



# Ordnance Survey Limited Annual Report & Accounts 2018–19

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

July 2019



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## **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 until June 2019)

## Stephen Blair

Chief Executive Officer (From June 2019)

## **Paul Bragg**

Chief Financial Officer

## **Executive Directors**

### Will Davies

Director of Human Resources (Until Dec 2018)

## **Hazel Hendley**

Acting Director of Human Resources (From Dec 2018)

## **Nick Giles**

Managing Director of Consumer

## **David Henderson**

Managing Director of OSGB

## **Caroline Bellamy**

Chief Data Officer

## Rebecca Paterson

Chief Strategy and Marketing Officer

## **Dan Dukes**

**Director of Operations** 

## Jo Shannon

Director of Engineering

## Jon O'Meara

**Company Secretary** 

## **Non-Executive Directors**

## **Kieran Murphy**

Non-Executive Chairman

## Jacques Cadranel

Non-Executive Director

## Mike Carr

Non-Executive Director

### Stephen Lake

Non-Executive Director

## **Iain Rolfe**

Non-Executive Director (Until August 2018)

## Philippa Hird

Non-Executive Director (From June 2018)

## **Emily Ashwell**

Non-Executive Director (From August 2018)

## John Clarke

Non-Executive Director (From October 2018)

#### **External Auditors**

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## Chairman's statement

2018-19 was another busy and exciting year for Ordnance Survey as we continued to develop our relationships with the public sector, the commercial world and internationally.

Our detailed data underpins the delivery of a very wide range of services by our large network of public sector customers. In addition, OS provides a range of services to augment that data capability, driven by our customers' needs. We regularly engage and support beyond the data we provide, focusing on key government priority areas to maximise outcomes and benefits for our country and economy.

During the last year, our consultancy teams worked on a project to help with providing the homes our country needs, working alongside Ministry for Housing, Communities & Local Government staff to monitor the number, location and type of new homes built to support housing policy development.

We are currently actively engaging with the Department for Environment, Food & Rural Affairs to develop a joint understanding of how our data can more effectively be used to help address environmental issues, target preservation and support our farmers. OS's ability to provide its public sector customers with expert, knowledgeable personnel to support their operations in times of need is an important part of the value which we create, in addition to the core data which we provide.

This year saw the formal creation of the Geospatial Commission, the new Government body tasked with developing national strategy for the geospatial industry and with promoting the effective use of geospatial data throughout the economy.

We are pleased to welcome Sir Andrew Dilnot as the Commission's first chairman and Nigel Clifford, a past CEO at Ordnance Survey, as deputy chairman.

The Commission's role will be important to the continuing success of OS and we have worked closely with their team over the last few months. We are pleased to have been asked to lead a project in the North East, working with Northumbrian Water Group to create and maintain an accurate map of underground utility assets.

In my statement last year, I referred to the fact that discussions had begun with the Government about a new long-term financial agreement for Ordnance Survey which would provide the organisation with a sustainable long-term future, preserve and enhance our strategic strengths, finance our development and ensure that we can continue to maintain our data as the authoritative reference geospatial dataset for Great Britain. Those discussions are continuing. Our objective is to reach an agreement which will allow OS to offer a broader range of data and services to our public sector customers.

We remain confident that it should be possible to reach an agreement this year which will place the organisation on a firm footing for the years to come.

That agreement is also essential to underpin our ability to release more data under an Open Government Licence, following the announcement by Ministers last summer. Work has continued throughout the year, in close association with the Geospatial Commission, to allow the organisation to deliver effectively on that announcement and thereby enable businesses not just to access our high-quality data but to ensure that this data will be used widely throughout the economy as a key underpin for the country's future growth and prosperity.

More generally, OS has continued to develop projects which have the potential to create long-term value, whether through more effective data collection and processing or in the creation of new datasets for the future. In February of this year we announced that we are developing a highly innovative solar powered High-Altitude Pseudo Satellite (HAPS) which will have the potential to collect data over much wider areas than conventional aerial imagery capture and at significantly lower cost. The project, called Astigan, has the potential to optimise OS's data collection in Great Britain but has other applications such as climate and environmental monitoring and could revolutionise data capture capabilities elsewhere in the world.

We also announced a joint development project with the Intel™ company Mobileye, combining Mobileye's capability to capture a street-level view of road network



Kieran Murphy, Chairman

infrastructure with OS's skills in processing and cross-referencing data. This partnership will help create new datasets which will be valuable to energy, utility and infrastructure companies among others.

Our consumer business continues to grow. We encourage people to explore outdoors with our successful GetOutside campaign and by adding to our product range to make the outdoors more accessible, enjoyable and safe. We have added augmented reality features into OS Map apps, winning a number of industry awards. And we published the first Ordnance Survey Puzzle Book which became a Christmas bestseller, topping the Sunday Times charts and selling well over 150,000 copies.

We've continued to build links with customers and partners internationally and are now working with countries on four continents. We used our experience in digitising the GB geospatial database to create a geospatial data model for Malta.

We provided consultancy support to the Guyana Land and Surveys Commission to re-establish and develop its GPS reference stations network. And we have signed an agreement with the Singapore Land Authority to support the mutual exploration of geospatial data projects to support smart services for citizens and businesses.

Our international outreach programme has taken us to a number of other countries across Asia and the Middle East, developing understanding of the value of geospatial data and OS's expertise in the field.

None of this would be possible without the support of our committed and expert employees who generously share their expertise internally and with customers.

We have a strong track record in developing early career talent, and welcomed seven apprentices to OS across a range of disciplines from Marketing, Project Management, Data Analysis and HR. We are well underway with plans to recruit a further 10 apprentices in Software Engineering, and six graduates join us in September. This past year saw OS employees being seconded to a range of organisations, including the Welsh and Singaporean governments.

At senior executive and Board level, Neil Ackroyd acted as our interim CEO for just over 12 months in addition to continuing in his role as head of our commercial business. This was a very demanding period for Neil. My fellow Board colleagues and I are very grateful for his work in steering the overall business and in developing new opportunities throughout this busy time. I am delighted that, shortly before publication of this annual report, we were able to announce the appointment of Steve Blair as the new permanent CEO of Ordnance Survey.

Steve joins us after a very successful career in high-tech engineering businesses culminating as Group Chief Executive of E2V plc. We wish Steve every success in his new role with us.

During the year, we were also joined at Board level by two new non-executive directors. Philippa Hird has had a long career in human resources management while John Clarke has worked for many years in a number of high-tech delivery businesses. Both have quickly settled in and made effective contributions to the Board. We also welcomed Emily Ashwell as our new Shareholder Director, succeeding Iain Rolfe. Our thanks go to lain for his consistent support for OS at a time of change in its relationship with Government. Emily has already made a significant contribution at Board level and in our relationship with Government and we look forward to continuing to work with her this year. Separately, OS commissioned an independent board review during the year in line with best corporate governance practice. This review helped

us to identify and build on the strengths of the Board, and to plan the Board's future development.

OS is a busy and active organisation, at the heart of public sector service provision, a key driver of our citizens' interaction with the outdoors and a partner in an increasing variety of commercial projects at home and abroad. I very much expect that level of activity and interaction to continue to grow in the coming year.

I would like to thank all our employees in Southampton, across Great Britain and internationally who help to make OS such a rewarding place to work.

Kieran Murphy Chairman 3 July 2019

## Chief Executive Officer's statement

It's been a year of delivery for Ordnance Survey, building new partnerships, new customer relationships and strengthening existing ones.

We're proud of helping to position Great Britain as a world-leading geospatial nation. We're driven to produce location data and supporting geospatial content at levels of detail, currency and accuracy at national scale.

Over the last 12 months, we've been working closely with the newly formed Geospatial Commission and its five other partner bodies on the services and data a progressive national mapping agency needs to provide. Our information must be more relevant, discoverable, easier to access and simpler to use. We also know how important our people are to achieving customer success and we are building on our world-class competencies and capabilities to ensure our customers continue to receive real value from our services.

As a government-owned company, we remain committed to close engagement with our customers across government, with the public and with private sector partners and customers. Understanding our customers across many different industries and segments is critical to help us understand wider market trends. Our data is used by around 350 commercial partners, as well as more than 5,000 public sector organisations to deliver value to the UK economy. It's used daily across a broad church from land & property transactions; finance & insurance; energy & infrastructure; retail; transport & logistics; computer gaming; advertising and analytics.

To do this, we need a deep understanding of our customers as well as the market. For us, the customer is both citizen and society at large. For many years our work has delivered societal value and social purpose, but we need to also understand our role in a rapidly changing market. Through pathfinding projects and working in innovation communities within our Geovation accelerator, we're identifying the work we need to do to remain relevant.

We've been working in partnership with the public sector across all existing customer groups to ensure they are deriving value from our products and services. Working closely with our

parent department we have fed this into our future roadmap to support the ambition and objectives of the Geospatial Commission's plans going forward.

This work has had a positive impact on delivery. It has been a successful year of re-platforming our business and providing new capabilities, technologies and services through our most ambitious investment programme to date.

In June, our work with the Geospatial Commission was highlighted with the announcement that key parts of OS MasterMap would be made more openly available. To ensure improved access to our OpenData offerings, teams collaborated on OS Open Zoomstack, a comprehensive vector basemap showing coverage of Great Britain at a national level, right down to street-level detail.

We are also working on the delivery of a new Public Sector Geospatial Agreement (PSGA) for Great Britain to replace the current Public Sector Mapping Agreement and One Scotland Mapping Agreement. A new PSGA will allow our public sector partners to access the very best geospatial data available for their current and future needs and ensure OS remains a key contributor to the data infrastructure of our country.

Working with our production supply chain partners, we've also been re-platforming and enhancing our geo-production technology including Artificial Intelligence (AI) and machine-to-machine learning to deal with much bigger volumes of data. New and existing data will be captured more efficiently as we develop new forms of data capture and automated services in new and exciting partnerships.

One such new partnership was announced at CES 2019 in Las Vegas with the Intel™ company Mobileye. Working with them and their innovative AI driven automotive camera-based driver safety assist system gives a new dimension to mapping. This new 'professional crowd sourced' data will also support the successful rollout of technologies for new market segments, including potentially, intelligent mobility and connected and autonomous vehicles. Kieran talks about our exciting Astigan programme, looking at how we can offer high-resolution mapping capability as a significant disruptor to existing satellite and aerial imagery.



Neil Ackroyd, Acting Chief Executive Officer

By aligning these new capabilities with our world-class geospatial production and mapping expertise, we hope to support organisations and countries in tackling major societal challenges including urbanisation, land management, environmental change and mapping to support emergency response following natural disasters.

Indeed, our international presence is still growing as noted in our Chairman's statement. This year we also kicked off a new partnership with Guyana to help meet their sustainable development goals as well as improve transport, secure land tenure and boost the economy. We continue to develop great relationships across many countries for example working with the French Mapping Agency Institut National de l'information Géographique et Forestière (IGN) where we are sharing our knowhow of supporting 'London 2012' to inform the geospatial strategy for their own 2024 Paris Olympics. We continue to collaborate in the Middle East, deepening our relationship with Dubai Municipality and working together on looking at the geospatial capabilities that can support their national ambition.

While Britain embraced last summer's heatwave, our Flying Unit and external suppliers were making the most of the unique weather with unprecedented results. Their target for the year was to fly 90,000 km<sup>2</sup> and by July they were in a great position already covering over 88,000 km<sup>2</sup> and taking around 150,000 photographs.

The warmer weather also encouraged more people to get outside and explore the British countryside. Around 50 industry partners are on board with our GetOutside consumer campaign, which inspires people to get outside more often. We've helped more than a million people GetOutside on National GetOutside Day and continue to build on our exciting products in the Leisure space.

Our Operations team celebrated the completion of the Geospatial Content Improvement Programme (GCIP) marking the end of a key investment which had seen OS focus on improving the quality, completeness and currency of our core large-scale data in our urban areas. This complemented our continued commitment to improving the currency of our data across the whole of Great Britain.

We may be 228 years old, but we're still filled with energy, ambition and curiosity. It's in this spirit that we continue to innovate and build a reputation as the world's most inspiring and trusted geospatial partner.

I've been enormously proud to have taken the helm again over the past year as Acting Chief Executive Officer. It will soon be time to step down from this role, as we look forward to welcoming a new CEO. I'm excited to see the organisation play an ever-stronger part in the global geospatial community and embed further our growth ambitions.

Finally, I would like to thank all our customers in both the public and private sectors for their positive support through this year, my executive colleagues for their support (and forbearance) during this transition but mainly, of course, all our people at Ordnance Survey. We have delivered another year of growth in more uncertain economic conditions, increased the value for customers using our information and started to make real progress in developing our international offer. Our great team here at Ordnance Survey has made all of this possible.

Neil Ackroyd Acting Chief Executive Officer 2 July 2019

## Strategic report

## Principal activity

The principal activity of Ordnance Survey Limited is the collection, maintenance and distribution of up-todate geospatial information.

These accounts are for the year ending 31 March 2019.

## **Business model**

Ordnance Survey Limited (OS) is Britain's national mapping agency. It collects, maintains and distributes the most accurate and up-to-date geospatial information for Great Britain in accordance with its Public Task.

It provides services to government and businesses to enhance the value they derive from geospatial 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 majority of revenue is generated through licensing the intellectual property rights, held under Crown copyright and data base rights. Since April 2010, free and unrestricted access to a large range of mapping has also been provided via OS OpenData, a service that underpins a range of applications and encouraging greater use of geospatial information.

The OS Board remains accountable to the Secretary of State for Business, Energy and Industrial Strategy. 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.

## Strategy and future outlook

OS provides a critical foundation for the UK economy, by describing Britain in fine detail through our database of 500 million real-world features. We keep this current by making over 20,000 changes every day.

At the same time, profoundly disruptive technologies and trends are changing how we work, the way we live and how we relate to the world around us. The emergence of smart and connected technologies – and the new applications and solutions that come with them - are dependent on cost-effective, quality geospatial data that can be delivered in an increasingly discoverable, accessible and usable way.

At OS, we are committed to offering the best geospatial service possible, for our customers, with our partners and to support Britain as one of the world's leading digital economies.

In 2018-19, we continued our roll-out of a next generation geospatial infrastructure - a system that is scalable, cloud-based and fit to meet the demands of our users. whatever their needs may be.

We continue to offer products and services which help make outdoor experiences more enjoyable, accessible and safe for millions through our leisure products and GetOutside campaign.

We have also made strides this year to develop our offer of advisory and technology services on a commercial basis to international customers, governments and mapping agencies meeting the developing needs of our global customers in a rapidly-evolving marketplace.

To continue to engage and inspire our customers, OS is actively evolving the internal culture and organisation around a clear sense of purpose, informed by customer and market insight and supported by efficient and effective delivery.

We're working with our public and private sector partners to innovate and provide the next generation of geospatial products and services, delivering on our vision to be the world's most inspiring and trusted geospatial partner.

## **Business review**

#### A new Geospatial Commission

The creation of the Geospatial Commission in 2018 has put momentum behind the UK's 'geospatial moment'. As a partner body to the Geospatial Commission, OS is working closely with the new team in Cabinet Office to unlock the value of geospatial data. In 2018-19, OS responded to the Commission's Call for Evidence for a new national geospatial strategy, sharing insight and expertise from working with public and private sector partners across Great Britain. Over the coming year OS will continue collaborating with the other members of the Geo6 (the six Commission partner bodies) to work on overcoming the common barriers to the increased use and application of geospatial data.

## Open MasterMap Implementation **Programme**

In June 2018 the Government announced plans to release parts of OS MasterMap – our flagship data product.

Working closely with other government departments, we've been looking at the terms under which we can open certain datasets, including the Open Government Licence and free-to-use thresholds. This work also includes how best to improve the provision of types of content, such as property extents and spatial identifiers.

In our engineering environment, we've been working on developing Application Programme Interfaces (APIs) and technology to serve OS MasterMap openly in the market up to a defined threshold.

#### **Public Sector Geospatial Agreement**

We're working with the Commission to build the business case for a new Public Sector Geospatial Agreement (PSGA). A new PSGA will give UK public sector partners access to the best possible geospatial information to meet their current and future requirements.

### **Unlock Projects**

With a remit to create opportunities to unlock the value of geospatial data in the UK, the Geospatial Commission has commissioned a number of projects with its partner bodies. We were delighted to be asked to lead on two of these projects focused on identifying opportunities to simplify the discovery of geospatial data and to look at more innovative ways to link data that describes the same object.

