

ORDNANCE SURVEY LIMITED

# Annual Report & Accounts 2017–18



# Ordnance Survey Limited Annual Report & Accounts 2017–18

Presented to Parliament  
by the Secretary of State for  
Business, Energy & Industrial Strategy  
by Command of Her Majesty

October 2018



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# Contents

- 4 Directors
- 5 Chairman's statement
- 6 Chief Executive Officer's statement
- 8 Strategic report
- 14 Financial review
- 16 Corporate and social responsibility
- 18 Employee information
- 20 Sustainability
- 26 Principal risks and uncertainties
- 27 Governance statement
- 32 Directors' report
- 34 Directors' responsibility statement
- 35 Directors' remuneration
- 40 Audit report
- 42 Financial statements
- 49 Notes to the consolidated financial statements

# Directors

## Executive Leadership team

### Executive Statutory Directors

#### **Nigel Clifford**

Chief Executive Officer  
(Until May 2018)

#### **Neil Ackroyd**

Managing Director of OS  
Ventures and  
Deputy Chief Executive Officer  
Acting Chief Executive Officer  
(From June 2018)

#### **Paul Bragg**

Chief Financial Officer  
(From January 2018)

#### **Clive Mosey**

Chief Financial Officer  
(Until October 2017)

### Executive Directors

#### **Nick Giles**

Managing Director of  
Consumer

#### **David Henderson**

Managing Director of OSGB

#### **Caroline Bellamy**

Chief Data Officer

#### **Rebecca Paterson**

Chief Strategy and Marketing  
Officer

#### **Will Davies**

Director of Human Resources

#### **Dan Dukes**

Acting Director of Operations

#### **Jo Shannon**

Acting Director of Engineering

#### **Jon O'Meara**

Company Secretary

### Non-Executive Directors and Member

#### **Kieran Murphy**

Non-Executive Chairman

#### **Jacques Cadranel**

Non-Executive Director

#### **Mike Carr**

Non-Executive Director

#### **Michael Harrison**

Non-Executive Director  
(Until October 2017)

#### **Iain Rolfe**

Non-Executive Director  
(From October 2017)

#### **Stephen Lake**

Non-Executive Director

#### **Anne Jessop**

Non-Executive Member  
(Until October 2017)

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## Chairman's statement

When I was first appointed Chairman of Ordnance Survey (OS) in May 2016, I was enormously impressed by the sheer extent to which OS data is used in everyday life.

A couple of years on, it's even clearer how important OS's role is – and will continue to be – as we move to a digital Britain. Our data is already used by 4,700 organisations working across the public sector, in areas such as housing, transport, the natural environment, health and local & national security.

Our open data underpins many applications used by consumers up and down the country while private sector customers and partners access and use our data for a very wide variety of functions.

The demand for accurate and detailed location data will continue to grow as its importance is increasingly recognised.

We were pleased when this was formally acknowledged by the Chancellor of the Exchequer in his 2017 autumn budget.

The plan to create a new Geospatial Commission was recognition that Government is addressing the need to have a clear voice to ensure that location data and the organisations which provide it are at the heart of the future UK economy.

Ordnance Survey will work with Government to support the development of the Geospatial Commission, together with five other expert 'geo-agencies' (BGS, Valuation Office, HM Land Registry, UK Hydrographic Office and the Coal Authority) to help to reveal and unleash the national potential for growth which will come from more widespread and intelligent use of geospatial data. The Commission will have a key role in supporting and promoting the success of Ordnance Survey and the other agencies.

Ordnance Survey's plans to develop its service capability for its GB (Great Britain) customers continued to be implemented over the last year. We're working on new ways to collect and ingest data, re-platforming the systems for manipulating and organising that data and streamlining the ways in which we distribute data to our customers. We're also looking at ways in which we can develop our service offer to our customers, continuing the journey to develop OS from a provider of data into a supplier of geospatial services at home and abroad.

In the future we'll be able to take data from a wider range of sources to allow us to continue to build and maintain the authoritative geospatial dataset for GB. We'll be able to offer customers the facility to select data in packets of their choosing and in machine-to-machine format. Our investment plans will allow us to provide a significantly enhanced service to the economy as a whole.

In parallel with this programme, we'll be working to give effect to the announcement made by the Government on 15 June to extend the open data programme which OS has run successfully for the past eight years. This will involve changes to our licensing regime and to the way in which our data can be republished by users - which is intended to enhance the extent to which our data is used throughout the economy. As these changes are introduced during the course of the next year or so, customers will also be able to access more of our data free at the point of use, further incentivising its pervasive use across the economy.

Our plans to continue to develop Ordnance Survey and the extension of our open data programme will have major financial implications. Discussions have begun and will continue with Government to ensure that the financial framework for OS provides a sustainable long-term future for the organisation, allows for the preservation and enhancement of our strategic strengths, finances our development and, most importantly, ensures that we maintain our data as the authoritative reference geospatial set for GB.

Our consumer arm continues to successfully promote our brand name and is a growing business in its own right. It continues to sell around 1.7 million paper maps a year and is also making maps an everyday accessory for the outdoors through an increasingly sophisticated digital offering. It was exciting to see the first augmented reality product formally launched by the consumer team this year, joining a list of innovations including 3D route planning and a virtual reality Ben Nevis. We look forward to further innovations from the consumer team, promoting the wider enjoyment of the outside world for millions of our citizens.

Ordnance Survey also has a role in promoting Great Britain around the world, and we enjoy a reputation internationally as a leader among national mapping



*Kieran Murphy*  
Non-Executive Chairman

agencies. We already sell our advice and our services outside GB, and we intend to build on that. The capability which we are creating to collect, process and distribute data about GB can be applied elsewhere in the world to support the development of other countries' and cities' geospatial ambitions. In providing that service, we will create a new source of income for the organisation and continue on our path of becoming a provider of geospatial services – not just data.

This was the last year of Nigel Clifford's three-year tenure as Chief Executive. His contribution in setting a new strategic direction for our domestic and international activities will be felt for some time to come and is much appreciated. He has left OS with a strong leadership team and dedicated, enthusiastic staff. His role is being taken up by Neil Ackroyd as acting CEO and we warmly welcome Neil in his new responsibilities.

Ultimately, it's the enthusiasm, drive, accuracy and ambition of the people who work for Ordnance Survey which gives this organisation its heart and spirit. I want to thank my board colleagues, the leadership team and all OS employees for their commitment this past year; the work which you do helps to improve the lives of millions of our fellow citizens each day.

**Kieran Murphy**  
Chairman  
7 August 2018

## Chief Executive Officer's statement

The critical role that data plays in a modern digital economy is now accepted as a simple fact of life. Geospatial data is becoming even more essential as part of this eco-system taking an increasingly significant position in a digital world. Geography has always provided a human-centric way of making sense of complex information, allowing us to transform data into insight and safely guide us in choices we make. It now provides a perhaps less visible but even more essential role in this space in new platforms and services and through machine-to-machine interaction.

For the first time in many years, the Chancellor has personally highlighted the significance of the data Ordnance Survey captures and curates as essential to the future of the country. At the same time, the government's Industrial Strategy has identified four grand challenges that can only be solved by better use of data generated and derived for our digital economy. Data Infrastructure is now seen as essential as physical infrastructure in supporting a country's complex and ever-changing needs.

This recognition of the continued and growing importance of geospatial information has led to the creation of new policy body in the shape of the Geospatial Commission, which our Chairman Kieran Murphy talks more about in his statement. This Commission will help determine where we can use all our data across multiple organisations to best effect, unlocking future value and providing strategic guidance in how we take best advantage of the world-class capabilities we have in the United Kingdom.

We have been very pleased to be able to support in the preparatory work for the Geospatial Commission. With this new relationship we hope to collaborate even more effectively across all the partner bodies, the delivery agencies and the policy departments to help reinforce the UK's position as true leaders in this field. We believe this partnership will ensure that businesses – from start-ups to multi-nationals – are able to access our best-in-class data more simply and more tailored to their needs. By putting Ordnance Survey data at the fingertips of entrepreneurs and innovators, we're helping to build a more connected and vibrant economy.

We're delighted to be at the forefront of this through many programmes of work and collaborations both in the UK and internationally being in the vanguard of geospatial thought leadership. These include investigating the complex network of services and information that will be the Internet of Things – through CityVerve, Manchester's demonstration project. We're also supporting the Department for Digital, Culture, Media and Sport (DCMS) in the rollout of 5G – the next generation of mobile communications – through creating and integrating the highest quality data needed to evaluate planning and implementation issues.

In the four-year 'E-CAVE' project, commissioned through the Industrial Strategy, we're hard at work helping develop common standards for data exchange for future driverless cars, helping to make Britain one of the world's leading locations for connected and autonomous vehicles.

We're also bringing new learnings back into the UK, recently signing a Memorandum of Understanding with the Singapore Land Administration as partners in enabling spatial innovation. This builds on collaborative working with a small team in Singapore working with GovTech and the National University on the integration of Building Information Models (BIM) into their world-leading Future City Project.

We were very pleased to showcase all these different programmes in well-attended workshops in Singapore, Hong Kong, Manila, Hanoi, and Seoul under the title 'Geospatial Ideas. Shared.' We were given great support from our colleagues at the Department for International Trade and the Foreign and Commonwealth Office in getting the 'Britain is Great' message out to many interested attendees.

The vast amount of information generated by a connected economy will ultimately make it possible to create very complex and detailed digital models of the real world often referred to as a 'Digital Twin'. This could give us great insight in managing and predicting changes to the built and natural environment – potentially the underlying platform to a national digital infrastructure. With our existing data and expertise, Ordnance



Survey already has the foundations in place to make this concept a reality.

The need for accurate and consistent location data isn't just in these new exciting and challenging areas but is based on being relevant and hopefully essential to the existing and often very demanding user needs we support every day 24/7. Through our detailed research work this year, talking to organisations up and down the country, we now have better insight into what data our local authorities, emergency services and national health bodies need to deliver better public services. We're working with the Geospatial Commission to determine what a progressive national mapping agency provides to make our geospatial information easier to access and simpler to use.

Being the best we can possibly be in our day job gives us the platform to more fully understand the rapidly-changing customer expectation. The disruptive combination of accelerating customer demands and technological capability means innovation is fundamental and essential to success. I will always defend strongly our track record here, both in the projects we mention above and in other areas of intense focus such as new communities of engagement, crowd sourcing, deep machine learning, augmented reality and low-cost data capture and processing technologies.

Innovation is in our DNA, and this year we will see the first fruits of this work. But equally critical is how we'll disrupt ourselves in embracing these changes both in how we serve our data to new users in new communities, and how

we adapt our business to ensure this is sustainable and affordable. The data we have today is only one dimension but it's also the data we need for tomorrow that's just as important, as well as making it both affordable and accessible.

Realising this, collaboration and partnership is a fundamental tenet of our strategy. This year we've been working closely with our technology partners in enhancing and re-platforming our core geospatial capability as well as working with our existing and new market partners in the UK and internationally. For example, we presented at the recent World Bank Land & Poverty Conference alongside one of the world's leading geospatial companies. This introduced the concept of a managed land administration service currently in co-development, in support of our international activity.

We also of course have many ongoing collaborations in GB with our existing partner community many of whom have been working with us for many years. We do recognise the challenges we all face and the need to develop and adapt to meet the new customer expectations – and to support government in its ambitions to enhance the UK's capability and competitiveness. We value their input through the partner advisory council.

Partnerships also feature strongly within our Consumer arm which is working with more than 20 partners on GetOutside – a campaign encouraging more people to get outside more often. Engaging around a million people every month, GetOutside is now formally recognised as the British consumer participation campaign for the entire outdoor industry and has just won several prestigious awards.

A further noteworthy event came in March when our Mapping for Emergencies service was used by responders to deliver aid to cut-off communities in Cumbria during the heavy snow brought in by the 'Beast from the East'.

But let's not forget the day-to-day operations in place which form the core of Ordnance Survey.

Overall, we made in excess of 60 million changes to the National Geographic Database – equivalent to more than 100,000 updates to the features in our database every single day.

We've verified and updated change on 82,000 sq kms of rural geography and have continued our programme to update urban geographies in more detail than before with over 3,500 sq kms updated. We also completed a record 23,000+ surveys for HM Land Registry this year to underpin land registration.

Investing in developing core capabilities is something we've continued to do this year through a range of projects that deliver value to customers and ensure we operate as an efficient digital business. This includes beginning our work to re-platform the geospatial production technology working closely with our supply chain partners. Also, a range of projects to automate our production processes and explore new technologies such as machine learning techniques and UAVs.

These capabilities together with our expertise are delivering for our customers in GB and also support our increasing international opportunities.

In last year's Annual Report, Nigel Clifford spoke about a new structure for our organisation. Three separate market facing units now make it clearer who is talking to and serving each of our customer groups. I would like to thank Nigel for his great contribution in helping guide our ambitions and supporting the organisation through his time with us.

But buoyed by the expertise, innovation and passionate spirit of the people who work for and with Ordnance Survey, we believe we have the strength and depth of experience and domain knowledge to focus on user needs and partner relationships. However, we also recognise the need to bring in new skills to enhance our capability and relevance to a very different world for the next five and hopefully 227 years.

I very much look forward to the next stage of our journey.

**Neil Ackroyd**  
**Acting Chief Executive Officer**  
**7 August 2018**

## Principal activity

The principal activity of Ordnance Survey Limited is the collection, maintenance and distribution of up to date geographic information.

These accounts are for the year ending 31 March 2018.

## Business model

Ordnance Survey Limited (OS) is Britain's national mapping agency. It collects, maintains and distributes the most accurate and up to date geographic information for Great Britain in accordance with its Public Task, and this data is used and relied upon by government, businesses and individuals. It provides services to government and businesses to enhance the value they derive from geographic information.

OS also provides geospatial services to other countries, helping them realise the benefits of good location-based information.

Ordnance Survey Leisure is the Group's vehicle for selling geospatial products directly to consumers. GeoPlace® is our joint venture with the Local Government Association that oversees the production and maintenance of the national address and street gazetteers which are included in OS data products.

The OS Board remains accountable to the Secretary of State for Business, Energy and Industrial Strategy (formerly the Secretary of State for Business, Innovation and Skills). The governance arrangements for the company are set out in a Shareholder Framework Document signed on 31 March 2015 by the Directors of OS and for and on behalf of the Secretary of State for Business, Energy and Industrial Strategy (formerly Business, Innovation & Skills).

The majority of revenue is generated through licensing the intellectual property rights, held under Crown copyright and data base rights, which is inherent in the OS data. Since April 2010, free and unrestricted access to a large range of mapping has been provided to any prospective user via OS OpenData, a service that underpins a range of applications, while promoting government transparency and encouraging greater use of geographic information.

## Strategy & future outlook

Today's geospatial industry supports some £26bn of the UK economy and OS revenue represents c. 12% of the £1.1bn UK market for geospatial data, software and services. OS is a critical foundation describing Britain in fine detail through our database of 500 million features, kept current by making over 20,000 changes every day to real-world features in our database.

The 2017 Digital Land Review recognised that 'There is a very significant opportunity to generate economic growth from Geospatial data' and that 'known private sector cases have identified £6-11bn of economic value (and significant secondary benefits).' As a consequence, the Autumn Budget 2017 proposed the establishment of the Geospatial Commission to provide a guiding mind for the UK's geospatial activity in the unlocking of this anticipated 'geospatial dividend'. OS is committed to working with the emerging Geospatial Commission to help develop and shape the future geospatial agenda.

Meanwhile, on a global level, profoundly disruptive technology, market and economic forces are aligning, creating three distinct pressures: i) reduced resources such as access to capital from investment; talent/expertise and raw materials, ii) rising expectations from customers e.g. demands from 'smart' applications such as Connected and Autonomous Vehicles (CAVs) and 5G requiring sensors of a scale and sophistication not seen before and iii) competition from disruptive technology players who operate with multi-national economies of scope and scale.

In response, OS is committed to offering Britain the best geospatial service available globally, necessary for Britain to become a world leading smart, digital economy and in doing so we will continue to build a 'GB Exemplar' which will provide the basis of our overall 'GB Springboard' strategy.

To enable the GB Exemplar we are implementing a next generation geospatial infrastructure – scalable, cloud based and largely configured from commercially available software rather than developed by OS. From this we will create the 'GB Springboard' that enables Britain to retain its position as a geospatial showcase and offer our

geospatial engine as a managed service to international customers, governments and mapping agencies, delivering a unique OS service that meets the developing needs of our customers in a rapidly evolving marketplace.

To achieve this, OS is actively evolving the OS culture and organisation around a clear sense of purpose, informed by customer and market insight and supported by efficient and effective delivery.

## Business review

### A new Geospatial Commission

Following the 2017 election the Government began a Digital Land Review (DLR) to investigate the value and role of geospatial data in the UK.

In his Autumn Budget 2017, the Chancellor announced plans to establish a Geospatial Commission responsible for putting geospatial location data at the heart of the future UK economy.

Ordnance Survey is committed to support the Geospatial Commission. The role of the Geospatial Commission is to maximise the value of all UK government data linked to location.

### OS partners with ONS

In February 2018, Ordnance Survey entered into a partnership programme with The Office for National Statistics (ONS) to improve the integration of geospatial and statistical information.

The two data organisations will build even closer relationships and share ideas to ultimately promote innovation and deliver better access to data for businesses, academics and other customers.

The new partnership (working under a Memorandum of Understanding) will see both organisations collaborate on workstreams which include: innovation &

outreach, data architecture & platforms, data science & joint research, co-development of joint products & analysis, and international engagement.

## Enabling the public sector

Membership of our mapping agreements continues to grow. As of 31 March 2018 there are 4,781 members of the Public Sector Mapping Agreement (PSMA) and 134 members of the One Scotland Mapping Agreement (OSMA) – a 7% increase in total members.

New data orders are up by 6.4%, with OS VectorMap District, OS Open Map Local, OS Open Greenspace, and Boundary-Line products being the most popular over the last 12 months.

We collaborated with the PSMA user representative group (PURG) and OSMA management group – identifying new ways of engaging customers, so that we understand their objectives around policy and delivery and we've asked how we can support them.

This forms part of our scoping of the future Public Task – identifying what we should be providing to government in terms of data and services, including accessibility.

## Improving customer experience

We continue to invest in our customer experience, with improvements to our website, live web chat and microsites. We've also introduced a new error and omission reporting tool for greenspace which runs alongside the TellOS tool.

Thanks to these multiples lines of engagement, we've streamlined the customer journey and improved user experience. As a result, we're pleased to report a continual reduction in the number of enquiries dealt with by our helpdesk, as customers increasingly self-serve.

In March we launched an open data format trial providing data in a range of new, alternative formats to encourage take up and use. The first week attracted 1,848 hits, and 110GB of data was downloaded from 16 different countries demonstrating our global reach.

## HM Land Registry (HMLR)

We have continued our partnership and close working relationship with HMLR and are delighted they have joined our London based Geovation Hub to encourage and support innovation and property technology (PropTech) businesses. In addition, we continue to support Land Registration, with our surveying team undertaking more than 23,000 individual surveys last year.

## Cabinet Office

We've continued to develop and support the Cabinet Office owned Resilience Direct (RD) mapping application for the fourth consecutive year. We continued to enhance and make it available across the resilience community prior to transitioning the service to a new provider in March 2018.

## Ministry for Housing, Communities and Local Government (MHCLG)

We have been working closely with MHCLG to help monitor the planning and building status of government sites sold for housing. The information we provide is used to predict if enough homes are going to be built, which sites are complete, the speed of development and reasons for delay – all of which help MHCLG deliver the Public Land for Housing Programme.

In addition, we've continued to provide data about Land Use Change. This forms part of Land Use Change Statistics (LUCS) which MHCLG publish on their website as a national statistic. LUCS provides MHCLG a method to monitor planning policy by providing information on changes to the green belt, homes built on brownfield land, greenspace and flood risk areas. LUCS provides information on changes to agricultural land, forestry areas, commercial properties/land and brownfield land.

## Scottish Government (SG)

We continue to support Scottish Government and Scottish Natural Heritage (SNH) in creating a shared evidence base for sustainable coastal and terrestrial planning in light of a changing climate. In addition, we have contributed to The Third State of Scotland's Greenspace Report by providing our OS MasterMap Greenspace dataset. The report covers public use and attitudes to greenspaces, identifying how they contribute to policy priorities such as health and wellbeing.

## UK Border Force

We're working in partnership with UK Border Force and UK Hydrographic Office to create a geo-physical assessment of the coastline to inform border force operations. Analysis of the physical features of the environment will permit a more efficient deployment of resources and will enhance Border Security.

