourth Inmarsat-5 satellite in the fourth quarter of 2016, subject to confirmation from SpaceX as to the availability of a launch vehicle. This satellite will provide in-orbit redundancy as well as incremental global Ka-band capacity. Our L-band and Ka-band capabilities can be integrated together seamlessly into a single service offering to deliver the high speeds of Ka-band complemented by the high resilience of L-band. Indeed our core maritime service offering is expected to become Fleet Xpress, composed of our Global Xpress Ka-band service and our FleetBroadband L-band service.
- ***Growth and diversity via the EAN (S-Band).*** Once commercially available, we expect our EAN services to provide high-speed bandwidth principally to the European commercial and business aviation markets. This will



give airlines greater choice in the provision of their communications connectivity, complementing our existing service platforms in L- and Ka-band.

- ***The reach of an established global distribution network.*** We have over 40 distribution partners and over 35 GX VARs who sell our L-band and GX services to end-users, either directly or through a network of over 800 service providers. Some of our distribution partners and service providers specialise in the delivery of services to key end-user market sectors and offer specialist applications and value-added services in addition to the provision of our airtime. We believe our distribution network is an important contributor to our business success, offering reach, value-added and complementary services, and customer and market intimacy and specialisation, which together increase our ability to understand the needs of our customers and deliver tailored, value-added solutions to those needs.
- ***The stability of a large, installed end-user base contributing to strong reputation and brand.*** As at 30 June 2016, we had approximately 385,000 active terminals accessing our data, voice and broadband services. Additionally, in many instances, these terminals are accessed by multiple end-users, such as those on-board ships and aircraft. We also had an installed base of approximately 326,000 M2M terminals. We believe that this large installed base contributes to our stable revenues, due to the significant cost and effort required for end-users to switch to an alternative communications system. Our corporate end-users tend to have a high degree of day-to-day reliance on our services to support mission critical operations, which we believe also contributes to revenue stability. As well as our multiple different government users whom we support in times of crises, international aid organisations rely on our services when responding to global events, including aid relief missions in response to natural disasters.
- ***Our long-term commitment to safety services.*** The quality and coverage of our network is underpinned by the fact that we are currently the only provider of satellite services for the operation of the GMDSS, which maritime sector regulations require for all cargo vessels over 300 gross tons and for all passenger vessels that travel in international waters. In addition, we provide services that facilitate compliance with ICAO standards for the provision of aviation safety systems, such as air traffic management and aircraft operational control.
- ***Our track record of over 37 years of innovation, technical excellence and reliability.*** We have over 37 years of experience in designing, implementing and operating global MSS networks, and have a track record of high-quality services and reliability. We have not experienced a satellite failure in our operating history and, throughout our history, we have pioneered innovations in satellite communications services to make higher data speeds available to smaller and lighter mobile terminals. In addition, during the three years ended 31 December 2015 and the six months ended 30 June 2016, our average Inmarsat-4 satellite communications network availability exceeded 99.9 per cent. We believe our reliability is particularly attractive to government, military and enterprise-level users whose operations typically require mission and business critical communications support.
- ***The financial strength of high margins and strong EBITDA growth.*** For the past three financial years ending 31 December 2015, 2014 and 2013 and the six months ended 30 June 2016, we have had an EBITDA margin which exceeded 50 per cent. and EBITDA has grown from US\$648.7 million for the year ended 31 December 2013 to US\$701.0 million for the year ended 31 December 2014 and to US\$726.0 million for the year ended 31 December 2015. In the twelve months ended 30 June 2016, our EBITDA margin and EBITDA, respectively, were 58.4 per cent. and US\$751.4 million.
- ***An experienced management team.*** We have a highly experienced management team. Members of our senior management team have held senior positions at a number of public companies. Our senior management team has significant experience in the satellite industry with many successful launch campaigns and satellite deployments. They are supported by a world class technical team.

## Strategy

Our vision is to meet the remote and mobile connectivity needs of our customers, giving them what they need to connect, reliably, securely and globally. Inherent in that vision is an ambition to develop from being a satellite telecommunications operator to become a powerful, proactive digital enabler operating diversified networks and platforms across which we

deliver highly-integrated, value-added digital solutions and services to our target markets and customers. In support of this vision, we pursue a strategy to deliver sustained growth through maximising the opportunities that we believe exist in our markets.

Our business is focused principally on high growth mobile communications markets. Despite the current volatility of the broader maritime, government, energy and aviation sectors, there is growth in demand in those sectors, and beyond, for global mobile broadband. The world increasingly demands total connectivity on the move, not only between people, but also between people and machines, and between machines. According to Cisco, mobile data traffic is estimated to grow at a compound annual growth rate of 57 per cent. from 2014 to 2019.

As a result, we are seeing two main trends in our business. First, our core customer base has begun to change its use of mobile satellite services and second, our services have become relevant for the first time to a new customers. The first trend is driving new growth for us in a low risk, complementary way to our existing business, and the second trend offers further growth opportunities.

Our core customers are embracing the transformative power of connectivity in their businesses. In Maritime, data connectivity that used to be regarded as simply a cost to be tightly controlled is increasingly being regarded as a value-added enabler of the digital ship era, delivering strong returns on investment across diverse areas of ship-borne activity. Similarly, the cockpits of commercial aircraft and the management of aviation systems and operating platforms are being transformed by the power of mobile broadband. Governments have also placed beyond-line-of-sight broadband communications at the heart of their ability to deliver situational awareness, intelligence, surveillance and reconnaissance and inter-operational command and control indicating that mobile satellite communications has been a fundamental enabler to their activities across diverse areas of operations. In the energy sector, cost savings resulting from the introduction of ‘smart’ oil fields (meaning oil fields connected and operated increasingly autonomously as part of a community of sister oil fields) can produce significantly less expensive oil than a traditional oil field and, particularly in an era of relatively low oil prices, is increasing demand for remote broadband connectivity.

In addition to our existing customer constituencies, new customers with pervasive connectivity needs are deploying our services for the first time as the unique capabilities of global MSS meet their new business requirements, driven by their adoption of mobile broadband connectivity as a mission critical capability. Once a business or a government department has decided to embrace mobile broadband services for its customers, suppliers and staff, then coverage and reliability come into the equation, for which we believe our global capabilities can be highly desirable. For example, in respect of emergent aviation passenger connectivity, the demand for ubiquitous connectivity by travelling customers has driven commercial airlines to embrace mobile satellite broadband services as critical to their future competitiveness and created an environment in which we believe passenger broadband on commercial aircraft will rapidly become the norm.

Other sectors are also experiencing a similar revolution such as smart cities, intelligent transport systems (including the connected car, train, truck and bus), and the world of ‘smart everything’ including agriculture, education, healthcare, energy grids and control systems among many other verticals. In this interconnected world, satellite operators are being invited to become an integral part of next generation 5G mobile ecosystems. We are part of the European Commission’s 5G Action Group - for the first time lining up alongside the terrestrial network operators and telecommunications equipment manufacturers, to ensure that this innovative mobile technology extends into suburban and rural areas, reaches into the skies and onto the seas, is inter-operable and highly cyber resilient, can be broadcast to the many, supports low-power wide-area M2M networks and remains operational through natural disasters or acts of terrorism. These trends now place mobile satellite broadband closer to mainstream communications services.

These opportunities are not only in broadband communications, but also in narrowband, and increasingly in communications relating to applications and solutions, but perhaps agnostic to the platform used. To leverage our position as a leader in satellite communications in light of the above trends, we have built our strategy around the complementarity of our four platforms which are noted below. Other strategic opportunities may come forward for consideration from time to time which will further leverage these platforms:

- **L-Band Growth.** Our L-band platform (using the Inmarsat-3 and Inmarsat-4 satellites today, and including the Inmarsat-6 satellites currently planned from 2020) delivers fast, resilient global mobile broadband capabilities to smaller, low-cost, highly portable devices. Our objectives are to grow the value of our core L-band markets, innovate to expand beyond those core markets and to extend our geographical footprint. We are focused on

working with key countries, such as Russia, India and China, to introduce new L-band infrastructure locally as a condition to full market access for our services in those countries. Our priorities are to expand beyond our core markets, refocus L-band offerings on markets and service areas providing a sustainable competitive advantage, extend our Government and Enterprise businesses into new countries and verticals (e.g., environmental monitoring, election support and emergency response) and prepare for the new opportunities created by the capabilities of the Inmarsat-6 satellite generation, with the first Inmarsat-6 satellite currently expected to be launched in 2020, to enable L-band (and Ka-band) growth. We continue to search for ways to meet the rapidly evolving demands of an increasingly connected world. To this end, we continue to migrate our customers from Existing & Evolved Services on Inmarsat-3 satellites to more efficient Inmarsat-4 services.

