

Inmarsat's 2017 CDP Climate Change Response

Module: Introduction

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

Inmarsat was set up in 1979 by the International Maritime Organization (IMO) to enable ships to stay in constant touch with shore or to call for help in an emergency, no matter how far out to sea. Today our customers are found in many different sectors – but they are typically businesses and organisations that need to communicate where terrestrial telecom networks are unreliable or simply cannot reach.

As well as merchant shipping, our customers include governments, airlines, the broadcast media, the oil and gas industry, mining, construction, and humanitarian aid agencies – to name just a few. They connect to our fleet of 13 satellites using a range of equipment, including global handheld satellite phones and notebook-size broadband internet devices, as well as specialist terminals and antennas fitted to ships, aircraft and road vehicles.

Our business has grown strongly since 1999 when we became the first intergovernmental organization to transform into a private company, later floating on the London Stock Exchange (LSE: ISAT.L) in 2005. Inmarsat plc is the market leader in the provision of mobile satellite services, with the largest portfolio of global satellite communications solutions and value-added services on the market.

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

Enter Periods that will be disclosed

Fri 01 Jan 2016 - Sat 31 Dec 2016

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

The Chief Corporate Affairs Officer and Company Secretary, Alison Horrocks, has specific responsibility for climate change related issues at Inmarsat and is a member of the Executive Management Board. She provides governance advice to the Board and its Committees and ensures that the organisation is compliant with standard financial and legal practice, including energy/carbon compliance. She also acts as point of communication between the board of directors and Inmarsat shareholders, reporting on company procedures and developments, including those related to matters of Corporate Responsibility.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Energy managers	Monetary reward	Emissions reduction project Efficiency project	As part of an ongoing review, facilities managers are required to monitor and reduce energy consumption and to ensure that any replacement plant and equipment delivers a reduction in energy consumption and subsequent GHG emissions.

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	The Group mainly operates in the UK; Rest of Europe; North America; Asia and Pacific; and Rest of World and risks are considered by relevant different parts of the business (e.g. the Netherlands would be captured in Operations and Maritime risk reports).	> 6 years	

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

The company recognises that, although many of the risks and uncertainties influencing our performance are macroeconomic and likely to affect performance at a company level, others are particular to our operations in mobile satellite services. As such, a robust and overarching risk management policy is in place at Inmarsat which sets out the tolerance for risk within the Group and how this is measured across identified macro and business risks.

As required by the policy, management operates a risk management process to identify, evaluate and report significant risks within the business and to report to the Inmarsat plc Board on how those risks are being managed.

Risks are identified through a number of different reviews at both company-level and asset-level which culminate in a risk register. At an asset level, each business unit has its own risk register and this risk register is reviewed by a team within each business unit. Risks are monitored by Risk Committees across the Group, which identify the risk area, the probability of the risk occurring, the impact if it does occur and the actions being taken to manage the risk to the desired level. All the risk registers are reviewed by senior management and provided quarterly to the Inmarsat plc Board and to the Audit Committee. The latter is responsible for reviewing the risk management framework and effectiveness of internal controls, risk management systems and major risk initiatives, as well as the internal audit programme and reports.

This process is shown in the Risk Management Process infographic on page 50 of our 2016 annual report, which is attached as further information within this response.

CC2.1c**How do you prioritize the risks and opportunities identified?**

Inmarsat's risk evaluation and prioritisation process begins with quantification of probability and impact criteria within risk registers monitored by Risk Committees across the group. Once scored, risks are then prioritised into a four-tiered scale ranging from high to low. The Inmarsat plc Board and Audit Committee are then responsible for approving risk levels and approving risk decisions that are beyond delegated authorities.

CC2.2**Is climate change integrated into your business strategy?**

Yes

CC2.2a**Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process**

i. Describe how the business strategy has been influenced

Inmarsat has been collecting and reporting information on organisational energy use and emissions performance at a UK level since 2010, and on a global level since 2013. Monitoring, analysis and internal reporting of this data is a continuing influence on our business strategy – principally because it allows those responsible to highlight significant areas of energy use and emissions output so that we may focus our resource accordingly.

For example, in order to influence our business strategy we have used this data to understand and review our material risks/opportunities related to climate change through collaborative working sessions with a specialist carbon and energy partner, Carbon Credentials.

ii. What aspects of climate change have influenced the strategy?