## HM Revenue & Customs (HMRC)

We're supporting HMRC's 'Making Tax Digital' programme by providing detailed address data and expertise. We're working with HMRC to embed the Unique Property Reference Number (UPRN) as a master geographic key to reference administrative and third-party datasets to households, enabling spatial analysis of geographic patterns and trends.

## Greenspace

Guided by a wide range of Government stakeholders, we have developed Open and Premium Greenspace data products to provide a comprehensive view of the location, extent and type of recreational spaces across the urban and rural areas of GB. Additionally, the open dataset is published as a new layer within the OS Maps Leisure Portal, opening up information to encourage thousands of people to enjoy green spaces across the country.

The data created from this project will act as an evidence base to support a number of cross-government policy initiatives – such as health, air/noise pollution, access, planning, sports, and valuation of natural capital.

## Innovation Festival

As part of Northumbrian Water Group's (NWG) Innovation Festival, Ordnance Survey led a group of businesses, academics, students and members of the public in a week-long challenge to identify ways of improving the environment.

The festival brings together some of the world's leading businesses to tackle major social and environmental challenges and attracts around 400 people on each of the five days.

As a result of the festival, NWG has installed England's first pollution-busting 'moss tree' in Newcastle.

The tree will purify air in the city centre and create opportunities for research into the benefits of the plant's natural filtering abilities.

## Supporting the Industrial Strategy

We recognise the opportunities for OS in the big overarching themes of the government's Industrial Strategy. The four 'grand challenges' include Artificial Intelligence & Big data; the Future of Mobility; Ageing Population and Clean Growth.

Our projects feeding into these include:

### 5G

Last year we talked about our ground-breaking work to understand how the built and natural environment will affect radio propagation of 5G networks. Following the success of the project for DCMS (Department for Digital, Culture, Media and Sport), Bournemouth selected an important area of the town where they wished to plan a radio network. Using our rich data and a planning tool we were able to optimise the number and position of radio antennae.

This planning has also informed the optimum routing of fibre to support the radio network. This ability to plan both the location of radio antennae and fibre networks has resulted in real savings in terms of capital expenditure.

To support government and local authorities, Ordnance Survey has published a guide for planners and local authorities to assist in understanding the geospatial considerations for 5G.

Ordnance Survey is continuing to work with research organisations and industry to develop geospatial capabilities to support the national rollout of 5G.

### E-CAVE

We're helping to shape a national infrastructure capable of supporting a nationwide network of connected and autonomous vehicles (CAVs). We're leading the E-CAVE (Enabling Connected and Autonomous Vehicles Environments) research project to design the frameworks, data and resources for CAV data exchange.

E-CAVE will enable real-time vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) data sharing, using open standards and architecture. At the heart of the project is a focus on positioning and safety, underpinned by geospatial technologies and standards. We will work closely with industrial and academic partners and the government-funded CAV Test Beds with the aim of accelerating the UK's CAV testing capability and developing new business models to exploit the value of CAV data exchange to drive UK and international opportunities.

### CityVerve

Based in Manchester, CityVerve is the UK's demonstrator project for large-scale deployment of Internet of Things (IoT) technology. We're part of a consortium of more than 20 public and private sector organisations who have been delivering a series of citizen-focused solutions around the themes of transport, energy, health and culture, using IoT sensor and collaborative platform technology.

Our role is to provide the geospatial framework and location expertise on which these solutions may be based.

### Microsoft

This year we joined forces with Microsoft to teach machines how to identify types of roofs.

The week-long hack, featuring software engineers from Microsoft who had travelled from across Europe and Africa to work with OS's machine learning team, used the city of Hull as a testbed. The trained machine model finished the week by correctly identifying 87% of the roof types it was shown.

Together with Microsoft, we have worked out how to stream this machine-captured data into our database for when we're ready to put machine learning into production.

## Working with partners

We maximise what we do through our partner channel. Our partners are licensed to use, enhance and distribute our data, enabling millions of customers to access and gain greater value from it.

Our 400 partners range from corporate multinationals to small innovative startups. They enable the use of our data in solutions across sectors including land & property; finance & insurance; energy & infrastructure; government; retail; transport & logistics; computer gaming; advertising and analytics.

They can supply our data, provide the infrastructure or software to make it work or, in many cases, both.

We have an elected partner advisory council who represent the views, ideas and opinions of our partner community, sharing that insight with us and helping to shape our future initiatives.

## Driving innovation

### Research

Ordnance Survey's longer-term, early ideas stage research is mostly vested in external partners, particularly universities. Our research comprises a range of topics from technical issues in geospatial data capture and management, including machine learning to extract extra detail from images; through new means to collect data, such as crowd-sourcing and citizen science. We're looking at new means of presenting data, such as smart watches, augmented reality or heads-up displays in future driverless vehicles; as well as understanding better how to map 'places' and the informal geography of Britain.

Our preferred approach is to co-fund projects with other agencies, particularly UK Research & Innovation, the UK's new research coordination and funding agency. Here, we are working to transition across our good relationships with the Engineering & Physical Sciences Research Council (EPSRC) and InnovateUK. The present portfolio comprises 25 PhDs and three postdoctoral positions, located at 16 universities.

This year we've seen a number of research projects begin to mature. The nationally and strategically important UK Infrastructure Transitions Research Consortium (ITRC) has begun to establish a national infrastructure modelling capability on the Science & Technology Facilities Council's high-performance computing facility at Harwell; all founded on OS data.

The Privacy, Ethics, Trust, Reliability, Acceptability and Security of the Internet of Things (PETRAS) consortium is moving to a demonstration phase that will bring our research at the University of Surrey's 5G Innovation Centre in locational privacy and security into a real-world setting.

As well as this, our earlier research in Connected and Autonomous Vehicles has led into the Industrial Strategy Challenge Fund (ISCF) supported E-CAVE (Enabling Connected and Autonomous Vehicle Environments) project to develop means of data exchange to enhance the safety of driverless cars on our roads.

Our research has international reach. We're half way through a project working with the National University of Singapore for the Government of Singapore on methods to continually update their

national 3D geospatial model with 3D data from their planning and building design systems. And we are working with researchers at Massey University in New Zealand on better means to interpret the geographical elements of natural language, for example to provide better voice interfaces.

### Geovation Hub: Britain's pioneering location data lab, London

In 2015, Ordnance Survey launched the Geovation Hub – a co-working space in Clerkenwell, London, with the aim of attracting, supporting and enabling geospatial innovation in the UK. Since opening its doors, Geovation's fully funded accelerator programme has supported 65 technology startups, and helped raise £12.7m in investment in over 10 market sectors including property, mobility, transport, infrastructure, energy, health and connectivity.

Geovation has a growing community of over 1,000 registered members who regularly visit the Hub, where they have access to Ordnance Survey data through a free Data Exploration Licence. This data, along with being able to connect with like-minded entrepreneurs, is enabling geospatial innovation and is disrupting the way we use location data in the UK, to make positive, impactful change.

In July 2017, Lord Prior announced a new strategic partnership between Ordnance Survey and HM Land Registry to help propel the UK towards becoming a global leader in the land and property market. HMLR has joined Ordnance Survey at its Geovation Hub to encourage and support innovation and property technology (PropTech) businesses.

In February 2018, Geovation held its first ever conference – Geovate 2018: Building Greener, Smarter Communities – at the Royal Geographical Society in London. This followed on from a two-day Geovation Challenge Camp where seven startups pitched their ideas and left with a share of £155,000 in funding.

Geovation also received the 'Geospatial Hub of the Year Award' at this year's Geospatial World Forum. The Geospatial World Leadership Awards jury recognised Geovation's leadership role in creating a centre of excellence to nurture startups, enabling spatial innovation and entrepreneurship.

[www.geovation.uk](http://www.geovation.uk)

## Taking our expertise worldwide

Ordnance Survey International was launched in 2012 and works with customers to help them tap into the potential benefits that come from the creation and use of accurate and up-to-date geospatial information. We continue to build strong links around the world and are now working in countries on four continents.

Over the last year we've completed or agreed a number of projects in collaboration with governments and mapping agencies around the world.

These include:

- Working with the Government of Tanzania and World Bank, Tanzania to provide civil service users with skills development for data collection, management and use of geospatial datasets, and knowledge of geospatial principles and standards.
- Seconding research associates to the National University of Singapore (NUS) for a two-year project addressing the automation challenge of mapping IFC-BIM models into open standardised CityGML building models.
- Optimising the positional accuracy of underground utility infrastructure information in the Kingdom of Bahrain.
- Working with Saudi Arabia's General Commission for Survey (GCS), reviewing its plans and initiatives and providing recommendations leading to the adoption of a road map for the development of the National Geospatial Information Centre (NGIC).
- Undertaking a feasibility study for the Ministry of Land Reform in the Republic of Namibia to support cadastral and geodetic activities.
- Supporting the creation of a detailed large-scale base map of Malta and Gozo in digital form for Malta's national mapping agency.

### Geospatial maturity tool

We've developed a geospatial maturity assessment tool which evaluates how capable organisations are at collecting, managing and disseminating geospatial information to meet stakeholder requirements and business goals. The assessment helps understand not only how mature they are now, but how mature they need to be.

### Cambridge Conference

In July we hosted a very successful Cambridge Conference with the theme 'Mapping Nations: The Next Decade'.

The conference examined some of the biggest global challenges which we face - economic, social and technical. It considered how national mapping and geospatial agencies should adapt to face these challenges, and how the industry will make a profound contribution to communities all over the world.

Every four years since 1928, the Cambridge Conference has welcomed the senior leaders of national mapping and geospatial agencies from around the world.

### Keeping Britain active

In our consumer sector we're continuing to drive awareness of the OS brand, not only through existing products but also the wider activity across outdoor and digital arenas. We remain focused on making outdoor experiences enjoyable, accessible and safe.

### GetOutside

With our GetOutside initiative we help more people to get outside more often, to help them live longer, stay younger and enjoy life more.

GetOutside has more than 20 partners and engages with around a million people every month. It's now formerly recognised as the British consumer participation campaign for the entire outdoor industry.

We've recruited 65 champions across a range of outdoor interests to continue raising awareness of GetOutside on the ground, through their blogs and social media presence.

It's also been announced by UK Active that 30 September is the country's inaugural National Get Outside Day as part of European Week of Sport.

### Sport England and the Open Data Institute

We're working with Sport England and the Open Data Institute (ODI) to help make information about outdoor activity more readily available, publishing open data to encourage growth within the outdoor sport and the physical activity sector.

### OS Maps app

We've further developed our OS Maps app this year to incorporate an augmented reality feature - helping users to see 'beyond the map'.

Using a phone or tablet's camera view, users can see the whereabouts of more than 200,000 hills, mountains, coastal features, lakes, settlements, transport hubs and woodland - all of which have been identified and labelled in the app.

OS Maps has also won four further awards. Direct Commerce magazine voted it the Best Technology Tool in their Innovator Award, while Singletrack Readers awarded it Best Online Service 2017. In May 2018 it won Best App in the 2018 Sports and Technology Awards, while in June it won the ECMOD award for 'Best Exploitation of technology - B2C'.

The app supports the Duke of Edinburgh Award through its eDofE portal, an online system where thousands of young men and women can record their Duke of Edinburgh Award programme and activities.

Country Walking and Trail magazine continue to support OS Maps' position as the definitive platform for mapping and outdoor exploration, interlinking with their respective magazines. We've also agreed a further partnership with Immediate Media across their walking and mountain biking titles.

Bauer Media has fully integrated the app into its #walk1000miles campaign.

### Britain's favourite walks

We teamed up with ITV, the National Trust and The Ramblers to encourage outdoor enthusiasts to vote for their 100 favourite walks in England, Scotland, Wales and Northern Ireland. The results were revealed on a two-and-a-half hour ITV prime time programme, featuring the top 100 across the UK's cities, countryside and coastline. All routes are freely available on OS Maps.

### Great British Adventure Map

Supporting the GetOutside campaign, the new Great British Adventure Map is a two-sided, fold-out map in the same style as an OS Landranger map. The front has a map of Great Britain in 1:1 000 000 scale, showing long distance walking and cycling routes, the top 50 places to visit, great beaches, hills and mountains and

some of the best views in the country. The back has a wealth of information on events, activities and ideas, with room to tick off completed ones and add notes.

### New GPS range

In March 2018 we launched four new rugged handheld GPS devices, featuring all the accuracy and detail of our world-famous leisure maps. Designed for hiking and off-road cycling, they also include features to keep users on track with their performance, and let them and others know exactly where they are. The devices can be synched with other products to plot and share routes, and monitor heart rate, energy and speed.



# Financial review

## Financial summary

	2017-18	2016-17
	£m	£m
Revenue	154.9	152.8
Cost of sales	22.3	21.7
Operating costs (excluding depreciation, amortisation & impairment)	84.1	93.7
EBITDA	54.7	42.5
EBITDA%	35%	28%
Depreciation, amortisation & impairment	30.8	22.4
Corporation tax	4.9	3.9
Profit attributable to owners of the Company	21.2	16.4
Dividend	18.0	0.0
Net assets	209.4	190.4

## Revenue

Total revenue comprises both trading revenue and other operating activities. The trading growth on 2016-17 was due to strong performance through our Licensed Partners and continued strong sales of digital products to consumers.

## Earnings Before Interest Tax Depreciation and Amortisation (EBITDA)

The EBITDA rose to £54.7m (2016-17: £42.5m). This was driven by a reduction in investment operating expenditure due to phasing of programs of work and by the restructure provision incurred in the prior year.

## New organisation structure

During the year, the Group undertook the restructure announced in March 2017. The Group created three new units to enable OS to grow in a complex, competitive and changing landscape.

The three customer-oriented units – OS Consumer, OS Ventures and OSGB – came into effect on 1 June 2017. The Group restructure reduced the workforce by 5%. The company incurred £3.4m in respect of the obligation arising.

## Operating costs

The major single line of expenditure, direct and indirect employee costs, has been managed within the expectation for the year. This has been achieved at the same time as we have continued to invest in new talent as we prepare for future growth.

## Dividends

In June 2018 we declared a final dividend to our shareholder, the Secretary of State for Business Energy and Industrial Strategy, of £18.0m (2016-17 £nil).

## Statement of financial position

### Cash

We generated a net cash inflow of £36.1m (2016-17: £36.2m) from operating activities during the year and a further £4.9m (2016-17: £4.1m) received from joint ventures. Our capital expenditure programme (2017-18: £19.0m; 2016-17: £22.5m) included the investment Geospatial Content Improvement Programme and the Geospatial Database Management System.

### Net Promoter Score

The net promoter score for the year was 40 (2016-17: 36) which exceeded expectations.

### Non-current assets

Our non-current assets are principally:

**Explorer House:** Our head office in Southampton.

**Geospatial Content Improvement Programme:** The new programme for the improvement of urban content will run over five years. Increasing demand for more features and greater urban detail has made this programme a necessity to maintain OS MasterMap's world-leading, best in class status.

**Geospatial Database Management System:** The operating system central to the entire business is the Geospatial Database Management System. This is the repository for all data content from which all products are derived.

## Other entities

In support of Ordnance Survey's strategic goals, we operate and hold investments in the following subsidiaries and shared ownership entities.

### 100% subsidiaries

#### Ordnance Survey Leisure Limited (OSL)

OSL provides a direct retail offer to consumers who prefer to purchase OS products and services online. The business continues to grow significantly year on year, particularly OS Maps subscriptions, where several innovative product developments have led to our subscriber database growing by 50% from a 31 March 17 base of 64,000. Digital products are the key growth area of the business and the business is expected to continue to grow as our traditional market and new users adopt this digital technology. Total revenue of £3.9m (2016-17: £3.3m) and EBITDA of £0.7m (2016-17: £0.3m).

#### Ordnance Survey International LLP, Ordnance Survey International Services Limited (together OSI)

OSI is our nascent international business, which aims to leverage our world leading reputation in the geospatial industry and sell our expertise to government agencies in other countries with a primary focus in Middle East and North America (MENA) and Asia Pacific (APAC). OSI generated turnover of £0.7m (2016-17: £0.6m) and a loss of £1.0m (2016-17: £1.2m).

## Shared ownership entities

### GeoPlace LLP

GeoPlace is a 50:50 joint venture with the Local Government Association, which has developed an addressing product licensed to the Company. GeoPlace generated a profit share return of £5.5m (2016-17: £5.0m), and £4.9m in cash was returned to the Company during the year (2016-17: £4.1m).

### Astigan Limited (Astigan)

Astigan is a 51% owned subsidiary which is consolidated into the Group accounts as OS has control of the board. The objective of the Company is to research new ways of remote data collection. We see this as a medium-term investment and have entered into a joint venture with technical experts in their field. In the year, Astigan made a loss of £4.9m (2016-17: loss of £0.3m). This loss was driven by the £4.7m impairment of the development of the platform. OS is still supporting the project but it was deemed appropriate to impair the investment due to delays to milestones reducing certainty of the timings of future revenue.

### PointX Limited (PointX)

PointX® is a 50% joint venture with Landmark Information Group®. PointX provides national location information for UK businesses, government, local authorities, emergency services and the commercial sector.

During the year PointX generated a profit share of £0.1m (2016-17: £nil).

### Dennis Maps

The Company took a 25% share of Dennis Maps Limited in December 2016. The Group profit share generated in year is £0.1m (2016-17: £nil).

The main objective of the investment is for us to secure the supply of OS paper maps. In addition, we will develop new strategies and explore future innovations and technological advances within the printing and mapping industry.

## Key performance indicators

The group key performance indicators are the primary measures the board use to monitor the Group's performance:

	2017-18	2016-17
Revenue	£154.9	£152.8m
EBITDA%	35%	28%
Free cashflow	£22.0	£17.8m
Net Promoter Score	40	36

**Revenue** – is the total consolidated group revenue recognised on the statement of profit or loss.

**EBITDA%** – defined as operating profit adding back amortisation, depreciation and impairment divided by revenue as a percentage.

**Free cashflow** – defined as total net cash flow with dividend added back. The definition has been modified by the board to include tax cashflows within free cashflow. Both 2017-18 and 2016-17 have been presented on this basis.

**Net Promoter Score** – is an index ranging from -100 to 100 that measures the willingness of customers to recommend a company's products or services to others. It's used as a proxy for gauging the customer's overall satisfaction with a company's product or service and the customer's loyalty to the brand.

# Corporate and social responsibility

## Education services

The number of schools who are registered users of the EDINA Digimap for Schools service has increased from 2,700 to 2,850 during the year – representing 38% of secondary schools and over 7% of primary schools in GB.

To assist secondary schools who have an Ofsted rating of 3 (requires improvement) or 4 (inadequate) who were under-represented among users, we funded a scheme to provide these schools with a free two-year subscription to Digimap for Schools, supported with free twilight training in their local area for their geography teachers. 461 schools took advantage of that scheme.

OS map data is also now available via Esri UK's free ArcGIS Online for Schools programme. More than 1,500 schools are using this service which includes OS maps in 2D and 3D, with the ability to create elevation profiles and the option to take OS maps out into the field via a variety of fieldwork apps.

## Corporate charity

In March 2016, 362 OS employees voted for the 2016–18 corporate charity. The winner with 33.7% of the votes was Solent Mind, a mental health charity. Ordnance Survey has been supporting Solent Mind for 24 months.

Between 1 April 2016 and 31 March 2018, we held more than 130 fundraising events for Solent Mind. Many of these events encompassed our GetOutside ethos with employees running 10ks, 10 miles and even marathons – raising a collective total of more than £7,000. OS staff members have cycled from Sandbanks to Bude to 'Chase the Sun', raising over £2,600.

We also hosted the popular bake sales (this year included a vegan and food allergy offering) and as ever, we had second-hand map sales, book sales, and lots of Christmas fun.

Our work place Choir 'Off the Scale' held several performances, raising £2,325.

Our Craftography Club created a patchwork embroidered tapestry of the UK, which raised over £500 at auction.

OS hosted a Charity Ball in September 2017, which raised just under £5,000.

In total, OS employees have raised £33,395

Field surveyors have raised a record-breaking £11,660 for their local charities:

Carers Trust – (1145181)
Children's Hospice Southwest (1003314)
KIDS Yorkshire and Humberside (275936)
Alzheimer's Research UK (1077089)
Macmillan Cancer Support (261017)

## Volunteering

155 employees from OS took a volunteer day. These days have been used to support a multitude of different charities, causes and projects. Employees have spent their volunteer day helping: Children's hospices, local schools, including The Cedar School Southampton, as well as taking on conservation initiatives at Broadlands Estate in Romsey and Pondhead Conservation Trust in the New Forest.

