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The Science Inside

Defence Science and Technology Laboratory

Annual Report and Accounts

2021-2022

Ministry of Defence

HC 658

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Defence Science and Technology Laboratory

Annual Report & Accounts

→ 2021/22

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HC 658

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Instrument 2017 No. 148, the Defence Science and Technology Laboratory Trading Fund Order 2011 (S.I. 2011/1330) was revoked; Dstl continuing as an Executive Agency within the ambit of the Defence vote but no longer operating as a Trading Fund.

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Performance

Our Performance Report explains Dstl as an organisation, detailing our strategy, the principal risks we face in our delivery and the analysis of our performance.

Our Performance Report contains two sections:

These pages complement the detail in our financial statements, which begin on page 089.

1 / Overview

Chief Executive's statement

I am delighted to introduce Dstl's Annual Report and Accounts for 2021/22.

It is a pleasure to present the Defence Science and Technology Laboratory's (Dstl) Annual Report and Accounts for 2021/22.

I became Chief Executive of this world-class science and technology (S&T) organisation in February 2022 and I'm pleased to report on another successful year in delivering S&T that makes a real impact for the armed forces and ensures the safety of the nation.

We have seen another frenetic year where demand, expectation, and delivery continues to grow against a backdrop of major challenges, including the coronavirus pandemic and the outbreak of war in Ukraine. Dstl scientists have continued to provide round the clock support to defence and security operations at home and abroad. Their expertise saves lives, ensures the UK sustains strategic advantage over our adversaries and underpins our nation's safety and prosperity.

When a terrorist bomber targeted Liverpool Women's Hospital in November, Dstl's explosive experts were on the scene within hours. Their crucial early advice and guidance was instrumental in pinpointing vital evidence to build an accurate and reliable picture for the police and judiciary of what happened and how. This came just a few months after our globally recognised Forensic Explosives Laboratory reached its

150th anniversary – a remarkable record of supporting and offering operational advantage to our police and security services.

In September and October, our scientists led the first 5 Eyes urban military experiment hosted in the UK – demonstrating novel and emerging technologies such as artificial intelligence (AI) and machine learning to support intelligence, surveillance and reconnaissance capabilities. This major activity conducted with our international allies ensures our respective armed forces benefit from cutting-edge technology to give them unrivalled situational awareness in the most challenging scenarios.

And in April 2021, Dstl celebrated its 1,000th intellectual property report. A Dstl engineer invented a novel way of clearing naval mines faster and cheaper by safely exploding them using an electrical pulse. This will mean safer seas for mariners and protect those tasked with ridding the waves of unexploded ordnance. Further detailed, high-impact S&T examples can be found throughout this report.

Across the organisation, we have embraced the extra strategic emphasis placed on S&T in the Integrated Review and backed up with investment in the Spending Review, stepping up our ambitions in AI, autonomy, cyber, space, weapons and futures capabilities.

We are reshaping our partnerships with industry, academia and our international allies, investing more in early stage research and emerging technologies that will lead to so-called 'Generation After Next' capabilities to sustain our scientific and technological supremacy.

Through initiatives such as Supercharging Science and Dstl Searchlight, we continue to make significant progress to diversify our supply chain, working with more small and medium-sized enterprises (SMEs), non-traditional defence suppliers and academia. We are more transparent and proactive with industry and academia than at any time in our history, creating a holistic Research and Development pipeline and making the routes to work with us as simple and accessible as possible.

Further detailed, high-impact S&T examples can be found throughout this report.

We also opened Dstl Newcastle alongside the National Innovation Centre for Data, expanding Dstl's reach in the North East of England, building stronger relationships with organisations with specialist skills and expertise in that region while supporting the local economy through new jobs.

Moving forward, we also want to strengthen our international alliances beyond research collaboration to build consensus on policy and strategy.

In closing, I would like to thank Doug Umbers, who stood in as interim Chief Executive and led the organisation through a year of significant change, continuing S&T development, an ambitious transformation programme and the ramping up of skills and resources – all done through some of the most challenging months of the COVID-19 pandemic.

My final thanks go to our people who are at the heart of the organisation. Without them there would be no Dstl. Their passion, skill, dedication, expertise and values are what makes Dstl the world-class S&T organisation it is – providing the critical science inside UK defence and security.

Finally, I am looking forward to working with all colleagues and partners as we harness the best S&T to keep the UK safe and prosperous.

Paul Hollinshead
Chief Executive

8 September 2022

Case Study #01

Space

Driving space research to enhance capability

Dstl underpins UK Defence Space capability through science and research, driving innovation, and leveraging technological opportunities. We support UK Space Command and Space Directorate in the delivery of the Defence Space Portfolio, as well as unlocking generation-after-next capability by developing advanced S&T concepts through rapid innovation, and continual collaboration with allies, industry and academia. Our research and expertise provides future choices for MOD as we seek to build strength in space.

Over the next four years Defence will launch up to eight Research and Development satellite missions, supported by Dstl's Space Systems Programme. The first payloads will be launched from the UK on Virgin Orbit's dedicated small satellite launch service, which is due to take off from Spaceport Cornwall in 2022. The two payloads, known as Prometheus 2, will operate in Low Earth Orbit, around 550km above the Earth and 50-100km apart. Designed with Airbus Defence and Space and assembled by In-Space Missions Ltd, the two tiny satellites which are comparable to the size of a cereal box, will provide a test platform for sophisticated imaging, and monitoring radio signals including GPS, paving the way for a more collaborative and connected space communication system with our combat allies.

A further 2022 science mission in collaboration with the US Naval Research Laboratory will monitor environmental changes in the Earth's ionosphere. Data will be captured by a UK instrument suite designed in collaboration with academic partners University College London's Mullard Space Science Laboratory, the University of Bath, and Surrey Satellite Technology Limited, drawing on expertise from the University of Surrey.

As part of the research and development missions, Dstl is supporting MINERVA, a £127 million investment over four years to develop a network of space platforms and ground systems, designed to integrate space with other domains. MINERVA will show the UK's ability to autonomously collect, process and disseminate data from UK and allied space assets, to better aid frontline military decision-making on the ground.

Who we are and what we do

We are Dstl – the science inside UK defence and security.

Role and purpose

As an Executive Agency of the Ministry of Defence (MOD), we provide world-class expertise to deliver high-impact science and cutting-edge technology for the defence, security and prosperity of the UK.

We supply specialist services to MOD, Home Office and across government, working collaboratively with industry and academia worldwide, providing expert research, specialist advice and operational support.

Our values are "Innovative, Collaborative and Impactful". Nothing shows these more than our investment in Ploughshare, our wholly-owned technology transfer company, which ensures UK government science delivers real prosperity to the UK. We are delighted to host the cross-Government Defence and Security Accelerator (DASA), which funds exploitable innovation to support UK defence and security quickly and effectively.

What we deliver

Dstl plays a key part in stewarding future capability for defence and security in line with the five capability challenges set out in MOD's S&T Strategy. Our expertise spans the breadth of S&T disciplines, with our expert staff working across 22 capability areas.

Bringing this diversity together, we are proud to deliver truly original research and concepts, creating innovative new capabilities. We assess, evaluate and deliver current and next generation capabilities. Our specialist knowledge and facilities mean Dstl is always ready to provide operational support to meet urgent priority needs, as we have demonstrated through the COVID-19 pandemic and Russia's invasion of Ukraine.

The Integrated Review (IR), the Defence Command Plan and the Defence and Security Industrial Strategy set out the challenges the country faces, and Dstl is rising to meet them. With a £6.6 billion investment for defence research and development announced in the Spending Review, and greater clarity from the published documents, we have prioritised key areas to ensure we are fit for the UK's future.

Our main customer is the MOD Chief Scientific Adviser (CSA) who is responsible for the direction of MOD's core S&T research portfolio. We proudly deliver MOD CSA's research programme (£1.7 billion over the next four years), including subcontracting more than half of this to industry and academia. Guided by MOD's S&T Strategy we are ensuring effective delivery of wider Departmental objectives, working in close collaboration with Defence Science and Technology (DST) to maximise impact and ensure we have a deep understanding of defence and security needs. Dstl delivers credible, impartial and evidence-driven advice and solutions to provide clear military and security advantage.

