Government
Office for Science

Government Science & Engineering

Government Science and Engineering organisational directory of expertise

Version 1.2

Government Science & Engineering (GSE)

About the directory

The online directory was developed by the Departmental Heads of Science and Engineering Profession in partnership with the Government Office for Science as an action of the 2012 government science and engineering review: *'Making the most of scientists and engineers in government'.* Its purpose is to help articulate the science and engineering capability in government and to help build networks across and within organisations. Our aims in developing it are to aid senior decision makers in establishing links to other organisations and locate experts; help more clearly define the Government Science & Engineering (GSE) cohort; and enable individuals in the GSE profession to build understanding, links and organisational resilience.

The directory entries do not seek to list in-depth information or details on every area in which a given organisation is expert. Instead they are designed to be readily accessible to the non-specialist, contain basic information and sign-post ways of finding more detail. This document contains clickable links that will redirect to websites where further relevant information may be found along with contact details for key staff who may be able to help direct enquiries to the most suitable individual.

We are grateful to the working group led by Alan Pratt (Home Office) for their efforts in bringing together this resource, and to officials across the GSE network for providing material for the entries.

If you believe a link is broken please contact the GSE team at the Government Office for Science.

Contents

Name of organisation	**Department for Business, Innovation & Skills (BIS)** Website: www.gov.uk/bis
Type of organisation	BIS is a ministerial department supported by 49 agencies and public bodies.
Mission and purpose	BIS is the department for economic growth. The department invests in skills and education to promote trade, boost innovation and help people to start and grow a business. BIS also protects consumers and reduces the impact of regulation. BIS are responsible for: • working with further and higher education providers to give students the skills they need to compete in a global employment market • supporting innovation and developing the UK's science and research industry, which is important to help economic growth • making sure consumer law is fair for both consumers and businesses, and that consumers know their rights and are able to use them effectively • supporting British businesses to increase productivity and compete anywhere in the world • better regulation - by cutting the amount of regulation and making it easy to understand we can help businesses cut time, save money and be more efficient For all priorities, have a look at the BIS business plan for 2012 to 2015.
Key science and engineering staff	BIS Chief Scientific Adviser: Professor Tim Dafforn ChiefScientificAdviser@bis.gsi.gov.uk dCSA: Chris Bush Head of Profession: Christopher Parish christopher.parish@bis.gsi.gov.uk
Subject areas for which the organisation has ownership	**Business and enterprise** The government is working to create the right conditions for companies to thrive and make it easier for people to start successful new businesses. **Consumer rights and issues** The government is working to make sure that people have the information and protection they need when they buy goods and services. **UK economy** All parts of the economy are growing - but the government still has a huge amount to do through continuing to create jobs and supporting businesses to grow. The government is also making sure that the recovery is a recovery for all and this means creating a more educated workforce and taking measures to help with the cost of living. **Employment** To boost the number of jobs and create a flexible labour market, the government is modernising employment law while protecting employee rights. To increase the number of people in employment, we need to support them into work through the benefits system and job search support.

	Europe The government is working with allies to reform the European Union to make it more open, competitive, flexible and democratically accountable, for the benefit of the UK and the whole of Europe. **Financial services** Financial services support the economy and provide essential credit to households, consumers and business. We are creating a framework that promotes a responsible and sustainable financial services industry, tackling the issues of competition and risk in the banking sector. **Further education and skills** The government aims to make sure that further education provides the skilled workforce employers need and helps individuals reach their full potential. **Higher education** The government is working with universities and colleges so they can continue to provide high quality teaching and research and produce highly skilled graduates and post graduates. **Regulation reform** Excessive bureaucracy stifles businesses, voluntary organisations and individuals. We will remove unnecessary red tape to encourage economic growth and increase personal freedom and fairness. **Science and innovation** The government funds and supports innovation in science, technology and engineering to help the UK's high-tech industries to thrive. **Trade and investment** Overseas trade and inward investment are vital for the UK's prosperity. Through its trade and investment policies, the government aims to help UK businesses succeed internationally and encourage overseas companies to work with the UK. **Export control** All exports of military and dual-use goods from the UK require an export licence. The export licensing system operated by the Export Control Organisation (ECO) is of central importance to the UK's foreign and security policy.
Approximate number of staff who are scientists or engineers	• 18 non SCS (G6 to HEO) in the Export Control Organisation (ECO) • 2 non SCS (G7 and SEO) elsewhere in BIS BIS currently defines scientists and engineers as those in receipt of a Specialist Pay Enhancement. As with many departments, a number of our policy staff come from a science and engineering background and are members of the GSE community.
Examples of work	In relation to Science and Engineering in the Export Control Organisation: • The Technical Assessment Unit (TAU) in ECO is primarily responsible for the technical assessment of licence applications against current Strategic Export Control Regulations. TAU also provides a formal advisory service to exporters, and responds to urgent enquiries from HMRC and UK Border Force (UKBF) for goods stopped at the border.

	• The Strategic Export Control regulations cover most areas of science, engineering and technology and the Technical Assessor role requires a Science or Engineering degree or equivalent, combined with significant experience gained in a relevant area such as defence, electronics, telecommunications, aerospace, bio-chemical , or nuclear sectors • Technical Assessors also develop significant expertise in the applicable legislation and underlying international export control regimes and lead for the UK on the technical negotiation of international export controls.
List of key agencies employing scientists and engineers	UK Space Agency, National Measurement Office, Intellectual Property Office, Met Office, UK Atomic Energy Authority, the 7 Research Councils (BBSRC, EPSRC, ESRC, MRC, NERC, STFC, AHRC), RCUK, and the Ordnance Survey.
Emergency procedure and contacts	London office address: 1 Victoria Street London SW1H 0ET General enquiries: Telephone: 02072155000 Email: enquiries@bis.gsi.gov.uk

Name of organisation	***Intellectual Property Office (IPO)*** Website: www.gov.uk/ipo
Type of organisation	An executive agency of the Department for Business, Innovation & Skills
Mission and purpose	The official government body responsible for Intellectual Property (IP) rights in the United Kingdom. These rights include: • Patents • Designs • Trade marks • Copyright IPO promotes innovation by providing a clear, accessible and widely understood IP system, which enables the economy and society to benefit from knowledge and ideas. The IPO's strategic aims are: • The IPO will have a reputation in the UK and globally for high quality, informed and influential IP policy • The UK will be a more attractive place for creators and users of IP, including businesses and consumers • The European IP system will support innovation and creativity and allow the single market to work better as a home market for UK business • IP systems around the world will be accessible to and supportive of UK businesses that create and use IP, and developing countries will be able to use IP more effectively IPO's corporate strategy sets out the goals for 2011-16, to enable it to achieve their vision: The full potential of ideas, knowledge and creativity is realised for the benefit of the economy and society. IPO's Corporate Plan sets out in more detail what it plans to do in the coming year.
Key science and engineering staff	Director of Patents: Sean Dennehey Deputy CEO: Julyan Elbro Patents Divisional Director & Head of Patent Examination: Patents Divisional Directors: 3 Patents, Deputy Directors: 12 Graduate Patent Examiners: 250 Policy staff: approx. 12
Links to other expertise	IPO draws on expertise on legal matters and has relationships with organisations such as the Chartered Institute of Patent Attorneys and the Institute of Trade Mark Attorneys. It works closely with several BIS policy divisions and policy functions in OGDs, for example CMS, DEFRA, DFID and FCO.

Subject areas for which the organisation has ownership	• Delivering IP rights in patents, trademarks and registered designs • Tribunal for patents, trademarks and design disputes • Development of UK policy on intellectual property • Development of EU-wide policies relating to IP in partnership with other organisations, e.g. the European Commission. • Lead for the UK on international "IP" organisations and policies relating to IP.
Approximate number of staff who are scientists or engineers	17 SCS analogues with science or engineering degrees > 250 non-SCS (G7-HEO) patent examiners and policy officials
Examples of work	In relation to Science, Engineering and research in particular: • The Patents Division has over 250 graduate patent examiner specialists who cover all areas of science, engineering and technology. • The Patents Informatics Service provides sophisticated technology trend mapping and has made regular contributions to Govt. policy making, e.g. eight great technologies and produces reports on topical issues such as regenerative medicine, energy storage and 3D-printing. • Patents policy which works with a range of OGDs for example on life-sciences and energy policies involving IP. • A directorate dedicated to Innovation which leads on IP policies relating to universities and research. For example, the Innovation Directorate has recently reviewed the world-leading Lambert tool-kit for facilitating university-business research-based interactions and is updating and modernising the toolkit.
Contact official	Jim Houlihan Jim.houlihan@ipo.gov.uk 01633 813506 0776 9713374
	General Enquiries Telephone: 0300 300 2000 Email: information@ipo.gov.uk
	Intellectual Property Office Concept House Cardiff Road Newport South Wales NP10 8QQ United Kingdom

Name of organisation	***Met Office*** Website: www.metoffice.gov.uk
Type of organisation	A science and service focused Trading Fund within the Department for Business, Innovation and Skills, operating on a commercial basis under set targets. The Met Office is also the UK National Weather Service and home to the world renowned climate change research centre, the Met Office Hadley Centre.
Mission and purpose	The Met Office Aim is: "To be recognised as the best weather and climate service in the world" Our corporate plan enables us to provide a weather and climate service that can help Government and its agencies, the public and business customers achieve their goals through our top level objectives: 1. Enabling protection of lives, infrastructure and the natural world 2. Improving well-being, now and in the future 3. Increasing prosperity and enabling UK economic growth and international competitiveness.
Key science and engineering staff	Chief Scientist: Julia Slingo Chief Executive: John Hirst Operations and Services Director: Rob Varley Director of Science: Andy Brown Chief Information Officer: Charles Ewen
Links to other expertise	**The Met Office Unified Model (UM)** is the 'seamless' numerical modelling system developed and used at the Met Office to underpin all of the Met Office's Weather and Climate Prediction capabilities, including ocean and sea ice modelling. It is 'seamless' in that different configurations of the same model are used across all time and space scales. It is licensed and used operationally in a number of collaborating nations including Australia, South Africa, India, New Zealand and South Korea. It is also used by the US Air Force to support its operations. Outputs are also used by a wide range of UK Research Councils (including NERC) and Universities. There are various research licences for UM use in Australia, Korea, Canada, India, New Zealand, United States, Brazil, Singapore, Argentina, Kenya and Hong Kong. We also have a commercial arrangement with the Interdisciplinary Centre for Mathematical and Computational Modelling in Poland. **The Met Office NAME Model** (Numerical Atmospheric dispersion Modelling Environment) models atmospheric dispersion of any given particles e.g. ash, radiation, airborne diseases etc. in order to provide advice and support on a wide range of private and public sector issues. For example advice given to Cabinet Office and relevant bodies on the 2010, 2011 and 2012 Volcanic Ash dispersion (Eyjafjallajökull, Grimsvötn, Chile, Eritrea) the 2011 Fukishima radiation leak, the 2008 Bluetongue outbreak, the 2001 and 2007 Foot and Mouth disease outbreak, the 2005 Buncefield oil storage depot incident and the pollution resulting from the Kuwaiti oil fired in the First Gulf War.

	The Flood Forecasting Centre (FFC) is a joint Environment Agency and Met Office Flood Forecasting Centre for England and Wales. It was created in 2009 in response to a key recommendation of Sir Michael Pitt's Review into the Summer 2007 floods. In 2011 the Scottish Environment Protection Agency (SEPA) and the Met Office launched a similar Scottish Flood Forecasting Service. The FFC combines the Environment Agency's expertise in flood risk management and the Met Office's expertise in weather forecasting. It helps provide earlier warnings of floods to local authorities and the emergency services, to give them more time to prepare for floods and reduce to loss of life and damage to property. **The Natural Hazard Partnership (NHP)** was set up by the Met Office in 2010 following the eruption of the Icelandic volcano, Eyjafjallajökull, which caused major disruption to the airline industry as large parts of European airspace were closed. The NHP's aim is to provide responders with a focal point for hazard information and advice and to develop joint multi-hazard services. Currently we are working with twelve other partners, including the British Geological Survey, Cabinet Office, Centre for Ecology and Hydrology, Defra, Environment Agency, Government Office for Science, Health Protection Agency, National Centre for Atmospheric Science, National Oceanography Centre, Ordnance Survey, and UK Space Agency **The FAAM Aircraft** (Facility for Airborne Atmospheric Measurements) is the result of a collaboration between the Met Office and NERC and has been established as part of the National Centre for Atmospheric Sciences (NCAS) to provide an aircraft measurement platform for use by all the UK atmospheric research community on campaigns throughout the world. The FAAM Aircraft is used for research purposes and to monitor and make informed decisions on the potential impacts of atmospheric events (for example ash cloud and smoke detection). Now, in addition to FAAM, there is a new **Met Office Civil Contingencies Aircraft** (MOCCA) which provides back up to the FAAM. As well as being used to monitor volcanic ash incidents, MOCCA can sample a range of other gases and aerosols in the atmosphere such as dust and smoke from fires like the one at the oil depot in Buncefield in 2005. We operate MOCCA on behalf of the Civil Aviation Authority (CAA) in partnership with Cranfield Aerospace and DO Systems. **The Met Office Academic Partnership** is a cluster of research excellence that brings together the Met Office and institutions that are among the leading UK Universities in weather and climate science (Universities of Exeter, Leeds, Oxford and Reading) through a formal collaboration to advance the science and skill of weather and climate prediction. The Met Office is also proficient in many areas of ICT – an area that is vital and intrinsic to the Met Office mission.
Subject areas for which the organisation has ownership	Public Weather Service and Met Office Hadley Centre Climate Programme, includes resilience to the National Risk Register, National Security Strategy and Climate Change. The Met Office Hadley Centre delivers the National Climate Capability. Works with BIS, DECC, Defra, DfT, Home Office, FCO and Dfid, Devolved Governments and others on specific aspects of science policy areas.
Approximate number of staff who are scientists or engineers	There are 530 FTEs within Science and 307 FTEs within IT.