In December 2015, we entered into a contract with Airbus Defence and Space for the manufacture of two Inmarsat-6 satellites. This new fleet will feature dual-payload satellites, with each satellite supporting both Ka-band and L-band services. Based on our current services and demand, the Ka-band secondary payload will augment the capacity of the GX network over busy traffic routes and regions, while the L-band primary payload will extend the commercial life of our existing L-band services as well as support a new generation of more advanced L-band services. We currently expect to launch the first of our Inmarsat-6 fleet into orbit in 2020 to begin the replacement of the Inmarsat-4 satellites, the oldest of which will have reached the end of their design lives by such time. While the principal role of the first two Inmarsat-6 satellites will be to maintain our substantial existing L-band service revenues, we have also taken the opportunity to both modernise and develop the Inmarsat-6 L-band payloads by taking advantage of recent technological developments, which will allow us to upgrade and develop our future L-band services as well as add a substantial Ka-band payload on each satellite to provide additional GX services in the future.

- ***Growth and diversity via GX and Ka-band infrastructure.*** Our Ka-band platform, using our Inmarsat-5 satellites to deliver GX services, complements the L-band platform by delivering high throughput and high capacity global mobile broadband to our customers. Our objective is to grow new, fast broadband MSS opportunities with our existing customers, as they seek to move up the bandwidth curve, and also to diversify into large and growing markets adjacent to our legacy L-band markets, such as the established Maritime VSAT, Government VSAT and Energy markets as well as the newly emerging military satellite communications and commercial aviation passenger connectivity opportunities. The GX global commercial service introduction was achieved in December 2015, and we have signed VAR agreements for GX services with over 35 organisations and we are in discussions with multiple others. Our future near-term priorities in this area are to successfully operate our GX offerings across our markets and to complete the launch and entry into commercial service of our fourth Inmarsat-5 satellite to provide ourselves with in-orbit redundancy for GX services as well as additional system capacity. Our initial Government GX service offerings were complemented by the launch of commercial Maritime GX services, Fleet Xpress, and Enterprise GX services. We plan to complete the initial phase of the global launch of GX services in 2016 with the launch of GX Aviation services by the end of 2016. We are targeting GX revenues to significantly contribute to our revenues in the medium term.

In respect of military communications, we will offer a wide range of global military Ka-band capabilities over the Inmarsat-6 satellite platform that we believe will augment and fill needs of entities such as the US Department of Defense and a small group of coalition forces who deploy alongside the US Department of Defense. We believe that we have an opportunity to become a trusted and embedded supplier to these governments of services that are fungible with the existing deployed proprietary investments these governments have already made, such as the US Government WGS network or the Athena-Fidus system, making us a highly efficient and effective strategic partner for these users.

- ***The development of a hybrid S-band network for Europe.*** On 13 May 2009, the European Commission awarded us rights over 30 MHz of S-band frequencies (in two contiguous blocks of 15MHz) for use in a pan-European satellite and complementary terrestrial deployment. In 2014, we announced the development of the EAN partnership with European telecommunications firm, Deutsche Telekom, to pursue our S-band business plans. We are in the process of constructing the EAN, which will be a hybrid service comprised of two integrated networks; (1) a satellite component and (2) a CGC, both operating in the S-band and will also operate on an integrated basis with our global GX Aviation services. Once commercially operational, we expect our EAN services to provide high-speed broadband principally to the European commercial and business aviation markets, but also to offer



local services in Europe to global long-haul traffic transiting Europe, providing high-speed connectivity and other services to aviation passengers. We have completed the manufacture of the Inmarsat-S satellite, which we currently expect to launch in the first half of 2017. Deutsche Telekom is responsible for the CGC, has commenced build out of the EAN tower infrastructure and currently expects this to be ready for network trials in early 2017. We currently expect the commercial launch of the EAN in mid-2017.

- The innovation of our Inmarsat Gateway platform.*** We are currently developing Inmarsat Gateway, a service platform which we will make available across all of our networks. The Gateway platform will initially support (1) the core functionality of our Global Xpress services (e.g., provisioning and billing services) and (2) the integration of our L-band and Ka-band services into innovative services offerings (e.g., Fleet Xpress), but is also being developed to support and enhance the development and distribution of our own and third party digital services and solutions to our partners and end users. As such, Inmarsat Gateway is intended to enable us to develop an ecosystem of application partners and other suppliers delivering innovative, tailored and value-added services and solutions to our channel partners and end customers seamlessly over our global mobile broadband networks, driving differentiation, end-customer loyalty, ARPU and new revenue streams.

### Geographical Markets

Revenues are allocated to countries based on the billing address of the customer. For wholesale customers, this is the distribution partner who receives the invoice for the service, and for retail customers this is the billing address of the customer for whom the service is provided. The table below provides a breakdown of our revenue for the years ended 31 December 2015, 2014 and 2013 by geographical region:

	Year ended 31 December		
	2015	2014	2013
	(US\$ in millions)		
Europe.....	423.0	559.3	518.7
North America .....	541.8	391.2	438.5
Asia-Pacific .....	254.9	282.7	254.7
Rest of the world.....	54.3	52.7	50.0
<b>Total revenues .....</b>	<b>1,274.1</b>	<b>1,285.9</b>	<b>1,261.9</b>

### Our Key Products and Services

We provide MSS services over the Inmarsat satellite system directly to end-users and through a network of service providers. End-users access our services at sea, on land and in the air. We provide mobile data and voice services on an on-demand basis through user terminals that vary based on bandwidth capability, size, mobility, and cost and lease capacity. Some of our services are available only in specified sectors (e.g., maritime-only applications), while others are available across a number of market sectors. We also provide the supply of wholesale airtime, equipment and services to distribution partners and other wholesale partners of mobile satellite communications services, including entering into spectrum coordination agreements.

#### *Global Xpress Services*

Global Xpress services are available over a global network of three Ka-band Inmarsat-5 satellites constructed by Boeing Space and Intelligence Systems. The first Inmarsat-5 satellite was successfully launched in December 2013 and the second and third satellites launched in 2015. We experienced a launch delay for the second and third satellites due to successive Proton launch failures, which pushed back the launch of global commercial services for GX by approximately nine months. However, we were able to sell regional GX government services as well as XpressLink services to the maritime sector (which provides for an upgrade path to GX) to continue the rollout of services on a global basis. We plan to launch a fourth Inmarsat-5 satellite, originally built as an operational spare, by the end of 2016, subject to confirmation from SpaceX as to the availability of a launch vehicle.



GX offers mobile connectivity at speeds (up to 50 Mbps to antennas of 60 centimetres in diameter) which are significantly faster than, any current Ku-band VSAT services. We offer terminals which allow users to access Global Xpress services on fixed and mobile platforms at sea, on land and in the air.

We intend to offer GX services across all five of our business units.

- *Maritime:* In March 2016, we launched Fleet Xpress, the first globally available, high-speed broadband solution for maritime and offshore operators available from a single communications provider. Fleet Xpress enables ship owners and operators to enhance their business intelligence, improve operational efficiency and vessel performance as well as provide a host of high-value, welfare benefits for crew members. Fleet Xpress also empowers third-party application providers to enhance their existing services and to host innovative new applications that will further drive operational efficiencies, ranging from real-time monitoring, remote diagnostics and telemedicine, to security and crew service management tools, among others. We have already commenced the transition of XpressLink customers to Fleet Xpress, a process that we expect to take approximately three years. As of 30 June 2016, our VSAT (including XpressLink) services have been installed on approximately 2,800 ships. We recently announced major strategic partnerships with three of the largest maritime VSAT resellers, Marlink, SpeedCast and Navarino. These partners commit to equipping over 5,000 vessels with Fleet Xpress over the next five years.
- *Aviation:* In 2015, we conducted successful trials of our GX Aviation product (branded “Jet ConneX” for business aviation), equipment and network capabilities, including streaming videos and live radio, facilitating online conference calls and downloading files. Successful trials for helicopter flights were also conducted by Boeing. These trials validated the ability of GX to deliver high-speed, global, broadband connectivity in the air to our customers. With our GX Aviation network, airlines and their passengers can access a consistent and reliable service at all times. Our single network provides a seamless handover, backed up with a two-receiver antenna technology system designed to ensure the connection to the aircraft does not drop. GX Aviation services are currently scheduled to enter commercial service by the end of 2016, although some customers have already adopted the service as at the date of this document.
- *Enterprise:* In 2015, we launched a trial of GX services in Enterprise following the Nepal earthquake and strengthened the GX sales channel with five new GX VARs. In March 2016, we announced market availability for Enterprise customers of a range of land-based applications which span industries including aid and development, oil and gas, media and energy, transport and logistics.
- *US and Global Government:* We deliver global GX services to US and international government customers. We built Global Xpress purposely from the ground up with government users in mind. Our worldwide service complements the WGS network, allowing the US, Canadian, Australian and other coalition partners to cost-effectively augment their systems without any up-front commitment or additional infrastructure investment. We provide our government users with a secure network infrastructure that provides reliable assured access to comply with business security practices supported by a cyber security team. GX is particularly suited to bandwidth-intensive mobile applications for airborne intelligence, surveillance and reconnaissance, special operations and expeditionary forces, live full-motion video, intelligence, as well as command and control and theatre backhaul.

We believe Global Xpress will deliver significant service revenues in the future.

#### ***Inmarsat-4 Services***

Our Inmarsat-4 satellites provide simultaneous voice and data transmission services, globally. These services include FleetBroadband, BGAN and SwiftBroadband and use IP technology to provide higher data speeds than are possible using Existing & Evolved Services. Our Inmarsat-4 services also include standard IP rates for office applications such as email, the web or VPN and guaranteed, on-demand streaming IP rates for more demanding uses such as videoconferencing, telemedicine and live broadcasting.