Our plans for the future – Our strategy

In 2020, the MOD announced an investment of £6.6 billion into research and development, which included an additional £1 billion specifically for S&T research and pull through into service, over the next four years. Dstl has a crucial role in delivering this investment in collaboration with national and international S&T partners and suppliers, to meet an overall increased demand across the full breadth of MOD's activities. Over the last year, Dstl commenced delivery of its multi-year response to ensure we are playing our part to "sustain strategic advantage through S&T".

In the context of increased demand, the three strategic objectives set out in our 2018-22 Strategic Direction remain valid and have successfully enabled Dstl's effective response. We have made significant progress in increasing internal S&T delivery capacity and increased access and delivery through external capabilities. Together with our partners we have responded to government priorities whilst our underpinning strategic objectives have enabled us to be resilient in the face of the ongoing challenges presented by the global pandemic.

The three Dstl Strategic Objectives are:

1. **Through our S&T, we will shape the future of defence and security via relentless focus on our customers' challenges and needs;**
2. **We will continue to ensure defence and security can exploit the best science and technology capabilities on demand;**
3. **We will become a more agile organisation that is fit for the future.**

In 2021/22, Dstl prioritised a number of actions to enable delivery of the significant increase in demand, guided by the framework supporting our strategic objectives. These included a focus on understanding customer expectations about the new investment, further enhancing and optimising our commercial and recruitment approaches and increasing productivity of tools and infrastructure. In these, we have continued to make good progress in achieving improved organisational effectiveness and efficiency.

→ **Strategic objective one: Through our S&T, we will shape the future of defence and security via relentless focus on our customers' challenges and needs**

Response to the Integrated Review 2021
Dstl has rapidly responded to the increased demands for S&T, both directed by policy and supporting our partners across the armed forces and security services. We have accelerated S&T development in AI, autonomous systems, space and advanced weapons. The policy focus on S&T has enabled us to work with our partners to define the impact our S&T must have in key areas and prioritise across them. As we move into the second and future years of the additional S&T investment, we will continue to work closely with our customers and suppliers to realise the ambition of the Integrated Review.

MOD S&T portfolio
Working with DST, Dstl has been preparing for MOD's launch of its new five-year S&T portfolio, launched in April 2022, aiming to meet the priorities set out by MOD CSA in the MOD S&T Strategy 2020. In anticipation, aligning to the MOD strategy, Dstl has increased its focus on its role in developing generation after next capabilities including the launch of Exploration Division which has recently celebrated its first anniversary. Dstl's newest Division was created to identify and accelerate the delivery of transformative technology, systems, concepts and strategy for defence and security.

We have started pursuing our longer-term ambitions for our 22 Strategic Capabilities, ensuring that we are able to meet both near term delivery demands whilst also investing and shaping the capabilities to inform and meet future requirements. We have begun the new portfolio from a well-informed position, ready to accommodate the new and refocused programmes.

For further information on our strategic capabilities...

See page 009

→ **Strategic objective two: We will continue to ensure defence and security can exploit the best science and technology capabilities on demand**

Collaborating with partners and suppliers to deliver S&T has long been a core component of Dstl's delivery model. In light of the significant increase in demand we have concentrated on growing and accessing a wider range of external capabilities to ensure we can harness the best S&T. For example, the Dstl Searchlight initiative which was first launched in 2019 has helped deliver exceptional results forming new collaborations across different sectors, providing visibility of opportunities to our SMEs and academia partner community and ultimately increasing the innovation available to Dstl.

Focusing on Dstl commercial, we have enabled a 29% growth by value in our contracting throughput. Our partnership and commercial framework agreements have been examined and expanded where needed and we have expanded use of DASA. We have also continued to seek added value from our intellectual property through our commercialisation agent, Ploughshare Innovations.

One prominent example of Dstl's commitment to accessing talent more broadly was in Dstl's Artificial Intelligence and Data Science capability. Dstl recently opened a new facility in Newcastle-upon-Tyne, co-located with the National Innovation Centre for Data (NICD). This action will benefit our customers by accessing a new and relevant skills base, and demonstrates our commitment to supporting the Government's levelling up agenda by increasing collaboration with universities and non-traditional SME suppliers outside London and the South East.

→ **Strategic objective three: We will become a more agile organisation that is fit for the future**

Many of the challenges of this year have arisen from the combination of increased demand with the continuing COVID-19 epidemic. Dstl continues to adapt to hybrid working, successfully delivering more S&T despite the virus and the restrictions that have been necessary to ensure our safety. Enhanced tools for collaboration, with suppliers, partners and internally, have been delivered and are demonstrating benefits.

Our ongoing focus on improving our brand recognition coupled with improved recruitment processes has enabled us to embark on our biggest recruitment drive in recent years, with over 300 new roles advertised for physicists, scientists, engineers, technologists and leaders.

The next steps for our strategy - 2022 and beyond

This year marks the first year of a new MOD CSA refreshed core research programme. The ambition within the new portfolio is unprecedented, in addition to a challenging and evolving global defence context following the Russian invasion of Ukraine. Dstl will need to deliver with agility and pace, with an increased focus on S&T exploitation and demonstrable impact. In light of these significant delivery challenges, the continuing multi-year S&T investment uplift and the arrival of the new Dstl Chief Executive, the time is right to re-examine our strategy and set out a more focused pathway to identify what is required for the future. In 2022, we intend to develop that new strategy with an aim to launch it in 2023.

Underpinned by the legacy of our existing strategy and three strategic objectives, we will identify the strategic changes required by the direction in the MOD S&T Strategy 2020 and the Integrated and Spending reviews, and continue to adapt our strategic direction, keeping in step with the views of our customers and owner. Our refreshed S&T ambitions will help us to have conversations with our customers, industry suppliers and academic partners about their future needs from Dstl. Through these discussions, we will be in a good position to build S&T capabilities for the future and strengthen our supply chains.

As we build S&T advantage in key areas, we must ensure our organisation has access to the right balance of technical and leadership skills and can adapt to a competitive labour market. We must have in place the appropriate infrastructure and IT in order to enable our staff to keep in step with a rapidly changing S&T landscape and new post pandemic ways of working. At the same time we will continue to review and demonstrate our efficiency measures and fulfil our own obligations to wider government commitments.

Our 22 S&T Strategic Capabilities

Above Water Systems

Advanced Materials

AI & Data Science

Air Systems

CBR

Communications & Networks

Cyber

Electromagnetic Activities

Explosives & Energy

Homeland Security & CT Systems

Human & Social Sciences

Information Systems

Land Systems

Operational Research

Robotics & Autonomous Systems

Sensing

Space Systems

S&T Futures & Incubator

Strategic Systems

Survivability

Underwater Systems

Weapons

Note: The 22 Dstl S&T Strategic Capabilities support the 17 MOD capabilities, where the MOD 'Systems Capability' has been expanded out as above with a cog.

Descriptions of Dstl's 22 S&T Strategic capabilities can be found in its **Annual Report and Accounts FY20/21**, pages 010-011.

