

Defence Science and Technology Laboratory  
**Annual Report and Accounts**  
2018/19





Defence Science and Technology Laboratory

# Annual Report and Accounts

## 2018/19

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Notes:

On 1 July 2001, in accordance with the Statutory Instrument 2001 No. 1246, the Defence Science and Technology Laboratory (Dstl) was created as a result of the separation of the Defence Evaluation and Research Agency (DERA); Dstl continuing as the Trading Fund.

On 1 April 2017, in accordance with the Statutory Instrument 2017 No. 148, the Defence Science and Technology Laboratory Trading Fund Order 2011 (S.I. 2011/1330) was revoked; Dstl continuing as an Executive Agency within the ambit of the Defence vote but no longer operating as a Trading Fund.



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# A Diary of Defence Science and Technology

From the depths of the ocean to beyond the stratosphere, our projects cover a wide range of work that benefits UK defence and security. No two weeks are ever the same ...

WEEK ONE

Monday	Tuesday	Wednesday
 <p><b>Supporting homeland security</b></p> <p>This year, Dstl made a major contribution to the Government's response to the nerve-agent attacks in Salisbury and Amesbury at both operational and strategic levels.</p> <p>Our work included:</p> <ul style="list-style-type: none"> <li>• scientific input to the counter-terrorism police to identify the place and mode of the attacks</li> <li>• on-site operations to ensure contaminated forensic material was safely recovered and analysed</li> <li>• authoritative scientific advice to support public health messaging</li> <li>• clinical advice to Salisbury District Hospital</li> <li>• health monitoring of all agency staff working in contaminated scenes</li> <li>• safe storage and disposal of contaminated materials</li> <li>• scientific advice across Whitehall</li> <li>• advice on decontamination to provide evidence that sites were safe to return to normal.</li> </ul> <p>More detail on our support to this homeland incident is on page 8.</p>	 <p><b>Protecting marine life</b></p> <p>For the past four years, Dstl has been working with 11 North Atlantic Treaty Organization (NATO) and NATO partner nations as part of the Active Sonar Risk Mitigation project.</p> <p>The project, initiated by NATO Allied Command Transformation, has produced a now accepted-and-approved common NATO code of conduct for active sonar transmissions, which will ultimately protect marine life from sonar activity during naval exercises.</p> <p>The project team benchmarked each participating nation's mitigation methods by comparing and contrasting the procedures and policies applied by the different NATO nations. This enabled the provision of a common set of standards that can be used by NATO commanders to ensure that they are complying with current legislation and best practice within NATO exercise areas.</p> <p>The collaborative team is now working to develop a common risk-assessment approach that can be used in planning operations involving active sonar.</p>	 <p><b>Developing air defence</b></p> <p>Dstl's operational analysis, trials and demonstrations have resulted in the successful commissioning of Sea Ceptor, a next-generation air defence weapons system, which will defend against anti-ship cruise missiles, hostile aircraft and other highly sophisticated threats.</p> <p>Built by industry, Sea Ceptor is now on target for full-time use by both the Royal Navy and the Army - with our scientists providing ongoing specialist technical advice.</p> <p>Using state-of-the-art seeking and communications technology, Sea Ceptor will replace Sea Wolf and provide local-area air defence to the Type 23 and Type 26 frigates; this will be complemented by Land Ceptor, which will replace the Rapier missile, and deliver a ground-based air defence capability.</p> <p>Sea Ceptor enables MOD to realise more than £500 million of through-life savings across the related Land Ceptor and ASRAAM (Advanced Short Range Air-to-Air Missile) projects.</p>

M	T	W	T	F	S	S
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20	21	22	23	24	25	26
27	28	29	30	31		

## A Diary of Defence Science and Technology

## Thursday

**Recovering evidence**

Dstl provides important support to the UK Criminal Justice System. This year, we supported a major development in digital forensics, helping police harness evidence from mobile phones efficiently and accurately. Several companies have developed 'forensic kiosks' that can be deployed by front-line officers to collect this evidence. We evaluated the kiosks to understand their accuracy, capabilities and limitations. We then produced guidance to assist all police forces and other agencies that will use them, helping to ensure evidence is fit for court.

We also worked on a new chemical formulation, indandione, which detects and recovers fingerprints on porous items, such as paper. Indandione has led to a significant improvement in the ability to detect and visualise fingerprints – police users who have trialled the new formulation have been recovering up to 40 per cent more fingerprints compared with the existing process. The use of indandione will greatly benefit police investigations and help bring criminals and terrorists to justice.

## Friday

**Future-proofing technology**

The Contested Urban Environment (CUE) wargaming exercise in Montreal involved Dstl scientists and technical experts, working alongside soldiers and industry teams to look at current technology and to take a glimpse into the future of warfare.

In constant use since World War II, wargaming is a technique in which doctrine and technology experts see how future conflicts might play out. It is a recognised approach, which aims to 'future-proof' technology by looking at the potential use of technology or kit before it is real.

Collaborating with other five-eyes nations (USA, New Zealand, Australia, and Canada), the UK used computer modelling to operate in an urban environment and work on 'missions' – looking into the future as far as 2035. Our leading wargaming experts looked at future scenarios, at technologies that may be available and how an enemy might use them, and at how we might respond.

## Saturday / Sunday

**Studying space debris**

As the number of satellites in space has grown, so has the risk of collisions involving communication, navigation or remote-sensing satellites. In an innovative collaboration, members of Dstl's Space Programme worked with amateur astronomers at the Basingstoke Astronomical Society (BAS) to test the ability of readily available astronomical equipment to see, catalogue and study space debris – Project Argus.

Providing accurately timed satellite observations from geographically distributed sensor sites is a critical technical challenge of Space Situational Awareness (SSA). Project Argus highlighted key considerations for future UK operational SSA systems, including identifying the capabilities and limitations of commercial optical equipment to observe satellites. This will feed into our advice to national SSA enhancement programmes across both the military and civilian domains.

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## A Diary of Defence Science and Technology

## WEEK TWO

## Monday

**Providing scientific advice**

Over the past two years, there has been increased concern over the use of corrosive substances as weapons. Dstl helped to tackle corrosive substance-related crime by providing independent scientific advice to support the introduction of the Offensive Weapons Bill through Parliament. The Bill aimed to strengthen the legislation on firearms, knives and corrosive substances.

Our experts provided advice during the Bill's committee stages to provide a rationale for the chemical substances listed for control. Our advice underpins the decisions for the legislative controls around the sale and delivery of chemical products or substances to under 18s.

We continue to support the Home Office Serious Violence Unit and the National Police Chiefs' Council by identifying, evaluating and recommending technology to enhance the police capability to screen for suspected corrosive substances.

## Tuesday

**Recognising cyber activity**

The UK faces the growing challenge of cyber attacks and information warfare. Such attacks take various forms and are often very sophisticated, meaning they may go unnoticed. Training staff to recognise and counter common information warfare attack strategies can be difficult, time consuming and expensive.

Our scientists developed a cyber card game that helps users to identify and learn about some of the key techniques that a cyber aggressor might use to gain insight, access and control over industrial and commercial infrastructures.

Extensive testing of the game and positive stakeholder feedback showed a very rapid initial learning curve compared with conventional training; this contributed to the game winning a Dstl 2018 Innovator of the Year award, and an Institution of Engineering and Technology (IET) award in the cyber security category.

## Wednesday

**Working in partnership**

The Last Mile Challenge is a competition that brings together the best in autonomous logistics delivery. 'Last Mile' refers to contested or hard-to-reach areas where medical, humanitarian or logistics supplies are urgently required.

Part of a wider autonomy programme at Dstl and involving the US Department of Defense, the Challenge aims to be at the forefront of technological advances in autonomy to deliver logistics and medical supplies to the front line. This year's phase 2 demonstration on Salisbury Plain included unmanned aerial vehicles and unmanned ground vehicles, as well as software that allowed drones to fly hundreds of miles away while being controlled in the UK.

The Last Mile Challenge, which has also developed software integration and increased payloads on drones and robots, is the result of partnerships with the Department for International Development (DFID) and United Kingdom Research and Innovation (UKRI).

M	T	W	T	F	S	S
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## A Diary of Defence Science and Technology

## Thursday

**Buying time for survival**

A new test developed at Dstl means that patients with sepsis will stand a much better chance of survival. Current diagnostic approaches rely on the patient showing sepsis symptoms, by which time the condition is already well advanced. Test results take several hours and possibly days, during which time a patient's condition can deteriorate further.

Our scientists developed a test to detect sepsis before symptoms even appear and which provides fast and accurate results. This means medical teams have hours or even days of critical extra time to treat this life-threatening condition.

Following more than a decade of work by our experts and our partners, including the US Department of Defense, the new test will identify patients most likely to develop sepsis in a variety of scenarios. It could be used on the front line to save the lives of troops, and in hospitals in the UK and beyond.

## Friday

**Partnering in data science**

Dstl, the Government Communications Headquarters (GCHQ), and Joint Forces Command (JFC) have become strategic partners of The Alan Turing Institute, the UK's national centre for data science and Artificial Intelligence (AI).

The collaboration has enabled the partners to direct The Alan Turing Institute in leading-edge research through the application of data science and AI. The partnership is already resulting in tangible benefits and promises much more in the future.

Our data scientists have been involved in the development of a model to help indicate areas of possible future conflict, work that has received international recognition. Other work has used innovative techniques to identify patterns in large volumes of biological data.

As well as seconding some of our data scientists to the Institute, some of its leading data science practitioners are also providing training, which has enabled us to increase our own internal expertise.

## Saturday / Sunday

**Investing in UK security**

Dstl's counter-terrorism and security work is not limited to current operations. We also research the next big things, and invest in people to ensure the UK has enough skilled scientists and engineers.

We are investing in the UK's energetics capability, which is needed for tasks including bomb disposal, munitions storage and counter-terrorism operations. One project is using 3D printing to manufacture explosives. In the future, troops in theatre could print bespoke charges on demand, offering them a more effective, efficient and low-cost capability on operations.

Another area of research is using virtual crime scenes with realistic imagery, which will allow police officers to train in distressing and hazardous scenarios, and prepare them for situations such as discovering home-made explosives. Not only will this let the police practise for such events, it has the potential to save taxpayers' money and allow personnel to train and interact with people in different locations simultaneously – even from other countries.



[ ]

# Performance

The Performance Report section of Dstl's annual report and accounts presents our organisation's story.

On the following pages, we provide information about us, our strategy, the principal risks that we face in the delivery of that strategy, and analysis of our performance. These pages will complement the details in our financial statements, which begin on page 78.

### Our Performance Report contains two sections:

An **Overview**, which begins on page 8. This includes a short summary of our business, which we hope provides enough information for you to understand what we do and why we do it, our purpose, our key risks and how we have performed over the past year.

A **Performance Analysis** section, which begins on page 24. This is a more detailed summary explaining how we measure our performance. This section uses information from other parts of our annual report and accounts, and provides longer-term trend analysis.

# Overview



## Chief Executive's Statement

I am delighted to introduce our annual report and accounts for 2018/19

I have now been Chief Executive of Dstl for more than a year and it is safe to say that it has been one of the most interesting and challenging years of my career. The past 12 months have seen great changes across the science and technology (S&T) landscape and we at Dstl have adapted and excelled, while ensuring our customers' challenges and needs remain our main focus.

In particular, Dstl staff from across the laboratory played a crucial role in the UK's response to the Novichok nerve-agent attack in Salisbury in March, and the subsequent poisonings in Amesbury in July.

During the initial response to Salisbury, Dstl provided 24/7 support, which at its peak involved more than 300 staff delivering at pace to support the investigation. This constitutes the largest-ever scientific response to a homeland incident, and our significant contribution was acknowledged in Parliament by the Prime Minister and the Home Secretary.

Our support included:

- staff at each investigation scene assisting with sampling and collecting of evidence
- giving clinical advice to Salisbury District Hospital staff to help inform the treatment of those exposed to this very toxic agent
- embedding our Senior Scientific Advisers in Wiltshire Police's Gold Command, working with the Home Office response and supporting wider Government
- clinically screening up to 100 people a day during the peak of the operation
- collecting and performing chemical analysis on more than 5,000 samples and more than 3,800 blood samples taken during clinical screening, as well as further chemical analysis on more than 3,000 exhibits gathered by police as part of the Salisbury and Amesbury investigations.

During the subsequent clean-up operation and efforts to get Salisbury 'back to normal', we also undertook further sampling, analysis and disposal in support of Defra's (Department for the Environment, Food & Rural Affairs) Decontamination Scientific Assurance Group, which was responsible for declaring sites 'clean'.

I am incredibly proud of Dstl and the people who are the heart of our organisation. It is their skills and knowledge that provide our customers and the UK with the innovation and world-leading capabilities needed to provide the maximum benefit to defence and security.

Indeed, I have been privileged to attend many awards ceremonies this year where our people were recognised. At the Women in Defence UK Awards in November 2018, our Professor Petra Oyston was given the top award in the innovation category for her work in developing synthetic biology techniques for the next generation of materials for protection, such as use in body armour for military personnel.

A Dstl team also won the innovation category at The Sun Military Awards in December 2018. The award was for the team's breakthrough work on treatment for sepsis, with a new test that can identify patients most likely to develop sepsis. This is a great example of collaboration at Dstl as it was developed following ten years of work by Dstl and our partners, including the US Department of Defense. The test could one day be used on the front line to save the lives of troops, and in hospitals in the UK and beyond – once again showing how work and research at Dstl is supporting our Armed Forces and the nation (see page 5).

Of course, these are just a few examples of the vast array of work that Dstl does, and at the beginning of this report, there are more examples of high-impact S&T delivered by Dstl in the past year. We continue to support procurement and policy decisions, criminal prosecutions through our forensic work, including expert witnesses, and I am pleased to say we have continued our high performance as an organisation (see page 24).

Over the past year, we worked to capture the spirit of the Dstl culture through our values. We asked our staff to suggest and vote on the values they hold dear and launched the resulting “*innovative, collaborative and impactful*” values in November. Culture is extremely important to me and my Senior Leadership Team (the Dstl Executive Management Committee) and I look forward to celebrating these values across the organisation.

In May 2018, we launched our strategic direction (see page 12). This was not a complete change for Dstl but gave us a clearer strategic intent, enabled us to be more aligned across the laboratory and to work more effectively with MOD Defence Science and Technology and the MOD Chief Scientific Adviser to deliver the MOD S&T Strategy. This is now showing real results with our people feeling more engaged and having confidence in the future direction of Dstl, and we are receiving extremely positive feedback from our customers and suppliers.

We are better at communicating the impact of what we do and continue to promote Dstl as the defence and security S&T specialists across Government – whether delivering work within Government or partnering with the best from industry and academia to make sure the greatest minds are working on S&T for the benefit of our nation.

This could not be achieved without the hard work of the staff at Dstl. Our workforce is passionate, diverse and knowledgeable, and, above all, dedicated to our purpose.



**Gary Aitkenhead**  
Chief Executive | 27 June 2019

## Who we are and what we do

Dstl (the Defence Science and Technology Laboratory) is an Executive Agency of the UK Ministry of Defence. We work to deliver cutting-edge science and technology for the benefit of national defence and security

Since we were formed in 2001, our talented scientists and professionals have built an excellent reputation for world-class sensitive and specialist science and technology (S&T) research, advice, analysis and assurance.

Specifically, we:

- deliver S&T that enhances military capability
- provide specialist technical advice to support counter-terrorism
- offer impartial advice, analysis and assurance to the UK's Front Line Commands (Air, Land, Maritime, and Joint Forces) and to Defence Equipment and Support
- advise MOD on the development of defence policy and on improving the effectiveness and efficiency of MOD's business
- steward and maintain the critical S&T capabilities (people and facilities) deemed necessary for future defence and security
- exploit intellectual property to drive prosperity
- act as a trusted interface and integrator of solutions for Government.

These activities link together through the way we work, and this represents our unique position as a Government S&T organisation. We integrate and exploit these activities enabling us to respond promptly and professionally to national and international events; situations such as our response to the nerve-agent incidents in Salisbury and Amesbury are testament to this (see pages 2 and 8).

We serve a broad range of customers; our main customer is the MOD Chief Scientific Adviser, who currently places more than £300 million of work with us every year, which represents the aggregated S&T requirements of the Front Line Commands. We also provide in-Government S&T support on highly sensitive issues of national security. Our support to the Home Office, in particular, has expanded since its Centre for Applied Science and Technology (CAST) joined us last year. We occasionally provide services to customers outside of UK Government, within the constraints of our role and purpose.

We deliver politically sensitive projects and those of national security from our sites at: Porton Down, Wiltshire; Portsdown West and Alverstoke, Hampshire; Fort Halstead, Kent; Langhurst, West Sussex; and Sandridge, Hertfordshire. We deliver other work in close partnership with suppliers, industry, universities and international partners. Our Helios Project to transfer key capabilities from Fort Halstead to Porton Down and Portsdown West continues to progress, and we have recently opened an office within the Defence Electronics and Components Agency – another MOD Executive Agency – at MOD Sealand, North Wales.

Working off-site alongside our customers, partners and suppliers is an integral part of what we do as an organisation. We have a significant presence on other MOD sites, including Abbey Wood, Bristol, within the Front Line Commands and in MOD Head Office, London; our formal international, industrial and academic secondment and project-funded placements help to build and maximise our networks and relationships across the S&T community.

Our wholly owned technology transfer office for Dstl and wider MOD, Ploughshare Innovations Ltd, continues to maximise the benefit of any new technologies and knowledge that we develop during the course of our defence work. In partnership with Dstl, Ploughshare has commercialised more than 125 technologies and created 13 spin-out companies. While this has not yet resulted in a substantial direct financial return to Dstl, Ploughshare activities have led to the creation of 585 jobs and wider benefits to MOD including technical improvements made by licensees and discounts on product sales to MOD. Ploughshare's most recent spin-out company, Presym Diagnostics, was incorporated in February 2019 and will commercialise the ground-breaking sepsis diagnosis innovation developed at Dstl (see page 5).

We continue to develop new technologies that can be protected and exploited. This year, we filed 39 new patent applications for our various technologies and, through the Dstl-Ploughshare Rewards to Inventors scheme, we paid just under £70,000 to 104 members of our staff in recognition of their inventions and their contributions to exploitation.

We also host the Defence and Security Accelerator (DASA) at Dstl. Part of the Defence Innovation Initiative, DASA helps Government defence and security departments to collaborate with industry, academia and allies to develop innovative solutions to the UK's most pressing national defence and security challenges.

Along with New Sarum Enterprises and GWE BusinessWest, we have an interest in the Tetricus Business Incubator, which brings together experience and expertise to benefit new and growing science companies. Tetricus is a Dstl associate company and was located within our Porton Down site perimeter. During 2018/19, the last of the companies incubated by Tetricus moved to purpose-built accommodation on the new Porton Science Park, which is owned by Wiltshire Council. Following this move by the last of its tenants, Tetricus effectively ceased trading during the year.

Our status as an Executive Agency of MOD reflects the secure and sensitive nature of the work that we do. We continue to shape the future of defence and national security by focussing on our customers, and to ensure that UK defence and security can exploit the best S&T; we do this while being an agile organisation that delivers for UK defence and security – now and in the future (see page 13).

#### Our work focuses on nine key capability areas:



**Analysis.** We use science and technology to solve complex policy, planning and operational problems.



**C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance).** We develop S&T for networks, sensors and intelligence integration.



**CBR (Chemical, Biological and Radiological).** We provide authoritative S&T advice on CBR materials, and develop CBR countermeasures.



**Counter-terrorism and Security.** We deliver S&T to respond to a diverse range of current and future defence and security threats.



**Cyber.** We find ways to defend against cyber attacks and to outsmart our adversaries in the digital age.



**Human Capability.** We develop S&T to benefit and enhance the contribution that humans themselves make to defence and security.



**Integrated Survivability.** We use systems engineering to achieve the best chances of survival for our service personnel and for the successful completion of affordable missions.



**Platform Systems.** We enable the integration of technologies across the land, sea and air military platforms.



**Weapons.** We assess and advise on conventional and new weapons technologies and systems.

“As we look to the future, we are uniquely positioned to consider all the opportunities to harness innovative ideas and new technologies.”

## Our plans for the future

Dstl is a science and technology (S&T) centre of excellence for UK Government focussing on addressing the biggest challenges facing defence and security today, and our strategy reflects this

Over the past year, there has been an increased appreciation of the growing importance of S&T in defence and security. Not only is this clear through the part played by our S&T in the Salisbury and Amesbury nerve-agent incidents, it is also evident through recognition of the importance of technology-led modernisation in MOD's *Modernising Defence Programme*, and through initiatives to 'mainstream' S&T within defence in the 2017 *MOD S&T Strategy*. Collectively, this increased recognition has led to increased customer demand for our S&T products and services.

As an Executive Agency of MOD, we support MOD's strategic objectives, specifically to mobilise, modernise and transform defence. In doing this, we also make critical contributions to the UK's national security objectives to protect people, project global influence, and promote prosperity.

So as we look to the future, we are uniquely positioned to consider all the opportunities to harness innovative ideas and new technologies. We must fulfil defence and security's ever-increasing demands from S&T by using our in-Government expertise and that of our partners and suppliers. In addition, we must continue to maintain access to specialist S&T capabilities not available elsewhere to enable the UK to respond to national and global events.

In early 2018, we conducted a strategic analysis exercise on our organisation and our operating environment. The analysis resulted in three strategic objectives, which now set the direction for the alignment of our organisation and the work we do. Having set this direction, we will focus on driving improvements in understanding and prioritising the S&T we need to deliver, in collaboration with MOD Defence Science and Technology.

## Our strategic objectives

Through our S&T, we will continue to **shape the future of defence and national security via relentless focus on our customers' challenges and needs**. There is an increasing need for us to drive the influence of S&T into mainstream defence and security thinking. To achieve this, we will need to build greater trust with our customers at the most senior levels to ensure we are more effective in influencing how and where S&T can support their needs. We need our people to continue focusing on high-impact delivery, and to look beyond what they are delivering to focus on future exploitation. Underpinning this, we need to ensure that we all become better at communicating the relevance of our work, with Dstl having an internationally recognised brand.

We will continue to **ensure defence and security can exploit the best science and technology capabilities on demand**. There is a continuing need for us to increase our effectiveness in collaborating with our partners to fulfil our role as capability steward for MOD. As the pace of S&T innovation and investment continues to step up in non-defence and security sectors, it is important for us to determine the capabilities we require for the long term, and to enhance our approach to collaboration and partnering. This will enable us to guide and harness the necessary leading-edge innovation and expertise to sustain the advantage for UK defence and security capability.

We aim to **become an agile organisation that is fit for the future**. To do this, we must adapt, improve and invest in those elements of our business that ensure our quality delivery for today and the future. This includes: leadership, accountability and governance; investment in the talent, skills and careers of our people; and, our infrastructure, smart processes and information technology (IT) systems.

We are measuring the progress to achieving our strategic objectives, with ambitious timelines to meet defined outcomes against each objective.

## How we will achieve our strategy

We have expanded our strategic objectives into nine supporting strategic imperatives, which are the areas of focus that guide our implementation priorities. These nine strategic imperatives (see page 13) comprise actions with accountable owners in the Executive Management Committee.

We monitor the delivery of the actions against the imperatives through quarterly reviews, output milestones and key performance metrics (see pages 26-27). We must make progress in all of our imperatives to achieve our strategic intent.

## Achieving our strategic objectives: What good looks like

## Strategic Objective 1

**Through S&T, shape the future of defence and national security via relentless focus on our customers' challenges and needs**

<b>Strategic Imperative 1</b> Make customer focus central to our delivery process	<b>Strategic Imperative 2</b> Improve communication of our work	<b>Strategic Imperative 3</b> Drive impact and exploitation of our work
<b>Outcomes</b> <ul style="list-style-type: none"> <li>Our customers will recognise how, where and when S&amp;T addresses their needs.</li> <li>We will influence S&amp;T demand through good customer relationships.</li> </ul>	<b>Outcomes</b> <ul style="list-style-type: none"> <li>We will have a recognised brand that defines who we are and what we do.</li> <li>We will routinely communicate our impact and value.</li> </ul>	<b>Outcomes</b> <ul style="list-style-type: none"> <li>We will have clear, high-impact exploitation routes for all our work.</li> <li>We will demonstrate the economic value of S&amp;T with case studies of exploited work.</li> </ul>

## Strategic Objective 2

**Ensure defence and security can exploit the best science and technology capabilities on demand**

<b>Strategic Imperative 4</b> Identify the capabilities Dstl requires internally and externally to deliver the MOD S&T Strategy	<b>Strategic Imperative 5</b> Collaborate more effectively with our suppliers and partners to deliver impact and support international relationships through S&T
<b>Outcomes</b> <ul style="list-style-type: none"> <li>Vital S&amp;T capabilities will be healthy and assured for the future, incorporating game-changing new S&amp;T.</li> </ul>	<b>Outcomes</b> <ul style="list-style-type: none"> <li>We will be working with an increasing range of suppliers and partners to deliver more high-impact and jointly developed S&amp;T capabilities.</li> </ul>

## Strategic Objective 3

**Become an agile organisation that is fit for the future**

<b>Strategic Imperative 6</b> Improve leadership, accountability, empowerment and decision-making	<b>Strategic Imperative 7</b> Develop our people, provide exciting career opportunities and improve knowledge management	<b>Strategic Imperative 8</b> Ensure safe, secure, sustainable and fit-for-purpose infrastructure and IT	<b>Strategic Imperative 9</b> Drive up the efficiency of our operations
<b>Outcomes</b> <ul style="list-style-type: none"> <li>Our staff will feel well led and empowered to support our strategy.</li> <li>Our leadership will be recognised as high performing.</li> </ul>	<b>Outcomes</b> <ul style="list-style-type: none"> <li>We will have a talent pipeline that develops essential skills and experience in our staff.</li> <li>Dstl will be recognised as an exciting and innovative workplace.</li> </ul>	<b>Outcomes</b> <ul style="list-style-type: none"> <li>We will have delivered current infrastructure programmes.</li> <li>We will be prepared and forward-looking to meet future needs.</li> </ul>	<b>Outcomes</b> <ul style="list-style-type: none"> <li>We will demonstrate value for money and efficiency to our owner.</li> <li>Resource deployment across Dstl will match strategic priorities.</li> </ul>

## Barriers to achieving our objectives

Risk exists where future events may affect the achievement of our objectives. While it is uncertain whether risk events will occur or what their impact may be, it is important that we actively manage our risks so that we can minimise the threats, and maximise potential opportunities, in order to deliver our strategic objectives

Risk forms an integral part of all business and Dstl is no different. Acknowledging how and when to take risk is how we grow and develop as an organisation, and by doing this well we achieve our goals. We focus on the active management of risks – in our dynamic and fast-paced environment, some risks may evolve quickly. It is our considered approach to these uncertain events that enables us to identify risk events and develop plans to manage the likelihood of them occurring and the impact of them should they occur.

Our approach to risk management complies with MOD risk management policy and draws on best practice.

We seek to:

- proactively identify internal and external factors and influences that may positively or negatively affect whether, when and the extent to which we achieve our strategy
- understand our appetite for taking, tolerating or treating the uncertain events that face us and respond by identifying, planning and delivering a range of activities that achieves that intent
- maintain risk management effectiveness through awareness of changing circumstances and their effect on our risk profiles and on the control measures we have put in place. We acknowledge that managing our risks well requires an ongoing approach continually reshaping what we are doing and how we are doing it depending on the changing environment.

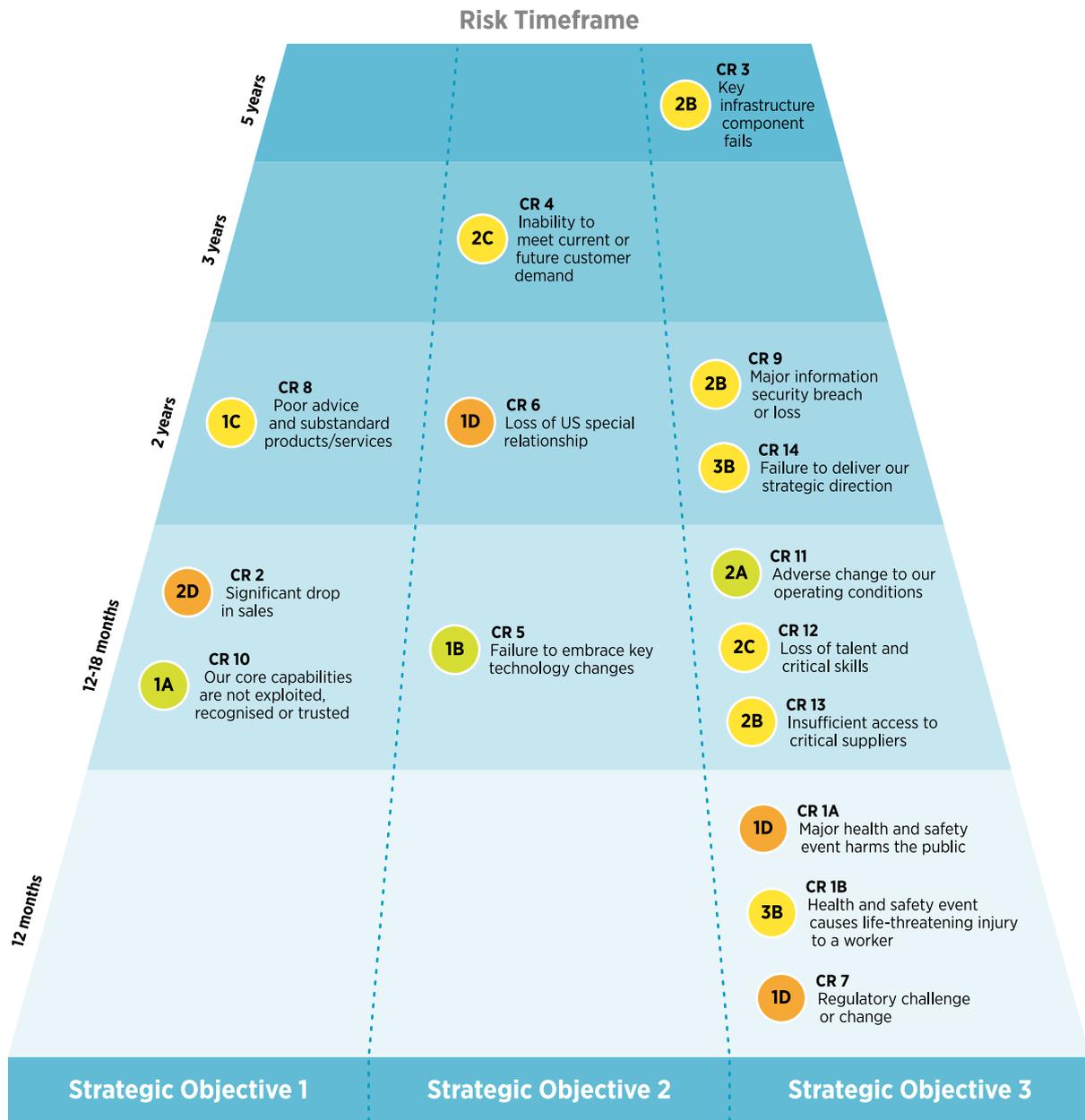
## Our corporate risks

In previous years, our Corporate Risk Register comprised two tiers of risks: strategic risks – those that threatened or enhanced the existence of Dstl and/or the defence and security of the UK – and operational risks – those risks that threatened or enhanced our effective operation. In 2018, we simplified our definition of corporate risk in line with the definition provided by the *British Risk Management Standard* (ISO 31000), which defines a corporate risk as having the potential to impact (positively and negatively) on the delivery of strategic objectives.

As at year end, our Corporate Risk Register comprised 15 risks as summarised opposite. Each of our corporate risks is owned by a member of the Executive Management Committee; the risk owner is accountable for the management of the risk and appoints a risk manager who is responsible for developing and delivering the risk management plan to achieve this.

For more information  
on risk management  
at Dstl – see page 55

2018/19 Corporate risks – target risk ratings mapped against our strategic objectives



**Key:**

**Risk Timeframe:** The anticipated time taken to achieve our target risk rating.

**Strategic Objective 1:** Through S&T, shape the future of defence and national security via relentless focus on our customers’ challenges and needs.

**Strategic Objective 2:** Ensure defence and security can exploit the best science and technology capabilities on demand.