### *FleetBroadband*

Our FleetBroadband services were first launched in November 2007 and have been available globally since February 2009, targeting the maritime sector. These services offer voice and high-speed IP data service at transmission rates of up to 432 kbps. FleetBroadband was the first maritime communications service to provide cost-effective broadband data and voice, simultaneously, on a global basis. Operational systems can run online while multiple users simultaneously access email, the internet and make phone calls, all via a single terminal.

We launched our FleetBroadband 150 service in May 2009. FleetBroadband 150 is a lower cost variant of our FleetBroadband range and was introduced to target and expand the addressable markets for smaller vessels, coastal merchant vessels and the fishing and marine leisure sectors. FleetBroadband 150 offers voice connection of landline quality, accessible simultaneously with an internet connection of up to 150 kbps, and simple-to-use SMS.

FleetBroadband 250 is our mid-range service, providing connection speeds of up to 284 kbps for applications such as email, internet access, real-time electronic charts and weather reporting. Guaranteed rates of up to 128 kbps are available on-demand for live applications such as video conferencing and database synchronisation, as well as up to nine telephone lines with FleetBroadband Multi-voice for phone calls to terrestrial and mobile networks.

FleetBroadband 500 is our top-range service predominately serving merchant ships and offshore supply vessels and is designed to ensure maximisation of operational efficiency. FleetBroadband 500 provides connection speeds of up to 432 kbps for applications such as email, internet access, real-time electronic charts and weather reporting and guaranteed connection rates of up to 256 kbps available on-demand. It also includes up to nine telephone lines which can be added with FleetBroadband Multi-voice for phone calls to terrestrial and mobile networks. We provide free emergency calling, a safety communications facility using any FleetBroadband terminal.

We offer various price plans across our services, from unlimited data allowances to low volume plans.

### *BGAN*

Our BGAN service was our first broadband service offered to Enterprise customers. BGAN was first launched in December 2005 and has been available on a global basis since February 2009. BGAN offers end-users secure, reliable broadband internet and telephony capability for high-speed data applications using portable terminals connecting via USB, Bluetooth, Wi-Fi or Ethernet, depending on terminal type. The service supports data transmission rates of up to 492 kbps, similar to, and in some cases higher than, the transmission rates for third generation (3G) terrestrial wireless networks, with the option of 64 kbps Integrated Services Digital Network or IP streaming at certain rates between 8 and 384 kbps. BGAN also offers a premium X-Stream service allowing a guaranteed minimum symmetrical video streaming rate of up to 450 kbps.

We launched our BGAN HDR in December 2013. This service is aimed at live TV broadcasting and provides an average speed of 650 kbps, but which can achieve speeds as high as 800 kbps. In 2015, we launched our Bonded HDR service which can achieve speeds in excess of 1 Mbps.

### *SwiftBroadband*

In October 2007, we launched our SwiftBroadband services to the aviation sector, which can be accessed by end-users through dedicated terminals specifically designed for use on aircraft. SwiftBroadband offers simultaneous voice and data connectivity of up to 432 kbps per channel (many customers have two channels bonded for even faster speeds).

SwiftBroadband is suitable for a range of applications from aircraft operation and management to cabin applications such as voice, email, internet access, SMS text messaging and integration into in-flight entertainment systems. In addition, SwiftBroadband is available for the in-flight use of electronic personal devices, and for Wi-Fi browsing services.

In October 2010, we introduced a new class of our SwiftBroadband service, SwiftBroadband 200 (“**SB200**”). SB200 is designed to extend the benefits of Inmarsat aviation services to smaller aircraft and provides a lower cost option for IP data service up to 200 kbps.

We are currently developing a higher speed variant service, SwiftBroadband HDR, which will provide an average speed of 650 kbps.

We are also currently evaluating the use of SB-S on several commercial jet platforms. SB-S enables faster transmission of our existing voice and data safety services including oceanic communication and surveillance. In addition, SB-S would enable multiple Electronic Flight Bag applications, defined as electronic information management devices that assist flight crews in performing flight management tasks more efficiently, including advance weather application, Flight Tracking, and Black Box in the Cloud. These applications are currently not utilised by pilots as they cannot be connected in-flight due to a lack of security and limitations on existing communications systems. SB-S incorporates network and terminal security measures and is currently scheduled to be commercially available in 2018. Airbus has announced that SB-S has been selected as a cockpit communications solution for its A320 and A330 aircraft families.

#### *Global Satellite Phone Services (GSPS)*

In June 2010, we launched our first global handheld satellite phone service, the IsatPhone Pro. The IsatPhone Pro is the first handheld satellite phone to be purpose-built for the Inmarsat network. The IsatPhone Pro is targeted primarily at professional users in the media, aid, oil and gas, mining and construction sectors. It offers satellite telephony, with Bluetooth for hands-free use, voicemail, SMS and email messaging, with a data capability which became available at the end of March 2011.

In March 2014, we launched our next-generation satellite phone, the IsatPhone 2. The IsatPhone 2 has a rugged handset design, an industry-leading eight hours of talk time and 160 hours on standby, and includes a range of updated emergency and tracking features. In 2015, we updated the IsatPhone 2 to include a feature which allows any user to make a safety call. In 2015, we experienced a manufacturing quality issue with a third-party vendor in relation to our IsatPhone 2 handsets, which resulted in a temporary suspension of sales in the third quarter of 2015 and lower sales in the first quarter of 2016. The manufacturing issue has now been resolved. In July 2015, we received a type approval for our IsatPhone 2 technology in China, making us the only international operator legally eligible to sell handheld satellite phones in the country. FleetPhone is our equivalent low-cost, maritime satellite phone service with approximately 10,000 active terminals. As at 30 June 2016, our GSPS services had approximately 149,000 active subscribers.

#### *Machine-to-Machine (M2M) Services*

We have a range of services targeting the M2M market in our Enterprise and Global Government business units. In August 2011, together with our partner SkyWave, we announced the launch of IsatData Pro, a new service designed to enable data packet communication with remote assets at much greater data speeds than are possible with any comparable competitive terminal. In January 2012, we launched a new M2M terminal based on our BGAN service. The BGAN M2M service offers an end-to-end IP data capability for real-time applications, including smart metering, SCADA, monitoring and other infrastructure telemetry solutions. In addition, we have established M2M services using our Inmarsat D+ and IsatM2M terminals. Among our target markets for this new service are oil and gas, utilities and asset tracking. As at 30 June 2016, we had an installed base of approximately 326,000 M2M terminals.

#### *Other*

In 2015 and 2016, we introduced a range of new L-band Inmarsat-4 services. These include:

- Fleet One, designed to meet the low data usage demands of occasional or seasonal maritime users when they move out of VHF or GSM coverage areas;
- Fleet Media, comprising entertainment solutions allowing maritime customers to download films, sport and TV shows;
- L-band Tactical Beyond Line of Sight (L-TAC) communications for military users;
- L-band Airborne Intelligence, Surveillance and Reconnaissance (LAISR) services for military users;
- L-band Advanced Communications Element (LACE) terminal providing an on-demand lease service for government users; and
- a variety of new rate pricing plans for existing products.

### ***XpressLink Services***

In July 2011, we launched XpressLink, a managed global broadband service for the maritime industry. XpressLink offers enhanced Ku-band coverage and bandwidth using Ku-band capacity procured from other satellite operators, combined with the global capabilities of FleetBroadband's L-band service on a fully-integrated basis. XpressLink was launched before our GX services were available and acts as a bridge to our GX service by offering terminals which can be upgraded to our GX service. XpressLink competes with existing maritime VSAT service offerings that often rely on our services to provide back-up and resilience in areas where VSAT may be unavailable due to lack of coverage or those affected by adverse weather. XpressLink is unique in bundling a Ku-band VSAT service with our FleetBroadband service for a fixed monthly subscription. We commenced migration of our XpressLink customers to our GX service, Fleet Xpress, in the second quarter of 2016, a process that we expect to take approximately three years.

### ***Inmarsat-3 Services (Existing & Evolved Services)***

Existing & Evolved Services are those services that were introduced on our Inmarsat-2 satellites (which have been de-orbited) and Inmarsat-3 satellites. All of our current Existing & Evolved Services are also supported by our Inmarsat-4 satellites. Our principal Existing & Evolved Services comprise Inmarsat-C, Swift 64, Classic Aero and Fleet. In the year ended 31 December 2015, our Existing & Evolved services represented 13 per cent. of our total revenue (excluding Ligado Networks), compared to 18 per cent. in the year ended 31 December 2014. As we continue to focus on our core broadband and GX services, we expect revenue from our Existing & Evolved Services to continue to decline.