Case Study #02

Cyber and Information Systems

Increasing breadth of cybersecurity tasks

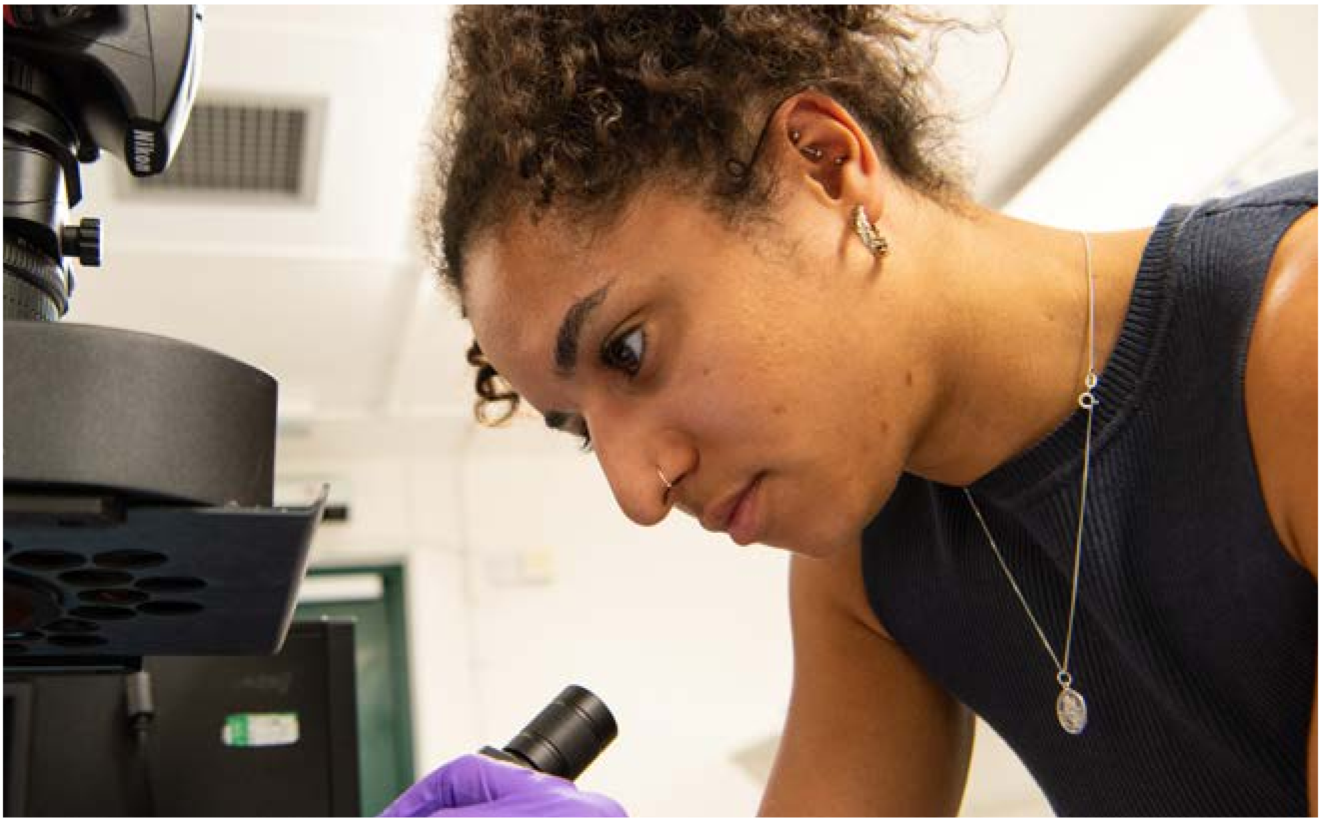
Cybersecurity and cyber defence are key themes running throughout the Integrated Review and central to the UK's future prosperity and resilience. Dstl plays a vital role in helping to keep the UK safe from cyber-attack and developing capabilities in key areas such as: Command, Control, Communications and Computers (C4); Intelligence, Surveillance and Reconnaissance (ISR); and Sub-threshold, competing with adversaries below the threshold of conventional conflict. The examples below indicate the range and variety of work undertaken throughout the year.

For the maiden deployment of the HMS Queen Elizabeth Carrier Strike Group to the Indo-Pacific region Dstl provided planning and operational support against cyber-attack, maintaining Freedom of Operation and Manoeuvre throughout the 28 week voyage.

Heavier armour is not the only way to protect platforms such as aircraft and vehicles. Disguising or minimising their electronic signature can make such platforms harder to track and identify. Dstl's work in the Contested Electromagnetic Environment also involves research into the use of radio frequencies to counter ground and air-launched missiles intent and prevent them from destroying their targets. Protection extends from existing to "Generation After Next" platforms, and can involve developing agreed international standards for increased future interoperability.

Dstl has delivered the first international open standard for secure communications specifically designed for underwater acoustic communications. Working with the National Cyber Security Centre (NCSC) and the Centre for Maritime Research and Experimentation (CMRE) Dstl has enhanced the UK's capability for doing secure interoperable communications in the underwater domain.

Among many AI projects Dstl has developed a video analytics platform which provides near real time detection of objects, faces and events. A prototype implementation has been applied to a full-scale realistic problem to enhance the utility and value of large volumes of video data that could not reasonably be exploited manually. Separately, Deep Learning based automated object detection from satellite imagery has transitioned to the Operational Concept Demonstrator stage, alerting analysts to change of interest at high priority sites.



Ensuring successful delivery

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 is both inherent in our S&T activities and embarked upon to further the science that supports UK defence and security. Effective management of these risks helps to ensure the successful delivery of our objectives. We continue to apply the MOD's risk management policy to our risk management arrangements. We have embedded risk management practices into our planning and forecasts, minimising disruption that could be caused by threats, as well as maximising the exploitation of opportunities.

By proactively identifying, assessing, and managing the risks to the organisation, we improve the confidence of our stakeholders, and allow Dstl to improve its decision making and take the appropriate course of action in pursuit of its objectives.

Our Corporate Risks

Corporate Risks are those threats and opportunities which could impact on Dstl's strategic objectives. Management of Corporate Risks is delegated to the Executive Management Committee with oversight by the Board. Through a process of Risk Deep Dives, the Board and its Audit and Risk Assurance Committee undertake assurance of these risks to review the effectiveness of the mitigation plans and ensure the level of risk carried by the organisation is within both its tolerance and delegation.

Corporate Risk Refresh

With changes to Dstl's external and internal environment, at the beginning of the financial year (FY) 2021/22 a review of the risk register was commenced to ensure it remains extant and pertinent to meet the current challenges, both through threats and opportunities, to Dstl. The refreshed Corporate Risk Register comprises 13 risks, one of which relates to our response to the ongoing impact of the COVID-19 pandemic.

This refreshed risk register includes two opportunity risks; Dstl influence prior to stakeholder decision making and Dstl as a socially responsible organisation.

We continue to monitor the effects of the conflict in Ukraine on our risks. This includes remaining sighted on the latest advice from partners such as the Centre for the Protection of National Infrastructure (CPNI) and the National Cyber Security Centre (NCSC) and ensuring that our risks are regularly reviewed within the context of the conflict and its impact on the direct and indirect work of Dstl and our stakeholders.

The following table summarises our corporate risks, our progress in the reporting year, our risk response and the key activities we are undertaking to address the risks.

Risk	Outline mitigations	Progress and changes in FY 2021/22
CR21 **Prolonged Pandemic Arrangements**	Dstl ensures effective management as we emerge from the pandemic.	→ Consolidated from four COVID-19 specific risks in FY 2020/21 to reflect the changing nature of the risk. → A clear roadmap is in place to ensure our ability to respond to the changing context of the pandemic.
CR31 **Major Health and Safety Event Harms the Public**	Dstl protects the public via in-depth engineered safeguards, which are functioning and being used correctly. Additionally through an internal assurance regime of 1st and 2nd party audits of operating and health and safety arrangements.	→ Dstl continues to maintain assurance activities and ensure staff are competent and trained to undertake activities. → For areas where high hazard and/or complex activities are being conducted, then additional systematic assessments of Dstl's arrangements are in regular review. → Additional, regulatory inspections have been conducted providing additional assurance that arrangements are appropriate.
CR32 **Health and Safety Event Causes Life-threatening Injury to a Worker**	Dstl ensures adherence to suitable and sufficient risk assessments and comprehensive work procedures by competent, trained personnel. An audit programme of specific activities and deep dives is periodically carried out. Through a system of internal controls, all incidents and near misses are reported. Where appropriate corrective action has been completed, lessons learnt are communicated to the rest of the business.	→ Reviewed existing Dstl Risk Assessment process through workshops involving multiple stakeholders across Dstl. → Risk Assessment training for all staff was further improved. → Dstl's new Safety and Environment Management System was launched.
CR33 **Key Infrastructure Component Fails**	Dstl's infrastructure assets are protected via a series of maintenance plans and ongoing investment. Additionally, key infrastructure components have resilience plans and Divisions have authored Business Continuity Plans.	→ Pursuing funding avenues to upgrade our infrastructure. → Managing and maintaining the infrastructure we have.
CR34 **Major Information Security Breach or Loss**	In line with MOD security protocols, Dstl has robust policies, procedures and practices in place to ensure that its information remains protected and within its control.	→ Cyber and information security defences are regularly monitored, tested and audited to ensure they remain robust and balanced.