In addition, we provided 'subject matter expertise' on two further Commission projects looking at harmonising end-user data licences across the Geo6 partner bodies and assessing opportunities to expand the amount of data sourced externally to enhance the UK's core geospatial data assets.

Looking ahead, we're continuing to work with the Commission to expand these projects beyond the Geo6 and engage with a wider stakeholder community in both the public and private sectors.

## Working with government

#### Our mapping agreements

Membership of our mapping agreements continues to grow. As of 31 March 2019 there are 5,052 members of the Public Sector Mapping Agreement (PSMA) and 137 members of the One Scotland Mapping Agreement (OSMA) - a total increase of 285 on the previous year.

#### Data supply

• For the year 2018-19 there was a total of 47,745 orders fulfilled of data licensed under these two agreements.

- 77% (36,773) of these were fulfilled through our download options, with the remaining 23% (10,972) fulfilled on physical media.
- Of the 8,408 new orders placed, 90% (7,567) were fulfilled as data downloads, with the remaining 10% (841) fulfilled on DVD.

### OS OpenData:

• For the year 2018-19 there was a total of 225,101 OS OpenData items fulfilled.

#### Supporting key challenges

We're engaging with and supporting some of the key challenges faced in Great Britain today through long-term strategic relationships in both policy and delivery departments across England and the Devolved Administrations. In parallel we're delivering collaborative projects that maximise the value our data can provide in key policy areas.

Over the last 12 months we have helped government in:

## Delivering the homes the country needs

Delivering better homes more quickly is currently one of the government's highest priorities. Working collaboratively with the Ministry of Housing, Communities and Local Government (MHCLG), we continue to help government by applying data, tools and knowhow to measure the rate new homes are being built. This information is used to inform planning and policy, and to address delivery issues in the future.

As well as supporting a national approach to housing, this year we have been established as a key delivery partner for the Hampshire County Council 2050 Inquiry, a local programme that will shape the future of Hampshire. We have informed planning and community engagement, applying insights from our data to help form early responses to tackle societal, housing and environmental issues the area will face over the next 30 years.

Supporting the land registration process remains a critical pillar of our strategic activity, and we continue to work closely with HM Land Registry. This year we've delivered a number of service improvements that have increased efficiency and throughput. We've also collaborated on a number of projects, exploring options for common technology services across our organisations.

#### Protecting our environment

We're playing an active role in supporting the government's 25 year environment plan. We've been selected by Defra to support an Environmental Land Management System trial where we will be collaborating with partners such as the Farming and Wildlife Advisory Group and National Parks across England.

We've also supported future farming in Britain, providing the Rural Payments Agency with a maintained dataset of hedgerows in England. We're exploring with the Centre for Ecology and Hydrology how we might do more to help understand biodiversity and protect local ecosystems across England, Scotland and Wales - helping deliver on the government's environmental commitments.

## Keeping our country safe

Helping keep the country safe remains a priority for us. We support many aspects of national security, from Cabinet Office Briefing Rooms to Local Resilience Forums/ blue lights in emergencies, to predictive crime prevention. We've developed a strong relationship with UK Border Force and this year have started to explore how our data can help protect high-risk areas of our coastline. This insight could support targeted interventions and reduce costs.

To complement our national initiatives above, we have collaborated locally with Hampshire blue light services to help reduce costs and increase efficiency when responding to multi-agency Road Traffic Collisions (RTCs). We've worked together on areas such as data sharing between agencies and jointly developed a methodology to predict where RTCs are likely to take place, helping Hampshire inform and protect the public, predict hotspots and target prevention campaigns.

## Operating an efficient and effective transport network

Today our data is playing a vital role in planning, managing and monitoring the transport network across the country, helping minimise the impact of roadworks and improving journeys.

This year OS data and services are underpinning key services in 21 Police Forces across England and within the Department for Transport (DfT) by improving the administrative process that follows road traffic collisions involving injury. We've connected our data and services into key systems which improves the way forces across England electronically locate the scene of a collision and populate key information from the Highways Layer. This saves police time, improves accuracy and also provides vital evidence that informs future decision making to make England's roads safer for users

We've also worked closely with DfT, providing support and insights into traffic standards for spatial data. This year we've successfully tested a pilot service for the UK and demonstrated how our data helps to enable intelligent transport systems of the future. The insight we have provided is preparing Britain with the data needed to enable autonomous vehicles and allowing us to remain connected and consistent with methodologies being adopted for autonomous vehicles in Europe.

## Helping grow our economy

We've celebrated the first full year of our Memorandum of Understanding (MoU) with the Office for National Statistics (ONS), and a number of successes since we've been working more closely together. We've collaborated to publish the first ever Urban Ecosystem Natural Capital Accounts where we've helped gather insights on urban greenspaces and their effect on our social and economic wellbeing. In addition, for the first time, our data is being used to underpin projects being delivered by the ONS Data Science Campus, including the analysis of 'High Growth Businesses' for BEIS. We've also delivered a joint project aimed at filling 'data gaps' in the UK's Sustainable Development Goal reporting as well as analysis for the West Midlands Combined Authority (WMCA) looking at the impact of investment in transport to support their local industrial strategy.

We've helped to reinvigorate the high street through geospatial insight, working with MHCLG to understand high street geographies, and relating that to the types of retail outlets located there over time. Bringing this together with ONS, we've looked at how this links to the ONS Business Register: This work will shortly be published, looking at patterns and trends to help government sustain the successes and fix the issues associated with Britain's high streets.

## Supporting the Industrial Strategy through innovation

Our innovation programme continues to support the government's Industrial Strategy through our own focus areas:

## **Intelligent Mobility**

Now in its third year, the BEIS-funded E-CAVE (Enabling Connected and Autonomous Vehicle Environments) research project continues to develop our understanding of the frameworks, data and resources needed for the successful exchange of mobility data. Our focus has been on safety-related data, including vehicle-to-vehicle and vehicleto-infrastructure data sharing. More importantly we've started to develop a rich understanding of how we enable the built environment for intelligent mobility solutions and advanced connectivity. This is helping to support the Industrial Strategy's ambition to accelerate Connected and Autonomous Vehicle (CAV) adoption and operation in the UK.

We've also been working with Zenzic (previously Meridian), the body responsible for the test bed environments for CAVs, building an understanding of the specifications and use cases for geospatial data in an operational test bed. We'll develop a series of recommendations and minimum requirements for test bed location data, including base mapping, frameworks and standards.

Again, in the autonomous vehicle field, we're part of the OmniCAV consortium – an Innovate UK funded project to create a simulation, validation and certification environment for CAVs. Based in Oxfordshire, a 32km test route will be developed using geospatial technology, dynamic data and artificial intelligence (AI) trained models of pedestrians, road users and scenarios to enable safe simulation of autonomous vehicles before real-world testing.

#### **Adaptive Infrastructure**

CityVerve, the UK's demonstrator project for large-scale deployment of the Internet of Things (IoT) technology was completed in summer 2018. It was a great success in terms of us understanding the emerging requirements of a 'Digital Twin' (a dynamic software model of physical thing or system) to support our cities. We continue to support Manchester and the region in developing legacy projects and requirements for dynamic data in a city context.

We're also part of the Digital Framework Task Group. As part of the National Infrastructure Commission's evaluation into the requirements of a national Digital Twin for infrastructure, we've been on the advisory group informing these requirements. We provide leadership on behalf of the 'Geo 6' organisations within the Geospatial Commission.

#### **Advanced Connectivity**

Building on our work in Bournemouth for The Department for Digital, Culture, Media and Sport (DCMS), we're continuing to explore the advanced mobile network connectivity requirements of cities and regions, and where geospatial can act as a differentiator when it comes to accelerating effective 5G and full fibre roll-out. Our work developing advanced data capture techniques using mobile mapping, lidar and other forms of sensed data continues to provide us with insights into the detailed geospatial needs of a fully enabled and connected environment.

## Working with partners

We maximise the value of location data through our Partner Channel, which we continue to grow. Our partners are licensed to use, enhance and distribute our data, enabling millions of customers to access and gain greater value from it.

Through collaboration, we can deliver innovation and provide the next generation of geospatial products and services.

We currently have a network of more than 350 business partners, from corporate multinationals to small innovative startups, across a wide range of markets. Our partners enable the use of our data in solutions across all sectors, including land & property; finance & insurance; energy & infrastructure, government, transport and logistics.

We've had a successful year working closely with our Partner community. We've worked hard to increase customer satisfaction among partners, including an enhanced Partner Finder section on our website.

Highlights from the 2018-19 financial year include:

## Partner Advisory Council (PAC)

We have 10 members on the council representing a good mix of the Partner community. We have used the forum to work closely together on relevant messages on OS strategy, new Public Sector Geospatial Agreement, and our Open MasterMap Programme during those sessions which has been valued by the members. We received excellent levels of engagement and feedback from those attending. These meetings will continue throughout 2019-20.

#### **Technical Showcase**

We delivered the first ever Partner Technical Showcase in February 2019 at OS Head Office, with 84 attendees from 57 different organisations. Teams were able to get together and explore how to maximise use of OS products and services.

## **Partner Net Promoter Score**

This is currently + 92 (up from + 64 in 2017-18). This is the highest it has ever been and has been delivered by listening to our partner feedback and putting an improvement plan in place to address this.

### Research

OS's Research team handles the longerterm Research and Development programme for the business, mostly through partnerships with research organisations such as universities. Our remit includes the research required to enable future products and services; exploring possible future markets; and horizon-scanning to identify emerging innovation and to anticipate disruption.

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 ways of collecting data, such as crowd-sourcing and citizen science. We're looking at new means of presenting data, such as mixed environments of 3D-printed models with augmented reality overlays; navigation aids in future driverless vehicles; 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 (UKRI), for example through Centres for Doctoral Training (CDTs). As of the end of year, our portfolio comprises 19 PhDs and two postdoctoral positions in active research, and seven PhDs and one postdoc in the last stages of writing up or having just been completed. These projects are located at 16 universities.

This year we've seen the Engineering & Physical Science Research Council (EPSRC) in UKRI go through a major exercise to fund a new set of CDTs. Each CDT will recruit a cohort of PhD students each year for five years, making an eight-year investment. We supported a number of proposals: A particular highlight is a new CDT in Geospatial Systems that was awarded to Newcastle University and the University of Nottingham, to recruit 20 students a year (10 at each university). This investment by UKRI in 100 new PhDs is significant. We plan to sponsor students across the life of this CDT.

In the wider landscape, the Privacy, Ethics, Trust, Reliability, Acceptability and Security of the Internet of Things (PETRAS) consortium has reached the end of its initial three-year funding but has received further funding by EPSRC to establish a National Centre. Our research at the University of Surrey's 5G Innovation Centre in locational privacy and security of connected and

autonomous vehicles culminated in a demonstrator in collaboration with the Warwick Manufacturing Group to show secure messaging and tracking of vehicles in a test-bed setting. This research is being increasingly linked 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 an international dimension. We've been involved throughout the two years that OS has been working with the National University of Singapore for the Government of Singapore on methods to continually update their national 3D geospatial model with data converted from building information models. This would, for example, allow this Virtual Singapore model to be updated as part of the national planning systems. We are working with researchers at Massey University in New Zealand on better means to interpret the geographical elements of natural language; we participate in the Open Geospatial Consortium's standards processes; and contributed to the GIScience conference in Australia in August.

### Geovation

Over the past 12 months, our Geovation Hub has continued to spearhead GeoTech and PropTech innovation in the UK.

During this time, membership steadily grew and Geovation is now supporting more than 1,200 registered members, (including entrepreneurs, investors, developers, academics, students and corporate innovators) financially and technically as well as offering access to an online community and tools. Support is provided in the form of access to data, experienced product development capabilities and geospatial expertise from OS. In addition to this, another 13 technology startups joined the Geovation Accelerator Programme and are now working in partnership with Ordnance Survey and HM Land Registry to build their business ideas and go to market.

In May 2018, Geovation moved to a brand new office space at Sutton Yard in Clerkenwell. The new office is an open-plan, light-filled space designed to promote fresh thinking and creativity.

In January 2019, Geovation announced its first partnership with another co-

working space, Engine Shed in Bristol. The partnership provides benefits to members of both spaces, including access to events, data, technical support, business advice and mentorship, building on Geovation's goal of fostering open innovation to make positive change happen. Partnerships in other locations are likely to be announced soon and this is a key goal for the team during 2019-20.

Building on the success of the London Hub, Geovation is currently investigating the possibility of opening a new Hub in Edinburgh, working in partnership with Registers of Scotland to bring our experience to a new location. It is hoped that the new hub will launch by the Summer of 2019.

## Accelerating digital transformation

We're positioning ourselves in the infrastructure market away from 'data provider' to being a partner to accelerate other organisations' digital transformation programmes.

## A pioneering underground map

At the Northumbrian Water Group's annual five-day Innovation Festival, we were asked to create the first combined underground infrastructure map detailing water, wastewater, gas, electricity, telecoms and other underground services and datasets so that planners and excavation teams could get a shared, accurate view of their datasets. This combined map is the first step towards creating a North East Underground Infrastructure Hub (NEUIH) to reap significant operational and health & safety benefits in utilities, local government and for citizens. The Geospatial Commission's announcement of its investment in bringing together the existing data on underground pipes and cables to create an Underground Assets Register builds on this good work.

#### Streetside Infrastructure Asset Trial

We've teamed up with Mobileye®, an Intel Company, to deliver highprecision roadside asset location data to improve the efficiency of infrastructure maintenance programmes.

Using Mobileye's automotive camerabased technology, vehicles can gather large volumes of data on roadside infrastructure such as manhole covers, lamp posts and more. We process and transform the data to add an accurate location to it.

Utility companies are set to benefit from the data. With such a detailed view of the location of overground and underground assets, companies can more efficiently plan and manage maintenance needs, service upgrades or other necessary work.

#### Taking our expertise worldwide

We provide geospatial services around the world, helping governments and mapping agencies realise the benefits of creating and using accurate location-based information. We continue to build strong links worldwide and are working with countries on four continents. One area of focus has been developing land administration solutions – both technical and advisory – with our partner, Trimble, to support our international activity.

Over the last year we've completed projects including:

- Signing a Memorandum of Understanding (MOU) with the Singapore Land Authority (SLA) as partners in enabling spatial innovation. The MOU will see both organisations focus on the promotion and use of geospatial information to support smart services and solutions which aim to benefit citizens, communities, business and government. Building on the current, longstanding and strong relationship between OS and SLA, the MOU will support the exploration of new collaborations.
- Providing consultancy services to the Guyana Lands and Surveys Commission (GLSC) to re-establish and further develop the GPS Continuously Operating Reference Stations (CORS) network in Guyana. The project's aim was to establish and sustainably maintain a modern, robust and accurate national geodetic positioning network. The re-established CORS network will help Guyana meet its Sustainable Development Goals (SDGs) and will enable better government, improved economy, better transport, securer land tenure, and happier citizens.
- Creating a geospatial data model for Malta. We were the first national mapping agency in the world to digitise our geospatial database, and we used this experience to develop the first geospatial data model for Malta. The

project, known as MaltaMap, was part of a vision to build a modern Spatial Data Infrastructure across Malta's various government departments through the SIntegraM Project.

We've also completed a series of roadshows under the title of 'Geospatial Ideas. Shared.' This outreach programme helped us share our expertise across the Asia-Pacific region, the Middle East and Europe – and we have more planned in future months.

## Creating detail: Evolving operational delivery

In our Operations department, we've had a fantastic year of delivery, including the following achievements:

- We've completed our largest ever urban data content improvement programme, marking the end of a sixyear key investment in improving the quality, completeness and currency of our core large-scale data, to meet current and future customer needs. The improvements are fundamental to transforming our data to be truly analytics-ready and to enhancing our offer to the changing needs of our users.
- This programme has created the foundations for implementing, for the first time, a single GB-wide update programme (National Cyclic Revision), irrespective of the underlying geography type (urban, rural or mountain / moorland), which is an improved proposition for our customers.
- We've completed a record 24,800 surveys for HM Land Registry.
- We implemented the first fullyautomated map production system for creating a premium national dataset (OS VectorMap Local) derived from large-scale source data. Development of this cutting-edge technology, which has been internationally recognised, has been a long-held aspiration of OS which is shared by many National Mapping Agencies around the world. This automated system has a great deal of benefits for our customers and OS by improving the value of the product and increasing production efficiency. Our customers will see hugely improved currency, regular refreshes across GB, more analytical value and consistency with other products. It also provides

the platform for delivering further automated techniques into our operations.

