

# Oxfordshire Sector Profile Space Technologies



### Contents

Foreword	3
Executive Summary	4
Introduction	5
Space Technologies	6
Research and Development	11
Education and Skills	13
Population and Profile	14
Sites and Premises	15
Connectivity	16
Business Support	18

#### This is one of a series of five Oxfordshire Sector Profiles.

- Automotive and Motorsport
- Creative and Digital
- Electronics and Sensors
- Life Sciences
- Space Technologies

Please visit www.investinoxfordshire.com for more information.

### Foreword



**Nigel Tipple** CEO Oxfordshire Local Enterprise Partnership

# Oxfordshire is renowned across the globe for its academic excellence, innovative business culture and quality of the built and natural environment. We have Europe's largest concentration of multi-million pound science research facilities, underpinning our leading position in advanced engineering, manufacturing and life sciences, in addition to being at the heart of the UK's growing international space cluster.

With one of the strongest economies nationally driving a GVA output of £19.2bn annually, Oxfordshire is one of only three areas that positively contribute to the Exchequer.

World leading research and innovation sits at the heart of our success - the use and application of knowledge is a key feature – indeed the county was recently cited as the most innovative in the country.

Our success is driven by a number of distinctive features:

- Two leading universities the University of Oxford is rated one of the best in the world and Oxford Brookes is one of the top performing modern universities nationally.
- We are home to an internationally significant group of large science and research facilities including Harwell Campus (home to the Rutherford Appleton Laboratory, Diamond Light Source and the gateway to the UK space sector where the newly established European Space Agency sits alongside the Satellite Applications Catapult Centre) and the UK Atomic Energy Authority Culham Centre for Fusion Energy home to the UK's national fusion research laboratory.
- The area is also home to globally recognised companies like MINI Plant Oxford, Oxfam, Oxford University Press, Siemens, Oxford Instruments and more.
- We have a highly skilled workforce; 49% are graduates and we have the lowest rate of residents with no qualifications and the lowest Jobseeker's Allowance claimant count nationally.

We are primed for investment with solid economic foundations and a strong ambition to create 85,000 new jobs by 2030. Our integrated approach, driving 'economic growth through innovation', presents government and business with a compelling case for investment.

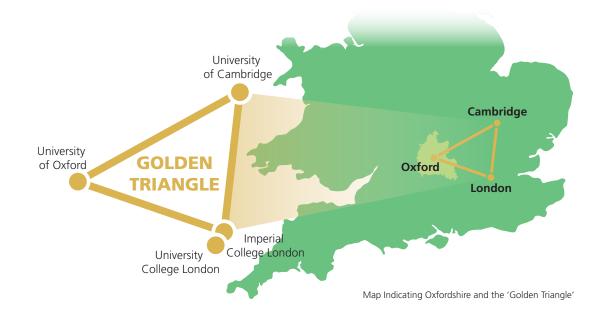
Oxfordshire is the gateway to the UK's space industry and has already attracted significant global companies including Lockheed Martin and Thales Alenia Space

### **Executive Summary**

- UK Space Gateway at Harwell Campus, Oxfordshire is the focal point for the UK's and European space industry. The strength of the industry at Harwell is due to the combined presence of the European Space Agency (ESA) and its European Centre for Space Applications and Telecommunications (ECSAT); Rutherford Appleton Laboratory (RAL) Space and the Satellite Applications Catapult.
- **Proximity to both the UK and Europe's space commissioning bodies.** ESA has a yearly budget of £3.38bn (2015) and accounts for 45% of European space related sales. The UK space industry is anticipated to increase from its current position of £9bn a year to £40bn annually by 2030.
- A track record in attracting global leading space technology companies. Lockheed Martin, Thales Alenia Space and Elecnor Deimos have established significant operations in Oxfordshire with activities ranging from the design of propulsion subsystems to navigation satellite systems.
- A strong 'downstream' space technologies sector. The Satellite Space Applications Catapult supports businesses to commercialise new services developed from satellite technologies.
- An environment for encouraging collaborations and supply chain opportunities. A diverse base of global and indigenous space related companies combined with R&D and infrastructure enables joint collaborations and networking.
- World leading R&D expertise and testing facilities enable the development of new technologies. RAL Space works alongside the UK Space Agency and ESA at the forefront of space research. Enhanced testing facilities include advanced space test chambers.
- International state-of-the-art robotics and autonomous systems laboratories. Home to the Remote Applications in Challenging Environments (RACE) centre and the Harwell Robotics and Autonomy Facility.
- An ideal location for testing, analytics and diagnostic companies. Oxfordshire has nearly five times the proportion of employees working in scientific R&D than the national average.
- With its excellent motorway, rail and airport links, Oxfordshire is an ideal location from which to access national and international clients and markets. Frequent direct train services make London only 56 minutes away. Heathrow Airport is an hour's drive from Oxford.
- **A SuperConnected city.** As part of the Government's SuperConnected Cities Programme, Oxford is rolling out its programme to enable superfast broadband for everyone, everywhere in Oxford.