**Strategic Objective 3:** Become an agile organisation that is fit for the future.

**Risk matrix**

Impact	Likelihood	Likelihood				
		1 = Very low	2 = Low	3 = Medium	4 = High	5 = Very high
E = Critical		Orange	Red	Red	Red	Red
D = Severe		Orange	Orange	Red	Red	Red
C = Major		Yellow	Yellow	Orange	Red	Red
B = Moderate		Light Green	Yellow	Orange	Orange	Red
A = Minor		Light Green	Light Green	Yellow	Yellow	Orange

The following table highlights the linkages between our current corporate risks and the previous strategic and operational risks that featured in our 2017/18 Corporate Risk Register, the details of which can be viewed in the Dstl Annual Report and Accounts 2017/18 at: [www.gov.uk/government/publications/defence-science-and-technology-laboratory-annual-report-and-accounts-2017-to-2018](http://www.gov.uk/government/publications/defence-science-and-technology-laboratory-annual-report-and-accounts-2017-to-2018)

2018/19 Corporate Risks	What we are doing to manage the risk?	Link to 2017/18 Corporate Risk Register
<b>CR1A:</b> Major health and safety event harms the public	Improving our safety assurance processes	<b>S06:</b> Major safety incident
<b>CR1B:</b> Health and safety event causes life-threatening injury to a worker	Increasing our awareness of, and adherence to, risk assessments and safety processes	<b>S06:</b> Major safety incident
<b>CR2:</b> Significant drop in sales	Engaging with customers to understand their income projections  Increased focus on Dstl branding to sell S&T services or create access to our capabilities  Increasing the flexibility in our capability	<b>S01:</b> Significant drop in funding
<b>CR3:</b> Key infrastructure component fails	Pursuing funding avenues to upgrade our infrastructure  Managing and maintaining the infrastructure we have	<b>S01:</b> Significant drop in funding  <b>O01:</b> Helios project fails
<b>CR4:</b> Inability to meet current or future customer demand	Identifying how we access greater capacity (internal and external) to overcome “spread too thinly”  Improved decisiveness and focus on what we need to do to be most effective with the capacity we have	N/A
<b>CR5:</b> Failure to embrace key technology changes	Increasing our exposure to external ideas on emerging technology  Improving our agility to adapt what we do to exploit emerging technology	<b>S02:</b> Change in MOD strategic direction
<b>CR6:</b> Loss of US special relationship	Working to minimise likelihood through strengthening relationships, increasing collaborative working and staff exchanges	<b>S05:</b> Change in international or national Government policy
<b>CR7:</b> Regulatory challenge or change	Understanding and influencing upcoming regulatory changes	<b>O03:</b> Legal, regulatory or ethical challenge stops work
<b>CR8:</b> Poor advice and substandard products/services	Improving processes for quality control (internal and external) and increasing our focus on assuring their effectiveness	<b>S04:</b> Loss of customer confidence  <b>O04:</b> Ineffective supplier outputs
<b>CR9:</b> Major information security loss or breach	Implementing strong cyber defences	<b>O02:</b> Major information security breach or loss

2018/19 Corporate Risks	What we are doing to manage the risk?	Link to 2017/18 Corporate Risk Register
<b>CR10:</b> Our core capabilities are not exploited, trusted or recognised	Engaging more with our customers to align our work with their challenges  Improving our communications and developing and promoting our brand	<b>S04:</b> Loss of customer confidence
<b>CR11:</b> Adverse change to our operating conditions	Increased engagement of our Executive Management Committee with our senior stakeholders and customers	N/A
<b>CR12:</b> Loss of talent and critical skills	Attracting people with specialist skill sets  Planning for resilience in the workforce  Raising brand awareness	N/A
<b>CR13:</b> Insufficient access to critical suppliers	Improving our acquisition system to increase the volume of work we can deliver externally  Improving our contract and supplier management	<b>O04:</b> Ineffective supplier outputs
<b>CR14:</b> Failure to deliver our strategic direction	Prioritisation of Executive Management Committee time for leading and delivering the key actions that will deliver our strategy  Resourcing the delivery of our priority activities with our top talent	<b>O05:</b> Failure to deliver key change outcomes

### How do we know we are doing the right things to mitigate our risks?

The management of risk done well is a cyclical process that requires a good knowledge of the environment we work in, how it is changing and whether this affects our risk profiles. A risk management plan is only a good plan if it is modified and adapted as our environment changes to ensure that we still realise the outcome we intended. Therefore, we test whether we are doing the right things to manage the uncertainties that face us, identify gaps in our plans and address them.

Our Board has a role not only in identifying the corporate risks of our organisation but in assuring itself that our approach to managing our risks is effective. During 2018/19, we increased our focus in this area by implementing two key improvements:

- better alignment of our corporate risks with our strategic objectives, establishing the role of risk management in achieving our strategy through identifying and managing threats and opportunities to its delivery
- implementation of a risk deep-dive assessment framework to enable our Board (and our Audit and Risk Assurance Committee) to understand how we are managing risks and to assure themselves that the action being taken will deliver our desired outcome.

At year end, five corporate risk deep dives have been conducted; the remaining 10 deep-dive reviews are planned for 2019/20 (see our Governance Statement on page 50).

PEOPLE  
BEHIND  
THE  
SCIENCE

“As well as responding rapidly to our customers’ urgent operational needs, we show them what the future could look like, offering solutions for the next generation.”

Charlie, Staff Officer

**Strategic Objective 1:** Shape the future of defence and national security via relentless focus on our customers’ challenges and needs.

## Our financial summary

Following a period of relative constraint for defence and security science and technology (S&T) expenditure, Dstl's income increased by 15 per cent to meet customer demands, while we continued to invest in our site rationalisation and operational integration

### Foreword

After a challenging year in 2017/18 when we adapted to our new agency status and coped with a downturn in demand, 2018/19 saw a resurgence in S&T activity that placed pressure on both internal and external delivery resources.

### Operating income

Total operating income for the year was £630 million (2017/18: £543 million). The majority of the income growth represents an increased volume of increased S&T output, reflecting strong customer demand backed by prioritised funding, and additional revenue to cover our contribution to the response and recovery operations following the nerve-agent incidents in Salisbury and Amesbury during 2018.

Our charge rates increased in line with underlying inflation, and there were no changes to fees and charges policies.

An analysis of our key top-level customer groups is set out in the table below:

	2018/19 £ million	2017/18 £ million
<b>MOD</b>		
Chief Scientific Adviser	346	312
Other	212	182
	<b>558</b>	<b>494</b>
<b>Non-MOD</b>		
Wider UK Government	56	31
Non-Exchequer	10	12
Estates	2	4
Other operating income	4	2
<b>Total</b>	<b>630</b>	<b>543</b>

MOD accounted for 89 per cent of sales (2017/18: 91 per cent). The majority of MOD sales are attributable to the core MOD S&T Programme, where sales increased by £34 million to £346 million (2017/18: £312 million). This programme represented 55 per cent of total sales (2017/18: 58 per cent).

Other MOD sales reflect the demand for defence work that needs to remain managed within Government. The largest element relates to Defence Equipment and Support (DE&S), with sales of £75 million (2017/18: £87 million). Tasking from DE&S has reduced in part due to a change in MOD's operating model, which means that more of this work is placed directly by the Front Line Commands (FLCs). Sales to Joint Forces Command increased to £59 million (2017/18: £50 million), and represents an increase of nearly 60% since 2016/17. This reflects the high priority and urgency attached to the assessment and countering of rapidly evolving threats. Business with the rest of MOD, covering the other Air, Land and Navy FLCs, Head Office and the new Defence Nuclear Organisation, increased to £78 million (2017/18: £45 million) with growth in all areas.

Continued on next page



Non-MOD sales increased significantly to £68 million (2017/18: £47 million). This follows the absorption of work previously conducted by the Home Office's Centre for Applied Science and Technology (CAST), which has been integrated into Dstl, and our extensive support to the analysis, investigation and clean-up activities associated with the Salisbury and Amesbury nerve-agent attacks. Support to wider Government represents an area of opportunity for us to contribute more in the future.

Non-Exchequer income relates mainly to collaborative and jointly funded work on behalf of defence allies and alliances. Other operating income increased to £4 million (2017/18: £2 million), and includes the recovery of ancillary charges for non-Dstl staff occupying Dstl services and the accounting for the value of donated assets as part of the absorption of CAST.

### Cost of sales

External cost of sales comprising subcontracted work and purchases of materials and services increased by 24 per cent to £280 million (2017/18: £225 million), representing 45 per cent of all S&T work delivered in the year (2017/18: 42 per cent). Compared to the previous year, our external procurement requirements were defined sooner, enabling contracts to be placed earlier in order to secure timely delivery from suppliers and partners. The mix of work demanded by S&T programmes did not cause as much growth in external subcontract work as had been anticipated but there was a more significant increase in the value of such work already committed for delivery in future periods.

### Operating expenses

Operating expenses increased by £6 million to £359 million (2017/18: £353 million). Staff costs increased by £21 million to £222 million (2017/18: £201 million) and account for 62 per cent of total operating expenses (2017/18: 57 per cent). This reflects annual pay inflation plus a 5 per cent increase in the average number of staff employed, pay inflation and a reduction in the recovery of payroll costs for staff seconded to other Government departments. Non-permanent staff increased slightly and at year end accounted for 8.0 per cent of total headcount (2017/18: 7.5 per cent).

	2018/19 £ million	2017/18 £ million
Staff costs	222	201
Non-staff costs	114	110
Depreciation and amortisation	23	42
<b>Total</b>	<b>359</b>	<b>353</b>

Non-staff costs increased to £114 million (2017/18: £110 million). The increase occurred within infrastructure running costs, covering both IT and facilities management expenditure, with the main contribution related to non-capital elements of major internal projects for site rationalisation and infrastructure repair and renewal. Depreciation of £23 million is more representative of the agency's steady state, with no repeat of the large impairment and building valuation adjustments (totalling £17m) that were incurred in 2017/18.

### Net operating expenditure

Our income arises principally from charges to customers. Our MOD customers are charged at rates representing the recovery of cash operating costs only, in accordance with the department's policy for internal charging. Charges to non-MOD customers continue to reflect full economic cost and include a contribution towards our capital costs in the form of a fee based on a representative proportion of our annual non-cash depreciation and financing charges. The proportion is based on estimates of projected sales to non-MOD customers at the time when budgets are finalised.

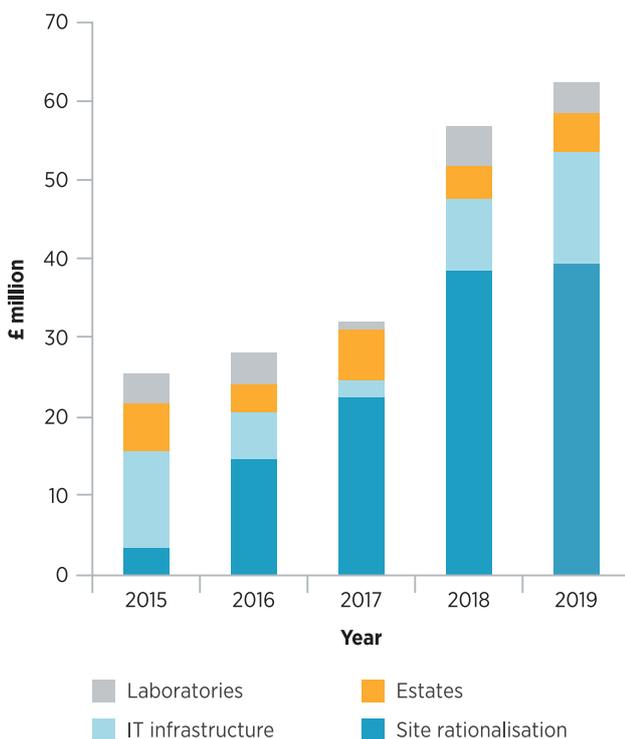
	2018/19 £ million	2017/18 £ million
Operating income	630	543
Cost of sales – direct purchases	(280)	(225)
Other operating expenditure	(359)	(353)
<b>Net operating income / (expenditure)</b>	<b>(9)</b>	<b>(35)</b>

When the full non-cash costs of depreciation and amortisation are included, the result is net operating expenditure of £9 million (2017/18: £35 million). The apparent improvement in performance is due to the non-repeat of impairment and revaluation charges suffered in 2017/18, and an increase compared to budget in the staffing levels and volume of internally resourced outputs during 2018/19.

### Capital investment

Capital investment was £60 million (2017/18: £58 million), representing £63 million of new additions less £3 million of assets under construction from a previous period, which were reclassified as revenue expenditure. The Helios Project – our site rationalisation programme – accounted for £39 million (2017/18: £38 million), with the majority of expenditure (£36 million) related to the continuation of construction at Porton Down of facilities to accommodate transfer of capability from Fort Halstead, plus the commencement of construction of new chemistry facilities. IT investment of £14 million covered the replacement of obsolete and end-of-life data centre hardware, plus enhancements to improve network security, capacity and performance. Other estates projects (£4 million) related to the upgrade of site services and utilities infrastructure. Laboratory expenditure represents the acquisition of new instruments and specialist S&T equipment.

### Capital Expenditure



### Funding and treasury management

We are equity funded by MOD as explained in the financial statements and accompanying notes. The funding requirement arises from a combination of cash and non-cash transactions. We operate within the departmental control framework as described in the Parliamentary Accountability and Audit Report on

pages 72-73. We receive cash directly from non-MOD customers and retain responsibility for settling external liabilities with the exception of payroll, which is funded directly by MOD. This gives rise to a net cash outflow that is funded by MOD Treasury.

### Supplier payments

During the year, we paid 97 per cent of invoices within five days of being approved and cleared for payment (2017/18: 95 per cent), against the target set by Government of 80 per cent.

### Group entities

Related group entities remain immaterial to the agency's accounts and have not been consolidated.

### Distorting factors

Unlike the previous two years covering the change in our agency status, there have been no significant distorting factors affecting our primary financial statements, apart from entries to correct the categorisation of taxpayers' equity. A full explanation of this and all other relevant information on accounting policies and impacts can be found within the notes to the financial statements on pages 85-109. Our financial statements continue to be prepared on a going-concern basis.

### Events after the reporting date

There have been no significant events since the end of the financial year that affect the results for the year or the year-end financial position, or that are likely to have a material impact on future performance.

### Accounting policies

These accounts have been prepared under International Financial Reporting Standards (IFRS), as adapted for the public sector in the Government *Financial Reporting Manual* (FReM), issued by Her Majesty's Treasury. This year's accounts reflect the adoption of IFRS 9 covering financial instruments and IFRS 15 covering revenue from contracts with customers. Neither of these new standards have had a significant impact on the agency's financial statements.

Any other changes to accounting policy, including the likely impact from future adoption of new accounting and reporting standards, are outlined in Note 1 to the financial statements commencing on page 85.

Continued on page 23

PEOPLE  
BEHIND  
THE  
SCIENCE

**“We worked with experts across the lab and partnered with other organisations like the US Department of Defense to discover a breakthrough in the pre-treatment of sepsis.”**

Roman, Microbiology and Biological Detection

**Strategic Objective 1:** Shape the future of defence and national security via relentless focus on our customers' challenges and needs.

## Outlook

Our core purpose and role remain unchanged as a supplier of S&T services to defence and security customers, mainly within Government. We continue to operate principally in specialist areas where there are often few private sector suppliers or no effective commercial market.

Future projected demand for our services is strong, aided by several instances of positive media exposure during the last year, and increased awareness of the impacts of our work due to a renewed focus on customer communication. Growth in staffing levels is expected to continue over the next year, and this places additional pressure on workplace capacity. We are looking at options to refit or re-purpose existing buildings to house a larger workforce, as well as seeking to realise the full benefits of flexible working practices to ensure that attendance patterns are balanced to meet the office and desk capacity available at any given time.

In the face of sustained demand, it remains imperative that we complete the current Helios Project (site rationalisation programme) in order to realise the operational synergies and running cost savings that were at the heart of its justification. We will also complete the full absorption of former Home Office CAST work, including the migration of staff and equipment from their former sites. In some areas this requires us to commission and accredit replacement operating environments before we can decommission those currently in use, leading to some duplicated costs during the transition period. Our effective and efficient future operation relies on reducing the fragmentation of our principal operating locations.

In the short term, there will be continued pressure on both capital and resource budgets, which must also remain sufficient to sustain and renew effective IT infrastructure, and allow us to continue to acquire up-to-date science and engineering equipment for our world-leading capabilities. The value of what we do is widely recognised and appreciated, and we remain confident that the necessary investment and support for our plans will continue to be forthcoming.

## Our performance headlines

Dstl monitors its performance every month to advise the Dstl Executive Management Committee and Dstl Board on current and

future performance. This means that we take timely and appropriate action to ensure that we are on track to deliver our strategic objectives.



**93%**

**Customer Satisfaction**



**9%** increase in research placed with industry and academia

**CAPITAL EXPENDITURE**



**£60m**



**£87.8k**  
Internal  
**SALES**  
PER FTE

**36%** 

of contracts awarded to small- to medium-sized enterprises

**7,398**

applications for **career opportunities** at Dstl

Chargeable utilisation **57.9%**

**5.5%** of employed workforce are **apprentices** or on **student schemes**



96%



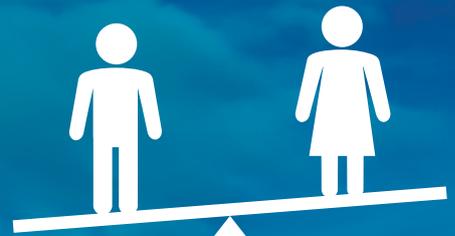
of generated **WASTE** diverted from **LANDFILL**



4,026 **STAFF**

2.2%

Hours lost to **sickness absence**



33.1%

**GENDER BALANCE**  
(% FEMALE FULL-TIME EQUIVALENT)

100%



Percentage of **Treat Official correspondence answered on time**

60%

Employee **ENGAGEMENT** index  
(up 4 percentage points)



100%

**commitment to HUMAN RIGHTS**



7%

PERMANENT STAFF **Turnover**

**ZERO**

tolerance policy to **fraud, bribery and corruption**

125 per 100,000 **WORKERS**

**Injury incident rate**



# Performance Analysis

## Measuring how we are doing

Dstl has continued to work closely with our Board and MOD Sponsor to develop our performance reporting, building on work conducted last year. Using a range of indicators, our performance can now be linked back to our strategic objectives

### Our performance framework

Our recently published *Corporate Plan 2019-2024* sets out the range of areas where we measure performance, including our:

- financial performance
- delivery for customers
- Science and Technology (S&T) capability health
- exploitation of our S&T
- operational performance
- workforce.

We developed these Key Performance Indicators (KPIs) to ensure clear monitoring of progress against our strategic objectives (see pages 12-13).

On a quarterly basis, we report progress to our Board on these KPIs and against our strategic objectives. In 2018/19, our MOD Sponsor also assessed our performance biannually against our strategic objectives. Our risk appetite will inform our targets and thresholds, in consultation with our Board and Sponsor, as we assess the effectiveness of our strategy through these KPIs.

### Delivering for our customers

**- shape the future of defence and national security via relentless focus on our customers' challenges and needs**

This year has seen a significant increase in the rise in demand for our services. In 2018/19, we delivered £626 million of S&T services compared to £542m the year before. This demand will continue to rise into the next financial year when we are planning to deliver £686m of S&T services. Our *Corporate Plan 2019-2024* sets out how we will plan to meet this rising demand over the next five years.

### Finance

In order to meet this growth in demand, we have increased the volume of work going out to our external partners in industry and academia, delivering externally £280m in 2018/19, compared with £225m the year before.

	2015/16	2016/17	2017/18	2018/19
Externally delivered work	£274m	£239m	£225m	£280m

### Intellectual property

In exploiting our S&T services into intellectual property, we have recorded a record number of 39 patents this year, resulting from 287 patent submissions.

	2015/16	2016/17	2017/18	2018/19
Number of patents	11	15	21	39

### Delivery

Our key indicators on delivery and customer satisfaction remain positive. We delivered 1,189 key customer deliverables in year. Although there is an apparent reducing trend in the numbers of products delivered, this reflects a change in methodology introduced in 2018/19. Figures from 2015/16 to 2017/18 also include assurance products that are excluded from the 2018/19 figures. The product measure is now focused on the critical deliverables that deliver defence and security impact. Our overall customer satisfaction rating for this year was 93 per cent.

	2015/16	2016/17	2017/18	2018/19
Products delivered	2,233	2,208	1,592	1,189

Our utilisation remains strong at 57.9 per cent while our running costs have risen, reflecting the growth in the organisation in order to meet rising demand for our services.

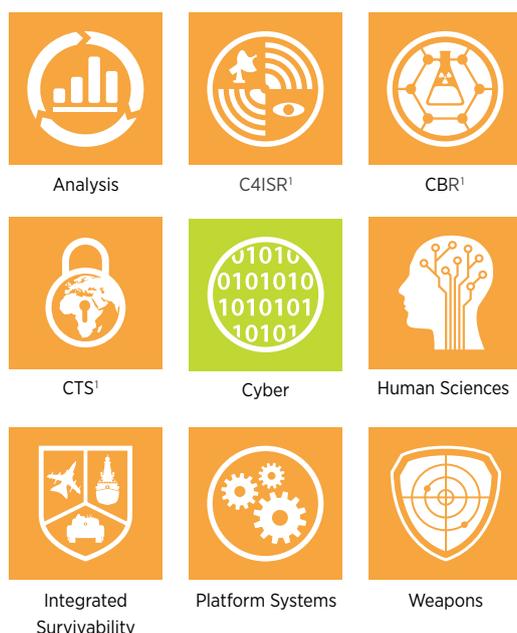
	2015/16	2016/17	2017/18	2018/19
Chargeable utilisation	57.6%	57.4%	56.8%	57.9%
Running costs	£307m	£327m	£353m	£359m

## Sustaining capability

### - ensure defence and security can exploit the best science and technology capabilities on demand

We completed our second annual S&T capability health assessment this year. We base our assessments on a best-practice methodology, using evidence, including expert judgement, against 12 separate dimensions of capability health. The assessments cover both in-house S&T capability and that of the external supply chain for capabilities stewarded by Dstl.

Our capability health remains stable from last year, reflecting the investment across capability areas to maintain their health. The overall picture still reflects the challenges in needing to provide ongoing investment to improve our capabilities still currently at **amber** and have tolerable levels of risk that are manageable with targeted interventions. As an S&T Enterprise, we will help ensure that these **amber** S&T capabilities are resilient to minor disruptions but they may not be able to absorb larger-scale impacts; **green** capabilities are in good health.



<sup>1</sup> See Glossary on page 110.

## Ensuring Dstl is fit for the future

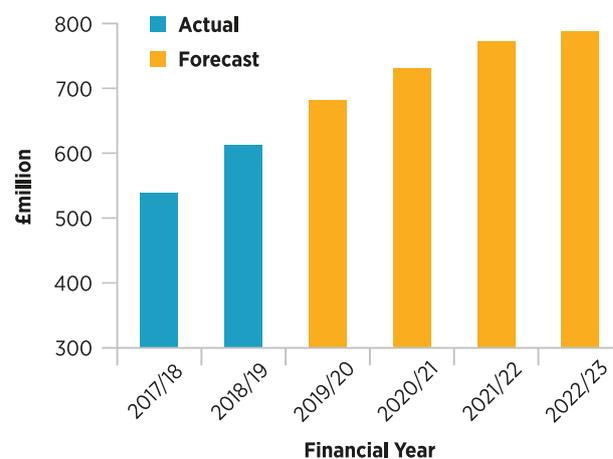
### - become an agile organisation that is fit for the future

We have continued to invest significantly in our future estate to maintain our S&T capabilities into the future, in order to maximise delivery for our customers. Our capital expenditure is expected to remain at the current high level for at least the next two years, at least while we complete our current site rationalisation programme

and absorb the activities of the Home Office's Centre for Applied Science and Technology laboratories into Dstl core sites, and undertake significant Information Technology infrastructure renewals.

Our total operating expenditure responds to the level of demand that is funded by our customers. As such, we cannot accurately anticipate it beyond the short term (next financial year) because it is subject to our customers' annual budgets and priorities; however, we do forecast five years ahead to plan for demand levels. Operating expenditure includes the running costs of our organisation, the cost of subcontracted work, and materials and services sourced from third parties.

Our estate running costs will reduce significantly on completion of the site rationalisation programme, and we continue to seek improved value for money in all elements of our operating costs. Future expenditure will follow the rise in demand for Dstl's services over the next five years, as set out in our *Corporate Plan 2019-2024*. The chart below shows our expenditure levels from 2017 to this year and the forecast until 2022/23.

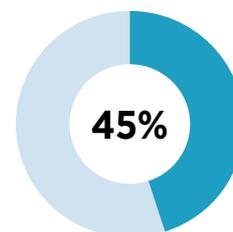
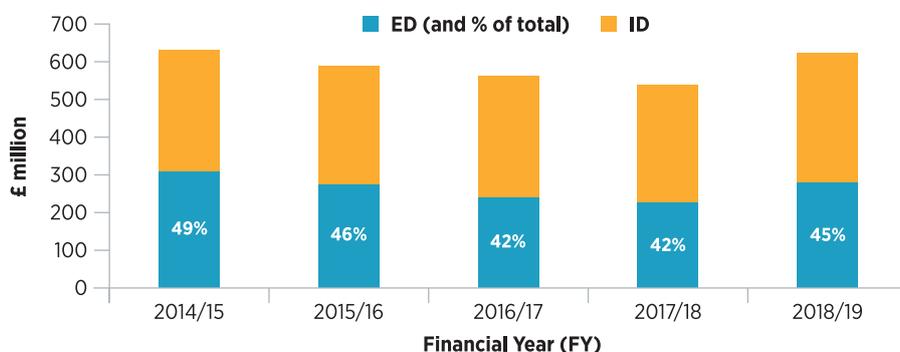


## Maintaining corporate certifications

In July 2018, we maintained all three corporate certifications ISO 9001:2015 (Quality management system), ISO 14001:2015 (Environmental management system) and TickITplus (quality assurance of software and models), extending ISO 9001:2015 and TickITplus scope, to include the work transitioned to Dstl as part of the CAST integration. Next year, Dstl will consider its approach to ISO 14001 and any findings will be reported in next year's report.

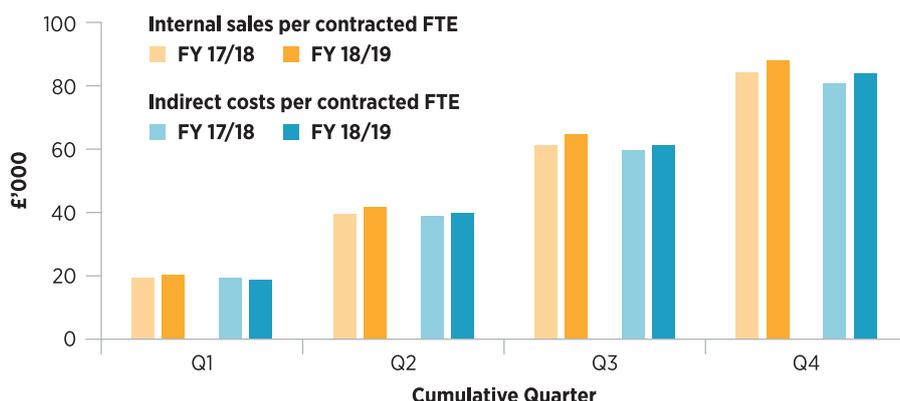
## Trend analysis

### Externally delivered (ED) and internally delivered (ID) spend



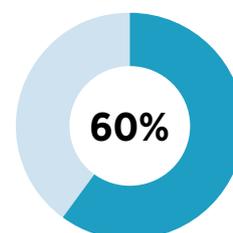
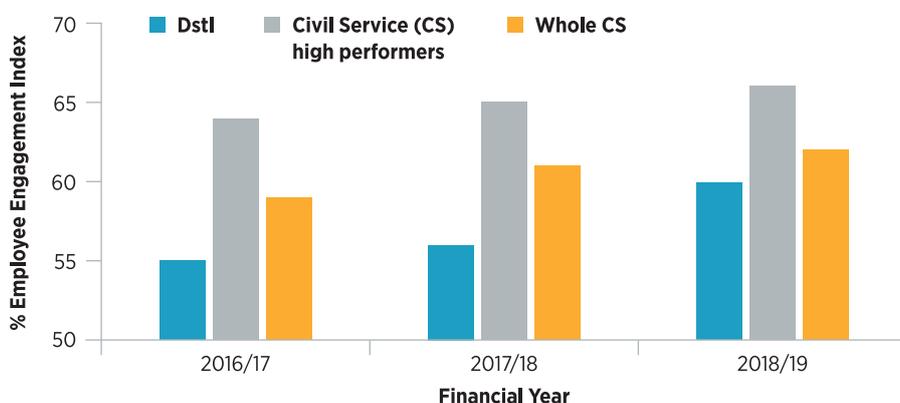
An increased volume of work contributed to growth of 25 per cent over the previous year's expenditure on external delivery, with the overall share delivered by external partners also increasing by 3 per cent.

### Efficiency



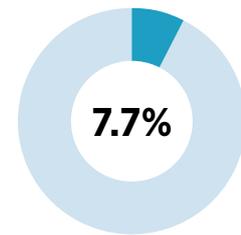
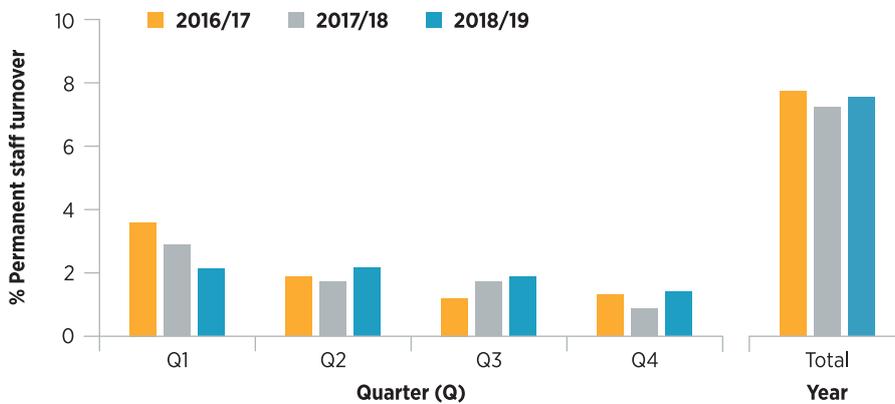
There has been a slight increase in internal sales per Full-Time Equivalent (FTE) representing increased utilisation within the workforce. However, there has also been a slight increase in indirect costs per FTE. This is only the second year of tracking this metric and therefore it is hard to conclude if this is with normal tolerance or represents a significant trend.

### Employee engagement



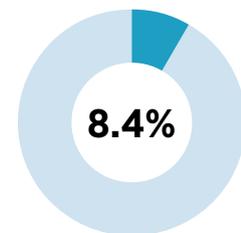
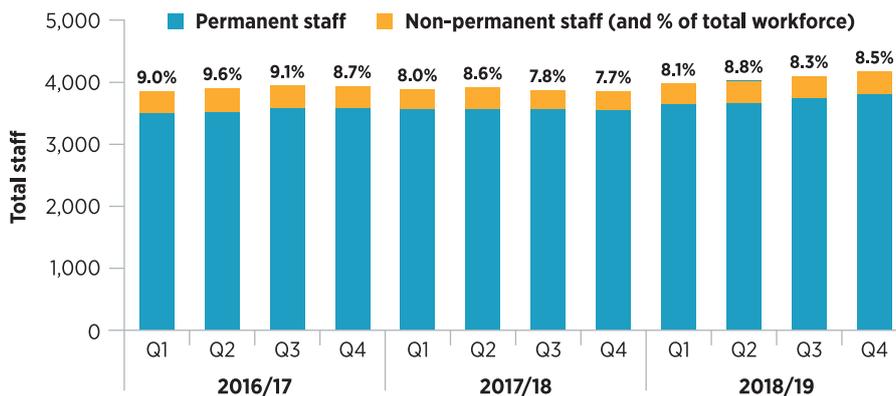
Our employee engagement index has increased for the third year running, making significant progress towards the Civil Service average. This improvement represents a 4 per cent rise from the previous year.