Regulatory changes are the primary aspect of climate change that has influenced our business strategy. The UK and EU have long been party to international legislation that aims to tackle climate change, resulting in the formation of the UK Climate Change Act 2008 and EU Energy Efficiency Directive 2012. Establishment of these regulatory frameworks has resulted in Inmarsat becoming subject to three carbon/energy compliance schemes within the last 5 years alone: the CRC Energy Efficiency Scheme, Energy Savings Opportunity Scheme (ESOS) and mandatory greenhouse gas reporting. Indirectly, we are also required to pay an environmental tax on our UK energy supplies in the form of the Climate Change Levy (CCL) and ensure any refrigeration and air-conditioning equipment we use is compliant with Fluorinated Greenhouse Gases Regulations.

iii. Describe the most important components of the short-term strategy that have been influenced by climate change

In relation to risks driven by changes in fuel/energy taxes and regulations, the most important component of our short term business strategy that has been influenced by climate change is the changes we have made to operational practices with regards to energy consumption. This is specifically related to one of our four strategic objectives: to deliver sustained and profitable growth by maintaining a highly efficient business model. As part of this, we are currently reviewing our energy policy in order to incorporate specific energy reduction and efficiency targets. By 2018, Inmarsat intends to have set a science-based emission reduction target in line the UK's commitment under the UN Paris Agreement thereby contributing to the global effort to prevent the worst consequences of climate change. In the interim, we have set a target for 2017 to reduce consumption by

10% which we believe to be in line, or more ambitious, than a science-based target.

In addition, we have a pillar of our strategy related to making Inmarsat the best workplace which means we take into account energy efficiency in our building and environmental planning, as our employees want us to be as energy efficient and carbon neutral as possible. We are refurbishing our London head office where the works will focus on reducing energy consumption for the remaining 12 years of the lease.

iv. Describe the most important components of the long-term strategy that have been influenced by climate change

A good example is in relation to opportunities driven by customer needs to reduce vessel expenses (particularly marine fuel), and is the most important component of our long term business strategy that has been influenced by climate change. We have invested in a new portal which allows shipping companies to steer a fuel-efficient course, keeping costs and emissions to a minimum. This is part of one of our four strategic objectives: the creation of a solutions ecosystem through new value drivers and differentiators. Smart solutions may help save Inmarsat's maritime customers up to \$3,000 per day on fuel consumption. The Company's vision is therefore to continue this investment as part of our aim to integrate safety, environmental monitoring and regulatory compliance into a single, easy to use, robust and reliable solution.

v. How this is gaining you strategic advantage over your competitors?

Through working with our partners and the industry to drive the adoption of new technologies, using our maritime business as an example, which represents approximately half of our revenues, we anticipate that with Inmarsat's satellite communications, our clients can run a more efficient and cost-effective operation – saving fuel, time, money and contributing to enhanced crew morale. We have estimated realizable savings of 10% on vessel expenses.

2016 was an important year for Inmarsat's Maritime business as it introduced the next generation maritime connectivity solution, FleetXpress, which is the first globally available, VSAT high-speed broadband solution for maritime and offshore operators. Again, with crew welfare, regulatory and operational efficiency at its heart, FleetXpress swiftly secured commitments for thousands of vessels from the world's leading maritime connectivity providers and major shipping lines.

vi. What have been the most substantial business decisions made during the reporting year that have been influenced by the climate change driven aspects of the strategy?

As previously mentioned, regulatory changes are the primary aspect of climate change that has influenced our business strategy. This led to the decision to explore science-based emission reduction targets in 2016, and we intend to have our science-based target in place by 2018. This is a substantial business decision because the pathway to decarbonisation could alter Inmarsat's operations significantly.

In addition, with the introduction of the Non-Financial Reporting Directive (NFRD) in the UK, we have begun a process of stakeholder engagement in order to align our reporting to the Global Reporting Initiative (GRI) guidelines in the next reporting year. This process has been undertaken to provide transparent sustainability information to investors in a structured and credible manner.

CC2.2c

Does your company use an internal price on carbon?

No, and we currently don't anticipate doing so in the next 2 years

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Trade associations

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
International Telecommunication Union (ITU)	Consistent	ITU's position is that Information and Communication Technologies (ICTs), such as satellites, mobile phones and the Internet, are capable of playing a key role in addressing the global challenges of climate change and sustainable development.	We are not attempting to influence the ITU's current position on climate change.
UKSpace	Consistent	As part of its 'Vision 2025', UKSpace advocates smarter use of satellites as a central plank in Britain's Low Carbon Action Plan, as well as their use in monitoring and enforcing international agreements to cut emissions.	We are not attempting to influence UKSpace's current position on climate change.

CC2.3f

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

The Chief Corporate Affairs Officer and Company Secretary acts as liaison between external stakeholders, the Inmarsat plc Board and those responsible for day-to-day management of Inmarsat's climate change strategy in order to ensure that all activities which may influence policy on climate change are consistent.

Attachments

[Risk and Opp Process.pdf](#)

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1+2 (market-based)	100%	10%	2016	11724	2017	No, but we anticipate setting one in the next 2 years	

CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	0%	0%	The target was set this year.

CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Company-wide	i) Explain how emissions are/were avoided by the third party Our maritime business is an example of how the use of Inmarsat services may directly enable GHG emissions to be avoided by a third party.	Avoided emissions	Evaluating the carbon reducing impacts of ICT	43%	More than 40% but less than or equal to 60%	

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	Thousands of vessels rely on our unrivaled end-to-end service availability and coverage for operational communications, crew welfare and safety services. In the era of the 'smart vessel', Inmarsat is working with its partners and the industry to drive the adoption of new technologies, which might help shipping companies achieve fuel savings via route planning, pirate charts, EU-NAVFOR updates, and weather reports. ii) Estimate the amount of the emissions that are/were avoided over the time We estimate that our smart solutions may save around \$3,000 per day on fuel consumption. This is equivalent to avoided emissions of 19 tCO2 per day. iii) Provide your methodology, assumptions, and emission factors used for the estimations. Methodology: We estimated avoided carbon dioxide by applying emission factors to activity data converted from approximate financial values. Assumptions: We used the Bunker Index MDO Average Global Bunker Price for all marine diesel oil during May 2017 of \$509.50 per metric tonne in order to convert financial values into fuel weight activity data. Emission factors: Fuel oil emission factor of 3248 kg CO2e/tonne taken from the UK Government Conversion Factors for Company Reporting 2016.					
Group of products	The introduction of Inmarsat satellite surveillance (Automatic Dependence Surveillance – Contract) and communication (Controller-Pilot Data Link Communications) services in the oceanic regions enabled significantly more efficient and safer operations within formally constrained environments. Inmarsat helped usher in increased levels of air traffic services through the more efficient use of preferred routing and altitudes, resulting in the savings of time, fuel and greenhouse gas emissions. Inmarsat has participated in multiple global flight trial demonstrations including AIRE, ASPIRE and INSPIRE, that validate the use of satellite in optimizing airspace.	Avoided emissions	Evaluating the carbon reducing impacts of ICT		Less than or equal to 10%	

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	1	10.1
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	This project was undertaken in common areas throughout the London office where the lighting was permanently on. This involved a change to selected LED lighting with associated movement sensors, lux sensors to stop operation if there is enough natural light, and adjustable time delays to minimise on times & to eliminate the constant operation.	10.1	Scope 2 (location-based)	Voluntary	2940	10000	1-3 years	11-15 years	

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	
Financial optimization calculations	
Dedicated budget for energy efficiency	

Page: CC4. Communication

CC4.1

Have you published information about your organization’s response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	62	Inmarsat 2016 Annual Report.pdf	

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fuel/energy taxes and regulations	Geographically, our energy consumption is greatest within the UK, where we are required to comply with both the CRC Energy Efficiency Scheme and Energy Savings Opportunity Scheme (ESOS). The former requires Inmarsat to measure total electricity and natural gas consumption from qualifying meters and pay a levy to	Increased operational cost	>6 years	Direct	Very unlikely	Low	CRC: Up to \$78,500 ESOS: Up to \$78,500	As part of our objective to ensure that the Group does not have any detrimental effect on the environment we comply with all relevant global environmental legislation. EXAMPLES/CASE STUDIES • We have a specialist carbon and energy partner that manages all aspects of related compliance efforts on our behalf. • At our headquarters in London, we have installed	\$70,000 per annum

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>government on the associated climate change impact. The latter requires Inmarsat to perform mandatory assessments of energy consumption from all sources in order to identify possible conservation and/or efficiency measures, and in 2015 Inmarsat's head office in London completed an assessment for a Display Energy Certificate as its route to compliance. Both regulations require Inmarsat to maintain an evidence pack in order to demonstrate compliance to the Environment Agency, which provides regulatory oversight for each scheme. There is a risk that inaccurate, incomplete or un-auditable Inmarsat energy data could result in non-compliance with both regulations. Failure to comply with either could result in financial penalties being applied by the Environment Agency and publication of non-compliance. In addition, the UK began increasing the CRC allowance in line with the retail price index from 2015/16. As a result, our CRC liability could increase if we fail to take action on our energy consumption and associated carbon footprint.</p>							<p>Automatic Meter Readers (AMR) on our energy meters that provide data on a half-hourly basis to ensure the accuracy and availability of information used to prepare compliance returns. • In 2014 we implemented a global environmental data programme that allows for regular monitoring, reporting and analysis of energy use and emissions. • In 2016 the company examined the opportunity to set a science-based target for emission reductions and we plan to set our target by 2018. Achieving emission reductions in line with a science-based target will reduce tax liability. • ESOS requires us to undertake energy audits to identify cost-effective energy efficiency recommendations every four years. Implementing these recommendations will reduce CRC costs. Inmarsat consulted its sustainability partner to understand its optimal route to compliance. Due to planned renovations at this site an assessment for a Display Energy Certificate for the London office was the optimal route to compliance. The DEC analysis identified areas for efficiency improvement which has been taken account for in our plans for the renovation.</p>	