- We've fulfilled a record number of digital orders this year – a 2% increase on previous year, with just under half of total orders being for OS OpenData products.
- We've focused on investing in core capabilities to improve resilience and operational efficiency. Examples include the use of the latest aerial cameras and upgrades to OS Net – our vital core positioning network of global navigation satellite system (GNSS) base stations covering Great Britain.
- We've continued to work closely with our supply chain partners to replatform the geospatial production technology in addition to a range of projects to explore new and exciting capture methodologies and automation techniques for new content and services for our customers. We have built on the technology deployed for the National Cyclic Revision programme to deliver significant improvements to the efficiency and effectiveness of our supply chain.
- We continue to invest in our key skills to ensure that our expertise is fit for the future. We have recruited geospatial specialists as well as developing our existing employees. These capabilities are helping us deliver for our customers in GB and also support our growing number of international opportunities.

### **Astigan**

We're working with a team of worldleading aeronautic engineers to develop a highly innovative solar powered, High Altitude Pseudo Satellite (HAPS).

The pioneering enterprise, called Astigan, is a platform which will fly at 67,000 feet and deliver better images of the Earth more quickly.

Weighing 149kg and with a wingspan of 38m, it can be positioned to view any part of the Earth and collect data over much wider areas compared with conventional aerial imagery capture. The platform has been designed to complement existing satellite services and it will fly for 90 days at a time without the need for landing, the equivalent of circling the Earth four-and-a-half times.

The platform has been designed to offer major cost and efficiency advantages over traditional methods.

## Helping more people to get outside more often

In our consumer sector we maintain our core purpose of helping people to get outside more often, as we firmly believe outdoor activity helps you live longer, stay younger and enjoy life more. We continue to do this though releasing a range of products and services which help make outdoor experiences more enjoyable, accessible and safe.

#### GetOutside

The GetOutside initiative remains the golden thread that runs through the whole of the consumer business in our drive to deliver our core purpose. It now has more than 50 partners and engages with well over a million people every month. It's formally recognised as the British consumer participation campaign for the entire outdoor industry.

The initiative is supported by 61 champions across a range of outdoor interests who continue to raise awareness of GetOutside on the ground, through their blogs, media appearances and social media presence.

We continue to work 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. We now have more than 250,000 web pages with inspirational content covering every location in GB.

September 2018 saw the inaugural National GetOutside Day, as part of European Week of Sport, where around 1.4 million people engaged and undertook some sort of outdoor activity. On the back of this success we have confirmed 29 September 2019 as the next National GetOutside Day to continue to promote the benefits of an active outdoor lifestyle.

### OS Puzzle Book

In 2018 we launched the first OS Puzzle Book which was a Christmas bestseller, topping the Sunday Times charts and selling well over 150,000 copies. This book has also been shortlisted for the prestigious British Book of the Year Award (Nibbies), in the Lifestyle category. A follow-up to this book is in production.

#### Paper maps

While it was a particularly difficult first half of the year for retail markets, we began to see green shoots of recovery as we went into spring when people began to get out and enjoy the longer evenings. We continue to promote the safety of taking a paper map for any outdoor excursion alongside mountain rescue services, and are actively promoting our national mapping range to ensure that we maintain demand. Over the next year we have a number of initiatives that will help bring these maps to life.

#### OS Maps app

This year we've developed further Augmented Reality (AR) features to our OS Maps app, principally Tabletop 3D. This free-to-use feature enables people to visualise the landscape before they explore it. By using an AR viewer, users can place a virtual model of the landscape overlaid with any one of 2.5 million routes served through the app on any flat surface, and explore this area through the camera function on their smartphone.

The app has won a further three awards. In May 2018 it won Best App in the 2018 Sports and Technology Awards, while in June 2018 it won the ECMOD Award for 'Best Exploitation of Technology – B2C'. In March 2019 it was awarded 'Digital Product of the Year' by the Outdoor Industries Association.

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 magazines 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. They have given the app extensive press coverage, in particular the 3D fly-throughs.

During the last year, OS Maps has featured extensively across the national press, including the BBC, ITV and the front page of The Times, showcasing Britain's most explored locations.

## Financial review

#### Financial summary

	2018-19	2017-18
	£m	£m
Revenue	157.4	154.9
Cost of sales	24.5	22.3
Operating costs (excluding depreciation, amortisation & impairment)	90.3	84.1
EBITDA	49.2	54.7
EBITDA%	31%	35%
Depreciation, amortisation & impairment	23.0	30.8
Corporation tax	4.9	4.9
Profit attributable to owners of the Company	22.7	21.2
Dividend	45.4	-
Net assets	179.0	209.4

#### Revenue

Total revenue comprises both trading revenue and other operating activities. The trading growth on 2017–18 was due to growth of licensed partners sales and sales of digital products to consumers.

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

The major single line of expenditure which has driven the EBITDA reduction is direct and indirect employee costs, this has increased as we continue to invest in new talent in preparation for future growth.

#### Profit before interest and tax (PBIT)

The PBIT outturn of £26.3m (2017–18: £23.9m) was driven by reduced amortisation following the update to the useful economic life of the geospatial database management system (GDMS) which is expected to be in use for an additional 18 months and reduced impairment folllowing the prior year Astigan impairment.

#### Dividends

In March 2019 we declared a final dividend to our shareholder, the Secretary of State for Business Energy and Industrial Strategy, of £27.4m. In June 2018, we declared a dividend for 2017-18: of £18.0m.

## Statement of financial position

#### Cash

We generated a net cash inflow of £43.6m (2017–18: £36.1m) from operating activities during the year and a further £6.5m (2017–18: £4.9m) received from joint ventures. Our capital expenditure programme of £15.0m (2017–18: £19.0m) included the investment in our Geospatial Content Improvement Programme and the Geospatial Database Management System.

#### **Net Promoter Score**

The Net Promoter Score for the year was 46 (2017–18: 40) which exceeded expectations.

#### Non-current assets

Our non-current assets are principally:

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

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

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 30% from 31 March 2018. Digital products are the key growth area of the business and the business is expected to continue to grow as our traditional customers and new users adopt this digital technology. Total revenue of £4.9m (2017–18: £3.9m) and PBIT of £1.3m (2017–18: £0.7m).

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

OSI is our 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 Africa (MENA) and Asia Pacific (APAC). OSI generated revenue of £1.0m (2017–18: £0.7m) and a loss of £1.4m (2017–18: £1.0m).

## Shared ownership entities

### GeoPlace LLP (GeoPlace)

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 £5.7m (2017–18: £5.5m), and £6.4m in cash was returned to the Company during the year (2017–18: £4.9m).

## 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-. In the year, Astigan made a loss of £2.6m (2017–18: loss of £4.9m). In the prior year the 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 loss share of £0.1m (2017–18: profit £0.1m) and £0.1m in cash was returned to the Company during the year (2017-18: nil).

## **Dennis Maps**

The Company took a 25% share of Dennis Maps Limited in December 2016. The Group profit share generated in year is nil (2017–18: £0.1m).

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 uses to monitor the Group's performance:

	2018-19	2017-18
Revenue	£157.4m	£154.9m
PBIT%	17%	15%
Free cashflow	£35.3m	£22.0m
Net Promoter Score	46	40

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

**PBIT**% – defined as profit before interest and tax.

**Free cashflow** – defined as total net cash flow with dividend added back.

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.

## Working as an OS employee

At Ordnance Survey we aim to create an environment where every employee can have a positive experience every day. Along with exciting and energising work opportunities, we focus on the many other aspects of an individual's life at work – from wellbeing to diversity and inclusion, from health and safety to a vibrant sports and social community. An engaged workforce is critical to our success; the following sections highlight many of the things that we have done together in the last 12 months.

#### **Engagement**

As well as our annual engagement survey, we regularly monitor how people are feeling at OS. This year has seen a positive increase in our overall engagement scores with our people saying that opportunities for personal growth, to give something back to our community & wider society, and to make a difference as a company are particularly strong.

All employee events, awareness and involvement campaigns on key business topics, enhanced development options for line managers and the introduction of learning resources such as MindTools for everyone are just a few of the things we have done this year that have helped to enhance our employee experience.

#### Wellbeing

We know that people are more engaged and perform better at work when they have positive wellbeing – and we want OS to be a place where people enjoy what they do, thrive and have a positive worklife balance.

Along with a commitment to events that support our physical wellbeing and flexible working in all its forms, we are acutely aware that our mental wellbeing is as important as our physical health and we want to ensure there is no stigma in talking about this subject. In partnership with Solent Mind, we've held a series of workshops including managing anxiety, depression, work-related stress and building resilience.

Our managers are critical in supporting wellbeing. They receive regular training on how to engage, motivate and lead, openly show appreciation to employees through our recognition and reward systems and ensure their teams have the opportunity to attend wellbeing events.

This year our many events have included:

- A Wellbeing Fair, providing sessions such as stress management talks, health check-ups, back massages, and mindfulness.
- National Fitness Day, when OS colleagues from across the UK came together to have fun and get active.
- Time to Talk Day, when we provided numerous activities for our employees' physical and mental benefit.
- The Virgin Pulse Global Challenge.
   Competing with other people around the world, the 100-day virtual journey encourages members to focus on physical activity, healthy eating and stress resilience.

#### Equality and inclusivity

At OS, we are committed to building an inclusive organisation from the very first touchpoint potential employees have with us. We recognise there is always more we can do, and we continue to invest time and effort in developing increasingly flexible contracts, ongoing support for our women's network and a significant programme of work to bring greater transparency to our career and reward frameworks. We also provide an employee assistance scheme, have an occupational partner for expert advice when needed and continue to make reasonable adjustments where possible to support the needs of our diverse team.

#### **Gender diversity**

We continue to promote gender diversity at every level in OS, and as at 31 March 2019, our combined Executive Board and Executive Leadership Team comprised 11 men and five women.

Our Women's Development Network provides opportunities for targeted learning coupled with colleague support and aims to actively encourage women to feel confident in making the most of every opportunity at OS. We're also active members of Hants Women in IT, and regularly host events and talks open to everyone at OS.

Our gender pay gap for 2018 was 6.2% which is significantly below the national average, and below other similar sized organisations in both public and private sectors. Across our early careers programmes, talent schemes, learning & development offer and resourcing strategy, we're encouraging and supporting women at every stage of their career and at all levels of our business.

#### **Employee benefits**

Alongside our core benefits such as flexible working and good annual and parental leave, we also provide a Bike-to-Work Scheme, on-site nursery facilities and a range of employee discounts.

### Sports and social clubs

We currently have 16 official OS clubs at Explorer House, run by OS employees for OS employees. These clubs include running, singing, crafting, photography and golf. In 2018 we introduced two new clubs: table tennis and archery.

Our clubs hold events throughout the year which help contribute to our charity fundraising. All our clubs can apply for limited sponsorship for equipment.

### Health & safety

This year we have ensured health & safety remains an ongoing priority, both corporately and individually.

We work in partnership with Capita Property & Infrastructure for provision of Health & Safety Advisory Services and in 2018-19 they supported a programme of H&S awareness and responsibility training along with additional training on risk management and awareness. Our Field teams also received refresher training in manual handling and risk awareness, while our Geovation Hub received independent Fire Risk and H&S awareness training.

Extensive risk assessments were completed in 2018-19 and a corporatewide campaign to increase awareness saw an increase in the reporting of incidents and resulting mitigating actions.

During the reporting period Capita has provided the following information:

A total of 31 incidents/accidents have been reported in 2018-19

- Two incidents have been reported to the HSE under RIDDOR 2013.
- The most common cause of an incident/ accident was slip, trip or fall on the same level.
- · A total of five fire risk assessments have been completed by the Capita H&S team.
- There were two further independent Fire Risk and H&S Awareness training courses provided for external Geovation Hub and Astigan.
- · 21 risk assessments have been completed/reviewed by the Capita H&S team.

#### Our people

The table below provides a breakdown of employees by career level and gender as at 31 March 2019.

	31 March 2019			31 March 2018			
Career Level	Male	Female	Total	Male	Female	Total	
Non-Executive	5	2	7	5	0	5	
Executive Leadership Team	6	3	9	8	3	11	
Heads	2	2	4	19	7	26	
Senior Managers/ Professionals	75	14	89	18	7	25	
Other roles	641	289	930	672	276	948	
TOTAL	729	310	1,039	722	293	1,015	

In June 2018 we introduced a new career architecture which classified jobs at OS into job families and career levels, the career levels incorporate managerial and professional roles – the addition of professional roles accounts for the increase at the senior level in the table.

#### Employee sickness and absence

Employee absence is monitored, and return-to-work interviews are held to ensure appropriate support or adjustments can be offered.

Employee sickness & absence	OS Total days lost due to sickness	OS average sickness days lost per employee	Average days lost per employee (mean) (CIPD 2016)
2018-19	5,085	4.4	9.3
2017-18	4,047	3.4	8.4

Sickness absence levels increased in 2018-19, though our figures are below the national average we are monitoring it closely and are aware that 45% of all absence is long term, due to a wide range of health issues with no obvious trend at this point.

## 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.

Off-payroll engagements are managed in compliance with IR35 legislation.

Off-payroll engagements as at 31 March 2019 for more than £245 per day and that lasts for more than six months are as follows:

	31 March 2019	31 March 2018
Number of existing engagements as of:	23	7
Number that have existed for less than one year at time of reporting:	20	5
Number that have existed for between one and two years at time of reporting:	3	1
Number that have existed for between two and three years at time of reporting:	0	1
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	0

	31 March 2019	31 March 2018
Number of new engagements, or those that reached six months in duration between 1 April 2018 and 31 March 2019:	20	5
Number assessed as relevant to IR35:	0	0
Number assessed as not relevant to IR35:	20	5
Number engaged directly and are on payroll:	0	0
Number of engagements reassessed for consistency/assurance purposes during the year:	20	5
Number of engagements that saw a change to IR35 status following the consistency review:	0	0

	31 March 2019	31 March 2018
Number of off-payroll engagements of board members and/or senior officials with significant financial responsibility through 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:	17	18

## Corporate and social responsibility

As a business, and a group of people, we're committed to giving something back - whether to our local community, national charities or schools and colleges.

We're always looking for ways to get involved in our communities. We're pleased to support a different corporate charity biennially; more of our employees are using their volunteer days; our number of visits to schools is increasing, as are the work experience opportunities we offer each year.

In 2018-19 we were involved in a number of initiatives to give back to our communities and support the health and wellbeing of everyone who works at OS.

#### Corporate charity

In March 2018, 529 OS employees voted for the 2018-2020 corporate charity. The winner with 36% of the votes was Southampton Children's Hospital: Emergency and Trauma Unit Appeal.

Between 1 April 2018 and 31 March 2019, we held more than 50 fundraising events for the Unit. Many of these events encompassed our GetOutside ethos with many employees taking part in various running and activity events outside.

Throughout the year, OS employees also sang, baked, and got festive to raise funds. In May 2018 we introduced #CharityTuesday - a day a month when we would run smaller-scale charity events, such as cake and book sales.

In total, OS employees raised a fantastic £14,574.

We've set ourselves a fundraising target of £25,000 by 31 March 2020.

## Volunteering

We actively encourage everyone at OS to take their Volunteer Day and in 2018-19, we saw more than three times the number of people taking this opportunity (489 from 155 in 2017-18).

Our employee volunteer days - totalling 3,668 hours - have been used to support many different charities, causes and projects including children's hospices, local schools and care homes. We have also used volunteer days to clean beaches, care for rescued apes at Monkey World and deliver Christmas gifts to disadvantaged children.

#### Work experience

In 2018-19, 39 students joined us for work experience. The students, aged between 11 and 18, spent time in departments including IT, Engineering, GI Developing, Procurement, Product Development, Production, Cartography, Remote Sensing and our Business Centre.

In total we provided 39 weeks (equivalent of 1,443 hours) worth of meaningful work experience for school and college students who were mostly local. However, a few travelled some distance to be part of our rewarding, life-enhancing scheme.