Examples of work	The products and services cover areas of: Public services: This includes the Public Weather Service (PWS), which provides forecasts for the public to help them make informed decisions about their day-to-day activities. The National Severe Weather Warning Service is also a part of this, providing advance notice of weather which could affect public safety. Health: The Met Office works with the NHS to provide information on how the weather affects hospital admissions and helping them manage workloads. They can also help people with certain medical conditions, advising them when the weather could affect their health, helping them to stay healthy and out of hospital. Transport and business: Their range of services for transport includes tailored advice on how the weather will affect roads, air and sea travel. They also provide detailed information to a broad range of businesses which can be affected by the weather, from how it will affect the demand for electricity and gas, to how it will affect sales of high street products. Defence and Government: Provide forecasts for military operations anywhere in the world, often supported by Met Office forecasters working in theatre with armed forces. Helps the military make strategic decisions, plan operations and safeguard service personnel from the worst effects of the weather, such as heat stress. Services for government include environmental monitoring advice on the predicted spread of insect-borne diseases such as bluetongue, to toxic or hazardous fumes, or even volcanic ash. Climate change: Research plays a vital role in providing evidence to support climate predictions and rapid reductions in greenhouse gas emissions are required to ensure this does not rise further for future generations. Provide tailored advice and services for a range of clients to help them begin adapting to the consequences of climate change. Includes projects focusing on defence, transport, energy, water supply, defence, flooding, health, and a host of other issues. Research areas include monitoring, modelling systems, climate science, applied science and weather science. For further information: Science strategy 2010-2015
Emergency procedure and contacts	General enquiries: Met Office FitzRoy Road Exeter, Devon, EX1 3PB Telephone: 08709000100 Email: enquiries@metoffice.gov.uk

Name of organisation	***National Measurement & Regulation Office (NMRO)*** Website: www.gov.uk/nmro
Type of organisation	The National Measurement & Regulation Office (NMRO) is an Executive Agency of the Department for Business, Innovation and Skills.
Mission and purpose	To provide policy support to Ministers on measurement issues and a measurement infrastructure which enables innovation and growth, promotes trade and facilitates fair competition and the protection of consumers, health and the environment. *Objectives:* • Increase economic growth, innovation and social impact through a world class scientific measurement infrastructure. • Promote competition and fair trading both in the UK and at the global level through a modern weights & measures and hallmarking regime. • Provide good value for money metrology services. • Protect the interests of the public, business and the environment by enforcing relevant legislation. • The Agency has also set itself the internal objective of providing professional, value for money, Corporate Services that contribute to Agency objectives, align with cross-government initiatives, promote good and informed decision making, ensure accountable governance and provide effective channels of communication. ***Metrology - "the science of measurement"*** **Scientific metrology** NMRO is responsible for managing and developing the National Measurement System (NMS) which is a network of laboratories and processes that provide measurement standards and calibration testing facilities. It maintains the measurement infrastructure, represents the position of the UK internationally and influences the development of standards. The National Measurement System (NMS) is part of the NMRO, which is the UK's national infrastructure of laboratories that deliver world class measurement, science and technology. NMRO carries out agreed projects on a 3 year basis under this programme. **Legal metrology** NMRO provides the focus for legal metrology in the UK, ensuring that trade measurements are accurate, fair and legal. It has the policy lead for legal units, measuring instruments, quantity labelling and transactions for trade use. It operates certification services to manufacturers, installers and repairers of measuring instruments, and UKAS-accredited testing/calibration services to businesses and local authorities who enforce weights and measures legislation. They prepare legislation under the Weights and Measures Act 1985, Hallmarking Act 1973, Gas Act 1986 and Electricity Act 1989, and associated European legislation. They represent the UK's interests internationally through their membership of OIML, WELMEC, and the International Hallmarking Convention.

	Enforcement NMRO undertake the direct enforcement/market surveillance of a range of technical pieces of legislation relating to environmental protection, energy conservation, safety, and weighing and measuring. Through a partnership approach with UK industry NMRO provides advice and support to businesses and intermediaries as well as the discovery, product and system assessment, investigation and resolution of failures to comply with legal requirements. A full list of the legislation that is enforced by NMRO is available on the website; www.gov.uk/government/collections/national-measurement-office-enforcement-authority.
Key contacts for science and engineering staff	NMS Director: Robert Gunn Regulation Director: Richard Sanders Certification Services Director: Paul Dixon Enforcement Director: Richard Frewin
Links to other expertise	NMO's science & engineering staff deliver measurement science & engineering-related policy advice to ministers and manage the National Measurement System Science Programme contracts. NMO have some generic measurement expertise in-house but often draw science/engineering expertise from the National Measurement Laboratories (NPL, LGC and NEL) and the Science Programme steering groups.
Subject areas for which the organisation has ownership	• The continuation or ending of Leap Seconds that also involves social sciences research. • Units of measurement including re-defining the kg and metrication policy.
Approximate number of staff who are scientists or engineers	Non-SCS – 35.
Examples of work	The National Measurement System 2011-2015 Strategy sets out the framework for the future of the NMS and the National Measurement Laboratories (NPL, LGC and NEL). For more information on NMRO science programmes see here: www.gov.uk/guidance/national-measurement-system--2 For legal metrology, NMO provides technical advice to businesses and trading standards in support of statutory requirements. For example, advice on temperature compensation in petrol pumps: www.gov.uk/government/collections/weights-and-measures-regulations-guidance
List of key agencies employing scientists and engineers	The National Measurement System, funded by BIS and managed by NMRO, is a network of laboratories that provide measurement standards, and calibration and testing facilities. • National Physical Laboratory • LGC • NEL

Emergency Procedure and Contacts	A full list of contacts can be found here: www.gov.uk/government/organisations/national-measurement-and-regulation-office#org-contacts

Name of organisation	***National Physical Laboratory (NPL)*** Website: www.npl.co.uk
Type of organisation	NPL is owned by the Department for Business, Innovation and Skills and operated on behalf of its Executive Agency, the National Measurement Office, by NPL Management Limited, currently a wholly owned subsidiary of Serco Group plc. The Minister of State for Universities and Science, David Willetts, has announced plans for a different arrangement from April 2014, when the current contract with Serco Group plc comes to an end.
Mission and purpose	NPL is the UK's National Measurement Institute, and is a world-leading Centre of excellence in developing and applying the most accurate measurement standards, science and technology available. Its mission is to provide the measurement capability that underpins the UK's prosperity and quality of life.
Key science and engineering staff	Managing Director: Dr Brian Bowsher Deputy Director & Director of Operations: Dr Martyn Sené Chief Scientific Adviser: Prof. John Pethica Director Research and International: Prof. Kamal Hossain Head of Physics and Chemistry: Prof. Jason Crain Head of Materials and Chemistry: Prof. Graham Sims
Links to other expertise	NPL is a key element of the National Measurement System with links to National Measurement Institutes overseas and with the Designated Measurement Institutes in the UK.
Subject areas for which the organisation has ownership	NPL is responsible for developing and maintaining the UK's national measurement standards and capability except for Fluid Flow, Gears and some aspects of chemistry and biology.
Approximate number of staff who are scientists or engineers	510
Examples of work	NPL Science areas are:- Acoustics, Advanced Materials, Biotechnology, Chemical Metrology, Composites and Polymeric materials, Dimensional Metrology, Electrochemistry, Electromagnetics, Electronics interconnections, Engineered materials, Environmental Measurements, Functional Materials, Ionising Radiation, Mass & Force, Mathematics and Scientific Computing, Neutron Metrology, Optical Radiation and Photonics, Quantum Detection, Radiation Dosimetry, Surface and Nanoanalysis, Temperature & Humidity, Thermal Performance and Time & Frequency.

Examples of work (cont.)	NPL provides a range of services and activities: Science & technology NPL maintains a wide portfolio of internationally visible research programmes that advances measurement science, underpins the SI system and supports various cross-disciplinary technologies from acoustics and advanced materials to electronics interconnection and thermal performance, time and frequency. Commercial services are built on 100 years of leadership in accuracy, innovation and scientific research. Experienced consultants and project managers draw upon a unique combination of industry know-how and world-leading scientific discovery to deliver real-world business solutions, enable innovation and secure competitive advantage. Education and outreach NPL strives to actively promote public awareness and appreciation of science and technology, particularly the importance of measurement and the role of NPL. It offers science outreach activities and educational resources. Joint ventures: NPL collaborates with leading national international organisations to ensure their science achieves the highest possible impact, e.g. EMRP, NiCE-MSI (National Centre of Excellence in Mass Spectrometry Imaging), and Centre for Carbon Measurement.
Emergency procedure and contacts	UK address NPL Hampton Road Teddington Middlesex TW11 0LW Switchboard +4020 8977 32224

Name of organisation	***The Research Councils*** Website: www.rcuk.ac.uk
Type of organisation	The Research Councils are executive non-departmental public bodies of the Department for Business, Innovation and Skills.
Mission and purpose	Research Councils UK (RCUK) are responsible for investing public money in research in the UK to advance knowledge and generate new ideas which lead to a productive economy, healthy society and contribute to a sustainable world. The seven Research Councils have common objectives, which are to: • fund basic, strategic and applied research • support postgraduate training (PhDs and masters students and fellows) • advance knowledge and technology and provide services and trained scientists and engineers to contribute to the economic competitiveness, the effectiveness of public services and policy, and quality of life • support science in society activities Arts and Humanities Research Council Promote and support research in the arts and humanities and postgraduate training. Strengthen the impact of arts and humanities research by encouraging researchers to disseminate and transfer knowledge to other contexts. Raise the profile of arts and humanities research and advocate for its social, cultural and economic significance. Biotechnology and Biological Sciences Research Council Promotes and supports high-quality basic, strategic and applied research and postgraduate training relating to the understanding and exploitation of biological systems. BBSRC invests in world-class bioscience research and training to underpin economic growth, wealth and job creation and to improve quality of life in the UK and beyond. Economic and Social Research Council Promotes and supports high-quality basic, strategic and applied research and related postgraduate training in the social sciences. Advance knowledge and provide trained social scientists, thereby contributing to the economic competitiveness of the United Kingdom, the effectiveness of public services and policy, and the quality of life. Engineering and Physical Sciences Research Council Promote and support, by any means, high quality basic, strategic and applied research and related postgraduate training in engineering and the physical sciences. Advance knowledge and technology and provide trained scientists and engineers, which meet the needs of users and beneficiaries (including the chemical, communications, construction, electrical, electronic, energy, engineering, information technology, pharmaceutical, process and other industries).

	Medical Research Council Support discovery science across the spectrum of biomedical research, from basic science to clinical studies in all major disease areas, and strengthen partnerships to accelerate the pace of improvements in health and wealth. The MRC gives a high priority to research that is likely to make a real difference to the health of the population and works closely with the NHS and industry to ensure findings are translated into clinical practice. In 2012/13, £766.9m was spent on research in universities, hospitals and MRC units, centres and institutes across the UK, which directly employ 1716 scientists[1]. Working in partnership with medical research charities, the MRC provides leadership in the governance of medical research and works to sustain a robust research environment. Natural Environment Research Council Deliver independent research, survey, postgraduate training and innovation in the environmental sciences, to advance knowledge of planet Earth as a complex, interacting system. Science and Technology Facilities Council Universities: supports university-based research, innovation and skills development in astronomy, particle physics, nuclear physics, and space science Scientific Facilities: STFC provides access to world-leading, large-scale facilities across a range of physical and life sciences, enabling research, innovation and skills training in these areas National Campuses: works with partners to build National Science and Innovation Campuses based around our National Laboratories to promote academic and industrial collaboration and translation of our research to market through direct interaction with industry.
Key science and engineering staff	AHRC Chief Executive: Prof Rick Rylance BBSRC Chief Executive: Professor Jackie Hunter BBSRC Director of Science: Professor Melanie Welham ESRC Chief Executive: Prof Paul Boyle EPSRC Chief Executive: Prof David Delpy MRC Chief Executive: Sir John Savill NERC Chief Executive: Prof Duncan Wingham STFC Chief Executive: Prof John Womersley

[1] Figures current at 15/08/13

Emergency procedure and contacts	Research Councils UK info@rcuk.ac.uk; 01793444400 AHRC 01793444000 BBSRC 01793413200 EPSRC 01793444000 ESRC 01793413000 MRC 01793416200 NERC 01793411500 STFC 01793442000

Name of organisation	***Innovate UK*** ***(formerly the Technology Strategy Board)*** Website: www.gov.uk/innovate-uk
Type of organisation	Innovate UK is an executive non-departmental public body of the Department for Business, Innovation & Skills.
Mission and purpose	Innovate UK supports the development of innovative technologies and products. It offers a range of funding programmes and works with businesses of every size, universities and other organisations. Many factors hamper innovation. Companies can struggle to find finance for early-stage development, the returns can be hard to predict, and the innovation 'landscape' can be complex and confusing. Innovate UK tackles these barriers and supports business-led innovation. They work across business, academia and government - supporting innovative projects, reducing risk, creating partnerships, and promoting collaboration, knowledge exchange and open innovation. The Innovate UK strategy for 2011-15 focuses on five areas: **1. Accelerating the journey between concept and commercialisation** The journey of an idea from concept to market can be uneven and indirect. They work to speed this up. **2. Connecting the innovation landscape** The innovation landscape can be fragmented and difficult to navigate. They build strategic relationships with other innovation players, creating a more effective innovation environment. **3. Turning government action into business opportunity** Government can create opportunities for innovative businesses. They identify how policy, standards, and regulation can stimulate innovation and they help unlock the potential of government to act as 'lead customer' for businesses that can solve public sector challenges. **4. Investing in priority areas based on potential** Innovate UK focuses on thematic areas which are most likely to generate UK economic growth and which address global challenges and opportunities – and on competencies and technologies which enable innovation in these areas. **5. Continuously improving our capability** Innovate UK develops people and processes to be fast, flexible, and focused on business needs and develop measures to ensure that we are effective and deliver value for money.
Key science and engineering staff	Directors of Technology and Innovation: Simon Bennett & Mike Biddle Director of Catapults: Simon Edmonds

Links to other expertise	Key link is via the Knowledge Transfer Networks. https://connect.innovateuk.org/knowledge-transfer-networks Innovate UK works with government departments – e.g. BIS, DEFRA, DfT, Home Office, Department of Health, IPO, National Measurement System and UK Space Agency – as well as the devolved administrations. It also has links with SMEs and many of the UK's largest companies. Innovate UK's other partners includes funders the Research Councils and the Higher Education Funding Councils. They also work closely with research base organisations and alliances including Mission Groups (e.g. the Russell Group, the 1994 Group, University Alliance, Guild HE), practitioner groups (e.g. PraxisUnico and AURIL) and others.
Subject areas for which the organisation has ownership	Innovate UK's priority areas are Energy, Built Environment, Food, Transport, Healthcare, High value Manufacturing, Digital Economy, Advanced Materials, Bioscience, ICT, Electronics, Sensors and Photonics, Enabling Technologies, Emerging Technologies and Industries and Space Applications. For further information, see the delivery plan. Innovate UK publishes technology strategies for all of its priority areas such as energy, transport and health. It also provides a searchable database of all grant funded activity it delivers, including an abstract of the project. Companies in receipt of Innovate UK funds are able to publish the results of their projects freely if they wish to do so. Innovate UK conducts an evaluation of its programmes to assess the robustness of each programme to deliver business success and growth. Innovate UK's toolset has evolved to create an escalator of tools designed to assist companies along the journey from concept to commercialisation.
Approximate number of staff who are scientists or engineers	Non-SCS – 55.
Examples of work	Innovate UK's priority areas are: • Advanced materials • Bioscience • Built environment • Digital economy • Electronics, sensors and photonics • Energy • Food (supply) • Healthcare • High value manufacturing • ICT • Space • Resource efficiency • Transport • Other areas To see examples of Innovate UK's work with Government Departments click here: www.innovateuk.org/government-partners.