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Sea level rise	As the world's leading mobile satellite communications provider, we operate a sophisticated ground network. This is a nexus of data centres and ground stations – also known as satellite access stations (SASs) or land earth stations (LESs) – located at strategic points around the world, which act as traffic gateways connecting customers using the Inmarsat satellites to terrestrial networks. Governments worldwide rely on our satellite communications to support their civil and defence operations. We are also the satellite cornerstone of the Global Maritime Distress and Safety System (GMDSS). Our on-going investment in ground infrastructure ensures that customers enjoy an overall 99.9% availability for our L-band network. A minority of these ground stations are coastal facilities that may be at risk from negative impacts related to sea-level rise as a consequence of climate change. A possible, albeit not felt to be likely at all, risk is that the business might need to either relocate infrastructure to a new area or allocate capital costs to coastal defences, which could imply investment in land, building and construction. For example, Inmarsat has a Satellite Access Station in Paumalu, Hawai'i, and according to	Increased capital cost	>6 years	Direct	More likely than not	Low-medium	\$17m to \$30m	Inmarsat uses the following to methods to manage risk of any disruption to our services: <ul style="list-style-type: none"> • Our ground station site selection is informed by due diligence processes that incorporate climactic geographic considerations. This enables us to understand any exposure to current and future hazards so that we can avoid locations where any risk may become unmanageable and ensure our investments are climate resilient. • We operate a highly secure ground network designed for full redundancy across all services. Each satellite is served by two ground stations which switch between prime and back-up as needed to ensure the highest levels of network availability to ensure reliability of the system. • Inmarsat has business continuity plans in place for our key infrastructure to ensure that any interruption to services is minimised and data is not lost. Disaster recovery exercises are carried out quarterly to test and rehearse satellite contingencies (e.g. satellite or ground station failure). This involves mimicking recovery by moving from one satellite to another. Separate disaster recovery exercises for corporate operating systems are reviewed annually. EXAMPLE/CASE 	This cost is incorporated within the roles of several staff and costs of back up centres etc.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the NOAA, sea level has risen in Hawai'i at approximately 1.5 mm/year over the past century. A 2009 report by the United States Global Change Research Program predicted that, as a result of sea level rises linked to climate change, infrastructure close to the Hawai'ian coast will be vulnerable to coastal inundation, flooding, and shoreline erosion. Over time, this could potentially affect coastal roads and other infrastructure such as Honolulu International Airport, which may impact our Paumalu ground station. This Satellite Access Station is, however, solidly above ground.							STUDY In 2016 we began organisation of a future building blackout. This is a partial DR exercise where services will be shifted off to other sites. Part of this is a black building test in order to ensure negative consequences are minimised in the face of disaster, such as flooding.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	A positive corporate reputation is critical to maintaining our trusted brand and reputation, as well as the loyalty of our customers. As a result it is imperative that Inmarsat continues to demonstrate to stakeholders that it is proactively managing environmental risk in order to avoid any possible denigration of our reputation. For example, failure to align our organisational greenhouse gas reporting to the requirements of mandatory	Increased operational cost	>6 years	Direct	Unlikely	Low	The financial implications of reputational damage would depend on the nature of an event by could be at least 1% of revenue.	<ul style="list-style-type: none"> During 2013/14, we implemented a global environmental data programme that not only allows for regular monitoring, reporting and analysis of energy use and emissions, but also water and waste where available. This gives the business oversight around its environmental impacts and provides management information to enhance decision-making. We have an appointed Carbon Credentials to quantify and report Inmarsat's organisational GHG 	\$70,000 per annum

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>emissions reporting for UK quoted companies could result in an investigation by the Financial Reporting Council, and follow up action by way of preparation of a revised report. There are also further related risks, including possible impact to our reputation as a result of any misstatement of GHG information in the public domain, or if our reported emissions should only increase. In recent years Inmarsat has received increased requests for information relating to climate change issues from our investors, customers and suppliers. When tendering for work, our environmental management is generally an important part of this process. We are also currently undergoing a stakeholder engagement on ESG topics as part of the materiality assessment we are conducting to prepare for GRI reporting in 2018. We increased the content on our approach to climate change mitigation and adaptation within our 2016 annual report due to the increasing requirements from stakeholders for this information, and as a result, we received less questions than normal from shareholders on environmental issues ahead of our May 2017.</p>							<p>emissions for disclosure in our annual report and any other publications. This helps safeguard the completeness, consistency and accuracy of reported figures within public communications. It also ensures that we are kept informed of, and can respond to, the latest developments and trends in how businesses are responding to climate change. EXAMPLE/CASE STUDY In 2015 Inmarsat made the decision to explore opportunities to set a science-based emission targets, and in this reporting year we began going through this process with our sustainability partners, Carbon Credentials. This work continues into 2017 and we plan to have set this target set and approved by the SBTi by 2018. By achieving third party recognition of our science-based target this will provide credibility to our sustainability programme and allow us to maintain our reputation.</p>	

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure?

Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fuel/energy taxes and regulations	Our obligation to comply with CRC and ESOS legislation brings with it an opportunity to reduce our energy expenditure through analysis of consumption data and subsequent evaluation of energy efficiency and conservation opportunities. As a company that deals with satellite communications, we are located in strategic locations all across the globe, many of which are not subject to stringent climate change legislation. However, as Inmarsat is a public company traded on the UK stock exchange, we are required to comply with UK legislation across our global operations. Because of this, we now look at energy	Reduced operational costs	>6 years	Direct	Very likely	Low	In their July 2013 consultation document, the Department for Energy and Climate Change (DECC) provided a conservative assumption that audits will lead to an average 0.7% energy saving per enterprise. This represents an approximate opportunity of \$50,000 to Inmarsat.	A key principle of our objective to ensure that the Group does not have any detrimental effect on the environment is to actively encourage the conservation of energy through increased efficiency and the introduction of improved technology. EXAMPLE/CASE STUDY • In 2016, the Company agreed to examine opportunities for science-based emission targets and we plan to set this target by 2018. • At our London headquarters we have installed Automatic Meter Readers (AMR) on our energy meters that provide data on a half-hourly basis, as well as sub-metering	Consultancy fees cost in excess of \$70,000 per annum, plus additional costs every four years to comply with ESOS legislation.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	consumption at all of our worldwide locations. These actions provide us with the required data and information to be able to establish the business case for any possible investment in technological or behavioural interventions that could not only reduce our energy bills, but also our associated emissions and CRC liability.							connected to our building management system (BMS). Both data sets are regularly analysed in order to optimise building systems and highlight areas for improvement (e.g. in shutdown procedures or performance of specific plant). • In 2014 we implemented a global data programme to regularly monitor, report and analyse energy use and emissions. In addition, our BMS is inspected weekly by a controls engineer. Findings from these analyses have led us to install daylight sensors in key work areas and movement sensors in common areas to switch lighting on/off. • We are currently renovating our London office with the aim of reducing energy consumption by up to 30%. We are setting green goals for our suppliers and contractors in order to optimise energy efficiency in the building. Reductions in energy consumption will mainly be achieved through replacement of our mechanical and	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								electrical plant and zoning our building more appropriately.	

CC6.1b

Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation pattern	According to the IPCC's Fifth Assessment Report (AR5), in areas across the world that will likely experience decreases in precipitation (most subtropical and mid-latitude regions), precipitation intensity is projected to increase but there would be longer periods between rainfall events. Furthermore, inter-annual variability of the Asian monsoon is also projected to increase. These changes in both mean precipitation and patterns of precipitation will mean that both seafarers (and airlines) will require more advanced connectivity to enable real-time weather information for optimal route planning, as well as reliable communications	Increased demand for existing products/services	>6 years	Direct	Likely	Medium	We see a continuing growth opportunity for maritime services such as FleetBroadband and Global Xpress terminal installation and usage and that usage will be driven by additional applications appealing to users' requirements for information on ship engine, fuel and general operational efficiencies.	Our Maritime business is Inmarsat's largest single market segment, representing approximately 50% of our annual mobile satellite services revenues in 2016. We plan to continue to build on our 35+ years of heritage in maritime safety services with an approach that will bring the world's most reliable safety systems into the heart of the 'smart ship'. The Company's vision is to integrate safety, environmental monitoring and regulatory compliance into an easy to use, robust and reliable solution. Our strategy is to continue with our strong product and service pipeline, as well as develop innovative services, in order to expand our leadership position in maritime	Inmarsat will continue to focus attention and investment in working with application developers to bring to market innovative solutions of which some are expected to focus on optimising routes in different weather scenarios.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>in any weather. Inmarsat has a highly resilient global network and the opportunity that arises from this situation is that we will be able to provide these services to a greater number of potential customers. These customers will benefit from more efficient operations and improved safety in the face of greater uncertainty. We see a continuing growth opportunity for maritime services such as FleetBroadband and Global Xpress terminal installation and usage and that usage will be driven by additional applications appealing to users' requirements for information on ship engine, fuel and general operational efficiencies.</p>							<p>communications and uncover new opportunities. We are also migrating Inmarsat Maritime customers away from our legacy services. We have the opportunity to offer similar opportunities for product and service development across other parts of our business to respond to customer needs (airlines, logistics companies, utilities organisations etc.)</p> <p>EXAMPLE/CASE STUDY</p> <p>The introduction of Inmarsat satellite surveillance (Automatic Dependence Surveillance – Contract) and communication (Controller-Pilot Data Link Communications) services in the oceanic regions enabled significantly more efficient and safer operations within formally constrained environments. Inmarsat helped improve services through the more efficient use of preferred routing and altitudes, resulting in the savings of time, fuel and emissions.</p>	