Continued on page 013

Risk	Outline mitigations	Progress and changes in FY21/22
CR41 **Maintain a Focus on Dstl Strategy**	Through the prioritisation of Executive Management Committee time for leading and delivering key actions, and a dedicated team in place to provide the direction, coherence and governance of the strategy and its implementation, Dstl will maintain focus on its strategy.	→ Maintenance of the management controls put in place. → Understanding of priorities as work begins on the new strategy to be launched in April 2023.
CR42 **Inability to Meet Current or Future Customer Demand**	Dstl has a series of measures in place to ensure that it maintains the capabilities it needs to meet existing demand, which include health checks on facilities, people, knowledge, and licences to practice. Through engagement with our customers on a number of levels, we are able to anticipate and advise on potential step changes in demand.	→ Development of Strategic Engagement Plans. → Cross-function working on resourcing and recruitment models.
CR43 **Poor Advice and Sub-Standard Products/Services**	Dstl prides itself on the quality of its outputs and therefore has a set of robust controls in place to ensure all formal S&T outputs undergo a process of Technical Quality Assurance. Its outputs are produced by staff who have been appropriately assessed against competence criteria and customer scorecards ensure Dstl is either meeting or exceeding expectations.	→ Ensuring that we are compliant with technical quality regulations. → Assess and develop staff technical knowledge.
CR44 **Dstl influence prior to stakeholder decision making**	Dstl ensures that it engages not only with its key stakeholders, but is an integral part of the decision making process.	→ Implementation of the Engagement Framework, Strategy and Plans. → Development of active stakeholder analysis.
CR51 **Attraction, retention and development of talent and critical skills**	Dstl recognises its people as a key asset and through a number of measures monitors its workforce levels against Divisional Plans. Dstl considers succession planning, critical roles and reviews key areas for skills shortages.	→ Through recruitment and employee development, Dstl maintains the skills and talent required. → Additional effort conducted to attract people with specialist skill sets in identified areas.
CR52 **Dstl as a socially-responsible organisation**	Dstl is a high skilled and diverse organisation and understands how it can position itself as a role model within Government, is engaged in the community, and being regarded as an employer of choice.	→ Review of the sustainability strategy. → Implementation of a Diversity and Inclusion strategy.
CR61 **Dstl being an adopter of technologies**	Dstl is an effective and innovative adopter of technologies which ensures it stays at the forefront of S&T.	→ Review and alignment of governance for innovation programmes. → Establishment of a digital innovation capability. → Continued development of strategic technology plans.
CR62 **Pace and agility to respond to an external event**	Dstl ensures it has the capacity and capability to respond to sudden and emerging demands for its services and advice through an understanding of its current workloads and the implantation of scenario planning.	→ Clear understanding of critical capabilities and dependencies. → Assessment of current prioritisation and resilience of key business areas.

Our performance summary

Foreword

2021/22 was a record year for S&T delivery. Total operating income grew by £133 million, an 18% increase on 2020/21. Aligned to the Integrated and Spending Reviews we have grown our capabilities to respond to the challenge of S&T playing a greater role in defence and security. We enhanced our internal people capability by 7%, and external delivery through our diverse supplier base of industry and academic partners by 29% (an increase of 92% over five years).

Operating income

Total operating income for the year was £876 million (2020/21: £743 million). As a result of the Spending Review, customer demand for Dstl's high impact S&T outputs has grown to unprecedented levels. Dstl, through its network of diverse industry and academic partners collaborated to meet this rising demand. The relaxation of COVID-19 restrictions improved operating conditions, and capabilities that were previously diverted to support the nation's health response to the pandemic were made re-available to support Core Programme delivery. Overall, Dstl delivered £2 million (2020/21: £16 million) in support of the Government's COVID-19 response.

Our charge rates increased by 1%, with operational efficiencies absorbing the impact of sustained investment in long term transformation. There were no changes to fees and charges policies.

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

MOD accounted for 93% of the £834 million customer contract sales (2020/21: 90%). The majority of MOD sales are attributable to the core S&T Programme, where sales increased by £62 million to £426 million (2020/21: £364 million). This programme represented 51% of total sales (2020/21: 50%).

	2021/22 £ million	2020/21 £ million
MOD:		
Core S&T Programme	426	364
Other	346	293
	772	**657**
Non MOD:		
Wider Government	48	56
Non-Exchequer	14	13
Total Customer Sales	**834**	**726**
Other Operating Income	42	17
Total	**876**	**743**

Other MOD sales were also strong, increasing by £53 million to £346 million (2020/21: £293 million). The increase was dominated by a £45 million increase to Head Office sales which doubled in size to £91 million (2020/21: £46 million), buoyed by additional work on Future Effect and Weapon Systems. Work for Defence Equipment and Support (DE&S), remained broadly static with sales of £86 million (2020/21: £88 million).

Strategic Command sales, at £70 million (2020/21: £61 million), were restored to pre COVID-19 levels, with a relaxation of government restrictions increasing site access for sensitive work.

Business with the rest of MOD, covering the other Front Line Commands (Royal Air Force, Army and Royal Navy) and Nuclear, increased by 2% to £100 million (2020/21: £98 million).

Non-MOD sales reduced to £62 million (2020/21: £69 million). Work for UK Government departments dropped back to pre COVID-19 levels following a one-off surge in 2020/21, that diverted resource from core defence activity to support the UK Government response to the pandemic.

Non-Exchequer income relates mainly to collaborative and jointly funded work with our defence allies and alliances.

Other operating income increased by £25 million, to £42 million (2020/21: £17 million). This includes £27 million in respect of customer-funded (donated) assets and £14 million from the Defence Innovation Unit to finance seed funds.

Cost of sales

External cost of sales comprising subcontracted work and purchases of materials and services increased by 29% to £432 million (2020/21: £335 million), representing 51% of all S&T work delivered in the year (2020/21: 47%). The continued growth, 92% increase since 2017/18, signals Dstl's commitment to continue to deliver work in collaboration with partners in academia and industry, leveraging S&T innovation within a growing commercial sector.

Operating expenses

Operating expenses reduced by £4 million to £443 million (2020/21: £447 million). Staff costs increased by £11 million to £282 million (2020/21: £271 million) this reflects annual pay inflation and a 2% increase in the average number of staff employed (the year-end number grew by a much larger 7%. The average is supressed due to much of this growth occurring in the second half of the year).

Non-staff costs increased to £135 million (2020/21: £123 million). The cost increase represents continued planned investment in Dstl's change projects with significant in-year investments on: Fort Halstead Exit costs, a new Enterprise Resource Planning system and Information Systems Service Solution.

Depreciation and amortisation costs returned to a historic norm following a one-off spike in 2020/21 as a result of revaluation of Dstl's building stock at its Porton site.

	2021/22 £ million	2020/21 £ million
Staff costs	282	271
Non-staff costs	135	123
Depreciation and amortisation	26	53
Total	**443**	**447**

Net operating income

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.