## Permanent staff turnover



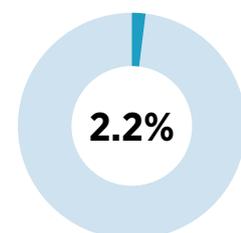
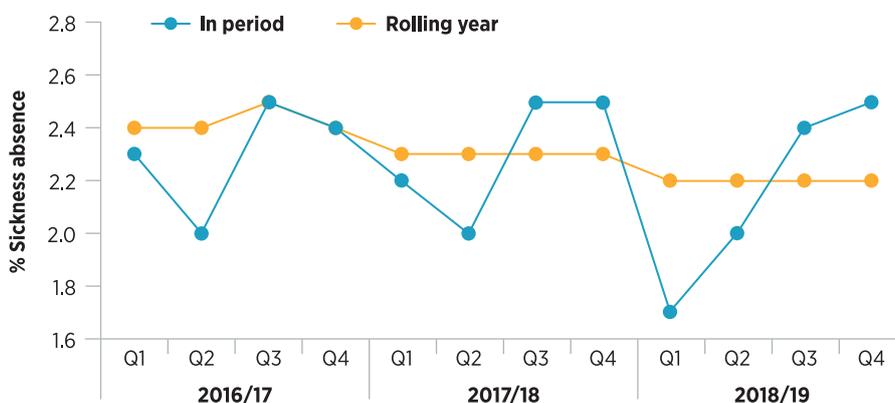
There was a small increase in staff turnover due to an increase in Q2 and Q4 leavers compared with the previous year. However, this is within normal variability and does not represent an overall increasing trend.

## Percentage of non-permanent to permanent staff



After a considerable reduction in the proportion of non-permanent workers at Dstl, last year saw a slight increase in this number. However, this is significantly below historic averages.

## Sickness absence



The small but increasing trend in proportion of working hours lost to sickness absence since 2012/13 (an increase of 0.2 per cent) appears to have levelled off and is now steady at a rolling average of 2.2 per cent. This represents a decrease of 0.1 per cent on the previous year.

PEOPLE  
BEHIND  
THE  
SCIENCE

**“We draw world-leading experts from academia and industry to produce cutting-edge solutions for the Front Line Commands at MOD.”**

Lee, Sensor Protection

**Strategic Objective 2:** Ensure defence and security can exploit the best science and technology capabilities on demand.

## Managing the impact of our activities

At Dstl, we are committed to building a sustainable future for our environment, for each other, and for our community

As a result of our recycling processes, we diverted 96 per cent of our generated waste from landfill – see page 33

This year, we continued to run a sustainability programme that included environmental management, procurement, green travel, charitable giving and education outreach, while maintaining the necessary capability and infrastructure for the efficient and effective delivery of science and technology (S&T).

We recognise that our activities can have both negative and positive impacts on the environment, people and wider communities. In light of this,

we consider environmental, social, and economic impacts when making decisions.

This year, we completed the review of single-use plastics usage that we began last year, and have implemented a series of change programmes to reduce their use.

Greening Government Commitment		2019/20 Government operational targets <sup>1</sup>	Our position at 31 March 2019	Our position at 31 March 2018
	<b>Greenhouse gas emissions (Scope 1 and 2)</b>	32% reduction from the whole estate and UK business transport	21% reduction <sup>2</sup>	18% reduction
	<b>Greenhouse gas emissions (Scope 3 – business travel)</b>	32% reduction from the whole estate and UK business transport	6% reduction <sup>3</sup>	25% reduction
	<b>Waste</b>	Reduce the amount of waste going to landfill to less than 10% <sup>4</sup>	4% of waste to landfill <sup>5</sup>	0.7% of waste to landfill
	<b>Total waste</b>	Target is 25% reduction on baseline	89% reduction <sup>6</sup>	63% reduction
	<b>Water</b>	Continued reduction in water consumption	5% increase <sup>7</sup>	13% increase
	<b>Paper</b>	50% reduction	46% reduction on baseline <sup>8</sup>	52% reduction on baseline
	<b>Domestic business flights</b>	30% reduction	0.2% reduction on baseline	0.3% reduction on baseline

<sup>1</sup> Compared to a 2009/10 baseline. Dstl works hard to achieve Greening Government Commitment targets. However, our customers' demands and needs drive our business, which influences our business travel and our delivery activities.

<sup>2</sup> From the 2009/10 baseline.

<sup>3</sup> From the 2009/10 baseline.

<sup>4</sup> Plus continued reduction in the waste generated and increased recycling.

<sup>5</sup> Generation of waste is driven by the demands of our customers and the current needs of the science and technology activity during the year.

<sup>6</sup> From the 2009/10 baseline.

<sup>7</sup> From the 2009/10 baseline. Last year, there were water supply issues at Fort Halstead, which have now been addressed. 2018/19 also saw increased water consumption during current construction/decommissioning activities at Porton Down and Fort Halstead.

<sup>8</sup> Although Dstl strives to reduce paper consumption year on year (using digital technology and increasingly moving to a paperless office environment), much of our output is demand-led by our customers so it may not be always possible to maintain current consumption or to reduce usage further.

## Environmental management

Our Helios Project is still on track to deliver reduced greenhouse gas emissions. This will be achieved by a reduction in demand for inter-site travel, the commissioning of more carbon-efficient building stock, improved energy monitoring and tracking, and improved

ways of working. We have also begun to investigate the wider use of solar power and district heat networks. This investigation has led to the installation of a pilot solar photovoltaic (PV) array at Porton Down, and advanced plans for an additional PV array installation, also at Porton Down, in collaboration with the Cabinet Office.

Greenhouse gas emissions		2015/16	2016/17	2017/18	2018/19
Non-financial indicators (tCO <sub>2</sub> e) <sup>1</sup>	Gross emissions for scopes 1 and 2 energy:				
	- Oil	6,580	7,055	6,602	5,882
	- Electricity consumed	21,743	20,521	17,404 <sup>2</sup>	18,034
	- Gas	8,258	8,799	8,907	8,575
	- LPG	84	92	139 <sup>3</sup>	547
	- Diesel	604	754	389 <sup>4</sup>	95
	- Fugitive gases	959	869	35 <sup>5</sup>	N/A <sup>6</sup>
	- Electricity transmission and distribution	1,859	1,856	1,623	N/A <sup>7</sup>
	<b>Total gross emissions for scopes 1 and 2 energy</b>	<b>40,087</b>	<b>39,946</b>	<b>35,099</b>	<b>33,133</b>
	Gross emissions for scope 3 energy:				
- Business travel (air, road and rail)	9,961	8,655	7,870	10,911	
- Water	446	478	393	407	
<b>Total gross emissions for scope 3 energy</b>	<b>10,407</b>	<b>9,133</b>	<b>8,263</b>	<b>11,318</b>	
Financial indicators (£'000)	Expenditure on energy	6,373	6,419	7,778	9,277
	Expenditure on official business travel	10,583	8,917	6,964	10,902
	<b>Total expenditure on energy and business travel</b>	<b>16,956</b>	<b>15,336</b>	<b>14,742</b>	<b>20,179</b>

<sup>1</sup> The tonnes of carbon dioxide equivalents (tCO<sub>2</sub>e) has been calculated on gross calorific value (CV) for each kilowatt hour (kWh) of energy reported because most energy billing is provided on a gross CV basis. The guidance calculates in kilograms of carbon dioxide equivalent (kgCO<sub>2</sub>e), which has been converted into tCO<sub>2</sub>e for the purpose of this report.

<sup>2</sup> The conversion factors for company reporting reduced from -0.4 to -0.3 per kWh reflecting the reported decrease in emissions compared to the corresponding electricity consumption.

<sup>3</sup> The increase in Liquefied Petroleum Gas (LPG) is associated with the installation, commissioning and use of LPG tanks on a new S&T facility at Dstl Porton Down.

<sup>4</sup> Red and white diesel has been reported as average blend of biofuel as it is purchased and used as forecourt fuel.

<sup>5</sup> This calculation is based on fugitive emissions from actual Dstl-use fluorinated gases (F-gases) and ozone depleting substances (ODS) in S&T research. The information previously included fugitive gas emissions from maintenance and repair of infrastructure-related systems e.g. air-conditioning etc but these would have been reported by the facilities management supply chain as Dstl owns the assets but does not operate or maintain the assets and is not competent or registered under the F-gas or ODS regulations.

<sup>6</sup> This financial year, Dstl does not have access to fugitive gas figures as they have not been captured by our strategic partner under the waste management contract. They are not captured through Dstl processes. We have provided previous years' figures for information.

<sup>7</sup> This financial year, electricity transmission and distribution figures were not captured in Dstl's utility reporting datasheets. We have provided previous years' figures for information.

## Waste management

We contract waste management services to our facilities management partner, EMCOR UK. Waste generated from facilities management and projects that are related to the Helios Project remain the responsibility of the contractors and as such are excluded from the waste figures that are reported here. Our own hazardous waste incinerator is also used to process both our own and third-party hazardous and sensitive waste. Twenty-eight tonnes of solid waste and 8 tonnes of liquid waste were treated via this route in year. This facility is regulated by the Environment Agency.

This financial year, we reported 48 per cent of our waste as recycled across all three core sites, with 20 per cent sent for conversion to energy by incineration, and 4 per cent sent to landfill, which exceeded the wider Government aspiration that less than 10 per cent of waste should be sent via this route. As a result of these processes, we diverted 96 per cent of our generated waste from landfill.

Waste		2015/16	2016/17	2017/18	2018/19	
Non-financial indicators (tonnes)	Hazardous waste, internal incineration, solid	121	211	225	280	
	Hazardous waste, internal incineration, wet	32	8	7	8	
	Hazardous waste, external disposal	468	15	163	29	
	<b>Total hazardous waste</b>	<b>621</b>	<b>234</b>	<b>395</b>	<b>317</b>	
	Non-hazardous waste	Land fill	87	64	6	9
		Reused/recycled	727	519	265	109
		Incinerated/energy from waste	182	166	165	46
		Composted	0	0	0	0
		IT equipment	0	0	0	0
	<b>Total non-hazardous waste</b>	<b>996</b>	<b>749</b>	<b>436</b>	<b>164</b>	
<b>Total waste</b>	<b>1,617</b>	<b>983</b>	<b>831</b>	<b>481</b>		
Financial indicators (£'000)	Total disposal cost	437	225	193	112	
	Hazardous waste - total disposal cost	252	122	129	104	

Continued on page 35 

PEOPLE  
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**“We developed virtual reality crime scenes that will allow police services to train staff on complex or sensitive situations without putting them in harm’s way.”**

Mike, Policing and Security

**Strategic Objective 2:** Ensure defence and security can exploit the best science and technology capabilities on demand.

## Utilities

**Energy.** We have commissioned a number of new buildings in year, in line with our Helios Project (see page 10), but there are still older buildings that are awaiting decommissioning. This 'dual-running' will continue across the breadth of the estate until the Helios Project completes. We continue to install light-emitting diode (LED) lighting, water-saving devices and make adjustments to our existing heating and ventilation systems.

**Water.** We closely monitor water consumption to ensure that we sustain current and future needs and that water is used efficiently and effectively as part of ongoing operations. In partnership with other organisations within the Porton Down campus boundary, we continue with our strategic review of water, which will identify opportunities for water reduction and resilience.

**Paper.** Our paper usage and expenditure relates to the supplies we procured via Government contracts. Our strategic supply chain partners also use additional paper but this has not been included as the volumetric data is not available.

Finite resource consumption – energy			2015/16	2016/17	2017/18	2018/19
Non-financial indicators	Energy consumption (kWh) <sup>1</sup>	Electricity – non-renewable	48,808,038	49,803,236	49,506,784	51,299,309
		Electricity – renewable	4,821	4,662	4,275	4,429 <sup>2</sup>
		Gas	44,872,873	47,822,305	48,365,181	46,561,171
		LPG	12,091	13,206	13,072	51,465
		Oil	25,402,163	26,358,533	24,673,031	21,984,762 <sup>3</sup>
Financial indicators (£'000)	Total energy expenditure	6,373	5,832	7,778	9,277	

Finite resource consumption – water			2015/16	2016/17	2017/18	2018/19
Non-financial indicators	Water consumption (m <sup>3</sup> ) <sup>4</sup>	Supplied	168,565	215,549	187,678	206,570
		Abstracted	254,248	267,560	267,885	265,192
Financial indicators (£'000)	Water supply costs	1,582	1,519	1,370	1,354	

Finite resource consumption – paper		2015/16	2016/17	2017/18	2018/19
Non-financial indicators	Volume metric tonnes (t)	32.52	35.23	24.37	32.49
Financial indicators (£'000)	Total paper expenditure	37	40	39	52

<sup>1</sup> The figures used for this data are taken directly from the invoiced billing from metered data at the incoming supply and do not take into account use of energy by Dstl tenants and lodgers.

<sup>2</sup> In the absence of full data from metering of renewables on site, the renewables were calculated on the average of the past three financial years.

<sup>3</sup> This has been calculated using the conversion factor of 1 litre of fuel oil equates to 11.9 kWh.

<sup>4</sup> VAT is not charged on our water supply as it is for other utilities and energy.

## Travel

As part of our continued commitment to reduce our carbon footprint and to lead by example across the public sector we replenished our hire-car fleet to allow access to cleaner vehicles for business travel; this will help the move towards increasing the number of low-emission hybrid vehicles in the fleet.

We procure our travel through the Crown Commercial Services Framework, which through better data and subsequent analysis enables us to understand the travel behaviours of our staff, and to devise interventions that improve the use of low-carbon travel options and minimise cost.

We continue to invest in technological solutions that could negate, or at least reduce, the need for business travel between our sites. In December 2018, we completed the overhaul of our TelePresence video conferencing to enable full integration with our Voice Over Internet Protocol telephone system, further reducing the need for staff to travel.

Our three core sites are located in rural locations, with limited public transport services. In order for us to meet the needs and interests of our staff, we continue to provide bus services to provide transport links between our sites and key public transport hubs located within the reach of our staff.

## Conservation and biodiversity

The Porton Down Site of Special Scientific Interest (SSSI) comprises 1,519 hectares and constitutes one of the largest uninterrupted tracts of semi-natural chalk grassland in Britain. The grassland and scrub communities of the SSSI support nationally rare flora and fauna.

As part of Government biodiversity 2020 targets, we have continued with an intensive programme of scrub management in order to achieve 'Favourable Condition' status. In 2014, we established the Porton Down Stone Curlew Conservation Project to improve productivity and achieve a sustainable stone curlew population. We have achieved significant advances in protecting nests at the egg stage but success with fledglings remains challenging. Work has also continued in reducing the number of scheduled monuments deemed to be at risk because of natural ecological processes.

## Sustainable procurement

We apply the MOD Joint Service Publication (JSP) 418 (*Management of Environmental Protection in Defence*) and the *MOD Sustainable Procurement Commercial Policy Statement*, which details MOD's commercial policy and guidance on sustainable procurement, to our activities. In line with our ISO 14001 (Environmental Management) accreditation action-planning, we are seeking to further our approach to sustainable procurement across the business starting with a clear internal strategy; the MOD policy provides the baseline for our approach. We will adapt the MOD approach, which works well when running the business (tangible goods), to our business where we are procuring significant S&T intellectual effort and research (intangible goods). Our strategy is intended to create a culture of sustainable procurement across our whole business; this includes our suppliers, of which 65 per cent (2017/18: 65 per cent) are small businesses at the time of reporting. During 2018/19, approximately 36 per cent (2017/18: 35 per cent) of our contracts were awarded to small- to medium-sized enterprises.

## Community

Each November, our employees raise money for the Royal British Legion poppy appeal, which this year raised £2,255. Since 2009, we have also nominated certain charities for corporate fundraising; these have traditionally been charities that help military personnel and their families. Following our 2017/18 change in status to an Executive Agency of MOD, we reviewed our approach to corporate charity fundraising this financial year. As such, our support to the Forces Children's Trust (FCT) and the three air ambulances local to each of our sites, which we had supported since June 2016, ceased. During this time, we raised a total of £24,394 for these charities.

The review of our corporate charity approach has meant that individual employees are not now restricted to raising funds for a limited number of charities; they are now free to support their preferred charities of choice in fundraising activities in their own time at work, and with the appropriate site permissions where necessary. Over the ten years of Dstl corporate charity fundraising, Dstl employees raised a total of £168,270 distributed between Help For Heroes, SSAFA (the Armed Forces charity formerly known as Soldiers, Sailors, Airmen and Families Association), FCT and local air ambulance units.

Many of our staff continue to volunteer in the communities around our sites. We recognise that it is a rewarding way to use and develop skills while making a big difference to our communities. Members of our staff contribute to a wide variety of voluntary roles, from helping out at a community farm, at local youth sports clubs and in the scouting and guiding movement, to more formal voluntary roles such as justices of the peace, and the Samaritans. We also support members of our staff who are reservists in the Armed Forces.

We also have 139 Science, Technology, Engineering and Mathematics (STEM) Ambassadors across our workforce, who volunteer to meet young people, usually in a school setting, to explain their work and to discuss career paths into the kind of work we do at Dstl.

This year, as well as providing employer support to specialist STEM schools such as the University Technical Colleges in Salisbury and Portsmouth, our staff supported more than 75 STEM events helping young people to understand how STEM can lead to rewarding career opportunities.



**Gary Aitkenhead**  
Chief Executive | 27 June 2019

**We recognise that a highly-skilled inquisitive and dedicated workforce is critical to delivering our high-impact work – see page 66**

[ ]

# Accountability

Our Accountability Report presents information on Dstl's key accountability requirements to Parliament.

## Our Accountability Report has three main sections:

A **Corporate Governance section** demonstrates that we have the right governance structure in place to meet our objectives, and that we practise good corporate governance. It includes an introduction from the Chair of our Board (page 40), information about our leadership (pages 41-43), and our comprehensive Governance Statement (pages 50-61).

A **Remuneration and Staff Report** begins on page 62. This section shows how we have complied with the key rules and requirements related to the remuneration of our directors and other staff, as well as demonstrating a little of the flavour of what it is like working in our organisation (Our People – page 66).

Our **Parliamentary Accountability and Audit Report** is a summary of the main information relating to our resource and capital spending set by Parliament, as well as details about our organisation that are useful with regards to accountability and decision-making purposes. This section begins on page 72.

# Corporate Governance



## Directors' Report

### MOD looks to the Dstl Board to scrutinise Dstl's performance, capability and delivery

The past year has been a very significant one for Dstl. Our new Chief Executive, Gary Aitkenhead, began implementing a comprehensive new strategy to drive the development of the organisation's capability and culture with a clear customer focus. Dstl assumed responsibility for the Home Office S&T organisation, the Centre for Applied Science and Technology (CAST), thereby expanding its wider role in the UK's national security community. The Helios Project to transfer all work from Fort Halstead to Porton Down and Portsmouth West entered its final phase as construction began of the last of the new buildings at Porton Down along with the new Chemical Warfare Defence Centre. Dstl now has more freedom to grow in response to increasing customer demands. Taken together with the programme to invest in the next generation of IT infrastructure, these developments form an integrated and holistic approach to building the future of Dstl.

The approach of the Chief Executive in driving his strategy involves tight management of the programme and increasing rigour in management information; this is enabling the Board to improve its scrutiny of performance.

The progressive integration of the methods used in delivery and risk management, Board oversight and our reporting to the MOD's Chief Operating Officer is enhancing Board's effectiveness in all its aspects.

During the year, the Board said farewell to Sir David Grant after seven years of invaluable service. We welcomed Sarah Spurgeon and Brian Bowsher as non-executive members. Sarah has taken over leadership of the programme of in-depth examinations of specific areas of technical capability. The occupants of the two new senior posts, Doug Umlers as Chief Operating Officer and Andy Bell as Chief Technical Officer, have also joined us. The Board continues to be effective both in scrutinising Dstl's performance and as a source of challenge and advice to the Executive Management Committee on strategic issues; this is due in large part to the excellent and constructive relationship between executive and non-executive members.

This is my final report as Chair of the Dstl Board after five years in post. Those years have seen Dstl pass through a period of considerable uncertainty about its role, funding and governance, which had an inevitable effect upon morale. I am delighted to be able to say that it has emerged from that period with new vigour and increasing self-confidence thanks both to the growing customer understanding of, and demand for, its capabilities and to the clarity of the leadership vision.

Dstl is an extraordinary organisation, a national asset with a range of capabilities that is remarkable in both breadth and depth. Much of what it does has to remain hidden from public gaze, but it is now developing a more visible profile. Just as the Intelligence and Security Agencies have emerged from the shadows in recent years, it is important that the British public should understand more of what Dstl does to keep them safe. It has been both a great privilege and a huge pleasure to work with Dstl and its staff and to support the vital work of this key national resource. I leave it and them with my very best wishes.

*David Pepper*

**Sir David Pepper KCMG**  
Chair of the Dstl Board | 27 June 2019

## Our leadership

### The Dstl Board (for the financial year 2018/19)

Our Board exercises strategic oversight of Dstl in the delivery of our objectives. It provides a forum for independent, non-executive, support and reasonable

challenge to our Chief Executive and our Executive Management Committee members. It monitors performance and output against plans and forecasts, and ensures that we operate in compliance with relevant policies and standards.

#### Members of the Dstl Board as at 31 March 2019

Sir David Pepper KCMG	Non-executive Chair	-
Brian Bowsher	Non-executive member	From 1 September 2018
Jeremy Monroe	Non-executive member	-
Mark Preston	Non-executive member (MOD)	-
Sarah Spurgeon	Non-executive member	From 1 July 2018
David Tonkin	Non-executive member	-
Gary Aitkenhead	Chief Executive	-
Andrew Bell	Chief Technical Officer	From 22 October 2018
David English	Chief Finance Officer	-
Joanne Peel	Chief People Officer	-
Douglas Umbers	Chief Operating Officer	From 10 December 2018

#### Former non-executive members of the Dstl Board who served during financial year 2018/19

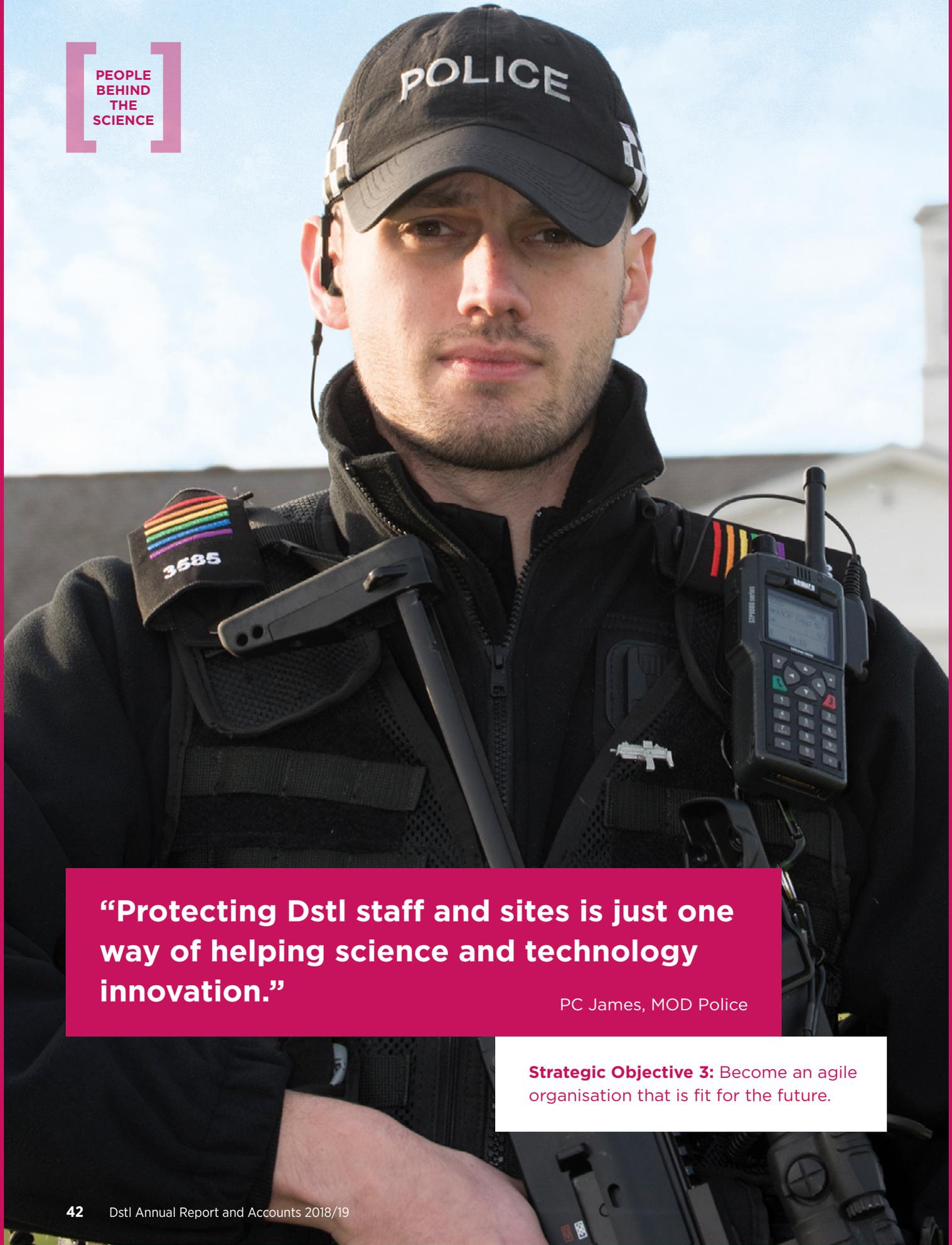
Sir David Grant	Non-executive member	Completed service on 31 December 2018
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#### Former Executive Management Committee members of the Dstl Board who served during financial year 2018/19

Penelope Endersby	Interim Chief Technical Officer	From 9 July 2018 to 4 November 2018
Bryn Hughes	Technical Director	Board membership ceased 2 July 2018
David Marsh	Deputy Chief Executive	Appointment ceased 30 September 2018
Kevin Wagstaff	Interim Capability and Delivery Director	Board membership ceased 9 July 2018

Continued on page 43 

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“Protecting Dstl staff and sites is just one way of helping science and technology innovation.”

PC James, MOD Police

**Strategic Objective 3:** Become an agile organisation that is fit for the future.

### The Dstl Executive Management Committee (for the financial year 2018/19)

Our Executive Management Committee provides day-to-day leadership and management to ensure that our strategic direction is appropriate to meet the

scientific requirements of our customers. It ensures that we operate safely and securely by reviewing performance and managing risks, and monitoring business delivery and financial performance.

#### Members of the Dstl Executive Management Committee (EMC) as at 31 March 2019

Gary Aitkenhead	Chief Executive	-
Andrew Bell	Chief Technical Officer	From 22 October 2018
Matthew Chinn	Division Head - Platform Systems Division	From 25 March 2019
Simon Earwicker	Division Head - Chemical, Biological and Radiological Division	From 2 July 2018
David English	Chief Finance Officer	-
Paul Kealey	Division Head - Cyber and Information Systems Division	From 1 January 2019
Mike Smith	Division Head - Counter-Terrorism and Security Division	From 2 July 2018
Robert Solly	Division Head - Defence and Security Analysis Division	From 2 July 2018
Joanne Peel	Chief People Officer	-
Douglas Umbers	Chief Operating Officer	From 10 December 2018

#### Former members of the Dstl Executive/EMC who served during financial year 2018/19

Graham Balmer	Infrastructure Director	Executive membership ceased 2 July 2018
Patrick Burns	Division Head - Platform Systems Division	Appointment ceased 14 March 2019
Penelope Endersby	Division Head - Cyber and Information Systems Division	Appointment ceased 5 December 2018
Bryn Hughes	Technical Director	Executive membership ceased 2 July 2018
Dario Leslie	Interim Division Head - Cyber and Information Systems Division	From 5 December 2018 to 31 December 2018
David Marsh	Deputy Chief Executive	Appointment ceased 30 September 2018
Kevin Wagstaff	Interim Capability and Delivery Director	Executive membership ceased 9 July 2018

## Non-executive members of the Dstl Board (as at 31 March 2019)



**Sir David Pepper** KCMG  
Chair

- **Key strengths:** Strategic leadership and delivery management at Board level; stakeholder management; change management; science and technology; corporate governance.
- **Experience:** Sir David worked for Government Communications Headquarters (GCHQ) for 36 years; his final appointment there was as Director GCHQ from 2003 to 2008, when he led the organisation through a period of exceptional change. Other roles within GCHQ included Director of Policy and Resources, and Director of Administration. He was also Director of Corporate Development at the Home Office. Sir David was educated at St John's College, Oxford, where he obtained a doctorate in Theoretical Physics.
- **Declarations of Interest in year:** Trustee of Gloucestershire Wildlife Trust.

*Appointed as chair of the Board on 1 August 2014*



**Brian Bowsher**  
Non-executive member

- **Key strengths:** Strategic and change leadership; operational/assurance excellence; research and innovation (national and international); stakeholder engagement.
- **Experience:** In 2018, Brian retired as the chief executive of the Science and Technology Facilities Council. He has also been a member of the governing bodies of CERN, the Square Kilometre Array, and the European Spallation Source. From 2009 to 2015, Brian was the managing director of the National Physical Laboratory (NPL) and before joining NPL, he was on the executive board of AWE initially as Director of Research and Applied Science and then as Director Systems Engineering. He is a Fellow of the Royal Society of Chemistry and the Institute of Physics, an Honorary Fellow of the Institute of Measurement and Control, and holds an Honorary Doctorate of Science from the University of Southampton.
- **Declarations of Interest in year:** Advisory board to the chemistry department at the University of Southampton; consultancy services to the National Institute of Metrology, China (until September 2018).

*Appointed to the Board on 1 September 2018*



**Jeremy Monroe**  
Non-executive member

- **Key strengths:** Transformation and management of change; IT strategy; programme design; customer relationships.
- **Experience:** Jeremy started in the manufacturing industry and changed to management consultancy, becoming a partner in PricewaterhouseCoopers (PwC) and a member of its Supervisory Board. On the sale of PwC's consulting business, Jeremy became vice-president in IBM's public sector consulting and systems integration business.
- **Declarations of Interest in year:** Non-executive member of NHS Blood and Transplant; chair of VSPM; Director of Falstaff Consulting Ltd; Trustee of Seafarers UK.

*Appointed to the Board on 1 February 2017*



**Mark Preston**

Non-executive member (MOD)

- **Key strengths:** Leadership; ability to engage at all levels; strategic thinking; organisational analysis.
- **Experience:** Mark's career in MOD spans more than 33 years. Joining as a mathematician in 1986, he subsequently joined the civil service fast-stream programme. He has held various senior positions in MOD including Director of Business Resilience, Director of Acquisition Reform and Director of Management and Organisation. In May 2016, he was appointed MOD Director for Commissioning Services and was the Acting Director General for Head Office and Commissioning Services. Mark's current role is MOD Director for Sponsorship and Organisational Policy. Mark is a senior civil servant ambassador with the 11th Signal Brigade.
- **Declarations of Interest in year:** Non-executive director of Defence Infrastructure Organisation.

*Appointed to the Board on 2 May 2016*



**Sarah Spurgeon**

Non-executive member

- **Key strengths:** Engineer; research and innovation management; education and skills development; science and technology evaluation.
- **Experience:** Sarah is Professor of Control Engineering, and Head of Electronic and Electrical Engineering department at University College London; she is also President of the Engineering Professors' Council. In 2000, she was awarded the Institute of Electrical and Electronics Engineers millennium medal, and in 2010, she received the Honeywell international medal for distinguished contribution as a control and measurement technologist to developing the theory of control. Sarah was previously a member of the Defence Scientific Advisory Council.
- **Declarations of Interest in year:** Director of the Engineering Professors' Council; Board member of Engineering UK.

*Appointed to the Board on 1 July 2018*



**David Tonkin**

Non-executive member,  
chair of the Audit and Risk  
Assurance Committee

- **Key strengths:** Improving business performance; implementing and managing financial and organisational risk management frameworks; leading organisational change; process improvement; health and safety management.
- **Experience:** David is a commercially focused business leader with more than 20 years' experience in strategic and operational leadership. He has held both senior general management and financial leadership roles in complex multi-site operations, internationally and across various industry sectors. His last full-time role was with Atkins plc as Chief Executive of the UK's largest engineering consultancy.
- **Declarations of Interest in year:** Chairman and Director of Railway Industry Association Ltd; Director of Tonkin Consulting Ltd.

*Appointed to the Board on 1 September 2017*

## Executive Management Committee members on the Dstl Board (as at 31 March 2019)



**Gary Aitkenhead**  
Chief Executive

- **Key strengths:** Research and development; commercial leadership; revenue growth; business transformation.
- **Experience:** After achieving a first-class honours degree in electrical and electronic engineering from Strathclyde university, Gary has spent his career in the development and supply of mission-critical wireless communications solutions to public safety, industrial and transportation sectors. Prior to joining MOD, Gary held senior global positions at Sepura and at Motorola Solutions for more than 20 years, covering sales, services, operations and product management.
- **Declarations of Interest in year:** Director of Scanish Ltd; consultancy services on the public safety radio industry.