#### **Employee match funding**

Each year a set amount is available for match funding which is allocated on a first come, first served basis.

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.

Since 1 April 2018, OS employees have raised a further £12,000 through many different sponsored events and have taken advantage of our employees' match funding for their selected charities. These include local hospices; Marie Curie; The Swimathon Foundation; British Heart Foundation; Cancer Research UK; Macmillan Cancer Support; Christian Aid; Help for Heroes; Dementia UK; Scouts & Guides, and Solent Mind.

## Local community support

We also supported local communities in the following ways:

- Young Enterprise Event and Dragons' Den Event - for catering costs and complimentary use of Explorer House and Business Centre.
- Our 2018 Poppy Appeal raised £400.
- · We donated food to Southampton City Mission.
- 66 OS employees got active every day in January raising more than £1,000 for our local branch of Mind.
- We printed leaflets for SCRATCH charity.

#### 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 the use of our facilities at Explorer House.

#### **Education services**

The number of schools who were registered users of the EDINA Digimap for Schools at year end was 2,725 (1,469 primary schools and 1,256 secondary schools).

We have extended the funding for the scheme to provide free access to Digimap for Schools, for secondary schools who have an Ofsted rating of 3 (Requires improvement) or 4 (Inadequate). This will enable schools, while they have this Ofsted rating, to access the service for a two-year period. More than 500 eligible schools will be able to take advantage of this offer.

We continue to work closely with our strategic partners: The Geographical Association and the Royal Geographical Society, to help deliver initiatives and training to support teaching geography.

## Sustainability

Ordnance Survey has a role in helping the UK government and industry to achieve clean growth and protect the natural environment by supplying high quality geospatial data. Internationally, OS can help and support other nations to achieve their Sustainable Development Goals (SDGs) by demonstrating best practice in environmental management within the organisation and focusing on reducing our own environmental and social impact through our operations and supply chain.

The ongoing pressure on organisations and governments to act on climate change and pollution will continue, and stakeholders look to OS to deliver best practice and innovative means of managing emission and resource reductions.

A process of review and continuous improvement has led to a general reduction of emissions compared with previous years. Over the next 12 months OS will create further programmes of activity to reduce energy and gain greater efficiencies within our operations. As our strategic aim to be recognised as a geospatial global leader grows, the impact is that office-based emissions fall, but travel-related emissions rise, and we will look at innovative ways in which to address this. A more detailed explanation is given below.

#### Greenhouse gas emissions

Sustainable Development Goals:









Electricity consumption has fallen for another year at our Explorer House head office (467,000kWh reduction against 2017-18). This reduction can be related to our maintenance team changing timing sequences of the ventilation and lighting systems, and consolidation of servers in the data centre has led to a reduced electrical load. Gas consumption has also reduced to an all-time low of 272,825kWh. We believe this is directly related to the exceptionally warm winter and that the ground source heat pump was working optimally.

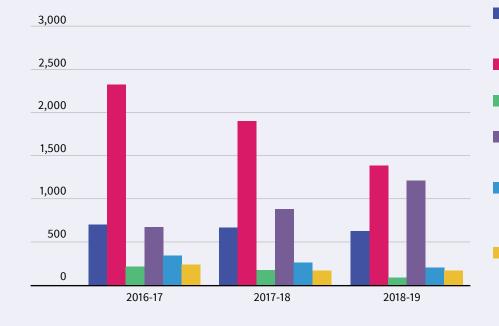
As with previous years, there was an ongoing fall in emission factors in 2018-19, reflecting the continuing decarbonisation of electricity generation. This, combined with the lower electricity consumption figures, has resulted in an emission reduction of 557 tCO2e at our head office compared with 2017-18 (almost a 9% reduction).

Our fleet of cars has mostly been updated to Euro 6 engines and a mix of petrol, diesel and hybrid engines.

However, there has been an increase in almost 100,000km extra travel, which has resulted in an almost 3% of scope 1 greenhouse gas emissions generated from the fleet. Further recruitment of surveyors has seen an increase in the number of hire cars being used while awaiting their business fleet car, an extra 74,000km being driven and a resultant uplift of over 12 tCO2e being liberated. This increase in car travel reflects the consistent growth of surveying activity on the ground. The amount of aerial surveying remained consistent between this and the last financial year.

Air and rail travel continue to increase, reflecting our international reach and business strategy. Long-haul air travel has increased significantly (an extra 1.2 million kilometres travelled), with an uplift of more than 300t CO2e. Domestic air travel also continues to rise, with an increase in the number of flights of 13% compared with last year and we need to balance this against the Greening Government Commitment target of a 25% reduction in the number of flights. We need to be mindful that due to our business strategy, which does impact both domestic and international travel, there will continue to be a conflict between planned business growth and travel-reduction targets, and our travel policies must be continually developed and reviewed with this in mind.

## Greenhouse gas emissions tCO2e



- 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

Total Scope 1 emissions (gas, fuel for fleet cars and fugitive emissions from air chillers)	Absolute metrics	Scope/emission/energy use	2018-19	2017-18	2016-17
Total Scope 3 emissions (transmission loss of electricity)		fleet cars and fugitive emissions from air	656.6	667.7	523.1
Non-financial indicators (tCOxe)	Non-financial indicators	,	1,410.3	1,916.0	2,306.3
Consumption   Coope 2 and 3   1,330.5   2,031   2,314.9   2,314.			120.2	179.1	208.6
Dusiness travel (rail, taxi, air, underground)   1,228.5   836.1   668.6			1,530.5	2,095.1	2,514.9
Managed Assets (Gloucester Data Centre, including flugitive emissions and electricity consumption)   Emissions attributable to Scope 3 Managed Assets (Cesna surveying aircraft)   190.1   188.1   241.8   2	(tCO <sub>2</sub> e)		1,228.5	836.1	668.6
Assets (Cessna surveying aircraft)   190.1   188.1   241.8     TOTAL EMISSIONS (ALL SCOPES)   3,819.8   6,155.2   6,813.4     Related energy consumption (kWh)   Electricity (Mains 'Green' Tariff – EH and GDC   Gas   361,073   507,182   365,909     TOTAL kWh Consumption   6,040,171   6,664,037   6,739,328     Expenditure on energy (gas, electricity, BUS fuel, GDC electricity, Cessna fuel)   Expenditure on CRC (including fees and allowance)     Expenditure on CRC (including fees and allowance)   Expenditure on official business travel (rail, hire cars, taxis, air, BUS leasing)   TOTAL expenditure on energy, CRC and official business travel (rail, hire cars, taxis, air, BUS leasing)   TOTAL expenditure on energy, CRC and official business travel   Explorer House   341.6   382.4   35,282,258     Romalised metrics   Asset   2018–19   2017–18   2016–17     kWh/m²   Explorer House   341.6   382.4   395.0     g CO2e/km travelled   BUS mileage (kilometres)   157.8   157.5   158.7     g CO2e/km travelled   Hire vehicles mileage (kilometres)   157.8   157.5   158.7     g CO2e/passenger-flight   Domestic flights   327   290   246     kg CO2e/passenger-flight   Short-hauf flights   373.4   318.7   2273.     kg CO2e/passenger-flight   Short-hauf flights   2527.2   2,263.2   1,741.1     kg CO2e per journey   Domestic rail travel   10.6   11.2   11.6     BUS lease   61,26,350   61,359,436   61,280,310     BUS lease   61,26,350   61,359,436   61,280,310     Domestic rail travel (including underground)   2248,446   2237,054   2275,035     Domestic rail travel (including underground)   2248,446   2237,054   2275,035     Domestic rail travel (including underground)   2248,446   2237,054   2275,035     Domestic rail travel (including underground)   2248,446   2338,071   2269,695     Domestic rail travel (including underground)   2248,446   237,054   2275,035     Domestic rail travel (including underground)   2248,446   237,054   2275,035     Domestic rail travel (including underground)   2248,446   237,054   2275,035     Domestic		Managed Assets (Gloucester Data Centre, including fugitive emissions and electricity	214.1	273.1	350.1
Related energy consumption (kWh)   GDC   Gas   361,073   507,182   365,909     TOTAL kWh Consumption   6,040,171   6,664,037   6,739,328     Expenditure on energy (gas, electricity, BUS fuel, GDC electricity, Cessna fuel)   Expenditure on CRC (including fees and allowance)   Expenditure on official business travel (rail, hire cars, taxis, air, BUS leasing)   TOTAL expenditure on energy, CRC and official business travel (rail, hire cars, taxis, air, BUS leasing)   TOTAL expenditure on energy, CRC and official business travel   53,303,983   53,292,201   53,282,258		, ,	190.1	188.1	241.8
Related energy consumption (kWh)   GDC   S,6/9,998   6,156,695   6,373,419   GDC   Gas   361,073   507,182   365,909   TOTAL kWh Consumption   6,040,171   6,664,037   6,739,328   Expenditure on energy (gas, electricity, BUS fuel, GDC electricity, Cessna fuel)   Expenditure on CRC (including fees and allowance)   Expenditure on official business travel (rail, hire cars, taxis, air, BUS leasing)   TOTAL expenditure on energy, CRC and official business travel   Fa,303,983   Fa,39,720   Fa,6216   Fa,229,713   Fa,220,713		TOTAL EMISSIONS (ALL SCOPES)	3,819.8	6,155.2	6,813.4
Related energy consumption (kWh)   GDC   S,6/9,998   6,156,695   6,373,419   GDC   Gas   361,073   507,182   365,909   TOTAL kWh Consumption   6,040,171   6,664,037   6,739,328   Expenditure on energy (gas, electricity, BUS fuel, GDC electricity, Cessna fuel)   Expenditure on CRC (including fees and allowance)   Expenditure on official business travel (rail, hire cars, taxis, air, BUS leasing)   TOTAL expenditure on energy, CRC and official business travel   Fa,303,983   Fa,39,720   Fa,6216   Fa,229,713   Fa,220,713					
TOTAL kWh Consumption   6,040,171   6,664,037   6,739,328	Related energy		5,679,098	6,156,855	6,373,419
Expenditure on energy (gas, electricity, E997,394 £966,807 £1,006,328	consumption (kWh)	Gas	361,073		365,909
BUS fuel, GDC electricity, Cessna fuel		TOTAL kWh Consumption	6,040,171	6,664,037	6,739,328
Expenditure on CRC (including fees and allowance)   Expenditure on official business travel (rail, hire cars, taxis, air, BUS leasing)   E2,276,153   E2,285,673   E2,229,713   TOTAL expenditure on energy, CRC and official business travel   E3,303,983   E3,292,201   E3,282,258   E3,282,258   E3,292,201   E3,282,258	Financial indicators (£)		£997,394	£966,807	£1,006,328
Expenditure on official business travel (rail, hire cars, taxis, air, BUS leasing)  TOTAL expenditure on energy, CRC and official business travel  Normalised metrics  Asset  2018–19  2017–18  2016–17  kWh/m²  Explorer House  341.6  382.4  395.0  kWh/m²  Gloucester Data Centre  3,182  3,228  3,545  g CO2e/km travelled  BUS mileage (kilometres)  157.8  157.5  158.7  g CO2e/km travelled  Hire vehicles mileage (kilometres)  160.4  157.3  164.1  Number of instances  Domestic flights  327  290  246  kg CO2e/passenger-flight  Short-haul flights  373.4  318.7  227.3  kg CO2e/passenger-flight  Long-haul flights  51.26,330  £2,285,673  £2,285,673  £2,229,713  £3,282,258  £3,303,983  £3,292,201  £3,282,258  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,282,258  £3,292,201  £3,292,2		Expenditure on CRC (including fees and	£30,435	£39,720	£46,216
Normalised metrics         Asset         2018–19         2017–18         2016–17           kWh/m²         Explorer House         341.6         382.4         395.0           kWh/m²         Gloucester Data Centre         3,182         3,228         3,545           g CO₂e/km travelled         BUS mileage (kilometres)         157.8         157.5         158.7           g CO₂e/km travelled         Hire vehicles mileage (kilometres)         160.4         157.3         164.1           Number of instances         Domestic flights         327         290         246           kg CO₂e/passenger-flight         Domestic flights         244.7         231.8         195.4           kg CO₂e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO₂e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO₂e per journey         Domestic rail travel         10.6         11.2         11.6           BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS fuel costs		•	£2,276,153	£2,285,673	£2,229,713
kWh/m²         Explorer House         341.6         382.4         395.0           kWh/m²         Gloucester Data Centre         3,182         3,228         3,545           g CO₂e/km travelled         BUS mileage (kilometres)         157.8         157.5         158.7           g CO₂e/km travelled         Hire vehicles mileage (kilometres)         160.4         157.3         164.1           Number of instances         Domestic flights         327         290         246           kg CO₂e/passenger-flight         Domestic flights         244.7         231.8         195.4           kg CO₂e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO₂e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO₂e per journey         Domestic rail travel         10.6         11.2         11.6           Financial breakdown of business travel (£)         BUS lease         £1,26,350         £1,359,436         £1,280,310           BUS lease         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic flights         £57,964         £51,077         £38,577			£3,303,983	£3,292,201	£3,282,258
kWh/m²         Explorer House         341.6         382.4         395.0           kWh/m²         Gloucester Data Centre         3,182         3,228         3,545           g CO₂e/km travelled         BUS mileage (kilometres)         157.8         157.5         158.7           g CO₂e/km travelled         Hire vehicles mileage (kilometres)         160.4         157.3         164.1           Number of instances         Domestic flights         327         290         246           kg CO₂e/passenger-flight         Domestic flights         244.7         231.8         195.4           kg CO₂e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO₂e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO₂e per journey         Domestic rail travel         10.6         11.2         11.6           Financial breakdown of business travel (£)         BUS lease         £1,26,350         £1,359,436         £1,280,310           BUS lease         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic flights         £57,964         £51,077         £38,577					
kWh/m²         Gloucester Data Centre         3,182         3,228         3,545           g CO₂e/km travelled         BUS mileage (kilometres)         157.8         157.5         158.7           g CO₂e/km travelled         Hire vehicles mileage (kilometres)         160.4         157.3         164.1           Number of instances         Domestic flights         327         290         246           kg CO₂e/passenger-flight         Domestic flights         244.7         231.8         195.4           kg CO₂e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO₂e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO₂e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO₂e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO₂e/passenger-flight         Long-haul flights         £1,216,350         £1,359,436         £1,280,310           BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS lease         £1,216,350         £1,359,436         £1,280,310           Financial breakdown of business travel (£)         Domestic flights					
g CO2e/km travelled         BUS mileage (kilometres)         157.8         157.5         158.7           g CO2e/km travelled         Hire vehicles mileage (kilometres)         160.4         157.3         164.1           Number of instances         Domestic flights         327         290         246           kg CO2e/passenger-flight         Domestic flights         244.7         231.8         195.4           kg CO2e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO2e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO2e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO2e/passenger-flight         Domestic rail travel         10.6         11.2         11.6           BUS lease         £1,216,350         £1,359,436         £1,280,310         £24,256           BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS fuel costs         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic rail travel (including underground)         £248,446         £237,054         £275,035	·	Explorer House	341.6	382.4	395.0
g CO2e/km travelled Hire vehicles mileage (kilometres) 160.4 157.3 164.1  Number of instances Domestic flights 327 290 246  kg CO2e/passenger-flight Domestic flights 244.7 231.8 195.4  kg CO2e/passenger-flight Short-haul flights 373.4 318.7 227.3  kg CO2e/passenger-flight Long-haul flights 2527.2 2,263.2 1,741.1  kg CO2e per journey Domestic rail travel 10.6 11.2 11.6  BUS lease £1,216,350 £1,359,436 £1,280,310  BUS lease £1,216,350 £1,359,436 £1,280,310  BUS fuel costs £233,004 £205,685 £224,256  Hire car costs £25,330 £17,300 £50,924  Domestic rail travel (including underground) £248,446 £237,054 £275,035  Domestic flights £57,964 £51,077 £38,577  Short-haul flights £56,404 £51,446 £50,099  Long-haul flights £56,404 £51,446 £50,099  Domestic taxis £43,799 £35,571 £40,817	kWh/m²		3,182	3,228	3,545
Number of instances         Domestic flights         327         290         246           kg CO2e/passenger-flight         Domestic flights         244.7         231.8         195.4           kg CO2e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO2e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO2e per journey         Domestic rail travel         10.6         11.2         11.6           Financial breakdown of business travel (£)         BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS lease         £233,004         £205,685         £224,256           Hire car costs         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic rail travel (including underground)         £248,446         £237,054         £275,035           Domestic flights         £57,964         £51,077         £38,577           Short-haul flights         £56,404         £51,446         £50,099           Long-haul flights         £406,245         £328,100         £269,695           Domestic taxis         £43,799         £35,571 <t< td=""><td>g CO₂e/km travelled</td><td>BUS mileage (kilometres)</td><td>157.8</td><td>157.5</td><td>158.7</td></t<>	g CO₂e/km travelled	BUS mileage (kilometres)	157.8	157.5	158.7
kg CO₂e/passenger-flight         Domestic flights         244.7         231.8         195.4           kg CO₂e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO₂e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO₂e per journey         Domestic rail travel         10.6         11.2         11.6           Financial breakdown of business travel (£)         BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS fuel costs         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic rail travel (including underground)         £248,446         £237,054         £275,035           Domestic flights         £57,964         £51,077         £38,577           Short-haul flights         £56,404         £51,446         £50,099           Long-haul flights         £406,245         £328,100         £269,695           Domestic taxis         £43,799         £35,571         £40,817	g CO₂e/km travelled	Hire vehicles mileage (kilometres)	160.4	157.3	164.1
kg CO2e/passenger-flight         Short-haul flights         373.4         318.7         227.3           kg CO2e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO2e per journey         Domestic rail travel         10.6         11.2         11.6           Financial breakdown of business travel (£)         BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS fuel costs         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic rail travel (including underground)         £248,446         £237,054         £275,035           Domestic flights         £57,964         £51,077         £38,577           Short-haul flights         £56,404         £51,446         £50,099           Long-haul flights         £406,245         £328,100         £269,695           Domestic taxis         £43,799         £35,571         £40,817	Number of instances	Domestic flights	327	290	246
kg CO2e/passenger-flight         Long-haul flights         2527.2         2,263.2         1,741.1           kg CO2e per journey         Domestic rail travel         10.6         11.2         11.6           Financial breakdown of business travel (£)         BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS fuel costs         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic rail travel (including underground)         £248,446         £237,054         £275,035           Domestic flights         £57,964         £51,077         £38,577           Short-haul flights         £56,404         £51,446         £50,099           Long-haul flights         £406,245         £328,100         £269,695           Domestic taxis         £43,799         £35,571         £40,817	kg CO₂e/passenger-flight	Domestic flights	244.7		195.4
kg CO2e per journey         Domestic rail travel         10.6         11.2         11.6           Financial breakdown of business travel (£)         BUS lease         £1,216,350         £1,359,436         £1,280,310           BUS fuel costs         £233,004         £205,685         £224,256           Hire car costs         £25,330         £17,300         £50,924           Domestic rail travel (including underground)         £248,446         £237,054         £275,035           Domestic flights         £57,964         £51,077         £38,577           Short-haul flights         £56,404         £51,446         £50,099           Long-haul flights         £406,245         £328,100         £269,695           Domestic taxis         £43,799         £35,571         £40,817	kg CO₂e/passenger-flight	Short-haul flights	373.4	318.7	227.3
BUS lease £1,216,350 £1,359,436 £1,280,310 BUS fuel costs £233,004 £205,685 £224,256 Hire car costs £25,330 £17,300 £50,924 Domestic rail travel (including underground) £248,446 £237,054 £275,035 Domestic flights £57,964 £51,077 £38,577 Short-haul flights £56,404 £51,446 £50,099 Long-haul flights £406,245 £328,100 £269,695 Domestic taxis £43,799 £35,571 £40,817	kg CO₂e/passenger-flight	Long-haul flights	2527.2	2,263.2	1,741.1
BUS fuel costs	kg CO₂e per journey	Domestic rail travel	10.6	11.2	11.6
BUS fuel costs		Dual .			
Hire car costs £25,330 £17,300 £50,924  Domestic rail travel (including underground) £248,446 £237,054 £275,035  Domestic flights £57,964 £51,077 £38,577  Short-haul flights £56,404 £51,446 £50,099  Long-haul flights £406,245 £328,100 £269,695  Domestic taxis £43,799 £35,571 £40,817					
Domestic rail travel (including underground)   £248,446   £237,054   £275,035			,		
Financial breakdown of business travel (£)         Domestic flights         £57,964         £51,077         £38,577           Short-haul flights         £56,404         £51,446         £50,099           Long-haul flights         £406,245         £328,100         £269,695           Domestic taxis         £43,799         £35,571         £40,817					
business travel (£)  Short-haul flights  Long-haul flights  Domestic flights  £51,964  £51,977  £38,577  £56,404  £51,446  £50,099  £406,245  £328,100  £269,695  Domestic taxis  £43,799  £35,571  £40,817	Financial breakdown of		•		
Long-haul flights         £406,245         £328,100         £269,695           Domestic taxis         £43,799         £35,571         £40,817			•	•	
Domestic taxis £43,799 £35,571 £40,817					
		-	•		
TOTAL £2,287,545 £2,285,673 £2,229,713					
		TOTAL	£2,287,545	£2,285,673	£2,229,713