Emergency procedure and contacts	Address: Innovate UK North Star House North Star Avenue Swindon Wiltshire SN2 1UE General enquiries: Telephone: 01793442700 Email: support@innovateuk.gov.uk

Name of organisation	***UK Atomic Energy Authority (UKAEA)*** Website: www.gov.uk/ukaea
Type of organisation	UKAEA is an executive non-departmental public body of the Department for Business, Innovation & Skills.
Mission and purpose	The UK Atomic Energy Authority carries out magnetic confinement fusion research on behalf of the UK government (funded by an EPSRC grant and Euratom funds) and manages the JET fusion project on behalf of the EU at the Culham Centre for Fusion Energy (CCFE), one of the world's leading fusion research laboratories. CCFE scientists and engineers are working with partners around the globe to develop fusion as a new source of clean energy for tomorrow's power stations. CCFE's work is part of a coordinated European programme under the Horizon 2020 research framework. This is focused on providing Europe's input to the next-step international fusion experiment, ITER, and the demonstration power station that will follow it, known as DEMO. Main research activities at CCFE include: • experiments on the MAST spherical tokamak; • participation in the JET research programme; • a theory and modelling programme which studies key areas of plasma physics and predicts performance of future tokamaks such as ITER; • studies of the materials and technology needed in ITER and fusion power stations. Areas of expertise include: • Diagnostics systems; • Engineering; • Deuterium-Tritium fuel cycle; • Materials modelling; • Neutral beam (plasma heating) systems; • Neutronics; • Remote handling; • Radio Frequency heating systems; • Special Techniques (material joining); • Publications
Key science and engineering staff	Chief Executive Officer: Prof Steven Cowley Director of Strategy and Technology: Martin Cox Director of Operations: David Martin Chief Scientist: Dr William Morris Chief Technologist: Tom Todd List of Researchers: www.ccfe.ac.uk/researchers.aspx

Links to other expertise	The research at CCFE is linked not only to the European and World fusion programmes, but with university and industrial partners, including collaborations with physics, materials science and engineering departments in over 20 UK universities.
Subject areas for which the organisation has ownership	Magnetic confinement Fusion research. CCFE will be increasing links with both academia and industry in both the fission and fusion areas to encourage joint working and increasing the UK skill base in these areas. Preparation for nuclear new build and the advanced materials (one of the 'Eight Great Technologies' highlighted by BIS) and technologies for advanced fission and fusion reactors.
Approximate number of staff who are scientists or engineers	SCS - 7 Non-SCS – 480 CCFE also has approximately 400 contractors which are mainly specialist science and engineering contractors.
Examples of work	CCFE produces an annual report each year which summarises the research work carried out. This can be found on the CCFE website here: www.ccfe.ac.uk/annual_reports.aspx
List of key agencies employing scientists and engineers	Culham Centre for Fusion Energy.
Emergency procedure and contacts	Address: Culham Science Centre Abingdon Oxfordshire OX14 3DB General enquiries: 01235 528822

Name of organisation	***UK Space Agency (UKSA)*** Website: www.gov.uk/uksa
Type of organisation	The UK Space Agency is an executive agency of the Department for Business, Innovation and Skills (BIS).
Mission and purpose	The UK Space Agency is at the heart of UK efforts to explore space, exploit space-based applications and technology and support our academic and industrial communities. To meet national needs, the UK Space Agency is responsible for ensuring that the UK retains and grows a strategic capability in the space-based systems, technologies, science and applications. The UK Space Agency therefore leads the UK's civil space programme in order to win sustainable economic growth, secure new scientific knowledge and provide benefits to all citizens. To support these goals, the organisation: • Oversees the preparation of an Agency corporate strategy and its effective delivery, monitoring and evaluation • Provides the central focus for civil space policy and programmes across HM Government • Manages the space projects and programmes under the Agency's responsibility against schedule and budget • Works with departments, agencies and research councils; and with industry and academia to ensure effective and growing exploitation of space across government, business and civil society, such as through the ground segment coordination group. • Negotiates on behalf of the UK and manages the UK's relationship with other space agencies and trans-national organisations such as ESA (European Space Agency), the European Commission and international groups such as CEOS (Committee on Earth Observation Satellites) and ISECG (International Space Exploration Coordination Group) • Manages the statutory duties of HM Government under the Outer Space Act and develops space regulation policy that supports economic growth • Provides the face of the UK civil space programme to the UK general public through its communications activities and leads the delivery of the UK's space-related education, skills and outreach programme. • Delivers efficient support services to support central Government's needs including briefings and correspondence handling concerning the UK's civil space programme
Key science and engineering staff	Chief Executive: Dr David Parker Director, Policy & Operations: Emma Lord/Richard Blayber Director, Technology, Science and Exploration: Dr Chris Castelli Director, Growth Applications and EU Programmes: Catherine Mealing-Jones Chief Engineer: Prof Richard Crowther Environmental Science, Material Physics: Dr Alice Bunn Head Spectrum: Dr Mike Willis Head Technology: Dr Nick Cox Head Radiation (nuclear/electromagnetic): Dr Major Chahal Head, Microgravity: Jeremy Curtis

Links to other expertise	The UKSA negotiates on behalf of the UK and manages the UK's relationship with other space agencies and trans-national organisations such as ESA (European Space Agency), the European Commission and international groups such as CEOS (Committee on Earth Observation Satellites), ISECG (International Space Exploration Coordination Group) and the Inter-Agency Debris Coordination Group (IADC). The UKSA also works with The Met Office, which funds the UK's weather satellite programme, The Natural Environment Research Council, The Science and Technology Facilities Council, Innovate UK, UK Trade and Investment, and the Foreign and Commonwealth Office, leading UK space delegations to UN bodies such as the Committee on the Peaceful Uses of Outer Space (COPUOS). The Agency also maintains close working relations with other Government departments and a range of professional and industrial bodies in the UK including the following: The Association of Specialist Technical Organisations for Space (ASTOS), The British Association of Remote Sensing Companies, The British Interplanetary Society, The Cabinet Office, Department for Environment, Food and Rural Affairs, Department for Transport, Foreign and Commonwealth Office, Home Office, Ministry of Defence, Royal Aeronautical Society, Royal Astronomical Society, UKSpace. The UK Space Agency also works extensively with organisations in Europe and the rest of the world. At its establishment, the Agency was not assigned the responsibility for funding the scientific exploitation of data returned from space missions, only for supporting and growing a strategic capability in space infrastructure. Thus, in the programme area of space science, which covers solar system exploration, astronomy and Earth observation, there is a clear division of responsibilities between the relevant Research Councils (STFC and NERC) and the Agency. To ensure a coherent approach to managing the development of science related infrastructure a **'dual-key' process** has been established whereby the Agency and the Research Councils share the decision-making while at the same time respecting their individual authorities. In this way the dual-key ensures that research council's scientific priorities are reflected in new missions that are selected for study by the Agency via its representation in the Agency's advisory bodies EOAC (Earth Observation Advisory Committee), SPAC (Science Programme Advisory Committee) and SEAC (Space Exploration Advisory Body). Our committees have a mix of scientific and industrial members and factor in issues beyond science such as economic impact; strategic importance; affordability; deliverability.
Subject areas for which the organisation has ownership	Civil space strategy Space exploration Spaceflight regulation
Approximate number of staff who are scientists or engineers	8 (aerospace engineering, physics).

Examples of work	The UKSA's work focuses on: 1. Space and the growth agenda 2. Exploring the universe 3. Earth Observation
List of key agencies employing scientists and engineers	• Rutherford Appleton Laboratory (Science and Technology Facilities Council) • European Space Agency
Emergency procedure and contacts	Communications Team: Matt Goodman, 07766 780926 Julia Short, 07770 276721 Business Continuity: Nathan Moores, 01793 418093 General enquiries: Tel: 020 7215 5000 Address: UK Space Agency Polaris House North Star Avenue Swindon Wiltshire SN2 1SZ

Name of organisation	**Department for Communities and Local Government (DCLG)** Website: www.gov.uk/dclg
Type of organisation	DCLG is a ministerial department, supported by eleven agencies and public bodies.
Mission and purpose	DCLG work to move decision-making power from central government to local councils. This helps put communities in charge of planning, increases accountability and helps citizens to see how their money is being spent. DCLG is responsible for: • supporting local government bodies by giving them the power to act for their community - without interference from central government • helping communities and neighbourhoods to solve their own problems so neighbourhoods are strong, attractive and thriving • working with Local Enterprise Partnerships (LEPs) and enterprise zones to help the private sector grow • making the planning system work more efficiently and effectively • supporting local fire and resilience authorities so that they are able to respond to emergencies and reduce the number and impact of fires
Key science and engineering staff	Chief Scientific Adviser (Interim): Stephen Aldridge Strategic Analysis Team: Karl Cunion
Links to other expertise	We draw heavily on the broader analytical communities within and outside the Department.
Subject areas for which the organisation has ownership	• Housing • Local government • Planning and building • Fire, resilience and related emergencies • Community and society
Approximate number of staff who are scientists or engineers	Fourteen posts, principally in relation to technical support for the Building Regulations, and fire, resilience and emergencies.
Examples of work	DCLG work covers: • Housing • UK economy • Local government • Planning and building • Public safety and emergencies • Community and society

	DCLG priorities in 2012 to 2013: • putting local councils and businesses in charge of economic growth and bringing new business and jobs to their areas • getting the housing market moving again so there are more homes to buy and to rent at prices people can afford • ensuring Council Tax payers get value for money and making their local council accountable to them • turning round the lives of troubled families, giving them the chance of a better life and reducing the cost to the taxpayer • bringing people together in strong united, communities An example of DCLG work is the Enterprise Zones programme – geographically defined areas agreed between LEPs and Government of economic growth potential, which, through a combination of fiscal incentives and simplified planning, will generate both new jobs and business, helping to drive local and national growth.
Emergency procedure and contacts	General enquiries - Tel: 0303 444 0000 Email: contactus@communities.gsi.gov.uk Karl Cunion – Tel: 0303 444 1231 Email: Karl.cunion@communities.gsi.gov.uk

Name of organisation	**Department of Energy & Climate Change (DECC)** Website: www.gov.uk/decc
Type of organisation	DECC is a ministerial department, supported by 8 agencies and public bodies.
Mission and purpose	The Department of Energy & Climate Change (DECC) works to make sure the UK has secure, clean, affordable energy supplies and promote international action to mitigate climate change. DECC is responsible for: • **energy security:** making sure UK businesses and households have secure supplies of energy for light and power, heat and transport • **action on climate change:** leading government efforts to mitigate climate change, both through international action and cutting UK greenhouse gas emissions by at least 80% by 2050 (including by sourcing at least 15% of our energy from renewable sources by 2020) • **renewable energy:** sourcing at least 15% of our energy from renewable sources by 2020 • **affordability:** delivering secure, low-carbon energy at the least cost to consumers, taxpayers and the economy • **fairness:** making sure the costs and benefits of policies are distributed fairly so as to protect the most vulnerable and fuel poor households and address competitiveness problems faced by energy intensive industries • **supporting growth:** delivering policies in a way that maximises the benefits to the economy in terms of jobs, growth and investment, including by making the most of existing oil and gas reserves and seizing the opportunities presented by the rise of the global green economy • **managing the UK's energy legacy safely, securely and cost effectively**
Key science and engineering staff	Chief Scientific Advisor and Head of Science & Engineering Profession: John Loughhead Director, Science and Innovation: Tony Ashton Head of Engineering: Craig Lucas Head of Science: David Warrilow
Links to other expertise	Addressing complex challenges in climate and energy policy requires combined expertise from across a range of disciplines. DECC routinely uses evidence from, and has expertise in commercial, customer insight, economics, engineering, operational research and the natural, physical and social sciences.
Subject areas for which the organisation has ownership	• Climate Science • Energy technology innovation • Low carbon electricity generation • Fossil fuels • Energy use and Efficiency • Energy Production, Transformation, Distribution and Markets • Nuclear Legacy and Counter-proliferation Issues

Approximate number of staff who are scientists or engineers	There are approximately 90 specialist engineering and science posts in DECC. The main areas they employ scientists and engineers in are: offshore oil and gas environmental regulation and licensing, and energy engineering and analysis.
Examples of work	DECC's three main priorities of work cover: • Energy • Climate change • UK economy Examples of science and engineering work include: The 2050 Calculator is a user-friendly model that lets you create your own UK emissions reduction pathway, and see the impact using real UK data. The Calculator helps everyone engage in the debate and lets Government make sure our planning is consistent with the long-term aim. The 2050 Calculator outlines, in minutes, months of work from technical experts. It can be used to engage a range of audiences on the challenges and opportunities of the energy system. It brings energy and emissions data alive, showing the benefits, costs and trade-offs of different versions of the future. It allows you to explore the fundamental questions of how the UK can best meet energy needs and reduce emissions. The Low Carbon Innovation Co-ordination Group (LCICG) brings together the major public sector backed organisations that are supporting low carbon innovation in the UK. The group aims to maximise the impact of UK public sector funding for low carbon technology. Energy Development Unit (EDU) is responsible for managing the UK's onshore and offshore oil and gas reserves. They do this through licensing acreage to operators, encouraging exploration and sanctioning development plans for exploiting reserves. They are also responsible, through a separate team, for the environmental regulation of offshore oil and gas activity on the UKCS, where they work closely with the HSE and the Maritime and Coastguard Agency to ensure safe and clean operations in the seas around our shores. Scientific evidence to help us understand climate change. The scientific evidence that the world's climate is changing is clear and extensive. Nevertheless we need further research to refine our understanding of how the climate system works and how climate will change in coming decades.
List of key agencies employing scientists and engineers	• Nuclear Decommissioning Authority • Ofgem
Emergency procedure and contacts	3 Whitehall Place London SW1A 2AW General enquiries: Tel: 0300 068 4000 Email: correspondence@decc.gsi.gov.uk

Name of organisation	**Department for Environment, Food & Rural Affairs (Defra)** Website: www.gov.uk/defra
Type of organisation	A ministerial department, supported by a network of delivery partners who provide advice or deliver policies to our customers: 38 agencies and public bodies. Of those 38, 10 executive agencies and NDPBs are involved in Defra funded evidence policy work and employ scientists and engineers.
Mission and purpose	Defra is the UK government department responsible for policy and regulations on environmental, food and rural issues. Defra's strategic direction is expressed through four priorities: growing the rural economy; improving the environment; safeguarding animal health; safeguarding plant health. Running through all of these is the priority of economic growth as the Government's top priority. Defra is responsible for policy and regulations on: • the natural environment, biodiversity, plants and animals • sustainable development and the green economy • food, farming and fisheries • animal health and welfare • environmental protection and pollution control • rural communities and issues
Key science and engineering staff	Chief Scientific Adviser: Prof Ian Boyd Head of Science and Engineering Profession: Prof Ian Boyd Deputy CSAs (and deputy Heads of Profession for Science and Engineering): Dr Stuart Wainwright (Tel: 020 7238 1813) Dr Fiona Harrison (Tel: 020 7979 8581)
Links to other expertise	To inform sound policy-making, Defra needs access to the right information and to be confident of the quality of that information. In order to achieve this, Defra scientists and engineers are embedded in multi-disciplinary teams, procuring and interpreting evidence that will be used to inform policy making. The core department also draws on its network of agencies, some of whom provide advice, and some of whom deliver policies to customers. Defra's non-departmental public bodies (NDPBs) provide independent advice on technical, scientific or other complex issues. Defra's Science Advisory Council provides advice and challenge to Defra's Chief Scientific Adviser and ministers on the science underpinning Defra policies. Defra is also supported by a network of evidence advisory expert committee's The department also maintains wider links with those working in academia and in the Research Councils.
Subject areas for which the organisation has ownership	Defra has produced evidence plans for each of its policy areas which have a significant evidence component. • The Water Availability and Quality (WAAQ) Programme

	• Waste & Resources • Veterinary Medicines and Antimicrobial Resistance • Transmissible Spongiform Encephalopathies and Animal By-Products: • Tree Health and Plant Biosecurity • Sustainable Land and Soils and Sustainable and Competitive Farming • Sustainable Economy • Rural Communities and Rural Development • Public Health Protection • Plant Varieties and Seeds - Plant Health • Pesticides • New and Re-emerging Diseases, Endemic Diseases and Enhanced Surveillance Methodology • Marine Programme • Landscape and Outdoor Recreation • International, EU and CAP Reform • Food chain • Flood and Coastal Erosion Risk Management • Drinking Water Quality and Health • Crops and Horticulture Policy Delivery • Climate change • Chemicals and emerging technologies • Chemicals, biological, radiological, nuclear emergencies • Bovine tuberculosis • Biodiversity and ecosystems • Bee health • Atmosphere and local environment • Aquatic animal health • Animal welfare • Animal health policy and implementation
Approximate number of staff who are scientists or engineers	The total number of core Defra evidence and analysis specialists is 275. Including 90 natural scientists (with an interest in evidence policy), 15 social scientists and 7 engineers. We also have economists, operational researchers, statisticians and vets on our staff, and staff who have a strong interest in the use of geographic information.
Examples of work	Defra Science Information about its research. Defra's strategic direction is expressed through its four priorities: **Grow the rural economy:** Champion a thriving, competitive British food and farming sector and drive sustainable growth in the wider rural economy in support of rural communities www.gov.uk/government/topics/rural-and-countryside

	Improve the environment: Manage our rural, urban and marine environments, reducing pollution and waste, and ensuring greater resilience to climate change and other environmental risks www.gov.uk/government/topics/environment **Food and Farming:** Ensure a sustainable supply of food for the UK market and export. Support and develop British farming, and encourage sustainable food production (including fisheries) www.gov.uk/government/topics/food-and-farming **Safeguard animal health:** Minimise risks and increase preparedness for animal disease outbreaks, driving growth and competitiveness through improving standards of animal health and welfare. **Safeguard plant health:** Strengthen capability to minimise and manage plant disease and pest outbreaks, with greater economic and environmental resilience to disease threats www.gov.uk/government/topics/wildlife-and-animal-welfare
List of key agencies employing scientists and engineers	Forestry Commission Responsible for delivering government forestry and woodlands policy through Forest Services and management of the public forest estate via the Agency Forest Enterprise England. Animal Health and Veterinary Laboratories Agency Safeguards animal health and welfare as well as public health, protects the economy and enhances food security through research, surveillance and inspection. Centre for Environment, Fisheries and Aquaculture Science Supports the long-term prosperity and well-being of industries, communities and individuals that enjoy and depend on the rich natural assets found in our marine and freshwater environments. The Food and Environment Research Agency Its overarching purpose is to support and develop a sustainable food chain, a healthy natural environment, and to protect the global community from biological and chemical risks. Veterinary Medicines Directorate: Aims to protect public health, animal health and the environment and promote animal welfare by assuring the safety, quality and efficacy of veterinary medicines. Marine Management Organisation The MMO has a statutory objective to make a consistent, co-ordinated contribution to sustainable development. Environment Agency Works to protect and improve the environment in England. It reduces the risks to people and properties from flooding; makes sure there is enough water for people and wildlife; protects and improves air, land and water quality; and applies the environmental standards within which industry must operate. Joint Nature Conservation Committee JNCC is the public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation.