*Appointed to the Board on 1 January 2018*



**Andrew Bell**  
Chief Technical Officer

- **Key strengths:** Strategic outlook; broad science and technology knowledge; leadership; cross-Government experience; change programmes.
- **Experience:** Andrew (Andy) joined MOD in 1994 as a scientist researching chemical weapon detection technologies. He was seconded to the Home Office in 2005 as chief scientist for CBRN, returning to Dstl in 2007. Andy was the Dstl Chief Technical Officer from 2012 to 2015, when he left to head up the Centre for Applied Science and Technology (CAST) at the Home Office, returning to Dstl with CAST in 2018. He was appointed Chief Technical Officer in October 2018.
- **Declarations of Interest in year:** Council member of the Royal Society of Chemistry; non-executive director of Ploughshare Innovations Ltd; chair of the Chemistry Advisory Board at the University of Southampton; Board member at the Jill Dando Institute; member of the Advisory Committee to the Dawes Centre for Future Crime at University College London.

*Appointed to the Board on 22 October 2018*



**David English**  
Chief Finance Officer

- **Key strengths:** Finance; Government relations; governance.
- **Experience:** Before joining Dstl, David was the Head of Business Strategy and Governance in MOD. He joined MOD in 1996 having completed a BEng in Avionic Systems and some hands-on engineering in industry. During his MOD career, David has worked in Defence Equipment & Support, and has been a Private Secretary to the Defence Secretary. During summer 2011, David was Head of Libya Operations Policy until the successful conclusion of the NATO-led operation.
- **Declarations of Interest in year:** Non-executive director (NED) of Ploughshare Innovations Ltd; NED of Tetricus Ltd; chair of governors at Lea and Garsdon Primary School, Wiltshire.

*Appointed Finance Director on 1 April 2016. He joined the Board on 30 May 2015 as the MOD non-executive director*



**Joanne Peel**  
Chief People Officer

- **Key strengths:** Strategy; talent management; coaching; human resources (HR).
- **Experience:** Joanne (Jo) joined Dstl from the Judicial Office where she was HR Director for the Judiciary of England and Wales. She has held a number of roles across Government including three in the Cabinet Office where she was Head of Senior Executive Talent Management, Head of the Government Fast-Stream Programme and a member of the Prime Minister's Delivery Unit. Prior to this, she worked in other Government departments and the private sector in a variety of HR, organisational development and corporate service functions. Jo is a Chartered Fellow of the Institute of Personnel and Development; she has a MSc in Training, and a Post-graduate Certificate in Coaching in Personal and Business Coaching.
- **Declarations of Interest in year:** Chair of governors at South Wiltshire University Technical College.

*Appointed to the Board on 25 January 2016*



**Douglas Umbers**  
Chief Operating Officer

- **Key strengths:** A strategic people leader; broad commercial experience (private and public sector); customer focused.
- **Experience:** Before joining Dstl, Douglas (Doug) was the interim Chief Operating Officer at FCO Services, a trading fund owned by the Foreign and Commonwealth Office (FCO). Prior to this, he spent 20 years in and around the world of defence and security, operating in senior roles at private-sector businesses providing engineering and technology services, including for MOD, and for the intelligence services and related agencies. Doug has been on the executive boards of VT Group plc (now Babcock International plc) and terrestrial TV, radio and wireless communications infrastructure provider Arqiva.
- **Declarations of Interest in year:** None declared.

*Appointed to the Board on 10 December 2018*

#### Total length of service by the Board's non-executive members as at 31 March 2019

Name	Total length of service	Date of most recent appointment	Date of expiry
Sir David Pepper	4 years, 7 months	1 August 2016	31 July 2019
Brian Bowsher	0 years, 7 months	1 September 2018	31 August 2021
Jeremy Monroe	2 years, 2 months	1 February 2017	31 January 2020
Mark Preston	2 years, 11 months	2 May 2016	N/A
Sarah Spurgeon	0 years, 9 months	1 July 2018	30 June 2021
David Tonkin	1 year, 7 months	1 September 2017	30 August 2020

PEOPLE  
BEHIND  
THE  
SCIENCE

**“I joined Dstl as an apprentice and I’m now working on computer aided design to help keep our planes safe in the sky. Dstl invested in me and then harnessed my skills.”**

Verity, Platforms Survivability

**Strategic Objective 3:** Become an agile organisation that is fit for the future.

## Statement of the Accounting Officer's responsibilities

Under Sections 7(1) and 7(2) of the Government Resources and Accounts Act 2000, Her Majesty's (HM) Treasury has directed Dstl to prepare for each financial year a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of Dstl and of its net resource outturn, application of resources, changes in taxpayers' equity and cash flows for the financial year.

In preparing the accounts, the Accounting Officer is required to comply with the requirements of the *Government Financial Reporting Manual* and in particular to:

- observe the Accounts Direction issued by HM Treasury including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis
- make judgements and estimates on a reasonable basis
- state whether applicable accounting standards as set out in the *Government Financial Reporting Manual* have been followed, and disclose and explain any material departures in the financial statements
- prepare the financial statements on a going-concern basis, unless it is inappropriate to presume that Dstl will continue in operation

- confirm that, as far as the Accounting Officer is aware, there is no relevant audit information of which Dstl's auditors are unaware and that the Accounting Officer has taken all the steps that ought to have been taken to make himself aware of any relevant audit information and to establish that Dstl's auditors are aware of that information
- confirm that the Dstl Annual Report and Accounts 2018/19 as a whole gives a fair, balanced and understandable view of Dstl's activities for the year ended 31 March 2019 and its financial position as at 31 March 2019 (page 77)
- confirm that the Accounting Officer is personally responsible for this annual report and accounts and for the judgements required for determining that it is fair, balanced and understandable (page 77).

The Accounting Officer of the Ministry of Defence, the MOD Permanent Secretary, has designated the Chief Executive as Accounting Officer of Dstl. The responsibility of an Accounting Officer, including for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding the Dstl's assets, are set out in *Managing Public Money* published by HM Treasury.

**Parliamentary  
Accountability  
and Audit Report**  
– see page 72

## Governance statement

This governance statement, for which I, Gary Aitkenhead as Accounting Officer for Dstl, take personal responsibility, aims to provide an insight into the effective running of Dstl and to offer a clear understanding of our governance arrangements

### Scope of responsibility

As Accounting Officer for Dstl, it is my responsibility to ensure that there is a sound system of governance, risk management and internal control in place, and that Dstl business is conducted in accordance with *Managing Public Money* to ensure public money is safeguarded, properly accounted for and used economically, efficiently and effectively.

To demonstrate this, our governance statement covers:

- our corporate governance
- our risk management
- our control environment
- our control activities.

### Our corporate governance

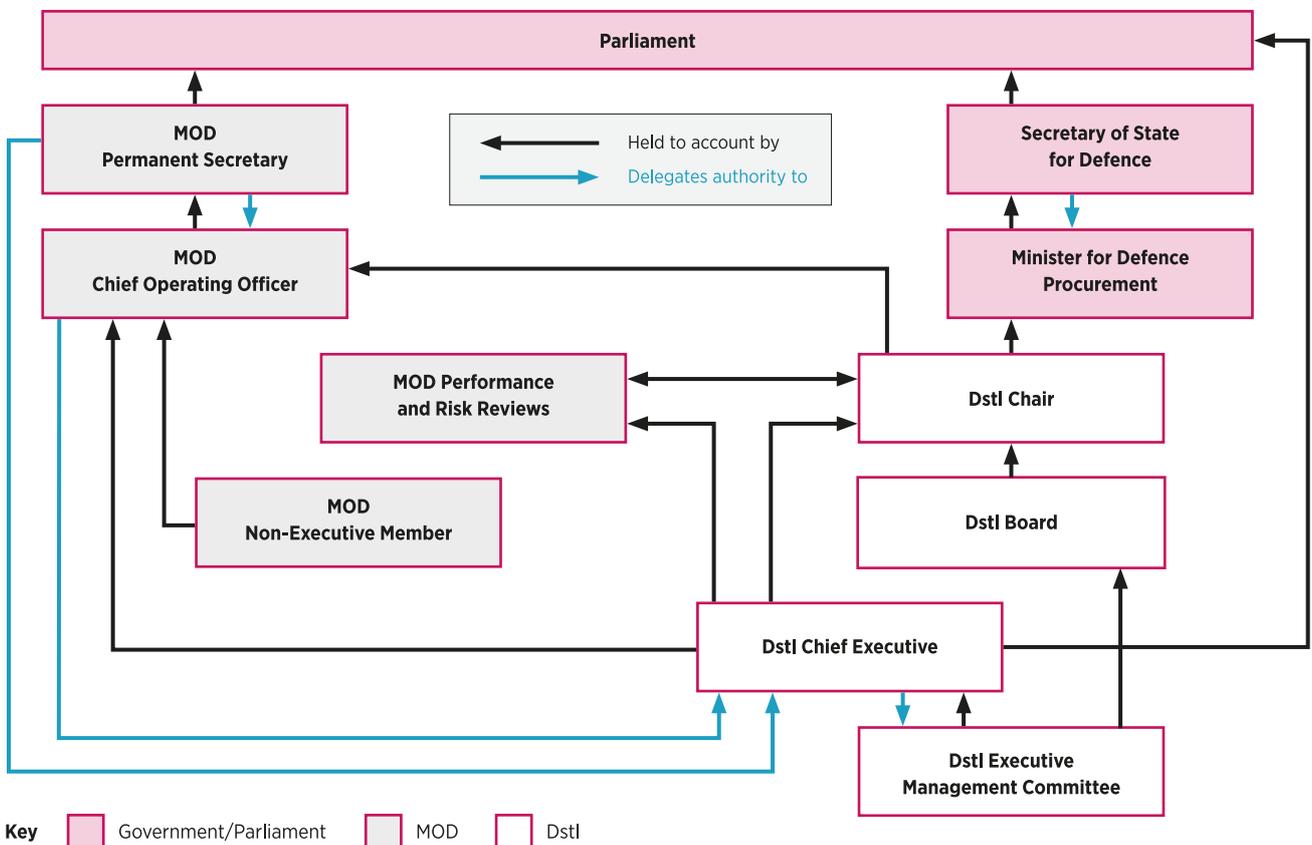
We continue to comply with HM Treasury's *Code of Good Practice on Corporate Governance in Central Government Departments* (2017).

Dstl is held accountable through two distinct mechanisms within the MOD. These are:

- A 'vertical axis' of corporate governance through the MOD Sponsor on behalf of our responsible minister, holding Dstl to account for performance against our *Corporate Plan*
- A 'horizontal axis' through which MOD customers hold Dstl to account for performance against the agreed programme of work.

As at 31 March 2019, our corporate governance framework is summarised as below:

Dstl corporate governance framework



## Board

The Board held six regular meetings during the year. In addition, it convened for an Away Day in May in Salisbury, Wiltshire, to focus on risk management for the organisation and the role of the Board in assuring this. It also held a joint meeting with Dstl's Executive Management Committee in July to explore the role of Dstl in supporting future defence and security priorities.

**Membership.** During this financial year, the Dstl Board comprised Chair Sir David Pepper, up to five non-executive members (NEMs) with experience relevant to Dstl's work, a NEM from MOD, up to five senior members of the Dstl Executive Management Committee (including the Chief Finance Officer) and me, as Chief Executive. This year, outgoing NEM Sir David Grant attended six Board meetings before his tenure expired.

### Attendance at Board meetings in 2018/19

Sir David Pepper KCMG (Chair)	8 (8)
Sir David Grant (until December 2018)	6 (6)
Jeremy Monroe	8 (8)
David Tonkin	7 (8)
Sarah Spurgeon (from July 2018)	5 (5)
Brian Bowsher (from September 2018)	5 (5)
Mark Preston	7 (8)
Gary Aitkenhead	8 (8)
David English	8 (8)
Joanne Peel	8 (8)
Bryn Hughes (until July 2018)	2 (2)
Kevin Wagstaff (until July 2018)	0 (1)
Penelope Endersby (from July - December 2018)	3 (3)
Andrew Bell (from October 2018)	4 (4)
Douglas Umbers (from December 2018)	2 (2)

Figures in brackets indicate the total number of meetings that could have been attended.

**Business 2018/19.** The business taken at Board meetings reflects the role and responsibilities of the Dstl Board and also the implementation of Dstl's strategy and the management of its corporate risks. Standing items include an update from the Chief Executive and from the Chair of the Audit and Risk Assurance Committee (ARAC) following the quarterly ARAC meetings. Meetings are usually followed by a science and technology (S&T) Showcase as part of our NEMs' ongoing familiarisation with the work we do at Dstl. Examples include a technical briefing on the new Type 31e general purpose frigate and a counter-terrorism and security-themed afternoon event comprising various presentations and demonstrations.

### Key business at Dstl Board meetings throughout 2018/19

#### 7 June 2018 (Porton Down)

- New Information Systems Service Solution (NISS) update
- Review of corporate risks identified at May 2018 Away Day
- Review and endorsement of end-of-year finance report
- Review of actions from the Board Away Day

#### 13 September 2018 (Porton Down)

- Review of quarter (Q)1 *Business Performance Report*
- Q1 Strategy On A Page (SOAP) update
- Brexit discussion – discussion of potential impacts on Dstl
- Review and endorsement of Senior Leadership Development plan
- Review and endorsement of Annual Budget Cycle submission to MOD
- External Review College update
- Review of Corporate Risk Register

#### 22 October 2018 (Portsmouth West)

- Review of Q2 *Business Performance Report*
- Q2 SOAP update
- *Dstl Corporate Plan 2019-2024* – discussion on approach
- Corporate risk deep dive: Loss of critical talent
- Review and endorsement of the Dstl Values
- Brexit update

Continued on next page 

### Key business at Dstl Board meetings throughout 2018/19

#### 6 December 2018 (MOD Main Building, London)

- Review of Ploughshare Innovations Ltd
- Dstl External Review College: Weapons and People – review of key findings and recommendations
- Review of feedback from newly established Dstl Customer Scorecards
- Corporate risk deep dive: Health and safety
- Brexit update

#### 7 February 2019 (Porton Down)

- Review of Q3 *Business Performance Report*
- Review and endorsement of Financial Year (FY) 2019/20 demand forecast
- Review of *Chief Finance Officer's Report*
- Q3 SOAP update
- Review of first draft of *Dstl Corporate Plan 2019-2024*
- Corporate risk deep dive: No access to critical inputs
- Review of Have Your Say 2018 results and agreement to next steps
- Brexit update

#### 21 March 2019 (Porton Down)

- Approval of *Dstl Corporate Plan 2019-2024*
- Approval of FY 2019/20 budget
- Health and safety update
- Review of Dstl's approach to strategic workforce planning
- Endorsement of revised corporate risk descriptions and deep-dive schedule
- Brexit update

**Annual review of effectiveness.** We have completed the outstanding actions from the last annual review of effectiveness, which related to stakeholder engagement. Due to unprecedented operational commitment this year, this year's annual review of effectiveness of the Board had not taken place at the time of reporting. The next review is scheduled to be completed in the next financial year, and the recommendations will be disclosed in next year's report.

### Audit and Risk Assurance Committee

The Audit and Risk Assurance Committee (ARAC) met four times during 2018/19.

**Membership.** Membership of the committee comprised three Dstl NEMs – David Tonkin (chair), Brian Bowsher, and Jeremy Monroe, and MOD NEM Mark Preston, who, with agreement from Dstl Chair Sir David Pepper, sent Adam Powell (Head of Organisational Policy) as a representative. This year, outgoing NEM Sir David Grant attended three ARAC meetings before his tenure expired.

I attend by invitation, as do my Chief Finance Officer, my Chief Operating Officer and my Head of Risk, Assurance and Governance. The National Audit Office, auditors BDO, and MOD Defence Internal Audit also attend by invitation.

#### Attendance at Dstl Audit and Risk Assurance Committee for 2018/19

David Tonkin	4 (4)
Sir David Grant (to December 2018)	3 (3)
Brian Bowsher (with effect from November 2018; first meeting as observer)	2 (2)
Jeremy Monroe	4 (4)
Adam Powell	4 (4)

*Figures in brackets indicate the total number of meetings that could have been attended.*

**Business 2018/19.** This year, the ARAC continued to concentrate on its key purpose of supporting the Dstl Board on issues of risk, control and governance, being careful to maintain its independence at all times.

Our Corporate Risk Register and the outputs and outcomes from both our internal and external audit activity have driven the main business taken by the committee this year. We continued our series of deep dives into reviewing the assurance activities of our process value chains (Process Deep Dives) and into the management of our corporate risks (Corporate Risk Deep Dives). This year, these have included: stewarding capability; managing assets; acquiring and supply Process Deep Dives; and, major information security breach/loss; poor advice/substandard products; regulatory challenge or change Corporate Risk Deep Dives.

During this financial year, the ARAC continued to hold the Dstl Assurance Report in high regard. The assurance report, which is presented at each quarterly meeting, has continued to provide a comprehensive base from which the ARAC can ensure the Board and Accounting Officer's assurance needs are being met, and one by which the reliability and integrity of the assurances can be examined.

Commenting on the work of the committee over the past year, Chair of the ARAC David Tonkin said: "The committee continues to review Dstl's systems and controls to ensure that Dstl operates its business within a robust and effective assurance framework. The revised and refreshed corporate strategy instigated by a new Chief Executive led to a critical review of the associated organisational risks. The refreshed risk register and planned mitigations has been systematically scrutinised by a series of risk deep dives conducted by both the committee and the Board. A new assessment tool has been used to test that each risk is understood well and the associated mitigations are thoroughly thought through with evidenced plans and controls. Any necessary corrective actions or improvements are carefully logged and reviewed. The thrust of the committee is supported by a thorough and detailed assurance report; this has been routinely challenged and adapted to ensure visibility of all key areas of the business requiring assurance. The committee's focus will continue to validate that the processes, the risk management framework and the associated controls are working effectively to provide the Board with the necessary assurance that the organisation delivers its strategic plans in an effective and proportionately controlled manner."

**Annual review of effectiveness.** Former internal audit provider Grant Thornton undertook an independent review of the ARAC effectiveness for 2016/17, which reported in June 2017. This review found that committee papers were well organised, clear and consistent, and the minutes contained a wide range of relevant issues to suggest that the governance arrangements were performing well.

In June 2018, we completed a self-assessment review of the effectiveness of the ARAC; the outcome found that the operation of the ARAC was considered to be extremely effective. An additional moderate finding was the need for additional induction activities to cover the specific requirements of the MOD and Public Sector regulatory requirements for the non-executive members of the committee, and to include a particular focus on cyber-related threats. We have subsequently actioned both of these areas.

### Remuneration committee

This year, there has been one meeting of the Remuneration Committee. It met on 7 June 2018 to review and agree the proposed performance scores for the Executive Directors and other part-year Executive Directors. I was present at the meeting as were: Chair Sir David Pepper; NEMs Sir David Grant, David Tonkin, Jeremy Monroe, and Mark Preston; and, Dstl Chief People Officer Joanne Peel.

A recruitment exercise led by Chair Sir David Pepper resulted in the appointment of NEMs Brian Bowsher and Sarah Spurgeon. Dstl handled the recruitment for the latest NEMs in-house through a fair and open competition using the civil service jobs website, the Cabinet Office Public Appointments website, social media, networking and some targeted recruitment.

### Executive Management Committee

In February 2018, I commissioned an organisational design exercise acknowledging that some changes in the structure of how Dstl was organised may be required to deliver our newly defined strategic direction.

The aims of the organisational design exercise were to:

- ensure delivery of high-impact S&T is at the heart of Dstl
- put in place a structure that supports successful delivery of the Dstl Strategy
- flatten hierarchy to improve internal communications and cross-team collaboration
- to align Dstl with other key parts of the defence enterprise
- reduce duplication and remove blurred boundaries.

As a result of the exercise, we created four new Enabling Divisions:

1. a Strategy, Portfolio and Capability Division led by the Chief Technical Officer
2. an Operations Division led by the Chief Operating Officer
3. a Finance, Planning and Governance Division led by the Chief Finance Officer
4. a People Engagement and Communications Division led by the Chief People Officer.

Continued on next page



No changes were made to Dstl's five Delivery (S&T) Divisions. These remained as: Chemical, Biological and Radiological (CBR) Division; Cyber and Information Systems (CIS) Division; Counter-Terrorism and Security (CTS) Division; Defence Security and Analysis (DSA) Division; and, Platform Systems (PLS) Division. The purpose of the newly created Enabling Divisions is detailed below.

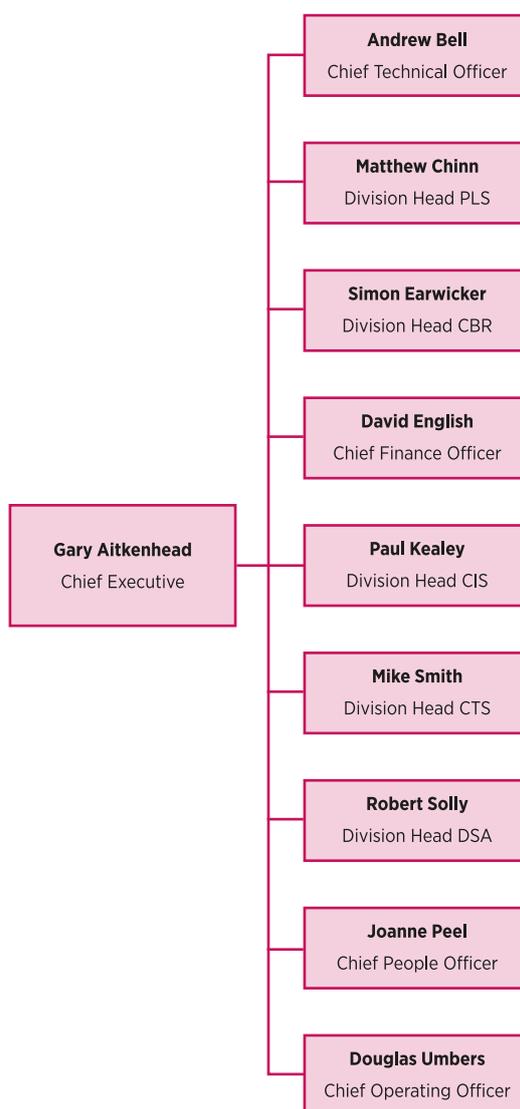
Enabling Division	Purpose
Strategy, Portfolio and Capability Division	<ul style="list-style-type: none"> <li>owning Dstl strategy on behalf of the Chief Executive</li> <li>establishing an integrated S&amp;T planning function to provide robust, coherent enterprise S&amp;T plans that unify collective efforts</li> <li>establishing effective governance, risk assurance and reporting to monitor and change manage Dstl's enterprise-level S&amp;T plans</li> </ul>
Operations Division	<ul style="list-style-type: none"> <li>leading a set of business enabling operations spanning acquisition, facilities, IT, security, health and safety and internal portfolio transformation programmes</li> </ul>
Finance, Planning and Governance Division	<ul style="list-style-type: none"> <li>managing and overseeing all aspects of financial management within Dstl</li> <li>developing Dstl's corporate strategies and plans and oversee Dstl's corporate performance regime</li> <li>maintaining and operating the governance framework within Dstl</li> <li>delivering an intellectual property management service for Dstl</li> </ul>
People Engagement and Communications Division	<ul style="list-style-type: none"> <li>delivering communications internal and external to Dstl</li> <li>designing and implementing people frameworks and policies to support Dstl's business</li> <li>sourcing, attracting and recruiting talent for Dstl</li> </ul>

To reflect the changes implemented as part of the organisational design exercise, the Executive Management Committee (EMC) was refreshed. The purpose of the EMC is to ensure the effective and efficient strategic leadership and operational delivery of Dstl, including the:

- development and implementation of strategy, plans, policies and budgets

- assessment and control of risk (both threats and opportunities)
- monitoring of business delivery and financial performance
- monitoring of key stakeholder feedback and engagement initiatives
- establishment of a positive working culture and strong communication ethos.

As of March 2019, the EMC membership is:



### Executive Management Committee sub-committees

As part of the strategy exercise outlined above, we also revisited the scope and purpose of the sub-committees of the EMC. As a result, there are now two formal sub-committees, the Investment Management Committee and the Safety Management Committee, which have the purposes outlined in the table below. I also established a Brexit Management Committee to discuss the implications of Brexit on Dstl, to put in place any necessary mitigating activities and to respond with agility to MOD requests for resource support.

Executive Management sub-committee	Purpose
Investment Management	To assist the Chief Executive in the execution of his financial delegations. The Investment Management Committee (IMC) ensures that expenditure proposals are subject to requirement and financial scrutiny. The IMC is responsible for considering all investment proposals (capital and significant revenue) above a defined threshold.
Safety Management	To ensure that Dstl provides a safe place of work for Dstl staff, partners and suppliers. The Safety Management Committee also provides the formal management review of Dstl's health, safety and environmental management systems.
Brexit Management	To understand the implications of the European Union exit deal and no-deal scenario on Dstl, and to ensure the correct actions are identified and implemented to enable Dstl to operate.

### Our risk management

Part of my role as Accounting Officer and Senior Risk Owner for Dstl is to ensure we have an effective risk management approach that is used across the organisation and that where needed, continuous improvement activity exists to reach our desired level of maturity.

This year, building on the development and introduction of our new risk management strategy and framework in 2017/18, we have begun to develop a risk management capability within our Finance, Planning and Governance Division, to drive risk management best practice across the organisation. In parallel, we have focussed heavily on assuring our approach to managing our corporate risks and developed a new deep-dive assessment framework.

During 2018/19, to ensure we stood the best chance of delivering our strategic objectives as detailed in our new strategic direction, I, alongside the Executive Management Committee, have focussed on:

- better aligning our corporate risks to our strategic objectives, ensuring that we understand the threats and opportunities to delivering our strategy and how we will manage these
- proactively seeking independent assurance of our approach to managing our corporate risks; inviting challenge from our Board, and Audit and Risk Assurance Committee, as to whether we are doing the right things and in the right timeframe, and where gaps are identified seeking to address them to control our risks better.

In the coming financial year, we will continue to:

- deliver our risk management strategy through a series of activities that will focus specifically on understanding how we identify our risk appetite
- improve the escalation and transfer of risk within the organisation
- mature the risk culture of our organisation.

**Risk is managed at the lowest possible level by empowering staff and ensuring they are aware of their delegations – see page 56**

**Managing risk in Dstl**

We manage risks by a four-stage process:

1. risk identification
2. risk assessment
3. risk response
4. risk monitoring, reporting and escalation.

We have detailed the basic principles of each process stage below:

**Risk identification**

- identify the threat or opportunity risks that are likely to impact delivery of objectives
- allocate risk owners and managers
- develop a detailed description of the risk including the future event to which it is linked

**Risk assessment**

- assess existing controls that may affect the risk
- assess when the risk event could occur
- assess the inherent (worst case), residual (current with existing controls) and target (desired end state) risk ratings

**Risk response**

- develop a plan of work to achieve target risk rating
- complete planned work to minimise threat risks and maximise opportunity risks

**Risk monitoring, reporting and escalation**

- risk management is a continuous process and does not stop after a risk response has been established. The risks are monitored, reviewed and escalated during this stage

**Risk reporting**

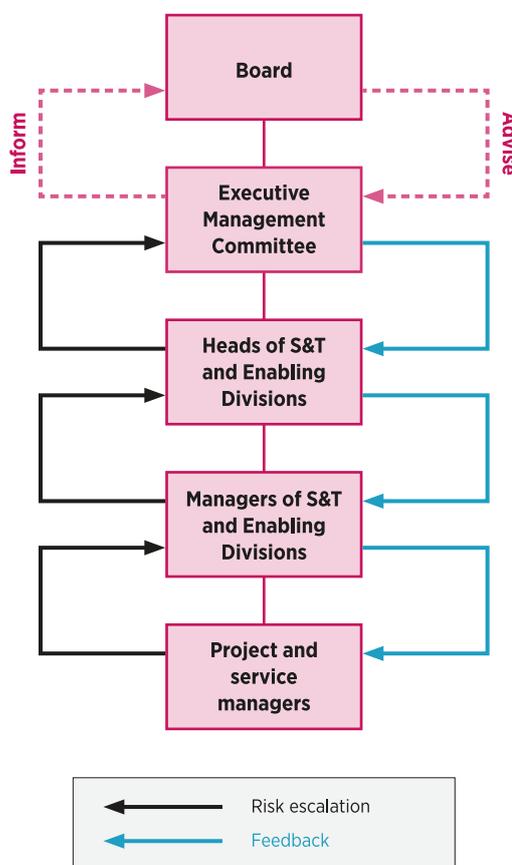
Risk reporting within Dstl happens at five levels:

- our Board, and Audit and Risk Assurance Committee
- my Executive Management Committee
- my heads of our S&T and Enabling Divisions
- my managers of our S&T and Enabling Divisions
- my project and service managers.

Risk is managed at the lowest possible level by empowering staff and ensuring they are aware of their delegated authorities. We escalate risks for either information or for action to the management layer above when the following happens:

- risks are assessed as severe or critical in their impact
- the risk is potentially part of a larger aggregated risk
- the risk owner cannot take action to decrease or stabilise an increasing risk trend within their delegated authorities.

**Dstl's risk reporting**



The ultimate point of escalation within Dstl is the Corporate Risk Register (CRR), which contains the risks that have the potential to impact our strategic objectives (see pages 15 to 17).

## Our control environment

We strive to create an environment where people are trusted and empowered to deliver their work while acting responsibly and safely at all times. This environment is built from: a combination of the policies, processes and guidance in our Management System; the responsibilities set out in standard role profiles and letters of delegation; and, the central role of review in our programme and project governance. The provision of sound ethical advice underpins this.

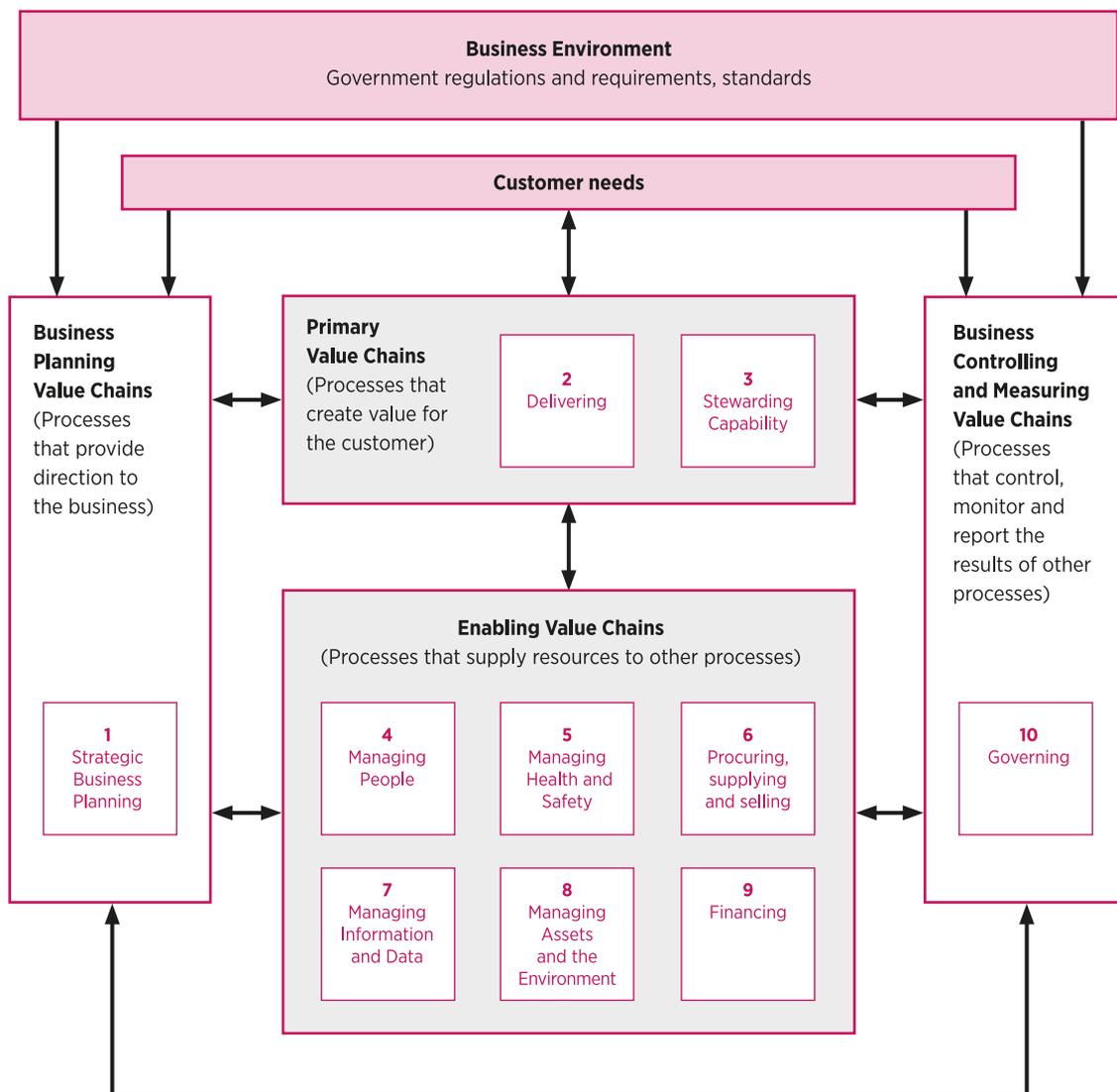
## Dstl processes

We operate a process hierarchy that gives strategic direction and intent to our business processes, sub-processes and process activities. These are aligned with our ten core value chains – the key sets of activities that Dstl performs in order to help manage corporate risks while achieving our purpose of delivering high-impact S&T.