### Introduction

- Oxfordshire is part of the UK's 'Golden Triangle'. This triangle is formed by the University of Oxford, the University of Cambridge, and the universities based in London (including Imperial College London and University College London). The universities within the 'Golden Triangle' have a combined research income of over £1.4bn.
- Located midway between London and Birmingham, Oxfordshire has excellent connectivity to the UK's motorway network including access to the M4 / M40 corridor and the M25, putting the rest of the country within easy reach. There is an average of five direct train services an hour to London from Oxford's main station (journey time of 56 minutes) and additional new services via Oxford Parkway. Heathrow Airport is just an hour's drive away and Birmingham International a similar distance.
- As well as space technologies, Oxfordshire has strengths in a number of other sectors including medical technologies and medical devices, automotive and Formula 1, digital (including cyber security) and Big Data.
- Oxfordshire has a strong track record in attracting foreign direct investment (FDI), with global companies including Sharp, Toshiba, Siemens, BMW, Lockheed Martin and Thales Alenia Space.
- Companies locating to Oxfordshire are supported by a collaborative base of partners. This includes industry networks, as well as outstanding research organisations including the University of Oxford and Oxford Brookes University.
- In addition to the Universities, Oxfordshire has world class scientific centres including the UK's national laboratory for fusion research, Culham Centre for Fusion Energy, and the UK's national synchrotron science facility, Diamond Light Source.



world class base of R&D facilities and expertise, including the University of Oxford, rated No 1 in the UK for its research excellence Oxfordshire is at the centre of the UK's space industry – an industry that is anticipated to reach £40bn a vear by 2030

# 

# **Space Technologies**

Oxfordshire is an ideal location from which to serve both the UK and European space industry. Businesses can benefit from close proximity to both the UK and Europe's space commissioning bodies, the UK Space Agency and the European Space Agency.

- Oxfordshire is located at the centre of the UK's space industry. The strength of the industry locally is due to the combined presence of the European Space Agency (ESA) and its European Centre for Space Applications & Telecommunications (ECSAT), RAL Space and the Satellite Applications Catapult. This has positioned the area as the UK's 'Space Gateway at Harwell'.
- The UK government's support of the UK space industry has led to the recognition of Harwell Campus as a focal point for the country's space sector. Harwell is the base for 55 space related organisations, 66% of which are 'downstream' and 34% are 'upstream'.
- Not only is Oxfordshire an ideal location for servicing the UK space industry, the presence of ESA at Harwell also positions the locality as an ideal location from which to also service the European space market. Harwell is situated within close proximity to Swindon (35 miles away) where the UK Space Agency has its headquarters.
- ESA has a yearly budget of £3.38 billion (2015) and accounts for 45% of European space related sales. Its presence in Oxfordshire, together with other factors, has already attracted a number of international space companies including Lockheed Martin, Thales Alenia Space, Deimos Space UK and Neptec Design Group.
- The global space market is estimated to reach £400 billion by 2030 with the UK space industry anticipated to increase from its current position of £9 billion a year to £40 billion a year during the same period.
- The space industry is segmented into the 'upstream' and 'downstream' sectors. The latter relates to the use of space technology to develop non-space products for use on earth, whilst the 'upstream' sector includes space infrastructure, spacecraft, launchers and satellites.
- The ecosystem of support organisations, R&D infrastructure and innovative business start-ups provides the opportunity for collaboration and supply chain opportunities. The growth of university spin-out companies and business startups has been facilitated by the incubation facilities at the ESA Business Incubator and the Satellite Applications Catapult.