	2021/22 £ million	2020/20 £ million
Operating income	876	743
Cost of sales – direct purchases	(432)	(335)
Other operating expenditure	(443)	(447)
Net operating income / (expenditure)	**1**	**(39)**

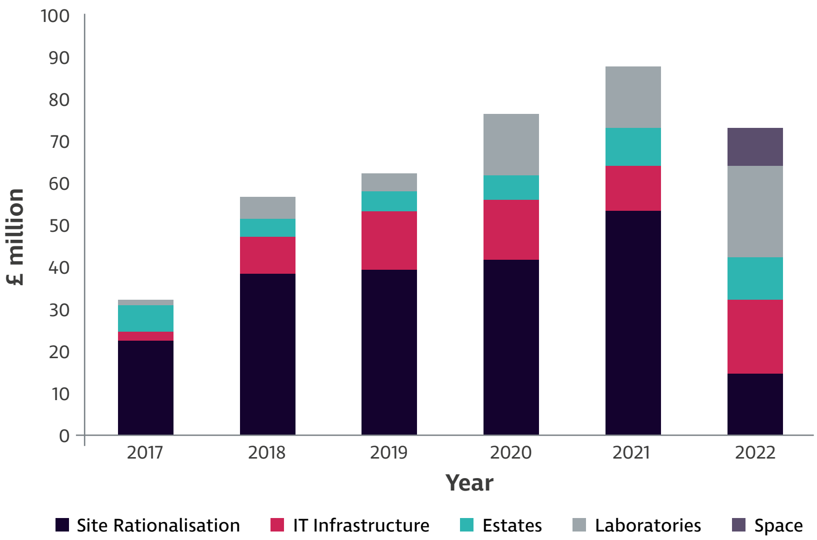
The net operating income for FY 2021/22 is £1 million (2020/21: £39 million expense). Excluding depreciation/amortisation costs of £26 million and customer-funded/donated asset income of £27 million, the underlying net operating income reduces to £nil million (2020/21: £1 million expense). The small improvement to underlying performance is directly attributable to an increase in staff delivery as a result of relaxation of COVID-19 health and safety working restrictions.

Capital investment

Capital investment was £77 million (2020/21: £88 million), which included £27 million of assets either donated by MOD or funded by other government departments. Following five years of focus on site rationalisation programmes, our investment portfolio is now more diverse and entering into a new phase which will realise Dstl's long term vision for infrastructure, both fixed and virtual.

We invested a further £14 million in the delivery of a new Chemical Weapons Defence Centre, which will complete by a revised date of January 2023. The Centre represents the last major construction of our site rationalisation project Helios, which accommodates the transfer of capabilities from Fort Halstead to Porton Down. Site rationalisation represented 19% of total capital investment, which had previously averaged 62% in the last five years.

Across the remainder of the portfolio we invested £18 million on IT, £11 million on Estates, £23 million on Laboratory Equipment and £9 million on Space assets. IT networks continue to be upgraded to ensure our operating systems are fit for the future. Estates investment included enhanced site utilities, office space and continued refurbishment of buildings that will house the Home Office's former 'Centre for Applied Science and Technology' capabilities. Laboratory expenditure represents the acquisition of new specialist S&T equipment to support current and expanding future S&T programmes. The procurement of Space assets, strengthens Dstl's position to support UK Space Command with discovery of new concepts and first-of-a-kind experimentation.



"We invested a further £14 million in the delivery of a new Chemical Weapons Defence Centre."

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 082-088. 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 94% of invoices within five days of being approved and cleared for payment (2020/21: 95%), against the target set by Government of 80%.

Distorting factors

There were no significant distorting factors affecting our primary financial statements. A full explanation of our accounting policies and other explanatory information can be found within the notes to the financial statements on pages 095-122. We continue to prepare our financial statements on a going-concern basis based principally on funding projections from our parent department.

Group entities

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

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 His Majesty's Treasury. There were no new accounting or reporting standards adopted in year.

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 095.

Financial 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.

Demand for our work continues to be strong and the financial outlook is underpinned by Spending Review commitment to S&T programmes. Next year marks the second year of that commitment, Dstl's sales are budgeted to rise to £977 million for 2022/23. The Ukraine conflict is unlikely to materially impact the value of delivery projections in the near term, but may require reprioritisation of resources as appropriate.

The importance of our work continues to be highlighted by positive media exposure and we anticipate that with both Integrated and Spending reviews signifying a greater role for S&T in defence and security, Dstl's role will continue to grow.

Dstl's sales are budgeted to rise to £977 million for 2022/23.

Case Study #03

Policing and Security

Shaping the future of UK policing

Dstl has a long history of exploring future and emerging science and technology to build a picture of how they might impact or be applied to UK defence and security. Through Home Office funding, for the first time we have taken our horizon scanning and considered it from the perspective of the police over three future time horizons.

We took nine policing-related themes – including AI, deep fakes, novel materials and quantum – and looked at what technologies could have real benefit for policing.

The opportunities are vast. For example, if weapon detection systems using AI were to be integrated into CCTV or body-worn cameras, accurate and real-time intelligence could be provided to officers and help identify knife crime. Options for less lethal weapons which distract and disorientate could provide greater protection for officers and the public, allowing engagement with subjects at a distance and preventing the escalation of conflict or violence. Facial recognition is increasingly being implemented across commercial sectors. For policing, beyond the legal and ethical challenges for use, the development and introduction of algorithms will improve the use of the technology to identify persons of interest. Rapid advances in the processing power of quantum computers could be used to increase the speed of assessment and identification of surveillance data, releasing administrative resources that could be deployed elsewhere.

Policing Chief Scientific Adviser, Professor Paul Taylor, said: "The technologies examined by Dstl offer an exciting vision for the future of policing. We recognise that technological change must be in step with public confidence and these ideas will help inform future debate and considerations."

> For the first time we have taken our horizon scanning and considered it from the perspective of the police over three future time horizons.

2 / Performance Analysis

Performance analysis

Dstl's performance is measured and reviewed through monthly reporting to the Dstl Executive Management Committee (EMC) and quarterly at EMC Performance meetings. Performance is reported at Dstl Board meetings and our MOD sponsor considers our performance tri-annually as part of their Performance and Risk Reviews. The Performance and Risk review meeting is attended by the MOD COO, MOD Finance and representatives from DST.

The approach to reporting takes into account both current and future performance and enables Dstl to take prompt action to ensure we meet our strategic objectives.

Progress against our performance, including our Key Performance Indicators (KPIs), is reported quarterly to the Dstl Board, with an extract on the following page.

We continue to work closely with our Board and MOD sponsor to improve the reporting of Dstl performance.

Our performance headlines

£876m
Operating income for the year

42%
Externally delivered work

91%
Customer satisfaction

Key performance indicators

Business Performance Area	What we measure (Leading KPI)	2021-22 Target	2021-22 Achieved
Efficiency and Productivity	Average S&T delivered per Full Time Employee (at Dstl level)	£188k	£189k
	EMR (Extra Mural Research) spend (sub contract only), as a % of the Total Cost of Sales	42%	42%
	No charge rate increase in relation to standard operating costs (excluding transformation costs)	Dstl maintained a charge rate increase for FY23, in line with inflation and in consultation with DST	
Delivery	Delivery of S&T Programme Outcomes benefiting defence and security from the baseline portfolio plan	85%	83%
Customer Satisfaction	Customer Satisfaction Ratings via survey (CSAT returns)	90%	91%
Finance	Delivery within 1% of the Q2 Forecast agreed Control Totals - RDEL	+/- £41k	£5.1m variance* (see page 22)
	Delivery within 1% of the Q2 Forecast agreed Control Totals - CDEL	+/- £0.7m	£(20.1)m variance
Investment	Internal Portfolios Capital plan key project/programme milestones, delivered to time	70%	46%** (see page 22)
Operational Effectiveness	Fewer than 140 RIDDOR injuries, per 100,000 employees	140	156
People	Achieve an overall Staff Engagement score of 65%	65%	60%
	Diversity & Inclusion Levels of Ambition – Ethnic Minority Intake	4%	5.3%
	Diversity & Inclusion Levels of Ambition – Ethnic Minority Workforce	4%	4.8%
	Diversity & Inclusion Levels of Ambition – Senior Female representation, level 7-8	24%	22.7%
	Diversity & Inclusion Levels of Ambition – Senior Female representation, level 8-9	21%	22.3%
Sustainability	Reduce energy consumption by at least 1% by end 2021/22 from the baseline year of 2017/18	1%	4.7% increase (Shadow KPI)
	Increase recycled waste to at least 45% of total waste by end 2021/22 from the baseline year of 2017/18	45%	57% (Shadow KPI)
Impact	Return on Investment of S&T delivered	In development - to be reported in FY23	

Dstl works with our MOD sponsor, Board and DST to identify and agree the KPIs used by the organisation. In addition to the KPIs, a range of wider performance measures (PMs) are tracked regularly. Together the KPIs and PMs represent performance areas across all aspects of the organisation and utilise a comprehensive range of measures and indicators which are used to inform management decisions at all levels of the organisation.