## Work experience

In 2017-18 we had interest from 75 potential candidates; a huge increase from last year.

Out of those 75, we placed 25 students, totalling 26 weeks' worth of work experience.

## Paid Public Service Duties

134 days were recorded for Paid Public Service Duties, this includes supporting school governors, armed forces and magistrates.

## Employee match funding

To ensure as many employees as possible benefit from the limited amount of funding available, we match individual fundraising activities to a maximum of £100 per charity, per employee. Each year a set amount is available for match funding which will be allocated on a first come, first served basis.

Since 1 April 2017, OS employees have raised a further £24,256 and taken advantage of our employee match funding to their selected charities. These include:

Alzheimer's Society
Macmillian Cancer Support
Wessex Kidney Centre
Breast Cancer Charity
Cancer Research UK
Grenfell Tower Appeal
Williams Syndrome
Mind
Level Water
NSPCC
Julia's House
Prince's Trust
Breast Cancer Haven
PICU
Aspire
Movember
Walking with the Wounded
Bearsden Choir Charity

The events OS employees have participated in have included:

Isle of Wight Challenge 2017
Mighty Hike
Charity Cycle Ride
The Moonwalk London 2017
Southampton Half Marathon
London & Bournemouth Marathons
Great South Run
Great North Run
River Dart 10k
Sky dives
Challenge Adventure Charities
Aspire Channel Swim 2017
MoBro
Walking Home for Christmas
Prague Run Tour (10K)

## Local community support

We also supported local communities in the following ways:

Young Enterprise Event and Dragons' Den Event – catering costs and complimentary use of Explorer House and Business Centre.
Our 2017 Poppy Appeal raised £410 in November 2017.
We donated food to Southampton City Mission during the summer of 2017.
We supported our local church events and 'The Big Lunch' by helping to design and print promotional literature.

## Community use of the OS Business Centre

Over the last 12 months we have had 26 (12 more than last year) bookings from the community. Infant schools, universities, Solent NHS Trust, Hampshire Fire & Rescue and Hampshire Constabulary are just a few government organisations who have benefited from our facilities at Explorer House.

We are able to offer our rooms and AV support at a community rate. The community bookers must pay for the catering costs, but registration and name badges are provided without charge.

We send out feedback forms to all bookers after their events and we are delighted with the high praise and compliments we receive regarding our building, our facilities and our customer service.

# Employee information

## Employee benefits

This year we secured new discounts for our employees with:

- Cineworld
- Delicious Dining
- Southampton Harbour Hotel
- Volkswagen Chandlers Ford
- Nissan

Employees access a range of benefits including the above from our Lifeworks portal. This portal also includes a social recognition platform as well as our Employee Assistance Programme.

## Equality and diversity

We have a diversity and equal opportunities policy which is regularly reviewed and which can be found in our Employee Handbook.

Human Resources continue to work closely with managers on health and attendance issues. Referrals are made to our occupational health provider for expert advice when appropriate.

Reasonable adjustments continue to be made in the workplace to enable employees to continue in their roles. These are a mixture of long and short term and include changes to equipment as well as work practices.

### Employee composition

The table below provides a breakdown of employees by career level and gender as at 31 March 2018.

Career Level	Male	Female	Total
Non-Executive Director & Board Member	5	–	5
Executive leadership team	8	3	11
Senior Manager	19	7	26
Professional Leader	18	7	25
Other roles	672	276	948
TOTAL	722	293	1,015

### Employee sickness and absence

Employee absence is monitored and return-to-work interviews are held to ensure appropriate support or adjustments can be offered. The data below is for 2017-18 as at 31 March 2018.

Year	OS, total days lost due to sickness	OS, average sickness days lost per employee	Average days lost per employee (Mean) (CIPD 2016)
2014–2015	4,725	3.9	7.4
2015–2016	5,034	4.2	8.3
2016–2017	5,481	5.3	7.5
2017–2018	4,047	3.35	8.38

## Sports and social clubs

We currently have 11 official OS Clubs running from Explorer House. These clubs include runners, singers, crafters, photographers and golfers.

## Health and Safety

We use Capita Property & infrastructure for provision of Health and Safety Advisory Services.

During the reporting period Capita have provided the following information:

A total of 29 incidents/accidents have been reported in 2017/2018

- 0 incidents have been reported to the HSE under RIDDOR 2013
- Most common cause of an incident/accident was slip, trip or fall on the same level
- The most incidents were reported in the month of January
- Six face-to-face training courses provided by Capita have been undertaken. These include Manual handling and First aid at work
- A total of 5 Fire risk assessments have been completed by the Capita H&S team
- 19 risk assessment have been completed/reviewed by the Capita H&S team.

## Off-payroll engagements

We disclose all off-payroll engagements which exceed six months. We use the services of contractors provided by third-party organisations to cope with peaks of demand on resources.

On 6 April 2017 the Government revised the IR35 legislation and off payroll engagements are managed in compliance with the legislation.

Off-payroll engagements as at 31 March 2018 for more than £245 per day and that lasts for more than six months are as follows:

	31 March 2018	31 March 2017
Number of existing engagements as of:	7	24
Number that have existed for less than one year at time of reporting:	5	6
Number that have existed for between one and two years at time of reporting:	1	10
Number that have existed for between two and three years at time of reporting:	1	7
Number that have existed for between three and four years at time of reporting:	0	0
Number that have existed for four or more years at time of reporting:	0	1

	31 March 2018	31 March 2017
Number of new engagements, or those that reached six months in duration between 1 April 2017 and 31 March 2018:	5	2
Number assessed as relevant to IR35:	0	0
Number assessed as not relevant to IR35:	5	2
Number engaged directly and are on payroll:	0	0
Number of engagements reassessed for consistency / assurance purposes during the year:	5	2
Number of engagements that saw a change to IR35 status following the consistency review:	0	0

	31 March 2018	31 March 2017
Number of off-payroll engagements of board members and/or senior officials with significant financial responsibility during the financial year:	0	0
Number of individuals on payroll and off-payroll that have been deemed "board members, and/or senior officials with significant financial responsibility", during the financial year:	18	14

# Sustainability

Ordnance Survey is committed to gaining ISO 14001:2015 Environmental Management System (EMS) accreditation, in response to stakeholder demands and a recognition that its work helps further the United Nations' Sustainable Development Goals (SDGs). To this end, we have recently invested in sub-metering and energy management software to establish a baseline for accurate energy management. We have also trained staff who are involved in the EMS. A schedule of works aligned to the objectives within the EMS will be ongoing; reducing emissions and waste and increasing resource efficiency across the supply chain and its operations.

Ordnance Survey received its first full year payment of the Renewable Heat Incentive (RHI) for its ground source heat pump. Between December 2016 and December 2017, £111,804 of RHI funds were received. These RHI funds are to be used to finance the initiatives and management of the EMS.

In general terms, we have reduced emissions and energy consumption year-on-year. This is seemingly due to the structural changes of the organisation rather than any correlation to energy efficiency drives or interventions.

## Greenhouse gas emissions

Sustainable Development Goals:



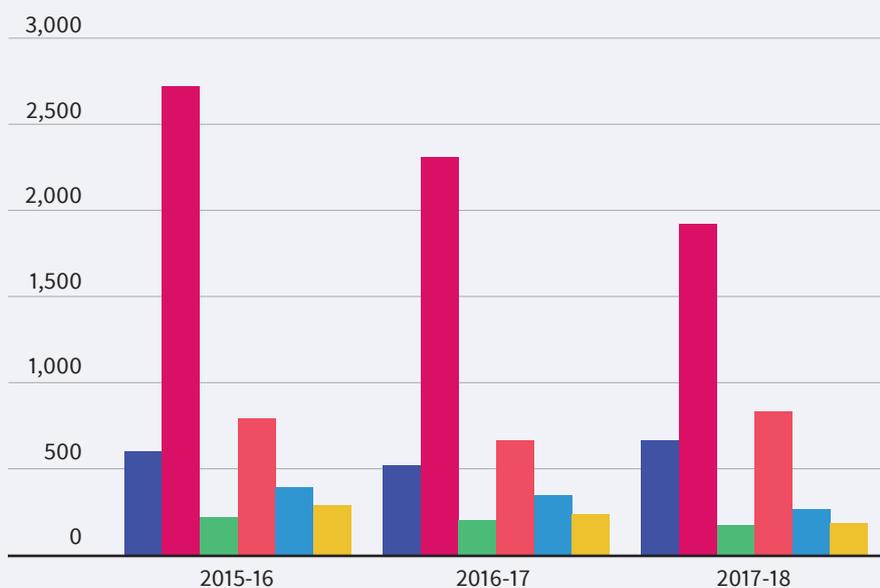
There has been an ongoing fall in annual electricity consumption at Head Office (284,000kWh drop) and the Gloucester Data Centre (69,000kWh drop). This may be due to the consolidation and upgrading of the IT infrastructure in the data centres, the fall in staff numbers and preferential weather during the year. Without granular and ongoing energy data, it is impossible to pinpoint the exact reason for the lower consumption. Newly installed sub-metering and energy management software will give us this insight.

It should be noted that the heat generated from the ground source heat pump has been included for the first time. The ground source heat pump has been in operation since 2010, though has not been sufficiently metered until recently to determine the heat output. Mains electricity is used to generate the heat (reported with the carbon account), though the 'additional' heat generated via the heat pumps does not have an emissions factor – in effect is carbon 'neutral'.

Greenhouse gas emissions from head office operations also fell significantly (17%), partly due to lesser consumption (3% energy reduction in kWh), but mainly due to the emission factor changing, reflecting less carbon-intensive electricity generation. To illustrate, using OS's electricity consumption figure and emission factor from 2014/15, there is a 'drop' of 819 tCO<sub>2</sub>e if the 2017/18 emission factor is used.

During 2016/17 and 2017/18, our fleet of 280 cars changed. Although the average fleet emission cap of 130gCO<sub>2</sub>/km did not change, it is expected that more modern vehicles will be more fuel efficient than their predecessors. We have determined a new and accurate methodology for recording business mileage, and this was retrospectively applied to 2016/17 figures only. This resulted in an 'extra' 1,000,000km per year being accounted for. Therefore, comparing 2016/17 and 2017/18 mileage figures with previous years will be misleading. However, between 2016/17 and 2017/18, a drop of 7% less miles travelled was observed, with an associated drop of CO<sub>2</sub>e by 10%.

Greenhouse gas emissions tCO<sub>2</sub>e



- Total Scope 1 emissions (gas, fuel for fleet cars and fugitive emissions from air chillers).
- Total Scope 2 emissions (off-site electricity generation).
- Total Scope 3 emissions (transmission loss of electricity).
- Emissions attributable to Scope 3 official business travel (rail, taxi, air, underground).
- Emissions attributable to Scope 3 Managed assets (Gloucester Data Centre, including fugitive emissions and electricity consumption).
- Emissions attributable to Scope 3 Managed assets (Cessna surveying aircraft).

## Greenhouse gas emissions

Absolute metrics	Scope/emission/energy use	2015-16	2016-17	2017-18
Non-financial indicators (tCO <sub>2</sub> e)	Total Scope 1 emissions (gas, fuel for fleet cars and fugitive emissions from air chillers)	606.9	523.1	667.7
	Total Scope 2 emissions (off-site electricity generation)	2,713.2	2,306.3	1,916.0
	Total Scope 3 emissions (transmission loss of electricity)	224.0	208.6	179.1
	Total emissions attributed to electricity consumption (Scope 2 and 3)	2,937.2	2,514.9	2,095.1
	Emissions attributable to Scope 3 official business travel (rail, taxi, air, underground)	793.2	668.6	836.1
	Emissions attributable to Scope 3 Managed Assets (Gloucester Data Centre, including fugitive emissions and electricity consumption)	398.3	350.1	273.1
	Emissions attributable to Scope 3 Managed Assets (Cessna surveying aircraft)	291.3	241.8	188.1
	<b>TOTAL EMISSIONS (ALL SCOPES)</b>	<b>7,964.1</b>	<b>6,813.4</b>	<b>6,155.2</b>
Related energy consumption (kWh)	Electricity (Mains 'Green' Tariff – EH and GDC)	6,663,798	6,373,419	6,156,855
	Gas	543,608	365,909	507,182
	<b>TOTAL kWh Consumption</b>	<b>7,207,406</b>	<b>6,739,328</b>	<b>6,664,037</b>
Financial indicators (£)	Expenditure on energy (gas, electricity, BUS fuel, GDC electricity, Cessna fuel)	£1,064,692	£1,006,328	£966,807.44
	Expenditure on CRC (including fees and allowance)	£53,261	£46,216	£39,720
	Expenditure on official business travel (rail, hire cars, taxis, air, BUS leasing)	£2,335,830	£2,229,713	£2,285,672.82
	<b>TOTAL expenditure on energy, CRC and official business travel</b>	<b>£3,453,783</b>	<b>£3,282,258</b>	<b>£3,292,201</b>
Normalised metrics	Asset	2015-16	2016-17	2017-18
kWh/m <sup>2</sup>	Explorer House	424.9	395.0	382.4
kWh/m <sup>2</sup>	Gloucester Data Centre	3,623	3,545	3,228
g CO <sub>2</sub> e/km travelled	BUS mileage (kilometres)	156.2	158.7	157.5
g CO <sub>2</sub> e/km travelled	Hire vehicles mileage (kilometres)	163.7	164.1	157.3
Number of instances	Domestic flights	321	246	290
kg CO <sub>2</sub> e/passenger-flight	Domestic flights	260.5	195.4	231.8
kg CO <sub>2</sub> e/passenger-flight	Short-haul flights	295.2	227.3	318.7
kg CO <sub>2</sub> e/passenger-flight	Long-haul flights	2,161.3	1,741.1	2,263.2
kg CO <sub>2</sub> e per journey	Domestic rail travel	10.9	11.6	11.2
Financial breakdown of business travel	BUS lease	£1,484,166	£1,280,310	£1,359,436.48
	BUS fuel costs	£217,207	£224,256	£205,684.70
	Hire car costs	£54,874	£50,924	£17,300
	Domestic rail travel (including underground)	£297,136	£275,035	£237,054
	Domestic flights	£49,524	£38,577	£51,077
	Short-haul flights	£128,170	£50,099	£51,446
	Long-haul flights	£280,392	£269,695	£328,100
	Domestic taxis	£41,568	£40,817	£35,571
<b>TOTAL</b>	<b>£2,553,037</b>	<b>£2,229,713</b>	<b>£2,285,672.82</b>	

Our fleet now incorporates three Plug-in Hybrid Electric Vehicles (PHEVs), five traditional hybrid cars and numerous petrol-engine cars (as opposed to being exclusively diesel engines). Despite newer engine technology, the incorporation of petrol engine cars may increase carbon dioxide emissions compared with a pure diesel fleet. However, particulate and nitrogen oxide emissions should decrease (though these are non-reportable).

Business travel (mileage) has increased across the board, especially air travel. This reflects our change in strategic direction and activity in the international arena. However, domestic flight numbers have increased also and may be related to closer working with our Scottish customers.

Our Cessna aircraft fuel consumption was much lower due to poor weather throughout the flying season and aircraft being out of service.

A 25% share in Dennis Maps was secured by Ordnance Survey in 2016. Therefore, using the equity share approach, we must incorporate 25% of Dennis Maps' emission into our annual carbon account, which will uplift the total emissions by around 55 tCO<sub>2</sub>e. An inclusion of the 'starting year' of 2016/17 has been retrospectively applied.

### Finite resource consumption: water and paper

Sustainable Development Goals:



Total water consumption has fallen by 8%, though only by 1% on a normalised basis (m<sup>3</sup> per FTE). This is mainly due to a drop in the number of staff. It's interesting to note that the proportion of rainwater used has increased (to 36%) per FTE. Due to the lack of sub-metering, it's impossible to ascertain why water levels have varied and that the m<sup>3</sup>/FTE metric does not fully correlate to the total water used. Despite less staff frequenting the head office in relation to previous years, total water per FTE remains high at 5.9m<sup>3</sup>/FTE. Further investigations are required to determine why water usage is relatively unaffected by staff numbers.

In April 2017, a manual sub-meter was installed on the external water feature at Explorer House. To date, the water feature has consumed 59,000 litres of mains water, which equates to 1.2% of all mains water consumed on site.

Water footprinting ('embedded water' or 'Scope 3 water') methodologies are still in their infancy and we await guidance from government before we start quantifying the indirect impacts of water usage (energy used in abstraction, treatment and transportation of water and the embedded water usage of and in products).

Paper procurement has dropped slightly compared with last year. Some of this reduction can be attributed to having fewer staff in the head office, and digital print services using a higher proportion of heavier grades of paper which fall outside of the reporting scope (80–100g/m<sup>2</sup>). However, paper usage remains above the GGC's target of a 50% reduction and paper consumption will be addressed in the new EMS.

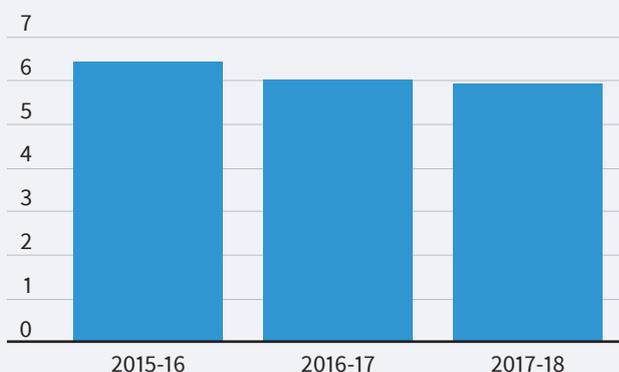
### Waste minimisation and management SDG 12, 15

Sustainable Development Goals:

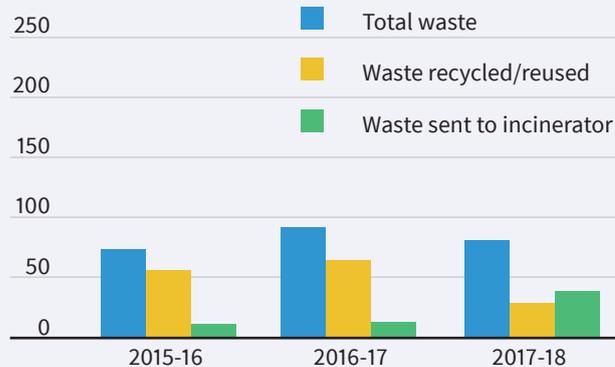
Ordnance Survey changed its waste contractor in April 2017. Due to methodological changes in the way waste data is collated by the contractor, it may be difficult to accurately appraise waste data between 2017/18 and previous years. It is apparent that the new waste data is more accurate than the previous contractor's data.

In 2017-18, there was a large shift to more waste being incinerated with energy recovery (48%), with a fall in recycling (46%, excluding ICT waste) and an increase in residual waste going to landfill (6%). More data will be needed to track progress reliably. The fact that more waste is being incinerated alludes to poor segregation/contamination of waste and is counter to the Waste Hierarchy. However, it is difficult to make assertions as to why less waste is being recycled. New waste objectives and subsequent promotions (as laid out in the new EMS) should impact the above figures.