CC6.1c

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	In order to maintain our reputation as a trusted provider, and any associated competitive advantage, we must demonstrate robust management of environmental risks to our stakeholders, including those arising from the challenge of climate change. Taking action to improve our environmental performance and communicating the results can help us to produce first class responses to requests from shareholder and proxy agency reviews (e.g. Sustainalytics, ISS, PIRC) that may help us achieve higher levels of advocacy and interest among responsible investor groups and some mainstream investors. Customers, including government agencies, are increasingly concerned about environmental risk and performance. In recent years Inmarsat has received increased requests for information	Increased demand for existing products/services	3 to 6 years	Direct	About as likely as not	Medium	In 2014, the A-List of top-scoring CDP respondents outperformed the remainder of the Bloomberg World Index by 9.6%	The following management methods are used by Inmarsat, as part of maintaining our reputation as a trusted provider: <ul style="list-style-type: none"> • Measurement and public disclosure of our emissions helps to drive action internally. • Working with our appointed carbon and energy partner helps Inmarsat to stay apace of the latest developments in corporate sustainability and climate change policy. EXAMPLE/CASE STUDY • In 2016 we examined opportunities for science-based targets for energy saving and this work will continue into 2017. • We continue to monitor stakeholder perceptions in this area so that we may react accordingly and this year we have undertaken a materiality assessment with our stakeholders as part of the GRI reporting process which we plan to report according to in the next year. By doing this we can understand clearly what our stakeholders 	Reputational management costs approximately \$70,000 in consultancy fees as well as the indirect costs of our Facilities Team and Executive Board ensuring that carbon discussions remain visible with external stakeholders and within the business itself.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>relating to climate change issues from our investors, customers and suppliers. When tendering for work, our environmental management is generally an important part of this process. Demonstrating good environmental performance (including reducing our emissions) and robust risk management practices could assist in the awarding of contracts. We are also currently undergoing a stakeholder engagement on ESG topics as part of the materiality assessment we are conducting to prepare for GRI reporting in 2018. We increased the content on our approach to climate change mitigation and adaptation within our 2016 annual report due to the increasing requirements from stakeholders for this information, and as a result, we received less queries than normal from shareholders on environmental issues ahead of our May 2017 AGM.</p>							<p>concerns are in order to protect our reputation.</p>	

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Thu 01 Jan 2015 - Thu 31 Dec 2015	978
Scope 2 (location-based)	Thu 01 Jan 2015 - Thu 31 Dec 2015	12141
Scope 2 (market-based)	Thu 01 Jan 2015 - Thu 31 Dec 2015	12141

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Electricity	0.41205	Other: kgCO2e per kWh	UK electricity generation example only. Please see attached UK Government Conversion Factors for Company Reporting 2016.

Attachments

[IEA CO2kWh Data.xlsx](#)

[2016 Flat format file v01-01.xlsx](#)

Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)**CC8.1**

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

1164

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
11743	10559	

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
Emissions from locations with fewer than 15 staff on-site have been reasonably estimated as immaterial and are thus excluded from our GHG disclosure.	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	Emissions from locations with fewer than 15 staff on-site have been reasonably estimated as immaterial.

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Data Gaps Extrapolation	There is a low level of uncertainty surrounding Scope 1 emissions figures due to the fact that figures have been externally verified by a third party to a limited level of assurance. The main source of uncertainty in the data is extrapolation using average daily consumption due to gaps in data.
Scope 2 (location-based)	Less than or equal to 2%	Data Gaps Extrapolation	There is a low level of uncertainty surrounding Scope 2 (location-based) emissions figures due to the fact that figures have been externally verified by a third party to a limited level of assurance. The main source of uncertainty in the data is extrapolation using average daily consumption due to gaps in data.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	Data Gaps Extrapolation	There is a low level of uncertainty surrounding Scope 2 (market-based) emissions figures due to the fact that figures have been externally verified by a third party to a limited level of assurance. The main source of uncertainty in the data is extrapolation using average daily consumption due to gaps in data. In addition, we have not been able to supply specific market-based emission factors for some of our international sites, and therefore we have used the national location-based emission factors to calculate market-based emissions according to the GHG Protocol Market-Based Scope 2 data hierarchy.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	Inmarsat 2016 GHG Verification Statement v1.0.pdf	1-2	ISO14064-3	100

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	Inmarsat 2016 GHG Verification Statement v1.0.pdf	1-2	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year change in emissions (Scope 1 and 2)	
Year on year emissions intensity figure	

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Australia	37.8
Canada	29.3
Indonesia	140.1
Netherlands	206.8
New Zealand	9.8
United Kingdom	721.1
United States of America	19.4

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By activity

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Diesel	11.1
Gas oil	83.2
LPG	0.3
Natural gas	659.7
Owned vehicle mileage	28.2
Petrol	34.5
Refrigerants	347.4

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Australia	2019.9	2020	2749	0
Canada	268.5	4	1848	0
Hong Kong	50.2	50	63	0
Indonesia	594.3	594	807	0
Netherlands	3252.3	3981	6883	0
New Zealand	378.4	378	2885	0
Norway	2.9	0	352	352
Singapore	176.6	176.6	400.6	0
United Arab Emirates	30.9	24	48	0
United Kingdom	3170.8	1539	7695	0
United States of America	1798.2	1792	3701	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Aalesund	3	0
Auckland	378	378

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Batam	594	594
Burum	3178	3891
Den Haag	53	65
Dubai	31	24
Hong Kong	50	50
Houston	66	66
London	3171	1539
Palm Bay	343	270
Paumalu	1344	1421
Perth	2020	2020
Reston	37	27
Rotterdam	21	26
Singapore	177	177
St. John's	268	4
Washington, D.C.	7	7

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	0
Steam	0
Cooling	0

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

31505

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Motor gasoline	144
Diesel/Gas oil	341
Liquefied petroleum gas (LPG)	1
Natural gas	3585

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in

CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Contract with suppliers or utilities, with a supplier-specific emission rate, not backed by electricity attribute certificates	352	0	Electricity consumed by Inmarsat's Alesund office is 100% hydroelectric.