Aligned to our strategic objectives, Dstl's 2021/22 KPIs were identified, setting out stretching but realistic performance targets with performance against KPIs being closely monitored on a monthly basis.

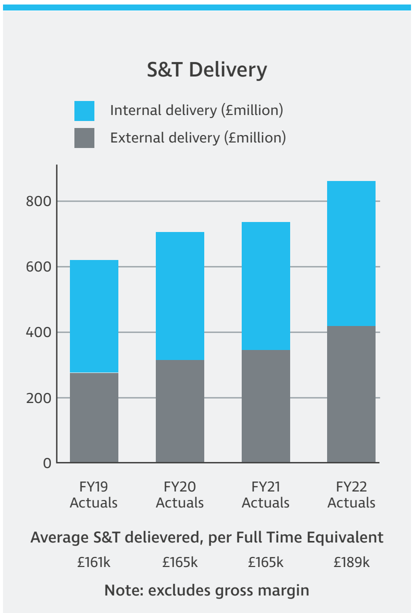
Measuring how we are doing

Efficiency and productivity

Average S&T delivered per Full Time Employee (at Dstl level)

Our S&T delivery for FY 2021/22 grew significantly as a result of the additional funding received from the MOD Spending Review (SR), granting Dstl a major increase to our income. In order to deliver this growth, it was necessary for Dstl to undertake an extensive recruitment drive and to collaborate further with our partners in Industry and Academia to ensure delivery of the increasing demand.

As a result of the increased funding, this metric of delivery per FTE has grown over the last four years with a significant rise from FY21 (£165,000 per FTE) to FY22 (£189,000 per FTE).



EMR (Extra Mural Research) spend (sub contract only), as a % of the Total Cost of Sales

For Dstl to meet the SR ambitions, it is essential that we work hard to grow the volume of work that can be delivered through our external partnerships, with this metric focussing on sub-contracted research work only. EMR is a subset of the total External costs (EM) and does not include items such as materials.

This metric is essential to ensure we are partnering with a wide range of organisations primarily from academia and industry, and to ensure we are not just growing our own internal capability.

Type	FY18/19	FY19/20	FY20/21	FY21/22
EMR	£200m	£249m	£266m	£354m
EMR%*	32%	36%	37%	42%

Notes:
*EMR as a % of total cost of sales

> As a result of the increased funding, our S&T delivery has grown from £165,000 per FTE in FY21 to £189,000 in FY22.

Delivery

Delivery of S&T Programme Outcomes benefiting defence and security from the baseline portfolio plan

Despite the delivery of our S&T programme milestones narrowly missing the target of 85%, this is an excellent achievement, considering the large increase in deliverables from 2020/21 as we reach the end of the current five year S&T portfolio (250 in FY21, to 601 delivered in 2021/22).

Crucial to this success has been the close working with DST and our wider stakeholder community which enabled rapid and innovative re-scoping and planning of delivery, often using novel tools and techniques to enable different ways of working, particularly with the ongoing impact of the COVID-19 pandemic in this FY. It is important to note that some milestones were necessarily rescheduled for delivery into future years, the risk associated with this will be managed as a priority as we complete transition to the new S&T portfolio.

We are proud of the maintenance of our high customer satisfaction levels.

Customer satisfaction

Customer Satisfaction Ratings via survey (CSAT returns)

Whilst 2021/22 was an unprecedented year in many ways, Dstl remained committed to providing high impact S&T for our customers. Customer satisfaction is measured through the completion of Customer Satisfaction surveys and in 2021/22, Dstl achieved an overall customer satisfaction score of 91%, against a target of 90% (with 170 out of 440 surveys having been completed by customers, a return rate of 39%).

We are proud of the maintenance of our high customer satisfaction levels and will continue to build on that success over the coming period. In 2021/22, Dstl carried out a review of its CSAT methodologies (with DST support) and we are now implementing changes to CSAT such that feedback is gathered more consistently and from the most appropriate source, as well as providing a more visible complaints process. The consequent quantitative and qualitative analysis of CSAT returns is carried out with increased depth, breadth and rigour to inform action planning and targeted engagement activities to enhance customer relationships.

Finance

Delivery within 1% of the Q2 Forecast agreed Control Totals - RDEL*

The target outturn of the RDEL Control Total (CT) was agreed to be within 1% of the Q2 forecast. Dstl was on target for achieving this year's KPI, however due to a request of a late adjustment from Defence Resources, this target was missed. The agreed adjustment alleviated wider central pressures from Defence Resource, with a year-end reversal of MOD charging being placed in our system. This adjustment was done in consultation with DST and Head Office.

Delivery within 1% of the Q2 Forecast agreed Control Totals - CDEL and Internal Portfolios Capital plan key project/programme milestones, delivered to time**

The outturn of the CDEL CT was agreed to be within 1% of the Q2 forecast. However the capital programme fell short in 2021/22 by £20 million due to delivery delays in major programmes (Helios), RDEL/CDEL limitations, specialist construction and digital supply chain delays. There are key challenges ahead in the coming FY for delivery of the capital programme, however these are in review to ensure smooth delivery in future years.

Operational effectiveness

Fewer than 140 RIDDOR injuries, per 100k employees

There were a total of six RIDDORS in FY 2021/22, of which they were all due to differing and isolated events.

People

Achieve an overall Staff Engagement score of 65%

The results from the annual People Survey during FY 2021/22 saw the engagement index for Dstl reduce by 5%, to an overall score of 60%, with all main survey themes decreasing.

2021/22 was a significant year of change and transition for Dstl. During this time we said farewell to the outgoing Chief Executive Gary Aitkenhead and for much of the year had an interim Chief Executive. We were delivering at a rapid pace, experiencing some large challenges in recruitment and all during a pandemic.

Responses to the survey highlighted that the opportunities of hybrid working have had a positive impact on our employees' physical and mental health and we continue to develop our blended working approach (Our Better Normal).

Diversity & Inclusion levels of ambition

We continue to be dedicated to being an inclusive and equal opportunity employer and are committed to increasing the representation of minority demographics within the organisation.

Our levels of ambition (LOA) provide motivational goals across the whole employee life cycle which are supported by our Executive Team. This year, to summarise:

- Eight out of 12 areas have increased in terms of representation
- Since 2021, we have exceeded six out of 16 LOAs
- Significantly, we achieved our intake level of ambition and increased the number of candidates from ethnic minority backgrounds successful at interview.
- For early career recruitment, this year, our gender representation has been encouraging. Across the majority of our Divisions, the male: female split at each stage of the graduate recruitment process has improved.

Case Study #04

Air

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Maintaining Operational Independence and Freedom of Action in the air

The advent of increasingly capable Integrated Air Defence Systems (IADS) and the spread of advanced weapons to less technologically advanced countries and non-state actors is expected to threaten the UK's operational independence. Dstl is at the heart of Team PELLONIA and the innovative Next Generation Air Survivability (NGAS) approach that will provide aircraft with advanced survivability solutions to counter emerging and future weapon systems and thus maintain the UK's Freedom of Action and Manoeuvre (FOAM).