Total water consumed per FTE in m<sup>3</sup>



Waste (tonnes)



## Finite resources consumption – water and paper procured

Absolute metrics			2015-16	2016-17	2017-18
Non-financial indicators (m³)	Water consumed (m³)	Mains water supply (Scope 2)	5,341	5,158	4,309
		Harvested rainwater used (Scope 1)	1,492	1,229	1,564
		Mains water tCO <sub>2</sub> e	1.8	1.8	0
		Waste water tCO <sub>2</sub> e	4.8	4.5	0
		Total tCO <sub>2</sub> e	6.7	6.3	0
		<b>TOTAL CONSUMPTION (m³)</b>	<b>6,833</b>	<b>6,387</b>	<b>5,873</b>
Normalised metrics	Water consumed (m³)	Mains water supply per FTE	5.00	4.83	4.32
		Harvested rainwater used per FTE	1.40	1.15	1.57
		<b>TOTAL CONSUMPTION per FTE</b>	<b>6.39</b>	<b>5.98</b>	<b>5.89</b>
Absolute metrics	Paper procured (tonnes)	Procurement (through Banner GGC)	3.93	2.97	1.15
		Procurement through FM contractor	3.00	3.05	3.28
		<b>TOTAL PAPER PROCURED</b>	<b>6.92</b>	<b>6.01</b>	<b>4.43</b>
Financial indicators (£)	Water consumed (£)	Mains water supply and treatment	£18,495	£20,582	£17,604
		Used harvested rainwater treatment	£3,416	£2,635	£3,604
		<b>TOTAL WATER SUPPLY AND TREATMENT</b>	<b>£21,911</b>	<b>£23,217</b>	<b>£21,208</b>

## Waste

Absolute metrics			2015-16	2016-17	2017-18
Non-financial indicators (tonnes)	Total waste arisings (tonnes)		71.56	88.91	78.08
	Non-hazardous waste	Waste recycled/reused (excludes ICT)	54.45	62.02	27.48
		ICT equipment reused/recycled externally	0.68	8.57	4.41
		Waste composted	4.48	4.48	4.02
		Toner cartridges (recycled)	0.18	0.44	0.25
		Waste sent to incinerator (energy recovery)	10.43	11.88	37
		Residual waste sent to landfill	1.05	1.19	5
	Hazardous waste	Batteries (recycled)	0.09	0.20	0.12
		HCFC equipment (fridges and so on)	0.15	0	0.06
		Fluorescent lamps (recycled)	0	0.08	0
		Sanitary waste (not recycled)	0.06	0.06	0.06
		WEEE	0.25	0.75	0.38
		Engine oil	0	1.60	0
	Financial indicators (£)	Total disposal costs (£)		£22,736	£33,851
Non-hazardous waste		<b>TOTAL NON-HAZARDOUS WASTE COSTS</b>	<b>£18,764</b>	<b>£29,579</b>	<b>£15,454</b>
		Waste recycled/reused	£17,711	£16,085	£15,083
		ICT equipment reused/recycled externally	£1,190	£14,506	£4,520
		Toner cartridges (recycled)	£379	£331	£455
		Waste composted	nil	nil	£77
		Waste sent to incinerator (energy recovery)			
Hazardous waste		<b>TOTAL HAZARDOUS WASTE COSTS</b>	<b>£3,972</b>	<b>£4,272</b>	<b>£3,999</b>
		Batteries (recycled)	£188	£302	£604
		HCFC equipment (fridges and so on)	£110	-	-
		Fluorescent lamps (recycled)	-	-	-
		Sanitary waste (not recycled)	£3,464	£3,260	£3,230
		WEEE	£210	£710	£165
	Engine oil	0	0	0	

The new EMS has objectives to limit the amount of plastic waste generated. We have given all OS staff members reusable coffee cups, which will reduce the number of disposable cups being used. This will negate three tonnes of waste per year.

We are also looking at giving each staff member a refillable water bottle, to reduce waste from plastic water bottles.

We're hosting a local 10K race in the summer, helping it to be the first 'Be Plastic Clever' run in the country, by bringing and serving water in non-plastic containers.

Looking forward, we'll continue to educate staff on recycling best practice.

### Sustainable procurement

Sustainable Development Goals:



The Procurement team continues to drive the environmental agenda with specific questions regarding potential suppliers' approach to management and monitoring environmental issues. There is a range of specific environmental questions contained in our standard tendering documentation including carbon footprint, energy reduction, staff travel and recycling targets. As part of our ongoing commitment to a sustainability agenda, Procurement will be working on a new and updated sustainable procurement policy and actively supporting the wider organisation's EMS plans.

Operationally our current print supplier is required to print all our maps on paper that is either approved by Forest Stewardship Council or Pan European Forest Council and, wherever possible, we use Government Framework contracts where Greening Government Commitments are in place.

In support of the updated sustainable procurement policy, a new Supplier Code of Conduct is being rolled out to all our suppliers which will place an obligation on them to reduce supply chain impacts on our environment. We will be working closely with all suppliers to ensure delivery of sustainable and ethical goods and services.

### Anti-slavery act

An anti-slavery statement has been published on our website, and the Procurement Category Management teams have also undertaken supplier and supply chain reviews specifically centred on the supplier's approach to the Modern Slavery Act. This will continue to be an ongoing operational activity that the Procurement team will undertake.

### Biodiversity Action Plan and Climate Change Adaptation Plan

Sustainable Development Goals:



Ordnance Survey does not have an official Biodiversity Action Plan or Climate Change Adaptation Plan. These are now two objectives within the EMS. The unmanaged 'wild' area consisting of native British flora to the east of Explorer House was planted in 2010 to increase the biodiversity at the head office site.

### Future improvements in sustainability

The new EMS will, by its nature, set a course of continual improvement in sustainability over the short, medium and long term. The newly installed sub-meters and energy management software should identify potential energy savings, seeding energy saving projects. Embedding principles of the circular economy and sustainability throughout the organisation using BS8001:2017 will shape the way sustainability is viewed, recorded and acted upon. Lifecycle analyses will help improve the sustainability up and downstream of our supply chain.



# Principal risks and uncertainties

Further details on the OS principal risks and uncertainties and our approach to risk management are reported as part of the 2017/18 Governance Statement on page 27.

Neil Ackroyd  
Acting Chief Executive Officer  
7 August 2018

# Governance statement

## Scope of responsibility

As Acting Chief Executive Officer of Ordnance Survey (OS) I fulfil the role of Accounting Officer. I have collective responsibility with the OS Board for maintaining a sound system of internal control that supports the achievement of OS's policies, aims and objectives, while safeguarding the public funds and departmental assets for which we are personally responsible, in accordance with the responsibilities assigned to us in Managing Public Money and the Companies Act.

## The purpose of the Governance statement

The Governance Statement is intended to give a clear understanding of the dynamics of the business and its control structure. It explains how OS has complied with the principles of good governance and reviews the effectiveness of its governance arrangements.

## The Governance framework

The OS governance structure, current roles and high level responsibilities within the governance framework are outlined below:

**UK Government Investments Limited:** OS reports to BEIS (Department for Business, Energy and Industrial Strategy) through UK Government Investments Limited (UKGI) which advises BEIS Ministers on the management of the Government's interest in OS and a UKGI representative sits on the OS Board.

**OS Board:** comprises a Non-Executive Chair and five other Non-Executive Directors in addition to the Statutory Executive Directors, and it meets at least six times a year. It is responsible for determining the OS long term strategy and vision; monitoring the external business environment and challenging internal business performance to ensure the strategy remains relevant and effective. It's also responsible for overseeing the successful discharge of the remit assigned to OS by Ministers, focusing on the strategic priorities for the business.

**Accounting Officer and Chief Executive Officer:** As Chief Executive Officer I am responsible for the day to day leadership

of OS. I have responsibility for the proper, effective and efficient use of public funds and the stewardship of OS resources.

**Executive Committee (ExCom):** is the senior executive forum for OS Limited and its group of companies (OS Group) and is constituted and led by the Chief Executive Officer. Its purpose is to assist the Chief Executive in leading the delivery and development of the Strategic Plan (and budget) agreed by the OS Board, monitoring operating and financial performance against the Strategic Plan and budget, assessing and controlling strategic and corporate risks and discussing and deciding upon operational business issues, including approvals and guidance sought by the business in accordance with the delegations agreed by the Board, and processes and policies accordingly put in place by ExCom.

ExCom has received monthly strategic risk updates since May 2017 which has increased the profile of risk management across the business and provided more focus and engagement. The meetings have challenged, modified and rationalised the risks. Additionally, attention to recommendations from internal audit reports has improved significantly because of the Quarterly Business Reviews.

**Audit and Risk Committee (OSARC):** is responsible for providing assurance to me as Accounting Officer and to the OS Board that the organisation's system of governance, risk management and internal control is operating effectively. It is chaired by a Non-Executive Director supported by a further two Non-Executive Directors. The Chair annually assesses whether the Committee has discharged its responsibilities effectively, in accordance with its terms of reference. OSARC meet at least three times a year.

During 2017/18 OSARC established a strategic risk 'Deep Dive' programme in addition to reviewing assurance activity to support its annual risk management opinion to the Board.

Cyber security risk is a regular agenda item for the Committee.

**Remuneration Committee:** is responsible for developing and reviewing the OS Remuneration Policy and for making recommendations to the Board on the remuneration for Directors and designated Senior Executives, including pension rights and any compensation payments. It comprises at least three

Non-Executive Directors, one of whom is appointed as Chair. The Committee meets at least quarterly. Further information on the work of the Remuneration Committee can be found in the report on Directors' remuneration on page 35.

**Nomination Committee:** is responsible for agreeing Executive and Non-Executive appointments and terminations, reviewing succession plans for Executives and Non-Executives, and undertaking regular reviews of the structure, size, and composition of the Board. The Committee comprises at least three Non-Executive Directors, one of whom is appointed as Chair.

**Pension Committee:** is responsible for monitoring the operation of the OS Horizon, OS Group Life Scheme, and Civil Service Pension Schemes. The Committee meets at least annually and comprises a Non-Executive Director and an Executive Director.

## Board effectiveness

A self-assessment of the Board's effectiveness was conducted during the year. This highlighted the following areas for improvement:

- Clear articulation of the Board's priorities (and recognition of when these change).
- More attention to the forward agenda and advance scheduling of 'deep dive' topics for Board (and OSARC) consideration (over a 12-month period).
- More concise Board papers with increased focus on business dashboard and strategic scorecard, KPIs and milestones.
- Regular risk reporting from OSARC to improve understanding of business risks and their mitigation.

The Chair of OSARC provides the OS Board and I with an annual report on the effectiveness of the Committee in discharging its responsibilities.

## Managing conflicts of interest

The Board agrees and documents an appropriate system to record and manage conflicts and potential conflicts of interest

Attendance at Board and Committee meetings in 2017–18 was as follows:

Board and Committee composition and attendance	Committee Membership	OS Board	OSARC	Remuneration Committee	Nomination Committee	Pensions Committee
Total number of meetings		7	3	7	2	3
<b>Kieran Murphy</b> , Non-Executive Chair	Nomination Remuneration	7/7	1/1*	7/7	2/2	
<b>Mike Carr</b> , Remuneration and Nomination Committee Chair	OSARC Nomination Remuneration	7/7	3/3	7/7	2/2	
<b>Jacques Cadranel</b> , Pensions Committee Chair	OSARC Pensions Nomination	7/7	3/3		1/2	3/3
<b>Stephen Lake</b> , OSARC Chair	OSARC Nomination	7/7	3/3		1/2	
<b>Anne Jessop</b> , Non-Executive Board Member (to September 2017)	Remuneration	1/3		4/5		
<b>Michael Harrison</b> , Non-Executive Director, UKGI representative (to October 2017)	Nomination Remuneration	2/2		5/5	0/1	
<b>Iain Rolfe</b> , Non-Executive Director, UKGI representative (from October 2017)	Nomination Remuneration	5/5		2/2	1/1	
<b>Nigel Clifford</b> , Chief Executive Officer (until May 2018)		7/7	2/3	6/7	2/2	3/3
<b>Neil Ackroyd</b> , Managing Director of OS Ventures, Deputy CEO & Acting CEO (from June 2018)		6/7	2/2			
<b>Clive Mosey</b> , Chief Finance Officer (to October 2017)		4/4	2/2	2/2		
<b>Jamie Blackman</b> , Head of Finance **		1/1				
<b>Paul Bragg</b> , Chief Finance Officer (from January 2018)		2/2	1/1			

\*Attended as an observer

\*\*Attended as representative of Finance in the absence of the CFO which was being recruited for

of Board members. None have been recorded this financial year.

#### Compliance with the UK Corporate Governance Code

With effect from April 2015 the entire functions, business and assets of the OS Trading Fund were transferred to Ordnance Survey Limited, a private company limited by shares and wholly owned by the Secretary of State for Business, Innovation & Skills. OS has considered the UK Corporate Governance Code in designing its governance processes and arrangements to align with best practice as far as is possible.

#### The Risk and Internal Control Framework

Our strategy for risk management is designed to achieve a cost effective balance between mitigation and acceptance of risk. Risks are proactively identified, assessed and managed at all levels of the organisation so that exposure to risk, including information risk, is captured, reported and maintained at an acceptable level. Risk management is supported through the key governance and decision making groups. Senior management takes responsibility for embedding a consistent risk and control framework throughout the organisation. The Internal Audit team assesses the systems of governance, risk and control via a planned programme of assurance work.

Strategic risks are reviewed monthly at Executive Committee to assess the relevance, completeness and adequacy of mitigating controls. Each Executive Director is required to maintain review and oversight of the arrangements for identifying and managing risk for the areas for which they are responsible. The Chief Finance Officer acting as Chief Risk Officer is responsible for monitoring risk, reporting to OSARC and the Board on the adequacy of the strategic risk management process.

The Internal Audit team has used the strategic risk register to inform its risk based internal audit programme and conducted a series of risk maturity reviews across different business functions to evaluate the effectiveness of the risk management process.

## Senior management assurance

Maintaining and demonstrating a strong control environment is an important part of ensuring the business meets its objectives and goals. As part of the year end process the Head of Risk and Assurance conducted a control self assessment and annual assurance statement exercise to provide the OS Board and I with assurance that the risk management, governance and control systems established by senior management are reliable and effective.

It has also:

- Provided a framework for management to review, assess and validate the operational effectiveness of their internal controls.
- Improved awareness of risk and controls among management and staff.
- Provided a structured approach to improving the controls framework through the organisation.
- Enhanced responsibility and accountability for risks and controls among management and staff.
- Highlighted best practices and opportunities to improve business performance.
- Provided a focus on areas requiring management and/or internal audit attention.

## Summary risk profile

OSARC reports to the Board and is satisfied OS is managing its principal risks for uncertainties appropriately. During 2017/18 the Committee introduced a strategic risk deep dive with senior management attending its meetings to explain how strategic risks are being reduced to an acceptable level or how issues of concern identified by Risk & Assurance are being managed effectively to mitigate risk. During the year there was specific focus on cyber security, revenue diversification and growth, Public Task and Geospatial Commission.

The risk profile for the year included the following strategic risks and opportunities to achieving OS strategic goals:

### Goal: Maximise our value to GB

Risk: Successful delivery of the strategic business plan will be impacted if OS is not recognised as a key part of Critical National Infrastructure and delivery of the Public Task is not fully recognised by key stakeholders.

### Goal: Be the natural geospatial advisory partner to policy-makers in GB and internationally

Risk: Engagement with HMG to properly understand needs and support initiatives through the Public Task to enhance perception and importance of OS brand and its relevance, increasing our opportunities to advise, provide solutions, our role in GB GI activity, thought leadership, revenue opportunities and strategy delivery.

### Goal: Grow and diversify our revenues

Risk: The Government requirement to provide OpenData access results in a short to medium term funding gap and limited revenue growth, degradation of OS data quality and service.

- Deliver a platform that enables more detailed geospatial data and its manipulation by users or has the ability manage new types of data content i.e. micro-geography, reduces revenue options.
- Reach International Geospatial, Land Administration & Infrastructure markets and interpret needs into clear propositions to improve opportunities and revenue.

- Significant disruption of the market (including opportunities arising from open data) may alter the consumer business model, leading to reduced traffic levels, and conversion rates, thereby resulting in lower than planned (revenue and) profit, reduction in brand awareness/relevance and social purpose impact.

### Goal: OS is a great place to work

Risk: Engage staff to understand and recognise business wide challenges and opportunities and setting realistic and clear expectations due to enhance staff motivation and morale, reduce turnover and ensure successful and timely strategy delivery.

### Goal: Make OS an efficient digital business

Risk: Deliver modern processes, technologies and platforms that can be translated into attractive propositions and sold beyond OSGB, to improve economies of scale.

- Timely replacement of legacy systems and improved operational processes to minimise costs serving existing products and services.

### Goal: Ensure OS is resilient and relevant

Risk: Business operations are interrupted by a major event impacting service delivery, reputation and short to medium term revenue loss and increased cost.

- Increasing cyber and data corruption risks in a data led environment could interrupt business and service delivery, cause reputational damage, and short to medium term revenue loss and increased cost.
- Identify sufficient human resource capability and/or capacity to meet both current and future internal and external demands.
- Medium to long-term technology roadmaps that require continuous 'whole life' investment in fast moving markets are required to improve resilience, revenue and reputation.

## People

As an organisation with significant intellectual property, and working in a constantly evolving industry, OS is reliant on the skills, knowledge and integrity of our employees. OS needs to be able to respond quickly to new and emerging requirements, while maintaining the efficiency and effectiveness of operations. We do this by training our employees, providing adequate opportunities for development, career progression and financial reward. These risks are addressed through appropriate recruitment activities, talent identification with tailored training programmes, graduate schemes, internships and recognition schemes.

OS uses the services of contractors to cope with the peaks of demand on resources, and complies with the recommendations outlined in the HM Treasury Review of the tax arrangements of public sector appointees.

## Whistleblowing policy

OS has established appropriate arrangements for raising concerns and reporting fraud which we consider to be effective. These arrangements include:

- Whistleblowing policy and procedures.
- The Head of Risk & Assurance as a named independent person to report any concerns to.
- Additional independence with the Chair of OSARC as a named Non-Executive to report to.
- The National Audit Office as an alternative independent party.
- Regular reminders to ensure all staff remain aware of the policy.

One concern was reported during 2017/18 and investigated by the Head of Risk & Assurance.

## Information security

OS considers the confidentiality, integrity and availability of its information to be of high importance. The Chief Data Officer assumed Senior Information Risk Owner (SIRO) responsibilities during 2017/18. The SIRO is supported by Information Asset Owners who own and address risks to their information assets.

We have strengthened our Operational Security team from one Security Architect, to four full time members of the team and one contract team member. Further to the specialist security team, staff within the OS Engineering team form part of the 'virtual' security team. Significant focus has also been placed on security consultation with projects to ensure new capabilities are done so with security in mind, and security tested.

A monthly security working group, chaired by the SIRO, has been formed.

The Information Assurance and Security team provide assurance to stakeholders that governance structures, policies and processes are in place to protect the confidentiality, integrity and availability of the organisation's information.

OS continued to achieve Cyber Essentials PLUS accreditation which demonstrates information security compliance to our stakeholders.

OS completed the annual HMG Security Policy Framework and was subject to internal audit review and OSARC consideration prior to submission to BEIS.

Cyber security is also a regular OSARC agenda item.

We have continued to raise and promote security awareness across the organisation. The interactive monthly information security training and awareness programme first introduced in January 2017 for all OS staff continued throughout 2017/18. Subjects included Passwords, Phishing, Business Continuity, Data Protection and Identity Theft.

Information security risk was also considered as a key element of our arrangements to implement GDPR for May 2018.

## Protecting personal data

During 2017/18 any data compromise and data loss incidents were logged and investigated but were not considered to present substantial harm or distress to the data subject, so were not reported to the Information Commissioner's Office (ICO).

The Information Assurance and Security team seeks to ensure OS continues to understand its obligations to comply with the Data Protection Act 1998 and GDPR from May 2018.

## Internal Audit opinion

Internal Audit assessed the systems of governance, risk management and internal control based on a programme of work reviewed and agreed by OSARC.

The results of Internal Audit activity, including assurance opinions and progress with implementing recommendations arising from that work, were reviewed at each OSARC.

The Head of Risk and Assurance provided an annual opinion that partial assurance can be provided over the adequacy and effectiveness of OS's systems of governance, risk management and internal control. Where weaknesses were identified through the internal audit work, management agreed appropriate corrective actions and a time scale for improvement.

Internal Audit published 18 assurance opinion based reports (comprising six limited, seven partial and five substantial opinions) and three advisory based reviews.

The Internal Audit recommendation tracking process was revised during the year with supporting recommendation status information provided to me for quarterly director review meetings. This has significantly improved recommendation closures. There were no high priority recommendations not receiving adequate management attention.

## Looking ahead

The Board and ExCom have worked at developing plans to improve the risk management and governance arrangements at OS. We will continue to review those strategic risks to achieving our strategic goals with increased scrutiny by ExCom on the timeliness and success of mitigating actions and will be looking to incorporate risk reporting as a key component of the quarterly review meetings I have with Directors.

We will continue to integrate the strategy and business planning, budgeting and risk management processes as fundamental to delivering the OS strategy with OSARC and Board oversight.

## Review of effectiveness

As Accounting Officer, I have responsibility for conducting an annual review of the effectiveness of the system of governance, risk management and internal control.

This review is informed by:

- OSARC.
- The oversight and work of the Executive Directors and senior managers.
- The annual control self assessment process and annual letters of assurance received from OS senior management and Executive Directors confirming their responsibilities in relation to OS strategy and values, risk management, internal control and security.
- The work of the Risk & Assurance function.
- The external auditors, the National Audit Office.