	Natural England Its purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development. It is Defra's key delivery body on nature conservation, countryside and landscape matters, including those relating to biodiversity, marine, landscape, and outdoor recreation The Royal Botanic Gardens, Kew Kew is a world leader in plant science and conservation. Its work helps to discover and describe the world's plant and fungal diversity, safeguard the world's plant life for our future, promote the sustainable use of plants and inspire an appreciation of plants and the environment.
Emergency procedure and contacts	Address - c/o Nobel House 17 Smith Square London SW1P 3JR General enquiries - Tel (UK only): 08459 33 55 77 Email: defra.helpline@defra.gsi.gov.uk

Name of organisation	***Centre for Environment, Fisheries and Aquaculture Science (Cefas)*** Website: www.gov.uk/cefas
Type of organisation	An executive agency of the Department for Environment, Food and Rural Affairs (Defra).
Mission and purpose	Supports the long-term prosperity and well-being of industries, communities and individuals that enjoy and depend on the natural assets found in our marine and freshwater environments. Contributes to securing healthy and sustainable marine and freshwater environments so that current and future generations can prosper. As the UK's most diverse applied marine science centre, it helps to shape and implement policy through internationally renowned science and collaborative relationships that span the EU, UK government, non-governmental organisations, research centres and industry.
Key science and engineering staff	Chief Scientist: Stuart Rogers (Tel: 01502 562244) Science Leaders: Stephen Malcolm Michaela Schratzberger David Righton Ioanna Katsiadaki Ewan Hunter
Links to other expertise	Cefas is a key delivery partner for Defra and for the Marine Management Organisation; it provides advice and programme management for the Welsh Government, the Food Standards Agency and the Environment Agency; and collaborates with the Joint Nature Conservation Committee and Natural England; it has strategic alliances with the Universities of East Anglia, Exeter and Bangor; and it collaborates with many more scientific institutes. The Cefas Science Advisory Committee (CSAC) is an external formal Board committee with a remit to challenge and advise on science, and in particular on our science and technology quality: both to assure ourselves internally and for our external customers, including Defra. Other elements of this assurance include sustaining quality accreditations, publication rates and positive customer feedback.
Subject areas for which the organisation has ownership	Cefas plays a vital role in securing healthy marine and freshwater environments for everyone's well-being, health and prosperity. This is achieved by providing evidence-based scientific advice, managing related data and information, conducting scientific research, and facilitating collaborative action through wide-ranging international relationships. Cefas apply their scientific expertise and knowledge to: • conserve and enhance marine and wider aquatic environments and ecosystems • ensure sustainable use of natural resources, in particular fish stocks • collect, interpret and manage data to underpin decisions and to support long-term monitoring

Subject areas for which the organisation has ownership	• protect society and the economy from the effects of aquatic contaminants and fish diseases • promote adaptation to the impacts of climate change on the aquatic environment and ecosystems • enable government and other customers' response to emergencies.
Approximate number of staff who are scientists or engineers	450 Natural Scientists and 30 Engineers.
Examples of work	Cefas work is organised into six key themes: • observing and modelling the marine environment: oceanography and numerical modelling, using a range of technology and tools • climate - predicting marine impacts and adapting to change: evidence and potential mitigation measures • the ecosystem approach and biodiversity: habitat mapping and understanding connections • assessing human impacts on the marine environment: marine planning, emergency response and specific impacts • promoting healthy aquaculture and mariculture: food safety, plus aquatic animal diseases and impacts on animal health • sustainable fisheries management: marine, migratory and freshwater fisheries information to support management
Emergency procedure and contacts	Address: Cefas Pakefield Rd Lowestoft Suffolk NR33 0HT

Name of organisation	***Animal and Plant Health Agency (APHA)*** ***(formerly the Animal Health and Veterinary Laboratories Agency)*** Website: www.gov.uk/apha
Type of organisation	APHA is an Executive Agency working on behalf of the Department for the Environment, Food & Rural Affairs (Defra), Scottish Government and Welsh Government.
Mission and purpose	Its role is to safeguard animal health and welfare as well as public health, protect the economy and enhance food security through research, surveillance and inspection. APHA acts on behalf of the GB agriculture departments to implement EU legislation for animal health and welfare which consumes half our budget. Its range of activities includes scientific research, surveillance, testing, provision of consultancy and advice on a range of field based activities including disease investigations, welfare inspections, and the registration and licensing of imports of endangered wildlife. The agency also provides an emergency response to outbreaks of notifiable animal diseases. Its primary work is to prevent and control animal disease across Great Britain through activities on farms, at markets and other livestock-related premises, and through specialist veterinary laboratory and scientific services. It is also responsible for advising policy-making departments and providing veterinary evidence base for animal health and welfare policy decisions. It also has global responsibilities, notably acting as the national, European and international reference laboratory for several exotic and zoonotic notifiable diseases, and protecting CITES listed endangered species through our wildlife registration and licensing role. Much of APHA's scientific activity is focused on protecting Great Britain against the threat and impact of a wide variety of animal diseases. Its research provides scientific evidence that feeds into policy development for the UK government and the EU. APHA also acts as an international reference laboratory for a wide range of infectious and non-infectious diseases in farm animals; providing a range of veterinary and scientific consultancy to countries across the world. Key functions include confirmatory testing, standardisation of diagnostic methods, technical training and expert consultancy.
Key science and engineering staff	Chief Scientist: Glyn Hewinson Deputy Chief Scientist: Kath Webster
Links to other expertise	www.gov.uk/government/organisations/animal-and-plant-health-agency/about/research
Subject areas for which the organisation has ownership	Emergency Response to outbreaks of notifiable livestock diseases. Animal Health and Welfare research, surveillance and advice in GB.
Approximate number of staff who are scientists or engineers	950 natural scientists, working in multi-disciplinary teams, with a variety of specialities such as immunology, pathology, bacteriology, virology, wildlife ecology and management. 300 vets working in the field, within policy teams, or undertaking research.

Examples of work	Key areas of research include bovine TB; rabies; Transmissible Spngiform Encephalopathies (TSEs) such as BSE; avian influenza; and food-borne bacteria such as Salmonella; campylobacter and *E.coli.* These activities are delivered via the agency's key scientific disciplines: • Epidemiology • Virology • Bacteriology • Pathology • Parasitology • Biomathematics • Molecular biology • Immunology **Science Strategy 2012 – 2015 'Expertise with Impact'** In July 2012, AHVLA published its first science strategy. The strategy demonstrates how science is fundamental to everything the agency does and highlights its commitment to delivering high quality science-based evidence for policy development. It is based around three key strategic themes that reflect the key purpose of AHVLA's scientific activities: • Threat awareness • Threat definition • Threat mitigation Science Strategy 2012 – 2015 'Expertise with Impact'
Emergency procedure and contacts	c/o Weybridge AHVLA Woodham Lane New Haw Addlestone Surrey KT15 3NB

Name of organisation	***Food and Environment Research Agency (Fera)*** Website: www.fera.co.uk
Type of organisation	Fera is now independent of the UK government. On 1 April 2015 the business and operations of the Food and Environment Research Agency (Fera), an Executive Agency of Defra, transferred to Fera Science Limited (FSL), a joint venture between Defra and Capita. Find out more at www.fera.co.uk.

Name of organisation	***Veterinary Medicines Directorate (VMD)*** Website: www.gov.uk/vmd
Type of organisation	The VMD is an executive agency of Defra.
Mission and purpose	The vision of the VMD is the responsible, safe and effective use of veterinary medicinal products. In working towards achieving this vision the VMD aims to protect public health, animal health, the environment and promote animal welfare by assuring the safety, quality and efficacy of veterinary medicines. The VMD is responsible for: • the assessment, issue and maintenance of all national Marketing Authorisations (MA) for veterinary medicines in accordance with European Community and UK legislation • acting as Reference Member State (RMS), Rapporteur, Co-Rapporteur or Concerned Member State (CMS) for designated European applications for centralised or decentralised or mutual recognition authorisations • controls on the manufacture and distribution of veterinary medicinal products including inspections • pharmacovigilance through the surveillance of Suspected Adverse Events (SAEs) • surveillance for residues of veterinary medicines and illegal substances in animals and animal products • the provision and implementation of policy advice on these matters to Ministers • the management of the Research & Development (R&D) programme linked to veterinary medicine issues • the co-ordination of Defra's work on antimicrobial resistance via the Defra Antimicrobial Resistance Coordination (DARC) Group and policy lead for this work
Key science and engineering staff	Director and Chief Executive: Pete Borriello Email: p.borriello@vmd.defra.gsi.gov.uk Tel: 01932 338301
Links to other expertise	The VMD works with the devolved administrations in developing veterinary medicines policy and by doing so contributes to their strategic objectives. VMD work increasingly engages with the European Medicines Regulatory Network regulating veterinary medicines across the European Union (EU) and European Economic Area (EEA). They work closely with European colleagues to harmonise the authorisation of veterinary medicines and thus empowering the free movement of goods and services. Independent Advisory Bodies: • Veterinary Products Committee (VPC): offers advice to the VMD on behalf of the Secretary of State, in respect of new and renewal Marketing Authorisations (MAs), Provisional MAs, variations to MAs and Animal Test Certificates (ATCs). • Veterinary Residues Committee: provides high quality, independent, expert advice to VMD and the Food standards Agency.

Subject areas over which the organisation has ownership	Veterinary Medicinal products including antimicrobial resistance issues.
Approximate number of staff who are scientists or engineers	48 Natural Scientists.
Examples of work	The VMD runs food surveillance programmes to analyse for residues of veterinary medicines or environmental contaminants. There is the Statutory Surveillance Programme and the Non-Statutory Surveillance Programme.
Emergency procedure and contacts	General enquiries: Tel: 01932 336911 Email: postmaster@vmd.defra.gsi.gov.uk

Name of organisation	***The Marine Management Organisation (MMO)*** Website: www.gov.uk/mmo
Type of organisation	The MMO is an executive non-departmental public body (NDPB) established and given powers under the Marine and Coastal Access Act 2009.
Mission and purpose	The MMO's main mission is to enable sustainable growth in our marine area. The MMO has been established to make a significant contribution to sustainable development in the marine area and to promote the UK government's vision for clean, healthy, safe, productive and biologically diverse oceans and seas. The MMO is an enabling marine regulator, helping marine industries expand and grow wherever possible. By following the principles of better regulation and pursuing innovative management arrangements, MMO will improve efficiencies for those they regulate by reducing regulatory burdens. They have a wide range of responsibilities, including: • implementing a new marine planning system designed to integrate the social requirements, economic potential and environmental imperatives of our seas • implementing a new marine licensing regime that is easier for everyone to use with clearer, simpler and quicker licensing decisions • managing UK fishing fleet capacity and UK fisheries quotas • working with Natural England and the Joint Nature Conservation Committee (JNCC) to manage a network of marine protected areas (marine conservation zones and European marine sites) designed to preserve vulnerable habitats and species in UK marine waters • responding to marine emergencies alongside other agencies • developing an internationally recognised centre of excellence for marine information that supports the MMO's decision-making process.
Key science and engineering staff	Acting Chief Scientific Advisor: Dr Dickon Howell
Links to other expertise	The MMO collaborates with Natural England and the Joint Nature Conservation Committee to manage a network of marine protected areas.
Approximate number of staff who are scientists or engineers	The MMO has no designated scientists. However, it does have staff with a science background who provide 'Technical Support' to support MMO decision making.
Examples of work	MMO developed the Strategic Evidence Plan (SEP) to set the focus and direction for its evidence and research programme for the period of 2011 to 2015. The MMO has reports that outline the current state of knowledge and/or evidence on relevant topics and these are available alongside a two-page report note for each report that summarises the key information and findings. They aim to make all commissioned research widely available to increase the common understanding and the use of best available evidence. They will publish further commissioned reports as they are completed. For further information please email evidence@marinemanagement.gov.uk

Emergency procedure and contacts	General enquires: Tel: 0300 123 1032 Email: info@marinemanagement.org.uk

Name of organisation	***Environment Agency (EA)*** Website: www.gov.uk/environment-agency
Type of organisation	An Executive Non-departmental Public Body responsible to the Secretary of State for Environment, Food and Rural Affairs (Defra)
Mission and purpose	The Environment Agency's principal aims are to protect and improve the environment, and to promote sustainable development. It plays a central role in delivering the environmental priorities of central government through our functions and roles. Priorities are to: • act to reduce climate change and its consequences • protect and improve water, land and air by tackling pollution • work with people and communities to create better places • work with businesses and other organisations to use resources wisely • be the best we can
Key science and engineering staff	Evidence Director: Miranda Kavanagh Head of Scientific & Evidence Services: Doug Wilson Head of Research: Andy Croxford Senior Scientific Advisor: Jim Wharfe Chief Economist: Ronan Palmer Head of Monitoring, Analysis & Innovation: Owen Lewis Head of Data, Mapping, Modelling & Information: Martin Whitworth
Links to other expertise	There are a number of partnership initiatives where the Environment Agency work with other organisations, make a contribution towards activities being undertaken by others and/or secure funds from an external body towards the cost of specific activities The Environment Agency, Forestry Commission and Natural England work together in partnership on a daily basis all over England.
Subject areas over which the organisation has ownership	The Environment Agency is responsible for: • regulation of major industry • flood and coastal risk management • water quality and resources • waste regulation • climate change • fisheries • contaminated land • conservation and ecology • navigation