### ***Leasing***

We lease capacity on our satellites to distribution partners who in turn provide the capacity to end-users. We entered into the Lease Agreements that took effect from 15 April 2009 with our distribution partners that lease our satellite capacity to end-users for exclusive use for a pre-arranged fixed term (as opposed to on-demand services). Typically, the end-user lease contracts are short-term, with terms of up to one year, although they can be as long as five years. We also lease specialised satellite navigation transponders on our Inmarsat-3 and Inmarsat-4 satellites primarily for the provision of navigation services to US and European civil aviation organisations, for up to five years. In 2015, the leasing revenue represented 6 per cent. of our total revenue (excluding Ligado Networks), as compared to 7 per cent. for the year ended 31 December 2014.

### ***Terminals***

Our data and voice services are provided over a range of communications terminals with differing bandwidth capabilities, sizes, mobility and cost. Some of these terminals also provide maritime and aviation safety services. As size and portability are not as critical for maritime- and aviation-based users, the terminals available to these users are often larger, more expensive and satisfy the users' requirements for stabilisation and more stringent pointing capabilities.

Specialised third parties manufacture our user terminals and, except in the case of GSPS terminals, sell them to end-users directly or via their own independent sales channels, as well as through our distribution partners, service providers and value-added resellers. In the case of GSPS terminals, we manufacture the terminals using a contract manufacturer and sell these to our GSPS distribution partners for onward sale to service providers and end-users. We establish the performance specifications of all terminals used to access our services with the terminal manufacturers. This helps us to ensure that our service quality objectives are met.

Our broadband and GSPS terminals are designed to provide access via our Inmarsat-4 satellites. These terminals use the same SIM cards as terrestrial wireless terminals. This interoperability enables distribution partners and service providers to deliver a single service to users for both their mobile satellite and terrestrial communications services.

GX uses compact terminals that come in portable, mobile or fixed form with fixed terminals easily transportable from one location to another. These terminals each have their own single, global IP address. The portfolio ranges in size from 60 centimetres, lightweight and highly portable terminals with lower power consumption for customers that require a high-speed mobile office to fixed-site installations of up to 2.4 meters.

## Our Business Units

### *Maritime*

Through our Maritime business unit we provide MSS solutions to the maritime industry. Our Maritime business unit remains our largest business unit, representing 51 per cent. of our total revenues (excluding Central Services revenue) in the year ended 31 December 2015.

We offer Fleet Xpress, a fully integrated dual capability, high speed, high capacity service, powered by Global Xpress, which is seamlessly integrated with our L-band, FleetBroadband service (including emergency calling for safety), in a single package available globally. We also offer leasing services to the maritime sector. In addition, we provide the following Existing & Evolved Services to the maritime sector: Inmarsat B, Inmarsat C, Inmarsat M, Mini M and Fleet. These products offer voice services and data transmission rates ranging from 600 bps to 432 kbps, with Fleet Xpress delivering speeds up to 50 Mbps. We also offer the XpressLink service which was launched as a bridge to our GX service. We commenced migration of our XpressLink customers to Fleet Xpress in the second quarter of 2016. End-users of our services in the maritime sector include companies engaged in merchant shipping, passenger transport, fishing, energy and leisure. Merchant shipping accounts for the bulk of our maritime revenues, as those ships spend the majority of their time at sea away from coastal areas and out of reach of terrestrial communication services.

All of our existing maritime services are available globally (excluding the extreme polar regions).

Maritime end-users utilise our satellite communications services for the following:

- *Data and information applications.* Ships' crews and passengers use our services to send and receive email and data files, and to receive other information services such as electronic newspapers, weather reports, emergency bulletins, electronic charts and related updates. The data speeds we offer through Fleet Xpress, FleetBroadband and XpressLink allow video conferencing and internet browsing for business and crew welfare purposes.
- *Vessel management, procurement and asset tracking.* Ship operators use our services to manage inventory on-board ships and to transmit data, such as course, speed and fuel stock. Our services can be integrated with a global positioning system to provide a position reporting capability. Many fishing vessels are required to carry terminals using our services to monitor catches and to ensure compliance with geographic fishing restrictions. Furthermore, pursuant to the IMO resolution relating to long-range identification and tracking, security regulations were introduced requiring tracking of merchant vessels in territorial waters.
- *Welfare services for passengers and crew.* Voice services are used for both vessel operations and social communications for crew welfare. Merchant shipping operators increasingly use our services to provide phone cards and/or payphones for crew use with preferential rates. Fleet Media is our maritime entertainment solution. The service offers an extensive on-demand video library including Hollywood movies, international films, sports and TV shows, which can be accessed via a laptop, computer or mobile device through a Wi-Fi or physical network connection anywhere on board of a vessel.
- *Safety.* In addition to our commercial activities, we provide GMDSS safety services to the maritime sector. Ships in distress use our safety services to alert a maritime rescue coordination centre of their situation and position. The rescue coordination centre then uses our services to coordinate rescue efforts among ships in the area. The IMO requires all cargo vessels over 300 gross tons and all passenger vessels, irrespective of size, that travel in international waters to carry distress and safety terminals that use our services. We are currently recognised by the IMO as the only provider of the satellite communications services required for GMDSS. We have also introduced further safety services: "505" for maritime users who do not have access to GMDSS services which uses our FleetBroadband voice distress service.

We recently announced major strategic partnerships within our Maritime business unit with three of the largest maritime VSAT resellers, Marlink, SpeedCast and Navarino. These partners commit to equipping over 5,000 vessels with Fleet Xpress over the next five years.

## **Aviation**

We provide connectivity to the aviation sector through our Aviation business unit. The Aviation business unit represented 11 per cent. of our total revenues (excluding Central Services revenue) in the year ended 31 December 2015. In the aviation sector, our satellite communications services are used by corporate jet operators and commercial airlines. Avionics from our hardware partners have become factory options or standard equipment on a range of aircraft in business aviation and air transport. We have a Master Distribution Agreement with Honeywell for a term of five years which commenced on 31 March 2015.

The commercial service introduction for our GX Aviation product (branded “Jet ConneX” for business aviation) is currently scheduled to launch by the end of 2016, although some customers have already adopted the service as at the date of this document. We also offer our broadband service, SwiftBroadband, and the following Existing & Evolved Services to the aviation sector: Aero C, Aero H/H+, Aero I, Aero L, Mini M and Swift 64. These services offer voice and data communication rates ranging from 600 bps up to 432 kbps per channel and up to 50 Mbps for GX. The Aero L, I, H and H+ services are compliant with ICAO’s standards for provision of safety services.

Aviation users utilise our satellite communications services for:

- *Air Traffic Control Communications.* Aircraft crew and air traffic controllers use our services for data and voice communication between the flight deck and ground based control facilities. This includes ADS-C (Automatic Dependent Surveillance—Contract) for waypoint position reporting and flight plan conformance monitoring; ACARS/FANS (Aircraft Communication and Reporting System/Future Air Navigation System) for data link messages between the controller and an aircraft and CPDLC (Controller Pilot Data Link Communication) for clearance and information services. Examples of our safety services include user coordinated revisions of flight plans en route and transmission of aircraft systems’ data to the ground.
- *Operational Communications.* Aircraft crew and airline ground operations use our services for air-to-ground telephony and data communications. For example, aircraft systems’ “mission critical” condition data can be transmitted to the ground or administrative data can be transferred to the aircraft.
- *In-flight Passenger Communications.* Our services are used for air-to-ground telephony, data services and communications as the enabler for in-flight mobile phone systems allowing passengers to communicate using their own mobile phones, smartphones and other PDAs or to access the internet via Wi-Fi services.

All of our aviation services are available globally, excluding the extreme polar regions.

In the first quarter of 2011, we were awarded a contract by the European Space Agency (“ESA”) for stages A and B of a project to enhance air traffic management in Europe by using satellite data-link transmissions as a key component of the multi-link system. In November 2014, we were awarded a contract for stage C. In July 2015, we announced the successful completion of Phase 1 of the ESA’s ‘Iris Precursor’ project to validate the ESA’s Iris programme, which forms part of the EU’s ‘Single European Skies’ air traffic management initiative. In July 2015, we also signed a Public Private Partnership with the ESA in which we agreed to act as the prime contractor in a project to expand the identification of new technologies for the next generation of space-enabled communications services.

## **Enterprise**

We provide MSS to a range of customers across energy, resources, media, aid, transport and logistics sectors through our Enterprise business unit. The Enterprise business unit provides low data-rate, voice and broadband communications and focuses on worldwide energy, industry, media, carriers and M2M services. The Enterprise business unit represented 14 per cent. of our total revenues (excluding Central Services revenue) in the year ended 31 December 2015.

In January 2014, we sold the majority of our retail energy business to RigNet. Following the disposal, we formed a strategic partnership with RigNet to drive GX use in the energy and resource sector. During 2015, GX field trials took place around the globe and GX services were deployed commercially by the media in Nepal, following the April 2015 earthquake. Our GX services have also been tested by commercial partners and in March 2016, we announced GX services as available



for approved persons for a range of land based applications, aid and development, oil and gas, media, energy, transport and logistics.

We provide the following Existing & Evolved Services to the Enterprise market: Inmarsat B, Inmarsat C, Inmarsat D+, Inmarsat M, Mini M and GAN. The Inmarsat-4 services we offer to the Enterprise sector include BGAN, GSPS and M2M services which include IsatM2M, IsatData Pro and BGAN M2M. These products offer data transmission rates up to 492 kbps (or higher, where multiple terminals are bonded and in the case of our new BGAN HDR services).