We have continued to design, review and improve our business processes to ensure that they:

- meet the needs of our staff, customers and other stakeholders
- continue to support delivery of our strategic intent
- mitigate risk to the operation of Dstl's business.

## Dstl's ten value chains



This year has seen the implementation of new safety focussed processes for the control of contractors and visitors and the management of pressure systems and cylinder gases. We have also seen major improvements to the processes for: managing and observing trials; software development; and, management of our S&T programmes and projects. We are also improving inclusivity of the Dstl Management System, to give staff equal access to the information. By removing barriers to staff ability to interact with and understand key information on the Dstl Management System, we are better protecting our staff and business from wrongdoing and harm.

### External certification

Following our successful re-certification in 2017/18, this year we had the first surveillance audit for our ISO 9001:2015 (Quality Management Systems), ISO 14001:2015 (Environmental Management Systems) and TickITplus (software development) certifications. This included a successful extension to scope for our ISO 9001:2015 and TickITplus certifications, to include the work transitioned to Dstl as part of the Centre for Applied Science and Technology (CAST) integration. During the surveillance audit, the auditors noted as a strength, the integration of CAST into Dstl and, specifically, how the CAST and Dstl Management Systems were successfully integrated.

This financial year, we have successfully re-tendered for our certification body services and have appointed BSI Assurance UK Ltd as our certification body for the next five years.

### Our control activities

This year, we have reviewed our assurance framework to ensure its ongoing effectiveness. This has resulted in a *Dstl Assurance Strategy* through which we will ensure a common understanding of what is meant by assurance, its importance to the successful operation of our business and the approach to assurance in Dstl. The approach, based on the Four Lines of Defence Model, focusses

on those things that matter most to Dstl and to our stakeholders, and will provide a holistic, single view of risk and control issues across our business.

### Internal audit

Dstl's corporate internal audit capability is provided by Defence Internal Audit, who this year delivered a programme of nine internal audits. These audits were selected from the areas of highest risk, or where there were gaps or weaknesses in other assurance arrangements. The internal audits ranged from determining the adequacy and effectiveness of S&T project delivery performance through to assurance over the degree to which practices associated with strategic workforce planning are established and embedded across Dstl.

The majority of internal audits received a rating of substantial – providing assurance that the systems of internal control established are operating effectively with some minor weaknesses.

### Fraud management

This year, our fraud risk-reduction activities continued to focus on control and monitoring of the procurement process, and encouragement of disclosure via existing channels for whistle-blowing and incident reporting. The fraud investigation that was outstanding from last year was satisfactorily resolved.

During the reporting period, there have been two reports of unusual activity from internal sources. We used our investigation process to investigate the activities, both of which have been satisfactorily resolved.

### Incident investigations

We actively promote the reporting of near misses and incidents. We investigate incidents proportionately based on the potential the incident could have had as well as in balance with the actual harm or damage caused.

First Line of Defence	Second Line of Defence	Third Line of Defence	Fourth Line of Defence
<p>The way that risks are managed and controlled day to day.</p> <p>Assurance coming directly from those responsible for delivering specific objectives. It may lack independence but its value comes from those who know the business well.</p>	<p>The way the organisation oversees the control framework.</p> <p>Providing assurance that is separate from those responsible for delivery, but not independent of the management chains.</p>	<p>Objective and independent assurance e.g. internal audit.</p> <p>Providing reasonable (not absolute) assurance of the overall effectiveness of governance, risk management and internal controls.</p>	<p>Assurance from external independent bodies.</p> <p>Assurance from independent bodies who may not have familiarity with the organisation but who can bring a new and valuable perspective.</p>

The responsible business unit investigates all incidents classified as 'medium'. Incidents classified as 'high' are subject to an independent, corporate investigation.

This year, we reviewed the way we investigate incidents. We established root cause analysis for investigations to ensure a systematic analysis of incidents that identifies the root cause, to enable setting of effective actions to prevent reoccurrence. Application of a 'just culture' has assured staff that incident investigations are for the purpose of organisational learning, to prevent reoccurrence, and not for the purpose of disciplinary action. This, in turn, has encouraged a strong culture of reporting incidents when they occur. Together, this ensures that we remain an organisation that seeks to learn from incidents to prevent reoccurrence and improve our business, thereby adding value to our stakeholders.

During the year, we had 63 high incidents reported centrally of which 37 were investigated as high potential/actual incidents – 27 safety, five business, four HR and one security. Eleven of the safety incidents were reportable to the Health and Safety Executive under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations). Seventeen of the high-severity incidents reported were not investigated corporately – 12 resulted in medium investigations delivered within Division, one incident was investigated by our facilities management provider, and four incidents were not investigated due to there being no benefit of an investigation. The remainder were incorporated into investigations that had already commenced due to similarity in the nature of the incidents.

### Information assurance

I am pleased to report that there have been no serious security breaches or breaches of data protection incurring the interest of the Information Commissioner's Office. Early in the year, during the Salisbury incident, our network came under a sophisticated and prolonged cyber attack. Our cyber defences proved effective in quickly detecting the attack and monitoring how it evolved, and we were able to apply appropriate and proportionate countermeasures. I am satisfied that the network remains secure and no data was compromised. An internal review of the attack and our response has been carried out and the findings identified are being actioned.

### Whistle-blowing

We remain committed to achieving the highest possible standards of service and ethics in public life. This is demonstrated by our whistle-blowing process, which is written in line with the *Public Interest Disclosure Act 1998*, the *Fraud Act 2006* and the *Bribery Act 2010*.

This year there were no incidents raised via our whistle-blowing process.

### Protected personal data incidents

This year, there have been no incidents where personal data was either lost or compromised. We have put a register of processing activities in place, identified its key suppliers and made appropriate arrangements with them, and implemented a robust breach-reporting regime. We have been key in implementing the overarching MOD General Data Protection Regulation programme, and led on the creation and implementation of the new Data Protection Impact Assessment form, ensuring the implementation of best practice from across Government.

### Quality assurance of analytical models

Every six months, we declare our business-critical models – as defined following the Macpherson Review in 2013 – to MOD. A model is a way to appraise, assess, evaluate, plan or forecast future responses or outcomes by processing a variety of input data and assumptions. Our Modelling and Simulation Strategy Group manages the coherence and governance of our modelling. We continue to interface and share best practice with MOD and wider Government, and to continue to improve the quality and operation of such models.

### Contract management and assurance

Effective contract management remains a key priority for us, for MOD, and for wider Government. At Dstl, this has translated to Level 1-3 contract management being assured monthly by the Contract Manager Co-ordinator, supported by an independent (cross-team) individual. The focus has been Level 1 contract management, managed by Dstl's project managers, rather than Levels 2-3, which have a dedicated Commercial contract manager. A sample-check assurance review of Level 1 contract management conducted during the previous financial year ascertained the level of understanding and application of Level 1 contract management principles. The key findings against each of the 12 contract management activities reviewed demonstrated evidence of good practice. The review produced a series of recommended activities to provide ongoing assurance for this financial year:

- the production and release of an essential guide leaflet for Level 1 contract management for project managers
- a self-assessment electronic questionnaire for project managers
- Individual Assurance Reviews by the Contract Management Co-ordination Lead for up to 10 per cent of the project management community.

### Official correspondence from members of the public

During 2018/19, Dstl received 30 letters from members of the public, to which we responded within the mandated 20 working day deadline in 100 per cent of cases. The complexity of official correspondence increased during our support to the Salisbury and Amesbury nerve-agent incidents, and we answered or contributed to 70 Freedom of Information (FOI) requests during the whole financial year, in accordance with the *FOI Act*. We handled four Data Subject Access Requests (DSARs) under the *Data Protection Act (DPA)* all of which we answered on time. Additionally, there were eight enquiries to the Porton Down Former Volunteers Helpline, which were also handled in accordance with the DPA.

### Group Head of Defence Internal Audit's summary

In line with Public Sector Internal Audit Standards, the Group Head of Defence Internal Audit (DIA) must provide a professional opinion on the adequacy and effectiveness of Dstl's arrangements for risk management, internal control and governance. I have used the following DIA audit opinion to help me in the production of this year's Governance Statement; it summarises the results of DIA's internal audit work relevant to our objectives from April 2018 to March 2019.

The Group Head DIA has said: "Our audit opinion is based on a combination of our audit programme, which covered nine audits in 2018/19, our attendance at Dstl Audit and Risk Assurance Committee (ARAC) meetings, our engagement with Dstl senior management, and

our consultation on any other relevant developments in both Dstl and MOD.

"In year, we also initiated a planned audit on the integration of the Home Office's Centre for Applied Science and Technology into Dstl but this had to be cancelled due to another extensive review being undertaken in year; the Dstl ARAC endorsed this decision.

"Following all the above-mentioned activity, I am able, overall, to provide *substantial* assurance over the governance, risk management arrangements and system of internal control in Dstl.

"Our audits of Intelligent Client Capability Governance and the End-to-end Acquisition Improvement Strategy confirmed that, overall, there were strong governance and assurance arrangements in place and that control processes were operating effectively. Our other audits highlighted that positive steps were being taken to mature Safety Improvement and Strategic Workforce Planning processes.

"However, we recognise that selected areas of Dstl require further development and offer opportunities for improving the control environment. They include improved change control and learning from experience in science and technology project delivery, greater accuracy of management information in contract management, and enhanced interdependency mapping and approvals processes within capital infrastructure."

The internal audits taking place at Dstl in 2018/19, their timings and owners, were:

Audit title	When	Owner
Safety Improvement Programme - follow on	August 2018	Chief Executive
Science and Technology Project Delivery Performance	August 2018	Chief Technical Officer
Facilities Management Services (FMS) Provider Contract Management	October 2018	Director of Operational Risk (for Chief Operating Officer)
Agreed Management Action Follow-Up Process	October 2018	Chief Finance Officer
Capital Infrastructure Plan	November 2018	Chief Executive
Strategic Workforce Planning	November 2018	Chief People Officer
Knowledge and Information Services - Intelligent Client Capability Governance	March 2019	Chief Operating Officer
End-to-end Acquisition Improvement Strategy	March 2019	Chief Operating Officer
FMS Provider Contract Management - follow on	April 2019	Head of FMS (on behalf of Chief Operating Officer)

## Chief Executive's summary

Coming into post and launching the new Dstl Strategic Direction was a great opportunity to revisit our arrangements for risk management, internal control and governance. I have been impressed with the energy and pragmatism that all parties have invested, and pleased that we have continued to build on the strong culture of good internal governance at Dstl.

Particular highlights for me have included an enhanced *Dstl Assurance Strategy* and a refreshed risk register with planned mitigations. As a result, I am confident that we are making good progress with continuous improvement plans that will stand us in good stead for the future.

In my first full financial year as Chief Executive and Accounting Officer, I can see a strong culture of governance and assurance via internal controls, supported by multiple sources of external audit across our operations. We have strong processes that are well understood by our staff, and ensure that we efficiently deliver to our customers while appropriately managing risk and ensuring compliance. In particular, we have made significant progress in our commercial processes that is enabling us to work more effectively with our partners and suppliers. We have also strengthened our Risk, Assurance and Governance team through internal rotation and promotion to ensure sustained progress in this area.

All of this has been supported by appropriate challenge from the independently chaired Audit and Risk Assurance Committee. This committee is essential to enable me to discharge my responsibilities as Chief Executive and Accounting Officer, particularly given the significant changes facing Dstl in what continues to be a challenging defence, economic and rapidly changing technology context.

It has also been the first full year for our internal audit partner, and I am pleased that they have settled in well and developed their understanding of our work and operations, which has resulted in increasingly effective audit findings. These findings, together with the challenge and support of our non-executive members, are enabling us to tackle those parts of our business that we need to improve as we continue to deliver impact and value to our customers.

# Remuneration and Staff

## Remuneration policy

Dstl has no pay costs for ministers. At year end, five directors were Senior Civil Service (SCS) and subject to SCS terms and conditions, including the remuneration policy. These directors were: Gary Aitkenhead; Andrew Bell; David English; Joanne Peel; and, Douglas Umbers. As SCS, their pay is set through recommendations made by the Review Body on Senior Salaries (SSRB). The SSRB provides independent advice to the Prime Minister and to the Secretary of State for Defence on the remuneration of the SCS. Further information about the SSRB's work can be found at: [www.gov.uk/government/organisations/review-body-on-senior-salaries](http://www.gov.uk/government/organisations/review-body-on-senior-salaries). Their non-consolidated performance award arrangements fall under SCS rules rather than the Dstl performance-award system.

The remaining directors at year end (Matthew Chinn, Simon Earwicker, Paul Kealey, Mike Smith, and Robert Solly) are Dstl employees and subject to the same performance-related remuneration policy as all other non-SCS Dstl staff.

The non-executive members (NEMs) are not Dstl employees and, apart from one who is employed by MOD, are paid a fee for their services.

## Performance conditions

Directors who are subject to SCS terms and conditions are also subject to the SCS performance conditions. The remaining directors are subject to the Dstl performance management rules.

## Service contracts

The *Constitutional Reform and Governance Act 2010* requires civil service appointments to be made on merit on the basis of fair and open competition. The Recruitment Principles published by the Civil Service Commission specifies the circumstances when appointments may be made otherwise.

Unless otherwise stated, the officials named in this report hold appointments that are open-ended. Early termination would result in the individual receiving compensation (except in cases of misconduct) as outlined in the *Civil Service Compensation Scheme*. There were no awards made to past senior managers.

Further information about the work of the Civil Service Commission can be found at: [www.civilservicecommission.org.uk](http://www.civilservicecommission.org.uk)

## Fees paid to non-executive members of the Dstl Board for the financial year 2018/19

The MOD non-executive member is a senior civil servant. All other non-executive members are not civil servants and, as such, their contracts are not pensionable and there is no compensation for early termination.

<i>This information is subject to audit opinion</i>	Fee 2018/19 £'000	Fee 2017/18 £'000
Sir David Pepper KCMG	25-30	25-30
Brian Bowsher <sup>1</sup>	10-15 <i>15-20</i>	
Sir David Grant <sup>2</sup>	10-15 <i>15-20</i>	15-20
Jeremy Monroe	15-20	15-20
Mark Preston <sup>3</sup>		
Sarah Spurgeon <sup>4</sup>	10-15 <i>15-20</i>	
David Tonkin	15-20	10-15 <i>15-20</i>

*Figures in italics denote full-year equivalent fee.*

<sup>1</sup> Brian Bowsher joined Dstl on 1 September 2018.

<sup>2</sup> Sir David Grant completed his tenure as a non-executive member of the Dstl Board on 31 December 2018.

<sup>3</sup> Mark Preston did not receive a fee; he represents MOD as a non-executive member. This is a related party with which Dstl has material transactions. Please see Related Party Note at Note 21. Mark Preston was appointed to the Board on 2 May 2016.

<sup>4</sup> Sarah Spurgeon joined Dstl on 1 July 2018.

## Remuneration paid to executive directors for the financial year 2018/19

<i>This information is subject to audit opinion</i>	Note (B) <sup>†</sup>	Salary band 2018/19 £'000	Salary band 2017/18 £'000	NCPA* 2018/19 £'000	NCPA 2017/18 £'000	Pension benefits 2018/19 Nearest £'000	Pension benefits 2017/18 Nearest £'000	Total 2018/19 £'000	Total 2017/18 £'000
Gary Aitkenhead	(B)	140-145	45-50 <i>135-140</i>	35-40		55	18	235-240	65-70
Graham Balmer <sup>1</sup>		25-30 <i>75-80</i>	75-80	0-5	0-5	27	18	55-60	95-100
Andrew Bell <sup>2</sup>	(B)	40-45 <i>90-95</i>				28		40-45	
Patrick Burns <sup>3</sup>		70-75 <i>75-80</i>		0-5		8		75-80	
Matthew Chinn <sup>4</sup>		0-5 <i>100-105</i>				26		25-30	
Simon Earwicker <sup>5</sup>		55-60 <i>75-80</i>		0-5		25		85-90	
David English	(B)	80-85	75-80	5-10		17	19	105-110	95-100
Penelope Endersby <sup>6</sup>	(B)	25-30 <i>75-80</i>		0-5		35		65-70	
Bryn Hughes <sup>7</sup>	(B)	15-20 <i>75-80</i>	75-80	0-5		-7	0	10-15	75-80
Paul Kealey <sup>8</sup>		20-25 <i>70-75</i>				7		25-30	
Dario Leslie <sup>9</sup>		0-5 <i>65-70</i>		0-5		24		25-30	
David Marsh <sup>10, 11</sup>	(B)	50-55 <i>105-110</i>	110-115		10-15	5	14	55-60	180-185
Joanne Peel	(B)	75-80 <i>75-80</i>	75-80		10-15	28	25	105-110	110-115
Mike Smith <sup>12</sup>		60-65 <i>80-85</i>		0-5		42		105-110	
Robert Solly <sup>13</sup>		60-65 <i>80-85</i>		0-5		25		90-95	
Douglas Umbers <sup>14</sup>	(B)	35-40 <i>120-125</i>				14		50-55	
Kevin Wagstaff <sup>15</sup>	(B)	20-25 <i>75-80</i>	65-70 <i>80-85</i>	0-5		18	-3	40-45	60-65

Figures in italics denote full-year equivalent salary.

\* Non-consolidated performance awards (NCPAs). NCPAs were awarded in line with SCS and Dstl performance management rules.

† (B) denotes that this executive director is or was also a member of the Dstl Board. The salary bands set out above relate only to emoluments paid during the period of these directors' membership of the Dstl Board and the Dstl Executive Membership Committee (EMC).

In the case of those directors sitting on the EMC and not on the Dstl Board, the salary bands set out above relate only to emoluments paid during the period of these directors' membership of the EMC.

No directors, key managerial staff or other related parties have undertaken any material transactions with Dstl during the year.

There was no non-cash element of the remuneration package.

<sup>1 to 15</sup> Please see notes on page 65.

### Executive Agency Board members' emoluments

We have shown the details of Board members' emoluments in the tables on pages 62 and 63. They are summarised as follows:

*This information is subject to audit opinion*

	2019	2018
Salaries, NCPAs and fees (£'000)	856.3	812.1

### Pension provision for executive directors for the financial year 2018/19

<i>This information is subject to audit opinion</i>	Note (B) <sup>†</sup>	Real increase in pension [and related lump sum at pension age]	Total accrued pension at pension age at 31/03/19 [and related lump sum]	Cash equivalent value at 31/03/19	Cash equivalent value at 31/03/18	Real increase in cash equivalent transfer value as funded by employer
		£'000	£'000	£'000	£'000	£'000
Gary Aitkenhead	(B)	2.5-5	0-5	53	12	29
Graham Balmer		0-2.5 [0-(2.5)]	0-2.5 [30-35]	593	510	14
Andrew Bell	(B)	0-2.5 [0-(2.5)]	30-35 [75-80]	644	559	13
Patrick Burns		0-2.5 [0-2.5]	35-40 [110-115]	841	758	8
Matthew Chinn <sup>1,5</sup>		0-2.5 [0-(2.5)]	30-35 [70-75]	554	476	11
Simon Earwicker <sup>1</sup>		0-2.5 [0-(2.5)]	25-30 [60-65]	474	405	11
David English <sup>1</sup>	(B)	0-2.5	30-35	427	361	4
Penelope Endersby	(B)	0-2.5 [0-2.5]	30-35 [70-75]	516	448	21
Bryn Hughes <sup>2</sup>	(B)	0-(2.5) [0-(2.5)]	30-35 [100-105]	739	717	-7
Paul Kealey		0-2.5	10-15	147	142	3
Dario Leslie <sup>1</sup>		0-2.5 [0-(2.5)]	25-30 [60-65]	560	493	15
David Marsh <sup>3</sup>	(B)	0-2.5 [0-2.5]	35-40 [105-110]	739	723	4
Joanne Peel <sup>1</sup>	(B)	0-2.5 [0-(2.5)]	20-25 40-45	381	323	15
Mike Smith		0-2.5	15-20	290	229	29
Robert Solly <sup>1</sup>		0-2.5 [0-(2.5)]	25-30 [65-70]	498	427	11
Douglas Umbers	(B)	0-2.5	0-5	11	0	8
Kevin Wagstaff <sup>4</sup>	(B)	0-2.5 [0-(2.5)]	45-50 [65-70]	997	889	18

Pension information is provided by MyCSP, the administrators of civil service pensions. With the exception of Kevin Wagstaff, who belongs to the *premium* Civil Service Pension Scheme (CSPS) all other directors belong to the *classic*, *classic plus* or *alpha* CSPSs. All schemes are part of the civil service pension arrangements. See pension information on page 71.

<sup>†</sup> (B) denotes that this executive director is or was also a member of the Dstl Board.

<sup>1 to 5</sup> Please see notes on page 65.

## Relationship between the highest-paid director and the workforce median

*This information is subject to audit opinion*

	2018/19	2017/18
Band of highest-paid director total remuneration	£180,000-£185,000	£145,000-£150,000 <sup>1</sup>
Median total remuneration	£36,974	£36,399
Ratio <sup>2</sup>	4.94	4.05

Dstl is required to disclose the relationship between the remuneration of the highest-paid director in our organisation and the median remuneration of our organisation's workforce.

The banded remuneration of the highest-paid director in Dstl in the financial year 2018/19 was £180,000-£185,000 (2017/18: £145,000-£150,000). This was 4.94 times (2017/18: 4.05) the median remuneration of the workforce, which was £36,974 (2017/18: £36,399).

In both 2018/19 and 2017/18, no employees received remuneration in excess of the highest-paid director. In 2018/19, remuneration ranged from £12,500 to £180,000-£185,000 (2017/18: £12,500 to £145,000-£150,000).

Total remuneration includes salary, non-consolidated performance-related pay, and benefits in kind. It does not include severance payments, employer pension contributions and the cash equivalent transfer value of pensions.

<sup>1</sup> This represented the annual equivalent salary and non-consolidated performance award for Dstl's former Chief Executive Jonathan Lyle.

<sup>2</sup> This year, there has been a rise in the pay award and a large non-consolidated payment to our highest-paid director. While there has been a £575 rise in the median salary of the workforce compared to last year, the highest-paid director's increases have resulted in a significant change in the ratio between the median staff remuneration and the mid-point of the banded remuneration of the highest paid director, increasing from 4.05 for 2017/18 to 4.94 for 2018/19.

### Notes for remuneration paid to executive directors for the financial year 2018/19 on page 63.

- <sup>1</sup> Graham Balmer's Executive Management Committee (EMC) membership ceased on 2 July 2018.
- <sup>2</sup> Andrew Bell was appointed to the Board and to the EMC on 22 October 2018.
- <sup>3</sup> Patrick Burns' appointment ceased on 14 March 2019.
- <sup>4</sup> Matthew Chinn was appointed to the EMC on 25 March 2019. He also received a non-consolidated performance award (5-10) during 2018/19 relating to performance in his previous non-Dstl role. Because he remained on the Dstl payroll throughout his secondment, his pension benefits represent the whole of 2018/19 and are not an apportionment of remuneration reflecting his membership of the EMC.
- <sup>5</sup> Simon Earwicker was appointed to the EMC on 2 July 2018.
- <sup>6</sup> Penelope Endersby was Interim Chief Technical Officer on the Board from 9 July 2018 to 5 November 2018.
- <sup>7</sup> Bryn Hughes' appointment to the Board ceased on 2 July 2018.
- <sup>8</sup> Paul Kealey was appointed to the EMC on 1 January 2019.
- <sup>9</sup> Dario Leslie was Interim Division Head for Cyber and Information Systems Division from 5 December 2018 to 31 December 2018.
- <sup>10</sup> David Marsh was seconded to a position within MOD from April 2018; his appointment to the Board ceased on 30 September 2018.
- <sup>11</sup> David Marsh's pension benefits for 2017/18 have been restated due to a retrospective update to salary data.
- <sup>12</sup> Mike Smith was appointed to the EMC on 2 July 2018.
- <sup>13</sup> Robert Solly was appointed to the EMC on 2 July 2018.
- <sup>14</sup> Douglas Umbers was appointed to the Board and to the EMC on 10 December 2018.
- <sup>15</sup> Kevin Wagstaff's Board membership as Interim Capability and Delivery Director ceased on 9 July 2018.

### Notes for pension provision for executive directors for the financial year 2018/19 on page 64.

- <sup>1</sup> Final salary members (*classic/classic plus/premium*) who have transitioned to *alpha*. The final salary pension of a person in employment is calculated by reference to their pay and length of service. The pension will increase from one year to the next by virtue of any pay rise during the year. Where there is no or a small pay rise, the increase in pension due to extra service may not be sufficient to offset the inflation increase - that is, in real terms, the pension value can reduce, hence negative values.
- <sup>2</sup> Final salary member (*classic/classic plus/premium*) for the whole period. The final salary pension of a person in employment is calculated by reference to their pay and length of service. The pension will increase from one year to the next by virtue of them having an extra year's service and by virtue of any pay rise during the year. Where there is no or a small pay rise, the increase in pension due to extra service may not be sufficient to offset the inflation increase - that is, in real terms, the pension value can reduce and will show a negative value.
- <sup>3</sup> David Marsh's cash equivalent value at 31/03/18 has been restated due to a retrospective update to salary data.
- <sup>4</sup> Member of *classic plus* where no service after 30 September 2002 counts towards the calculation of the lump sum.
- <sup>5</sup> Pension provision stated for 2018/19. Member remained on the Dstl payroll throughout a secondment to MOD. As such, pension provision is not an apportionment of provision to reflect membership of the EMC.

**The Civil Service pension arrangements provide pension benefits to our former employees – see page 71**

## Our people

**Dstl recognises that a highly skilled, inquisitive and dedicated workforce is critical to delivering our high-impact work**

We are a knowledge-based organisation and we can only achieve our purpose through having the right people with the right skills at the right time. In line with our third strategic objective to be an agile organisation that is fit for the future, we adapt, improve and invest in the talent, skills and careers of our workforce, while ensuring that Dstl is a great place to work.

### Talent pipeline

We ensure that our strategic workforce and capability health planning influences business decisions and shapes the future supply and demand for our workforce. We are targeting Energetics, Analytics, Data Science and Cyber as growth areas and engineers, analysts, chemists and other scientific specialists in our recruitment; we recognise these are national skills gaps.

An innovative development this year has seen the launch of virtual careers fairs. Hosted online, the fairs give a wider range of people an opportunity to participate with us and consider the exciting opportunities we can offer. A further demonstration of our cutting-edge approach to recruitment is our continued use of video interviewing. This new assessment process has saved the business £35,000 in costs and also saved 240 hours of administration time this year.

Using the priorities identified through our improved planning processes, we spent £237,600 on experienced hire and early careers recruitment advertising this year. This includes our use of social media platforms such as Facebook, LinkedIn and Job Boards. We have no other publicity or advertising costs at Dstl.

Our attraction and recruitment activities resulted in 7,398 applications for Dstl's careers opportunities, including 1,115 graduates, 634 students, 476 apprentices, and 5,173 others. This saw 704 new people joining Dstl this year, with another 321 candidates currently going through the onboarding process to join us later in 2019. Additionally, 147 colleagues from the former Centre for Applied Science and Technology at the Home Office integrated into Dstl, an exciting expansion of our role and an example of the confidence placed in Dstl across Government.

### Skilled workforce

We continue to expand our apprenticeship schemes. This year, we offered apprenticeships for the first time as vehicle fitters, surveying technicians, team leaders, and digital and technology solutions professionals. We also offered new apprenticeships in commercial procurement and operational delivery. We have also been part of the design of a 'trailblazer' bachelor degree-level apprenticeship in ordnance, munitions and explosives, which gained approval in August 2018. Trailblazer apprenticeships meet business needs and grow future talent pipelines; a Health and Safety professional-level apprenticeship was also approved.

This year, we retained our membership of The 5% Club, a group of public and private sector companies committed to working towards having a minimum of five per cent of members' workforces enrolled on formal apprenticeship programmes, graduate development schemes or sponsored student schemes. On average this year, we had 205 apprentices/students on various schemes across the organisation, which represents 5.49 per cent of our employed workforce. However, despite this good work and our commitment to apprenticeships, we may still fall short of our target of 90 new-start apprentices per annum although we will fully recoup the financial value of the Government's apprenticeship levy (£852,179).

This year, for the first time we worked in partnership with UK Naval Engineering Science and Technology, and the Women's Engineering Society to pilot a Science, Technology, Engineering and Mathematics (STEM) Returners Programme. Those involved worked on challenging projects across Dstl, as well as taking part in one-to-one mentoring, networking opportunities and further career support. The programme aimed to give confidence to experienced STEM professionals so they could step back into their careers after taking time off. The programme attracted a high level of skills and experience, allowing us to harness valuable technical expertise. We plan to run the scheme again in 2019 in order to continue to explore non-traditional sources of talent for our workforce. This aim is also supported by our continued leadership of the STEM Futures scheme, which aims to address a sector-wide shortage in STEM skills by developing a continuous talent pipeline.

### Exciting, innovative and supportive workplace

This year, our workforce established a shared set of organisational and personal qualities to capture our culture at Dstl; the resulting 'values', launched in November 2018, are *'innovative, collaborative, impactful'*.

Continued on page 68



**[dstl]**

**We are**

**Innovative**

**Collaborative**

**Impactful**

**We are Dstl**

These values represent what means most to our staff, they reflect what Dstl is, what we are proud of, and how we act, think and feel.

We offer rewarding technical and generalist careers, providing exciting work that is not possible elsewhere. We continue to invest in our people through chartership and other accreditations. This year, 38 people have become chartered and 17 have become Fellows of their given professions. We have also been successfully reaccredited with The Institute of Materials, Minerals and Mining for the development offered to our staff. Our engineering apprenticeship has been reaccredited by the Institution of Engineering and Technology and the Institution of Mechanical Engineers.

We know that it is vital that we attract and retain a diverse workforce and that we remain an inclusive employer. We want everyone to feel included, listened to, and be able to fulfil their full potential. The Dstl Executive Management Committee is committed to embedding diversity and inclusion (D&I) as 'business as usual'. We value inclusivity and difference in our people, ensuring we also stand up for fairness and equality. During National Inclusion Week this year, we shared impactful and inspirational video clips of people from diverse backgrounds on our social media platforms and internally.

This year, we supported staff to participate in the Lesbian, Gay, Bisexual and Transgender (LGBT) and Black, Asian and Minority Ethnic leadership conferences; we also flew the rainbow flag at Portsmouth West, Porton Down and Fort Halstead during February 2019 to recognise LGBT History Month.

We are working hard to address our D&I levels of ambition with regards to our own workforce, and are also committed to playing our part in the challenges that the UK faces in relation to our future STEM workforce. We are members of Women in Science and Engineering, Stonewall, and are signatories of NHS initiative Mindful Employer. We have also taken part in Social Mobility Index and are considering applying to be 'Disability Confident' under the Disability Confidence Scheme in 2019.

We continue to support people with disabilities by interviewing all disabled applicants who meet the essential job criteria for our vacancies. The *Equality Act 2010* places a requirement on employers to make adjustments for their staff to help them overcome disadvantages resulting from their disability; our D&I policy sets the overall framework of how we promote and support those with protected characteristics. Our workplace adjustment process ensures that adjustments are available for the continuation of employment of new

recruits and during employment to accommodate all our people. This year, we hosted the first Civil Service Hearing Showcase, which included 60 guests from across defence and the civil service. We demonstrated our use of advanced technology to enable people with hearing impairments to be included in highly classified areas.