#### **Thales Alenia Space**

Thales Alenia Space established its new British subsidiary, Thales Alenia Space at Harwell in 2014. The UK business is an integral part of Thales Alenia Space Neosat prime engineering activity and will contribute to the design and production of the propulsion subsystem for this new platform.

"Globally, the space industry is moving very fast, and there is exponential growth in demand for space-based communications, navigation and observation. Thales Alenia Space's decision to come to the UK is a direct result of the UK Government's work to create a space-friendly R&D environment, new access to funding and an effective business support network". Martin Gee, CEO of Thales Alenia Space UK

#### **UPSTREAM TECHNOLOGIES**

Oxfordshire's diverse base of global and indigenous space related companies provides an environment for encouraging collaborations and supply chain opportunities Oxfordshire has a diverse upstream space sector – from the design of propulsion subsystems to satellite components including sensors and antennas.

- The 'upstream' sector is anticipated to grow in the UK from £1 billion presently to £3 billion annually by 2030, a 200% increase. In addition there are major pan-European opportunities such as the recent £18 million contract to develop Europe's next generation satellite communications platform (Neosat).
- This major contract was a key driver for Thales Alenia Space to establish an operation in Harwell in 2014. The company is involved in the design and production of the propulsion subsystem for the Neosat.
- The global market for small and nano satellites is one of the fastest growing areas within the upstream sector due to developments in new technologies and lower costs. Between 2014 and 2020, it is forecasted that 2,000-2,750 small satellites will be launched. Lockheed Martin recently opened an office at Harwell which has a focus on space exploration and small communications satellites and is expanding its relationships with the UK space supply chain to share technology and expertise.
- This market has led to the growth of indigenous companies. Oxford Space Systems, a space technology business, is developing novel hardware solutions including boom, panel and antenna solutions for Europe's leading satellite builders.

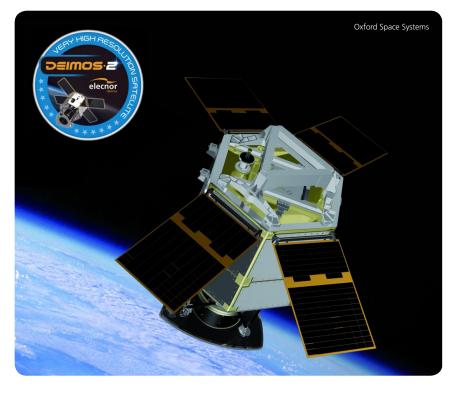


- A key UK company is Reaction Engines which has its engineering centre and engine testing facilities at Culham Science Centre. The company has developed integrated air-breathing and rocket propulsion technology.
- Oxfordshire's expertise in sensor technologies for harsh environments and space has recently attracted Canadian owned company Neptec which located its European HQ at Harwell Campus. The company specialises in the development, production, integration, operation and support of intelligent spaceflight sensors and equipment.



Oxfordshire has an experienced labour force employed in the area of technical testing and consultancy, as well as in the electronics industry generally, ensuring the area is an ideal location and base for manufacturing, analytics and diagnostic companies.

- In Oxfordshire, there are nearly five times the proportion of employees working in scientific R&D than the national average.
- Oxfordshire has a depth of commercial expertise in electronic and optoelectronics. It also has almost 2.5 times higher proportion of employees than the national average in the manufacture of computer, electronics and optical products. In total there are 3,800 people employed in this area of activity.