Our Enterprise end-users utilise our satellite communications services for:

- *Voice, Data and Videophone.* Media companies and multinational corporations use our services for video conferencing, business telephony and to provide pay telephony services for employees in communities inadequately served by terrestrial networks. Media organisations transmit live broadcast-quality voice, live videophone, store-and-forward video footage and still images using our services.
- *Mobile and Remote Office Connectivity.* A variety of enterprises use our services to place and receive voice calls, access data, email, digital images, internet and facilitate corporate network connectivity.
- *M2M Services.* Our M2M services are used to monitor the location of assets or transport fleets and to conduct two-way communications with drivers. Governments and multinational corporations use our services to run applications that enable the remote operation of facilities such as lighthouses, oil pipelines and utilities networks.

We offer both data and voice services to Enterprise end-users. All of our Enterprise services are available globally (excluding the extreme polar regions). As at 30 June 2015, we had over 65,000 active BGAN terminals.

In 2015, we continued to focus on developing a long-term M2M connectivity business. We created a team focused on the growing M2M and the ‘Internet of Things’ markets. M2M connectivity allows devices to communicate with each other and share information via the internet. Satellite communications play an increasingly important role in M2M enablement in specific vertical markets, enabling a host of applications ranging from asset tracking and remote surveillance to Smart Grids and environmental monitoring.

### ***US and Global Government***

Our US Government and Global Government business units provide MSS to the US Government and over 100 other nations, focusing on worldwide civil and military government services. Together, these two business units represented 24 per cent. of our total revenues (excluding Central Services revenue) in the year ended 31 December 2015.

The US Government was an early adopter of, and the first to use, the GX service on each of the three deployed Inmarsat-5 satellites. This was provided through our Subscription Services Agreement with Boeing. The US Government has also participated in the launch of our lower-cost maritime terminal capable of operating on our military and commercial Ka-band services as well as on government military Ka-band satellites. We have been working with our partners on the development and demonstration of a GX military helicopter service capable of delivering super-fast wideband speeds through the rotor blades, and, in addition, the launch of a roof-mounted terminal for rapid deployment.

In July 2016, our US Government business unit was awarded the US Navy’s next generation commercial satellite communications contract (CSSC) from the US Defense Immigration Systems Agency. If option years are exercised, we could expect this contract to run until the end of 2021.

Outside of the US, we cater to a range of government customers from defence forces operating in inhospitable terrain, to first responders bringing relief during a disaster, border control at sea and by air, and in the efficient delivery of critical national infrastructure.

Government users utilise our satellite communications for:

- *Military operations.* Our services are adapted for all types of military deployment and we develop the depth and breadth of our services to match the changing face of operations.

- *Border protection.* Border authorities, customs and immigration use our services to remain connected while securing a country's boundaries. For example, on-demand connection to centralised customs and immigration systems provides up-to-date, real-time access to shared information.
- *Emergency response.* Our services enable first responders to connect via voice and video in places where a cellular and Wi-Fi infrastructure is not available to assess damage, rescue victims and call for more support.
- *Civil government.* Our services are used to provide a wide range of services for distance education and health in remote areas, for example by enabling medical staff to monitor, diagnose and treat patients, and to communicate and compare patient information and stats with medical specialists anywhere in the world. Our services are also used to provide voice and broadband data services to ensure reliability and redundancy for all critical infrastructure such as hospitals, power and transportation.

### **Other Income**

We also generate revenue from the provision of operational support to other satellite operators, the provision of conference facilities, leasing surplus office space to external organisations and from the sale of terminals and other communications equipment primarily in respect of our GSPS service. "Other income" also includes revenue under our Cooperation Agreement with Ligado Networks (see below).

#### ***Ligado Networks Cooperation Agreement***

In December 2007, we signed the Cooperation Agreement with Ligado Networks for the efficient use of L-band spectrum over North America to enable ATC services. The Cooperation Agreement includes conditional provisions for the coordination of the parties' respective existing and planned satellites serving the Americas and for the reorganisation of our spectrum and that of Ligado Networks over the Americas to provide contiguous spectrum in larger blocks for both our operations and efficient re-use of the L-band spectrum. The purpose of the agreement is to increase spectrum efficiency and protect both MSS and ATC operations from inter-system interference.

The Cooperation Agreement also provides for the parties to cooperate with a view to facilitating the deployment by Ligado Networks of a North American integrated MSS/ATC network, subject to certain preconditions which have not yet been satisfied. Should Ligado Networks deploy such a network, it is obliged both to support our activities necessary to implement the inter-system and spectrum coordination, as well as pay us substantial sums in return for increasing the total spectrum capacity available to Ligado Networks.

### **Distribution**

We sell our services directly to end-customers as well as via wholesale distributors. We have over 40 distribution partners who provide our L-band services to end-users, either directly or indirectly through a network of over 800 service providers. In the year ended 31 December 2015, our largest distribution partner accounted for 11.5 per cent. of our total revenue compared to 12.8 per cent. in the year ended 31 December 2014. This same customer comprised 16.4 per cent. of our trade receivables balance as at 31 December 2015. No other customer accounted for 10 per cent. or more of our revenue for the years ended 31 December 2015 or 2014, respectively, or for 10 per cent. of our accounts receivable as at 31 December 2015 or 31 December 2014, respectively. Our distribution partners have all signed Distribution Agreements with us. The majority of our Distribution Agreements came into force in April 2009 and provided us with improved terms and flexibility when compared with the previous agreements. We have made some amendments to our Distribution Agreements, and have given the agreed notice on the Network Services Distribution Agreements so that we can put in place a new streamlined agreement with them which we expect to be in place during 2017.

While our Distribution Agreements specify the prices distributors pay for our services on a wholesale basis, we do not control or set the price charged by our independent distributors to end-users or service providers. We also lease capacity on our satellites to distribution partners who in turn provide the capacity to end-users. We entered into the Lease Agreements that took effect from 15 April 2009 with our distribution partners that lease our satellite capacity to end-users for exclusive use for a pre-arranged fixed term (as opposed to on-demand services). Typically, the lease contracts are short-term, with terms of up to one year, although they can be as long as five years. We also lease specialised satellite navigation transponders



on our Inmarsat-3 and Inmarsat-4 satellites primarily for the provision of navigation services to US and European civil aviation organisations, for up to five years.

In addition, we have signed agreements for the distribution of GX services with over 35 GX VARs and we are in discussions with multiple others. GX VARs are appointed to distribute our services in the maritime, enterprise, government and aviation markets.

### **Billing**

Our billing systems collect and process data relating to all of the communications services we provide. The majority of our services have historically been charged on a usage basis, either by volume of data transmitted measured in kilobytes or megabytes, or by connection duration measured in minutes. We have also offered a number of rate plans, some of which feature advance payment in return for reduced rates and the facility to utilise the associated traffic allowance over an extended period of time or multiple terminals. Increasingly, we are providing plans which allow usage of a set amount of data for payment of a fixed monthly fee. We utilise some of our satellites to provide dedicated leased capacity to our distribution partners for several of our services, and to provide specialised navigational transponder facilities. Lease charges are determined by satellite availability, lease duration and the capacity, measured by service type, power and bandwidth, provided under the lease.

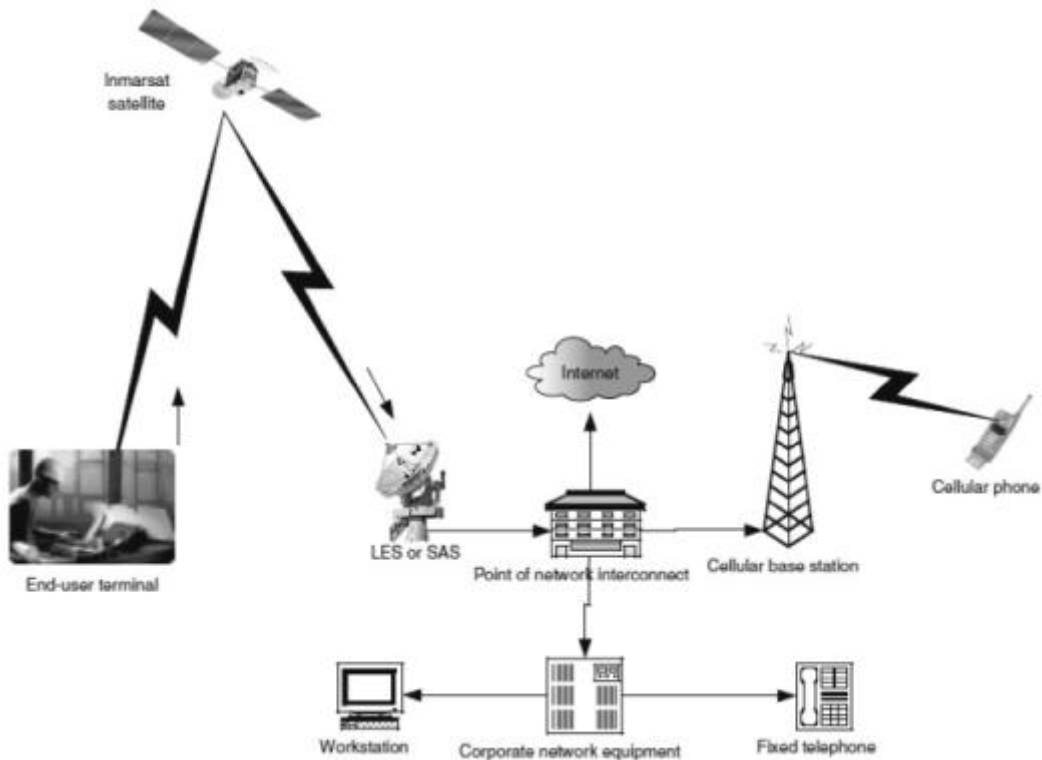
Services provided on a usage or fixed fee basis are invoiced monthly and payable by the distribution partner on that basis. Where capacity is leased, invoices are generated and payable by the distribution partner on a basis appropriate to the duration of the lease. Charges for leases, may be payable for the entire period prior to commencement of the lease (generally for those of a shorter duration). Others are typically payable quarterly in advance.