Our people are civil servants and as such the Civil Service governs our people policies. We ensure that our procedures and employment contracts are in line with the *Civil Service Management Code* and that they reflect the fundamental principles of the *Human Rights Act 2000*. Good industrial relations are important to us at Dstl. We continue to enjoy an excellent relationship with the trade unions based on mutual trust and respect. We work in partnership to reach agreement on issues that affect employees, their terms and conditions of service, and their working environment.

We continue to invest in the health and wellbeing of our employees by working closely with our onsite occupational health team and our Employee Assistance Programme provider. This year saw 2.2 per cent of hours lost due to sickness absence. To support us in improving employee well-being and reduce time lost due to psychological illness, we have embedded mental health advocates, retendered our Occupational Health and Employee Assistance provision and launched the carers' passport. We continue to take health and safety extremely seriously; this year our health and safety injury incident rate is 125 per 100,000 workers.

We know we have ongoing engagement challenges linked to pay and reward within Dstl. While we believe that our Total Rewards package is good, we need to continue to be creative and flexible in our approach to recognising and rewarding our people at the same time as ensuring transparency. This will require us to continue to work hard to develop and submit proposals to the Cabinet Office and Her Majesty's Treasury.

Pay, although important, is one element of our Total Rewards Package, so we have introduced a number of new benefits. For example, this year we launched Rewarding Achievement, which sees our leadership teams empowered to reward employees' specific achievements financially throughout the year, based on the principle of timely recognition. We have also extended our Rental Deposit Scheme to new joiners and also continued our buying and selling leave scheme. Our staff engagement survey indicated an increase of four percentage points in engagement this year, and we are continuing to work hard to increase this score further, particularly in the categories of Learning and Development and by focussing on the communication and intention of our strategic priorities.

## Our workforce

The average Full-Time Equivalent number of persons (including members of the Board) employed during the year at Dstl was:

	Permanent (UK) employment contract		Agency and short-term contract staff		Inward secondees		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
<i>This information is subject to audit opinion</i>								
Professional and technical staff	2,952	2,856	187	173	60	62	3,199	3,091
Administrative and industrial staff	549	504	71	58	1	1	621	563
<b>Total</b>	<b>3,501</b>	<b>3,360</b>	<b>258</b>	<b>231</b>	<b>61</b>	<b>63</b>	<b>3,820</b>	<b>3,654</b>

The staff costs incurred by our workforce over the past financial year were:

	2019 £ million	2018 £ million
<i>This information is subject to audit opinion</i>		
Wages and salaries	159.7	146.3
Social security costs (including apprenticeship levy)	17.6	16.5
Other pension costs	30.9	29.0
Inward secondees	6.0	6.1
Agency and contract staff	13.7	10.7
Less recoveries in respect of outward secondments	(5.6)	(7.0)
<b>Total</b>	<b>222.3</b>	<b>201.6</b>

No staff costs were capitalised during the year (2017/18: £12,500).

This year, there were no consultancy services costs at Dstl (2017/18: £39,000).

## Our off-payroll engagements

Following the *Review of Tax Arrangements of Public Sector Appointees* published by the Chief Secretary to HM Treasury on 23 May 2012, Dstl must publish information on our highly paid and/or senior off-payroll engagements. To complement our committed employed workforce, and to cover temporary capacity or to deliver particular niche scientific expertise for which there is no permanent need, we engage a number of Contracted Temporary Workers (CTWs).

Identified in the following tables are the numbers of our non-permanent staff (contractors) at Dstl whom we hire under contingent labour routes – the CL One/PSR (Public Sector Resourcing) frameworks. CTWs are not employees and nor are they off-payroll appointments to public office, for which there is none at Dstl.

**Table 1. All off-payroll engagements**

Number of existing engagements as of 31 March 2019 for more than £245 per day and that last for longer than six months	147
<b>Of which</b>	
Number that have existed for less than one year at time of reporting.	68
Number that have existed for between one and two years at time of reporting.	42
Number that have existed for between two and three years at time of reporting.	19
Number that have existed for between three and four years at time of reporting.	12
Number that have existed for four or more years at time of reporting.	6

**Table 2. All new off-payroll engagements**

Number of new engagements, or those that reached six months in duration, between 1 April 2018 and 31 March 2019	80
<b>Of which</b>	
Number assessed as caught by IR35	71 <sup>1</sup>
Number assessed as not caught by IR35	9 <sup>2</sup>
Number engaged directly (via Personal Services Contract contracted to Dstl) and are on the payroll	0
Number of engagements reassessed for consistency/assurance purposes during the year	0 <sup>3</sup>
Number of engagements that saw a change to IR35 status following the consistency review	0

<sup>1</sup> All of Dstl's contingent labour requirements are engaged via the Crown Commercial Services' CL One/PSR (Public Sector Resourcing) frameworks and the supply chain within those frameworks. It is the responsibility of the framework's supply chain, be it a specialist recruitment company or umbrella company, to deduct the appropriate tax and national insurance.

<sup>2</sup> These nine contracts held by Dstl (for example, medically qualified professionals paid hourly for their services) were all put through the Her Majesty's Revenue and Customs' Assessment Tool and were assessed as being out of scope of IR35. However, since the release of the MOD Defence Instruction Notice regarding all future contracts being inside-scope-of-IR35 roles, the roles will be advertised as inside-scope roles should they require re-competition or become full-time roles. These nine contracts have been noted by the MOD Off-Payroll working group, and MOD HR is aware.

<sup>3</sup> Dstl does not undertake a reassessment for consistency/assurance purposes due to the small number of contracts falling outside of IR35. Dstl would only perform a consistency check where the scope and nature of a role changed mid-contract.

**Table 3. Off-payroll and on-payroll engagements of Board members and/or senior officials**

Number of off-payroll engagements of Board members, and/or, senior officials with significant financial responsibility, during the financial year.	0
Total number of individuals on payroll and off-payroll that have been deemed Board members, and/or, senior officials with significant financial responsibility during the financial year.	24

**Exit packages**

This year, a voluntary exit scheme for those employed at Fort Halstead affected by the Helios Project resulted in three exits. Dstl also completed a further four exits to assist reshaping Dstl.

Redundancy and other departure costs were paid in accordance with the provisions of the Civil Service Compensation Scheme, a statutory scheme, made under the *Superannuation Act 1972*. Exit costs are accounted for in-full in the year of departure. Where the Executive Agency has agreed early departures, the additional costs are met by the agency, not the Civil Service Pension Scheme. Ill-health retirement costs are met by the pension scheme and are not included in the table below.

*This information is subject to audit opinion*

Exit package cost band	Number of compulsory redundancies		Number of other departures agreed		Total number of exit packages by cost band	
	2019	2018	2019	2018	2019	2018
Less than £10,000	0	0	0	1	0	1
£10,000 - £25,000	0	0	0	19	0	19
£25,001 - £50,000	0	1	4	21	4	22
£50,001 - £100,000	0	0	3	14	3	14
£100,001 - £150,000	0	0	0	0	0	0
£150,001 - £200,000	0	0	0	0	0	0
More than £200,000	0	0	0	0	0	0
<b>Total number of exit packages</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>55</b>	<b>7</b>	<b>56</b>
<b>Total cost of exit packages (£)</b>	<b>0</b>	<b>27,086</b>	<b>363,535</b>	<b>2,097,348</b>	<b>363,535</b>	<b>2,214,434</b>

In addition, there was a net charge of £78,902 that relates to adjustments made for previous years. This was mainly due to late notification of a deferred lump-sum payment.

## Pensions

The civil service pension arrangements provide pension benefits to our former employees. From 1 April 2015, a new pension scheme for civil servants was introduced – the Civil Servants and Others Pension Scheme or *alpha*, which provides benefits on a career-average basis with a normal pension age equal to the member's state pension age or 65 if higher. From 1 April 2015, all newly appointed civil servants and the majority of those already in service joined *alpha*. Prior to that date, civil servants participated in the Principal Civil Service Pension Scheme (PCSPS). The PCSPS has four sections: three (*classic*, *premium*, *classic plus*) provide benefits on a final-salary basis with a normal pension age of 60, and one (*nuvos*) provides benefits on a whole-career basis with a normal pension age of 65.

These multi-employer defined benefit schemes are unfunded with the cost of benefits met by monies voted by Parliament each year. Pensions payable under *classic*, *premium*, *classic plus*, *nuvos* and *alpha* increase annually in line with pensions increase legislation. Dstl is unable to identify its share of the underlying assets and liabilities. A full scheme valuation was performed by the scheme actuary during 2012. The valuation is updated annually using the underlying 2012 valuation. Details can be found in the resource accounts of the Cabinet Office: Civil Service Superannuation at [www.civilservicepensionscheme.org.uk/about-us/resource-accounts](http://www.civilservicepensionscheme.org.uk/about-us/resource-accounts)

Employee contributions are salary-related and range between 4.6 per cent and 8.1 per cent of pensionable earnings for members of *classic*, *premium*, *classic plus*, *nuvos* and *alpha*. For the year ending 31 March 2019, Dstl employer contributions of £30.9 million were payable to MyCSP (2017/18: £29.0 million) at one of four rates in the range 20.0 per cent to 24.5 per cent of pensionable earnings, based on salary bands.

The scheme actuary reviews employer contributions usually every four years following a full scheme valuation. The contribution rates are set to meet the cost of the benefits accruing during the year ending 31 March 2019 to be paid when the member retires, and not the benefits paid during this period to existing pensioners.

More details on the *classic*, *premium*, *classic plus*, *nuvos* and *alpha* pension schemes including information about benefits and contributions are available at: [www.civilservicepensionscheme.org.uk/employers/employer-pension-guide/civil-service-pension-arrangements](http://www.civilservicepensionscheme.org.uk/employers/employer-pension-guide/civil-service-pension-arrangements)

Since October 2002, employees joining Dstl can opt for either the appropriate defined-benefit arrangement as above or a 'money purchase' stakeholder pension with an employer contribution (partnership pension account). Dstl makes a basic contribution of between 8.0 per cent and 14.8 per cent (depending on the age of the member) into the stakeholder pension. For 2018/19, employer contributions of £315,670 were paid into partnership pensions providers. Employers also contribute a further 0.5 per cent of pensionable salary to cover the cost of centrally provided risk benefit cover (death in service and ill-health retirement). Contributions due to the partnership pension providers at 31 March 2019 were £10,769. There were no prepaid contributions at that date.

This year, one person retired early on ill-health grounds; there were no accrued pension liabilities in the year for this individual. Further details about the Civil Service pension arrangements are available at: [www.civilservicepensionscheme.org.uk](http://www.civilservicepensionscheme.org.uk)

## Our staff composition

As at 31 March 2019, the gender numbers for our non-executive members, Executive Management Committee members, and employees were:

	Male	Female	Total
Non-executive members <sup>1</sup>	5	1	6
Executive Management Committee <sup>2</sup>	9	1	10
Employees	2,622	1,388	4,010
<b>Totals</b>	<b>2,636</b>	<b>1,390</b>	<b>4,026<sup>3</sup></b>

<sup>1</sup> The MOD non-executive member on the Dstl Board is senior civil service.

<sup>2</sup> The Chief Executive, Chief Finance Officer, Chief Operating Officer, Chief People Officer, and the Chief Technical Officer are senior civil service.

<sup>3</sup> All the above figures are headcount. Employee numbers include our permanent staff, our apprentices, and our fixed-term appointments.

# Parliamentary Accountability and Audit

This section presents information about Dstl that is useful to readers for accountability and decision-making purposes

As Accounting Officer, our Chief Executive is personally accountable to the MOD Permanent Secretary (who is directly accountable to Parliament) for ensuring that public money is safeguarded, properly accounted for and used economically, efficiently and effectively. Additionally, our Chief Executive is personally accountable to the MOD Chief Operating Officer for the performance and management of Dstl.

Our Chief Executive is designated as Dstl's Accounting Officer by the MOD Principal Accounting Officer (the MOD Permanent Secretary), and must operate in accordance with *Managing Public Money*. This designation is conveyed via an Accounting Officer letter of delegation from the MOD Permanent Secretary.

As the Dstl Accounting Officer, our Chief Executive may be called to account directly by Parliament. He is personally responsible for: safeguarding the public funds for which he has charge; for ensuring propriety, regularity, value for money and feasibility in the handling of those public funds; and, for the day-to-day operations and management of Dstl.

The Dstl Accounting Officer's specific accountabilities to Parliament include:

- signing the Dstl Annual Report and Accounts ensuring that proper records are kept and that accounts are properly prepared
- ensuring that effective procedures for handling complaints about Dstl are established and widely communicated
- acting in accordance with: *Managing Public Money*; the Dstl Framework Document; and, other instructions and policy as issued by MOD, Her Majesty's Treasury and the Cabinet Office
- giving evidence, normally with the MOD's Principal Accounting Officer, when summoned before the Public Accounts Committee.

Our annual report and accounts is subject to audit by the Comptroller and Auditor General, who heads the National Audit Office and is responsible for scrutinising public spending and safeguarding the interests of taxpayers on behalf of Parliament. The Comptroller and Auditor General's audit certification of this report is on page 74.

More details on our governance, key roles and our accountabilities relating to the MOD ownership function of Dstl's governance are published in our existing *Framework Document*. Our ownership structure is designed to balance the risk of Dstl's operations to MOD, and to encourage diversity of thought and reasonable challenge. Our *Framework Document* is available to view at: [www.gov.uk/government/publications/defence-science-and-technology-laboratory-framework-document](http://www.gov.uk/government/publications/defence-science-and-technology-laboratory-framework-document)

## Statement of Parliamentary Supply *(subject to audit)*

As an on-vote Executive Agency, we operate within MOD's control framework and are subject to delegated control totals for (net) resource and capital funding from within MOD's departmental allocation. We require net cash funding from MOD to cover the balance of expenditure that cannot be met from receipts paid direct to Dstl. We conduct our transactions within MOD on a non-cash basis via intra-departmental accounting and bookkeeping constructs. Our financial statements represent the result of transactions pertaining to our operations, set in the context of MOD's overall Statement of Parliamentary Supply.

## Regularity of expenditure *(subject to audit)*

All expenditure for the year was regular.

## Remote contingent liabilities *(subject to audit)*

The nature of our operations means that our sites and specialist buildings may become liable to significant decommissioning and remediation costs. The likelihood of the experimental establishments that we own transferring outside the public sector is considered remote, and we have not attempted to quantify the costs associated with such liabilities that could arise due to a transfer of ownership or significant change of use. Maintenance of a safe and secure working environment presents an enduring running cost to our business, funded through our operating expenditure. Our normal business is self-insured and long-term residual liabilities are considered to be underwritten by our parent department, MOD.

**Losses and special payments** *(subject to audit)*

Dstl's subsidiary Ploughshare is no longer consolidated and we therefore carry out an impairment review of the carrying value of the investment. Based on a review of Ploughshare's draft audited accounts at 31 March 2019, this resulted in an impairment of £0.4 million (2017/18: £1.9 million) being expensed in 2018/19, for which authority was received from MOD. See Note 9 on page 98 of the financial statements.

**Fees and charges** *(subject to audit)*

All our operating income derives from fees and charges. Details of our principal operating segments are disclosed in Note 2 to the financial statements on pages 91-92. We charge for goods and services in accordance with the principles in *Managing Public Money* and apply a fee to all the goods and services we provide outside MOD; details of these services can be found on pages 19-23 of this report.

Our charges have been set to recover our net cash resource expenditure only and we no longer charge a fee to our MOD customers as we are within the departmental boundary. The fee applied to non-MOD business is set so as to make a proportionate contribution towards capital expenditure, which is otherwise funded by MOD through a separate capital control total, and to cover our cost of capital.

**Public spending and administration budgets**

Our Chief Executive receives his letter of authority as Accounting Officer directly from the MOD Permanent Secretary. We recover our resource costs as an Executive Agency via charges to our customers and they are not classified as administrative costs. All our operating expenditure is associated with delivery of our science and technology (S&T) outputs and maintenance of S&T capability. See page 27 for our long-term expenditure trends.

Our capital costs are subject to a separate funding line within MOD's overall control framework. All of our capital expenditure is associated with the provision of equipment, facilities and infrastructure to enable the delivery of our S&T outputs.

**Our financial  
statements begin  
on page 80**

## The Certificate and Report of the Comptroller and Auditor General to the House of Commons

### Opinion on financial statements

I certify that I have audited the financial statements of the Defence Science and Technology Laboratory for the year ended 31 March 2019 under the Government Resources and Accounts Act 2000. The financial statements comprise: the Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, Changes in Taxpayers' Equity; and the related notes, including the significant accounting policies. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Accountability Report that is described in that report as having been audited.

In my opinion:

- the financial statements give a true and fair view of the state of the Defence Science and Technology Laboratory's affairs as at 31 March 2019 and the net expenditure for the year then ended; and
- the financial statements have been properly prepared in accordance with the Government Resources and Accounts Act 2000 and HM Treasury directions issued thereunder.

### Opinion on regularity

In my opinion, in all material respects the income and expenditure recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

### Basis of opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK) and Practice Note 10 'Audit of Financial Statements of Public Sector Entities in the United Kingdom'. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my certificate. Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2016. I am independent of the Defence Science and Technology Laboratory in accordance with the ethical requirements that are relevant to my audit and the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### Conclusions relating to going concern

I am required to conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Defence Science and Technology Laboratory's ability to continue as a going concern for a period of at least twelve months from the date of approval of the financial statements. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern. I have nothing to report in these respects.

### Responsibilities of the Accounting Officer for the financial statements

As explained more fully in the Statement of the Accounting Officer's Responsibilities, the Chief Executive as Accounting Officer is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

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

My responsibility is to audit, certify and report on the financial statements in accordance with the Government Resources and Accounts Act 2000.

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

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

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Defence Science and Technology Laboratory's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

#### Other Information

The Chief Executive as Accounting Officer is responsible for the other information. The other information comprises information included in the annual report, but does not include the parts of the Accountability Report described in that report as having been audited, the financial statements and my auditor's report thereon. My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon. In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

#### Opinion on other matters

In my opinion:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with HM Treasury directions made under the Government Resources and Accounts Act 2000;
- in the light of the knowledge and understanding of the entity and its environment obtained in the course of the audit, I have not identified any material misstatements in the Performance Report and Accountability Report; and
- the information given in the Performance Report and Accountability Report for the financial year for which the financial statements are prepared is consistent with the financial statements and have been prepared in accordance with the applicable legal requirements.

#### Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the parts of the Accountability Report to be audited are not in agreement with the accounting records and returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

#### Report

I have no observations to make on these financial statements.

**Gareth Davies**  
**Comptroller and Auditor General**  
 National Audit Office,  
 157-197 Buckingham Palace Road  
 Victoria  
 London  
 SW1W 9SP

2 July 2019



PEOPLE  
BEHIND  
THE  
SCIENCE

**“We listen to our customers’ challenges and innovate to create solutions that provide them with a winning edge – we do science to create a safer future.”**

Gary Aitkenhead, Chief Executive, Dstl

**Strategic Objective 1:** Shape the future of defence and national security via relentless focus on our customers’ challenges and needs.

**Strategic Objective 2:** Ensure defence and security can exploit the best science and technology capabilities on demand.

**Strategic Objective 3:** Become an agile organisation that is fit for the future.

## Dstl Annual Report and Accounts 2018/19

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Our annual report and accounts is prepared in line with the *Government Financial Reporting Manual (FReM)*, *Managing Public Money* and any applicable HM Treasury instructions. Dstl's *Framework Document* requires us to prepare our own annual report and accounts and present it to Parliament following certification by the Comptroller and Auditor General to the House of Commons (see page 74).

I confirm that our annual report and accounts gives a fair, balanced and understandable view of Dstl's activities for the year ended 31 March 2019 and of our financial position as at 31 March 2019. I also confirm that I am personally responsible for this annual report and accounts and the judgements required for determining that it is fair, balanced and understandable.

As required in the FReM, I have signed and dated our Performance Report on page 37, as well as signing here our Accountability Report, which meets Dstl's key accountability requirements to Parliament. I have also signed our Statement of Financial Position on page 81, as part of the fully audited Financial Statements that follow in the rest of this document.

I hope you find our annual report and accounts helpful to your understanding of Dstl's business and performance over the past financial year.



**Gary Aitkenhead**  
Chief Executive | 27 June 2019

[ ]

# Financial

Our financial statements and disclosure notes make up the final report in this year's annual report and accounts; they have been audited by the Comptroller and Auditor General, who has sub-contracted BDO to undertake the audit on his behalf.



We have prepared our accounts under *International Financial Reporting Standards* (IFRS), as adapted for the public sector in the *Government Financial Reporting Manual* (FReM), issued by Her Majesty's Treasury. We have outlined the new reporting standards and any changes to accounting policy that affect our financial statements in Note 1 on page 85. Our desire to align with the policies of our parent department, MOD, where appropriate, drives these changes, subject to relevance and materiality considerations.

# Accounting Information

## Statement of Comprehensive Net Expenditure (SoCNE) for the year ended 31 March 2019

	Note	2019 £ million	2018 £ million
Operating income from contracts with customers	2	626.0	541.7
Other operating income		4.4	1.7
<b>Total operating income</b>	3	<b>630.4</b>	<b>543.4</b>
Staff costs		(222.3)	(201.6)
Purchase of direct goods and services		(280.4)	(224.8)
Depreciation, amortisation and impairment charges		(22.5)	(41.9)
Provision expense		(0.1)	(3.4)
Infrastructure running costs		(86.0)	(75.8)
Other operating expenditure		(27.7)	(31.3)
<b>Total operating expenditure</b>	4, 5	<b>(639.0)</b>	<b>(578.8)</b>
<b>Net operating expenditure</b>		<b>(8.6)</b>	<b>(35.4)</b>
Finance income	6	0.0	0.1
Gain on transfer by absorption <sup>1</sup>		0.0	347.4
<b>Net income / (expenditure) for the year</b>		<b>(8.6)</b>	<b>312.1</b>
<b>Other comprehensive net income / (expenditure)</b>			
Items which will not be reclassified to net operating income / (expenditure):			
Net surplus on revaluation of property, plant and equipment	SoCiTE	1.8	105.5
Net surplus / (deficit) on revaluation of intangible assets	SoCiTE	(0.1)	0.3
<b>Total comprehensive net income / (expenditure) for the year</b>		<b>(6.9)</b>	<b>417.9</b>

<sup>1</sup> On 1 April 2017, the functions of the Trading Fund were transferred to an Executive Agency of MOD on revocation. MOD transferred assets and liabilities to the Executive Agency under the absorption accounting method. Full disclosure was provided in the Agency's Annual Report and Accounts 2017/18.

The notes on pages 85 to 109 form an integral part of these accounts.

## Statement of Financial Position as at 31 March 2019

	Note	2019 £ million	2018 £ million
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant and equipment	8	510.3	463.8
Financial assets	9	1.4	1.8
Intangible assets	10	3.0	4.5
Receivables	13	2.9	1.0
<b>Total non-current assets</b>		<b>517.6</b>	<b>471.1</b>
<b>Current assets</b>			
Work in progress	12	0.1	0.3
Receivables	13	31.4	26.8
Cash and cash equivalents	14	15.6	18.9
		47.1	46.0
Assets classified as held for sale	15	0.4	0.0
<b>Total current assets</b>		<b>47.5</b>	<b>46.0</b>
<b>Total assets</b>		<b>565.1</b>	<b>517.1</b>
<b>Current liabilities</b>			
Trade and other payables	16	148.6	108.9
Short-term provisions	17	0.4	1.1
<b>Total current liabilities</b>		<b>149.0</b>	<b>110.0</b>
<b>Non-current assets plus net current assets</b>		<b>416.1</b>	<b>407.1</b>
<b>Non-current liabilities</b>			
Other payables	16	1.4	1.5
Long-term provisions	17	1.2	1.2
<b>Total non-current liabilities</b>		<b>2.6</b>	<b>2.7</b>
<b>Assets less liabilities</b>		<b>413.5</b>	<b>404.4</b>
<b>Taxpayers' equity and other reserves</b>			
Revaluation surplus	SoCITE	196.4	202.1
General fund	SoCITE	217.1	202.3
<b>Total taxpayers' equity</b>		<b>413.5</b>	<b>404.4</b>

The financial statements were signed on 27 June 2019.

The Accounts were authorised for issue on the date of certification by the Comptroller and Auditor General.



Gary Aitkenhead | Chief Executive

## Statement of Cash Flows for the year ended 31 March 2019

	Note	2019 £ million	2018 £ million
<b>Cash flows from operating activities</b>			
Net operating expenditure	SoCNE	(8.6)	(35.4)
Adjustments for non-cash transactions:			
Depreciation and impairment	4, 8	20.5	37.0
Loss on sale of property, plant and equipment	4	0.1	0.3
Amortisation and impairment	4, 10	1.6	3.0
Notional audit fee	4	0.1	0.1
Write-down of non-current financial asset	4	0.4	1.9
Provisions provided in year	4	0.7	3.4
Provisions not required written-back	4	(0.6)	0.0
Net operating expenditure before changes in working capital		14.2	10.3
(Increase) / decrease in work in progress		0.2	(0.2)
(Increase) / decrease in trade receivables and other receivables		(6.4)	31.8
Increase / (decrease) in trade payables and other liabilities <sup>1</sup>		41.9	(42.4)
Use of provisions		(0.8)	(3.8)
Net cash inflow / (outflow) from operating activities		49.1	(4.3)
<b>Cash flows from investing activities</b>			
Purchases of property, plant and equipment		(62.5)	(47.8)
Purchases of intangible assets		0.0	(0.5)
Finance income		0.0	0.1
Net cash outflow from investing activities		(62.5)	(48.2)
<b>Cash flows from financing activities</b>			
Net funding received from MOD in-year <sup>2</sup>	SoCiTE	10.1	66.3
Net cash inflow from financing activities	14.1	10.1	66.3
<b>Net financing</b>			
Net increase / (decrease) in cash and cash equivalents		(3.3)	13.8
Brought forward cash and cash equivalents		18.9	
Transfer of cash and cash equivalents by absorption <sup>3</sup>		0.0	5.1
<b>Carried forward cash and cash equivalents</b>	14	<b>15.6</b>	<b>18.9</b>

<sup>1</sup> Increase in cash inflows from trade payables and other liabilities is after taking account of £2.2 million reduction in non-cash movement for purchase of non-current assets (2017/18: £9.6 million decrease in cash flows from trade payables and other liabilities due to increase in non-cash movement for purchase of non-current assets).

<sup>2</sup>

	£ million
Cash received from MOD	377.0
Bookkeeping adjustments for transactions with MOD	(366.9)
Net funding received from MOD in-year	10.1

<sup>3</sup> See footnote 1 to SoCNE on page 80.

## Statement of Changes in Taxpayers' Equity (SoCiTE) for the year ended 31 March 2019

	Note	General fund £ million	Revaluation surplus £ million	Total taxpayers' equity £ million	Total comprehensive net expenditure £ million
<b>Balance at 1 April 2017</b>		<b>160.2</b>	<b>96.3</b>	<b>256.5</b>	
Gain on transfer by absorption <sup>1</sup>					347.4
Net equity investment received from MOD during the year		66.3		66.3	
Transfer to general fund <sup>2</sup>			(4.0)	(4.0)	(4.0)
Transfer to general fund realised depreciation	8		(6.9)	(6.9)	(6.9)
Surplus on revaluation of property, plant and equipment	8		116.4	116.4	116.4
Transfer to general fund realised amortisation	10		(0.1)	(0.1)	(0.1)
Surplus on revaluation of intangible assets	10		0.4	0.4	0.4
Net gains and losses recognised in the Statement of Comprehensive Net Expenditure			105.8	105.8	105.8
Auditor's remuneration (notional)	4	0.1		0.1	
Net operating expenditure	SoCNE	(35.4)		(35.4)	(35.4)
Net finance income	6, 7	0.1		0.1	0.1
Transfer from revaluation surplus <sup>2</sup>		4.0		4.0	
Transfer from revaluation surplus realised depreciation and amortisation		7.0		7.0	
<b>Balance at 31 March 2018</b>		<b>202.3</b>	<b>202.1</b>	<b>404.4</b>	<b>417.9</b>
Net equity investment received from MOD during the year <sup>3</sup>	14.1	10.1		10.1	
Transfer to general fund <sup>2</sup>			(1.5)	(1.5)	(1.5)
Surplus on revaluation of property, plant and equipment	8		7.4	7.4	7.4
Transfer to general fund realised depreciation			(4.1)	(4.1)	(4.1)
Alignment with MOD accounting <sup>4</sup>		7.4	(7.4)	0.0	0.0
Surplus on revaluation of intangible assets	10		0.1	0.1	0.1
Transfer to general fund realised amortisation			(0.2)	(0.2)	(0.2)
Net gains and losses recognised in the Statement of Comprehensive Net Expenditure			(5.7)	1.7	1.7
Auditor's remuneration (notional)	4	0.1		0.1	
Net operating expenditure	SoCNE	(8.6)		(8.6)	(8.6)
Transfer from revaluation surplus <sup>2</sup>		1.5		1.5	
Transfer from revaluation surplus realised depreciation and amortisation		4.3		4.3	
<b>Balance at 31 March 2019</b>		<b>217.1</b>	<b>196.4</b>	<b>413.5</b>	<b>(6.9)</b>

<sup>1</sup> See footnote 1 to SoCNE on page 80.

Continued on next page 

<sup>2</sup> Transfer to general fund

At inception of the Executive Agency, on 1 April 2017, the carrying values for property, plant and equipment, and intangible assets were transferred onto the fixed asset register at deemed historical cost. This was a practical expedient. The revaluation surplus was preserved. As a consequence, the historical cost depreciation includes an element of depreciation that relates to the Trading Fund cost remeasurements. The revaluation surplus derived from these previous remeasurements is transferred to general fund in line with the related realised depreciation. This policy is consistent, except that the realised depreciation is not separately identified from historic depreciation.

<sup>3</sup> Net equity investment received from MOD:

	Note	£ million
Balance at 31 March 2018		66.3
Net equity investment received during the year	14.1	10.1
<b>Balance at 31 March 2019</b>		<b>76.4</b>

<sup>4</sup> Alignment of general fund and revaluation surplus with MOD

The 2017/18 quinquennial valuation of building assets during the Executive Agency's first year of operating exposed some transitional differences with MOD, and the subsequent accounting for them. The main differences arose due to:

- (i) During the current year, MOD made adjustments to align with the Agency's accounting for impairment. This left a difference of £74,647. The Agency made a transfer from general fund to revaluation surplus during the year to correct this.
- (ii) Building assets that had not transferred to MOD's fixed asset register, and were valued above the £25,000 capitalisation threshold, were accounted by MOD as write-ons. Rather than credit SoCNE, the Agency's approach was to account for these assets as a revaluation.
- (iii) The quinquennial valuation of building assets included a loading for infrastructure. The Agency had previously valued its building assets without an infrastructure loading, and instead capitalised infrastructure assets separately. To remove the infrastructure double-accounting, MOD removed the infrastructure assets from its fixed asset register by accounting for them as disposals, resulting in a loss on disposal expensed to SoCNE. The Agency removed the double-accounting with an adjustment to valuation and revaluation surplus.

To align the accounting, a one off in-year adjustment within taxpayer's equity was made as follows:

	£ million
Transfer general fund to credit revaluation surplus to align with MOD for (i)	(0.1)
Transfer revaluation surplus to credit general fund to align with MOD for (ii)	17.2
Transfer general fund to credit revaluation surplus to align with MOD for (iii)	(9.7)
<b>Net transfer and credit to general fund</b>	<b>7.4</b>

## Notes to the accounts

### 1. Accounting policies

#### (a) Statement of accounting policies

The financial statements have been prepared in accordance with the 2018/19 *Government Financial Reporting Manual* (FRoM) issued by HM Treasury. The accounting policies contained in the FRoM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. The particular policies adopted by the Executive Agency are described below. They have been applied consistently in dealing with items that are considered material to the accounts.

#### (b)

##### (i) Accounting convention

These accounts have been prepared under the historical cost convention, modified for the application of fair value where appropriate. The balances affected are property, plant and equipment (see Note 1(f) on page 87), intangible assets (see Note 1(j) on page 87), and non-current financial assets (see Note 1(d)(ii) on page 86).

##### (ii) Going concern

The Executive Agency is dependent principally on its owning Department, MOD, as its main source of revenue. Demand for the Agency's services is enduring and there is no planned change to the Agency's status.

#### (c) Consolidation with MOD

The Executive Agency is within the Accounting Boundary of MOD and its financial statements are consolidated within those of the Department.