Traditional Urgent Operational Requirements (UORs) approaches for Air Platform Protection (APP) do not scale to address these future threat challenges, require regular hardware changes and drive high through-life costs. The NGAS approach, designed to maximise exploitation of CSA research, is defence's response to these challenges and has to date:

- Developed generic future threat adversaries and identified the key technological challenges out to 2035+;
- Agreed associated platform-level S&T requirement maps, completed gap analysis and established research and technology maturation goals;
- Established Team PELLONIA, an APP Enterprise with Strategic Partnering Arrangements (SPAs) between MOD, Leonardo, Thales and Chemring Countermeasures to enable joint development of capability for UK platforms and support the development of the export market.

Over the next decade £100 million of Air Cap funding will be aligned with CSA research to develop, deliver, test, assure and spirally upgrade the NGAS elements to ensure advanced system-level solutions and functionality keeps pace with threat developments. APP will be progressively rolled out to current and future fixed and rotary wing aircraft with the potential to also adapt solutions for use on uncrewed air vehicles. The first platforms being equipped with NGAS capabilities are Shadow Mk2 and E7. To realise the full benefits of this approach and maximise the impact of Operational Independence, Freedom of Actions and deliver economies of scale the aspiration is to utilise Team PELLONIA UK NGAS solutions as broadly as possible across UK fleets and support the export market.

This NGAS approach will help sustain investment in highly skilled jobs throughout the UK APP Enterprise supply chain, such as in Edinburgh, Glasgow, Luton, Reading and Salisbury and support the development of high-end technologies, tools, processes, and infrastructure with application to adjacent sectors.

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

During a year of continuing significant challenge due to COVID-19, our main priority was to safely maintain the capability and infrastructure required to enable the continued delivery of S&T in support of UK Government and its interests. We published our sustainability strategic direction, enhanced our waste training packages, created our climate risk assessment for our Porton Down site, and sustainable procurement progressed on improving the generation of social value.

Sustainability strategic direction

We progressed with our sustainability agenda within our business and in support of the UK Government and MOD's sustainability ambitions. Our sustainability goals have continued to support, and closely align, with the UK Government's Net Zero greenhouse gas emissions by 2050 (NZ50) mandate, the new Greening Government Commitments (GGC), and the MOD's S&T Strategy.

We identified a corporate risk (opportunity) "Dstl as a socially responsible organisation" including the social pillar of sustainability. This will provide us with the opportunity to enhance and progress our position on social responsibility, and engage in the community. Work has commenced to understand our ambition, scope and desired outcomes for social responsibility.

The three pillars of sustainability of social, environmental and economic, along with the 17 Sustainable Development Goals, continued to be integral to our sustainability agenda. We have focused on the Sustainable Development Goals where we can make an impactful difference using our seven Areas of Action.

- Governance, Behaviour, Culture and Engagement;
- Sustainable Use of Resources;
- Net Zero Carbon Estate and Climate Resilience;
- Science and Technology Research and Capability;
- Natural Capital;
- Sustainable Procurement and Improved Generation of Social Value;
- Data and Management Information.

Area of Action	United Nations Sustainable Development Goals Supported by Activities in 2021/22
Governance, Behaviour, Culture and Engagement	4 QUALITY EDUCATION 8 DECENT WORK AND ECONOMIC GROWTH 11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION 14 LIFE BELOW WATER 15 LIFE ON LAND 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS
Sustainable Use of Resources	2 ZERO HUNGER 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Net Zero Carbon Estate and Climate Resilience	6 CLEAN WATER AND SANITATION 7 AFFORDABLE AND CLEAN ENERGY 8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION
Science and Technology Research and Capability	13 CLIMATE ACTION 17 PARTNERSHIPS FOR THE GOALS
Natural Capital	3 GOOD HEALTH AND WELL-BEING 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION 14 LIFE BELOW WATER 15 LIFE ON LAND 17 PARTNERSHIPS FOR THE GOALS
Sustainable Procurement and Improved Generation of Social Value	1 NO POVERTY 3 GOOD HEALTH AND WELL-BEING 5 GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED INEQUALITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS
Data and Management Information	16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Looking forward to the future

We published our ['Dstl Sustainability Strategic Direction 2021 to 2026'](). Our strategic direction sets the landscape for sustainability, and how it will be developed and delivered over the coming years. Our sustainability strategy aligns with the Defence Infrastructure Organisation (DIO) and MOD's strategic ambitions. We continue to engage with MOD and DIO to find funding solutions to support sustainability.

Engagement

We have expanded our collaboration and key stakeholder engagement with representation at MOD and DIO. Through staff awareness campaigns we have communicated on energy and food waste reduction, supporting biodiversity, reducing printing, and boosting improvements to waste management. In addition, staff and Trade Union representation was encouraged and took place via sustainability initiatives working groups.

> We published our Dstl Sustainability Strategic Direction for 2021/26.

Greening Government Commitment Targets

The latest GGC 2021/25 was published in October 2021, using a new baseline year of 2017/18 and superseding the GGC Framework for 2016/20. The GGCs 2021/25 have headline targets underpinned by sub-targets, and were expanded to include production of Nature Recovery Plans, Sustainable Construction, and Climate Adaptation Plans. Defence scopes for GGC have been identified by MOD along with disaggregated targets. In a number of areas, the scope and methodology for GGC 2021/25 targets differ from 2016/20. Therefore, the data for historic years' performance may differ from previously reported data in our Annual Report and Accounts.

The report below provides our performance to date against the GGC 2021 to 2025.

Greening Government Commitment	2021/25 Operational Targets (where applicable disaggregated for Dstl)	Defence Scope	Our position at 31 March 2022, compared to 2017/18 baseline year	Status
Greenhouse Gas Targets				
Headline Targets	→ Reduce overall greenhouse gas emissions by 30.6% from a 2017/18 baseline	UK estate emissions from grid electricity, mains gas, oil, and LPG	1% Reduction	At risk
	→ As part of overall target, reduce direct greenhouse gas emissions by 12% from a 2017/18 baseline	UK estate emissions from mains gas, oil and LPG	8% Increase	At risk
	→ Reduce domestic travelling emissions by 30% from a 2017/18 baseline	Domestic UK to UK travel emissions from commercial flights, rail, grey and white fleet	53% Reduction	Achieved
Sub-targets	→ Meet the Government Fleet Commitment for 25% Ultra-Low Emissions Vehicles[1] by 31 December 2022, and 100% of fleet to be fully zero emissions at the tailpipe by 31 December 2027	2022 target – leased and sixth day plus hire cars 2027 target – leased and sixth day plus hire cars, and N1 vans weighing under 3.5 tonnes	8%	At risk (2022 target) On target (2027 target
	→ Reduce emissions from domestic business flights by 30%	Domestic business flights between UK airports via commercial airlines	53% Reduction	Achieved
	→ Report distance travelled by international business flights, with a view to better understanding and reducing related emissions where possible	International business flights via commercial airlines	5,835,912 pkm	Achieved (Reporting) On target (Understanding / reduction)
	→ Departments that already have policies in place to compensate for emissions are encouraged to report on their implementation	MOD does not have a policy in place to compensate for business travel emissions	Not Applicable	Not Applicable
	→ Update organisational travel policies so that they require rail travel to be considered first as an alternative to each planned flight	Dstl Travel Policy	Intend to review Travel Policy and process in next reporting year	On target