Charges for telecommunication services that are on the basis of usage or a fixed fee are typically billed monthly on a basis consistent with the underlying charge, although we also offer numerous rate plans which have separate billing arrangements depending on the plan structure. Charges for equipment, prepaid telecommunication cards and other services are billed upon fulfilment of the goods or services in accordance with the customer contract.

Our non-MSS businesses, such as our XpressLink service and the managed network services provided to US Government customers, each make use of their own billing systems appropriate for the nature of the services provided. These services generally provide a certain amount of network capacity for a certain period rather than being provided on a usage basis.

### **Our L-band and Ka-band Networks**

The following diagram illustrates how our L-band and Ka-band networks carry a data or voice transmission from an end-user terminal to a terrestrial network for delivery to a wireless telephone, or to a computer or telephone connected to a corporate network.



Our L-band network is one of the largest satellite-based global mobile communications networks in the world with over 650,000 active terminals. It comprises:

- our in-orbit fleet of eight owned satellites in geostationary orbit located approximately 36,000 km above the Earth, supported by six tracking, telemetry and control stations located at different points around the globe;
- four LESs operated by us and multiple others operated by our distribution partners that transmit and receive our Existing & Evolved Services to and from our satellites;
- three primary SASs and one back-up SAS comprising a total of eight antennae, all of which transmit and receive traffic for our broadband and certain other Inmarsat-4 services to and from our satellite network. To comply with regulatory requirements, an additional two SASs located in China and Russia transmit and receives traffic originating from and destined to mobile users located in Chinese and Russian territory;
- our GPS/GPS gateways that support our handheld satellite communications service;
- a range of wireline communications links to terrestrial communications networks, which in some cases, are procured or provided by our distribution partners; and
- our network operations centre (the “**Network Operations Centre**”) and satellite control centre located in London. These facilities are further supported by a fully redundant disaster recovery site elsewhere.

Our Ka-band network comprises:

- our in-orbit fleet of three owned satellites in geostationary orbit located approximately 36,000 km above the Earth (with a fourth nearing completion of construction); and

- two independent gateway sites for each satellite, providing a high degree of redundancy as well as Ka-band tracking, telemetry and control function for the Inmarsat-5 satellites.

#### **Our future S-band/EAN network**

The EAN is designed to be a high-speed broadband solution to meet the connectivity needs of passengers and airlines flying across traffic routes in Europe. The EAN is currently expected to be operational in mid-2017 and, once operational, will provide aircraft flying European routes access to a combined satellite and LTE ground network that will offer passengers a reliable high-speed broadband service. Our customers will have the option to use the EAN in conjunction with our GX and L-band services. Our S-band/EAN network (to be established in partnership with Deutsche Telekom) is expected to carry a data and/or voice transmission from an end-user terminal to a terrestrial network for delivery to a wireless telephone, and/or to a computer or telephone connected to a corporate network.

Our S-band/EAN network will comprise:

- a satellite in geostationary orbit located approximately 36,000 km above the Earth;
- a gateway which is currently under construction in Greece; and
- a fourth generation (4G) long-term evolution mobile terrestrial network of approximately 300 LTE sites owned and operated by Deutsche Telekom.



## Our Satellites

The key characteristics of our existing geostationary satellites are summarised in the following table:

Key characteristics	Inmarsat-3	Inmarsat-4	Alphasat	Inmarsat-5
Number of satellites .....	5 (4 in orbit, 1 deorbited)	3 (all in orbit)	1 (in orbit)	4 (3 in orbit, 1 on order)
Coverage and spot beams .....	Global beam and six wide spot beams <sup>(1)</sup>	Global beam, 19 wide spot beams <sup>(1)</sup> and 200+ narrow spot beams <sup>(2)</sup>	Global beam and 200+ narrow spot beams <sup>(2)</sup>	89 Spot beams <sup>(3)</sup> and 6 steerable beams
User Link Frequency.....	L-Band	L-Band	L-Band	Commercial and government Ka-Bands
Launch dates .....	April 1996 – February 1998	March 2005 – August 2008	July 2013	December 2013, February 2015, August 2015
Orbital position (on the equator) .....	64E, 15.5W, 178E, 54W, (25E deorbited)	143.5E, 25E, 98W	25E	62.6E, 55W, 179.6E
Geographic coverage .....	Global (other than extreme polar regions)	Global (other than extreme polar regions)	Regional, Global as part of Inmarsat-4 Constellation	Global (other than extreme polar regions)
Manufacturer.....	Lockheed Martin	Astrium <sup>(4)</sup>	Thales/Astrium <sup>(4)</sup>	Boeing
Payload <sup>(5)</sup> .....	Marconi	Astrium <sup>(4)</sup>	Astrium <sup>(4)</sup>	Boeing
Launch vehicle.....	Atlas Centaur, Proton, Ariane	Atlas V (first launch), Sea Launch (second launch), and Proton (third launch)	Ariane	Proton (first, second and third launch). SpaceX Falcon 9 planned for fourth launch
Cost (including launch insurance).....	US\$895.0 million	US\$1.1 million	US\$370 million	US\$1.6 billion
End of Life <sup>(6)</sup> .....	2018-2020	2023-2027	>2028	2031-2034

(1) A wide spot beam has an average diameter of approximately 3,400 km (2,100 miles), covering an area approximately the size of the continental United States.

(2) A narrow spot beam has an average diameter of approximately 800 km (500 miles), when pointed directly at the geographical regional immediately below the satellite (the “**sub-satellite point**”). This equates to an area approximately the size of Kenya. As the spot beam geographical coverage progressively moves away from the sub-satellite point, the geographical area covered by a narrow spot beam also progressively increases.

(3) Up to 72 of the 89 beams may be active at any one time.

(4) Now Airbus Defence and Space.

(5) Payload refers to communications subsystem.

(6) We calculate end of life estimates for our fleet of in-orbit satellites based on the latest information available for several factors. These factors include operational history, projections for remaining fuel on board, and the observed degradation of on-board systems in comparison to available redundancy. End of life estimates are subject to change and involve a degree of uncertainty.

### Inmarsat-3 Satellites

Each of our Inmarsat-3 satellites covers up to one third of the Earth’s surface, giving our existing services global reach (except for the extreme polar regions).

Our satellites take advantage of the relatively wide coverage patterns of the antennae of mobile ground terminals with which they communicate to operate in orbits slightly inclined to the equator, thus reducing their station-keeping fuel requirements and thereby extending their operating lifetimes. The satellites contain on-board fuel to support both regular

position maintenance manoeuvres and possible relocations to new orbital locations. All manoeuvres consume on-board fuel and therefore reduce the remaining operating life of a satellite. We have managed the manoeuvres of our satellites in order to optimise the usable life of our satellite fleet.

### *Inmarsat-4 Satellites*

Each of our Inmarsat-4 satellites has more than 200 narrow spot beams and 19 wide spot beams in addition to its global beam. These satellites support our broadband data services by incorporating higher-power transponders that can be focused into narrower beams than our earlier satellites. The satellites also employ technology that enables us to adjust the size, shape and power of spot beams to meet changing user demand. The design of the spot beams on our Inmarsat-4 satellites allows us to use the available spectrum more than 12 times more efficiently than is possible on our Inmarsat-3 satellites. Each Inmarsat-4 satellite is 60 times more powerful than an Inmarsat-3 satellite (measured by maximum equivalent isotropic radiated power on the narrowest spot beam), and each of our Inmarsat-4 satellites is capable of providing approximately 16 times more communications capacity than each of our Inmarsat-3 satellites, based on estimates of forward and return data rates of GAN services on the Inmarsat-3 satellites and BGAN on our Inmarsat-4 satellites.

### *Alphasat Satellite*

In 2007, Inmarsat entered into a contract with Astrium (now Airbus Defence and Space) for the construction of Alphasat, a new satellite to be deployed over the EMEA region. Alphasat was successfully launched on an Ariane 5 launch vehicle in July 2013. With the launch of Alphasat, we have enhanced our Inmarsat-4 BGAN/GSPS network and thus its reliability. With Alphasat deployed we have in-orbit redundancy, meaning a failure of either Alphasat or any one Inmarsat-4 satellite would not affect our ability to continue to offer global coverage in L-band via the remaining satellites, other than for a relatively short period of disruption. Alphasat has a design life of 15 years.