#### Number and Proportion of Employment, by Selected Sectors and Sub-sectors, 2014

Selected Industries by Standard Industry Classification (2 and 4 digit)	Oxfordshire No.	Oxfordshire %	England %
26 : Manufacture of computer, electronic optical products	3,400	1.0	0.5
27 : Manufacture of electrical equipment	900	0.3	0.3
7112 : Engineering activities and related technical consultancy	7,100	2.1	1.1
7120 : Technical testing and analysis	600	0.2	0.2
72 : Scientific research and development	6,100	1.8	0.4

Oxfordshire has a higher proportion of its employees working in computer programming activity than the average for England

The Satellite Applications Catapult supports businesses in the commercialisation of new services developed from satellite

### **DOWNSTREAM TECHNOLOGIES**

The availability of a support infrastructure specifically for the downstream sector has resulted in a growing ecosystem and diverse range of innovative companies based at UK Space Gateway at Harwell, including Deimos Space UK.

- Oxfordshire has 9,500 employees based in computer programming and data processing related activity, enabling new companies to effectively recruit from an experienced pool of software related talent.
- The UK's space sector is dominated by downstream services. Downstream services and applications are estimated to reach revenues of £37bn by 2030, an increase of 362% from at present. The most significant areas of opportunity are in applications for the defence, health, environment, maritime and telecommunications sectors.

#### **Space Applications Catapult Centre, Harwell**

- The Satellite Applications Catapult Centre provides support to businesses to develop and commercialise space technologies and satellite applications for the downstream sector. The ECSAT business incubator and the ESA's Technology Transfer Brokerage are also key assets to support companies in the downstream sector.
- The 'Catapult' and the UK Space Agency have simplified access to Earth Observation (EO) data through the development of a EO Data Exploitation Platform known as the 'data hub'. Other EO facilities include the Climate, Environment and Monitoring from Space (CEMS). This offers space-based climate change and EO data and services. In addition to these resources, large amounts of CERN and space data is downloaded and managed at Harwell Campus through the 'JANET' network which can also be accessed by collaborators.
- An international company that has recently established an office at Harwell is Deimos Space UK, a subsidiary of the Spanish owned company Elecnor Deimos. The company's R&D activities focus on developing and operating new services based on satellite data and digital geography.
- exactEarth Europe is an international data services company which utilises Satellite AIS (Automatic Identification System) data services to service the global maritime market. The company has established a system for analysing satellite data combined with other datasets (including vessel data and fishing licences).

#### **ROBOTICS AND AUTONOMOUS SYSTEMS**

The new Remote Applications in Challenging Environments Centre and the Harwell Robotics and Autonomy Facility positions Oxfordshire at the heart of the UK's R&D and testing facilities in robotics and autonomous systems Oxfordshire's state-of-the art robotics and autonomous systems laboratories, testing facilities and academia, combined with a growing base of innovative RAS related businesses, distinguishes the area as an ideal location for companies developing new technologies in this field.

- The global value of the robotics and autonomous systems (RAS) market is expected to be worth between £1.2 trillion to £4 trillion annually by 2025 (McKinsey 2013). The market for RAS products and technology in non-military sectors is estimated to represent £70 billion by 2020-2025.
- The RAS industry is well supported by the UK Government which launched its Robotics and Autonomous Systems strategy in 2014. The UK RAS industry is being supported through investments totalling £250m, including the establishment of the Remote Applications in Challenging Environments (RACE) centre at Culham Science Centre in Oxfordshire. The centre can be utilised on a commercial basis with the testing of robotic equipment in applications ranging from space to the advanced nuclear fission industry.
- ESA's facilities at Harwell also include the Harwell Robotics and Autonomy Facility Pilot Project 1 (HRAF). The centre supports the development, testing and validation of autonomous systems technologies involving planetary rovers and robots.



## **Research and Development**

Space related companies can benefit from proximity to international centres of space related R&D expertise.

### UNIVERSITY OF OXFORD

- The University of Oxford is ranked in the top 10 Universities in the world for Electrical and Electronics Engineering and Physics (QS World University Rankings 2015).
- The University has a number of research groups relevant to the space industry. These include the Planetary Group, the Microelectronics Circuits & Systems Group, the Photovoltaic and Optoelectronic Device Group and the Semiconductor and Silicon Photovoltaics Group.
- The 2015 QS world university rankings for Computer Science and Information Systems puts the University of Oxford third in the world and top in Europe.