All the above have a role in ensuring the OS risk management, governance and internal control structures are adequately designed and operating effectively.

I have been advised on the implications of the result of my review of the effectiveness of the system of governance and agreed plans to address weaknesses and to ensure continuous improvement of the system of internal control.

## Management certification

I have considered all the evidence provided during the preparation of this annual Governance Statement and have concluded that the organisation's overall governance and internal control structures are effective.

**Neil Ackroyd**  
**Acting Chief Executive Officer**  
**7 August 2018**

# Directors' report

Company number: 09121572

The Directors present the Annual Report and Accounts of Ordnance Survey Limited (the Company) and its subsidiaries (together the Group) for the year to 31 March 2018. The company is domiciled and incorporated in the United Kingdom, the parent and ultimate controlling party of the Company is the Secretary of State for Business Energy and Industrial Strategy.

The principal activity of the Company in the year to 31 March 2018 was the collection, maintenance and distribution of up to date geospatial information.

A detailed financial review is included as part of the Strategic Report on page 8.

## Results and dividends

The results are set out in the statement of profit or loss on page 42. The Directors declared a dividend for the year of £18.0m (2016–17: £nil). No dividends were paid during the year.

## Directors

The following Directors held office during the year ended 31 March 2018.

<b>Jacques Cadranel</b>	Non-Executive Director
<b>Mike Carr</b>	Non-Executive Director
<b>Michael Harrison</b>	Non-Executive Director (Employed by UKGI) (resigned 16 October 2017)
<b>Iain Rolfe</b>	Non-Executive Director (Employed by UKGI) (appointed 16 October 2017)
<b>Stephen Lake</b>	Non-Executive Director
<b>Kieran Murphy</b>	Non-Executive Chairman (appointed 17 May 2016)
<b>Neil Ackroyd</b>	Managing Director of OS Ventures and Acting Chief Executive Officer (from June 2018)
<b>Nigel Clifford</b>	Chief Executive Officer (until May 2018)
<b>Paul Bragg</b>	Chief Financial Officer (appointed 2 January 2018)
<b>Andrew Loveless</b>	Commercial Director (resigned 31 May 2017)
<b>Clive Mosey</b>	Chief Financial Officer (resigned 3 November 2017)

Further information about the Directors' interests is provided in the Directors' remuneration report.

## Directors' indemnities

The Company has made qualifying third party indemnity provisions for the benefit of its Directors, which were made during the year and remain in force at the date of this report.

## Research & Development, and future developments

These areas are dealt with in the Strategic report.

## Corporate Governance

These areas are dealt with in the Governance Statement.

## Sustainability

Sustainability, including greenhouse gas emissions, is dealt with in the Sustainability report.

## Risk profile

These areas are dealt with in the Governance Statement.

## Financial risk management

The Group's activities expose it to a number of financial risks including credit risk, cash flow risk and liquidity risk.

## Credit risk

Credit risk manifests itself in the trade receivables balance, which is spread over a large and diverse customer base. The group monitors the financial position of customers on initial application and on an ongoing basis. Provision is made for debts which are considered doubtful. At the year end, the Directors do not consider there to be any material unprovided credit risk.

## Cash flow risk

The group monitors cash flow risk by maintaining cash flow forecasts and ensuring that adequate unutilised cash facilities are maintained.

## Supplier payments

During the year average days from invoice date to payment date for the Company was 29.9 days (2016–17: 38.5).

## Treasury management

Most Group business is transacted in sterling although there are some large contracts transacted in US\$. The international subsidiary also receives some payments in foreign currencies. The group monitors the fluctuations on foreign currencies and will consider the use of cashflow hedges if a material risk is identified.

## Political contributions

No political donations were made in the year by the Company or Group.

## Branches outside the UK

The Group has branches, as defined in section 1046(3) of the Companies Act 2006, outside the UK as follows:

- United Arab Emirates
- Saudi Arabia
- Singapore
- Hong Kong

## Going concern

After making enquiries, the Directors of the Company concluded that it has adequate resources to continue in operational existence for the foreseeable future. The Company therefore adopts the going concern basis in preparing its financial statements.

## Disabled employees

Applications for employment by disabled people are always fully considered, bearing in mind the skill set of the person against the criteria of the role. In the event of members of staff becoming disabled, every effort is made to ensure their employment with the Group continues and that appropriate training is arranged. It is the policy of the Group and the Company that the training, career development and promotion of disabled people should, as far as possible, be identical to that of other employees.

## Employee collaboration

Ordnance Survey has developed a broad range of employee communications channels and mechanisms to make sure employees are informed, involved and engaged on everything concerning the current and future business. Employee engagement through communication ranges from broadcast communications, such as an e-magazine (The Grid), a daily updated intranet (Business Today) and an internal social media channel (Yammer at OS) through to dialogue focused events such as CEO briefings, yearly surveys and regular listening sessions. OS recognises and works along side Prospect and PCS trade union.

## Corporate governance

The company's statement on corporate governance can be found in the governance statement of this Annual Report.

## Independent auditors

So far as the Directors are aware, there is no relevant audit information, (that is, information needed by the Company's auditors in connection with preparing their report), of which the Company's auditors are unaware. The Directors have taken all steps to make themselves aware of any relevant information and to establish that the Company's auditors are aware of that information. The National Audit Office has indicated its willingness to continue in office and a resolution to confirm their appointment will be proposed at the Ordnance Survey Audit & Risk Committee.

## Authority of issue of financial statements

The Directors gave authority for the financial statements to be issued on 19 June 2018. Neither the Company's owner nor others have the power to amend the financial statements after issue.

Approved by the Board and signed on its behalf by:

**Neil Ackroyd**  
Acting Chief Executive Officer  
7 August 2018

# Directors' responsibility statement

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union.

Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period. In preparing these financial statements, the Directors are required to:

- Select suitable accounting policies and then apply them consistently.
- Make judgements and accounting estimates that are reasonable and prudent.
- State whether applicable IFRSs as adopted by the European Union have been followed, subject to any material departures disclosed and explained in the financial statements.
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and the group and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and the group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. The Directors are responsible for the maintenance and integrity of the group's website.

Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions. Having taken advice from the Audit Committee, the Directors consider that the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the company's performance, business model and strategy.

# Directors' remuneration

## Policy

The remuneration for the Executive Directors is set under the terms of the Shareholder Framework Document signed on 31 March 2015. We continue to adhere to the OS Executive Directors Reward Framework which was formalised 15 December 2015.

Ordnance Survey Limited's policy is to maintain levels of remuneration such as to attract, motivate and retain executives of a high calibre who can contribute effectively to the successful development of the business.

## Remuneration Committee

The Remuneration Committee is currently chaired by the Non-Executive Director, Mike Carr, and meets at least quarterly to agree remuneration policy for Executive Directors and other senior staff. The Committee also advises on the direction of the overall remuneration strategy for all employees. In addition, the following were on the Remuneration Committee during the year: Kieran Murphy, Non-Executive Chairman; Michael Harrison, Non-Executive Director (1 Apr to 16 Oct 2017) and Iain Rolfe Non-Executive Director (from 16 Oct 2017). The Committee was supported and advised by Anne Jessop, representative from The Royal Mint (until she stood down in September 2017), the Chief Executive Officer (Nigel Clifford) and the Human Resources Director (Will Davies). None of the above were present for discussions on matters concerning their own remuneration.

## Employment agreements

Except for Nigel Clifford, whose three year fixed terms contract ended on 31 May 2018. All other Executive Directors covered by this annual report hold appointments that are open ended until they reach retirement age. Their notice periods are six months.

## Statement of Directors' remuneration (audited)

2017-18						
	Salary and fees	Performance related pay	Benefits in kind*	Value of ER pension contributions**	Loss of office	Total
	£'000	£'000	£	£'000	£'000	£'000
Nigel Clifford***	255 - 260	0	14,900	0	0	270 - 275
Neil Ackroyd	170 - 175	20 - 25	24,000	38	0	255 - 260
Andrew Loveless - left 31 May 2017	25 - 30 (FYE 160 - 165)	0	1,200	6 (FYE 36)	165 - 170	200 - 205 (FYE 365-370)
Clive Mosey - left 3 Nov 2017	85 - 90 (FYE 150 - 155)	0	2,500	9 (FYE 15)	0	95 - 100 (FYE 165-170)
Paul Bragg - started 2 Jan 2018	40 - 45 (FYE 160-165)	5 - 10	100	4 (FYE 16)	0	50 - 55 (FYE 185-190)

- \*Taxable benefits for health screening, broadband, company cars and private medical insurance are captured through P11D submission. Benefits in kind are presented to the nearest £100.
- \*\*Members of a defined benefits pension scheme are Neil Ackroyd (Classic Plus) and Andrew Loveless (Alpha). Clive Mosey and Paul Bragg are members of the Group personal pension scheme (OS Horizon).
- \*\*\* An accrued payment of £115,000 will be paid to Nigel Clifford as an Incentive Plan bonus in 18/19 in relation to the three year period ending 31 March 2018.

2016-17						
	Salary and fees	Performance related pay	Benefits in kind	Value of pension benefits	Loss of office	Total
	£'000	£'000	£	£'000	£'000	£'000
Nigel Clifford	250 - 255	-	12,600	0	0	265 - 270
Neil Ackroyd	165 - 170	25 - 30	21,300	37	0	245 - 250
Andrew Loveless	160 - 165	25 - 30	6,400	37	0	230 - 235
Clive Mosey	150 - 155	25 - 30	3,800	15	0	190 - 195

## Salary and fees

- Salary and fees include gross salary and any other taxable allowances and payments.
- Total remuneration includes base salary, non-consolidated performance related pay, cash allowances/earnings, benefits in kind and the value of the pension contributions.

## Performance-related pay

### Executive Directors Short Term Incentive Plan (STIP)

Under the STIP a maximum bonus opportunity at 20% of gross annual base salary is available for each Director, with the exception of the Chief Executive Officer who is not eligible for this plan.

The Remuneration Committee reviewed the terms of the STIP and agreed measures for 17/18 should incentivise:

- The delivery of OS's strategic transformation targets.
- Hitting the corporate measures of EBITDA, Revenue, Free Cash and Customer satisfaction.
- Increasing employee engagement thereby maximising the discretionary effort and productivity of the organisation.

In addition to corporate and individual performance targets, the Remuneration Committee introduced a Strategic Measures target with the aim of incentivising and rewarding the right behaviours in the new matrixed organisational structure.

The Remuneration Committee agreed the following weightings should be applied:

	Corporate performance	Individual performance	Strategic measures
Weighting	35%	30%	35%

## Corporate performance

For 17/18 it was agreed the corporate measures would have revised targets as follows:

Corporate performance measures	Threshold*	Budget*	Maximum*
EBITDA	23.9%	25.2%	26.5%
Revenue	£149.2m	£152.3m	£155.3m
Free Cash	£5.9m	£8.4m	n/a
Customer Satisfaction	35	37	n/a

\*Performance between the defined performance levels will attract a relative award between the defined award levels.

The Remuneration Committee exercises their discretion to determine the extent to which Strategic Measures are achieved.

## Pension benefits

For those in the Principal Civil Service Pension Scheme the total value of pension represents the real increase in pension multiplied by 20 plus the real increase in any lump sum, less contributions made by the Director. Where this results in a decrease, no value is added.

## Benefits in kind

This is the monetary value of benefits in kind provided by the employer.

## Fair pay disclosure (audited)

Reporting bodies are required to disclose the relationship between the salaries of the most highly paid Director in their organisation and the median earnings of the organisation's workforce.

The salary and taxable benefits of the Company's most highly paid director on a full year equivalent basis in the current financial year was between £270,000-£275,000 which is 7.4 times the median salary and taxable benefits of the workforce, which was £37,062. In the prior year, the highest paid director on a full year equivalent basis was between £265,000-£270,000 which was 7.55 times the median salary and taxable benefits of the workforce, which was £35,396.

No employees received remuneration in excess of the highest paid Director.

## Directors' defined benefit pensions (audited)

2017-18					
	Real increase in pension and related lump sum at age 55 – 60	Total accrued pension at 60 at 31 March 2018 and related lump sum	Cash Equivalent Transfer Value (CETV) at 31 March 2018	CETV at 31 March 2017	Real increase in CETV after adjustment for inflation and changes in market investment factors
	£'000	£'000	£'000	£'000	£'000
Neil Ackroyd	0 – 2.5	55 – 60 plus a lump sum of 5 – 10	774	691	30

2016-17					
	Real increase in pension and related lump sum at age 55 – 60	Total accrued pension at 60 at 31 March 2017 and related lump sum	Cash Equivalent Transfer Value (CETV) at 31 March 2017	CETV at 31 March 2016	Real increase in CETV after adjustment for inflation and changes in market investment factors
	£'000	£'000	£'000	£'000	£'000
Neil Ackroyd	0 – 2.5	50 – 55 plus 5 – 10 lump sum	691	624	31
Andrew Loveless	2.5 – 5	5 – 10	110	66	30

The Directors in the table above are members of the Principal Civil Service Pension Scheme (PCSPS). Details of the scheme are contained in note 4 to the Accounts, and further details can be found at: [www.civilservice-pensions.gov.uk](http://www.civilservice-pensions.gov.uk)

Neil Ackroyd is a member of the Classic plus scheme. Andrew Loveless is a member of Alpha scheme and previously was a member of Nuvos prior to 01 April 2015.

The table above shows the member's Cash Equivalent Transfer Value (CETV) accrued at the beginning and the end of the reporting period and the increase in CETV effectively funded by the employer. It takes account of the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

A CETV is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the pension benefits they have accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total service, not just their current appointment. CETVs are calculated in accordance with The Occupational Pension Schemes (Transfer Values) (Amendment) Regulations 2008 and do not take account of any actual or potential reduction to benefits resulting from Lifetime Allowance Tax which may be due when pension benefits are taken.

The real increase in the value of the CETV is the element of the increase in accrued pension funded by the Exchequer. It excludes increases due to inflation and contributions paid by the Director. It is worked out using common market valuation factors for the start and end of the period.

## Non-Executive Directors

Of the Non-Executive Directors, the Non-Executive Chair (Kieran Murphy) and the Shareholder Director (Michael Harrison) are appointed directly by the Minister responsible for Ordnance Survey (these appointments being reserved to the shareholder under our Shareholder Framework). The remaining Non-Executive Directors (Mike Carr, Jacques Cadranel and Stephen Lake) are appointed by the Board of Directors of Ordnance Survey Limited, on the recommendation of the Nomination Committee. Their remuneration and terms of appointment are agreed at the time of their appointment, which is normally for three years with the option for this to be extended for a further three years. By exception and on completion of the three-year optional period, any further extension is offered under mutually agreed terms.

## Payments to Non-Executive Directors (audited)

Ordnance Survey Non-Executive Directors are not Ordnance Survey employees and are not members of the Principle Civil Service Pension Scheme nor the OS Group Personal Pension Plan. Their remuneration is paid after deduction of PAYE and NIC through the Ordnance Survey payroll.

Audited remuneration paid to Non-Executive Directors was as follows:

	2017-18	2017-18 BIK*	2016-17	2016-17 BIK*
	£'000	£	£'000	£
Kieran Murphy	50 – 55	1,000	40 – 45 (FYE 50 – 55)	200
Mike Carr	25 – 30	1,900	20 – 25	700
Stephen Lake	25 – 30	900	20 – 25	500
Jacques Cadranel	20 – 25	200	20 – 25	300
Sir Rob Margetts CBE (left 30 June 2016)	–	–	10-15 (FYE 50-55)	200

- Michael Harrison was a Non-Executive Director during the year, but no remuneration was paid for his services.
- Ian Rolfe replaced Michael Harrison – no remuneration was paid for his services.
- Anne Jessop was listed as Non-Executive as she was not a statutory Director under the Companies Act and was paid no remuneration for performing this role. Anne stood down from this role.
- \*BIK - Benefits in kind are presented to the nearest £100.

The inclusion of a Directors' remuneration report containing information about the salary and benefits of the senior managers and key decision makers of Ordnance Survey is voluntarily reported. The actual salary, performance related pay and benefit details of each Director form the audited elements of this report, as referred to in The Audit Opinion, which can be found in the Annual Accounts. The remaining elements are unaudited.

**Neil Ackroyd**  
Acting Chief Executive Officer  
7 August 2018

## Independent auditor's report to the Shareholders of Ordnance Survey Limited

### Opinion on financial statements

I have audited the financial statements of Ordnance Survey Limited for the year ended 31 March 2018 which comprise the Consolidated statement of profit or loss and other comprehensive income, Consolidated statement of financial position, Consolidated statement of changes in equity, Consolidated cash flow statement and the Company statement of financial position, Company statement of changes in equity, Company cash flow statement and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and the International Financial Reporting Standards as adopted by the European Union and as regards the parent company financial statements, as applied in accordance with the provisions of the Companies Act 2006. I have also audited the information in the Directors' Remuneration Report that is described as having been audited.

In my opinion the financial statements:

- give a true and fair view of the state of the group's and the parent company's affairs as at 31 March 2018 and of the group's profit for the year then ended; and
- have been properly prepared in accordance with International Financial Reporting Standards as adopted by European Union; and
- have been prepared in accordance with the Companies Act 2006.

### Basis of opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK). My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my certificate. Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2016. I am independent of the Ordnance Survey Limited in accordance with the ethical requirements that are relevant to my audit and the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### Responsibilities of the directors for the financial statements

As explained more fully in the Directors' responsibility statement, the directors are responsible for:

- the preparation of the financial statements and for being satisfied that they give a true and fair view.
- such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.
- assessing the group's and the parent's company's ability to continue as a going concern, disclosing, if applicable, matters relating to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

### Auditor's responsibilities for the audit of the financial statements

My responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (ISAs) (UK).

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs (UK), I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group's and the Ordnance Survey Limited's internal control.

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the group's and the Ordnance Survey Limited's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

#### Other Information

Directors are responsible for the other information. The other information comprises information included in the annual report, other than the parts of the Directors' Remuneration Report described in that report as having been audited, the financial statements and my auditor's report thereon. My opinion on the financial statements does not cover the other

information and I do not express any form of assurance conclusion thereon. In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

#### Opinion on other matters prescribed by the Companies Act 2006

In my opinion:

- the part of the Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006;
- in light of the knowledge and understanding of the group and the company and its environment obtained in the course of the audit, I have not identified any material misstatements in the Strategic Report or the Directors' Report; and
- the information given in the Strategic and Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements and those reports have been prepared in accordance with applicable legal requirements.

#### Matters on which I report by exception

I have nothing to report in respect of the following matters where the Companies Act 2006 requires me to report to you if, in my opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the part of the directors' remuneration report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- I have not received all of the information and explanations I require for my audit.

**Hilary Lower** (Senior Statutory Auditor)  
9 August 2018

For and on behalf of the  
Comptroller and Auditor General  
(Statutory Auditor)  
National Audit Office  
157–197 Buckingham Palace Road  
Victoria  
London  
SW1W 9SP

# Financial statements

## Consolidated statement of profit or loss and other comprehensive income for the year ended 31 March 2018

	Notes	31 March 2018 £'000	31 March 2017 £'000
Revenue	2	154,901	152,801
Cost of sales		(22,305)	(21,704)
<b>Gross profit</b>		<b>132,596</b>	<b>131,097</b>
Operating costs	3	(114,855)	(116,131)
Share of results of joint ventures	9	5,533	5,057
Other income		648	144
<b>Operating profit</b>		<b>23,922</b>	<b>20,167</b>
Finance income	5	17	12
Finance cost	6	-	(6)
<b>Finance costs – net</b>		<b>17</b>	<b>6</b>
<b>Profit before corporation tax</b>		<b>23,939</b>	<b>20,173</b>
Corporation tax expense	7	(4,898)	(3,911)
<b>Profit for the period</b>		<b>19,041</b>	<b>16,262</b>
<b>Profit is attributable to:</b>			
Owners of the company		21,167	16,425
Minority interest		(2,126)	(163)
		<b>19,041</b>	<b>16,262</b>

All the activities of the Group are classified as continuing.