## Finite resource consumption: water and paper

Sustainable Development Goals:









Total water consumption has fallen by 7%, though has increased by 9% on a normalised basis (m3 per FTE). As the year has progressed there has been an increase in the number of employees frequenting the head office and we are currently averaging above 6m3 per FTE although building utilisation has grown in quarter 4 with an increase in recruited employees and contractors. The amount of harvested rainwater used fell by 36%

due to a fault with the equipment and low rainfall throughout the summer. Investigation continues into why water consumption is higher than average.

Water footprinting ('embedded water' or 'Scope 3 water') methodologies are still in their infancy and OS awaits guidance from government before it starts 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 increased slightly compared with last year. The reasons for this are predominantly an increase in demand for printed services internally.

## Waste minimisation and management SDG 12, 15

Sustainable Development Goals:







There has been a drop of eight tonnes of total waste arisings compared with last year. There was slightly more waste being recycled than incinerated (43% compared with 41%, excluding ICT waste), which is an improvement from the previous year, where more waste was being incinerated than recycled. This is in part due to a business initiative to issue reusable coffee cups to all employees as an incentive, and thought provoker, so less disposable cups are going into the waste stream. Finally, the landfill rate was 6%, at just over four tonnes.

## Total water consumed per FTE in m<sup>3</sup> Mains water 7,000 Harvested rainwater 6,000 5,000 4,000 3,000 2,000 1,000 0 2016-17 2017-18 2018-19

## Waste arisings (tonnes)



## Finite resources consumption – water and paper procured

Absolute metrics	Absolute metrics			2017-18	2016-17
		Mains water supply (Scope 2)	4,601	4,309	5,158
		Harvested rainwater used (Scope 1)	852	1,564	1,229
Non-financial	Water consumed (m³)	Mains water tCO₂e	1.6	-	1.8
indicators (m³)	water consumed (III*)	Waste water tCO₂e	3.9	-	4.5
		Total tCO₂e	5.4	-	6.3
		TOTAL CONSUMPTION (m³)	5,453	5,873	6,387
Normalised metrics	Water consumed (m³)	Mains water supply per FTE	5.43	4.32	4.83
		Harvested rainwater used per FTE	1.01	1.57	1.15
		TOTAL CONSUMPTION per FTE	6.44	5.89	5.98
	Paper procured (tonnes)	Procurement (through Banner GGC)	1.46	1.15	2.97
Absolute metrics		Procurement through FM contractor	3.63	3.28	3.05
		TOTAL PAPER PROCURED	5.10	4.43	6.01
		Mains water supply and treatment	£17,669	£17,604	£20,582
Financial indicators (£)	Water consumed (£)	Used harvested rainwater treatment	£2,074	£3,604	£2,635
		TOTAL WATER SUPPLY AND TREATMENT	£19,743	£21,208	£23,217

## Waste

Absolute metrics			2018-19	2017-18	2016-17
	Total waste arisings (to	otal waste arisings (tonnes)		78.08	88.91
		Waste recycled/reused (excludes ICT)	25.49	27.48	62.02
		ICT equipment reused/recycled externally	3.24	4.41	8.57
	Non-hazardous waste	Waste composted	2.85	4.02	4.48
Non-financial indicators (tonnes)	NOII-Hazardous waste	Toner cartridges (recycled)	0.26	0.25	0.44
		Waste sent to incinerator (energy recovery)	27.32	37	11.88
		Residual waste sent to landfill	4.04	5	1.19
maneacoro (comico)		Batteries (recycled)	0.10	0.12	0.20
		HCFC equipment (fridges and so on)	0.38	0.06	-
	Hazardous waste	Fluorescent lamps (recycled)	0.18	-	0.08
	nazaruous waste	Sanitary waste (not recycled)	0.06	0.06	0.06
		WEEE	2.98	0.38	0.75
		Engine oil	-	-	1.60
	Total disposal costs (£)			£19,453	£33,851
	Non-hazardous waste	TOTAL NON-HAZARDOUS WASTE COSTS	£19,460	£15,454	£29,579
		Waste recycled/reused	£16,247	£15,083	£16,085
		ICT equipment reused/recycled externally	£3,250	£4,520	£14,506
		Toner cartridges (recycled)	£113	£455	£331
		Waste composted/anaerobic digestion	£427	£77	-
		General waste skips	£805	-	-
Financial indicators (C)		Waste sent to incinerator (energy recovery)			
Financial indicators (£)		Residual waste sent to landfill			
		Metal waste	£281		
		TOTAL HAZARDOUS WASTE COSTS	£6,619	£3,999	£4,272
		Batteries (recycled)	£395	£604	£302
		HCFC equipment (fridges and so on)	£389	-	-
	Hazardous waste	Fluorescent lamps (recycled)	£421	-	-
		Sanitary waste (not recycled)	£4,257	£3,230	£3,260
		WEEE	£1,156	£165	£710
		Engine oil	-	-	-

### 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 of environmental issues. There is a range of specific environmental questions contained in our standard tendering documentation including carbon footprint, energy reduction, employee 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 Environmental Management System (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.

## 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:







OS does not have an official biodiversity action plan or climate change adaptation plan.

#### Future improvements in sustainability

Over the last 12 months considerable efforts have been made in reviewing the EMS and updating the core content to meet ISO 14001 standards. There's still work to do to simplify the data collected and make it meaningful for our business operations to identify gaps that can addressed to create a range of sustainability projects. Although sub meters have been installed there is still more analysis to be undertaken to align the data with energy management software to achieve economies and savings. OS will continue to monitor and review and work with third parties to look at ways in which building efficiencies can be achieved by incremental changes to the infrastructure and use of utilities. There will be a stronger approach to engagement within the organisation to encourage all employees to have greater environmental and sustainability awareness.

## 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 2018-19 Governance statement on page 29.

Neil Ackroyd Acting Chief Executive Officer 2 July 2019

## Governance statement

## Scope of responsibility

As Acting Chief Executive Officer of Ordnance Survey, 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 Shareholder's interest in OS, and a UKGI representative sits on the OS Board.

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 longterm 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 Acting 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. These include 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 receives monthly strategic risk updates to help ensure sound risk management across the business and ensure focus and engagement in decision making. The meetings challenge, modify and rationalise the risks. The status of Internal Audit recommendations form part of the Quarterly Business Review agenda and will be extended in 2019-20 to include risk action status.

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 three Non-Executive Directors. The Chair annually assesses whether the Committee has discharged its responsibilities effectively, in accordance with its terms of reference. OSARC meets at least three times a year. During 2018-19 OSARC continued to conduct a strategic risk 'Deep Dive' programme in addition to operational risk oversight in support of its assurance activity and to inform 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 on the remuneration for Directors and designated Senior Executives, including pension rights and any compensation payments

in accordance with the Shareholder Framework Document and Executive Pay Framework. 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 37.

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**

An externally facilitated review of the Board was completed in 2018-19 and considered the:

- · Adequacy of Board individuals and supporting processes to enable effective oversight.
- Relationships and culture underpinning the processes.
- · Arrangements to drive accountability, values and standards.
- Impact and value of the executive team in supporting the Board

The report acknowledged several Board strengths but also offered suggestions for the immediate and medium term to improve Board composition, dynamics and processes. An action plan has been devised and implementation will be monitored by the Board.

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 actual and potential conflicts of interest.

Attendance at Board and Committee meetings in 2018–19 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	11	2	2
Kieran Murphy, Non-Executive Chair & Nomination Committee Chair	Nomination Remuneration	7/7	1/1	11/11	2/2	n/a
Mike Carr, Remuneration Committee Chair (to January 2019)	OSARC Nomination Remuneration	7/7	3/3	11/11	2/2	n/a
Jacques Cadranel, Pensions Committee Chair	OSARC Pensions Nomination	7/7	3/3	n/a	2/2	2/2
Stephen Lake, OSARC Chair	OSARC Nomination	7/7	3/3	n/a	2/2	n/a
Philippa Hird, Non-Executive Director (from June 2018) & Remuneration Committee Chair (from January 2019)	Remuneration Nomination	5/7	n/a	7/8	2/2	n/a
<b>John Clarke,</b> Non-Executive Director (from October 2018)	OSARC Nomination	4/4	1/1	n/a	2/2	n/a
lain Rolfe, Non-Executive Director, Shareholder Director (to August 2018)	Remuneration	2/2	n/a	3/3	n/a	n/a
<b>Emily Ashwell,</b> Non-Executive Director, Shareholder Director (from August 2018)	OSARC Nomination Remuneration	5/5	1/1	8/8	2/2	n/a
<b>Neil Ackroyd,</b> Managing Director of OS Ventures, Deputy CEO & Acting CEO (from June 2018)	n/a	6/6	2/3	n/a	n/a	n/a
Paul Bragg, Chief Finance Officer	n/a	7/7	3/3	n/a	n/a	2/2
<b>David Henderson,</b> Managing Director of OSGB*	n/a	1/1	n/a	n/a	n/a	n/a

<sup>\*</sup>Appointed as an Executive Statutory Director for the July 2018 Board only.

### Compliance with the UK Corporate **Governance Code**

OS has considered the original and updated UK Corporate Governance Code in designing its governance processes and arrangements to align with best practice as far as is possible.

The revised UK Government Code 2018 applies to accounting periods beginning on or after January 2019; we will therefore be conducting a review of the application of the Code to OS for reporting in 2019-20.

#### 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 decisionmaking 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 ExCom 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. The Board reviews the strategic risks at each meeting.

#### 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 selfassessment and annual assurance statement exercise whereby ExCom members and senior management provide me as the Accounting Officer with written assurance on the reliability and effectiveness of:

- · Strategic and Annual Operating Plan and budget delivery
- · Performance reporting
- Risk management
- Arrangements for conveying and living the OS values
- · Health and safety awareness, training and reporting
- · Arrangements for reporting instances of fraud, bribery or corruption
- · Reporting non-compliance with legislation
- The control environment and activities established to meet business objectives
- · Information security awareness, training and reporting

## Summary risk profile

The strategic risk profile for the year was reviewed by the Board during the year and highlighted the following strategic risks and opportunities to achieving OS strategic aims and priorities.

#### Deliver value for UK Government

Risk: There will be an adverse impact on our financial viability, business growth and dividend if a PSGA is not secured with UK Government.

Risk: Inadequate engagement with Geospatial Commission to properly understand its expected outcomes coupled with a lack of appreciation of the OS strategy may result in a disconnect which reduces the relevance and importance of OS to the geospatial digital economy limiting our opportunities to advise, provide solutions, provide thought leadership and generate revenue opportunities.

These risks are being mitigated in several ways including establishing close dayto-day working relationships with the Geospatial Commission, developing a full business and economic case to support the new Public Task, and active Geo 6 collaboration and project engagement.

## Deliver commercial growth

Risk: The business is unable to identify market opportunities, commit to, align with, fully support, resource and execute an informed, realistic and achievable strategy to achieve revenue growth.

Risk: Limited insight and understanding of our competitive environment, customer motivation (in GB and internationally) and the wider mapping ecosystem will affect our ability to make successful strategic choices.

Risk: Lack of commitment to innovate and take risk reduces competitive advantage in meeting customer needs, product differentiation, revenue opportunities and erodes the OS brand.