### **OXFORD BROOKES UNIVERSITY**

- A number of the University's research groups are of particular relevance to the wider space industry including the Communications, Media and Electronic Technologies (COMET) Research Group which has interests in areas such as instrumentation and intelligent wireless network design.
- 94%

**The University** 

of Oxford is ranked No.1

in the UK for

its research power in the

of Oxford Brookes University research is ranked as being of INTERNATIONAL STANDARD • The Department of Mechanical Engineering and Mathematical Sciences (MEMS) research is engaged in world-leading research in Artificial Intelligence for more than 10 years and has recently opened a new Cognitive Robotics Laboratory. The Intelligent Systems Engineering Research Centre has sensor expertise which relates to robotics and autonomous systems.

### HARWELL CAMPUS

- **Harwell Campus** is a national R&D centre which houses over £2 billion of world-leading research infrastructure. It is also the base for over 200 research organisations and technology led businesses.
- The European Centre for Space Applications & Telecommunications (ECSAT) is the European Space Agency's (ESA) department dedicated to R&D in satellite telecommunications. This includes R&D for satellite-based telecommunications, climate change analysis and the development of commercial space based products and services.
- **RAL Space** is based at STFC's Rutherford Appleton Laboratory. The centre works alongside the UK Space Agency and is at the forefront of UK space research. RAL Space's enhanced testing facilities include; Advanced Space Test Chambers, Thermal Vacuum Chambers and a Vibration Facility. It will also house the UK Centre for Calibration of Satellite Instrumentation.

Harwell Campus is a £2bn world leading research infrastructure and the base for over 5,000 researchers, engineers and innovators **Diamond Light Source** is the UK's national synchrotron science facility and is a research centre of global importance, where intense beams of light are used to investigate the structure and properties of a wide range of materials and components.

#### **CULHAM CENTRE FOR FUSION ENERGY**

- **The Culham Centre for Fusion Energy** is the UK's national fusion research laboratory. The Joint European Torus (JET) located at Culham Centre for Fusion Energy, is the world's largest and most powerful tokamak and the focal point of the European fusion research programme.
- The Remote Applications in Challenging Environments (RACE) centre at Culham provides a national facility for the testing of robotics in hazardous environments. The centre can be used on a commercial basis, with testing of robotic equipment in applications ranging from space to the advanced nuclear fission industry.



# Education and Skills

Higher Education and Further Education provision locally, ensures businesses can draw from a diverse range of skills, particularly within scientific and technologically based subjects

- In 2010/11 there were a total of 1,935 1st and Higher Degree qualifiers in science based subjects, representing an important source of new talent for space technology related companies.
- The University of Oxford has one of the largest physics departments in the world and has recently established a new masters in Mathematical Physics. The University has one of the longest established Computer Science departments in the country with courses covering Pure Computer Science as well as Quantum Computing, Computational Logistics, Information System and Software Engineering.
- The Faculty of Technology, Design and Environment at Oxford Brookes University incorporates the Department of Mechanical Engineering and Mathematic Sciences and the Department of Computing and Communication Technologies. These departments deliver a number of undergraduate courses, both at Foundation and Degree Level relevant to a wide range of space related technologies including Electrical and Electronic Engineering, Computer Science and Computing and Robotic Systems.

#### Space Related Education – 14-18 year olds

 Space Studio Banbury is a unique, brand new school catering for 14 - 18 year old pupils with an active interest in Science, Maths, Technology and Space. The Space Studio works closely with the space industry and aspects of the curriculum are developed and delivered by staff from the UK Space Agency, the European Space Agency and the National Space Academy programme.

#### No. of Qualifiers by Selected Broad Subjects, University of Oxford and Oxford Brookes University

Subject	1st Degree	Higher Degree (research)	Higher Degree (taught)
Physical Science	465	170	115
Engineering & Technology	300	85	110
Mathematical Science	235	50	105
Computer Science	125	25	150
Total	1,125	330	480

#### **Professional Development**

Business Executives can access
world class Continuing Professional
Development. The Saïd Business
School is 10th in the world in the
combined ranking of the Executive
Education programmes compiled by
the Financial Times (2015). The School
is ranked first in the UK for open
enrolment programmes and is ranked
23rd globally for custom programmes.