#### (d) Critical accounting judgements and key sources of estimation uncertainty

In the application of the Executive Agency's accounting policies, there are necessary judgements, estimates and assumptions made, that affect the carrying amounts of certain assets and liabilities. Where information is not readily available, estimates and assumptions are made with reference to advice from management, technical experts, professional third parties, and from historical experience. The estimates and underlying assumptions are reviewed on an ongoing basis.

There have been no revisions of accounting judgement, or revisions to the application of estimation technique during the year. Revisions to accounting estimates are recognised during the period of revision, and future periods if the revision affects both current and future periods.

##### (i) Critical judgements in applying accounting policies

The following are the critical judgements, apart from those involving estimates (see (ii) on page 86), that the Executive Agency has made in the process of applying its accounting policies. These have had significant effects on the financial statements.

##### • Valuation of property

The accounting policy for the valuation of freehold land and buildings is disclosed in Note 1(f), and the valuations are disclosed in Note 8. The Executive Agency has concluded that the most appropriate method of valuation provided by the Royal Institute of Chartered Surveyors (RICS) is Depreciated Replacement Cost (DRC).

The market for the Agency's specialised laboratories and secure accommodation is extremely limited. The large size of the two main sites (Porton Down and Portsdown West) and their remote locations has a limiting effect on the number of alternative users.

The estimation technique for the valuation of freehold land adopts the Alternative Site Approach to align with MOD, which results in a significant increase in the value when compared with the DRC method.

##### • Consolidation of subsidiary undertaking

Ploughshare Innovations Ltd (Ploughshare) is a wholly owned subsidiary that the Executive Agency has the power to control. The Agency does not consider Ploughshare to be material and has decided not to produce Group accounts. Consolidation would require considerable additional disclosure for minor adjustments and would not improve readers' understanding of the Agency's financial performance. Ploughshare will be reviewed each year for materiality.

##### • Biological High Containment Facility

This facility enables the Executive Agency to maintain the UK strategic sovereign capability for assessing hazards from current and emerging chemical and biological threats. It consists of several assets, including a building, operated together as a distinct facility. As an Agency inside the Department boundary, there is a more integrated approach to strategic capability planning that includes the facility, particularly as it is used principally for MOD project work. During 2017/18, MOD valued the facility building asset on a DRC basis providing the Agency with further assurance that the Department intends to sustain this capability and strategic asset for the foreseeable future.

For these reasons, the Agency has concluded that going forward, the most appropriate valuation method is DRC for the building, with the application of indices provided by Defence Statistics between independent professional quinquennial valuations. For plant and equipment assets, appropriate indices provided by Defence Statistics are applied. This also aligns with MOD's valuation method. See Note 8.

##### • Leases

The Executive Agency occupies a site at Fort Halstead under the terms of a property lease.

Continued on next page 

The Agency considers the lease to be an operating lease because there is a no-penalty termination notice period of five years and the Agency's rationalisation plans to leave the site are advanced.

There are a few other less material property operating leases where the Agency occupies a building, or part of a building under terms that have a duration of ten years or less. It is unlikely that these leases would be extended to the point where the Agency would consume substantially all of the assets' useful economic benefit, and therefore it is considered appropriate to account for them as operating leases. Commitments under leases are disclosed in Note 18. The likely impact of adoption of the new standard from 1 April 2020, IFRS16: Leases, is discussed in Note 1(x), on page 89.

#### (ii) Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities during the next year.

##### • Accruals

Accruals are estimated with reference to available documentation, advice from the relevant Project Manager, information provided by third parties, and from experience gained from previous years. Third-party verification is sought from suppliers of all sub-contracted research where the value of uninvoiced work is expected to be £100,000 or above. The total accrual relating to purchase of direct goods and services is £72.2 million (2017/18: £51.1 million).

Staff holiday is not recorded on central management information systems and therefore the holiday pay accrual calculation is an area of estimation uncertainty. The estimate is based on daily pay, using the mid-point for each pay scale. This is applied to the total calculated holiday entitlement for all employees by pay scale. An appropriate proportion is assumed to be outstanding at the year end. The proportion applied was derived from sample testing. The sample test, which was performed during 2013, resulted in an estimate of 32 per cent of all annual holiday to be outstanding at the financial year end. The total annual holiday accrual liability is £7.3 million (2017/18: £6.6 million). A variance of 5% to the proportion of holiday entitlement outstanding would vary this liability by £1.1 million.

##### • Fair value of non-current financial assets

The fair value of the Executive Agency's investment in Ploughshare is determined by taking the subsidiary's net assets, and adjusting for items already recognised in the Agency's Statement of Financial Position, such as a doubtful debt. A further adjustment is made for non-current assets where it is considered difficult to realise any value. Further information on Ploughshare is provided in Note 9.

##### • Modified Historic Cost Accounting (MHCA)

Non-current plant and equipment and non-current intangible assets are reported at fair value by applying various indices provided by Defence Statistics. Freehold land and buildings are subject to a rolling programme of quinquennial revaluation by an independent professional valuer. Indices provided by Defence Statistics are applied to land and building valuations in the years between independent professional valuations.

There are inherent valuation uncertainties. A professional's valuation will depend on the method applied (DRC) and judgement on factors such as functional obsolescence, age obsolescence, and the quality of surrounding infrastructure. Where indices are applied, the values are dependent on the particular index adopted. For consistency and comparability, the index used for each class of asset will be applied every year. Further information is provided in Note 1(f) and 1(j).

##### • Depreciation and amortisation

Depreciation of property, plant and equipment, and amortisation of intangible assets, is based on the useful economic life of the asset. It is rare for any of the Executive Agency's assets to have a residual value. They are often very specialised assets that are used until obsolescence. Remaining useful economic lives are reviewed at least annually. The basis for estimating a remaining useful economic life includes experience of similar assets, the condition and performance of the asset, and knowledge of technological advances and obsolescence. Remaining useful economic lives are revised, where appropriate, to reflect any change in these circumstances. The net book value of the asset at the time of the revision, will be depreciated on a straight-line basis over the revised remaining useful economic life.

With respect to the depreciation of buildings, an independent professional evaluation of their remaining useful economic lives is performed during the quinquennial rolling revaluation programme. Further information is provided in Note 1(f) and 1(j).

##### • Provisions

The measurement of early departure provisions is derived from information provided by the Cabinet Office (My Civil Service Pension). Variations between estimated values and the final cost on crystallisation of the liabilities are not considered material. The measurement of the dilapidation provision is based on a third-party estimate provided during 2009. The Retail Price Index has been applied to derive its current value. Further disclosures are provided in Note 17.

Any change in expectations, or difference between expectation and the actual liability on crystallisation, will be accounted for in the period the determination is made.

**(e) Basis of consolidation**

The Executive Agency has not consolidated its wholly owned subsidiary, Ploughshare, or the Agency's associate, Tetricus Ltd, on grounds of materiality. See Note 1(d)(i) on page 85.

**(f) Property, plant and equipment**

The majority of the Executive Agency's property, plant and equipment is held on MOD's non-current asset register where Defence Statistics indices are applied. For consistency, the Agency applies Defence Statistics indices for the balance of property, plant and equipment assets held on its own non-current asset register.

Property, plant, machinery, transport, IT and communication equipment are capitalised where the cost of acquisition is greater than £25,000.

All assets are independently inspected on a five-year rolling programme. Assets are carried at current value in existing use or fair value. The valuation methods for different classes of asset are as follows:

Land and buildings:

Where independent professional valuations are carried out, they are performed using RICS Red Book methods.

Land - DRC

Buildings - DRC

For land and buildings that have been declared surplus - Market Value

Plant, machinery, transport, and IT and communication equipment - MHCA.

Property is revalued in the years between professional independent valuations using indices provided by Defence Statistics. Plant, machinery, transport, IT and communication equipment assets are revalued using indices provided by Defence Statistics.

Depreciation is provided on a straight-line basis over the useful economic lives of the assets, which are as follows:

Buildings	5-50 years
Plant and machinery	5-30 years
Transport	3-35 years
IT and communication equipment	3-30 years.

Land that has a useful economic life of more than one year is not depreciated.

Details of property, plant and equipment values included within these financial statements are disclosed in Note 8.

**(g) Grant-funded assets**

Grants received or receivable for the acquisition or construction of property, plant or equipment are recognised as other operating income after the activity that creates the entitlement has been performed.

**(h) Donated assets**

Plant and equipment donated to the Executive Agency for which no consideration is given or conditions are attached, are brought onto the Statement of Financial

Position at their fair value and are revalued and depreciated on the same basis as purchased assets. The fair value at initial recognition is credited to the Statement of Comprehensive Net Expenditure as other operating income. The assets are depreciated and revalued on the same basis as other non-current assets of the same class.

**(i) Customer-funded assets**

Where a customer has funded in part or in whole, the purchase or construction of an asset that meets the definition of a non-current asset, and the Executive Agency is the beneficial user, the asset is initially brought onto the Statement of Financial Position at cost. The asset is depreciated and revalued on the same basis as other non-current assets of the same class. The customer funding is released to other operating income over the period that the customer has an interest in the asset.

**(j) Intangible assets**

Intangible assets comprise purchased software licences and the cost of software developed in-house where there is reliable cost information and the asset will give rise to future economic benefit. The minimum level for capitalisation of intangible assets is £25,000.

Amortisation is on a straight-line basis over the shorter of the licence term, or the software's useful economic life. Intangible assets are revalued annually by applying indices provided by Defence Statistics.

The majority of the Agency's intangible assets is held on MOD's non-current asset register where Defence Statistics indices are applied. For consistency, the Agency applies Defence Statistics indices to the balance of intangible assets held on its own non-current asset register.

The useful economic lives of intangible assets are considered to fall within one to ten years.

**(k) Impairment**

The carrying value of the Executive Agency's non-current assets is reviewed during the year to determine whether there is any indication of impairment. An impairment loss is recognised whenever the carrying amount of an asset exceeds its recoverable amount. Impairments are first offset through other comprehensive net expenditure where sufficient revaluation surplus exists. If impairment is due to consumption of economic benefit, or there is insufficient revaluation surplus, it is charged through profit or loss. Impairment losses will be reversed if there is an increase in the fair value or service potential of a previously impaired asset. The increased carrying amount attributable to a reversal of an impairment is first credited to profit or loss to the extent of any original impairment charge to profit or loss. Any remaining balance, or the whole reversal (if impairment was fully offset through other comprehensive net expenditure), will be credited through other comprehensive net expenditure.

Continued on next page 

**(l) Research and development**

Research and development expenditure incurred during work on a contract for a customer is chargeable to the customer. Internally funded research expenditure is charged to the Statement of Comprehensive Net Expenditure as incurred.

**(m) Work in progress**

Work in progress represents costs incurred on firm-price contracts and is stated at the lower of cost and net realisable value.

**(n) Contract assets**

Contract assets represent operating income recognised in excess of the values invoiced (net of VAT) on cost-plus contracts and include an appropriate amount of profit attributed to the contract. For firm-price contracts, contract assets are recognised where there is a timing difference between income recognition (such as on delivery of a milestone) and invoicing.

**(o) Financial instruments**

This is the first year of adoption of IFRS9: Financial Instruments, which is discussed in Note 20. Financial assets and liabilities are recognised in the Executive Agency's Statement of Financial Position where the Agency has become a party to contractual terms of an instrument. With respect to the Agency's investment in Ploughshare, the method of accounting that has been adopted is fair value through profit or loss. For information on the Agency's exposure to risk and categories of financial instruments, see Note 20.

**(p) Provisions**

Provisions are made where the Executive Agency has a present legal or constructive obligation as a result of a past event, and where it is probable that a reliably measured economic outflow will result. Provisions are measured taking into account the risks and uncertainties surrounding the obligation. Where possible, information from third parties is used as a basis for deriving the estimated liability.

**(q) Pensions**

Past and present employees are covered by pension benefits provided through Civil Service pension arrangements that are unfunded multi-employer schemes providing benefits based on either final salary, indexed average lifetime salary, or a mixture of both. The Executive Agency is unable to identify its share of the underlying assets and liabilities and therefore it accounts for the schemes as if they were defined contribution schemes. As a result, the amount charged to the Statement of Comprehensive Net Expenditure represents the contributions payable to the schemes in respect of the accounting period. Details of rates and amounts of contributions during the year are disclosed in the Remuneration and Staff Report on page 71.

**(r) Foreign currencies**

Transactions denominated in foreign currencies are translated into sterling at the rates of exchange ruling at the date of the transaction. Monetary assets and liabilities that are denominated in foreign currency are retranslated at the rates of exchange ruling at the Statement of Financial Position date. Gains and losses arising on retranslation are included in the Statement of Comprehensive Net Expenditure.

**(s) Operating income**

This is the first year of adoption of IFRS15: Revenue from Contracts with Customers. The Executive Agency has assessed the standard and as a result there is no change in the way revenue is recognised. The amount of operating income recognised by the Agency reflects the consideration due from the transfer of control for promised goods and services to customers. Control is when the customer has the ability to direct the use of, and obtain substantially all of the benefits of the goods or services.

For cost-plus contracts, the transfer of control passes to the customer over time. The customer simultaneously receives and consumes the benefits of the services. The services are specialised, have no alternative use, and the Agency has an enforceable right to payment for the completed performance to date. The recognition of operating income reflects the pattern of consumption of benefits by the customer, and includes the attributable contract profit rate. The total amount of operating income recognised is capped at the contract price limit.

For firm-price contracts, the transfer of control passes to the customer at a point in time. Each point in time reflects the transfer of a performance obligation to the customer (a contract milestone), and each performance obligation has an attributed contract price. The recognition of operating income reflects the price of an achieved performance obligation that is accepted by the customer. Some firm-price contracts have a single performance obligation where there are no specified interim milestones.

Operating income is accrued as contract assets where there is a timing difference between income recognition and invoicing.

Operating income is deferred as contract liabilities where a contract allows amounts to be invoiced ahead of the trigger point for income recognition (such as before the completion of performance obligations). Losses are recognised as soon as they are foreseen.

More than 89 per cent of the Agency's operating income from contracts with customers is from MOD. All contracts with MOD are charged at cost, with no profit. Under this arrangement, no formal invoicing takes place and therefore no trade receivable is recognised. The Agency recognises operating income over time, which is simultaneously expensed by MOD using intra-Department bookkeeping.

Other operating income is recognised for receipts relating to non-core activities that are not the supply of scientific and technical services. See Note 3 for further information. The Agency does not have any contracts where the period between the transfer of the promised goods and services to the customer and payment from the customer exceeds a year. As a consequence, the Agency does not adjust the contract prices for the time value of money.

**(t) Value Added Tax (VAT)**

The Executive Agency's VAT falls within MOD's VAT registration. The Agency accounts for VAT and transfers the net value to MOD on a quarterly basis for inclusion within MOD's VAT return. Where the VAT is irrecoverable, it is charged to the relevant expense category, or if capital, to the relevant non-current asset class.

**(u) Segmental reporting**

The principal business activities of the Executive Agency are managed through Divisions, and the segmental analysis in Note 2 is presented according to the Agency's internal management reporting structure. The accounting policies of the operating segments are the same as those of the Agency. Corporate overheads are allocated to operating segments on the basis of headcount with the exception of estates management charges, which are allocated on area of occupancy. Inter-segment income and transfers within the Agency are at cost.

**(v) Reserves within taxpayers' equity**

The revaluation surplus represents taxpayers' equity arising from increases in the value of the Executive Agency's non-current assets.

**(w) General fund**

Net funding received from the owning Department, MOD, is recorded as equity within the general fund. The Statement of Changes in Taxpayers' Equity provides transparency by disclosing the movement in net funding received from MOD during the year. The Statement of Cash Flows discloses the cash funding received from MOD within cash flows from financing activities, and associated footnote 2.

**(x) IFRS, amendments and interpretations in issue but not yet effective or adopted**

IAS8: Accounting Policies, Changes in Accounting Estimates and Errors requires disclosures in respect of new IFRS, amendments and interpretations that are or will be applicable after the reporting period. There are a number of standards, amendments and interpretations issued by the IAS Board that are effective for financial statements after this reporting period.

The following new or amended standards will be adopted by the Executive Agency as directed, interpreted or adapted by the FReM.

**IFRS16: Leases**

A new standard issued during January 2016 intended to replace the previous Leases standard IAS17. The standard provides a single lessee accounting model for recognising, measuring, presenting and disclosing leases. Recognition will be based on right-of-use, measured at the present value of lease payments. The FReM intends to adopt the standard for the period beginning 1 April 2020. The FReM mandates the cumulative effect catch-up transitional arrangement (simplified method), with the net adjustment taken to the general fund. The comparatives are not restated. The lease payments will be discounted by the incremental borrowing rate as promulgated by HM Treasury.

The standard has been reviewed and its impact is likely to depend on the exit arrangements and subsequent negotiations surrounding the lease for property at Fort Halstead. This is the Executive Agency's only material lease. The current annual rental charge for the property lease at Fort Halstead is £3.1 million. See Note 18 for further information.

The table on the next page is a sensitivity analysis of the Fort Halstead property lease based on current annual rental payments, and assuming the lease will be in place for 5 years, without negotiated early exit arrangements.

Continued on next page 

	1 April 2020 £ million	31 March 2021 £ million	31 March 2022 £ million	31 March 2023 £ million	31 March 2024 £ million	31 March 2025 £ million
<b>Discount factor 1.5%</b>						
Carrying value of lease asset	15.02	12.02	9.01	6.01	3.00	0.00
Lease obligation	15.02	11.37	8.40	5.38	2.32	0.00
Amortisation	0.00	3.01	3.00	3.01	3.00	3.00
Finance expense	0.05	0.19	0.14	0.10	0.05	0.01
<b>Discount factor 2.0%</b>						
Carrying value of lease asset	14.85	11.88	8.91	5.94	2.97	0.00
Lease obligation	14.85	11.27	8.35	5.36	2.32	0.00
Amortisation	0.00	2.97	2.97	2.97	2.97	2.97
Finance expense	0.07	0.24	0.19	0.13	0.07	0.01
<b>Discount factor 2.5%</b>						
Carrying value of lease asset	14.68	11.74	8.81	5.87	2.94	0.00
Lease obligation	14.68	11.18	8.30	5.35	2.32	0.00
Amortisation	0.00	2.94	2.93	2.94	2.93	2.94
Finance expense	0.09	0.30	0.23	0.16	0.09	0.01

The largest impact will be for the first year of adoption due to the finance expense front-loading during the earlier periods of the lease term. The combined amortisation and finance expense for the first year will be approximately £3.3 million when compared with the £3.1 million rental previously expensed as an operating lease.

The standard's initial adoption arrangements allow for the recognition of a provision for onerous contracts. If an exit arrangement is in place at the date of the standard's initial adoption that leaves the Agency with lease obligations after the site has been vacated, an onerous contract provision will be recognised, adjusted through the general fund.

## 2. Statement of net expenditure by operating segment

All of the Executive Agency's business reporting segments are disclosed to enable users of these financial statements to evaluate the nature and financial effects of the Agency's business activities. The Agency's corporate support functions have been aggregated. All Divisions derive their revenues from the provision of specialist and technical services. The Agency derives more than 89 per cent of its revenues from MOD, and more than 95 per cent of its revenues from wider Government. More detailed disclosures can be found in Note 21, related-party transactions.

The measure of profit presented to the Board, the chief decision-maker, is the underlying operating profit that excludes the significant operating items described in Note 5, and separately identified below. No measure of segmental assets and liabilities have been disclosed because this information is not regularly provided to the Board. More than 95 per cent of revenue is derived from UK sources. The Board does not review the business on a geographical basis. A geographical analysis would not be necessary to aid users' understanding of these financial statements.

For 2018/19, a new operating segment was created, Defence and Security Accelerator, for an activity that had previously been carried out within Defence and Security Analysis Division. The comparatives for this new operating segment cannot easily be derived. Therefore, there is no restatement due to the time and cost that would be involved when compared with the relatively minor benefit.

Operating segment analysis for the year ending 31 March 2019:

	Note	Chemical, Biological and Radiological Division £ million	Cyber and Information Systems Division £ million	Counter-Terrorism and Security Division £ million	Defence and Security Analysis Division £ million	Platform Systems Division £ million	Defence and Security Accelerator £ million	Corporate £ million	Internal trading adjustments £ million	Total as per financial statements £ million
MOD Chief Scientific Adviser		38.8	84.3	43.7	31.3	145.8	2.4	0.0		346.3
MOD other		23.7	35.0	50.8	8.1	83.5	10.5	0.0		211.6
Wider Government		15.3	2.7	35.1	0.2	2.2	0.0	0.0		55.5
Non-Exchequer income		6.4	0.7	0.7	0.0	0.2	0.0	4.6		12.6
Operating income from contracts with customers	3	84.2	122.7	130.3	39.6	231.7	12.9	4.6		626.0
Other operating income	3	0.2	0.0	0.7	0.0	0.0	0.0	3.5		4.4
Income from other operating segments <sup>1</sup>		6.9	11.6	12.1	33.6	18.7	0.0	2.1	(85.0)	0.0
<b>Operating income (internal and external)</b>		<b>91.3</b>	<b>134.3</b>	<b>143.1</b>	<b>73.2</b>	<b>250.4</b>	<b>12.9</b>	<b>10.2</b>	<b>(85.0)</b>	<b>630.4</b>
Underlying net operating income / (expenditure) <sup>2</sup>		(1.5)	6.2	(1.3)	6.9	8.0	2.1	(22.2)		(1.8)
Significant non-recurring operating items	5	0.0	0.0	0.0	0.0	0.0	0.0	(6.8)		(6.8)
<b>Net operating income / (expenditure)<sup>3</sup></b>		<b>(1.5)</b>	<b>6.2</b>	<b>(1.3)</b>	<b>6.9</b>	<b>8.0</b>	<b>2.1</b>	<b>(29.0)</b>		<b>(8.6)</b>
Finance income	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
<b>Net income / (expenditure) for the year</b>		<b>(1.5)</b>	<b>6.2</b>	<b>(1.3)</b>	<b>6.9</b>	<b>8.0</b>	<b>2.1</b>	<b>(29.0)</b>		<b>(8.6)</b>

<sup>1</sup> Internal trading where staff and facility resource, owned by an operating segment, is utilised on an external customer project that is owned and managed by another operating segment. This represents recovery of the cost of providing these services to the recipient operating segment. Cost recovery is included in internal financial performance reporting which is reviewed by the Board.

<sup>2</sup> Underlying net operating income / (expenditure) is the measure of profit or loss routinely presented to the Board.

<sup>3</sup> Within net operating income / (expenditure) is depreciation, amortisation and impairments expensed as follows:

	Note	£ million	£ million						
Depreciation and impairment of property, plant and equipment		0.0	0.0	0.0	0.0	0.0	0.0	20.5	20.5
Amortisation and impairment of intangible assets		0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
Impairment of investment in non-current financial asset		0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
<b>Total depreciation, amortisation and impairment</b>	<b>4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>22.5</b>	<b>22.5</b>

Continued on next page >

The comparatives for the year ending 31 March 2018:

	Note	Chemical, Biological and Radiological Division £ million	Cyber and Information Systems Division £ million	Counter-Terrorism and Security Division £ million	Defence and Security Analysis Division £ million	Platform Systems Division £ million	Corporate £ million	Internal trading adjustments £ million	Total as per financial statements £ million
MOD Chief Scientific Adviser		38.0	72.5	32.3	32.1	137.3	0.1		312.3
MOD other		26.4	26.4	50.6	17.4	61.0	0.1		181.9
Wider Government		7.0	1.5	20.1	0.5	0.7	1.2		31.0
Non-Exchequer income		10.1	0.2	1.7	0.0	0.2	4.3		16.5
Operating income from contracts with customers	3	81.5	100.6	104.7	50.0	199.2	5.7		541.7
Other operating income	3	0.1	0.0	0.3	0.0	0.0	1.3		1.7
Income from other operating segments <sup>1</sup>		8.6	11.0	13.6	31.9	18.4	4.8	(88.3)	0.0
<b>Operating income (internal and external)</b>		<b>90.2</b>	<b>111.6</b>	<b>118.6</b>	<b>81.9</b>	<b>217.6</b>	<b>11.8</b>	<b>(88.3)</b>	<b>543.4</b>
Underlying net operating income / (expenditure) <sup>2</sup>		(1.7)	5.3	1.3	5.2	6.3	(38.3)		(21.9)
Significant operating items	5	0.0	0.0	0.0	0.0	0.0	(13.5)		(13.5)
<b>Net operating income / (expenditure)<sup>3</sup></b>		<b>(1.7)</b>	<b>5.3</b>	<b>1.3</b>	<b>5.2</b>	<b>6.3</b>	<b>(51.8)</b>		<b>(35.4)</b>
Finance income	6	0.0	0.0	0.0	0.0	0.0	0.1		0.1
<b>Net income / (expenditure) for the year before transfer by absorption</b>		<b>(1.7)</b>	<b>5.3</b>	<b>1.3</b>	<b>5.2</b>	<b>6.3</b>	<b>(51.7)</b>		<b>(35.3)</b>
Gain on transfer by absorption <sup>4</sup>							347.4		347.4
<b>Net income / (expenditure) for the year</b>		<b>(1.7)</b>	<b>5.3</b>	<b>1.3</b>	<b>5.2</b>	<b>6.3</b>	<b>295.7</b>		<b>312.1</b>

<sup>1</sup> Internal trading where staff and facility resource, owned by an operating segment, is utilised on an external customer project that is owned and managed by another operating segment. This represents recovery of the cost of providing these services to the recipient operating segment. Cost recovery is included in internal financial performance reporting which is reviewed by the Board.

<sup>2</sup> Underlying net operating income / (expenditure) is the measure of profit or loss routinely presented to the Board.

<sup>3</sup> Within net operating income / (expenditure) is depreciation, amortisation and impairments expensed as in the table below.

<sup>4</sup> See footnote 1 to SoCNE on page 80.

	Note	£ million	£ million					
Depreciation and impairment of property, plant and equipment		0.0	0.0	0.0	0.0	0.0	37.0	37.0
Amortisation and impairment of intangible assets		0.0	0.0	0.0	0.0	0.0	3.0	3.0
Impairment of investment in non-current financial asset		0.0	0.0	0.0	0.0	0.0	1.9	1.9
<b>Total depreciation, amortisation and impairment</b>	<b>4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>41.9</b>	<b>41.9</b>

A summary of the business activities provided by the operating segments is as follows:

#### **Chemical, Biological and Radiological (CBR)**

The CBR Division provides an integrated chemical, biological, radiological and medical sciences capability. The Division delivers longer-term research as well as short-term advice and consultancy, and supports both the Front Line Commands and wider Government.

#### **Cyber and Information Systems (CIS)**

The CIS Division brings together the key capabilities of C4ISR (including sensors, data processing and information systems communications), cyber and space. By co-working with the Defence and Security Analysis (DSA) Division, the CIS Division delivers to MOD Head Office and Joint Forces Command.

#### **Counter-Terrorism and Security (CTS)**

The CTS Division delivers innovative science and technology and solutions to support CTS operations, both for MOD and wider Government. With in-house laboratories, workshops and other specialised facilities, the Division provides rapid response to operational demands. The Division maintains the Sovereign UK Energetics capability and provides a source of threat information throughout the Agency.

#### **Defence and Security Analysis (DSA)**

The DSA Division is the single focus for military and security capability analysis, consulting and enterprise-level system engineering. The Division covers work for MOD Head Office and all Commands, plus the human systems and analysis and simulation sub-capabilities.

#### **Platform Systems (PLS)**

The PLS Division brings together the platform systems, weapons and integrated survivability capabilities. The Division's focus is a single platform-based capability covering all mission and weapons systems, and the related survivability capabilities.

#### **Defence and Security Accelerator (DASA)**

DASA consists of personnel from Dstl, MOD, Defence Equipment and Support, and Home Office. Its remit is to provide funding and other support to wider Government, private sector, and academia to help solve the UK's most pressing defence and security challenges, and to link the Executive Agency's partners together.

#### **Corporate**

Main functions and activities include:

- corporate governance, and centralised functions such as finance and treasury management, human resources, and commercial contracting management
- estate management
- business information systems
- knowledge services, providing services to the Executive Agency's internal knowledge base, MOD-funded reports and the wider scientific and technical literature, together with a range of information and analysis services
- strategy portfolio and capability, the interface between scientific Divisions, key customers, and suppliers, to develop effective programmes and capability plans.

### 3. Operating income

The Executive Agency derives revenue from contracts with customers over time and at a point in time, analysed by major class of customer as follows:

	Timing of income recognition	2019 £ million	2018 £ million
<b>MOD</b>		<b>557.9</b>	<b>494.2</b>
Chief Scientific Adviser	Over time	346.3	312.3
Other	Over time	211.6	181.9
<b>Non-MOD</b>		<b>68.1</b>	<b>47.5</b>
Wider Government	Over time	52.9	28.4
Wider Government	At a point in time	2.6	2.6
Non-Exchequer income	Over time	10.3	14.9
Non-Exchequer income	At a point in time	2.3	1.6
<b>Total</b>		<b>626.0</b>	<b>541.7</b>

Operating income from contracts with customers is categorised according to the main contracted customer. All revenue is from the sale of goods and services and relates to the same class of business, which is the supply of scientific and technical services. This is conducted principally in the UK in sterling and no other geographical market has contributed significantly to operating income. See Note 2 for operating segment disclosures.

	2019 £ million	2018 £ million
<b>Other operating income</b>		
Transferred from deferred income for customer-funded non-current assets	0.1	0.2
Other miscellaneous income	4.3	1.5
<b>Total</b>	<b>4.4</b>	<b>1.7</b>

Other operating income excludes recovery of salary costs for outward secondees. This is treated as an off-set against staff costs. See Remuneration and Staff report on page 69. Other miscellaneous income includes receipts totalling £2.3 million from Home Office (2017/18: £nil) for the transitioning of former Centre for Applied Science and Technology staff and facilities into Dstl, and £1.2 million recovery of non-salary costs for outward secondees (2017/18: £1.1 million).

#### 4. Other expenditure

Material items charged / (credited) before stating net operating expenditure is as follows:

	2019 £ million	2018 £ million
<b>Staff costs<sup>1</sup></b>		
Wages and salaries	159.7	146.3
Social security costs (including apprenticeship levy)	17.6	16.5
Other pension costs	30.9	29.0
Other staff costs	14.1	9.8
	<b>222.3</b>	<b>201.6</b>
<b>Other cash items</b>		
Purchase of direct goods and services	280.4	224.8
Operating lease rentals:		
Property	3.7	3.4
Travel, subsistence and hospitality	3.6	3.0
Training	2.0	2.0
Professional services	3.7	3.0
Doubtful debt provision <sup>2</sup>	0.3	0.3
Foreign exchange (gains) / losses	(0.1)	0.2
Purchase of other indirect goods and services	100.3	94.8
<b>Total cash costs</b>	<b>616.2</b>	<b>533.1</b>
<b>Non-cash items</b>		
Depreciation and impairment charge for year:	20.5	37.0
Depreciation of owned property, plant and equipment	18.5	15.9
Exceptional costs of impairment of property, plant and equipment	0.0	14.2
Exceptional costs of reversal of impairment of property, plant and equipment	(2.0)	0.0
Adjustment valuation of property, plant and equipment	4.0	6.9
Amortisation and impairment charge for the year:	1.6	3.0
Amortisation of software licences	1.4	1.7
Exceptional costs of impairment of intangible assets	0.0	1.2
Adjustment valuation of software licences	0.2	0.1
Loss on disposal of owned property, plant and equipment	0.1	0.3
Impairment of non-current financial asset investment <sup>3</sup>	0.4	1.9
Auditor's remuneration and expenses <sup>4</sup>	0.1	0.1
Provisions provided in year	0.7	3.4
Provisions not required written-back	(0.6)	0.0
<b>Total non-cash costs</b>	<b>22.8</b>	<b>45.7</b>

<sup>1</sup> Staff costs are disclosed in more detail in the Remuneration and Staff Report on page 69.

<sup>2</sup> This relates to debt held with Ploughshare. The provision has been increased to include all debt owned by Ploughshare.

<sup>3</sup> Impairment of the carrying value of the Agency's investment in Ploughshare. See Note 9.

<sup>4</sup> The notional audit fee for 2018/19 is £79,000 (2017/18: £84,000). During the year, the Agency did not contract any non-audit services from its external auditor, the National Audit Office (NAO).