Approximate number of staff who are scientists or engineers	48 Natural Scientists.
Examples of Work	www.gov.uk/government/organisations/environment-agency/about/research http://evidence.environment-agency.gov.uk/FCERM/en/Default/FCRM.aspx
Emergency procedure and contacts	Incident Communication Service: Tel: 0845 850 3518 Email: incident_communication_service@environment-agency.gov.uk Evidence Directorate Duty Manager: Tel: 0800 028 4147 Email: evidence-incident_mg@environment-agency.gov.uk General enquiries: Tel: 03708 506 506 Email: enquiries@environment-agency.gov.uk

Name of organisation	***Joint Nature Conservation Committee (JNCC)*** Website: http://jncc.defra.gov.uk/
Type of organisation	JNCC is the public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation. Most of its funding, in the form of grant-in-aid, is from the Department for Environment, Food and Rural Affairs (Defra) and the devolved administrations.
Mission and purpose	JNCC advises Government and a wide range of bodies to help join up nature conservation policy and to deliver a strong and cost-effective evidence base by helping to see that the best possible return is achieved from investment in research and surveillance in the UK and internationally. Their work helps ro maintain and enrich biological diversity and conserve geological features. It also helps sustain natural systems, which provide the core "services" of food, fresh water and clean air. In this way they contribute to economic growth and social well-being, and are integral to sustainable development JNCC provides evidence, information and advice so that decisions are made that protect natural resources and systems. Its specific role is to work on nature conservation issues that affect the UK as a whole and internationally. Its priorities, work programmes and funding are agreed jointly each year by Defra and the devolved administrations.
Key science and engineering staff	Director of Evidence & Advice: Paul Rose
Links to other expertise	JNCC itself is a forum that brings together the UK's four country conservation bodies. It also works with others to get the most from investments in research. That includes enabling data held by a range of organisations to be available to all and developing strategies for collaborative research. JNCC also works with equivalent organisations in Europe and around the world to enable UK information to be shared and placed in context. Through work in partnership, nature conservation advice, policy and programmes provide greater environmental benefits as well as being fairer and delivering value for money. In the UK, JNCC works with a range of organisations, and through them with thousands of volunteers, to deliver surveillance schemes. They provide essential information on biodiversity status and trends.
Approximate number of staff who are scientists or engineers	125 natural scientists.
Examples of work	Priorities and programmes are detailed in their annual business plan. There is also the JNCC Surveillance Programme.
Emergency procedure and contacts	Paul Rose: TBC General enquiries: Tel: 01733 562626

Name of organisation	***Natural England (NE)*** Website: www.gov.uk/natural-england
Type of organisation	Natural England is an Executive Non-departmental Public Body responsible to the Secretary of State for Environment, Food and Rural Affairs (Defra).
Mission and purpose	Natural England's purpose within its founding legislation is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development. This purpose includes: • promoting nature conservation and protecting biodiversity • conserving and enhancing the landscape • securing the provision and improvement of facilities for the study, understanding and enjoyment of the natural environment • promoting access to the countryside and open spaces and encouraging open-air recreation • contributing in other ways to social and economic well-being through management of the natural environment A healthy natural environment is essential for sustainable development, underpinning successful economies. As the Government's statutory adviser on the natural environment, Natural England plays a critical role in finding solutions which secure both long term benefits to our economy and the natural services we are dependent on. Natural England's views, advice and actions are based on the best available evidence and analysis. Its evidence is derived from a wide range of data and information about the natural environment and its management. They integrate information on biodiversity, geodiversity, soils and landscape and their management, together with economic and statistical analysis, social research, operational research, monitoring and surveillance (including horizon scanning). Information on what NE's evidence programme is, what data it gathers, uses of that data and how NE communicates evidence is available here: www.gov.uk/government/organisations/natural-england/about/research
Key science and engineering staff	Executive Director Science, Evidence & Advice: Andrew Wood Director of Evidence: Tim Hill (PA is Carol Scales, 0300 060 0464)
Links to other expertise	Natural England's non-executive Board contains nationally respected environmental scientists and through their links with the wider scientific community, particularly through their Science Advisory Committee, they play a key part in ensuring that our decisions, directions and advice are based on scientific expertise. More widely Natural England encourages the involvement of universities, colleges and their students in researching and monitoring the natural environment. This is done not only to provide the evidence it needs to undertake its work, but also to promote understanding and engagement and to help develop the next generation of environmental scientists.

Subject areas over which the organisation has ownership	See mission and purpose above.
Approximate number of staff who are scientists or engineers	160 Environmental Specialists who spend much of their time engaging with science and evidence issues. Nonetheless, a high proportion of NE staff are scientists by training. NE have a small number of specialists more closely linked to other Government professions such as economists and social scientists.
Examples of work	Specific areas of work include: • Conservation of landscape, biodiversity and geodiversity and our marine environment. • Support for sympathetic farming and land stewardship. • The opportunities to enjoy and benefit from a healthy natural environment. • Statutory duty to promote access to the countryside. • The mechanisms used to protect the natural environment including designated areas, spatial planning, regulation and licensing. • Work towards a secure environmental future for the natural environment in 2060, including the impact of climate change and meeting increasing energy demands. • Consultations and the research and evidence which underpins NE's work
Emergency procedure and contacts	General enquiries: Tel: 0845 600 3078 Email: enquiries@naturalengland.org.uk

Name of organisation	***The Royal Botanic Gardens, Kew (RBG, Kew)*** Website: www.kew.org/science-conservation/research-data
Type of organisation	Executive Non Departmental Public Body (NDPB). As an Executive NDPB, Kew operates at arm's length from its sponsor department, the Department for Environment, Food and Rural Affairs (Defra), who also provide some funding as grant-in-aid.
Mission and purpose	Kew is a world leading plant science and conservation organisation. Its scientific resources and expertise are focused on finding plant-based solutions to global challenges such as biodiversity loss, ecosystem service provision (food and water security, poverty, disease) and changing climate. The strategy at the heart of this work is Kew's Breathing Planet Programme. **Mission statement**: To inspire and deliver science-based plant conservation worldwide, enhancing the quality of life. **Business aim**: Kew's business aim is to produce basic and applied information about plant-and fungal-related topics and to manage and communicate this to stakeholders. This aim is carried out through science and research in systematics, biological interactions, economic botany, conservation and horticulture. This is underpinned by Kew's extensive collections of living and preserved plants and fungi, associated artefacts, literature and archives.
Key science and engineering staff	Director of Royal Botanic Gardens: Richard Deverell Director of Science: Professor Kathy Willis (k.willis@kew.org)
Links to other expertise	Kew scientists are involved in hundreds of scientific projects of varying scales ranging from individual PhD research programmes to large-scale network endeavours involving more than 40 institutional partners, across several continents.
Subject areas over which the organisation has ownership	Biodiversity, plant conservation, plant taxonomy, plant quarantine and plant health.
Approximate number of staff who are scientists or engineers	290 Natural Scientists.
Examples of work	Kew's Breathing Planet Programme is Kew's 10-year action plan to rescue, revive and restore the plants and fungi that directly or indirectly sustain us all. Its aim is to help the planet – and everything that lives on it – to breathe a little more easily, paving the way for a better and more secure future
Emergency procedure and contacts	General enquiries: Tel: 020 8332 5655 Email: info@kew.org

Name of organisation	***Forest Research*** Website: www.forestry.gov.uk/forestresearch
Type of organisation	Forest Research is the research agency of the Forestry Commission, which itself is a non-ministerial department of the Department for Environment, Food & Rural Affairs.
Mission and purpose	Forest Research aims to provide research services relevant to UK and international forestry interests and inform and support forestry's contribution to UK governmental policies. This includes: • To assist the Forestry Commission in achieving its high-level objectives • On behalf of UK Government and the devolved administrations, to take the lead in development and promotion of sustainable forest management and to support its achievement internationally • To support and enhance forestry and its role in sustainable development by providing high-quality research and development in a well-run organisation
Key science and engineering staff	Forestry Commission Chief Scientific Advisor and Forest Research Chief Scientist Professor Peter Freer-Smith
Links to other expertise	The core role is to provide the evidence base for UK forestry practices and to support innovation. Forest Research has a growing portfolio of work for external clients. It provides research, development and associated services to government departments and commercial organisations in the UK, European Union and elsewhere. The Expert Committee on Forest Science provides guidance for Forest Research and the Forestry Commission on the quality and direction of our research. Forest Research works closely with the Forestry Commission, the European Commission and other international organisations.
Approximate number of staff who are scientists or engineers	111
Examples of work	Detailed information about Forest Research: achievements and future plans are available in its corporate publications.
Emergency procedure and contacts	Chris Quine (Head of Centre for Ecosystems, Society and Biosecurity) Northern Research Station, Bush Estate, Roslin, Midlothian, EH25 9SY Telephone: 0131 445 6979 Hugh Williams (Head of Centre for Research Services) Alice Holt Lodge, Wrecclesham, Farnham, Surrey, GU10 4LH Telephone: 01420 526194

Name of organisation	**Department of Health (DH)** Website: www.gov.uk/dh
Type of organisation	DH is a ministerial department, supported by 23 agencies and public bodies.
Mission and purpose	The Department of Health (DH) helps people to live better for longer. They lead, shape and fund health and care in England, making sure people have the support, care and treatment they need, with the compassion, respect and dignity they deserve. DH responsibilities include: • leading across health and care by creating national policies and legislation, providing the long-term vision and ambition to meet current and future challenges, putting health and care at the heart of government and being a global leader in health and care policy • supporting the integrity of the system by providing funding, assuring the delivery and continuity of services and accounting to Parliament in a way that represents the best interests of the patient, public and taxpayer • championing innovation and improvement by supporting research and technology, promoting honesty, openness and transparency, and instilling a culture that values compassion, dignity and the highest quality of care above everything • DH encourages staff in every health and care organisation, including its own, to understand and learn from people's experience of health and care and to apply this to everything they do DH priorities for 2013 to 2014 are: • preventing people from dying prematurely by improving mortality rates for the big killer diseases, to be amongst the best in Europe, through improving prevention, diagnosis and treatment • improving the standard of care throughout the system so that quality of care is considered as important as quality of treatment, through greater accountability, better training, tougher inspections and more attention paid to what patients say • improving treatment and care of people with dementia, to be among the best in Europe through early diagnosis, better research and better support • bringing the technology revolution to the NHS to help people, especially those with long term conditions, manage their health and care
Key science and engineering staff	Chief Medical Officer and Chief Scientific Adviser: Prof Dame Sally Davies Director General, Public Health: Dr Felicity Harvey Deputy Chief Scientific Advisers: Dr Mark Bale and Dr Russell Hamilton Head of Science and Engineering Profession: Dr Mark Bale
Links to other expertise	As well as drawing on the analysis and economist communities, the Department's non-departmental public bodies provide independent advice on technical, scientific or other complex issues.

Approximate number of staff who are scientists or engineers	Approximately 50 in the core Department with the majority of scientists being based in the Department's Agencies, the Medicines and Healthcare products Regulatory Agency and Public Health England.
Examples of work	Examples of work under DH's 4 main priorities are: • Public health • National Health Service • Social Care • Public safety and emergencies
List of key agencies and non-departmental public bodies employing scientists and engineers	Executive Agencies: • Medicines and Healthcare Products Regulatory Agency • Public Health England Executive non-departmental public bodies: • Care Quality Commission • Human Fertilisation and Embryology Authority • Human Tissue Authority • National Institute for Health and Care Excellence • NHS England
Emergency procedure and contacts	General enquiries: Ministerial Correspondence and Public Enquiries Unit Department of Health Richmond House 79 Whitehall SW1A 2NS Telephone: 020 7210 4850 Contact form

Name of organisation	***Medicines and Healthcare Products Regulatory Agency (MHRA)*** Website: www.gov.uk/mhra
Type of organisation	The MHRA is an executive agency of the Department of Health.
Mission and purpose	The MHRA is responsible for regulating all medicines and medical devices in the UK by ensuring they work and are acceptably safe. **Vision** Protect and improve the health of millions of people every day through the effective regulation of medicines and medical devices, underpinned by science and research. Their aims are: • Protecting public health through regulation, with acceptable benefit-risk profiles for medicines and devices. • Promoting public health by helping people who use these products to understand their risks and benefits. • Improving public health by encouraging and facilitating developments in products that will benefit people. • Supporting the development and safe use of biological medicines **Objectives** • safeguard public health through their primary role in ensuring that the products they regulate meet required standards, that they work and are acceptably safe • carry out their communication role through the provision of accurate, timely and authoritative information to healthcare professionals, patients and the public • support research, ensuring through the application of Better Regulation principles that regulation does not stifle innovation • influence the shape of the future regulatory framework through use of their effective European and International relationships • run an organisation with a skilled and equipped workforce that is fit for the future. • Developing and supplying measurement methods and global standards to underpin accurate dosing and consistent manufacture of biological medicines
Key science and engineering staff	Chief Executive Officer of MHRA: Dr Ian Hudson Director of Inspection, Enforcement and Standards (IE&S): Gerald Heddell Director of National Institute for Biological Standards and Control (NIBSC): Stephen Inglis Director of Clinical Practice Research Datalink (CPRD): Dr Janet Valentine Acting Director of Licensing: Dr Siu Ping Lam Director of Vigilance & Risk Management of Medicines: Dr June Raine Director of Medical Devices: John Wilkinson

Links to other expertise	On medicines, MHRA collaboration with other EU regulatory agencies takes place in the context of the European Medicines Regulatory Network. This comprises the medicines regulatory authorities of the EU Member States, the European Commission, the Heads of Medicines Agencies (HMA) network, the London-based European Medicines Agency (EMA) and a number of other EU agencies such as the European Directorate for the Quality of Medicines and Healthcare (EDQM), which coordinates the work of the European Pharamcopoeia and the network of European Official Medicines Control Laboratories. The agency also engages with international agencies, including: World Health Organization (WHO); Council of Europe; International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH); International Medical Device Regulators Forum (IMDRF); Pharmaceutical Inspection Cooperation Scheme (PIC/S); international pharmacopeias. The agency also has access to a wide range of independent scientific experts from its advisory committees such as the Commission on Human Medicines (CHM) and its Expert Advisory Groups (EAG) and other external panel of experts.
Subject areas for which the organisation has ownership	• Regulation of medicines and devices including safety monitoring. • Inspection & manufacturing standards including enforcement; • British Pharmacopoeia • Control of standards for chemical & biological reference materials; • Scientific advice to industry/academia in the development of new and existing medicines. • Innovation Office to assist industry/academia to navigate the regulatory framework
Approximate number of staff who are scientists or engineers	Approximately • 240 scientific staff in NIBSC (bacteriology, virology, immunology, haemostasis, transfusion medicine, protein chemistry, endocrinology, stem cell biology, vaccine development, product formulation); • 175 in Licensing Division (Doctors, pharmacists, toxicologists, biostatistics and other scientists in life sciences); • 125 in VRMM Division (Doctors, pharmacists, scientists in life sciences); • 15 in CPRD (statistical/science based staff); • 60 in Medical Devices Division (Science and engineering staff ranging from mechanical and electrical engineers, biomedical engineers, biochemists, physicists and biologists); • 65 inspectors who have various scientific backgrounds, including, pharmacists, chemists, biologists and a medic; • 20 scientific staff, including chemists, biologists, physicists, responsible for publishing the British Pharmacopoeia and providing laboratory services to support the MHRA's activities; and • 3 scientific staff – one chemist, two pharmacists responsible for assessing potentially defective medicines and imported unlicensed medicines.