The Alphasat satellite is capable of providing our services across the complete 41 MHz of L-band mobile satellite spectrum available over the EMEA region. This capability provides greater flexibility in spectrum utilisation compared to the use of one of the other Inmarsat-4 satellites, which are limited to providing service across 27 MHz of the L-band. In addition, Alphasat's advanced digital processor capability and optimised antenna coverage provided up to 50 per cent. more capacity for our services as compared to an Inmarsat-4 satellite. The total cost of the Alphasat programme, including manufacture and launch of the satellite, was approximately US\$370 million (excluding capitalised borrowing costs).

### *Inmarsat-5 Satellites*

In 2010, Inmarsat signed a contract with Boeing for the delivery of three identical Ka-band satellites (Inmarsat-5 F1, F2 and F3). Subsequently, in 2013, an option was exercised for an additional satellite (F4). The Inmarsat-5 satellites are based on Boeing's 702HP heritage platform. Each satellite consists of two payloads: 1) a global payload of 89 beams, of which up to 72 can be used at any one time, making use of the full commercial Ka-band frequency range and 2) a high capacity payload ("HCP") consisting of six steerable beams that can make use of the full commercial and military Ka-bands. The global payload on each Inmarsat-5 satellite has 72 x 40 MHz channels, and supports the Global Xpress service. The Inmarsat-5 satellites each have a design life of 15 years.

We successfully launched the Inmarsat-5 F1 satellite in December 2013 and the F2 and F3 satellites in 2015. Due to the successful launch of F1, F2 and F3, Inmarsat-5 F4, a satellite initially manufactured as a launch spare to insure against a launch failure of one of the first three Inmarsat-5 satellites, is currently expected to launch in the fourth quarter of 2016, subject to confirmation from SpaceX as to the availability of a launch vehicle. This satellite will provide in-orbit redundancy as well as incremental global Ka-band capacity.

Each beam of the HCP can be steered independently to anywhere on the visible Earth. The HCP payload is highly configurable to make use of, or a combination of, commercial frequencies to provide additional capacity (up to 8 x 100 MHz channels) to the global service over a region of high demand (e.g., following a natural disaster), government frequencies terminal traffic routed via the Global Xpress commercial gateways or government frequencies routed to a dedicated government gateway.

Gateway coverage on each Inmarsat-5 is provided through two identical steerable gateway spot beams. Two gateway earth stations for each satellite are located separately in order to provide redundancy in the event of failure as well as the ability to provide gateway diversity.

The Inmarsat-5 network is designed to be interoperable with the WGS system so that WGS terminals can seamlessly operate on GX without any special manipulation. This provides US Government customers the ability to fill in WGS-like capabilities in geographical areas where no such system is deployed, or access additional “surge-type” capability in support of existing services. The availability of WGS compatible services on GX offers US Government customers with secured communications capabilities at potentially lower cost than deploying and managing their own system and therefore reduces their long-term investment needs. In return, this provides GX with revenue opportunities and can further strengthen our relationship with the US Government as a customer.

### ***Inmarsat S-band Satellite***

In 2013, we signed a contract with Thales for an S- and Ku- band satellite that included an option for sharing the platform with a third-party. We and Hellas-Sat agreed to jointly contract Thales to build a S- and Ku-band satellite which will have Ka-band feeder links. This contact allows us to significantly reduce the cost of investment by sharing the satellite and launch cost with Hellas-sat. The S-band coverage will be in line with the common conditions of the EU framework, both in terms of geography and population. The satellite will provide multi-beam coverage over Europe. It will also provide a high degree of flexibility in resource allocation enabling us to match user needs, now and in the future. In addition, CGC will also be deployed across the EU in-line with user demand to compliment the S-band satellite for integrated MSS services.

In 2015, we completed development contracts with core suppliers for the EAN’s satellite antenna, ATG antenna and satellite ground network. Our feeder links land the traffic from the S-band satellite at the SAS. The feeder link is expected to operate in Ka-band, and the Ka-band ground station facilities will be in Italy and in Greece. Our existing ground stations will be used to serve the Inmarsat S-band network.

On the ground, the SAS and the Network Operations Centre will be interlinked by a private terrestrial network, referred to as the Data Communications Network. This network supports the signalling between ground network elements of the network management information as well as transport of actual traffic data.

The products planned for the S-band satellite system build on the existing BGAN terminals and the established broadband/broadcast terminals using DVB-SH/DVB-S2 standards.

We currently expect to launch the S-band satellite by mid-2017. It has a design life of 15 years.

### ***Inmarsat-6 Satellites***

In December 2015, we entered into a contract with Airbus Defence and Space for the manufacture of two Inmarsat-6 satellites. The contract, valued at approximately US\$600 million for the construction of two satellites, provides that Airbus Defence and Space will deliver the first Inmarsat-6 satellite by 2020. Our sixth-generation fleet will feature a dual-payload with each supporting both L-band and Ka-band services. The new satellites will represent a significant increase in the capabilities and capacity of our L-band services.

The Inmarsat-6 satellites will be based on Airbus Defence and Space’s proven Eurostar platform in its E3000e variant, which exclusively uses electric propulsion for orbit raising. The Inmarsat-6 satellites will take advantage of the reduction in mass that this electric propulsion technology enables for a dual payload mission, with an exceptionally capable next-generation digitally processed payload.

The Inmarsat-6 F1 and F2 satellites will carry a large 9m aperture L-band antenna and several multibeam Ka-band antennas, and feature a high level of flexibility and connectivity. A new generation modular digital processor will provide full routing flexibility for up to 8,000 channels and dynamic power allocation to over more than 1,000 spot beams in L-band. Ka-band spot beams will be steerable over the full Earth disk, with flexible channel to beam allocation.

The first Inmarsat-6 satellite is designed for 15 years.

### **Our Ground Stations**

Satellite Gateway Stations provide the connectivity between our satellites and terrestrial voice and data networks such as the Public Switched Telephone Network, the Internet, and the private networks of our Distribution Partners and end customers.



For our Existing & Evolved Services, gateways (i.e., LESs) are owned by either us or third-party LES operators. Our LESs are located in the Netherlands, Australia, New Zealand and Canada and together provide the full suite of Existing & Evolved Services, as well as leasing services, on our four Inmarsat-3 satellites. In addition to the LESs, the network is supported by four Network Coordination Stations located at various Inmarsat and third-party locations around the globe.

Our Inmarsat-4 broadband service gateways, also referred to as SASs, support our BGAN, FleetBroadband and SwiftBroadband product families. The SASs are primarily owned and operated by Inmarsat. Service in Europe, the Middle East and Africa is provided from two locations, in the Netherlands and Italy. Both the Americas and AsiaPac regions are serviced from our SAS in Paumalu, Hawaii; in addition, this site supports Classic Aero, one of our Existing & Evolved Services, on the Inmarsat-4 satellites. We additionally have a back up SAS for the AsiaPac region situated in New Zealand and we are in the process of implementing another back up SAS in Canada for the Americas region which we expect to be operational in 2017. Each SAS consists of a number of major components, and is architecturally similar to a GSM/UMTS mobile network. The Radio Frequency System, including a large (13m-16m) parabolic tracking antenna and the associated electronics, transmits the signals from the SAS to the spacecraft and also receives and amplifies the incoming signals. The Radio Access Network processes the signals and routes the communications traffic to a Core Network, which manages user sessions, provides mobility management and is the interface to the various terrestrial networks we connect with.

We have an agreement with the China Telecommunications and Information Centre to operate a SAS near Beijing serving Chinese territory. This system, which operates in coordination with our SAS in Hawaii, allows us to meet the regulatory requirements for operation in China. We also have an agreement with the Morsviazsputnik, one of our distribution partners, to operate a SAS near Moscow serving Russian territory. Similar to the Chinese SAS, this station operates in coordination with our SAS in the Netherlands and meets our regulatory requirements for service provision in the Russian Federation.

Our handheld service called GSPS operates in a similar manner to BGAN. The GSPS gateways are located in Italy, Hawaii and New Zealand. We additionally have an agreement with BSNL, a telecommunications service provider in India, for implementation of a BSNL-owned GSPS gateway covering the Indian territory, in compliance with the terms of our licence agreement in India. This gateway is currently expected to be operational by the end of 2016.

The functions of all the various gateway stations are coordinated by our Network Operations Centre, which is located in our headquarters in London. A hot-standby backup site is also able to carry out these same functions.

For our Global Xpress service, we have deployed the Inmarsat-5 air interface and iDirect Network Management System, and we have installed the ground segment infrastructure with SED Systems. There are six Global Xpress SAS stations located in Italy, Greece, US, Canada and New Zealand. These redundant stations address the higher impact of precipitation on Ka-band signals and provide the highest possible network availability for the GX service, two SAS sites are in operation for each of the Inmarsat-5 satellites. Sites in Greece and Italy operate as Global Xpress SASs for the Indian Ocean region satellite. SAS sites for the Atlantic Ocean region satellite are in Lino Lakes (Minnesota, US) and Winnipeg (Canada) and the Pacific Ocean region SAS sites are in New Zealand (located in Auckland and Warkworth). The SAS sites in Italy, Greece, the US and Canada are operated by third-parties with outsourcing for local support while we remain responsible for our own equipment, but we employ on-site staff at our SAS in Italy. We own one of our SAS sites in New Zealand and the second SAS site is owned by a third-party which provides limited support for certain utilities such as power and cooling. As at the date of this document, sites for the fourth Inmarsat-5 satellite were undergoing the selection process.