Source: HESA, 2010/11

Population of

making it the

youngest city

in England

and Wales

49%

Working Age

**Population** are

level and above

which is over 13%

# **Population and Profile**

Oxfordshire is an ideal location for scientific and R&D related operations. With 110,000 people employed in professional occupations, almost 11% higher than the national proportion, this enables space related companies to effectively recruit employees with the relevant skills base.

- Situated within the UK's most densely populated region, the South East, Oxfordshire has a large population, estimated at nearly 700,000 (Mid Year Population Estimates, 2013). In addition, the Oxfordshire area has a Working Age Population of over 430,000. The Working Age Population of the wider region is over 5.5 million.
- Over 205,000 (49%) of the resident Working Age Population are qualified to NVQ level 4 (diploma level) and above, which is over 13% higher than the UK proportion (36%) and 10% higher than the proportion for the South East (39.1%), indicating the presence of a considerable pool of highly educated employees.
- In addition to the high availability of employees in professional occupations Oxfordshire also has 55,200 (16%) of its employee base working in associate professional and technical occupations which is over 2.2% higher than the UK proportion (14%).



UK proportion.



#### Economic Activity Rate (16-64), ONS 2014

	Oxfordshire No.	Oxfordshire %	England %
Economic activity rate - aged 16-64	344,100	81.1	78.3

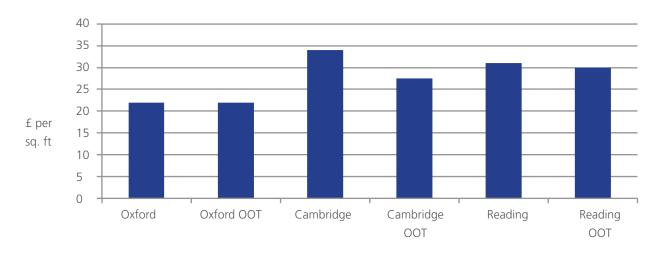


Source: Midyear Population Estimates, ONS

### **Sites and Premises**

Oxfordshire has a wide range of cost effective commercial properties together with flexible and incubator space specifically for space related companies.

- Oxfordshire has a range of high quality commercial, business and science parks as well as serviced offices. The average office rental per sq. ft. (Grade A) is £22.00 for both Oxford City Centre and for Out of Town (OOT) locations.
- The average rental per sq. ft is considerably less compared to other locations. It is 35% less than Cambridge and 29% less than Reading. The average rental for industrial space (based on 10,000 sq. ft.) is £8.00 per sq. ft. in Oxford and £7.00 per sq. ft. in Banbury, whereas in other locations such as Reading, the average industrial rental is £9.00 per sq. ft.
- The Science Vale Oxford Enterprise Zone is a 92 hectare site to the south of Oxford that comprises parts of Harwell Campus and MEPC Milton Park. Science Vale Oxford Enterprise Zone offers occupiers a number of benefits including a business rate discount worth up to £275,000 over five years and support for superfast broadband.
- MEPC Milton Park is a science and business park in Abingdon which provides office, laboratory space and light industrial premises. Its success has led to further expansion, with up to 370,000 sq. ft. (34, 000 sq. m.) of new, high quality commercial office and research space to be developed. In addition, Harwell Campus is also an expanding site with 470,000 sq. ft. (44,000 sq. m.) of new commercial space planned for future development. The campus master plan also includes enhanced leisure, hotel and amenity space.
- The European Space Agency has a space technologies Business Incubator Centre at Harwell. This is a partnership between ESA and STFC's Technology Transfer Office. The Space Applications Catapult also provides flexible space.
- Other science parks include Oxford Science Park and Begbroke Science Park.



#### Average Grade A Office Rentals, Collier International, 2014

£22.00

per sq. ft.

office rental

compared to

Cambridge

VERAGE Grade A

# Connectivity

Oxfordshire has outstanding transport infrastructure; with excellent motorway and railway access to the UK's main cities – London is just one hour 30 minutes drive away.