## Consolidated statement of financial position as at 31 March 2018

	Notes	31 March 2018 £'000	31 March 2017 £'000
<b>Non-current assets</b>			
Intangible assets	10	74,775	86,702
Property plant and equipment	11	30,428	30,247
Interests in joint ventures	9	3,799	3,141
Deferred tax asset	19	-	854
		<b>109,002</b>	<b>120,944</b>
<b>Current assets</b>			
Inventories	12	1,743	1,642
Trade and other receivables	13	25,845	24,064
Cash and cash equivalents	14	110,392	88,417
		<b>137,980</b>	<b>114,123</b>
<b>Total assets</b>		<b>246,982</b>	<b>235,067</b>
<b>Current liabilities</b>			
Trade and other payables	15	(15,550)	(14,969)
Current tax liability	16	(975)	(2,015)
Provisions	17	(160)	(4,652)
Deferred revenue	18	(10,632)	(12,089)
		<b>(27,317)</b>	<b>(33,725)</b>
<b>Net current assets</b>		<b>110,663</b>	<b>80,398</b>
<b>Non-current assets plus net current assets</b>		<b>219,665</b>	<b>201,342</b>
<b>Non-current liabilities</b>			
Trade and other payables	15	(80)	(160)
Provisions	17	(41)	(184)
Deferred revenue	18	(10,049)	(10,617)
Deferred tax liability	19	(71)	-
<b>Total liabilities</b>		<b>(37,558)</b>	<b>(44,686)</b>
<b>Net assets</b>		<b>209,424</b>	<b>190,381</b>
<b>Equity</b>			
Share capital	20	34,000	34,000
Retained earnings	21	178,862	157,695
<b>Capital and reserves attributable to owners of the Company</b>		<b>212,862</b>	<b>191,695</b>
Non-controlling Interest		(3,438)	(1,314)
<b>Total equity</b>		<b>209,424</b>	<b>190,381</b>

The Financial Statements were approved by the Board of Directors and authorised for issue on 19 June 2018. They were signed on its behalf by:

Neil Ackroyd  
Acting Chief Executive Officer  
7 August 2018

The notes on pages 49 to 71 are an integral part of these Financial Statements.

## Company statement of financial position as at 31 March 2018

	Notes	31 March 2018 £'000	31 March 2017 £'000
<b>Non-current assets</b>			
Intangible assets	10	74,775	85,121
Property plant and equipment	11	30,285	30,192
Investments	8	400	400
Interests in joint ventures	9	3,799	3,141
Deferred tax asset	19	-	848
		<b>109,259</b>	<b>119,702</b>
<b>Current assets</b>			
Inventories	12	1,744	1,642
Trade and other receivables	13	29,799	26,265
Cash and cash equivalents	14	108,550	87,282
		<b>140,093</b>	<b>115,189</b>
<b>Total assets</b>		<b>249,352</b>	<b>234,891</b>
<b>Current liabilities</b>			
Trade and other payables	15	(15,638)	(14,875)
Current tax liability	16	(970)	(2,008)
Provisions	17	(160)	(4,652)
Deferred revenue	18	(9,896)	(11,679)
		<b>(26,664)</b>	<b>(33,214)</b>
<b>Net current assets</b>		<b>113,429</b>	<b>81,975</b>
<b>Non-current assets plus net current assets</b>		<b>222,688</b>	<b>201,677</b>
<b>Non-current liabilities</b>			
Trade and other payables	15	(80)	(160)
Provisions	17	(41)	(184)
Deferred revenue	18	(10,049)	(10,637)
Deferred tax liability	19	(77)	-
<b>Total liabilities</b>		<b>(36,911)</b>	<b>(44,195)</b>
<b>Net assets</b>		<b>212,441</b>	<b>190,696</b>
<b>Equity</b>			
Share capital	20	34,000	34,000
Retained earnings	21	178,441	156,696
<b>Capital and reserves attributable to owners of the Company</b>		<b>212,441</b>	<b>190,696</b>

The Financial Statements were approved by the Board of Directors and authorised for issue on 19 June 2018.  
They were signed on its behalf by:

Neil Ackroyd  
Acting Chief Executive Officer  
7 August 2018

The notes on pages 49 to 71 are an integral part of these Financial Statements.

## Consolidated statement of changes in equity for the year ended 31 March 2018

	Share capital	Retained earnings	<b>Total</b>	Non-controlling	<b>Total</b>
	£'000	£'000	<b>£'000</b>	£'000	<b>£'000</b>
As at 1 April 2016	34,000	141,270	<b>175,270</b>	(1,151)	<b>174,119</b>
Profit for the year	-	16,425	<b>16,425</b>	(163)	<b>16,262</b>
<b>As at 31 March 2017</b>	<b>34,000</b>	<b>157,695</b>	<b>191,695</b>	<b>(1,314)</b>	<b>190,381</b>
As at 1 April 2017	34,000	157,695	<b>191,695</b>	(1,314)	<b>190,381</b>
Profit for the year	-	21,167	<b>21,167</b>	(2,126)	<b>19,041</b>
<b>As at 31 March 2018</b>	<b>34,000</b>	<b>178,862</b>	<b>212,862</b>	<b>(3,440)</b>	<b>209,422</b>

The notes on pages 49 to 71 are an integral part of these Financial Statements.

## Company statement of changes in equity for the year ended 31 March 2018

	Share capital	Retained earnings	Total
	£'000	£'000	£'000
As at 1 April 2016	34,000	140,463	174,463
Profit for the year	-	16,233	16,233
<b>As at 31 March 2017</b>	<b>34,000</b>	<b>156,696</b>	<b>190,696</b>
As at 1 April 2017	34,000	156,696	190,696
Profit for the year	-	21,745	21,745
<b>As at 31 March 2018</b>	<b>34,000</b>	<b>178,441</b>	<b>212,441</b>

The notes on pages 49 to 71 are an integral part of these Financial Statements.

## Consolidated cash flow statement for the year ended 31 March 2018

	Notes	31 March 2018 £'000	31 March 2017 £'000
Profit before corporation tax		23,939	20,173
Amortisation of intangible assets		23,878	18,236
Depreciation of tangible fixed assets		1,871	2,471
Impairment of intangible assets		5,074	1,650
Share of joint venture results		(5,533)	(5,057)
Interest		(17)	(6)
Movements in working capital			
Inventories		(101)	243
Trade and other receivables		(1,818)	(2,144)
Trade and other payables		502	423
Provisions for liabilities and charges		(4,635)	3,322
Deferred revenue		(2,025)	1,666
<b>Cashflow from operations</b>		<b>41,135</b>	<b>40,977</b>
Corporation taxes paid		(5,013)	(4,800)
<b>Net cash inflow from operating activities</b>		<b>36,122</b>	<b>36,177</b>
Cash flows from investing activities			
Interest received		17	12
Purchase of plant, property and equipment		(2,052)	(1,200)
Purchase of intangible assets		(17,025)	(21,346)
Payment of dividends		-	(12,400)
Receipt of loan repayments from associates		38	-
Receipt of dividends		4,875	4,125
<b>Net cash used in investing activities</b>		<b>(14,147)</b>	<b>(30,809)</b>
Cash flows from financing activities			
Interest paid		-	(6)
<b>Net cash used in financing activities</b>		<b>-</b>	<b>(6)</b>
<b>Net increase in cash and cash equivalents</b>		<b>21,975</b>	<b>5,362</b>
Cash and cash equivalents at beginning of year		88,417	83,055
Cash and cash equivalents at end of year	14	110,392	88,417

The notes on pages 49 to 71 are an integral part of these Financial Statements.

## Company cash flow statement for the year ended 31 March 2018

	Notes	31 March 2018 £'000	31 March 2017 £'000
Operating profit		26,644	20,144
Amortisation of intangible assets		23,878	18,236
Depreciation of tangible fixed assets		1,825	2,452
Impairment of intangible assets		821	1,650
Impairment of loans to Group companies		5,455	2,000
Reversal of impairment of loans to Group companies		(4,200)	
Share of joint venture results		(5,533)	(5,057)
Interest		(614)	(335)
Movements in working capital			
Inventories		(101)	243
Trade and other receivables		(1,172)	(2,018)
Trade and other payables		683	433
Provisions for liabilities and charges		(4,635)	3,322
Deferred revenue		(2,371)	1,396
<b>Cashflow from operations</b>		<b>40,680</b>	<b>42,466</b>
Corporation taxes paid		(5,013)	(4,800)
<b>Net cash inflow from operating activities</b>		<b>35,667</b>	<b>37,666</b>
Cash flows from investing activities			
Interest received		614	339
Purchase of plant, property and equipment		(1,918)	(1,154)
Purchase of intangible assets		(14,353)	(19,766)
Payment of dividends		-	(12,400)
Loans to group companies		(3,655)	(3,800)
Receipt of loan repayments from associates		38	-
Receipt of dividends		4,875	4,125
<b>Net cash used in investing activities</b>		<b>(14,399)</b>	<b>(32,656)</b>
Cash flows from financing activities			
Interest paid		-	(6)
<b>Net cash used in financing activities</b>		<b>-</b>	<b>(6)</b>
<b>Net increase in cash and cash equivalents</b>		<b>21,268</b>	<b>5,004</b>
Cash and cash equivalents at beginning of year		87,282	82,278
Cash and cash equivalents at end of year	15	108,550	87,282

The notes on pages 49 to 71 are an integral part of these Financial Statements.

# Notes to the consolidated financial statements

## 1 Principal accounting policies

Ordnance Survey Limited (the Company) is incorporated in the United Kingdom under the Companies Act. The address of the registered office is given on page 5. The principal activities of the Company and its subsidiaries (the Group) and the nature of the Group's operations are set out in note 9 and in the Strategic report on pages 8 to 12. These financial statements are presented in pounds sterling, because that is the currency of the primary economic environment in which the Group operates.

### 1.1 Basis of preparation

#### (i) Compliance with IFRS

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and International Financial Reporting Standard Interpretation Committee (IFRIC) interpretations as adopted by the European Union and the Companies Act 2006 applicable to companies reporting under IFRS as issued by the International Accounting Standards Board (IASB).

Where IFRS permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the specific circumstances of Ordnance Survey Limited ('Ordnance Survey') for the purpose of giving a true and fair view has been selected. The policies adopted are described below. They have been applied consistently unless otherwise stated in dealing with items that are considered material to the financial statements.

The Company has taken advantage of the exemption under Section 408 of the Companies Act 2006 from presenting its own profit and loss account.

#### (ii) Going concern

The financial statements have been prepared on a going concern basis.

#### (iii) Historical cost convention

The financial statements have been prepared under the historical cost convention except for the following:

- Financial assets and liabilities (including derivative instruments) – measured at fair value.
- Assets held for sale – measured at fair value less cost of disposal.

#### (iv) New and amended standards adopted by the Group

There were no new and amended standards and interpretations mandatory for the first time for the financial year.

#### (v) New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 March 2018 reporting periods and have not been early adopted by the Group.

The new revenue standard (IFRS 15 Revenue from Contracts with Customers) has now been published and is mandatory for financial years commencing on or after 1 January 2018. The IASB has issued a new standard for the recognition of revenue. This will replace IAS 18 which covers contracts for goods and services and IAS 11 which covers construction contracts. The new standard is based on the principle that revenue is recognised when control of a good or service transfers to a customer – so the notion of control replaces the existing notion of risks and rewards. The standard permits a modified retrospective approach for the adoption. Under this approach entities will recognise transitional adjustments in retained earnings on the date of initial application (for example, 1 April 2017), that is, without restating the comparative period. The company will only need to apply the new rules to contracts that are not completed as of the date of initial application.

Management is currently assessing the impact of the new rules and has identified the following areas that are likely to be affected:

- Partner distribution contracts where recognition of revenue will depend on the life of the contract with the end user.
- Bespoke contracts with break clauses where recognition of revenue will be constrained by uncertainty around outcomes.
- Consumer rebates where recognition of revenue will be constrained by estimates of rebate utilisation.

- The statement of financial position presentation of rights of return, which will have to be grossed up in future (separate recognition of the right to recover the goods from the customer and the refund obligation).

- The Group estimates the impact of the new rules on the Group's financial statements to be £1.6m increase in revenue.

The new leases standard (IFRS16 Leases) has now been published and is mandatory for financial years commencing on or after 1 January 2019. The standard replaces IAS 17 'Leases', and related interpretations.

The new standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. A key change arising from IFRS 16 is that most operating leases will be accounted for on the statement of financial position for lessees. The standard permits a modified retrospective approach for the adoption. Under this approach entities will recognise transitional adjustments in retained earnings on the date of initial application (for example, 1 April 2019), that is, without restating the comparative period.

Management is currently assessing the impact of the new rules and has identified the following areas that are likely to be affected:

- Vehicle, office and equipment leases where, as lessee, a right-of-use asset and lease liability will be recognised (based on the discounted payments required under the lease term).

At this stage, the Group is not able to estimate the impact of the new rules on the Group's financial statements but is not expected to be material.

The following standards are not expected to have a material impact on the Group:

IFRS 9 Financial Instruments – IFRS 9 addresses the classification, measurement and derecognition of financial assets and financial liabilities and introduces new rules for hedge accounting. In July 2014, the IASB made further changes to the classification and measurement rules and also introduced a new impairment model. These latest amendments now complete the new financial instruments standard. This must be applied for financial years commencing on or after 1 January 2018.

### 1.2 Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and its subsidiaries. Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Where necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by other members of the Group.

All intra-group transactions, balances, income and expenditure are eliminated in full on consolidation.

Non-controlling interests in the net assets of consolidated subsidiaries are identified separately from the Group's equity. Total comprehensive income is attributed to Non-controlling interests even if this results in the non-controlling interests having a deficit balance.

### 1.3 Joint ventures

Joint ventures are entities over which the Group has significant influence but does not control.

The Group accounts for investments in joint ventures using the equity method of accounting, recording the investment initially at cost. Adjustment is made in the Group accounts to ensure consistent application of Group accounting policies.

### 1.4 Segment reporting

The Board receives an analysis of revenue by channel and operating segments and this is presented in note 2.

### 1.5 Foreign currency transactions

Transactions denominated in foreign currencies are translated into the functional currency at the exchange rate ruling at the dates of the transactions. Exchange rate differences are charged to the statement of profit or loss as incurred. Monetary assets and liabilities

denominated in foreign currencies at the statement of financial position reporting date are translated at the rates ruling at that date.

### 1.6 Investments

Investments held as non-current assets are stated at cost less provision for permanent diminution in value.

### 1.7 Property, plant and equipment

Property, plant and equipment held for use in the supply of goods or services, or for administration purposes, are stated in the statement of financial position at costs less any accumulated depreciation.

The depreciable amount of an asset is calculated by deducting its residual value from its initial cost. The residual value of an asset is the estimated amount that the Group would obtain from the disposal of the asset after deducting the estimated cost of disposal.

Depreciation is charged so as to write off the costs of assets less their residual value over their estimated useful lives, using the straight-line method.

The depreciation policy applied to property, plant and equipment details the following useful lives to be applied to tangible fixed assets:

Freehold land	not depreciated
Freehold buildings	40 years from acquisition or remaining useful economic life
IT Equipment	3 to 5 years
Equipment, facilities and fixtures	2 to 15 years
Vehicles	4 years
Assets under construction	not depreciated

The minimum level for capitalisation of property, plant and equipment is £5,000 with the exception of information technology (IT) and support systems hardware, which is £1,000. All IT workstations (office computers and laptops) bought together are grouped as one asset.

### 1.8 Intangible assets

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

Internally generated intangible assets are capitalised if an asset has been created which can be identified and meets the following criteria:

- It is probable that the asset will give rise to future economic benefit.
- The original cost can be reliably measured.
- It is technically feasible that the asset can be completed for use.
- There is the intention to complete and use it.
- There is the ability to use it.
- Resources are available to complete the development.

These assets are capitalised at the cost of development.

Amortisation is charged on a straight-line basis in order to write down the asset over its useful life. Useful lives are reviewed on an annual basis and adjustments, where applicable, are made on a prospective basis. The useful lives of intangible assets are expected to fall within the following limits:

Data content	5 to 10 years
Software	3 to 10 years
Assets in course of construction	Not amortised

The Group's internally generated intangible assets consist of:

*a) Data content*

- Data content represents the core geographic data sets from which the business provides its products and services.

*b) Software*

- The costs of data delivery and business systems include all directly attributable costs including the cost of purchased computer software licences used to develop the systems.

*c) Assets in course of construction*

- Assets in course of construction are capitalised at cost and carried at cost less any recognised impairment loss.

Cost includes all directly attributable costs including professional fees and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy.

Amortisation of these assets commences when the assets are ready for their intended use.

**1.9 Impairment of non-financial assets**

Assets that are subject to amortisation are reviewed annually to consider whether there have been any events or changes in circumstance that indicate the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Non-financial assets which have suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

**1.10 Inventory and work in progress**

Inventories and work in progress are stated at the lower of cost and net realisable value. Cost is determined using the weighted average costing method.

Cost comprises design costs, direct materials, direct labour and those overheads that have been incurred in bringing the inventories to their present location and condition.

Net realisable value represents the estimated selling price in the ordinary course of business less applicable variable selling expenses.

**1.11 Financial assets and liabilities**

The Group has classified its financial instruments as follows:

*a) Financial assets*

- Fixed deposits including funds held with banks and trade receivables are classified as cash at bank and receivables respectively
- Investments (other than joint ventures) and short-term deposits are classified as available for sale

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost, less a provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the debt will not be recoverable according to the original terms of the receivables. The amount of the impairment provision will be based on the difference between the asset's receivable amount and the present value of future estimated cash flows. Any impairment is recognised in the statement of profit or loss.

Cash and cash equivalents include cash at bank, cash in hand and any amounts on short term deposit, typically less than six months.

Assets classified as available for sale financial assets are initially measured at fair value plus any transaction costs. They are subsequently measured at fair value. Unrealised gains and losses arising from changes in fair value are recognised in the statement of profit or loss and other comprehensive income.

*b) Financial liabilities*

- Trade payables and borrowings are classified as loans and receivables

Trade payables are recognised initially at fair value and subsequently measured at amortised cost adjusted for fair value movements.

Loans are initially recognised at fair value on the trade date and subsequently measured at amortised cost using the effective interest method. These are included within current liabilities, unless expected maturity is more than 12 months after the statement of financial position reporting date.

**1.12 Provisions**

Provisions are recognised when the Group has a present obligation as a result of a past event. It is probable that the Group will be required to settle that obligation and that a reliable estimate can be made of the obligation.

Provisions are measured at the best estimate of the expenditure required to settle the obligation at the statement of financial position reporting date, taking into account the risks and uncertainties surrounding the obligation and are discounted to present value, where material.

### 1.13 Employee benefits

#### a) Pensions – legacy schemes

Pension benefits are provided through the Principal Civil Service Pension Scheme (PCSPS); details are outlined in note 4 of the pension schemes of which the Company staff are members.

The 2015-16 year was the first year of trade for Ordnance Survey Limited. On 1 April 2015, the entire functions, business, subsidiaries, operations and assets of the Ordnance Survey Trading Fund were transferred to Ordnance Survey Limited, a limited company wholly owned by the Secretary of State for Business, Energy & Industrial Strategy, and the company commenced trading on this date.

From 1 October 2002, the Trading Fund staff could have joined one of three statutory based final salary defined benefit schemes (Classic, Premium, and Classic Plus). New entrants after 1 October 2002 chose between membership of the premium scheme and joining a defined contribution scheme with a significant employer contribution (partnership pension account). These schemes were closed to new entrants on 29 July 2007.

All new employees who joined the Trading Fund on or after 30 July 2007 could choose between membership of the Nuvos scheme and a partnership pension account. The defined benefit schemes were closed to employees on 31 March 2015.

All employer pension contributions payable are charged to the statement of profit or loss and other comprehensive income for the financial year as incurred, on the basis that the schemes are multi-employer and the Company is unable to identify its share of the underlying assets and liabilities.

#### b) Pensions – Horizon scheme

From 1 April 2015, all new Company employees were offered the opportunity to join the Horizon defined contribution pension scheme. For this scheme the amount charged to the profit and loss account in respect of pension costs and other retirement benefits is the contributions payable in the year. Differences between contributions payable in the year and contributions actually paid are shown as either accruals or prepayments in the statement of financial position.

#### c) Early release costs

A provision is recognised in the financial year for the full cost of the pension contributions of employees who have been identified at the discretion of the Company and agree to take early retirement under restructuring arrangements before the statement of financial position reporting date (excluding actuarially reduced retirement and medical retirement) until they reach normal pensionable age.

The full cost of funding early leavers prior to 31 March 2015 has been provided for in earlier years. Funds are released from the provision annually to fund payments for pensions and related benefits to the retired employees until normal retirement age. Under the different funding arrangements, which applied between October 1994 and 31 March 1997, 80% of the costs were met centrally from the Civil Superannuation Vote (CSV).