The SAS site for our S-band EAN satellite has been constructed in Nemea, Greece under an agreement with OTE. OTE is obliged to deliver and operate the satellite teleport facilities on the same site that has also hosted the GX satellite access station since 2012, delivering many operational efficiencies by providing both the GX and EAN service from the same site. The SAS will contain a 13-metre antenna that provides feeder links to the satellite, a radio frequency sub-system and a radio access network, which will also be provided by Cobham SATCOM using reliable BGAN technology in sync with the MSS terminals.

## **Information Technology**

In 2015, we implemented a new accounting software systems provider in all locations, with the exception of certain parts of the Government and Enterprise business units. This system now covers over 91 per cent. of the our revenues.

We have also initiated a comprehensive IT transformation (“**OneIT**”) programme to facilitate our business strategy and support profitable growth. Our current information technology landscape includes disparate, redundant capabilities as a result of past acquisitions that maintained discrete IT functions. The localised IT functions have not had sufficient scale to invest in new systems and technologies, and in some areas, there is an increasing risk of obsolescence. The OneIT programme is designed to provide a modernised, highly secure enterprise architecture, creating IT capability across the Group with the scale and agility to enable the business strategy and future growth.

The OneIT programme includes the redesign and implementation of standard business processes, a rationalised set of core applications based on proven enterprise grade solutions, and a complete upgrade of our infrastructure to process, store and secure information, all supported by a consolidated and revitalised IT function. We believe standardising and simplifying our processes and systems will make it easier for our customers and partners to work with us, improve employee collaboration and knowledge management, support continuous improvement, and provide the business with the functionality, information and analytics to drive business growth.

## **Insurance of Our Business and Insurable Assets**

### ***In-orbit Insurance***

We maintain in-orbit insurance for our fleet of three Inmarsat-4 satellites, Alphasat, and our first three Inmarsat-5 satellites. Our current fleet in-orbit insurance policy is renewable in July 2017. A level of long-term in-orbit insurance for our Alphasat and the first three Inmarsat-5 satellites was purchased at launch and remains in place until the fifth anniversary of each of their respective launch dates. In 2015, we successfully launched our second and third Inmarsat-5 satellites. We expect to maintain an appropriate level of in-orbit insurance for the Inmarsat-4 satellites (including Alphasat) and the Inmarsat-5 satellites. The cost of obtaining insurance may vary as a result of either satellite failures or general conditions in the insurance market. For future years, in-orbit insurance may not continue to be available on commercially reasonable terms, or at all.

We do not maintain in-orbit insurance for our Inmarsat-3 satellites due to the high level of operational flexibility and redundancy in our satellite fleet as a whole.

### ***Launch Insurance***

We have obtained launch insurance for our fourth Inmarsat-5 satellite and Inmarsat-S satellite. Launch insurance typically covers the “net book value” of the insured satellite, which for this purpose includes the cost of the relevant satellite, related launch insurance premiums, the cost of purchasing launch and related services and capitalised costs. Our launch insurance includes one year of in-orbit insurance for each satellite. We have also obtained a level of longer term in-orbit insurance for both of these satellites.

### ***Third-party Liability Insurance***

We also maintain third-party legal liability insurance. This insurance cover is in respect of sums which we may become legally obligated to pay for bodily injury or property damage caused by an occurrence related to services provided through our network or arising out of the ownership and/or operation of our fleet of satellites and including liability arising under the Convention on International Liability for Damage Caused by Space Objects (TIAS 7762) and the United Kingdom Outer Space Act 1986.

## **Intellectual Property**

### ***Our Brand***

Our main brand is “Inmarsat”. The word “Inmarsat” is a trademark licensed to us exclusively and perpetually by the International Mobile Satellite Organisation (“**IMSO**”). We have the right to have IMSO apply for registration of this trademark in the name of IMSO in any country in the world. The trademark is currently registered for equipment and services that are important to our business in many countries, including Australia, Brazil, Canada, China, Singapore, Mexico, New Zealand, the United Arab Emirates, Egypt, Japan, Russia, South Africa, the United Kingdom, Turkey, Ukraine, Poland, Switzerland, Republic of Korea, Malaysia, India, Indonesia, Hong Kong, Cuba and the United States. Our Inmarsat trade mark is also registered as a European Community Trade Mark.



Our licence from IMSO allows us to grant sublicenses. We have granted non-exclusive and royalty-free sublicenses to, among others, our distribution partners, VARs, service providers and manufacturing partners to use the Inmarsat brand on the basis of the IMSO Licence.

### ***Protecting Our Technological Developments***

We use reasonable efforts to protect certain significant technology by filing patent applications in key jurisdictions. Our key jurisdictions vary depending on the technology involved.

In addition to the above, or where patent protection is not possible or practicable for us to obtain, we seek to protect significant information about our technology, or “know-how”, by releasing it only to those third parties who have a reasonable need to access it and who have signed confidentiality agreements or licence agreements containing strict confidentiality obligations.

### ***Key Operational Software***

We use key operational software in our satellite control centre and the Network Operations Centre that has either been created by certain of our employees or by outside consultants who have transferred their intellectual property rights in such software to us, whereas we do not hold the intellectual property rights in third-party software where we only use certain tools or elements. Our main key operational software suites of this kind are an off-air monitoring system and an Inmarsat network monitoring system, both of which are used in our network operations centre, and the Inmarsat Storm Satellite Support system suite of software used to control our satellite fleet and ground stations. In certain circumstances we commercially supply our satellite control software to third parties, as a way of reducing maintenance costs, funding additional safety features for satellite control and retaining critical operational skills in the business.

The rest of our operational software is customised software designed by either third parties who have retained the intellectual property rights in it, but licensed those rights to us (normally on a non-exclusive, royalty free, perpetual, worldwide basis) for our use, or by our employees based on existing software supplied by third parties who have granted to us licences to adapt that software.

All of our key operational software is supported by appropriate technical maintenance and support arrangements that are either provided by our own employees or by third parties.

### **Employees**

The following table sets out the average number of employees by main category of activity and by reporting segment for the years ended 31 December, 2015, 2014 and 2013:

	For the years ended 31 December		
	2015	2014	2013
<b>By activity:</b>			
Operations.....	785	784	767
Sales and marketing.....	340	300	323
Development and engineering.....	213	156	163
Administration.....	349	352	369
<b>Total</b> .....	<b>1,687</b>	<b>1,592</b>	<b>1,622</b>
<b>By segment:</b>			
Maritime.....	378	356	201
Enterprise.....	74	181	188
Government.....	196	70	242
Aviation.....	68	28	14
Central Services.....	971	957	977
<b>Total</b> .....	<b>1,687</b>	<b>1,592</b>	<b>1,622</b>



In 2015, the total employee benefit costs incurred were US\$260.4 million as compared with US\$237.3 million in 2014 and US\$244.8 million in 2013. Our multicultural workforce comprises more than 45 nationalities, which is important to the operation of our global business. We do not recognise an official labour union although some of our employees have individual membership in such unions.

We believe that relations with our employees are good. We have ensured that employees are fully informed and involved in the business through the use of various communications methods including briefing sessions and discussions with groups of employees, circulation of newsletters, company announcements, information releases and dissemination of information through normal management channels. Employees are actively encouraged to attend internal training courses to learn about our business, products and services. Staff forums and a works council are established in some of the operating businesses in accordance with local legislative requirements.

We have a positive attitude towards the development of all of our employees and do not discriminate between employees or potential employees on grounds of race, ethnic or national origin, sex, age, marital status or religious beliefs.

We give full consideration to applications from disabled persons and to the continuing employment of staff that become disabled, including making reasonable adjustments where appropriate or considering such staff members for alternative positions.

### **Facilities**

The table below sets out information regarding certain of our material facilities.

<b>Facility</b>	<b>Principal Use</b>	<b>Owned/ Leased</b>	<b>Area (ft<sup>2</sup>)</b>	<b>Lease expiration</b>
99 City Road, London, United Kingdom	Head office	Leased	39,000	2029

The lease for 99 City Road is a 25-year operating lease which has an average annual rental over this period of approximately £6.0 million. The lease includes a tenant break clause at the end of 2024. Should we exercise the break clause, we will incur a penalty of £6.0 million. We are planning to commence refurbishment of the core areas of the facility starting later in 2016 and lasting over a couple of years with a project budget of approximately US\$20 million. We believe that all of our other operational facilities are in good condition and adequate to meet the requirements of our operations.

### ***Legal Proceedings***

Except as disclosed elsewhere in this document, as at the date of this document, we are not engaged in or aware of any pending or threatened legal or arbitration proceedings that could have a material effect on our financial position.