### Distances and Drive Times from Locations in Oxfordshire to Selected Cities

Location	Oxford	Banbury
Birmingham	80 miles 129 km 1hr 50mins	52 miles 83 km 1hr 5min
Cambridge	106 miles 107 km 2hr 30 mins	86 miles 138 km 2 hr 10mins
London	60 miles 97 km 1hr 30mins	78 miles 126 km 2hr 10mins
Manchester	161 miles 259 km 3hr 30mins	135 miles 217 km 2hr 50mins
Bristol	85 miles 137 km 1hr 50mins	79 miles 127 km 2hr

From Oxfordshire, key UK cities are easily and efficiently accessible by motorway: London and Birmingham in one hour 30 minutes and Manchester in under three hours.





Oxfordshire is within quick and easy access to key UK international airports; Heathrow and Birmingham are accessible by road in one hour and Gatwick in two hours.

With its excellent motorway, rail and airport links, Oxfordshire is an ideal location from which to access national and international clients and markets

#### Superfast Broadband

Businesses based in Oxfordshire can benefit from access to superfast broadband, with over 90% of Oxfordshire able to access broadband at a minimum of 24Mb/s. SuperConnected Oxford is a programme to enable superfast broadband access for everyone and everywhere in Oxford. Wifi Hotspots are being created as part of an extensive Wifi zone around the city.

### Distances from locations in Oxfordshire to Selected Airports

Airport	Oxford	Banbury
Heathrow	47 miles 76 km 1hr	65 miles 105 km 2hrs
Gatwick	85 miles 136 km 2hrs	102 miles 164 km 2hrs 30mins
Birmingham	66 miles 106 km 1hr 30mins	40 miles 64 km 1hr





Invest in Oxfordshire is a comprehensive service to support companies in establishing their operations locally

### **Business Support**

**Invest in Oxfordshire** provides a comprehensive package of support to assist companies in establishing their new operation in the area:

- Co-ordination and identification of commercial premises and property viewings
- Facilitation of introductions to the University of Oxford and Oxford Brookes University
- Introduction to other research facilities, including the Science & Technology Facilities Council and Rutherford Appleton Laboratory
- Connecting businesses with professional service providers, signposting to business support organisations such as Oxfordshire Business Support and sector specific networks as well as Network Navigators
- Assistance in recruitment of new staff, such as graduate recruitment and training support including apprenticeships
- Support in the relocation of employees and their families moving into the area
- Provision of ongoing aftercare to Oxfordshire based companies

There is a wide range of support for space related businesses. This includes amongst others the following:

**Space Network Navigator** facilitates business partnerships and alliances across entrepreneurs, SMEs and large companies, as well as research institutes. The Network Navigator can also facilitate introductions to the UK Space Agency and ESA.

The **Satellite Applications Catapult** offer a range of support to help businesses commercialise ideas and access funding.

The **European Space Agency's Business Incubator Centre** at Harwell offers a full package of business support including: R&D, legal and finance, business planning, market research and investor readiness.

**Electronics Group Oxford, Department of Physics, University of Oxford** specialise in custom design of electronics systems from prototype to small production series. The group translates ideas emanating from businesses into working designs.

For more information contact:



invest@investinoxfordshire.com
www.investinoxfordshire.com
@InvestInOxon

### **Our Priorities**



### people

Deliver and attract specialist and flexible skills at all levels, across all sectors, as required by our businesses, with full, inclusive employment and fulfilling jobs.



### place

Provide the quality environment and choice of homes needed to support growth and capitalise upon the exceptional quality of life, vibrant economy and the dynamic urban and rural communities of our county.



### enterprise

Encourage innovation led growth, underpinned by Oxfordshire's strengths in University research and development, business collaboration and supply chain potential.

### connectivity

Allow people to move freely, connect easily and provide the services, environment and facilities needed by a dynamic, growing and dispersed economy.

If you require this document in any other format, please contact info@oxfordshirelep.com.