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
27434	27434	0	0	0	

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	4.3	Decrease	A lighting upgrade project in the UK was responsible for a decrease in emissions at this site. The change in emissions was calculated using the following equation: Change in Scope 1+2 emissions attributed to the reason described in column 1/Previous year Scope 1+2 emissions which is equivalent to $566.6/13,117*100$
Divestment			
Acquisitions			
Mergers			
Change in output	1.9	Decrease	Due to deorbiting of the Garuda satellite, RF, SCF, and NCC equipment was turned off at the Batam site starting from February 2015, which has caused a steady decrease in emissions at the Batam site. In addition, decreased consumption at the Palm Bay is due to changed operating hours and fewer employees. The change in emissions was calculated using the following equation: Change in Scope 1+2 emissions attributed to the reason described in column 1/Previous year Scope 1+2 emissions which is equivalent to $246.5/13,117*100$
Change in methodology			
Change in boundary	.9	Increase	In 2016 the site at Singapore moved offices from a building where air conditioning was centralised (and therefore taken care of by landlord) to a building where air conditioning was the responsibility of Inmarsat. The change in emissions was calculated using the following equation: Change in Scope 1+2 emissions attributed to the reason described in column 1/Previous year Scope 1+2 emissions which is equivalent to $115.6/13,117*100$
Change in physical operating conditions	.4	Decrease	Slight decrease in emissions from natural gas at the London office can be explained by lower consumption in 2016 vs 2015 as a result of lower demand for heating. This is likely due to the warmer winter experience in the UK. The change in emissions was calculated using the following equation: Change in Scope 1+2 emissions attributed to the reason described in column 1/Previous year Scope 1+2 emissions which is equivalent to $49/13,117*100$
Unidentified	3.1	Increase	Variance can be explained by slight increase in electricity consumption at Den Haag for reasons unknown, coupled with an increase in the emissions factor between 2015 (0.399) and 2016 (0.473). The change in emissions was calculated using the following equation: Change in Scope 1+2 emissions attributed to the reason described in column 1/Previous year Scope 1+2 emissions which is equivalent to $404.5/13117*100$
Other	.9	Decrease	Consolidation of offices at St. John's caused a decrease in emissions, and refrigerant top ups in the Netherlands and UK caused a rise in emissions. The change in emissions was calculated using the following equation: Change in Scope 1+2 emissions attributed to the reason described in column 1/Previous year Scope 1+2 emissions which is equivalent to $119.9/13117*100$

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000097	metric tonnes CO2e	1329000000	Location-based	6	Decrease	Revenue increased by 4% this year whilst emissions decreased by 2%. This was mainly due to a decrease in electricity consumption at the London office due to emission reduction lighting projects coupled with the decrease in the UK electricity emission factor. In addition, the deorbiting of the Garuda satellite in February 2015 at the Batam site caused two second most significant decrease in emissions.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
6.8	metric tonnes CO2e	full time equivalent (FTE) employee	1900	Location-based	3	Decrease	The number of FTEs increased by 2% this year whilst emissions decreased by 2%. This was mainly due to a decrease in electricity consumption at the London office due to emission reduction lighting projects coupled with the decrease in the UK electricity emission factor. In addition, the deorbiting of the Garuda satellite in February 2015 at the Batam site caused two second most significant decrease in emissions.

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	18.9	The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard was used as guidance. The activity data in m3 for water was sourced from supplier billing. The emission factors for water supplied and treatment from the UK Government Conversion Factors for Company Reporting 2016 was then applied.	100.00%	This figure includes emissions from the supply and treatment of water for our London, Singapore, and Batam offices. This does not include emissions from satellite launches which we recognise are likely to be a significant source of Scope 3 emissions. We are currently working with our partners to further understand and calculate these emissions.
Capital goods	Relevant, not yet calculated				Typical Inmarsat capital goods purchases include antennas, Satellite Access Station hardware, satellites, and satellite handphones.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	1749.5	The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard was used as guidance. Activity data in kWh was sourced from supplier billing and travel management records. The emission factors were taken from UK Government Conversion Factors for Company Reporting 2016.	100.00%	This figure represents WTT emissions of electricity generated for all sites.
Upstream transportation and distribution	Not relevant, explanation provided				Emissions from the transportation and distribution of products purchased by Inmarsat between its Tier 1 suppliers and our own operations (in vehicles and facilities not owned and controlled by Inmarsat) are not relevant because they are unlikely to contribute significantly to our total anticipated Scope 3 emissions. We do not believe these emissions contribute to our risk exposure and, as far