The requirement of IAS 37 Provisions, Contingent Liabilities and Contingent Assets has been adopted to state the early release and pension commitment provision at a discounted amount where the time value of money is material. The provision for the estimated payments has been discounted by the HM Treasury discount rate of 0.24% in real terms. The discount is unwound over the anticipated duration of the provision.

### 1.14 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable for the delivery of mapping goods and services, which comprises mapping data, information, customer tailored services and copyright revenue, in the ordinary course of business. Revenue is shown net of VAT and discounts.

The Group recognises revenue once the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and when specific other criteria are met for each of the activities shown below.

**OS OpenData** revenue is recognised over the length of the agreement with the customer, reflecting the obligation of ongoing supply and to maintain accurate data sets.

### Public Sector Mapping Agreement

(PSMA) revenue is recognised each year at the amount agreed with HM Government, reflecting customer usage and the Group's obligation of ongoing supply and to provide updates.

**Direct Licences** – Licences which allow the customer to use the Group data for internal purposes only. The revenue deriving from these licences is recognised over the length of the licence agreement (usually 12 months) as this reflects the usage of the data by the customer and the Group's obligation of ongoing supply and to provide updates.

**Partner Licences** – Licences which enable the customer to add value to the Group data and resell the product to third parties. Revenue from royalty fees is recognised when the Group becomes entitled to receive a royalty from an onward sale of the Group data.

**Paper maps** – Revenue from paper map sales is recognised when the risks and rewards of ownership pass to the customer.

**Services** – Revenue from services are recognised at the point at which the services are performed by the Group.

**Rental** – Rental income is recognised on a monthly basis and any revenues received in advance or arrears are deferred or accrued as appropriate.

Unpaid invoices for licence fees which relate to periods after the statement of financial position reporting date are included in the trade receivables balance. The net invoiced value relating to revenue to be recognised in the period after the statement of financial position reporting date is recorded in current and long-term creditors as deferred income.

### 1.15 Leases

#### a) Operating leases

Leases in which a significant portion of the risk and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the statement of profit or loss and other comprehensive income on a straight-line basis over the length of the lease.

## b) Finance leases

Leases are classified as finance leases when the terms of the lease transfer substantially all risks and rewards of ownership to the Group. Finance leases are capitalised at the commencement of the lease at the lower of the fair value of the leased item and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The corresponding rental obligations, net of finance charges, are included in payables. The interest element of the finance cost is charged to the statement of profit or loss and other comprehensive income over the lease period, so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. Property, plant and equipment acquired under finance leases is depreciated over the shorter of the useful life of the asset and the lease term.

### 1.16 Taxation

#### Current taxation

The corporation tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

The current corporation tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Group's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. The Group establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

#### Deferred taxation

Deferred corporation tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred corporation tax is

not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred corporation tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred corporation tax asset is realised or the deferred corporation tax liability is settled.

Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

#### 1.17 Rounding of amounts

All amounts disclosed in the financial statements and notes have been rounded off to the nearest thousand pounds unless otherwise stated.

#### 1.18 Critical accounting estimates and judgements

In applying the Group's accounting policies set out above, management is required to make certain estimates and judgements concerning the future. These estimates and judgements are regularly reviewed and updated as necessary. The estimates and judgements that have the most significant effect on the amount included in these financial statements are as follows:

*Development costs* – The Group capitalises development costs when the project meets certain criteria. Costs are only capitalised if they can be reliably measured and the project has been approved by the Investment Group within the Group. Prior to this approval all project costs are expensed.

*Revenue recognition* – The Group recognises royalty revenue based on returns from partners. These returns are provided on a timely basis, usually quarterly, thus limiting the time-frame of the estimate. See note 2 for the breakdown of revenue by channel, segment and geography.

*Impairment of assets* – Property, plant and equipment and intangible assets are considered for impairment if there is a reason to believe that impairment

may be necessary. Factors taken into consideration in reaching such a decision include the economic viability of the asset itself and, where it is a component of a larger economic unit, the viability of that unit itself.

Future cash flows expected to be generated by the assets are projected, taking into account market conditions and the expected useful lives of the assets. The present value of these cash flows, determined using an appropriate discount rate, is compared with the current net asset value and, if lower, the assets are impaired to current value.

*Intangible asset lives* – The determination of asset lives for amortisation purposes is reviewed on a regular basis. Assessing the useful economic life of an asset is based on management judgement taking into account historical experience and the impact of technological change. Consequently this represents a source of estimation uncertainty. See note 10 for the breakdown of intangible assets classified as software, data & content and assets under construction.

## 2 Revenue

	2017-18 £'000	2016-17 £'000
Trading revenue	152,795	151,549
Other operating activities	1,873	1,178
Property rental income	233	74
	<b>154,901</b>	<b>152,801</b>
<b>Trading revenue</b>		
Channel	2017-18 £'000	2016-17 £'000
Direct licences	103,302	104,134
Partner licences	34,291	31,730
Paper maps	8,334	8,633
Services	6,868	7,052
	<b>152,795</b>	<b>151,549</b>
Segment	2017-18 £'000	2016-17 £'000
Business to government	87,104	88,167
Business to business	54,091	52,183
Business to consumer	11,600	11,199
	<b>152,795</b>	<b>151,549</b>
Geography	2017-18 £'000	2016-17 £'000
United Kingdom	144,093	143,653
Other European countries	1,321	1,279
Rest of world	7,381	6,617
	<b>152,795</b>	<b>151,549</b>

Revenues are attributed by country, based on the location of the entity to whom the Group provide the product or service. No details are available of the location of the ultimate end user.

During the year one customer (Department for Business, Energy & Industrial Strategy) accounted for more than 10% of turnover. The revenue received from this customer is secured under separate long term agreements.

Revenue of £73.4m (2016-17 £73.3m) in relation to this customer is reported in the Direct Licence's channel, the Business to Government segment and United Kingdom geographic region in the above tables.

The Group's operating revenue is principally generated by sales of mapping data, information, customer tailored services and copyrights or copyright material.

## 3 Operating costs

	Note	2017-18 £'000	2016-17 £'000
Operating profit for the year has been arrived at after charging:			
Staff costs	4	50,539	58,326
Amortisation of intangible assets	10	23,878	18,236
Depreciation of tangible fixed assets	11	1,825	2,471
Research and development		2,979	2,261
Operating lease charges – buildings		848	636
Operating lease charges – PPE		1,992	1,900
Foreign exchange losses/ (gains)		530	619
Fees payable to auditor for audit of the statutory annual accounts		75	85
Other operating charges		32,189	31,597
		<b>114,855</b>	<b>116,131</b>

The Company's auditor is The National Audit Office. Office leasing payments of £207k were made to our auditors for the provision of non audit services during the year (2016-17: £248k). The subsidiaries' auditor is Deloitte. The fee payable to Deloitte for the current year audit is £41k based on prior year figures (2016-17: £41k). Payments to Deloitte for non audit services during the year were £48k (2016-17: £173k).

### Losses and special payments

There were no losses or special payments to report.

#### 4 Staff numbers and costs

##### Total staff costs

	2017-18	2016-17
	£'000	£'000
Wages and salaries – permanent employees	38,238	40,884
Restructuring costs	(704)	4,178
Social security costs	4,592	4,892
Pension costs	7,076	7,941
Exit package costs in year	298	1,517
Temporary/agency contract labour costs	5,657	8,884
	<b>55,157</b>	<b>68,296</b>
Capitalised permanent labour	(3,041)	(6,229)
Capitalised temporary/agency contract labour	(1,577)	(3,741)
	<b>50,539</b>	<b>58,326</b>

The restructuring provision (2016-17: £4,178k) was utilised in year and the remaining balance is nil. The release of the restructuring costs is included within note 17 provisions.

##### Total permanent staff numbers, including Directors

The average monthly number of full time equivalent persons during the year was as follows:

	2017-18	2016-17
Operations	738	870
Sales and Marketing	125	161
Corporate Services	142	89
	<b>1,005</b>	<b>1,120</b>

##### Total temporary/agency staff

The average monthly number of full-time equivalent temporary/agency/contract persons employed by the Group during the year was as follows:

	2017-18	2016-17
Operations	29	76
Sales and Marketing	–	5
Corporate Services	7	6
	<b>36</b>	<b>87</b>

##### Directors' emoluments

	2017-18	2016-17
	£'000	£'000
Salaries and other short-term employee benefits	659	861
Pension contribution charged in year – defined benefit	44	74
Pension contribution charged in year – defined contribution	13	14
Highest paid Director	274	267

At 31 March 2018 two Directors were members of defined benefit schemes and one Director was a member of a defined contribution scheme. The defined benefit scheme known as the Principle Civil Service Pension Scheme (PCSPS) is a multi-employer scheme. The associated pension contributions have been presented in accordance with accounting policy 1.13.

##### Employee benefits

IAS 19 'Employee benefits' states that a liability exists where an employee has provided services in exchange for employee benefits to be paid in the future and an expense should be recognised when the entity consumes the economic benefit arising from service provided by an employee in exchange for employee benefits.

This results in the need to provide for holiday pay that has been accrued, but has not yet been taken as at the year end.

The Group's holiday year runs from April to March and the payroll records were reviewed to ascertain the amount of holiday accrued, but not yet taken, as at 31 March 2018.

The figure above for wages and salaries includes a charge of £77k (2016-17: £106k) in respect of additional annual leave earned, but not taken, as at 31 March 2018. The total liability of £886k (2016-17: £963k) is included within other payables within note 15 of these Financial statements.

### Pension costs – defined benefit

For 2017–18, employer’s contributions of £7,076k (2016-17: £7,941) were payable to the PCSPS at one of four rates in the range 20.0% to 24.5% of pensionable pay, based on salary bands. The scheme actuary reviews employers’ contributions every four years following a full scheme valuation. The contribution rates are set to meet the costs of the benefits accruing during 2017–18 to be paid when the member retires and not the benefits paid during this period to existing pensioners.

PCSPS is an unfunded multi-employer defined benefit scheme, but the Group is unable to identify its share of the underlying assets and liabilities due to pooling of the assets and liabilities being paid out of this pool. A full actuarial valuation was carried out at 31 March 2012. Details can be found in the resource accounts of the Cabinet Office: Civil Superannuation ([www.civilservicepensionscheme.org.uk](http://www.civilservicepensionscheme.org.uk)). No information is available regarding the overall surplus or deficit of the scheme.

The Group employees are members of one of the following: The Classic or Classic Plus schemes, the Premium scheme, the Partnership Pension Account or Nuvos.

Career Average pension arrangements were introduced on 1 April 2015 and the majority of Classic, Premium, Classic Plus and Nuvos members joined the new scheme.

Further details of this new scheme are available at <http://www.civilservicepensionscheme.org.uk/members/alpha-guide/>.

The defined benefit schemes were closed to new entrants on 31 March 2015.

### Pension costs – defined contribution

All employees who joined after 1 April 2015 were given the option to join the Company Personal Pension Plan, Horizon, a defined contribution scheme.

### Exit packages costs provided for in financial year

The statement of profit or loss and other comprehensive income includes a charge of £298k (2016-17: £1,217k) in respect of new leavers identified in 2017–18. This charge reflects the costs of leavers identified and confirmed by 31 March 2018, excluding those identified as part of the restructuring provision within note 17.

Exit package cost band (excluding restructure provision)	2017–18	2016–17
Less than £10,000	2	4
£10,000–£25,000	1	7
£25,000–£50,000	7	11
£50,000–£100,000	–	10
<b>Total number of exit packages</b>	<b>10</b>	<b>32</b>
<b>Total cost £’000</b>	<b>298</b>	<b>1,217</b>

Redundancy and other departure costs have been paid by the Group in accordance with the provisions of the Civil Service Compensation Scheme, a statutory scheme under the Superannuation Act 1972. Early release costs are accounted for as described in note 1.13. Where the Group has agreed early retirements, the additional costs are met by the Group and not by the Civil Service Pension Scheme. All leavers exited under voluntary terms.

### 5 Finance income

	2017–18 £’000	2016–17 £’000
<b>Finance income</b>		
Interest received	17	12

### 6 Finance cost

	2017–18 £’000	2016–17 £’000
<b>Financing cost</b>		
Unwind of provision discount	–	6

## 7 Taxation

As set out in the Strategic Report, on 1 April 2015, Ordnance Survey Limited acquired the entire functions, business, subsidiaries, operations and assets of the Ordnance Survey Trading Fund. The Trading Fund was outside the scope of UK Corporation Tax whereas Ordnance Survey Limited is a fully taxable entity. The subsidiaries and joint ventures of Ordnance Survey have throughout been subject to UK Corporation Tax.

(a) Corporation tax expense	2017-18 £'000	2016-17 £'000
<i>Current tax</i>		
Current tax on profits for the year	4,850	4,435
Adjustments in respect of prior years	(877)	(77)
<b>Total current tax</b>	<b>3,973</b>	<b>4,358</b>
<i>Deferred tax</i>		
Origination and reversal of temporary differences	493	(168)
Impact of rate change	(52)	151
Adjustments in respect of prior years	484	(430)
<b>Total deferred tax credit</b>	<b>925</b>	<b>(447)</b>
<b>Corporation tax expense</b>	<b>4,898</b>	<b>3,911</b>

(b) Reconciliation of income tax expense	2017-18 £'000	2016-17 £'000
Profit before corporation tax expense	23,939	20,173
<b>Tax on profit at the standard rate of 19% (2016: 20%)</b>	<b>4,548</b>	<b>4,035</b>
<b>Reasons affecting charge for the period:</b>		
Prior year adjustments	(393)	(507)
Impact of rate change	(52)	151
Impact of expenses not deductible	61	166
Utilisation of tax losses not previously recognised	(111)	-
Current year loss not recognised	845	66
<b>Corporation tax expense</b>	<b>4,898</b>	<b>3,911</b>

Finance (No.2) Act 2015 was substantively enacted on 26 October 2015 and included reductions to the UK main rate of corporation tax from 20% to 19% with effect from 1 April 2017 and to 18% from 1 April 2020. Finance Act 2016 was substantively enacted on 6 September 2016 and further reduced the rate to 17% with effect from 1 April 2020. Deferred tax assets have been valued based on the substantively enacted rates at the statement of financial position reporting date at which the assets are expected to reverse.

## 8 Investments and loan

	2017-18 £'000	2016-17 £'000
Value of shares at beginning of period	400	400
<b>Value of investments at end of period</b>	<b>400</b>	<b>400</b>
Value of loans at beginning of period	2,700	900
Additions	3,655	3,800
Impairment	(5,455)	(2,000)
Impairment Reversal	4,200	-
Loan Repayment	(37)	-
<b>Value of loans at end of period</b>	<b>5,063</b>	<b>2,700</b>
<b>Value of investments and loan</b>	<b>5,463</b>	<b>3,100</b>

The Company has assessed the recoverable value of Ordnance Survey Leisure loans and has reversed impairment losses of £4,200k previously recognised.

OS Ltd owns 100% of the ordinary shares in Ordnance Survey Leisure Ltd (3,924,000 shares at £1 a share).

OS Ltd owns 100% of the ordinary shares in Ordnance Survey International Services Ltd (1 share at £1 a share).

OS Ltd owns 51% of the ordinary shares in Astigan Limited (312,245 shares at £1) and 100% of the preference shares in Astigan Limited (787,756 shares at £1 a share).

OSI LLP does not have share capital. Ordnance Survey appoints 100% of the Board members and has a 100% profit share in accordance with a members' agreement.

## 9 Subsidiaries and investments

Details of the Company's subsidiaries at 31 March 2018 are as follows:

Name of subsidiary	Principal activity	Country of incorporation	Proportion of control/ ordinary shares held
Ordnance Survey Leisure Limited	Consumer web	England and Wales	100%
Ordnance Survey Services Limited	Dormant	England and Wales	100%
Ordnance Survey GB Limited	Dormant	England and Wales	100%
Astigan Limited	Research	England and Wales	51%
Ordnance Survey Partners Limited	Non-trading holding company	England and Wales	100%
Ordnance Survey International LLP	International consultancy	England and Wales	100%
Ordnance Survey International Services Ltd	International consultancy	England and Wales	100%
Ordnance Survey International Services FZ-LLZ	International consultancy	United Arab Emirates	100%
Ordnance Survey GeoIntelligence Limited	Dormant	England and Wales	100%

Ordnance Survey Limited has provided an unlimited bank guarantee to secure all bank liabilities of Ordnance Survey International LLP.

Details of the Company's joint ventures and associates at 31 March 2018 are as follows:

Name of joint ventures and associates	Principal activity	Country of incorporation	Proportion of control/ ordinary shares held
GeoPlace LLP	National addressing	England and Wales	50%
PointX Limited	Point of Interest database	England and Wales	50%
Dennis Maps Limited	Map printers	England and Wales	25%

### Joint ventures and associates

The share of profit is as follows:	2017-18 £'000	2016-17 £'000
GeoPlace LLP	5,347	5,006
PointX Limited	70	43
Dennis Maps Ltd	116	8
	<b>5,533</b>	<b>5,057</b>

The share of net assets is as follows:	2017-18 £'000	2016-17 £'000
GeoPlace LLP	3,430	2,959
PointX Limited	241	171
Dennis Maps Ltd	128	11
	<b>3,799</b>	<b>3,141</b>

### Material other investments – GeoPlace LLP

The investment in GeoPlace LLP at 31 March 2018 is as follows:	2017-18 £'000	2016-17 £'000
<b>Current assets</b>		
Cash and cash equivalents	2,738	1,736
Other current assets	3,548	3,719
<b>Total current assets</b>	<b>6,286</b>	<b>5,455</b>
<b>Current liabilities</b>		
Financial liabilities (excluding trade and other payables and provisions)	-	-
Other current liabilities	(1,713)	(1,510)
<b>Total current liabilities</b>	<b>(1,713)</b>	<b>(1,510)</b>
<b>Net assets</b>	<b>4,573</b>	<b>3,945</b>
<b>Ordnance Survey share of net assets at 75%</b>	<b>3,430</b>	<b>2,959</b>

	2017-18 £'000	2016-17 £'000
Revenue	13,656	13,248
Interest income	3	5
Operating costs	(6,372)	(6,397)
Depreciation and amortisation	(158)	(180)
<b>Operating profit</b>	<b>7,129</b>	<b>6,676</b>
Ordnance Survey share of profit at 75%	5,347	5,006

GeoPlace LLP is a joint venture limited liability partnership set up in 2010-11 to develop and market a national addressing product. GeoPlace LLP commenced trading on 1 April 2011 and is not subject to UK Corporation Tax. GeoPlace LLP does not have share capital. Ordnance Survey appoints 50% of the Board Members of the LLP and has a 75% profit share in accordance with a members' agreement.

Dividends of £4.9m were received from GeoPlace LLP during the year (2016-17: £4.1m)

The registered office of GeoPlace LLP is Explorer House, Adanac Drive, Southampton, Hampshire, SO16 0AS.

## 10 Intangible assets

Group	Software	Data content	Assets under construction	Total
<b>Year ended 31 March 2017</b>	£'000	£'000	£'000	£'000
Opening net book value	42,682	16,717	25,843	85,242
Additions	–	–	21,346	21,346
Additions from assets under construction	24,887	14,508	(39,395)	–
Reclassification	(4,232)	4,232	–	–
Amortisation	(13,238)	(4,998)	–	(18,236)
Impairment	(1,314)	–	(336)	(1,650)
<b>Closing net book value</b>	<b>48,785</b>	<b>30,459</b>	<b>7,458</b>	<b>86,702</b>
<b>At 31 March 2017</b>				
Cost or valuation	81,354	38,142	7,458	126,954
Accumulated amortisation & impairment	(32,569)	(7,683)	–	(40,252)
<b>Net book value</b>	<b>48,785</b>	<b>30,459</b>	<b>7,458</b>	<b>86,702</b>
<b>Year ended 31 March 2018</b>				
Opening net book value	48,785	30,459	7,458	86,702
Additions	–	–	17,025	17,025
Additions from assets under construction	1,100	10,177	(11,277)	–
Reclassification	–	–	–	–
Amortisation	(16,960)	(6,918)	–	(23,878)
Impairment	–	–	(5,074)	(5,074)
<b>Closing net book value</b>	<b>32,925</b>	<b>33,718</b>	<b>8,132</b>	<b>74,775</b>
<b>At 31 March 2018</b>				
Cost or valuation	82,455	48,318	13,542	144,315
Accumulated amortisation & impairment	(49,530)	(14,600)	(5,410)	(69,540)
<b>Net book value</b>	<b>32,925</b>	<b>33,718</b>	<b>8,132</b>	<b>74,775</b>

In 2016–17 £4.2m of existing intangible fixed assets were reclassified to from software to data content due to the nature of the underlying assets.