Risk: Limited OS capacity to support partnership/joint venture working coupled with limited partnership/ joint venture investment to support obligations undermines any potential strategic advantage and market access. Risk: There is a risk to achieving the commercial growth strategy if the role, value and integrity of the OS brand is not understood or compromised due to lack of attention to identifying and managing any threats to it, ensuring it remains relevant and is adequately maintained and strengthened.

Actions taken and being taken to address these risks include externally led market insight work to clarify, refine and inform commercial strategy, developing a proposition infrastructure, harnessing and managing innovation capacity and capability, developing a strategic and governance framework for Joint Ventures and Partnerships, and refreshing the OS brand strategy.

#### **Business resilience**

Risk: Inability to source, build and retain employee capability and establish effective succession planning for the current business will impact successful business growth and service delivery.

Risk: A major information security breach resulting in a loss or compromise of sensitive information (including personal, customer and commercial) or wilful damage results in service loss, reputational damage, financial penalties and loss of stakeholder confidence.

Risk: Inability to recover business operations effectively if interrupted by major events such as pandemic, fire, flood, terrorism or civil disturbance reduces business activity and agility, resulting in loss of revenue and reputational damage.

Risk: Inability to fully implement and re-platform core data collation and dissemination processes inhibits ability to build, deploy and run managed and other service offerings.

Risk mitigations include career architecture, employee engagement surveys, talent management schemes, full strength cyber security team and cyber assurance reporting to audit committee, business continuity plan testing and review programme, IS recovery plans and an agreed products and services priority list.

## 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 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.

## Fraud and whistleblowing

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

- Whistleblowing and counter-fraud policy and procedures
- · The Head of Risk & Assurance as a named independent person to whom to report any concerns
- 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 employees remain aware of the whistleblowing and counter-fraud policies.

No instances of fraud have been reported to the Head of Risk & Assurance during the year.

## Information security

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

We have further strengthened our Cyber Security team with the appointment of a Head of Cyber Security and increased the team complement to eight employees. Further to the specialist Cyber Security team, employees 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 and Information Risk group, chaired by the SIRO and established in 2017, continued to meet throughout 2018-19. Highlights from the work of the group included a review and refresh of the OS Incident Management Framework; implementation of the **Government Security Transformation** project; cyber risk updates and responses; appointment of a Security Adviser lead; review and assurance of the Departmental Security Healthcheck submission prior to OSARC, and international travel security risk.

The Information Assurance and Security team provides 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 standing OSARC agenda item.

We have continued to raise and promote security awareness across the business. The interactive monthly information security training and awareness programme first introduced in January 2017 for all OS employees continued throughout 2018-19.

Information security risk is a key element of our GDPR implementation and compliance arrangements.

#### Protecting personal data

During 2018-19 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 Data Protection Officer, the Information Assurance Manager and Cyber Security team has sought to ensure OS continues to understand its obligations to comply with GDPR.

## 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 12 assurance opinion-based reports (comprising four limited, seven partial and one substantial opinions) and ten advisory-based reviews.

Internal Audit recommendations are tracked with status information provided to me for quarterly director review meetings.

There were no high-priority recommendations not receiving adequate management attention.

## Looking ahead

The Board and ExCom have continued to work on 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 at ExCom and the Board with a view to considering the timeliness and success of mitigating actions and have incorporated risk reporting as a key component of the quarterly review.

We will continue to integrate the strategy and business planning, budgeting and risk management processes being 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.

This governance statement reflects the result of my review and I am satisfied with the effectiveness of the system of governance and the agreed plans to address weaknesses and ensure continuous improvement of the system of risk management and internal control.

## Management certification

I have considered all the evidence provided during the preparation of this annual governance statement inclusive of my handover from the previous accounting officer and have concluded that the organisation's overall governance, risk management and internal control structures are effective.

**Neil Ackroyd Acting Chief Executive Officer** 2 July 2019

## 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 2019. 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 2019 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 10.

## Results and dividends

The results are set out in the statement of profit or loss on page 44. The Directors declared a dividend for the year of £27.4m (2017-18: £18.0m). Dividends of £18.0m were paid during the year (2017-18: nil).

#### Directors

The following Directors held office during the year ended 31 March 2019.

Neil Ackroyd	Managing Director of OS Ventures and Acting Chief Executive Officer (from June 2018)
Emily Ashwell	Non-Executive Director (Shareholder Director) (from August 2018)
Paul Bragg	Chief Financial Officer
Jacques Cadranel	Non-Executive Director
Mike Carr	Non-Executive Director
John Clarke	Non-Executive Director (from October 2018)
Nigel Clifford	Chief Executive Officer (to May 2018)
David Henderson	Managing Director of OSGB (Appointed as Statutory Director for July 2018 Board only)
Philippa Hird	Non-Executive Director (from June 2018)
Stephen Lake	Non-Executive Director
Kieran Murphy	Non-Executive Chairman
Iain Rolfe	Non-Executive Director (Shareholder Director) (to August 2018)
= 11	

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

### Directors' indemnities

The Company has made qualifying thirdparty 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 33.5 days (2017-18: 29.9 days).

## 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 cash flow 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
- Singapore
- · Bahrain

## 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 employees 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**

OS 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 alongside Prospect and PCS trade unions.

## 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. Our framework document requires us to invite the National Audit Office to be the external auditor, and the National Audit Office has indicated its willingness to continue in office.

## Authority of issue of financial statements

The Directors gave authority for the financial statements to be issued on 2 July 2019. 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** 2 July 2019

## 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 UK 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

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

Ordnance Survey Limited's policy is to offer levels of remuneration to attract, motivate and retain high-calibre executives who can make an effective contribution to the success of the business, having regard to wider public sector pay policy and value for money.

### Remuneration Committee

The Remuneration Committee meets at least twice a year to agree remuneration policy for Executive Directors and other senior employees. The Committee also advises on the direction of the overall remuneration strategy for all employees. It's currently chaired by the Non-Executive Director, Philippa Hird; while the following were on the Remuneration Committee during the year:

Kieran Murphy Non-Executive Chairman

Mike Carr Non-Executive Director

Nigel Clifford Chief Executive Officer to May 2018

Iain Rolfe Non-Executive Director to August 2018 (Shareholder Director)

Emily Ashwell Non-Executive Director from August 2018 (Shareholder Director)

The committee was supported by Hazel Hendley HR Director (Acting)

None of the above were present for discussions concerning their own remuneration.

## **Employment agreements**

Nigel Clifford's fixed term appointment ended May 2018. Non-Executive Directors have a three-year fixed-term tenure. Other Statutory Directors covered by this Annual Report hold appointments which are open ended until they reach retirement age. Their notice periods are six months.

Philippa Hird joined as Non-Executive Director in June 2018.

John Clarke joined as Non-Executive Director in October 2018.

## Statement of Directors' remuneration (audited)

	2018-19							
2010-19								
	Salary and fees	Performance related pay	Benefits in kind*	Value of pension benefits	Total			
	£'000	£'000	£	£'000	£'000			
Nigel Clifford	45 – 50 (FYE 255 – 260)	110 – 115	2,400	-	160 – 165 (FYE 270 – 275)			
Neil Ackroyd	195 – 200	20 - 25	25,200	35 – 40	280 – 285			
Paul Bragg	160 – 165	15 – 20	600	15 – 20	195 – 200			

- · Salary and fees include gross salary and any other taxable allowances and payments i.e. cash in lieu of pension and car allowance.
- Total remuneration includes base salary, non-consolidated performance-related pay, cash allowances/earnings, benefits in kind and the value of pension contributions.
- \*Taxable benefits for health screening, broadband, company cars and private medical insurance are captured through P11D and PSA submission. Benefits in kind are presented to the nearest £100.
- Neil Ackroyd is a member of the Civil Service Pension Defined Benefit Scheme (Classic Plus).
   Paul Bragg is a member of the Group personal pension scheme (OS Horizon).
- Neil Ackroyd received a temporary assignment allowance while covering the CEO role.
- A payment of £115k was made to Nigel Clifford as an incentive plan bonus payment in relation to the three year period ending May 2018.

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

## 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 Nigel Clifford who was not eligible for this plan.

The Remuneration Committee reviewed the terms of the STIP and agreed measures for 18-19 should incentivise:

- The delivery of OS's strategic transformation targets.
- · Hitting the corporate measures of PBIT, Revenue, Free Cash and Customer Satisfaction.
- Ensuring OS has the ability to make the required dividend payments.
- Increasing employee engagement thereby maximising the productivity of the organisation.

It concluded it needed greater ability to target and reward progress against the strategic transformation targets and agreed that, in addition to Corporate and Individual Performance measures, a Strategic Measures target should be introduced for 2018-19. Therefore, the Remuneration Committee agreed the following weightings should be applied to reward the right behaviours in the new matrixed organisational structure with business units being mutually dependent on each other:

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

## Corporate performance

For 2018-19 it was agreed the corporate measures would have revised targets as follows:

Corporate performance measures	Threshold*	Budget*	Maximum*
PBIT	£20.2m	£21.3m	£22.4m
Revenue	£150.2m	£158.1m	£166.0m
Free Cash	£23.9m	£25.2m	n/a
Customer Satisfaction	39	41	n/a

<sup>\*</sup>Performance between the defined performance levels will attract a relative award between the defined award levels.

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

### Pension benefits

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 and treated by the HM Revenue and Customs as a taxable emolument.

## 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 excluding pension of the Company's most highly paid Director on a full year equivalent basis in the financial year 2018-19 was between £270,000 and £275,000 which was 7.2 times the median salary and taxable benefits of the workforce, which was £37,600.

The salary and taxable benefits excluding pension of the Company's most highly paid Director on a full year equivalent basis in the prior financial year was between £270,000 and £275,000 which was 7.4 times the median salary and taxable benefits of the workforce, which was £37,062.

On a total remuneration basis, no employee received remuneration in excess of the highest paid Director.

## Directors' defined benefit pensions (audited)

	2018-19							
	Real increase in pensions and related lump sum at age 60	Total accrued pension at 60 at 31 March 2019 and related lump sum	•	CETV at 31 March 2018	Real increase in CETV after adjustment for inflation and changes in market investment factors			
	£'000	£'000	£'000	£'000	£'000			
Neil Ackroyd	2.5 – 5 plus a lump sum of 0 – 2.5	60 – 65 plus a lump sum of 5 – 10	922	774	56			

	2017-18							
	Real increase in pensions and related lump sum at age 60	Total accrued pension at 60 at 31 March 2018 and related lump sum	•	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 5 – 10 lump sum	774	691	30			

The Director in the table above is a member of the Principal Civil Service Pension Scheme (PCSPS) Classic Plus Scheme. Details of the scheme are contained in the Accounts and further details can be found at: www.civilservice pensions.gov.uk

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 result 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's 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 Directors (Iain Rolfe and Emily Ashwell) are appointed directly by the Minister responsible for OS (these appointments being reserved to the Shareholder under our Shareholder Framework). The remaining Non-Executive Directors (Mike Carr, Jacques Cadranel, Stephen Lake, Philippa Hird and John Clarke) 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 threeyear optional period, any further extension is offered under mutually agreed terms.

## Payments to Non-Executive Directors

Ordnance Survey Non-Executive Directors are not Ordnance Survey employees and are not members of the Principal 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. The Shareholder Directors are members of the Principal Civil Service Pension scheme offered by their employer BEIS.

Remuneration paid to Non-Executive Directors was as follows:

	2018-19	2018-19 BIK*	2017-18	2017-18 BIK*
	£'000	£	£'000	£
Kieran Murphy	50 – 55	1,900	50 – 55	1,000
Mike Carr	25 – 30	2,900	25 – 30	1,900
Stephen Lake	25 – 30	1,600	25 – 30	900
Jacques Cadranel	25 – 30	300	20 – 25	200
John Clarke	10 – 15 (FYE 25 – 30)	500	n/a	n/a
Philippa Hird	20 – 25 (FYE 25 – 30)	1,100	n/a	n/a

- Iain Rolfe and Emily Ashwell were Shareholder Directors during the year, but no remuneration was paid for their services.
- \* 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 at OS is voluntarily reported. The actual salary, performance-related pay and benefits 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** 2 July 2019

## Audit report

## 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, 2019 which comprise the Consolidated statement of profit and loss and other comprehensive income, Consolidated statement of financial position, Company statement of financial position, Consolidated statement of changes in equity, Company statement of changes in equity, Consolidated cash flow statement, Company cash flow statement and the related Consolidated notes, including the significant accounting policies. 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 2019 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 report. 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.

#### Conclusions relating to going concern

We are required to 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 Ordnance Survey Limited's ability to continue as a going concern for a period of at least twelve months from the date of approval of the financial statements. 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. We have nothing to report in these respects.

### Responsibilities of the Directors for the financial statements

As explained more fully in the Directors' Responsibilities 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 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.
- · 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 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

### 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; or
- a corporate governance statement has not been prepared by the parent company.

Hilary Lower (Senior Statutory Auditor) 4 July 2019

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 2019

	Notes	31 March 2019	31 March 2018
		£'000	£'000
Revenue	2	157,354	154,901
Cost of Sales		(24,477)	(22,305)
Gross Profit		132,877	132,596
Operating costs	3	(113,326)	(114,855)
Share of results of joint ventures	9	5,596	5,533
Other income		1,128	648
Operating profit		26,275	23,922
Finance income	5	12	17
Profit before corporation tax		26,287	23,939
Corporation tax expense	6	(4,924)	(4,898)
Profit for the period		21,363	19,041
Profit is attributable to:			
Owners of the company		22,661	21,167
Minority interest		(1,298)	(2,126)
		21,363	19,041
Profit attributable to owners of the company		22,661	21,167
Dividends	7	(45,350)	
Profit retained for the year		(22,689)	21,167

All the activities of the Group are classified as continuing.

## Consolidated statement of financial position as at 31 March 2019

	Notes	31 March 2019	31 March 2018
		£'000	£'000
Non-current assets			
Intangible assets	10	66,474	74,775
Property plant and equipment	11	30,717	30,428
Interests in joint ventures	9	2,870	3,799
		100,061	109,002
Current assets			
Inventories	12	1,996	1,743
Trade and other receivables	13	17,368	25,845
Cash and cash equivalents	14	127,592	110,392
		146,956	137,980
Total assets		247,017	246,982
Current liabilities			
Trade and other payables	15	(40,702)	(15,550)
Current tax liability	16	(1,942)	(975)
Provisions	17	(618)	(160)
Deferred Revenue	18	(19,004)	(10,632)
		(62,266)	(27,317)
Net current assets		84,690	110,663
Non-current assets plus net current assets		184,751	219,665
Non-current liabilities			
Trade and other payables	15	-	(80)
Provisions	17	(6)	(41)
Deferred Revenue	18	(5,631)	(10,049)
Deferred tax liability	19	(78)	(71)
Total liabilities		(67,981)	(37,558)
Net assets		179,036	209,424
Equity			
Share capital	20	34,000	34,000
Retained earnings	21	149,772	178,862
Capital and reserves attributable to owners of the Company		183,772	212,862
		,	,
Non-controlling Interest		(4,736)	(3,438)
Total equity		179,036	209,424

The Financial Statements were approved by the Board of Directors and authorised for issue on 2 July 2019.