## 5. Significant non-recurring operating items

Significant non-recurring operating items are defined as operating income or operating expenses that are not routine to the core business and due to their size or incidence are considered material. They warrant supplementary disclosure to aid user understanding of the Executive Agency's underlying operating performance. They may occur as a single in-year item, or they can be part of a project that spans several years and whose continued disclosure enable users to assess the on-going impact on financial performance.

	2019 £ million	2018 £ million
Helios <sup>1</sup>	6.4	6.1
Impairment of assets under construction <sup>2</sup>	0.0	1.2
Impairment of non-current financial asset <sup>3</sup>	0.4	1.9
Charge for back-dated VAT due <sup>4</sup>	0.0	4.3

<sup>1</sup> Costs of withdrawal from the Executive Agency's site at Fort Halstead under the Helios Project.

<sup>2</sup> The comparative relates to impairment of Identity Access Management project, an intangible asset.

<sup>3</sup> Impairment of the carrying value of the Agency's investment in Ploughshare. See Note 9.

<sup>4</sup> Charge due to incorrect VAT treatment applied in prior accounting periods, that includes £0.2 million of interest.

## 6. Finance income

	2019 £ million	2018 £ million
Interest received and receivable from bank accounts	0.0	0.1
<b>Total</b>	<b>0.0</b>	<b>0.1</b>

## 7. Finance expense

	2019 £ million	2018 £ million
Interest paid and payable on loans	0.0	0.0
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

One payment of £143 was made under the Late Payments of Commercial Debts (Interest) Act 1998 (2017/18: £84).

## 8. Property, plant and equipment

Property, plant and equipment movements during the year were as follows:

	Note	Land £ million	Buildings £ million	Plant and machinery £ million	Transport £ million	IT communication equipment £ million	Assets under construction £ million	Total £ million
<b>Valuations and gross modified historic cost</b>								
<b>Balance at 1 April 2017</b>		42.6	167.8	29.5	0.2	16.8	70.5	327.4
Transfers between asset class		0.0	0.5	(0.5)	0.0	0.0	0.0	0.0
Additions		0.0	0.0	0.0	0.0	0.0	57.3	57.3
Transfers		0.0	32.1	1.7	0.0	2.3	(36.1)	0.0
Disposals		0.0	(0.4)	0.0	0.0	0.0	0.0	(0.4)
Revaluations		51.8	61.7	1.4	0.0	1.5	0.0	116.4
Impairment <sup>1</sup>	11	0.0	(14.2)	0.0	0.0	0.0	0.0	(14.2)
<b>Balance at 31 March 2018</b>		<b>94.4</b>	<b>247.5</b>	<b>32.1</b>	<b>0.2</b>	<b>20.6</b>	<b>91.7</b>	<b>486.5</b>
Transfers between asset class		0.0	(0.4)	0.0	0.0	0.0	0.4	0.0
Reclassified as revenue and expensed <sup>2</sup>		0.0	0.0	0.0	0.0	0.0	(2.2)	(2.2)
Alignment with MOD accounting <sup>3</sup>		0.0	(0.5)	0.0	0.0	0.0	0.0	(0.5)
Additions		0.0	0.0	0.4	0.1	0.0	61.9	62.4
Transfers		0.0	43.8	6.3	0.0	1.6	(51.7)	0.0
Disposals		0.0	(0.5)	(0.4)	0.0	(0.3)	0.0	(1.2)
Assets classified as held for sale	15	(0.4)	0.0	0.0	0.0	0.0	0.0	(0.4)
Revaluations		1.4	6.0	0.2	0.0	0.2	0.0	7.8
Impairment Reversal	11	0.0	2.0	0.0	0.0	0.0	0.0	2.0
<b>Balance at 31 March 2019</b>		<b>95.4</b>	<b>297.9</b>	<b>38.6</b>	<b>0.3</b>	<b>22.1</b>	<b>100.1</b>	<b>554.4</b>
<b>Depreciation</b>								
<b>Balance at 1 April 2017</b>		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charge for year:								
historical		0.0	(5.1)	(4.8)	(0.1)	(5.9)	0.0	(15.9)
supplementary		0.0	(5.7)	(0.6)	0.0	(0.6)	0.0	(6.9)
Impairment <sup>1</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disposals		0.0	0.1	0.0	0.0	0.0	0.0	0.1
<b>Balance at 31 March 2018</b>		<b>0.0</b>	<b>(10.7)</b>	<b>(5.4)</b>	<b>(0.1)</b>	<b>(6.5)</b>	<b>0.0</b>	<b>(22.7)</b>
Alignment with MOD accounting <sup>3</sup>		0.0	0.5	(0.1)	0.0	0.0	0.0	0.4
Charge for year:								
historical		0.0	(5.9)	(5.2)	(0.1)	(7.3)	0.0	(18.5)
supplementary		0.0	(3.3)	(0.1)	0.0	(0.6)	0.0	(4.0)
Disposals		0.0	0.4	0.4	0.0	0.3	0.0	1.1
Revaluations		0.0	(0.3)	0.0	0.0	(0.1)	0.0	(0.4)
<b>Balance at 31 March 2019</b>		<b>0.0</b>	<b>(19.3)</b>	<b>(10.4)</b>	<b>(0.2)</b>	<b>(14.2)</b>	<b>0.0</b>	<b>(44.1)</b>
Net modified historic cost:								
<b>Balance at 31 March 2019</b>		<b>95.4</b>	<b>278.6</b>	<b>28.2</b>	<b>0.1</b>	<b>7.9</b>	<b>100.1</b>	<b>510.3</b>
Balance at 1 April 2018		94.4	236.8	26.7	0.1	14.1	91.7	463.8

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Land and buildings are subject to a quinquennial revaluation by an independent, professional valuer in accordance with IAS16: Property, Plant and Equipment.

Please refer to the Accounting Policy Notes 1(d) and 1(f) for the basis of valuation.

The land and building assets at Portsdown West were valued by the Valuation Office Agency (VOA), an Executive Agency of HM Revenue and Customs, as at 1 November 2017. The land and building assets at Porton Down were valued by the VOA as at 1 November 2017.

Included within land and buildings are properties from which rental income is derived. They are not material and are not disclosed separately.

Included within plant and equipment are eight assets donated by Home Office on 1 April 2018. These assets were identified by the Home Office as equipment to provide S&T previously sourced through former Centre for Applied Science and Technology. The following is a sub-set of the note relating to these donated assets:

	Plant and machinery £ million	Transport £ million	Total £ million
<b>Gross modified historic cost</b>			
Additions	0.4	0.1	0.5
<b>Balance at 31 March 2019</b>	<b>0.4</b>	<b>0.1</b>	<b>0.5</b>
<b>Depreciation</b>			
Charge for year:			
historical	(0.1)	0.0	(0.1)
<b>Balance at 31 March 2019</b>	<b>(0.1)</b>	<b>0.0</b>	<b>(0.1)</b>
Net modified historic cost:			
<b>Balance at 31 March 2019</b>	<b>0.3</b>	<b>0.1</b>	<b>0.4</b>

<sup>1</sup> Correction of presentation error. The impairment to buildings was reported as accelerated depreciation in the comparative period. Since the MOD method is to adjust the carrying value by reducing cost, the Executive Agency has restated its comparative for consistency, and to enable alignment of opening balances.

<sup>2</sup> Reclassified as revenue and expensed. Included within this balance are purchases of bulk items that individually do not meet the capitalisation criteria, consumables, and decommissioning effort that had been included in assets under construction in error.

<sup>3</sup> Alignment with MOD. There was a difference in accounting approach following the 2017/18 quinquennial valuations of the Agency's property assets.

## 9. Non-current financial assets

	Note	Subsidiary undertaking £ million
<b>Valuation</b>		
<b>Balance at 1 April 2017</b>		3.7
Impairment	11	(1.9)
<b>Balance at 31 March 2018</b>		<b>1.8</b>
Impairment	11	(0.4)
<b>Balance at 31 March 2019</b>		<b>1.4</b>

The Executive Agency's wholly owned subsidiary, Ploughshare, is not consolidated on grounds of materiality. See Note 1(d)(i). The Agency assessed the value of its investment in Ploughshare, which resulted in an impairment of £0.4 million (2017/18: £1.9 million). See Note 1(d)(ii) for details of the approach taken to calculate the recoverable amount. Following this approach Ploughshare's long-term liabilities are excluded from the assessment because they are payable to the Agency, for which the Agency holds a full doubtful debt provision. Ploughshare's fair value is considered to be the value of its net current assets resulting in an impairment when compared with the previous carrying value of the investment. The method of accounting is fair value through profit or loss.

The financial statements of the Executive Agency's associate, Tetricus Ltd, are not consolidated. Their results are not material.

## 10. Intangible assets

Intangible asset movements during the year were:

	Note	Purchased software licences £ million	Software assets under construction £ million	Total £ million
<b>Gross modified historic cost</b>				
<b>Balance at 1 April 2017</b>		<b>4.9</b>	<b>1.7</b>	<b>6.6</b>
Additions		0.0	0.5	0.5
Revaluations		0.4	0.0	0.4
Impairments	11	0.0	(1.2)	(1.2)
<b>Balance at 31 March 2018</b>		<b>5.3</b>	<b>1.0</b>	<b>6.3</b>
Transfers		0.2	(0.2)	0.0
Disposals		(0.1)	0.0	(0.1)
Revaluations		0.1	0.0	0.1
<b>Balance at 31 March 2019</b>		<b>5.5</b>	<b>0.8</b>	<b>6.3</b>
<b>Amortisation</b>				
<b>Balance at 1 April 2017</b>		<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Charge for year:				
historical		(1.7)	0.0	(1.7)
supplementary		(0.1)	0.0	(0.1)
<b>Balance at 31 March 2018</b>		<b>(1.8)</b>	<b>0.0</b>	<b>(1.8)</b>
Charge for year:				
historical		(1.4)		(1.4)
supplementary		(0.2)		(0.2)
Disposals		0.1		0.1
<b>Balance at 31 March 2019</b>		<b>(3.3)</b>	<b>0.0</b>	<b>(3.3)</b>
Net modified historic cost:				
<b>Balance at 31 March 2019</b>		<b>2.2</b>	<b>0.8</b>	<b>3.0</b>
Balance at 1 April 2018		3.5	1.0	4.5

## 11. Impairments

Impairments occurring during the year were either charged to Profit or Loss, or Other Comprehensive Net Expenditure as follows:

	2019 Profit or Loss £ million	2018 Profit or Loss £ million	2019 Other Comprehensive Net Expenditure £ million	2018 Other Comprehensive Net Expenditure £ million
Assets under construction <sup>1</sup>	0.0	1.2	0.0	0.0
Investment in non-current financial asset <sup>2</sup>	0.4	1.9	0.0	0.0
Quinquennial revaluation of property <sup>3</sup>	0.0	14.2	0.0	27.6
<b>Total</b>	<b>0.4</b>	<b>17.3</b>	<b>0.0</b>	<b>27.6</b>

<sup>1</sup> The impairment relates to intangible software, Identity Access Management project.

<sup>2</sup> The Executive Agency assessed the value of its investment in Ploughshare by taking the approach described in Note 1(d)(i).

<sup>3</sup> During the year ended 31 March 2018, the Valuation Office Agency performed a valuation of the Agency's property assets. A few significant impairments were made. In particular, the headquarters at Porton Down, Building 005, was impaired through other comprehensive net expenditure by £9.8 million and then through profit or loss by £4.2 million. The main building at Portsmouth West, Grenville Building, was impaired through other comprehensive net expenditure by £13.2 million and then through profit or loss by £8.4 million.

## 12. Work in progress

	2019 £ million	2018 £ million
<b>Total work in progress</b>	<b>0.1</b>	<b>0.3</b>
Central Government bodies	0.0	0.1
Non-public sector organisations	0.1	0.2

### 13. Trade receivables and other assets

Amounts falling due within one year:

	2019 £ million	2018 £ million
<b>Trade receivables</b>	<b>10.8</b>	<b>11.5</b>
Central Government bodies	8.0	10.2
Local authorities	0.5	0.0
Non-public sector organisations	2.3	1.3
<b>Contract assets</b>	<b>10.1</b>	<b>7.0</b>
Central Government bodies	6.7	4.0
Non-public sector organisations	3.4	3.0
<b>Deposits and advances – staff receivables</b>	<b>0.3</b>	<b>0.3</b>
<b>Other receivables</b>	<b>1.6</b>	<b>0.6</b>
Central Government bodies	1.6	0.5
Non-public sector organisations	0.0	0.1
<b>Prepayments and accrued income</b>	<b>8.6</b>	<b>7.4</b>
Central Government bodies	0.0	0.3
Local authorities	0.9	1.6
Non-public sector organisations	7.7	5.5
<b>Total</b>	<b>31.4</b>	<b>26.8</b>

Amounts falling due after more than one year:

	2019 £ million	2018 £ million
<b>Deposits and advances – staff receivables</b>	<b>0.3</b>	<b>0.4</b>
<b>Other receivables</b>	<b>0.1</b>	<b>0.1</b>
Central Government bodies	0.1	0.1
<b>Prepayments and accrued income</b>	<b>2.5</b>	<b>0.5</b>
Non-public sector organisations	2.5	0.5
<b>Total</b>	<b>2.9</b>	<b>1.0</b>

#### 14. Cash and cash equivalents

	2019 £ million	2018 £ million
<b>Balance brought forward</b>	<b>18.9</b>	<b>5.1</b>
Net change in cash and cash equivalent balances	(3.3)	13.8
<b>Balance carried forward</b>	<b>15.6</b>	<b>18.9</b>
The following balances were held at:		
Government Banking Service	11.5	16.8
Commercial banks	4.1	2.1
<b>Balance carried forward</b>	<b>15.6</b>	<b>18.9</b>

#### 14.1. Reconciliation of cash flows arising from financing activities to Net Equity Investment

	Non-cash flow bookkeeping for transactions with MOD					Total net cash inflow from financing activities £ million
	Cash flows	VAT recoverable transferred to MOD £ million	Goods and services provided to MOD £ million	Goods and services provided by MOD £ million	Payroll financed by MOD £ million	
Balance at 31 March 2018	435.0	(29.7)	(501.6)	18.7	143.9	66.3
Net change in financing activities for the year	377.0	(26.0)	(563.9)	18.1	204.9	10.1
<b>Balance at 31 March 2019</b>	<b>812.0</b>	<b>(55.7)</b>	<b>(1,065.5)</b>	<b>36.8</b>	<b>348.8</b>	<b>76.4</b>

#### 15. Assets classified as held for sale

During the year, the Executive Agency began preparations for the sale of its freehold land at its Portsmouth Main site, Portsmouth. The site is not occupied. All of the main buildings, which were derelict, have been demolished, leaving only foundations. The site was valued by Alder King LLP, Property Consultants, as at 31 January 2017 on a Market Value basis. It has since been subject to indexation using indices provided by Defence Statistics. The site was sold by auction on 12 June 2019. See Note 23.

## 16. Trade payables and other liabilities

Amounts falling due within one year:

	2019 £ million	2018 £ million
<b>Other taxation and social security</b>	<b>2.0</b>	<b>1.7</b>
<b>Contract liabilities</b>	<b>8.1</b>	<b>6.6</b>
Central Government bodies	1.6	0.4
Local authorities	0.2	0.0
Non-public sector organisations	6.3	6.2
<b>Trade payables</b>	<b>25.1</b>	<b>23.9</b>
Central Government bodies	1.6	1.0
Local authorities	4.5	2.7
Non-public sector organisations	19.0	20.2
<b>Other Payables</b>	<b>1.5</b>	<b>1.4</b>
Central Government bodies	1.5	1.4
<b>Pay and expenses – staff payables</b>	<b>4.0</b>	<b>3.9</b>
<b>Accruals and deferred income</b>	<b>107.9</b>	<b>71.4</b>
Central Government bodies	2.1	3.4
NHS Trusts	0.0	0.1
Local authorities	8.5	8.3
Non-public sector organisations	93.2	57.9
Staff	4.1	1.7
<b>Total</b>	<b>148.6</b>	<b>108.9</b>

Amounts falling due after more than one year:

	2019 £ million	2018 £ million
<b>Accruals and deferred income</b>	<b>1.4</b>	<b>1.5</b>
Central Government bodies	1.1	1.2
Local authorities	0.2	0.2
Non-public sector organisations	0.1	0.1
<b>Total</b>	<b>1.4</b>	<b>1.5</b>

Long-term creditors are held undiscounted. The effect of discounting is not material.

## 17. Provisions for liabilities and charges

	Onerous contract £ million	Fair Deal pension shortfall £ million	Supplier claims £ million	i lab provisions £ million	Helios provisions £ million	Early departure costs £ million	Total £ million
Balance at 1 April 2018	1.2	0.5	0.3	0.0	0.1	0.2	2.3
Provided in the year	0.5	0.0	(0.1)	0.1	0.0	0.2	0.7
Provisions not required written-back	(0.1)	(0.5)	0.0	0.0	0.0	0.0	(0.6)
Provisions utilised in the year	(0.2)	0.0	0.0	(0.1)	(0.1)	(0.4)	(0.8)
<b>Balance at 31 March 2019</b>	<b>1.4</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.6</b>

Analysis of expected timing of cash flows:

	Onerous contract £ million	Fair Deal pension shortfall £ million	Supplier claims £ million	i lab provisions £ million	Helios provisions £ million	Early departure costs £ million	Total £ million
Between 1 April 2019 and 31 March 2020	0.2	0.0	0.2	0.0	0.0	0.0	0.4
Between 1 April 2020 and 31 March 2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Between 1 April 2021 and 31 March 2026	1.2	0.0	0.0	0.0	0.0	0.0	1.2
From 1 April 2026 thereafter	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Balance at 31 March 2019</b>	<b>1.4</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.6</b>

No amounts are expected to be called after 31 March 2026 and therefore no further analysis is necessary for amounts after this date. The provisions have not been discounted. The effect of discounting is not material.

### Onerous contract

A lease is in place for a facility (operated by the Executive Agency) remaining at the Farnborough site. This defers a dilapidation obligation under the terms of the lease to beyond a year. The current expiry date of the lease is 31 March 2020 and renewal of the lease is being negotiated. Utilisation of the provision will not be until beyond the expiry date of the renewed lease. The Agency has an obligation to repair the roof of a listed building at the Fort Halstead site. The provision is expected to be utilised during the year ending 31 March 2020. As part of the Agency's withdrawal from its site at Fort Halstead, it had an obligation to settle redundancy payments made to fire services staff. The fire services staff had been employed by the Agency's facilities management provider. The provision was utilised during the year, with a balance not required and written-back.

### Fair deal pension arrangements

Eleven staff who transferred from the Executive Agency to outside of the public sector were entitled to access to a public sector pension under the Fair Deal staff pension arrangements. Only one of the staff opted to transfer into the public sector pension arrangements, resulting in a balance not required and written-back.

### Supplier claims

Legal claims had been made against the Executive Agency by suppliers. One settlement was negotiated during the year, resulting in a balance not required and written-back.

### i lab (rationalisation programme) provisions

Due to the Executive Agency's withdrawal from the Farnborough and Malvern sites, there have been redundancies for some non-mobile staff. A liability of less than £0.1 million will remain until the year ending 31 March 2020.

### Helios Project provisions

Due to a phased withdrawal from the Fort Halstead site, there had been some voluntary early departures agreed during the previous year for non-mobile staff. The provision was utilised during the year.

### Early departure costs

The Executive Agency meets the additional costs of benefits beyond the normal Civil Service pension arrangements in respect of employees who depart early, by paying the required amounts to the Cabinet Office (My Civil Service Pension). The Agency provides for this in full when the early departure agreement becomes binding. Payment values are established by My Civil Service Pension.

Comparatives for the year ending 31 March 2018 are:

	Onerous contract £ million	Fair Deal pension shortfall £ million	Supplier claims £ million	liab provisions £ million	Helios provisions £ million	Early departure costs £ million	Total £ million
<b>Balance at 1 April 2017</b>	<b>1.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>1.5</b>	<b>2.7</b>
Provided in the year	0.1	0.5	0.3	0.2	0.2	2.1	3.4
Provisions utilised in the year	0.0	0.0	0.0	(0.3)	(0.1)	(3.4)	(3.8)
<b>Balance at 31 March 2018</b>	<b>1.2</b>	<b>0.5</b>	<b>0.3</b>	<b>0.0</b>	<b>0.1</b>	<b>0.2</b>	<b>2.3</b>

Analysis of expected timing of cash flows:

	Onerous contract £ million	Fair Deal pension shortfall £ million	Supplier claims £ million	liab provisions £ million	Helios provisions £ million	Early departure costs £ million	Total £ million
Between 1 April 2018 and 31 March 2019	0.0	0.5	0.3	0.0	0.1	0.2	1.1
Between 1 April 2019 and 31 March 2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Between 1 April 2020 and 31 March 2025	1.2	0.0	0.0	0.0	0.0	0.0	1.2
<b>Balance at 31 March 2018</b>	<b>1.2</b>	<b>0.5</b>	<b>0.3</b>	<b>0.0</b>	<b>0.1</b>	<b>0.2</b>	<b>2.3</b>

## 18. Commitments under leases

### Operating leases

Commitments under non-cancellable operating leases to pay rentals after 31 March 2019 are analysed as follows:

	2019 £ million	2018 £ million
Property:		
Due within one year	4.0	4.1
Due after one year but within five years	14.7	15.0
<b>Total</b>	<b>18.7</b>	<b>19.1</b>

The Executive Agency leases various properties, including land, under short-term cancellable operating lease agreements. There is only one significant lease – the property at Fort Halstead. To cancel the lease, a notice period of not less than five years is required of the Agency. The landlord does not have a right to cancel. No renewal or purchase options exist. There is a rent review every five years, performed on a Market Value basis. The next rent review from the period 1 April 2017 has not yet concluded. There is no contingent rent or any significant restrictions concerning the use of the property.

## 19. Capital commitments

	2019 £ million	2018 £ million
Property, plant and equipment:		
Capital expenditure that has been contracted for but has not been provided for in the accounts	85.1	20.9
Capital expenditure that has been authorised but has not been provided for in the accounts	20.2	109.0
Intangible assets:		
Capital expenditure that has been contracted for but has not been provided for in the accounts	0.0	0.0
Capital expenditure that has been authorised but has not been provided for in the accounts	0.0	0.0

During 2017/18, the Executive Agency obtained updated Ministerial approval for the Helios Project that will result in migration away from the Fort Halstead site following completion of replacement facilities at Porton Down. The scope of this updated approval was revised to include the proposed Chemical Weapons Defence Centre. Ministerial approval of £225.9 million at 2017 prices was granted comprising £205.0 million capital and £20.9 million revenue amounts. The Core Enclosure element of the original Helios Project and the Chemical Weapons Defence Centre have now commenced construction.

Within the approved £205.0 million capital authorisation, £116.9 million has been capitalised, £80.3 million has been contracted for but has not been provided for, and £7.8 million is authorised, but not yet contracted.

## 20. Financial instruments

An assessment of the new standard, IFRS9: Financial instruments, has been made. As a result, there has been no change in the Executive Agency's approach to financial instrument risks, its objectives, policies and processes for managing those risks or methods used to measure them. The Agency has continued to make a full doubtful debt provision with respect to debt owed from its subsidiary, Ploughshare. See Note 9. No other doubtful debt provision is considered necessary. Under the expected credit loss model, there is no expectation of any material future loss.

The Agency's principal financial instruments comprise cash, current receivables and current payables.

Cash generated from sales, supplemented with funding provided by MOD, are the primary sources of finance for the Agency.

Trade receivables and trade payables, arise directly from the Agency's operations. As the cash requirement of the Agency is met mainly from funding through its parent organisation, MOD, financial instruments play a limited role in the creation and management of risk when compared with a non-public sector body. More than 89 per cent of the Agency's sales is with MOD. As a consequence, the overall risk relating to financial instruments created by sales contracts is minimal. Other financial instruments relate to contracts to acquire non-financial items in line with the Agency's requirements for supply of external resource and services.

The Agency is not exposed to significant credit, liquidity, foreign currency or market risks. The Chief Finance Officer is responsible for the policies to manage these risks on behalf of the Board. These policies have remained unchanged throughout the year.

It has been the Agency's policy throughout the year that no trading in financial instruments for speculative purposes should be undertaken.

### Categories of financial instruments

Trade and other receivables, and cash and cash equivalents, have been classified as loans and receivables. Trade and other payables have been classified as other financial liabilities. The fair value of these financial assets and financial liabilities approximates carrying value due to the short-term nature of these financial instruments. The Agency's investment in its wholly owned subsidiary is classified as a non-current financial asset and is accounted for using the fair value through profit or loss method. See Note 9. The category of financial instrument that has produced finance income received and receivable, and the category of financial instrument that has produced finance charges paid and payable, are disclosed in Notes 6 and 7.

No capital disclosures are necessary. A buffer for risk to creditors does not arise because public sector financing is tax based.

## 21. Related-party transactions

Dstl is an Executive Agency of MOD.

### MOD

MOD is a related party and has non-executive representation on the Board. During the year, the Agency had various material transactions with MOD, all of which were carried out under contract terms and subject to the normal course of internal and external audit:

	2019 £'000	2018 £'000
Operating income	559,024.4	494,721.9
Purchases	18,140.1	19,117.0
Receivables	0.0	0.0
Accruals	759.1	639.2

### Ploughshare Innovations Ltd

Ploughshare is a wholly owned subsidiary undertaking of the Agency. During the year, the following trading occurred with Ploughshare, which is carried out under standard contract terms:

	2019 £'000	2018 £'000
Operating income	289.5	197.3
Purchases	730.5	136.8
Receivables	82.7	71.5
Accruals	359.8	0.0

A full doubtful debt provision has been maintained to include sales made to Ploughshare during the year. This has resulted in a total provision of £2,561,896 (2017/18: £2,228,247), and a charge to SoCNE of £277,176 (2017/18: £274,914).

### Tetricus Ltd

Tetricus is an associate of the Agency. During the year, the following trading occurred with Tetricus, which was carried out under standard contract terms:

	2019 £'000	2018 £'000
Operating income	17.4	150.2
Purchases <sup>1</sup>	0.0	0.0
Trade Receivables <sup>1</sup>	0.0	34.9
Trade Payables <sup>1</sup>	0.0	0.0

<sup>1</sup> Purchases are represented by invoices processed through the purchase ledger during the year. No account of movements in accruals is taken. Only trade receivables and trade payables recorded through the sales and purchase ledgers are disclosed. This more simplified approach focuses on invoices processed through the primary ledgers and is considered more meaningful and comparable with the Agency's related parties.

Continued on next page 

### Other public sector bodies

Other public sector bodies are regarded as related parties by virtue of being under the same common control. During the year, the Agency had various material transactions with certain public sector bodies. All transactions are carried out on standard contract terms and are subject to the normal course of internal and external audit.

	Operating income		Purchases <sup>1</sup>		Trade Receivables <sup>1</sup>		Trade Payables <sup>1</sup>	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Cabinet Office (excluding My Civil Service Pension)	173.2	170.4	272.2	12.7	0.9	72.8	0.0	0.0
Centre for Applied Science and Technology	0.0	0.0	0.0	145.1	0.0	0.0	0.0	0.0
Centre for Protection of National Infrastructure	2,744.7	2,231.9	0.0	121.0	2.6	801.8	0.0	121.0
Defence Electronics and Components Agency	10.3	13.7	52.0	0.0	0.0	0.0	52.0	0.0
Department for Energy and Climate Change	72.3	67.9	0.0	0.0	0.0	0.0	0.0	0.0
Department for the Environment, Food and Rural Affairs	2,742.4	14.0	102.8	176.1	0.0	19.1	0.0	0.0
Department for International Development	657.2	16.5	0.0	0.0	91.2	22.6	0.0	0.0
Department for Transport	9,212.2	6,783.4	0.0	0.0	458.9	2,099.6	0.0	0.0
Drinking Water Inspectorate	0.0	93.5	0.0	0.0	112.2	112.2	0.0	0.0
Engineering and Physical Sciences Research Council	0.0	0.0	1,634.9	1,409.2	0.0	0.0	242.2	255.9
Foreign and Commonwealth Office	434.9	176.7	98.5	0.0	127.8	48.0	0.0	0.0
Government Communications Bureau	153.5	196.2	1,956.0	947.0	0.0	51.0	0.0	0.0
Government Communications Centre	4,470.9	3,932.9	2,928.6	133.8	4.7	413.0	513.7	103.0
Government Legal Department	32.8	71.0	5.2	24.7	0.0	50.3	0.0	4.2
Health and Safety Executive	0.0	6.8	272.4	0.0	0.0	8.2	42.5	0.0
Health and Safety Laboratory	0.0	0.0	49.6	10.7	0.0	0.0	0.0	0.0
Home Office	33,596.9	15,691.2	86.6	83.3	5,633.5	5,389.9	18.1	2.0
Innovate UK	1,338.0	0.0	567.3	946.0	27.7	14.8	234.4	258.5
Medical Research Council	313.4	3.4	34.0	0.0	171.9	81.9	0.0	0.0
Meteorological Office	4.1	1.9	128.7	323.7	0.7	0.0	0.0	11.7
Public Health England	705.0	194.6	1,854.2	2,603.1	422.6	465.8	36.5	229.7
Science and Technology Facilities Council	0.0	0.0	716.0	538.7	0.0	0.0	416.5	14.5
UK Space Agency	1,891.6	1,365.0	0.0	0.0	376.7	79.2	0.0	0.0

<sup>1</sup> Purchases are represented by invoices processed through the purchase ledger during the year. No account of movements in accruals is taken. Only trade receivables and trade payables recorded through the sales and purchase ledgers are disclosed. This more simplified approach focuses on invoices processed through the primary ledgers and is considered more meaningful and comparable with the Executive Agency's related parties.

No Minister, Board member, key manager or other related parties has undertaken any material transactions with the Agency during the year. Any compensation paid to senior management is disclosed in the Remuneration Report on pages 62 to 65.

Tax and pension payments are made by MOD on behalf of the Agency.

## 22. Contingent liabilities

There were no contingent liabilities at 31 March 2019 or 31 March 2018. For remote contingent liabilities, see comments on page 72.

## 23. Events after the reporting period

The accounts were authorised for issue on the date of certification by the Comptroller and Auditor General.

On 12 June 2019, surplus land at the Agency's Portsdown Main site was sold by auction, realising proceeds of £2.6 million (before sale costs) and an associated gain on disposal. This is a non-adjusting event that will be reflected in the financial statements for 2020.

# Glossary

<b>ARAC</b>	Audit and Risk Assurance Committee	<b>ISO</b>	International Organisation for Standardisation
<b>C4ISR</b>	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance	<b>IT</b>	Information Technology
<b>CAST</b>	Centre for Applied Science and Technology	<b>JSP</b>	Joint Services Publication
<b>CBR</b>	Chemical, Biological and Radiological	<b>KPI</b>	Key Performance Indicators
<b>CETV</b>	Cash Equivalent Transfer Value	<b>MOD</b>	Ministry of Defence
<b>CIS</b>	Cyber and Information Systems	<b>MyCSP</b>	My Civil Service Pension
<b>CRR</b>	Corporate Risk Register	<b>NCPA</b>	Non-Consolidated Performance Award
<b>CTS</b>	Counter-Terrorism and Security	<b>NEM</b>	Non-Executive Member
<b>CTW</b>	Contracted Temporary Worker	<b>NISSS</b>	New IS Service Solution
<b>DASA</b>	Defence and Security Accelerator	<b>PIL</b>	Ploughshare Innovations Limited
<b>DIA</b>	Defence Internal Audit	<b>PLS</b>	Platform Systems
<b>DPA</b>	Data Protection Act	<b>PwC</b>	PricewaterhouseCoopers
<b>DSA</b>	Defence Security and Analysis	<b>Q</b>	Quarter
<b>FOI</b>	Freedom of Information	<b>RIDDOR</b>	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
<b>FReM</b>	Financial Reporting Manual	<b>S&amp;T</b>	Science and Technology
<b>FTE</b>	Full-Time Equivalent	<b>SCS</b>	Senior Civil Service
<b>GCHQ</b>	Government Communications Headquarters	<b>SoCITE</b>	Statement of Changes in Taxpayers' Equity
<b>HM</b>	Her Majesty's	<b>SoCNE</b>	Statement of Comprehensive Net Expenditure
<b>HR</b>	Human Resources	<b>SSRB</b>	Review Body on Senior Salaries
<b>IAS</b>	International Accounting Standard	<b>SSSI</b>	Site of Special Scientific Interest
<b>IFRS</b>	International Financial Reporting Standards	<b>STEM</b>	Science, Technology, Engineering and Mathematics
<b>IS</b>	Information Systems		



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