Examples of work	Activities include: • Authorising medicines before they can be marketed, reviewing scientific data supporting quality, safety & efficacy • Ensuring clinical trials meet robust standards and safeguard patient's interests • Inspecting the quality of medicines as manufactured and distributed • Overseeing UK Notified Bodies that audit medical device manufacturers • Monitoring the safety of medicines and devices, encouraging everyone to report suspected problems with both medicines and devices and then investigating these reports, taking regulatory action where appropriate • Investigating, and prosecuting where necessary, cases of non-compliance including advertising claims. • Carrying out scientific research to better the characteristics of biological medicines that affect their safety and efficacy • Publication of the British Pharmacopoeia and British Approved Names publications • Provision and Sales of chemical reference standards, mainly to the pharmaceutical industry The MHRA regulates medicines, devices, advanced therapy medicinal products and blood. Click the links for more details on what they regulate and how they regulate. An example of MHRA's work is its commitment to the UK government's Better Regulation programme. MHRA recognise that reducing unnecessary regulation can allow us to concentrate resources on those activities that have the greatest impact on public health. The Agency has contributed significantly to the Department of Health Administrative Burden Reduction Simplification Plan, and is taking a lead role in shaping the developing European better regulation agenda.
List of key agencies employing scientists and engineers	The MHRA is a centre of the Medicines and Healthcare Products Regulatory Agency which also includes the National Institute for Biological Standards and Control (NIBSC), and the Clinical Practice Research Datalink (CPRD). MHRA Innovation Office.
Emergency procedure and contacts	General enquiries: Tel: 02030806000 Email: info@mhra.gsi.gov.uk Clinical trials (02030806456) Defective medicines reporting (02030806574) Medicines enforcement (02030806330) Specific enquiries by MHRA division: www.gov.uk/government/organisations/medicines-and-healthcare-products-regulatory-agency#org-contacts

Name of organisation	***Public Health England (PHE)*** Website: www.gov.uk/phe
Type of organisation	PHE is an executive agency of the Department of Health.
Mission and purpose	Public Health England's mission is to protect and improve the nation's health and to address inequalities. It is responsible for: • making the public healthier by encouraging discussions, advising government and supporting action by local government, the NHS and other people and organisations • supporting the public so they can protect and improve their own health • protecting the nation's health through the national health protection service, and preparing for public health emergencies • sharing information and expertise with local authorities, industry and the NHS, to help them make improvements in the public's health • researching, collecting and analysing data to improve understanding of health and come up with answers to public health problems • reporting on improvements in the public's health so everyone can understand the challenge and the next steps • helping local authorities and the NHS to develop the public health system and its specialist workforce PHE priorities are: • helping people to live longer and more healthy lives by reducing preventable deaths and the burden of ill health associated with smoking, high blood pressure, obesity, poor diet, poor mental health, insufficient exercise, and alcohol • reducing the burden of disease and disability in life by focusing on preventing and recovering from the conditions with the greatest impact, including dementia, anxiety, depression and drug dependency • protecting the country from infectious diseases and environmental hazards, including the growing problem of infections that resist treatment with antibiotics • supporting families to give children and young people the best start in life, through working with health visiting and school nursing, family nurse partnerships and the Troubled Families programme • improving health in the workplace by encouraging employers to support their staff, and those moving into and out of the workforce, to lead healthier lives • promoting the development of place-based public health systems • developing their own capacity and capability to provide professional, scientific and delivery expertise to partners

Key science and engineering staff	Director of Microbiology Services and Scientific Advisor to CE: Christine McCartney Chief Knowledge Officer: Prof John Newton Director for Health Protection and Medical Director: Dr Paul Cosford Chief Operating Officer: Richard Gleave Director of Programmes: Sally Warren
Links to other expertise	PHE works closely with the academic community, e.g. universities and the research councils, and with other expert organisations, e.g. other government agencies, NHS.
Subject areas for which the organisation has ownership	Public Health (Health Protection, Health Improvement, Healthcare Public Health)
Approximate number of staff who are scientists or engineers	PHE employs approximately 2,400 staff in scientific areas at all levels in the following functional areas microbiology services, health protection including epidemiology and informatics, radiation, chemical, and environmental hazards, behavioural sciences.
Examples of work	PHE works on the following topics: • Public health • National Health Service • Public safety and emergencies • Local government • Science and innovation Scientific Expertise in Microbiology, Virology, Diagnostic and research science including: • Bioinformatics • Clinical Microbiology • Clinical Virology • Biomedical and Clinical Science • Food Water & Environment Microbiology Services • Environmental public health science (environment, radiation and chemical hazards) Radiation Protection • Reference Microbiology (Bacteriology and Virology) • Epidemiology

	• Bioinformatics • Clinical Microbiology • Clinical Virology • Biomedical and Clinical Science • Food Water & Environment Microbiology Services • Environmental public health science (environment, radiation and chemical hazards) Radiation Protection • Reference Microbiology (Bacteriology and Virology) • Epidemiology • Modelling & Statistics • Information Science • Research and Development • Emergency Response Examples of PHE work include: Antimicrobial Resistance – e.g. a toolkit to manage hospital infections caused by antibiotic-resistant bacteria, launched on 6 March 2014. Chemicals, Radiation and Environmental Hazards e.g. Winter watch bulletins and the PH response to flooding events in Winter 2013-14. Longer Lives – quantifies premature deaths from the four most common causes of mortality in England – heart disease and stroke, lung disease, liver disease, and cancer – highlights inequalities in premature mortality across the country and provides examples of effective local interventions.
Emergency procedure and contacts	General enquiries: Tel: 02076548000 Email: enquiries@phe.gov.uk Emergency response and preparedness: 01980612100 Infectious diseases: 02082004400 Biopharmaceutical manufacture: 01980612391 Research & technical microbiology services & innovation: 01980616709 Radiation protection services: 01235822783 Health protection services: 01980612805 Radiation emergency contact: 01235834590 Chemicals emergency contact: 08448920555 Poisons emergency contact: 08448920111

Name of organisation	**Department for Transport (DfT)** Website: www.gov.uk/dft
Type of organisation	DFT is a ministerial department, supported by 23 agencies and public bodies.
Mission and purpose	DfT works with its agencies and partners to support the transport network that helps the UK's businesses and gets people and goods travelling around the country. The Department plans and invests in transport infrastructure to keep the UK on the move. DfT is responsible for: • providing policy, guidance, and funding to English local authorities to help them run and maintain their road networks, improve passenger and freight travel, and develop new major transport schemes • investing in, maintaining and operating around 4,300 miles of the motorway and trunk road network in England through the Highways Agency • setting the strategic direction for the rail industry in England and Wales – funding investment in infrastructure through Network Rail, awarding and managing rail franchises, and regulating rail fares • improving English bus services through funding and regulation • working to make roads less congested and polluted by promoting lower carbon transport, including cycling and walking • encouraging the use of new technology such as smart ticketing and low carbon vehicles • maintaining high standards of safety and security in transport • supporting the maritime sector by producing the overall strategy and planning policy for ports in England and Wales • setting national aviation policy, working with airlines, airports, the Civil Aviation Authority and NATS (the UK's air traffic service)
Key science and engineering staff	Chief Scientific Adviser: Professor Phil Blythe Deputy Chief Scientific Adviser and Head of Science and Engineering profession: Dr Miles Elsden Tel: 020 7944 2261
Links to other expertise	DfT's scientists and engineers work with the other analytical groups:, economists; transport modellers; social researchers; operational researchers; and statisticians, in both central units and within policy teams, to ensure that the research and evidence we gather and use is relevant, robust and delivers value for money. The core department also draws on its network of executive agencies, some of which conduct their own research and have in-house science and engineering expertise, for example the Highways Agency and the Rail, Air and Marine Accident Investigation Branches.

	The Department's Science Advisory Council provides independent scientific advice and challenge to the Department. It assists the Department's Chief Scientific Adviser in assuring the quality and appropriateness of the Department's research portfolio and objectives, as well as providing important advice on key areas of Departmental policy. DfT maintains a broad range of relationships with key transport research sponsors both within the UK and internationally, including the Research Councils, the Technology Strategy Board and the EU's research framework programmes. DfT also collaborate with academia (e.g. the Universities' Transport Study Group), industry (e.g. the Transport Systems Catapult) and professional bodies: for example, the Institute of Mechanical Engineers; and the Institute of Civil Engineers.
Approximate number of staff who are scientists or engineers	Approximately 450 specialist science and engineering posts.
Examples of work	The main themes of DfT's evidence and research programme and an overview of how evidence and research is generated, managed and used by DfT are described in 'Evidence and Research for 2013/4 and beyond Summary document' [forthcoming]. The document describes five research themes: economic growth, technology, environmental impact, safety and security, and enhancing the travel experience. Information about research projects funded by the Department is available from the research database. Recent research publications are available on the DfT website. Examples of recent reports include: Rail alternatives to HS2 Examining the case for conventional alternatives to HS2 and possible enhancements to the existing rail network. UK H2Mobility: potential for hydrogen fuel cell electric vehicles – phase 1 results Brings together industry and government to evaluate how hydrogen fuel cell electric vehicles can help to decarbonise road transport. Heavy goods vehicle speed limit increase evaluation: final report Research report about the risks involved in increasing the speed limit of heavy good vehicles over 7.5 tonnes on single carriageways.
List of key agencies employing scientists and engineers	• Highways Agency • Driver and Vehicle Standards Agency • Maritime and Coastguard Agency • Vehicle Certification Agency • Air Accident Investigation Branch • Rail Accident Investigation Branch • Marine Accident Investigation Branch
Emergency procedure and contacts	Incident Room Manager 020 7944 6694 Out of hours Duty Office 020 7944 5999 Incident Room email address: dftincidentroom@dft.gsi.gov.uk

Name of organisation	***Vehicle Certification Agency (VCA)*** Website: www.dft.gov.uk/vca
Type of organisation	VCA is an Executive Agency of the Department for Transport and the UK's national approval authority for new road vehicles, agricultural tractors and off-road vehicles. Their status allows close links with the UK Government and European policy formulation and enforcement of vehicle safety and environmental standards.
Mission and purpose	VCA is the designated UK Approval Authority and Technical Service for type approval to all automotive European Union (EU) Directives and the equivalent United Nations Economic Community for Europe (UNECE) Regulations. **Vehicle Type Approval** is the confirmation that production samples of a design will meet specified performance standards. The VCA Dangerous Goods Office is the UK authority for the certification of packaging and intermediate bulk containers used for the transport of dangerous goods, in accordance with national and international regulations. VCA provides Enforcement services to government for Non-Road Mobile Machinery, Waste Electrical and Electronic Equipment, End of Vehicle Life, and Waste Batteries legislation, and for fuel consumption and CO2 advertising. VCA is a respected Certification Body for Management Systems to ISO9001, ISO/TS 16949, OSHAS 18001, ISO 14001, Acorn, EMAS and ISO50001. VCA priorities include: • Ensuring that vehicles and vehicle components meet legislative standards for safety and environmental protection • Providing a high quality service to its industry customers • Providing expert international test and certification services for vehicles and vehicle parts • Providing high quality type approval certificates that are recognised without question by other Approval Authorities • Encouraging the application of high standards amongst our peers
Key science and engineering staff	Chief Executive Paul Markwick (Tel: 0117 952 4100) Technical and Quality Branch Head Tony Stenning (Tel: 0117 952 4111) Technical Knowledge Manager Ross Hughes (Tel: 0117 952 4127)
Links to other expertise	• Links with global automotive industry • Links with DfT and other DfT agencies • Links with organisations that support the automotive industry, including testing facilities, testing equipment suppliers, organisations involved in simulation, components suppliers, etc.

Subject areas for which the organisation has ownership	• Type approval of vehicles and vehicle components • Technical Interpretations of UNECE and EC legislation relating to Type Approval • Type approval of dangerous goods packaging and containers
Approximate number of staff who are scientists or engineers	70
Examples of work	• Witness Testing of Type Approval tests • Review of Technical Applications for Civil Enforcement Camera Systems • Assessment of suitability of manufacturing facilities to meet ISO9001 and Conformity of Production requirements • Deciding on agreed technical interpretations of legislation associated with automotive type approval • Horizon scanning for technology and science associated with the automotive industry • Engineering Interpretations of Automotive Type Approval Legislation • Assessment of new automotive technology against legislative requirements • Assessment of dangerous goods packaging and containers
Emergency procedure and contacts	General enquiries: Email: enquiries@vca.gov.uk Tel: 0300 330 5797

Name of organisation	**Foreign & Commonwealth Office (FCO)** Website: www.gov.uk/fco
Type of organisation	FCO is a ministerial department.
Mission and purpose	The FCO promotes British interests overseas, supporting UK citizens and businesses around the globe. FCO are responsible for: • safeguarding Britain's national security by countering terrorism and weapons proliferation, and working to reduce conflict • building Britain's prosperity by increasing exports and investment, opening markets, ensuring access to resources, and promoting sustainable global growth • supporting British nationals around the world through modern and efficient consular services
Key science and engineering staff	Chief Scientific Advisor: Prof Robin Grimes
Links to other expertise	FCO has an Economics Unit and network, and a cadre of Research Analysts who work on key geographic and thematic issues. Further details can be found in the 2012 GO-Science SEA Review of Science and Engineering in the FCO. FCO and BIS have joint responsibility for the overseas Science and Innovation Network (SIN) that includes staff employed at Embassies and High Commissions overseas recruited for their science skills. Further SIN details can be found at UK Science and Innovation Network - GOV.UK.
Subject areas for which the organisation has ownership	For further information on HMG policy around British Antarctic Territory please contact the Foreign & Commonwealth Office Polar Regions Unit on 020 7008 1639.
Approximate number of staff who are scientists or engineers	CSA is the only member of staff specifically employed as a scientist.
Examples of work	The FCO promotes British interests overseas, supporting our citizens and businesses around the globe. We are responsible for: • safeguarding Britain's national security by countering terrorism and weapons proliferation, and working to reduce conflict • building Britain's prosperity by increasing exports and investment, opening markets, ensuring access to resources, and promoting sustainable global growth • supporting British nationals around the world through modern and efficient consular services Fuller details of our work are available on the FCO pages of GOV.UK.

List of key agencies employing scientists and engineers	FCO Services and British Council.
Emergency procedure and contacts	General enquiries: Tel: 02070081500 Email: fcocorrespondence@fco.gov.uk Science & Innovation Network: sinmanagement@bis.gsi.gov.uk

Name of organisation	**Food Standards Agency (FSA)** Website: www.food.gov.uk
Type of organisation	FSA is a non-ministerial government department responsible for food safety and hygiene across the UK.
Mission and purpose	The FSA is responsible for food safety and food hygiene across the UK. They work with Local Authorities to enforce food safety regulations and have staff who work in UK meat plants to check that the requirements of the regulations are being met. Their responsibilities include: • Food safety and hygiene • Food law enforcement (with local authorities) • Labelling (safety related including allergy for all of the UK, and in addition other labelling (not safety related) in Scotland, Wales and Northern Ireland) • Nutrition and nutrition labelling in Scotland and Northern Ireland (Please note that Defra is responsible for labelling that is not related to safety in England and that Department of Health is responsible for nutrition and nutrition labelling in England) The FSA also commissions research related to food safety. The five outcomes the FSA aims to deliver are: • Food produced or sold in the UK is safe to eat. • Imported food is safe to eat. • Food producers and caterers give priority to consumer interests in relation to food. • Consumers have the information and understanding they need to make informed choices about where and what they eat. • Business compliance is effectively supported because it delivers consumer protection. This will include a focus on effective, risk-based and proportionate regulation and enforcement.
Key science and engineering staff	Chief Scientific Advisor: Prof Guy Poppy Director of Policy: Steve Wearne Deputy CSA and Director of Science: Penny Bramwell Director of Operations: Andrew Rhodes
Links to other expertise	Key partners of the Food Standards Agency include: Local Authorities; Public Health England (PHE); Department of Health; Defra; other government Departments and Agencies; food business operators; European Food Safety Authority (EFSA); academia; national food agencies including animal welfare and veterinary agencies; European Commission; research councils; industry levy boards.