Neil Ackroyd **Acting Chief Executive Officer** 2 July 2019

They were signed on its behalf by:

## Company statement of financial position as at 31 March 2019

	Notes	31 March 2019	31 March 2018
		£'000	£'000
Non-current assets			
Intangible assets	10	66,474	74,775
Property plant and equipment	11	30,602	30,285
Investments	8	400	400
Interests in joint ventures	9	2,870	3,799
		100,346	109,259
Current assets			
Inventories	12	1,996	1,744
Trade and other receivables	13	19,840	29,799
Cash and cash equivalents	14	126,271	108,550
		148,107	140,093
Total assets		248,453	249,352
Current liabilities			
Trade and other payables	15	(40,616)	(15,638)
Current tax liability	16	(1,936)	(970)
Provisions	17	(618)	(160)
Deferred revenue	18	(17,966)	(9,896)
		(61,136)	(26,664)
Net current assets		86,971	113,429
Non-current assets plus net current assets		187,317	222,688
Non-current liabilities			
Trade and other payables	15	-	(80)
Provisions	17	(6)	(41)
Deferred revenue	18	(5,631)	(10,049)
Deferred tax liability	19	(84)	(77)
Total liabilities		(66,857)	(36,911)
Net assets		181,596	212,441
Equity			
Share capital	20	34,000	34,000
Retained earnings	21	147,596	178,441
Capital and reserves attributable to owners of the Company		181,596	212,441

The Financial Statements were approved by the Board of Directors and authorised for issue on 2 July 2019. They were signed on its behalf by:

Neil Ackroyd Acting Chief Executive Officer 2 July 2019

## Consolidated statement of changes in equity for the year ended 31 March 2019

	Note	Share capital	Retained earnings	Total	Non- controlling	Total
		£'000	£'000	£'000	£'000	£'000
As at 1 April 2017		34,000	157,695	191,695	(1,312)	190,383
Profit for the year		-	21,167	21,167	(2,126)	19,041
As at 31 March 2018		34,000	178,862	212,862	(3,438)	209,424
As at 1 April 2018		34,000	178,862	212,862	(3,438)	209,424
Adjustment on application of IFRS 15	26	-	(6,401)	(6,401)	-	(6,401)
As at 1 April 2018 restated		34,000	172,461	206,461	(3,438)	203,023
Profit for the year			22,661	22,661	(1,298)	21,363
Dividends payable		-	(45,350)	(45,350)	-	(45,350)
As at 31 March 2019		34,000	149,772	183,772	(4,736)	179,036

## Company statement of changes in equity for the year ended 31 March 2019

	Note	Share capital	Retained earnings	Total
		£'000	£'000	£'000
As at 1 April 2017		34,000	156,696	190,696
Profit for the year		-	21,745	21,745
As at 31 March 2018		34,000	178,441	212,441
As at 1 April 2018		34,000	178,441	212,441
Adjustment on application of IFRS 15	26	-	(6,401)	(6,401)
As at 1 April 2018 restated		34,000	172,040	206,040
Profit for the year		-	20,906	20,906
Dividends payable		-	(45,350)	(45,350)
As at 31 March 2019		34,000	147,596	181,596

## Consolidated cash flow statement for the year ended 31 March 2019

Notes	31 March 2019	31 March 2018
	£'000	£'000
Profit before corporation tax	26,287	23,939
Amortisation of intangible assets	20,730	23,878
Depreciation of tangible fixed assets	2,239	1,871
Impairment of intangible assets	-	5,074
Share of joint venture results	(5,596)	(5,533)
Interest received	(12)	(17)
Increase in inventories	(253)	(101)
Decrease/(increase) in trade and other receivables	8,453	(1,818)
(Decrease)/increase in trade and other payables	(2,278)	502
Increase/(decrease) in provisions for liabilities and charges	423	(4,635)
Increase in deferred revenue	(2,438)	(2,025)
Cashflow from operations	47,555	41,135
Corporation taxes paid	(3,950)	(5,013)
Net cash inflow from operating activities	43,605	36,122
Cash flows from investing activities		
Interest received	12	17
Purchase of plant, property and equipment	(2,538)	(2,052)
Purchase of intangible assets	(12,429)	(17,025)
Receipt of loan repayments from associates	25	38
Receipt of Dividends	6,525	4,875
Net cash used in investing activities	(8,405)	(14,147)
Cash flows from financing activities		
Interest paid	-	-
Payment of Dividends	(18,000)	-
Net cash used in financing activities	(18,000)	-
Net increase in cash and cash equivalents	17,200	21,975
Cash and cash equivalents at beginning of year	110,392	88,417
Cash and cash equivalents at end of year 14	127,592	110,392

## Company cash flow statement for the year ended 31 March 2019

Notes	31 March 2019	31 March 2018
	£'000	£'000
Profit before corporation tax	25,830	26,644
Amortisation of intangible assets	20,730	23,878
Depreciation of tangible fixed assets	2,195	1,825
Impairment of intangible assets	-	821
Impairment of loans to Group companies	4,197	5,455
Reversal of impairment of loans to Group companies	-	(4,200)
Share of joint venture results	(5,596)	(5,533)
Interest received	(587)	(614)
Increase in inventories	(252)	(101)
Decrease/(increase) in trade and other receivables	8,182	(1,172)
(Decrease)/increase in trade and other payables	(2,451)	683
Increase/(decrease) in provisions for liabilities and charges	423	(4,635)
Increase in deferred revenue	(2,749)	(2,371)
Cashflow from operations	49,922	40,680
Corporation taxes paid	(3,950)	(5,013)
Net cash inflow from operating activities	45,972	35,667
Cash flows from investing activities		
Interest received	587	614
Purchase of plant, property and equipment	(2,512)	(1,918)
Purchase of intangible assets	(12,429)	(14,353)
Loans to group companies	(2,447)	(3,655)
Receipt of loan repayments from associates	25	38
Receipt of Dividends	6,525	4,875
Net cash used in investing activities	(10,251)	(14,399)
Cash flows from financing activities		
Interest paid	_	_
Payment of Dividends	(18,000)	_
Net cash used in financing activities	(18,000)	-
Net increase in cash and cash equivalents	17,721	21,268
Cash and cash equivalents at beginning of year	108,550	87,282
Cash and cash equivalents at end of year 14	126,271	108,550

## 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 10 to 15. 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 historic cost convention except for the following:

- · Financial assets and liabilities 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

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing 1 April 2018:

IFRS 15 'Revenue from Contracts with Customers'. The impact of the transition is shown in note 26.

The new standard is based on the principal that revenue is recognised when control of a good or service transfer to a customer - so the notion of control replaces the existing notion of risks and rewards.

The treatment of revenue from Partner Licenses has required a change to policy under IFRS 15. Partner Licences enable the customer to add value to the Group data and resell the product to third parties. Under the previous policy, revenue from royalty fees is recognised when the Group becomes entitled to receive a royalty from an onward sale of the Group data, i.e. when the risk and rewards have transferred. IFRS 15 looks past the obligation of supplying data, and transfer of risk and reward, to the partner and instead requires revenue recognition be matched to the end user's sales or usage. In a situation where a partner makes a non-time-bound sale to the end user the royalties are matched to the point of sale. For a time-bound sale, royalties are matched to the period over which the end user benefits, ie the licence term.

The Group adopted IFRS 15 using the cumulative effect method, with the effect of adopting this standard on 1 April 2018, the date of initial application. Accordingly, the information presented for the year ended 31 March 2018 has not been restated. It remains as reported under IAS 18, IAS 11 and related interpretations. The group has recognised the cumulative effect of initially applying IFRS15 as an adjustment to the opening balance of retained earnings at 1 April 2018. Note 26 summarizes the impact of transition to IFRS 15 on the company's retained earnings as at 1 April 2018.

In its adoption of IFRS 15, the Company has elected to apply the requirements of the new standard only to contracts that are incomplete at the date of initial application. The Company has also elected to apply the contract modification practical expedient and reflect the aggregate effect of all contract modifications prior to the transition date.

The Company's accounting policy under IFRS 15 is documented in policy in 1.14.

IFRS 9 'Financial Instruments', which set out the requirements for recognition and measurement, impairment and derecognition of financial assets and financial liabilities and introduces new rules for hedge accounting. This standard simplifies the classification of a financial asset as either at amortized cost or at fair value as opposed to the multiple classifications which were permitted under IAS 39. This standard also requires the use of a single impairment method as opposed to the multiple methods in IAS 39. The approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of the financial assets. The standard also adds guidance on the classification and measurement of financial liabilities. The adoption of IFRS 9 has not had an effect on the Company's accounting policies related to financial liabilities. There was no material impact of transition to IFRS 9 on the Company's statement of financial position at 1 April 2018.

(v) New standards and interpretations not yet adopted.

Certain new accounting standards and interpretations have been published that are not mandatory for 31 March 2019 reporting periods and have not been early adopted by the Group.

The new leases standard IFRS 16 '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

The Group intends to apply the short lease provisions within IFRS 16 to exclude items with a lease term of less than 12 months from the calculation. The Group anticipate this primarily relating to equipment leased on a seasonal basis. No exemption will be taken for low value assets as the aggregate value of these is judged to be material to the financial statements.

The Group will apply the standard for the financial year ending 31 March 2020. The Group intends to apply the simplified transition 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. The Group has reviewed material contracts to identify any embedded leases at the date of initial application and included these as Right of Use assets together with the associated liability.

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Company recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability. The assets are depreciated to the earlier of the end of the useful life of the right-of-use asset or the lease term using the straightline method as this most closely reflects the expected pattern of consumption of the future economic benefits. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

The expected financial impact of the adoption of IFRS 16 is an increase in non current assets of £3.7m and an increase in liabilities of £3.8m. Consequently there will be a net reduction in reserves of £0.1m. This arises from the financing element of leases being charged on a reducing balance and hence increasing the income and expenditure account charge in the early years, reducing to cumulative nil impact when the lease expires.

There are no other standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

#### 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

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
- 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 12 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 three 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 employees 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 employees 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 new 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 multiemployer 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 0.29% 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. 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 end customer and the Group's obligation of ongoing supply and to provide updates.

Paper maps – Revenue from paper map sales is recognised when the control of ownership passes to the customer.

Services - Revenue from services are recognised at the point at which the services are transferred to the customer 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.

Revenue which is received in the financial period relating to payments received in advance of performance under the contract are contract liabilities and held as deferred revenue on the statement of financial position. Contract assets are recognised when the group has a conditional right to consideration for completed performance under the contract, contract assets are held as accrued revenue (within trade and other receivables) on the statement of financial position.

#### 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

	2018-19	2017-18
	£'000	£'000
Trading revenue	154,756	152,795
Other operating activities	2,177	1,873
Property rental income	421	233
	157,354	154,901
Trading revenue		
	2018-19	2017-18
Channel	£'000	£'000
Direct licences	104,803	103,302
Partner licences	35,827	34,291
Paper maps	7,570	8,334
Services	6,556	6,868
	154,756	152,795
	2018-19	2017-18
Segment	£'000	£'000
Business to government	85,171	87,104
Business to business	58,488	54,091
Business to consumer	11,097	11,600
	154,756	152,795
	2018-19	2017-18
Geography	£'000	£'000
United Kingdom	144,069	144,093
Other European countries	1,171	1,321
Rest of world	9,516	7,381
	154,756	152,795

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 £73.1m (2017-18: £73.4m)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

		113,326	114,855
Other operating charges		35,342	27,115
Fees payable to auditor for audit of the statutory annual accounts		75	75
Foreign exchange losses/ (gains)		(383)	530
Operating lease charges – PPE		1,975	1,992
Operating lease charges – buildings		1,022	848
Research and development		3,730	2,979
Depreciation of tangible fixed assets	11	2,239	1,825
Impairment of intangible assets	10	-	5,074
Amortisation of intangible assets	10	20,730	23,878
Employee costs	4	48,596	50,539
Operating profit for the year has been arrived at after charging:			
		£'000	£'000
	Note	2018-19	2017-18

The Company's auditor is The National Audit Office. Office leasing payments of £346k were made to the auditors for the provision of non audit services during the year (2017-18: £207k). The subsidiaries' auditor is Deloitte. The fee payable to Deloitte for the current year audit is £46k (2017-18: £41k). Payment to Deloitte for non audit services during the year were £6k (2017-18: £48k).

### Losses and special payments

There were no losses or special payments to report.

## 4 Employee numbers and costs

#### Total employee costs

	2018-19	2017-18
	£'000	£'000
Wages and salaries – permanent employees	38,346	38,238
Restructuring costs	-	(704)
Social security costs	4,541	4,592
Pension costs	6,955	7,076
Additional early release costs in year	277	298
Temporary/agency contract labour costs	6,087	5,657
	56,206	55,157
Capitalised permanent labour	(4,166)	(3,041)
Capitalised temporary/agency contract labour	(3,444)	(1,577)
·	48,596	50,539

## Total permanent employee numbers, including directors

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

	997	1,005
Corporate Services	174	142
Sales and Marketing	167	125
Operations	656	738
	2018-19	2017-18

## 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:

	2018-19	2017-18
Operations	23	29
Sales and Marketing	5	-
Corporate Services	7	7
	35	36

#### Directors' emoluments

	2018-19	2017-18
	£'000	£'000
Salaries and other short-term employee benefits	589	659
Pension contribution charged in year – defined benefit	40	44
Pension contribution charged in year – defined contribution	17	13
Highest paid Director	281	274

At 31 March 2019 one Director was a member of a defined benefit scheme and one Director was a member of a defined contribution scheme. The Principal 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 calculate the amount of holiday accrued, but not yet taken, as at 31 March 2019.

The figure above for wages and salaries includes a charge of £62k (2017-18: £77k) in respect of additional annual leave earned, but not taken, as at 31 March 2019. The total liability of £948k (2017-18: £886k) is included within other payables within note 15 of these financial statements.

#### Pension costs - defined benefit

For 2018-19, employers' contributions of £6,178k 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 accrued during 2018-19 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. A full actuarial valuation was carried out at 31 March 2016. Details can be found in the resource accounts of the Cabinet Office: Civil Superannuation (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/ the-new-pension-scheme-alpha/.

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 £277k (2017-18: £298k) in respect of new leavers identified in 2018-19. This charge reflects the costs of leavers identified and confirmed by 31 March 2019, excluding those identified as part of the restructuring provision within note 17.

Early release package cost band (excluding restructure provision)	2018-19	2017-18
Less than £10,000	1	2
£10,000-£25,000	3	1
£25,000-£50,000	2	7
£50,000-£100,000	2	-
Total number of exit packages	8	10
Total cost £'000	277	298

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

	2018-19	2017–18
	£'000	£'000
Finance income		
Interest received	12	17

### 6 Taxation

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 Limited have throughout been subject to UK Corporation Tax.

(a) Corporation tax expense	2018-19 £'000	2017-18 £'000
Current tax		
Current tax on profits for the year	5,148	4,850
Adjustments in respect of prior years	(231)	(877)
Total current tax	4,917	3,973
Deferred tax		
Origination and reversal of temporary differences	2	493
Impact of rate change	-	(52)
Adjustments in respect of prior years	5	484
Total deferred tax credit	7	925
Corporation tax expense	4,924	4,898
(b) Reconciliation of income tax	2018-19	2017-18
expense	£'000	£'000
Profit before income tax expense	26,287	23,939
Tax on profit at the standard rate of 19%	4,994	4,548
Reasons affecting charge for the period:		
Prior year adjustments	(226)	(393)
Impact of rate change	-	(52)
Impact of expenses not deductible	(15)	61
Utilisation of tax losses not previously recognised	(237)	(111)
Current year loss not recognised	408	845
Income tax expense	4,924	4,898

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 balance sheet date at which the assets are expected to reverse.

#### 7 Dividends

	2018-19	2017-18
	£'000	£'000
Dividends	45,350	-

In March 2019, the Company declared a dividend of £27.4m for 2018-19. In June 2018, the Company declared a final dividend relating to the prior year of £18.0m. This was not recognised in 2017-18 as it was not declared until post year end.

## 8 Investments and loan

Company	2018-19	2017-18
	£'000	£'000
Value of shares at beginning of period	400	400
Value of shares at end of period	400	400
Value of loans at beginning of period	5,063	2,700
Additions	4,197	3,655
Impairment	(4,197)	(5,455)
Impairment Reversal	-	4,200
Loan Repayment	(1,775)	(37)
Value of loans at end of period	3,288	5,063
Value of investments and loan	3,688	5,463

In 2017-18, the Company has assessed the recoverable value of Ordnance Survey Leisure investments and loans and reversed impairment losses of £4,200k previously recognised (2019:nil).

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

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

Ordnance Survey Limited 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

Ordnance Survey International 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.

Due to uncertainties in future cashflows the loans to Astigan Limited and Ordnance Survey International Services Limited are impaired.

## 9 Subsidiaries and investments

Details of the Company's subsidiaries at 31 March 2019 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	Dormant	England and Wales	100%
Ordnance Survey International Services Limited	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 and Ordnance Survey International Services Limited.