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					as we are aware, they are not deemed critical by stakeholders.
Waste generated in operations	Relevant, calculated	3.2	The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard was used as guidance. Activity data in tonnes by waste type and destination was sourced from supplier billing for our London office. Emission factors for recycled & combusted waste were taken from the UK Government Conversion Factors for Company Reporting 2016.	100.00%	
Business travel	Relevant, calculated	11796.7	The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard was used as guidance. Activity data in distance travelled was provided by our travel management partner. Business travel emission factors were taken from the UK Government Conversion Factors for Company Reporting 2016.	100.00%	
Employee commuting	Not relevant, explanation provided				Emissions from the transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by Inmarsat) are not relevant to Inmarsat as a large number of our employees commute to work in cities by public transport.
Upstream leased assets	Not relevant, explanation provided				Emissions arising from operation of assets leased by Inmarsat have been included within our reported Scope 1 & 2 figures as we take the operational control approach.
Downstream transportation and distribution	Not relevant, explanation provided				This is defined as the transportation and distribution of products sold by Inmarsat in the reporting year between Inmarsat's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company). Inmarsat's distribution partners transport our IsatPhone products to customers from our warehouses.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Processing of sold products	Not relevant, explanation provided				We do not sell intermediate products and therefore this category is not relevant to Inmarsat.
Use of sold products	Relevant, not yet calculated				We do not yet calculate the direct use-phase emissions of IsatPhone products sold by Inmarsat over their expected lifetime.
End of life treatment of sold products	Relevant, not yet calculated				Waste disposal and treatment of IsatPhone products sold by Inmarsat at the end of their life is a relevant category for Inmarsat that is currently not measured. We do, however, include disposal requirements in the packaging of all of the handheld satellite phones that we sell.
Downstream leased assets	Not relevant, explanation provided				This is not relevant to Inmarsat because the emissions from assets owned by the company and leased to other entities are already included in our Scope 1 & 2 emission figures.
Franchises	Not relevant, explanation provided				This is defined as the operation of franchises in the reporting year, not included in Scope 1 and Scope 2, reported by franchisor. Inmarsat does not have any franchises.
Investments	Not relevant, explanation provided				Not applicable to our business as we do not have equity or debt investments.
Other (upstream)	Not relevant, explanation provided				Not applicable - previous 15 categories provide full coverage.
Other (downstream)	Not relevant, explanation provided				Not applicable - previous 15 categories provide full coverage.

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	Inmarsat 2016 GHG Verification Statement v1.0.pdf	1-2	ISO14064-3	100

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Waste generated in operations	Emissions reduction activities	3	Decrease	We continue to reduce the amount of waste and increase the proportion of waste that is recycled at our sites globally through communication and engagement with employees. Initiatives for 2016 at our London office include: - Introduction of Winnow system in our kitchen. Winnow uses cutting edge technology to cut food waste in half. Significantly reduced the amount of waste going to land fill and environmental food print. - Introduction of “keep cup”. This will reduce the amount of disposable coffee cups through a loyalty reward scheme for all staff. - Sourcing eco-friendly alternatives packaging for our disposable range to reduce the use of plastic.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Other: Change in emission factors	5	Decrease	The reduction in emissions from fuel-and-energy-related activities has decreased due to a reduction in the factors for electricity WTT emissions.
Purchased goods & services	Unidentified	6	Decrease	In 2016 water consumption decreased significantly at both London (-5%) and Singapore (-44%). Despite this, the large decrease in water consumption at Singapore occurred because of the receipt of an actual, rather than estimated, which caused a dip in invoiced consumption as the water company had previously overestimated use.
Business travel	Unidentified	15	Decrease	This increase in business travel emissions can be mainly attributed to a 15% increase in short-haul economy flights and a 23% increase in long-haul first class flights.

CC14.4**Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)**

Yes, our suppliers

Yes, other partners in the value chain

CC14.4a**Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success**

Since 2015 we have been engaging with our suppliers and partners to gather information on their sustainability programmes in order to better understand the impacts of our supply chain.

Our strategy for prioritising engagement is to look at our relevant Scope 3 emission categories and determine which are likely to be the most relevant to Inmarsat. For example, we are engaging with our satellite launch providers as a top priority, as we expect satellite launches to have the greatest impact on our Scope 3 emissions. We have engaged with these companies to understand if they have a sustainability programme in place, whether they calculate their GHG emissions, and if they report to the CDP. In addition, we have inquired on more specific climate change related issues depending on the nature of the company we are engaging with.

A measure of success would be the collection of Inmarsat's Scope 3 emissions data from engagement with our partners and suppliers. Because we have not been able to measure our Scope 3 emissions in full, we currently do not completely understand the indirect impacts that our company has and therefore cannot yet begin to manage these impacts.

CC14.4b**To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent**

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Active engagement	6	1%	Since 2015 we have been engaging with our suppliers and partners to gather information on their sustainability programmes in order to better understand the impacts of our supply chain.

Module: Sign Off**Page: CC15. Sign Off****CC15.1****Please provide the following information for the person that has signed off (approved) your CDP climate change response**

Name	Job title	Corresponding job category
Alison Horrocks	Chief Corporate Affairs Officer and Company Secretary	Director on board