Links to other expertise	The work of the independent committees and working groups that advise the Food Standards Agency helps ensure that the Agency's advice to consumers is always based on the best and most recent scientific evidence. These include the following with their Secretariats in the Food Standards Agency: • Advisory Committee on Animal Feedingstuffs (ACAF) • Advisory Committee on Novel Foods and Processes (ACNFP) • Advisory Committee on the Microbiological Safety of Food (ACMSF) • General Advisory Committee on Science (GACS) • Social Science Research Committee (SSRC) and other committees with joint Food Standards Agency / Public Health England Secretariats: • Committee on Toxicity (COT) (Food Standards Agency lead) • Committee on Carcinogenicity (COC) (Public Health England lead) • Committee on Mutagenicity (COM) (Public Health England lead) and others with their Secretariats in other Departments, from which the Food Standards Agency draws upon for advice: • Advisory Committee on Dangerous Pathogens (ACDP) • Advisory Committee on Pesticides (ACP) • Defra Expert Committee on Pesticide Residues in Food (PRiF) • Veterinary Products Committee (VPC) • Veterinary Residues Committee (VRC) • Scientific Advisory Committee on Nutrition (SACN)
Subject areas over which the organisation has ownership	Food safety and hygiene, food law enforcement, labelling (see above at Mission and Purpose for split of responsibilities) and nutrition and nutrition labelling (see above at Mission and Purpose for split of responsibilities).
Approximate number of staff who are scientists or engineers	100 in posts requiring science (above 200 with science qualifications).
Examples of work	Areas of expertise include: Toxicology, microbiology and virology, TSEs, food allergy, animal feed science, environmental health, veterinary science, economics, social science, operational research and statistics, analytical methods, epidemiology, exposure assessment, nutrition. Details of the various FSA research projects can be found at www.food.gov.uk/science/research/ They include work in these areas: Food hygiene and microbiology: • Campylobacter

	• Listeria • Viruses • Verocytotoxin producing Escherichia coli • Future meat controls • TSEs Chemical safety: • Inorganic and process contaminants • Organic contaminants • Risk assessment • Additives and food contact materials • Novel and emerging technologies (e.g. GM, nanotechnology) • Food allergy and intolerance • Radiological monitoring • National Reference Laboratories Effective risk-based enforcement and compliance: • Food hygiene delivery • Research to support official controls on shellfish and fish • Animal feed statutory enforcement • Imported foods • General enforcement and compliance Cross-cutting and strategic work: • Cross cutting data sets • Strategic evidence • Social science and analytical evidence • Futures, horizon scanning, emerging risks Dietary health and nutrition
Emergency procedure and contacts	UK Headquarters: Aviation House 125 Kingsway London WC2B 6NH Switchboard: 020 7276 8000 General enquiries: Tel: 020 7276 8829 Email: helpline@foodstandards.gsi.gov.uk

	Chief Scientist's Team: Jane Ince Tel: 0207 276 8344 Email: jane.ince@foodstandards.gsi.gov.uk or cst@foodstandards.gsi.gov.uk Report a food incident: Tel: 020 7276 8448 (out of hours: 0845 051 8486) Email: foodincidents@foodstandards.gsi.gov.uk

Name of organisation	**Home Office (HO)** Website: www.gov.uk/home-office
Type of organisation	Home Office is a ministerial department, supported by 26 agencies and public bodies. The Home Office leads on immigration and passports, drugs policy, crime policy and counter-terrorism and works to ensure visible, responsive and accountable policing in the UK. Home Office priorities are to: • Empower the public to hold the police to account for their role in cutting crime • Free up the police to fight crime more effectively and efficiently • Create a more integrated criminal justice system • Secure our borders and reduce immigration • Protect people's freedoms and civil liberties • Protect our citizens from terrorism
Mission and purpose	Home Office Science is led by the Chief Scientific Adviser and is responsible for: • The development and application of physical and life sciences, engineering and technology to address policing, security and border issues; • The regulation of animal experimentation, forensic pathologists, the quality of forensic science and surveillance camera systems; • The delivery of the National DNA Database; • Support to most of the Home Office's independent scientific advisory committees; • The application of economics, operational research, analysis and social research techniques to issues in the Coalition Priority areas of migration, borders, crime and policing, and security, as well as to central Home Office functions; • The production of statistics, including the collation and publication of data on crime, drugs, policing, migration, scientific procedures carried out on animals, terrorism and alcohol licensing. Home Office Science directly contributes to the fulfilment of all the Home Office Coalition Priorities, and its objectives for 2013/14 are to: • Shape and support the policy stance taken by the Home Office through the provision of a credible evidence base; • Support operations and frontline delivery through the application of science and technology; • Provide effective regulatory functions in our defined areas of responsibility; • Stimulate innovation and drive economic growth through science, engineering and technology.

	Physical Science Activity The Centre for Applied Science and Technology (CAST) provide technical advice and operational support on the application of science, engineering and technology to policing, security and border issues. The National DNA Database (NDNAD) Delivery Unit (NDU) is responsible for the maintenance, operation, assurance and development of the NDNAD, and transferred to Home Office Science in October 2012. They are also responsible for the operation of the National Footwear Reference Collection. The Animals in Science Regulation Unit (ASRU) oversees the policy and licensing of the use of animals in experiments and carries out inspections of compliance and investigations into non-compliance. The Regulatory and Strategic Support Unit is responsible for the regulation of forensic pathologists and supporting the regulation of the quality of forensic science and surveillance cameras, working closely with the independent Forensic Science Regulator (FSR) and Surveillance Camera Commissioner. The Science Secretariat supports the Chief Scientific Adviser, the independent scientific advisory committees and the independent Forensic Science Regulator and Surveillance Camera Commissioner. The committees cover the misuse of drugs, poisons, animals in science and DNA ethics.
Key science and engineering staff	Chief Scientific Adviser: Prof Bernard Silverman Director, Science, Engineering and Technology / Head of Science and Engineering Profession: Alan Pratt
Links to other expertise	In order to ensure that the policy stance taken by the Home Office is supported by a credible evidence base, policy teams need to be confident in the quality of information provided to support decisions. Within Home Office Science; three policy-facing analysis units (Crime and Policing Analysis (CPA); Migration and Border Analysis (MBA) and Office of Security and Counter-Terrorism Research and Analysis)) are concerned with the analysis of migration; crime; policing and security issues; using economic; operational and social research techniques. The Decision Support for Operations (DSO) Unit and Economic Assessment Unit undertake overarching work to support Home Office units, such as the assessment of Portfolio and Investment Committee (PIC) business cases and the provision of rapid-response analysis, including underpinning work for the Spending Review. The Home Office Statistics unit are responsible for collecting, collating, analysing and publishing statistical data, to enable the public to hold the Government to account.
Subject areas for which the organisation has ownership	The Home Office works on the topics of: • Borders and immigration • National security • Crime and policing • Equality, rights and citizenship • Law and justice system

Approximate number of staff who are scientists or engineers	Approximately 170 scientists and engineers across a range of disciplines, including: • physics (40); • chemistry (24); • software and ICT (21); and ; • mechanical and civil engineering (20). • This figure also includes 28 vets working in support of the Animals in Science Regulation Unit.
Examples of work	Examples of Home Office Science work include: • An assessment of the detectability of 3D printed firearms across different X-ray and body scanner systems, and production of briefing material for operational security staff at airports to improve aviation security; • Publication of a guide to Type Approval of Mobile Preliminary Drug Testing Devices. This outlines the requirements manufacturers need to meet to have their mobile drug testing devices considered for type approval. This is a key element of enforcing the new offence of driving with a specified amount of a specified drug in the body; • ASRU leads for the Home Office on the Coalition Government commitment to work to replace, refine and reduce (3Rs) the use of animals in scientific research. In December 2013 ASRU published a Delivery Plan that set out the programmes and policies through which Government will continue to deliver its commitment. The consequence will be accelerated take up of the 3Rs - both domestically and internationally - set on the tenets of high standards of animal welfare alongside better science, faster science, and more cost-effective science. • The online publication of the UK Chemical Incidents Recovery Handbook, providing responders with strategies for return to normal following an incident; • The Advisory Council on the Misuse of Drugs has provided independent advice to the Home Secretary on a range of drugs. • As part of the Forensic Early Warning System (FEWS) initiative, CAST attended three music festivals over the summer (Glastonbury, Creamfields and Global Gathering) and carried out on-site analysis of drugs, which found some new psychoactive substances that had not previously been identified. • Publication in January 2014 of a new Fingermark Visualisation Manual, providing advice on the recovery and processing of fingermarks from crime scenes to police forces in the UK and internationally.
List of key agencies employing scientists and engineers	Home Office Science is responsible for the following Non-Departmental Public Bodies: • National DNA Database Ethics Group • Advisory Council on the Misuse of Drugs • Animals in Science Committee • Poisons Board

Emergency procedure and contacts	Home Office general enquiries: Tel: 0207 035 4848 Email: public.enquiries@homeoffice.gsi.gov.uk CAST general enquiries: Tel: 01727 816 400 Email: cast@homeoffice.gsi.gov.uk

Name of organisation	**Health and Safety Executive (HSE)** Website: www.hse.gov.uk
Type of organisation	Non-departmental public body.
Mission and purpose	HSE is Great Britain's national regulatory body with the important role of protecting the health, safety and welfare of workers and safeguarding others who may be exposed to risks from work activities.
Key science and engineering staff	Deputy Chief Executive: Prof Andrew Curran Chief Scientific Adviser: Prof Andrew Curran Corporate Science Unit: Paul Willgoss (paul.willgoss@hse.gsi.gov.uk)
Links to other expertise	The Director of Science is a member of HSE's Senior management Team and is also the Director of HSE's Chemical Regulations Directorate and Corporate Science Engineering & Analysis Directorate (CSEAD) which includes economists, statisticians, medics and epidemiologists.
Approximate number of staff who are scientists or engineers	1,100
Examples of work	HSE's work covers a varied range of activities, including securing compliance, enforcing the law and reviewing regulations, including reducing the burden of health and safety regulation on business, delivering research and producing statistics on work-related ill health, workplace fatalities and injuries, and enforcement in Great Britain. HSE's annual statistic reports are published on the HSE website: www.hse.gov.uk/statistics/index.htm HSE's Research reports are published on the HSE Website: www.hse.gov.uk/research/rrhtm/ The most recent research reports can be found here: www.hse.gov.uk/research/rrhtm/901-1000.htm In general, HSE applies the following areas of science and engineering across a range of industry sectors: • Construction / civil engineering • Control Systems • Electrical Engineering • Explosives • Human Factors • Mechanical Engineering • Microbiology • Noise & Vibration

	• Occupational Hygienist • Process Safety • Radiation • Risk Assessment • Occupational Health • Toxicology (Chemical Regulatory schemes) • Environmental Fate & Behaviour (Chemical Regulatory schemes) • Ecotoxicology (Chemical Regulatory schemes) • Efficacy (Chemical Regulatory schemes) • Epidemiology & Statistics • Psychology • Nuclear Engineering – The Office of Nuclear Regulation is in the process of becoming a Statutory Corporation Some additional disciplines, particularly those involving deep topic expertise, which is often sector specific; for example, those related to mining or offshore operations) are represented in smaller numbers. Note: Health & Safety Laboratory areas of Science & Engineering covered are not detailed here. These are considered separately on the HSL entry.
List of key agencies employing scientists and engineers	• Health and Safety Laboratory (HSL) • Office for Nuclear Regulation (ONR is a public corporation)
Emergency procedure and contacts	Office Hours via the Incident Contact Centre 0845 300 9923 (opening hours Monday to Friday 8.30am to 5pm) Out of Hours Duty Officer System 0151 922 9235 Both of these telephone systems will triage calls to relevant parts of HSE following HSE's internal major incident response plans. HSE is a Category 2 Responder under the Civil Contingencies Act (2004)

Name of organisation	***Health and Safety Laboratory (HSL)*** Website: www.hsl.gov.uk
Type of organisation	HSL is an agency of the Health & Safety Executive, which is a non-departmental public body.
Mission and purpose	HSL is the UK's health and safety laboratory, and their mission is to use science to enable a better working world. Their expertise is based on science and research combined with knowledge, based on investigating over 200 serious incidents a year on behalf of the Health and Safety Executive (HSE). HSL's expert teams know what goes wrong in workplaces. They help businesses and government to tackle complex issues, and find practical solutions based on scientific evidence. HSL was set up in 1911 to help keep people healthy and safe at work. Today, with over a century's experience, investment and growth, the scope of their expertise and work is unparalleled and ever-widening. Their activities range from helping organisations to control the hazards posed by industrial plant, through to assisting their management of the occupational health risks experienced by their workers. A key requirement running through all of this is an understanding of human behaviour in workplace environments. One of HSL's core strengths is to combine expertise in different areas to create multi-disciplinary teams who can focus on solving complex workplace health and safety problems.
Key science and engineering staff	Science and Delivery Director: Dr Andrew Curran
Links to other expertise	HSL currently has formal collaborative agreements with 20 scientific organisations in the UK and overseas and extensive informal networks throughout the world. Some examples of HSL's collaborating arrangements include: • World Health Organisation (WHO) • InterLab Forum • Partnership for European Research in Occupational Safety and Health (PEROSH) • Healthy Work Matters Group • Centre for Workplace Health
Approximate number of staff who are scientists or engineers	350
Examples of work	HSL's work focuses on a range of sectors, including: aerospace; construction; defence & security; healthcare; manufacturing; oil, gas & chemicals; power, utilities & nuclear; transport. In delivering this work HSL draws on the knowledge and experience of its scientific, engineering and medical staff who cover the widest range of disciplines for any equivalent organisation in Europe.