Details of the Company's joint ventures and associates at 31 March 2019 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/(loss):	2018-19	2017-18
	£'000	£'000
GeoPlace LLP	5,661	5,347
PointX Limited	(66)	70
Dennis Maps Limited	1	116
	5,596	5,533
The share of net assets is as follows:	2018-19	2017-18
	£'000	£'000
GeoPlace LLP	2,717	3,430
PointX Limited	25	241
Dennis Maps Limited	128	128
	2,870	3,799

### Other investments - GeoPlace LLP

The investment in GeoPlace LLP at 31 March 2019 is as follows:	2018-19 £'000	2017-18 £'000
Current assets		
Cash and cash equivalents	1,645	2,738
Other current assets	4,234	3,548
Total current assets	5,879	6,286
Current liabilities		
Other current liabilities	(2,257)	(1,713)
Total current liabilities	(2,257)	(1,713)
Net assets	3,622	4,573
Ordnance Survey share of net assets at 75%	2,717	3,430

	2018-19	2017-18
	£'000	£'000
Revenue	14,570	13,656
Interest income	10	3
Operating costs	(6,871)	(6,372)
Depreciation and amortisation	(160)	(158)
Operating profit	7,549	7,129
Ordnance Survey share of profit at 75%	5,661	5,347

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 £6.4m were received from GeoPlace LLP during the year (2017-18: £4.9m).

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
Year ended 31 March 2018	£'000	£'000	£'000	£'000
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)	-
Amortisation	(16,960)	(6,918)	-	(23,878)
Impairment		-	(5,074)	(5,074)
Closing net book value	32,925	33,718	8,132	74,775
At 31 March 2018				
Cost or valuation	82,455	48,318	13, 542	144,315
Accumulated amortisation & impairment	(49,530)	(14,600)	(5,410)	(69,540)
Net book value	32,925	33,718	8,132	74,775
Year ended 31 March 2019				
Opening net book value	32,925	33,718	8,132	74,775
Additions	-	-	12,429	12,429
Additions from assets under construction	6,638	6,958	(13,596)	-
Amortisation	(12,705)	(8,025)	-	(20,730)
Impairment	-	-	-	-
Closing net book value	26,858	32,651	6,965	66,474
At 31 March 2019				
Cost or valuation	89,092	55,276	12,375	156,743
Accumulated amortisation & impairment	(62,234)	(22,625)	(5,410)	(90,269)
Net book value	26,858	32,651	6,965	66,474

Individual material assets include the geospatial database management system (GDMS), current year carrying value £15.0m (2017-18: £18.6m) and the geospatial content improvement programme, current year carrying value £29.9m (2017-18: £23.8m).

Individual material assets impaired within assets under construction include the unmanned aerial vehicle platform. Impairment of nil was recognised in the current year (2017-18: £4.7m) within the statement of profit and loss and other comprehensive income due to delays in development milestones reducing the certainty of the timings of future revenue.

The GDMS assets are now expected to be in use for an additional 18 months so their useful economic lives have been extended which has resulted in a £2.0m reduction of amortisation in the year.

Company	Software	Data content	Assets under construction	Total
Year ended 31 March 2018	£'000	£'000	£'000	£'000
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)	-
Amortisation	(16,960)	(6,918)	-	(23,878)
Impairment	-	-	(821)	(821)
Closing net book value	32,925	33,718	8,132	74,775
At 31 March 2018				
Cost or valuation	82,417	48,318	9,289	140,024
Accumulated amortisation & impairment	(49,492)	(14,600)	(1,157)	(65,249)
Net book value	32,925	33,718	8,132	74,775
Year ended 31 March 2019				
Opening net book value	32,925	33,718	8,132	74,775
Additions	-	-	12,429	12,429
Additions from assets under construction	6,638	6,958	(13,596)	-
Amortisation	(12,705)	(8,025)	-	(20,730)
Impairment	-			-
Closing net book value	26,858	32,651	6,965	66,474
At 31 March 2019				
Cost or valuation	89,055	55,276	8,122	152,453
Accumulated amortisation & impairment	(62,197)	(22,625)	(1,157)	(85,979)
Net book value	26,858	32,651	6,965	66,474

Individual material assets include the geospatial database management system (GDMS), current year carrying value £15.0m (2017-18: £18.6m) and the geospatial content improvement programme, current year carrying value £29.9m (2017-18: £23.8m).

The GDMS assets are now expected to be in use for an additional 18 months so their useful economic lives have been extended which has resulted in a £2.0m reduction of amortisation in the year.

## 11 Property, plant and equipment

Group	Land	Buildings	IT Equipment	Equipment, facilities and fixtures	Total
Year ended 31 March 2018	£'000	£'000	£'000	£'000	£'000
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)
Closing net book value	6,300	20,650	2,020	1,458	30,428
At 31 March 2018					
Cost or valuation	6,300	22,544	6,929	2,829	38,602
Accumulated depreciation	_	(1,894)	(4,909)	(1,371)	(8,174)
Net book value	6,300	20,650	2,020	1,458	30,428
Year ended 31 March 2019					
Opening net book value	6,300	20,650	2,020	1,458	30,428
Additions	-	-	2,474	64	2,538
Disposals	-	-	-	(46)	(46)
Depreciation	-	(634)	(1,049)	(556)	(2,239)
Depreciation eliminated on disposal	-	-	-	36	36
Closing net book value	6,300	20,016	3,445	956	30,717
At 31 March 2019					
Cost or valuation	6,300	22,544	9,403	2,847	41,094
Accumulated amortisation	_	(2,528)	(5,958)	(1,891)	(10,377)
Net book value	6,300	20,016	3,445	956	30,717

Company	Land	Buildings	IT equipment	Equipment, facilities and fixtures	Total
Year ended 31 March 2018	£'000	£'000	£'000	£'000	£'000
Opening net book value	6,300	21,285	1,963	644	30,192
Additions	-	-	1,017	901	1,918
Depreciation	-	(635)	(960)	(230)	(1,825)
Closing net book value	6,300	20,650	2,020	1,315	30,285
At 31 March 2018					
Cost or valuation	6,300	22,544	6,929	2,608	38,380
Accumulated depreciation	_	(1,894)	(4,909)	(1,293)	(8,095)
Net book value	6,300	20,650	2,020	1,315	30,285
Year ended 31 March 2019					
Opening net book value	6,300	20,650	2,020	1,315	30,285
Additions	-	-	2,474	38	2,512
Disposals	-	-	-	-	-
Depreciation	-	(634)	(1,049)	(512)	(2,195)
Depreciation eliminated on disposal	-	-	-	_	-
Closing net book value	6,300	20,016	3,445	841	30,602
At 31 March 2019					
Cost or valuation	6,300	22,544	9,403	2,646	40,893
Accumulated amortisation		(2,528)	(5,958)	(1,805)	(10,291)
Net book value	6,300	20,016	3,445	841	30,602

### 12 Inventories

Company and Group	2018-19	2017-18
	£'000	£'000
Finished goods	1,996	1,743
	1,996	1,743

During the year, Ordnance Survey wrote off stock carried at £78k (2017-18: £93k)

## 13 Trade and other receivables

Group	2018-19	2017-18
	£'000	£'000
Trade receivables	3,128	11,823
Allowance for doubtful debts	(104)	(312)
	3,024	11,511
Other receivables	364	412
Taxation and social security receivable	125	325
Accrued income	6,134	8,909
Prepayments	7,721	4,688
	17,368	25,845
Company	2018-19	2017-18
Company	£'000	£'000
Trade receivables	2,818	11,506
Allowance for doubtful debts	(104)	(311)
- Allowance for doubtlat debts	2,714	11,195
Other receivables	345	374
Accrued income	5,774	8,683
Prepayments	7,628	4,636
Loans owed by Group undertakings	2,950	4,700
Accrued income from Group undertakings	429	211
Trade receivables owed by Group undertakings	-	(0)
	19,840	29,799

The total bad debts written off in year were £1k (2017-18: £187k).

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	2018-19	2017-18
	£'000	£'000
Balance held at Paymaster General's Office	112,902	91,750
Balance held in commercial banks and cash in hand	14,690	18,642
	127,592	110,392
Company	2018-19	2017-18
	£'000	£'000
Balance held at Paymaster General's Office	112,787	91,406
Balance held in commercial banks and cash in hand	13,484	17,144

## 15 Trade and other payables

Group	2018-19	2017-18
	£'000	£'000
Trade payables	586	1,573
Taxation and social security payable	788	1,014
Other payables	960	932
Accruals	11,018	12,111
Dividend payable	27,350	-
	40,702	15,630

Company	2018-19	2017-18
	£'000	£'000
Trade payables	467	1,566
Taxation and social security payable	770	1,014
Other payables	960	898
Accruals	10,695	11,911
Dividend payable	27,350	-
Intercompany payable	374	329
	40,616	15,718

The trade payables balance for both Group and Company includes long term payables of nil (2017–18: £80k).

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

## 16 Current tax liability

Group	2018-19	2017-18
	£'000	£'000
Corporation Tax	1,942	975
Company	0010_10	
company	2018-19	2017–18
Company	£'000	£'000

## 17 Provisions for liabilities and charges

As at 31 March 2019	624
Utilisation of provision	(142)
Additional provision in year	565
As at 1 April 2018	201
	£'000
Group and Company	2018-19

	2018-19	2017-18
	£'000	£'000
Included in current liabilities	618	160
Included in non-current liabilities	6	41
	624	201

The above amount is estimated as falling due as follows:

	Current liabilities	Non- current liabilities
	£'000	£'000
2019-20	618	-
2020-21	-	6
	618	6

Provisions are discounted at 0.29% in accordance with HM Treasury guidance.

## 18 Deferred revenue

Group	2018-19	2017-18
	£'000	£'000
Current deferred revenue	19,004	10,632
Non-current deferred revenue	5,631	10,049
	24,635	20,681
Company	2018-19	2017-18
	£'000	£'000
Current deferred revenue	17,966	9,876
Intercompany current deferred revenue	-	20
Non-current deferred revenue	5,631	10,049
	23,597	19,945

## 19 Deferred tax liability

Group	Provisions	Fixed assets	Total
	£'000	£'000	£'000
At 1 April 2017	424	430	854
(Charged)/credited to the income statement	(292)	(633)	(925)
At 31 March 2018	132	(203)	(71)
(Charged)/credited to the income statement	70	(77)	(7)
At 31 March 2019	202	(280)	(78)
Company	Provisions	Fixed	Total
Company	Provisions	Fixed assets	Total
Company	Provisions £'000		Total £'000
Company At 1 April 2017		assets	
, ,	£'000	assets £'000	£'000
At 1 April 2017 (Charged)/credited to the	£'000 424	assets £'000 424	£'000 848
At 1 April 2017 (Charged)/credited to the income statement	£'000 424 (292)	assets £'000 424 (633)	£'000 848 (925)

#### Ordnance Survey Leisure Limited

Ordnance Survey Leisure Limited generated a current year profit before tax of £1,247k (2017-18: profit: £585k). Ordnance Survey Leisure Limited has estimated tax losses of £5,490k (2017-18: £6,740k) 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 £2,631k (2017-18: £4,924k) 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 £10,602k (2017-18: £7,693k) 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

Group and Company	£'000
Balance as at 1 April 2017	34,000
Acquisition	-
Balance as at 31 March 2018	34,000
Balance as at 1 April 2018	34,000
Acquisition	_

No shares in Ordnance Survey Limited are held by or on behalf of its subsidiaries undertakings.

## 21 Retained earnings

Group	£'000
Balance as at 1 April 2017	157,695
Profit for the year	21,167
Balance at 31 March 2018	178,862
Balance as at 1 April 2018	178,862
Adjustment on application of IFRS 15	(6,401)
Balance at 1 April 2018 restated	172,461
Profit for the year	22,661
Dividend payable	(45,350)
Balance at 31 March 2019	149,772
Company	£'000
Company	
Balance as at 1 April 2017	156,696
Profit for the year	21,745
Balance at 31 March 2018	178,441
Balance as at 1 April 2018	178,441
Adjustment on application of IFRS 15	(6,401)
Balance at 1 April 2018 restated	172,040
Profit for the year	20,906
Dividend payable	(45,350)
Balance at 31 March 2019	147,596

## 22 Operating lease commitments

Group and Company	2018-19	2017-18
	£'000	£'000
Minimum lease payments under operating leases as an expense in the year	2,997	2,839

As at 31 March 2019, Ordnance Survey Limited has future minimum lease payments under non-cancellable operating leases as set out below:

Group and Company	2018-19	2017-18
	£'000	£'000
Within one year	4,130	2,813
Between two and five years	6,023	3,345

The increase in operating lease commitments is primarily driven by the lease on the new Geovation offices.

## 23 Contingent liabilities and contingent assets

No significant contingent assets or liabilities noted for current year.

## 24 Capital commitments

At 31 March 2019, the company had the following capital commitments:

	2018-19	2017-18
	£'000	£'000
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:

	2018-19	2017-18
	£'000	£'000
Past due 0–30 days	2,826	10,994
Past due 31–60 days	84	315
Past due 61–90 days	-	170
Past 90 days	115	34

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 £15k (2017-18: £187k).

### 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 2019 are set out below. All balances are held in sterling:

#### Group

	2018-19				2017-18	
Financial	Fixed	Floating	Total	Fixed	Floating	Total
assets	rate	rate		rate	rate	
	£'000	£'000	£'000	£'000	£'000	£'000
Cash at bank	-	127,592	127,592	-	110,392	110,392

## 26 Changes in accounting policies

This note explains the impact of adoption of IFRS 15 on the Groups financial statements.

Group	As at 31 March 2018	Partner revenue	Royalty expense	As at 1 April 2018
	£'000	£'000	£'000	£'000
Profit and loss (extract)				
Revenue	154,901	(8,303)	-	146,598
Cost of sales	(22,305)	-	1,902	(20,403)
Gross Profit	132,596	(8,303)	1,902	126,195
Statement of Financial Position (extra	act)			
Prepayments	4,688	-	506	5,194
Accrued income	8,909	(3,446)	-	5,463
Deferred revenue	(20,681)	(4,857)	-	(25,538)
Accruals	(12,111)	-	1,396	(10,715)
Retained Earnings impact of adopting IFRS 15 as at 1 April 2018		(8,303)	1,902	(6,401)

Partner revenue is received when customers licence digital mapping products for commercial re-use or on sell. The end customers pay the partner to use OS data and the partner returns a royalty revenue. OS receives partner revenue for both time bound (pay for access of time) and non-time bound (pay per usage) partner sales. Prior to adopting IFRS 15 all partner revenue was recognised in the year of sale. IFRS 15 directs a user to recognise revenue for sales or usage based royalties only when the later of the following has occurred; subsequent sale or usage or the performance obligation to which some or all of the sales or usage based royalty has been allocated has been satisfied. Post implementation of IFRS 15, time bound partner sales are recognised over the period of the end user licence, no change is required to non-time bound revenue recognition.

The implementation of IFRS 15 has resulted in a change in the recognition of Royalty Expense for some data streams. This has occurred where the royalty expense is directly linked to the partner royalty revenue recognised by the Group.

As per the standard the cumulative impact of the change in the accounting standard is shown through reserves.

#### **Contract assets and Contract liabilities**

	2018-19
Group	£'000
Revenue recognised in the period from:	
Amounts included in contract liability at the beginning of the period	4,845
Revenue received in the period from:	
Performance obligations satisfied in previous periods	4,135

The Group receives payments from customers based on the invoicing schedule, as established in the contracts. Contract assets relate to the groups conditional right to consideration for completed performance under the contract. Accounts receivable are recognised when the right to consideration becomes unconditional. Contract liability relates to payments received in advance of performance under the contract. Contract liabilities are recognised as revenue we perform under the contract. No contract asset were impaired in the financial year ended 31 March 2019.

## 27 Related parties

All transactions with actual or potential related parties are carried out at 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, HM 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 the 31 March 2019 were Paul Bragg and Nicholas Giles.

Ordnance Survey International Services Limited, is 100% owned by the company. The Directors of Ordnance Survey International Services Limited at the 31 March 2019 were Neil Ackroyd and Paul Bragg.

Astigan Limited is 51% owned by Ordnance Survey. The Directors of Astigan Limited at the 31 March 2019 representing the Company were Mike Carr and Neil Ackroyd.

GeoPlace LLP is a joint venture LLP with Local Government Association. At 31 March 2019, the Company was represented on the Board of GeoPlace by Paul Bragg and John Kimmance.

PointX Limited is a related party. At the 31 March 2019, Daniel Dukes and Paul Bragg represented the Company as Directors of PointX Limited.

Dennis Maps Limited is a related party. At the 31 March 2019, Nicholas Giles, James Blackman and Neil Ackroyd represented the Company as Directors of Dennis Maps Limited.

The results of Ordnance Survey Leisure 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.

## 28 Control

The immediate parent undertaking and ultimate controlling part 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.