Individual material assets include the geospatial database management system, current year carrying value £18.6m (2016–17: £25.0m) and the geospatial content improvement programme, current year carrying value £23.8m (2016–17: £27.2m).

Individual material assets impaired within assets under construction include the unmanned aerial vehicle platform. Impairment of £4.7m was recognised in the current year (2017: nil) within the statement of profit or loss and other consolidated income due to delays in development milestones reducing the certainty of the timings of future revenue.

Company	Software	Data content	Assets under construction	Total
<b>Year ended 31 March 2017</b>	£'000	£'000	£'000	£'000
Opening net book value	42,682	16,717	25,843	85,242
Additions	-	-	19,765	19,765
Additions from assets under construction	24,887	14,508	(39,395)	-
Reclassification	(4,232)	4,232	-	-
Amortisation	(13,238)	(4,998)	-	(18,236)
Impairment	(1,314)	-	(336)	(1,650)
<b>Closing net book value</b>	<b>48,785</b>	<b>30,459</b>	<b>5,877</b>	<b>85,121</b>
<b>At 31 March 2017</b>				
Cost or valuation	81,316	38,142	5,877	125,335
Accumulated amortisation & impairment	(32,531)	(7,683)	-	(40,214)
<b>Net book value</b>	<b>48,785</b>	<b>30,459</b>	<b>5,877</b>	<b>85,121</b>
<b>Year ended 31 March 2018</b>				
Opening net book value	48,785	30,459	5,877	85,121
Additions	-	-	14,353	14,353
Additions from assets under construction	1,100	10,177	(11,277)	-
Reclassification	-	-	-	-
Amortisation	(16,960)	(6,918)	-	(23,878)
Impairment	-	-	(821)	(821)
<b>Closing net book value</b>	<b>32,925</b>	<b>33,718</b>	<b>8,132</b>	<b>74,775</b>
<b>At 31 March 2018</b>				
Cost or valuation	82,417	48,318	8,953	139,688
Accumulated amortisation & impairment	(49,492)	(14,600)	(821)	(64,913)
<b>Net book value</b>	<b>32,925</b>	<b>33,718</b>	<b>8,132</b>	<b>74,775</b>

In 2016-17 £4.2m of existing intangible fixed assets were reclassified to from software to data content due to the nature of the underlying assets.

Individual material assets include the geospatial database management system, current year carrying value £18.6m (2016-17: £25.0m) and the geospatial content improvement programme, current year carrying value £23.8m (2016-17: £27.2m).

## 11 Property, plant and equipment

Group	Land	Buildings	IT Equipment	Equipment, facilities and fixtures	Total
<b>Year ended 31 March 2017</b>	£'000	£'000	£'000	£'000	£'000
Opening net book value	6,300	21,919	2,259	1,040	31,518
Additions	-	-	1,129	71	1,200
Depreciation	-	(634)	(1,425)	(412)	(2,471)
<b>Closing net book value</b>	<b>6,300</b>	<b>21,285</b>	<b>1,963</b>	<b>699</b>	<b>30,247</b>
<b>At 31 March 2017</b>					
Cost or valuation	6,300	22,544	5,912	1,794	36,550
Accumulated depreciation	-	(1,259)	(3,949)	(1,095)	(6,303)
<b>Net book value</b>	<b>6,300</b>	<b>21,285</b>	<b>1,963</b>	<b>699</b>	<b>30,247</b>
<b>Year ended 31 March 2018</b>					
Opening net book value	6,300	21,285	1,963	699	30,247
Additions	-	-	1,017	1,035	2,052
Depreciation	-	(635)	(960)	(276)	(1,871)
<b>Closing net book value</b>	<b>6,300</b>	<b>20,650</b>	<b>2,020</b>	<b>1,458</b>	<b>30,428</b>
<b>At 31 March 2018</b>					
Cost or valuation	6,300	22,544	6,929	2,829	38,602
Accumulated amortisation	-	(1,894)	(4,909)	(1,371)	(8,174)
<b>Net book value</b>	<b>6,300</b>	<b>20,650</b>	<b>2,020</b>	<b>1,458</b>	<b>30,428</b>

Company	Land	Buildings	IT equipment	Equipment, facilities and fixtures	Total
	£'000	£'000	£'000	£'000	£'000
<b>Year ended 31 March 2017</b>					
Opening net book value	6,300	21,918	2,259	1,012	31,489
Additions	-	-	1,129	26	1,155
Depreciation	-	(634)	(1,424)	(394)	(2,452)
<b>Closing net book value</b>	<b>6,300</b>	<b>21,284</b>	<b>1,964</b>	<b>644</b>	<b>30,192</b>
<b>At 31 March 2017</b>					
Cost or valuation	6,300	22,544	5,911	1,707	36,462
Accumulated depreciation	-	(1,260)	(3,947)	(1,063)	(6,270)
<b>Net book value</b>	<b>6,300</b>	<b>21,284</b>	<b>1,964</b>	<b>644</b>	<b>30,192</b>
<b>Year ended 31 March 2018</b>					
Opening net book value	6,300	21,284	1,964	644	30,192
Additions	-	-	1,017	901	1,918
Depreciation	-	(634)	(961)	(230)	(1,825)
<b>Closing net book value</b>	<b>6,300</b>	<b>20,650</b>	<b>2,020</b>	<b>1,315</b>	<b>30,285</b>
<b>At 31 March 2018</b>					
Cost or valuation	6,300	22,544	6,928	2,608	38,380
Accumulated amortisation	-	(1,894)	(4,908)	(1,293)	(8,095)
<b>Net book value</b>	<b>6,300</b>	<b>20,650</b>	<b>2,020</b>	<b>1,315</b>	<b>30,285</b>

## 12 Inventories

Company and Group	2017-18 £'000	2016-17 £'000
Finished goods	1,743	1,642
	<b>1,743</b>	<b>1,642</b>

During the year, Ordnance Survey wrote off stock carried at £93k (2016-17: £99k)

## 13 Trade and other receivables

Group	2017-18 £'000	2016-17 £'000
Trade receivables	11,823	10,991
Allowance for doubtful debts	(312)	(376)
	<b>11,511</b>	<b>10,615</b>
Other receivables	412	422
Taxation and social security receivable	325	35
Accrued income	8,909	7,825
Prepayments	4,688	5,167
	<b>25,845</b>	<b>24,064</b>

Company	2017-18 £'000	2016-17 £'000
Trade receivables	11,506	10,653
Allowance for bad debts	(311)	(300)
	<b>11,195</b>	<b>10,353</b>
Other receivables	374	421
Accrued income	8,683	7,631
Prepayments	4,636	5,067
Loans owed by Group undertakings	4,700	2,300
Accrued income from Group undertakings	211	-
Trade receivables owed by Group undertakings	(0)	493
	<b>29,799</b>	<b>26,265</b>

The bad debts written off in year were £187k (2016-17: nil).

The fair value of trade and other receivables is not materially different to the book value above. Receivables less than three months past due are not considered for impairment unless specific circumstances give rise to indication of impairment as historical experience shows these amounts as recoverable. Receivables are reviewed on a regular basis to assess the recoverability of the debt and a provision is made against them based on estimated recoverable amounts from the sales of goods/services determined by reference to past default experience. The value of receivables past due is shown in note 25.

Before accepting any new customer, the Group uses an external credit scoring system to assess the potential customer's credit quality and defines credit limits by customer. Limits and scoring attributed to customers are reviewed on a regular basis.

## 14 Cash and cash equivalents

Group	2017-18 £'000	2016-17 £'000
Balance held at Paymaster General's Office	91,750	17,158
Balance held in commercial banks and cash in hand	18,642	71,259
	<b>110,392</b>	<b>88,417</b>

Company	2017-18 £'000	2016-17 £'000
Balance held at Paymaster General's Office	91,406	16,847
Balance held in commercial banks and cash in hand	17,144	70,435
	<b>108,550</b>	<b>87,282</b>

## 15 Trade and other payables

<b>Group</b>	2017-18	2016-17
	£'000	£'000
Trade payables	1,573	1,138
Taxation and social security payable	1,014	924
Other payables	932	1,042
Accruals	12,111	11,865
	<b>15,630</b>	<b>14,969</b>

<b>Company</b>	2017-18	2016-17
	£'000	£'000
Trade payables	1,566	1,106
Taxation and social security payable	1,014	1,024
Other payables	898	988
Accruals	11,911	11,497
Intercompany payable	329	260
	<b>15,718</b>	<b>14,875</b>

The trade payables balance for both Group and Company includes long term payables of £80k (2016-17: £160k).

The fair value of trade and other payables is not materially different to the book values above.

A dividend of £18,000k was declared after the reporting date.

## 16 Current tax liability

<b>Group</b>	2017-18	2016-17
	£'000	£'000
Corporation Tax	975	2,015

<b>Company</b>	2017-18	2016-17
	£'000	£'000
Corporation Tax	970	2,008

## 17 Provisions for liabilities and charges

Group and Company	Restructuring provision	Early release provision	Other	Total
	£'000	£'000	£'000	£'000
As at 1 April 2017	4,178	588	70	4,836
Additional provision in year	-	-	1	1
Utilisation of provision	(3,474)	(382)	(71)	(3,927)
Unutilised provision released to P&L	(704)	-	-	(704)
Financing charges – unwind of provision discount	-	(5)	-	(5)
<b>As at 31 March 2018</b>	<b>-</b>	<b>201</b>	<b>-</b>	<b>201</b>

	2017–18	2016–17
	£'000	£'000
Included in current liabilities	160	4,652
Included in non-current liabilities	41	184
	<b>201</b>	<b>4,836</b>

The above amount is estimated as falling due as follows:

	Current liabilities	Non-current liabilities
	£'000	£'000
2018–19	160	-
2019–20	-	36
2020–21	-	5
Other provisions	-	-
	<b>160</b>	<b>41</b>

Provisions are discounted at -2.42% in accordance with HM Treasury guidance.

In the other provisions balance, a provision for onerous leases as a result of regional office closures of £71k was utilised in full during the current year. The provision covered residual commitments to lease expiry, after application of a risk factored allowance for anticipated sublet rental income, together with other sundry provisions.

The restructure provision of £4,178k, which related to an organisational restructuring announced March 2017, has been utilised in full during the current year. The unutilised provision was released during the current year.

The early release provision £201k (2016-17: £587k) represents the full cost of funding early leavers identified prior to 31 March 2015. Funds are released from the provision annually to fund payments for pensions and related benefits to retired employees until normal retirement age.

## 18 Deferred revenue

Group	2017-18	2016-17
	£'000	£'000
Current deferred revenue	10,632	12,089
Non-current deferred revenue	10,049	10,617
	<b>20,681</b>	<b>22,706</b>

Company	2017-18	2016-17
	£'000	£'000
Current deferred revenue	9,876	11,619
Intercompany current deferred revenue	20	60
Non-current deferred revenue	10,049	10,617
Intercompany non-current deferred revenue	-	20
	<b>19,945</b>	<b>22,316</b>

## 19 Deferred tax liability

Group	Provisions	Fixed assets	Total
	£'000	£'000	£'000
At 1 April 2016	-	407	407
(Charged)/credited to the income statement	424	23	447
<b>At 31 March 2017</b>	<b>424</b>	<b>430</b>	<b>854</b>
(Charged)/credited to the income statement	(292)	(633)	(925)
<b>At 31 March 2018</b>	<b>132</b>	<b>(203)</b>	<b>(71)</b>

Company	Provisions	Fixed assets	Total
	£'000	£'000	£'000
At 1 April 2016	-	401	401
(Charged)/credited to the income statement	424	23	447
At 31 March 2017	<b>424</b>	<b>424</b>	<b>848</b>
(Charged)/credited to the income statement	(292)	(633)	(925)
<b>At 31 March 2018</b>	<b>132</b>	<b>(209)</b>	<b>(77)</b>

### Ordnance Survey Leisure Limited

Ordnance Survey Leisure Limited generated a current year profit before tax of £585k (2016-17 profit: £160k). Ordnance Survey Leisure Limited has estimated tax losses of £6,740k (2016-17: £7,362k) available to carry forward against future profits of the same trade. No deferred tax asset has been recognised due to uncertainty over the timing and continuity of taxable profits.

### Astigan Limited

Due to the group's holding in Astigan Limited, losses before tax of £6,740k (2016-17: £7,362k) are included within the group's profit for the year. On this loss no amounts are due in respect of Corporation Tax. As an entity, Astigan Limited has estimated tax losses of £7,693k (2016-17: £3,222k) available to carry forward against future profits of the same trade. No deferred tax asset has been recognised due to uncertainty over the timing of taxable profits.

## 20 Share capital

<b>Group and Company</b>	<b>£'000</b>
Balance as at 1 April 2016	34,000
Acquisition	–
<b>Balance as at 31 March 2017</b>	<b>34,000</b>
Balance as at 31 March 2017	<b>34,000</b>
Acquisition	–
<b>Balance as at 31 March 2018</b>	<b>34,000</b>

No shares in OS Ltd are held by or on behalf of its subsidiaries undertakings

## 21 Retained earnings

<b>Group</b>	<b>£'000</b>
Balance as at 1 April 2016	141,270
Profit for the year	16,425
<b>Balance at 31 March 2017</b>	<b>157,695</b>
Balance as at 1 April 2017	157,695
Profit for the year	21,167
<b>Balance at 31 March 2018</b>	<b>178,862</b>

<b>Company</b>	<b>£'000</b>
Balance as at 1 April 2016	140,463
Profit for the year	16,233
<b>Balance at 31 March 2017</b>	<b>156,696</b>
Balance as at 1 April 2017	156,696
Profit for the year	21,745
<b>Balance at 31 March 2018</b>	<b>178,441</b>

## 22 Operating lease commitments

<b>Group and Company</b>	<b>2017-18</b>	<b>2016-17</b>
	<b>£'000</b>	<b>£'000</b>
Minimum lease payments under operating leases as an expense in the year	2,839	2,536

At 31 March 2018, the Company has future minimum lease payments under non-cancellable operating leases as set out below:

<b>Group and Company</b>	<b>2017-18</b>	<b>2016-17</b>
	<b>£'000</b>	<b>£'000</b>
Within one year	2,813	1,984
Between two and five years	3,345	2,639

## 23 Contingent liabilities and contingent assets

No significant contingent assets or liabilities noted for current year.

## 24 Capital commitments

At 31 March 2018, the company had the following capital commitments

	<b>2017-18</b>	<b>2016-17</b>
	<b>£'000</b>	<b>£'000</b>
Contracts for future capital expenditure not provided in the financial statements	432	-

## 25 Financial instruments

The Group's financial instruments comprise cash deposits and other items such as trade receivables, receivables owing from joint ventures, trade payables, provisions and loans. The main purpose of these financial instruments is to finance the Group's operations.

The main risks arising from the Group's financial instruments are credit, liquidity and interest rate risks. The Group's policies for managing these risks are set to achieve compliance with the regulatory framework. The Group follows Government Accounting rules, negotiating contracts with suppliers or contractors in sterling or major international currencies such as the euro. The Group's policy during the year on routine transactional conversions between currencies (for example, the collection of receivables and the settlement of payables) remained that these should be affected at the relevant spot exchange rate.

### Credit risk

The Group is exposed to credit risk through its trade receivables over a number of sectors. The Credit Policy has a deemed level of risk acceptance for commercial business and higher credit risks are subject to credit checking using external sources such as Dun & Bradstreet® and Experian®.

Generally, payment terms are 30 days from date of invoice except in the consumer sector, where payment terms of 60 or 90 days prevail. The profile of past due debt not impaired is shown below:

	2017-18 £'000	2016-17 £'000
Past due 0-30 days	11,220	10,521
Past due 31-60 days	334	93
Past due 61-90 days	171	65
Past 90 days	98	11

In arriving at the provision against trade receivables the following have been taken into account:

- An individual account-by-account assessment of debt based on past credit history.
- A statistical approach to determine the historical allowance rate for each debt tranche, applying this to the debt tranche at the end of the period.
- Any prior knowledge of debtor insolvency or other credit risk.

### Interest rate risk

The Group finances its operations through equity and retained profits thus is not exposed to interest rate risk.

### Liquidity risk

The Group has maintained short-term liquidity throughout the year by management of its cash deposits.

### Foreign exchange risk

The Group's activities expose it primarily to the financial risks of changes in foreign currencies.

The sensitivity analysis below has been determined based on the exposure to foreign exchange on the financial instrument balances at the reporting date and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period.

An increase of 5% of the US dollars versus sterling would result in a reduction of the Group's profit by £187k (2016-17: £180k).

### Fair value hierarchy

IFRS 7 requires that an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into levels 1 to 3 based on the degree to which the fair value observable is given. The levels are as follows:

- Level 1** Fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets and liabilities.
- Level 2** Fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3** Fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs). The Group's financial instruments, recognised at fair value, all fall into the level 3 categorisation.

### Interest rate risk profile

The interest rate profile of the Group's financial assets at 31 March 2018 are set out below. All balances are held in sterling:

Financial assets	2017-18			2016-17		
	Fixed rate £'000	Floating rate £'000	Total £'000	Fixed rate £'000	Floating rate £'000	Total £'000
Cash at bank	-	110,392	110,392	-	88,417	88,417

## 26 Related parties

All transactions with actual or potential related parties are carried out at on an arm's length basis.

The Company is wholly owned by the Secretary of State for Business, Energy & Industrial Strategy, which is a ministerial department of HM Government. The Secretary of State for Business, Energy & Industrial Strategy is regarded as a related party as it has both an ownership and customer role.

In the course of its normal business the Group provides mapping data and licences to both the private and public sectors.

During the year the Group had a significant number of material transactions with other governmental departments and central government bodies. Most of these transactions have been with the Secretary of State for Business, Energy & Industrial Strategy, Land Registry, the Scottish Government and GeoPlace LLP.

No other Board member, senior management or other related party has undertaken any material transactions with Ordnance Survey during the year. Compensation paid to management in the ordinary course of Group operations is given in the Remuneration report.

Ordnance Survey Leisure Limited is 100% owned by the Company. The Directors of Ordnance Survey Leisure Limited at 31 March 2018 were Nigel Clifford, Craig Lester and Helen Webb.

Ordnance Survey International Services Limited, is 100% owned by the company. The Director of Ordnance Survey International Services Limited at 31 March 2018 was Nigel Clifford.

Ordnance Survey International LLP is a limited liability partnership between Ordnance Survey Limited and Ordnance Survey Partners Limited. Ordnance Survey Limited has 100% control in the LLP. At 31 March 2018, The Company was represented on the Board of Ordnance Survey International LLP by Neil Ackroyd and Nigel Clifford.

Astigan Limited is 51% owned by Ordnance Survey. The Directors of Astigan Limited at 31 March 2018 representing the Company were Mike Carr and Neil Ackroyd.

GeoPlace LLP is a joint venture LLP with Local Government Association. At 31 March 2018, The Company was represented on the Board of GeoPlace by Will Davies and John Kimmance.

PointX Limited is a joint venture with Landmark Information. Ordnance Survey Limited own 50% of the shares and voting rights. At 31 March 2018, Daniel Dukes and Paul Bragg represent the Company as Directors of PointX Limited.

The Company and Dennis Maps Limited are related parties, whereby 25% is owned by Ordnance Survey Limited. At 31 March 2018, Nick Giles and Neil Ackroyd represented the Company as Directors of Dennis Maps Limited.

The results of Ordnance Survey Leisure Limited, Ordnance Survey International Services Limited, Ordnance Survey International LLP, Astigan Limited, GeoPlace LLP, PointX Limited and Dennis Maps Limited are included in the consolidated financial statements as described in the accounting policies.

## Remuneration of key management staff

Key management staff are considered to be the Company's Executive Leadership team. Remuneration of key management staff is set out below:

	2017-18 £'000	2016-17 £'000
Salaries and other short-term employee benefits	1,637	1,400
Pension contribution charged in year	178	173
	<b>1,815</b>	<b>1,573</b>

## 27 Control

The immediate parent undertaking and ultimate controlling party of the Company is the Secretary of State for Business, Energy & Industrial Strategy on behalf of HM Government.

The annual report and accounts for the Secretary of State for Business, Energy and Industrial Strategy on behalf of HM Government is available at:

[www.gov.uk/government/publications](http://www.gov.uk/government/publications).



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