	Recent examples of work for other government departments: • HSL were recently commissioned by the Department for Culture, Media and Sport (DCMS) to carry out a one-off study, showing them where to focus their efforts to improve mobile phone coverage. They needed to know which mobile 'not spots,' where coverage was lacking, had the highest numbers of people living, working and studying in them, so they could make them a priority. HSL used DCMS's own data, together with the National Population Database, to come up with the answer. • HSE needed to focus their inspections on where there was the highest potential risk of workplace accidents and ill health. The bespoke Find-it tool that HSL devised uses HSE's own data alongside other data sets. On the local level, the tool now helps HSE to plan where to send inspectors, and at the national level, it helps HSE to plan strategic interventions and use its resources effectively. • HSL work closely with the Met Office and the Flood Forecasting Centre to model the effects of extreme weather conditions. The information they provide will enable proactive measures to be taken very quickly, to reduce the impact of severe weather on people and infrastructure. • HSL runs a number of national databases including the National Population Database, the Blood Lead Workers Database and Pesticide Users Database. For more case studies visit: www.hsl.gov.uk/casestudies.
List of key agencies employing scientists and engineers	Explosives Notified Body
Emergency procedure and contacts	General enquiries: 01298218000 Sample analysis enquiries: 01298218099 Proficiency testing enquiries: 01298218553

Name of organisation	**Ministry of Defence (MOD)** Website: www.gov.uk/mod
Type of organisation	The Ministry of Defence has 67,600 permanent and casual civilian personnel, including Royal Fleet Auxiliaries, Trading Funds and locally engaged civilians. The UK Regular Forces comprise 168,080 full time trained and untrained personnel: • Royal Navy 33,680 • Army 98,030 • Royal Air Force 36,370 UK Regular Forces figures do not include Gurkhas, full-time or mobilised reservists. Figures are correct as at 1 July 2013 and have been rounded to the nearest 10; numbers ending in 5 have been rounded to the nearest multiple of 20 to prevent systematic bias.
Mission and purpose	The MOD protects the security, independence and interests of the UK at home and abroad. Supporting its allies and partners whenever possible. The MOD's aim is to ensure that the armed forces have the training, equipment and support necessary for their work, and that it keeps within budget. The core responsibilities are: • Defending the UK and its overseas territories • Providing strategic intelligence • Providing nuclear deterrence • Supporting civil emergency organisations in times of crisis • Defending UK interests by projecting power strategically and through expeditionary interventions • Providing a defence contribution to UK influence • Providing security for stabilisation In 2012 and 2013 the MOD's priorities are: • To continue to bring stability to Afghanistan as part of the international task force and prepare for handover to the Afghans in 2014 • To fulfil the UK's ongoing defence commitments at home and across the world • To be fully prepared to take on a wide range of other military operations, as they develop To continue the transformation of defence through the restructuring of the armed forces to create a simpler and more effective organisation at a lower cost to the taxpayer
Key science and engineering staff	MOD Chief Scientist: Professor Vernon Gibson

Links to other expertise	Defence and armed forces - The government works to defend the UK against threats to its national security, and to defend the interests of the UK and its allies in the world. National security - The government works to identify the most pressing risks to UK security, and put in place the ways and means to address them. Foreign affairs - The government works to promote and protect UK interests internationally, and works with other countries to make progress on issues of mutual concern like trade, climate change, security and economic development.
Subject areas for which the organisation has ownership	Defence Engineering and Science Group (DESG) - A large community of professional engineers and scientists working within the Defence Equipment and Support (DE&S) civil service, to equip and support the UK armed forces with state of the art technology. Acquisition Operating Framework (AOF) - Defines how the MOD conduct, govern and control its defence acquisition process and is a main enabler for improving its delivery to the armed forces and for producing greater value for money for the taxpayer. Defence Medical Services (DMS) - The primary role of the DMS is to ensure that service personnel are ready and medically fit to go where they are required in the UK and throughout the world, generally referred to as being 'fit for task'. Defence Intelligence (DI) - An integral part of the MOD and is the main provider of strategic defence intelligence to the department and the armed forces. This includes timely intelligence products, assessments and advice to guide decisions on policy, to inform defence research and equipment programmes and to support military operations. Defence Suppliers Forum - The major conduit for MOD-industry relationships. It is chaired by Secretary of State Philip Hammond and includes representatives from prime contractors, international companies and Small and Medium Sized Enterprises (SMEs).
Examples of work	Operation Herrick – UK forces involvement in Afghanistan. The Gulf – The Royal Navy's maritime presence is a demonstration of the UK's continued commitment to enduring peace and stability. UN Operations - RAF personnel are deployed from time to time across the world in support of UN operations.
List of key agencies employing scientists and engineers	Defence Equipment & Support (DE&S) - Has £14 billion annual budget to buy and support all the equipment and services that the Royal Navy, British Army and Royal Air Force need to operate effectively. We work closely with industry, including through partnering agreements and private finance initiatives. Defence Science and Technology Laboratory (Dstl) - Maximises the impact of science and technology for the defence and security of the UK. Defence Support Group (DSG) - Provides the MOD with secure access to assured onshore capacity and capability for the through life maintenance, repair, overhaul, upgrade and procurement support services for defence equipment. UK Hydrographic Office (UKHO) - Produces nautical publications and services for the Royal Navy and merchant shipping, to protect lives at sea.

	Defence Scientific Advisory Council (DSAC) - Provides independent advice and analysis to the Secretary of State for Defence on science, engineering and technology matters. Defence Nuclear Safety Committee (DNSC) - The primary source of independent advice to the Secretary of State for Defence on nuclear safety issues associated with the defence nuclear programmes. Nuclear Research Advisory Council (NRAC) - Reviews the Atomic Weapons Establishment's nuclear warhead research and capability maintenance programme. Science Advisory Committee on the medical implications of less-lethal weapons (SACMILL) - Provides independent advice to UK government departments and organisations on the biophysical, biomechanical, pathological and clinical aspects of less-lethal weapon systems. Defence Safety and Environment Authority (DSEA) - The authority that is responsible for the regulation of defence safety and environmental protection. Atomic Weapons Establishment (AWE) builds and maintains warheads for Trident, a submarine-launched ballistic missile. The company has been at the forefront of the UK nuclear deterrence programme for more than 60 years, delivering to the UK Government, providing innovative solutions to national nuclear security and supporting the Continuous At Sea Deterrence (CASD). We are a centre of scientific and technological excellence, with some of the most advanced research, design and production facilities in the world.
Emergency procedure and contacts	Address: Ministry of Defence Whitehall London SW1A 2HB Tel: 020 7218 9000

Name of organisation	***Defence Science and Technology Laboratory (Dstl)*** Website: www.gov.uk/dstl
Type of organisation	Trading Fund Agency of the Ministry of Defence (MoD).
Mission and purpose	Dstl's purpose is to maximise the impact of science and technology for the defence and security of the UK. Its role is to: • Supply sensitive and specialist science and technology services for the MoD and wider government • Provide and facilitate expert advice, analysis and assurance to aid decision-making and to support MoD and wider government to be an intelligent customer • Lead the formulation, design and delivery of a coherent and integrated MoD science and technology programme using industrial, academic and government resources • Manage and exploit knowledge across the wider defence and security community, and understand science and technology risks and opportunities through horizon scanning • Act as a trusted interface between MoD, wider government, the private sector academia and allies to support military co-operation, capability delivery, diplomacy and economic policy • Champion and develop science and technology skills across MoD, including managing the careers of MoD scientists.
Key science and engineering staff	MOD Chief Scientist (non-Dstl staff, based in MOD Head Office): Professor Vernon Gibson CE (and Head of Science and Engineering Profession): Jonathan Lyle Programme & Delivery Director: Richard Brooks PDD@Dstl.gov.uk – Programme and Delivery Director's Office Chief Technical Officer: Professor Andy Bell TechnicalOffice@Dstl.gov.uk – CTO's office
Links to other expertise	Dstl draws on a number of areas of expertise in addition to in-house staff to deliver its work, as >60% of the MOD research programme is delivered by external suppliers.
Subject areas over which the organisation has ownership	Chemical, Biological incident response team Radiological Protection Forensic Explosives and Forensic exploitation Custodian of Science and Technology capability for MOD, and commissions the MOD research programme (circa £400M)

Approximate number of staff who are scientists or engineers	3200 Top areas of science are Engineering, Physics, Biology, Chemistry, Operational research/operational analysis, Human systems
Examples of work	Examples of Dstl work can be found here: www.gov.uk/government/collections/dstls-areas-of-work-programmes-and-project-portfolios. Dstl defines nine key capability areas in which it operates: Cyber: *A global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the internet, telecommunications networks, computer systems, and embedded processors and controllers* Counter Terrorism & Security: *the ability to react rapidly against a diverse range of unknown future threats in a world where the terrorist has access to the latest technology* Chemical, Biological, Radiological (CBR) defence: *The provision of leading edge technology and methods to reduce the probability of use and impact of CBR weapons* Weapons: *support the development of, assessment, testing and advice on conventional and novel weapons technologies and systems* Platform Systems: *Recognisably expert in Systems Engineering, e.g. software and safety engineering, architecting, etc: SQEP, professionally skilled specialists.* Analysis: *Use of scientific methods to solve complex policy and operational problems, helping them to make informed and evidence-based decisions* Human Capability: *Enabling the human contribution to be optimised in defence and security capability through the exploitation of science and technology.* Integrated Survivability: A*chieving optimum survivability at an affordable cost, enabling a mission to be completed successfully in the face of a hostile environment.* Command, Control, Computers, Communication, Intelligence, Surveillance, Target Acquisition and Reconnaissance (C4ISTAR): *The C4 to deliver ISTAR, the latter defined as activities that synchronise and integrate the planning and integration of information collection capabilities, including processing and dissemination of the resulting product* Emerging Technologies: *making informed decisions, using Horizon Scanning and other techniques, about whether to invest in research to harness emerging technologies to our needs*.
List of key agencies employing scientists and engineers	Dstl is itself an agency of MOD, being the first port of call for science and technology skills in the MOD.
Emergency procedure and contacts	Defence Science and Technology Laboratory Headquarters Porton Down Salisbury Wiltshire SP4 0JQ

	Switchboard: 01980 613000 Defence Science and Technology Programme and Delivery Directorate: 01980 658055 PDD@dstl.gov.uk Ministry of Defence Police 01980 613325 (Porton Down) 01959 8922709 (Fort Halstead)

Name of organisation	***Defence Equipment & Support (DE&S)*** Website: www.gov.uk/des
Type of organisation	An organisation within the Ministry of Defence.
Mission and purpose	Our Mission **"to equip and support our Armed Forces for operations now and in the future"** The Ministry of Defence's (MOD's) Defence Equipment and Support (DE&S) organisation has a £14 billion annual budget to buy and support all the equipment and services that the Royal Navy, British Army and Royal Air Force need to operate effectively. We work closely with industry, including through partnering agreements and private finance initiatives.
Links to other expertise	Defence Science and Technology Laboratory
Subject areas over which the organisation has ownership	We are responsible for: • the procurement and support of ships, submarines, aircraft, vehicles, weapons, information systems, satellite communications and supporting services • general requirements including food, clothing, medical supplies and temporary accommodation • the joint support chain • British Forces Post Office • Submarine Dismantling Project • all commercial activities within MOD
Approximate number of staff who are scientists or engineers	Defence Equipment & Support employs approximately 16,500 people around the UK and overseas and our headquarters are in Bristol. Approximately one third of the staff is employed across a wide variety of Engineering disciplines.
Examples of work	Our priorities include: • providing equipment and support for operations now and in the future, including meeting urgent operational requirements • acting as an objective decision maker and adviser on the right equipment and services • progressing key defence transformation projects, including the materiel strategy, which is looking at changes to improve delivery of equipment and support to the armed forces
List of key agencies employing scientists and engineers	• Defence Science and Technology Laboratory • Defence Support Group • UK Hydrographic Office • Oil and Pipelines Agency

	Ministry of Defence DE&S Secretariat Maple 0a, #2043 MOD Abbey Wood Bristol BS34 8JH General enquiries: Tel: 020 7218 9000 Email: DESSec-Internet@mod.uk

Name of organisation	**Scottish Government** Website: www.scotland.gov.uk
Type of organisation	A devolved government.
Mission and purpose	The devolved government for Scotland is responsible for most of the issues of day-to-day concern to the people of Scotland, including health, education, justice, rural affairs, and transport. **Purpose** To focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.
Key science and engineering staff	Chief Scientific Adviser and Head of Profession: TBC chiefscientificadviser@scotland.gsi.gov.uk Chief Scientific Adviser for Rural Affairs and Environment: Professor Louise Heathwaite Chief Scientist for Health: Professor Andrew Morris Head of Marine Scotland Science: Professor Colin Moffat Acting Head of Science and Advice for Scottish Agriculture (SASA): Dr Kevin O'Donnell/Dr Gerry Saddler Chief Veterinary Officer: Sheila Voas
Links to other expertise	• Scottish Science Advisory Council • Statistician, economist and social science communities • Main Research Providers and Centres of Expertise • Scottish Funding Council and Research Councils • Chief Scientific Advisers' Network • Other UK Government Departments • Relevant Scottish and UK Non-Departmental Public Bodies and Agencies • Learned Societies, Science Centres and the Academic community

Subject areas for which the organisation has ownership	All devolved areas e.g. Education in Scotland Health, Social Care and NHS Scotland Rural affairs – agricultural science, plant and animal health, marine and fisheries science, renewable technologies Transport – road and rail networks and infrastructure engineering Energy Areas the Scottish Government do not have responsibility for are laid out as reserved matters in Schedule 5 of the Scotland Act 1998
Approximate number of staff who are scientists or engineers	300 Mainly in agricultural sciences, marine and fisheries science, engineering.
Examples of work	The Government has five objectives that underpin its core purpose - to create a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. • Wealthier and Fairer Scotland • Healthier Scotland • Safer and Stronger Scotland • Smarter Scotland • Greener Scotland More specific examples of science and engineering work include: • Rural and Environment Strategic Research 2011-2016 • Chief Scientist Office • Marine Scotland Science • Science and Advice for Scottish Agriculture (SASA) • Animal Health and Welfare • Forth Replacement Crossing
List of key agencies employing scientists and engineers	• Transport Scotland • Food Standards Agency Scotland • Scottish Natural Heritage • Scottish Environment Protection Agency • NHS Health Scotland
Emergency procedure and contacts	General enquiries: Tel: 08457741741 Email: ceu@scotland.gsi.gov.uk

Name of organisation	**Welsh Government** Website: http://wales.gov.uk/?lang=en
Type of organisation	A devolved government.
Mission and purpose	The Welsh Government is working to help improve the lives of people in Wales and make the Welsh nation a better place in which to live and work. They aim to be open and responsive to the needs of citizens and communities and are one of the few governments in the world that publishes Cabinet minutes and papers. Responsibility for most key areas of public life including health, education and environment is devolved.
Key science and engineering staff	gwyddoniaeth@cymru.gsi.gov.uk science@wales.gsi.gov.uk
Links to other expertise	To inform sound policy-making and delivery, the Welsh Government needs the right knowledge and evidence and to be confident of its quality. To achieve this, we employ high calibre staff trained in science and engineering across the organisation. The Welsh Government also draws on its network of external contacts, such as Natural Resources Wales, and works closely with other Government departments. Additionally the Science Advisory Council for Wales provides expert advice and challenge to the Chief Scientific Adviser for Wales. The Welsh Government maintains wider links with those working in academia and in the Research Councils.
Subject areas for which the organisation has ownership	The twenty broad 'subjects' that are currently devolved do not include science *per se* but do include health, economic development, environment and education which involve significant devolved scientific activity and funding e.g.: • Science, engineering and technology education, skills, university teaching and core research – with Research Councils operating on a UK basis • Economic development, including European structural funds and some high-technology. The Technology Strategy Board operates across the UK, though with some England only schemes and there has been occasional direct BIS innovation or research support in Wales. • National Institute for Social Care and Health Research, supporting improved health and social care in Wales.
Approximate number of staff who are scientists or engineers	Over 100 staff require science or engineering knowledge for their role.
Examples of work	The Programme for Government lists the areas to be covered in the plan of action: Growth & Sustainable Jobs; Public Services in Wales; Education; 21st Century Healthcare; Supporting People; Welsh Homes; Safer Communities for All; Equality; Tackling Poverty; Rural Communities; Environment & Sustainability; Culture & Heritage of Wales

List of key agencies employing scientists and engineers	Natural Resources Wales Natural Resources Wales has taken over the functions of the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales, as well as some functions of Welsh Government. Public Health Wales Public Health Wales complements and supports the NHS structure in Wales by providing health protection, health improvement, public health information and advice, public health training and research, laboratory, screening and blood services.
Emergency procedure and contacts	General enquiries: Tel: 0300 060 3300 Email: wag-en@mailuk.custhelp.com

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Contacts us if you have any enquiries about this publication, including requests for alternative formats, at:

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