Continued on page 028

Greening Government Commitment	2021-2025 Operational Targets (where applicable disaggregated for Dstl)	Defence Scope	Our position at 31 March 2022, compared to 2017/18 baseline year	Status
Waste Targets				
Headline Target	→ Reduce overall amount of (in-scope) waste generated by 15% from the 2017/18 baseline	UK mixed municipal waste streams	7% Increase	At risk
Sub-targets	→ Reduce amount of waste going to landfill to less than 5% of overall (in-scope) waste	UK mixed municipal waste streams	0%	Achieved
	→ Increase the proportion of waste which is recycled, composted or sent to anaerobic digestion to at least 70% of overall (in-scope) waste	Waste assigned for recycling, composting and anaerobic digestion	36%	At risk
	→ Remove Consumer Single Use Plastic (CSUP) from the central Government office estate	Dstl out of defence scope	Not Applicable	Not Applicable
	→ Measure and report on food waste by 2022.	UK Estate Baseline 2021/22 with defence action plan to follow	1 tonne	Achieved
	→ Report on introduction of reuse schemes		No new reuse schemes introduced	At risk
	→ Reduce Government's paper use by at least 50% from a 2017/18 baseline	MOD stationery supply contract	46% Reduction	On target
Water Targets				
Headline Target	→ Reduce water consumption by 8% from the 2017/18 baseline	Aquatrine supplied water consumption, excluding distribution system losses	29% Increase	At risk
Sub-targets	→ Ensure all water is measured	Aquatrine supplied water	Delivered through Aquatrine measurement methodology	Achieved (incoming supplies)
	→ Provide a qualitative assessment to show what is being done to encourage the efficient use of water		Intend to commence introduction of qualitative assessment in next reporting year	On target
Sustainable Procurement Target				
Headline Target	→ Continue to buy more sustainable and efficient products and services with the aim of achieving the best long-term, overall value for money for society	MOD systems in place and the action taken to buy sustainably. DEFRA to issue reporting template on an annual basis	Aligned to MOD systems	On target

Continued on page 029

Greening Government Commitment	2021-2025 Operational Targets (where applicable disaggregated for Dstl)	Defence Scope	Our position at 31 March 2022, compared to 2017/18 baseline year	Status
Nature Recovery and Biodiversity Target				
Headline Target	→ Develop and deliver Nature Recovery Plans for land, estates, development and operations	To be confirmed by MOD Plans expected to include targets for: → Tree planting and woodland cover → Total peatland owned and leased (not applicable to Dstl) → Pollinator friendly habitat → Land as a contribution to the Nature Recovery Network → All protected sites under management	Intend to commence development of Nature Recovery Plans in next reporting year	On target
Climate Adaptation Target				
Headline Target	→ Develop an organisational Climate Change Adaptation Strategy across estates and operations. I. Climate Risk Assessments II. Climate Change Adaptation Action Plan		One Climate Risk Assessment completed. One Climate Risk Assessment commenced	On target
ICT Target				
Headline Target	→ Report on the adoption of the Greening Government ICT and Digital Services Strategy and associated targets	Set strategy within the framework of the overarching Greening Government Commitment Strategy focusing on priority areas and delivering core data to support wider sustainability targets	Intend to commence production of a Data Centre Strategy in next reporting year	On track

Notes:

LPG – liquid petroleum gas

N1 – small commercial vehicles designed for the carriage of goods and less than 3.5 tonnes

pkm - passenger kilometres

DEFRA – Department for Environment, Food and Rural Affairs

ICT – information communication and technology

[1] 50 grams carbon dioxide/kilometre emissions at tailpipe

Environmental management

We continue to review our environmental management procedures, taking into account both negative and positive impacts on the environment, to ensure we can demonstrate continual improvement.

Our Safety and Environmental Management System (SEMS) is periodically reviewed for continual improvement. Work commenced to subsume and simplify some of the process elements. Our intention is to separate out specific requirements and responsibilities for environmental protection, including 'line 2' evidence based internal assurance, from delivery.

We are participating in the MOD review of Joint Services Publication (JSP) 418 Management of Environmental Protection in Defence to bring it up to date with current industry best practice, and consulting on the new JSP 816 Environmental Management System. When completed, this will inform our continual improvement activity.

We commenced pursuit of three strategic themes: System Safety; Safety Culture; and Human Factors. The Human Factors associated with behaviour have been recognised as being of critical importance for environmental performance as well as contributing to culture maturity.

Our Trials Plan template, mandated for use by Project and Trials Managers, includes requirements for carrying out an environmental impact assessment, and points users to our subject matter experts for further guidance. Our Trials Safety Technical Authority carried out sample checks on mandated trials planning requirements, including the identification of environmental protection omissions.

We are also in the process of establishing a specific Environmental Protection Committee to ensure adequate focus and management review. Our Sustainability Committee provides senior level direction, support and governance.

Mitigating climate change: working towards Net Zero by 2050

Our sustainability goals have continued to support and closely align with the UK Government's NZ50 mandate.

MOD provided Dstl with disaggregated GGC targets of 30.6% reduction in-scope overall greenhouse gas (GHG) emissions, 30% reduction in-scope business travel emissions and 6% reduction in-scope direct GHG emissions. All reductions are compared to the new baseline.

> **Our Sustainability Committee provides senior level direction, support and governance.**

Energy

As our Helios Project continues to move capabilities and staff from Fort Halstead to our other sites, we are 'dual running' new buildings alongside older buildings that are awaiting decommissioning, impacting on our energy and water consumption, and waste production. Once completed, our Helios Project is on track to deliver significant reduction in GHG emissions achieved by a reduction in demand for inter-site travel, commissioning of more carbon-efficient buildings, improved energy monitoring and tracking and improved ways of working.

We have continued to investigate the wider use of renewable energy and heat recovery. To that end, we have completed a project to produce a Decarbonisation of Heat Roadmap at Porton Down. The Roadmap is intended to form a major step in our route to the decarbonisation of our built estate.

We have upgraded our external cladding to improve our energy efficiency.

We have continued with our project to install light-emitting diode (LED) internal lighting delivered by DIO. Separately, a project to renew sodium outdoor area lighting with LED was completed, providing improved energy efficiency and lighting levels.

We also investigated the possibility of hydrogen boiler replacement for hot water boilers. Unfortunately the scheme proved prohibitive at the time due to restrictions in the availability of sustainable hydrogen.

We continued to progress our project to enhance our building sub-metering to improve quantitative data, enabling improved management of the estate and reporting.

Dstl Gross Finite Resource Consumption – per scope			Baseline year 2017/18	2018/19	2019/20	2020/21	2021/22
Energy[1]							
Non-financial indicators (kWh)	**Gross Direct Consumption - Scope 1**						
	Energy consumption	→ Electricity – renewable	4,275	4,429[3]	4,450	5,140	4,574[3]
		→ Mains gas	46,047,589[2]	45,947,863[2]	46,716,253[2]	48,076,576[2,3]	51,393,419[2]
		→ LPG	432,481[2]	404,901[2]	243,075[2]	283,765[2]	455,952[4]
		→ Oil	12,557,256[2]	18,768,530[2]	8,766,076[2]	9,642,006[2]	16,989,941[2]
		Total direct consumption - Scope 1	**59,041,601**	**65,125,723**	**55,729,854**	**58,007,487**	**68,843,886**
	Gross Direct Consumption - Scope 2						
	Energy consumption	→ Electricity – non-renewable	50,210,960[2]	51,287,845[2]	52,195,444[2]	55,644,789[2]	78,506,540[2]
	Total Gross Energy Consumption						
	Energy consumption	**Total gross energy consumption - Scopes 1 & 2**	**109,252,561**	**116,413,568**	**107,925,298**	**113,652,276**	**147,350,426**
	Normalisation						
	Normalisation gross energy consumption per FTE		29,041	31,574	26,807	25,783	31,338
	Normalisation gross energy consumption per NIFA		857	882	809	849	1,074
Financial indicators (£'000)	**Total energy expenditure**		7,778	9,277	9,156	8,569	10,168

Notes:

kWh – Kilowatt hour

FTE – Full time equivalent staff number. 2017/18 = 3,762, 2018/19 = 3,687, 2019/20 = 4,026, 2020/21 = 4,408, 2021/22 = 4,702

NIFA – Net internal floor area, as Valuation Office Agency's Code of Measuring Practice: Definition for Rating Purposes. 2017/18 = 127,506 m², 2018/19 = 132,012 m², 2019/20 = 133,350 m², 2020/21 = 133,910 m², 2021/22 = 137,204 m²

[1] Dstl consumption, including consumption of tenants and lodgers. This enables all consumption attributed to MOD energy contracts to be included in reporting

[2] Data source MOD/DIO

[3] Estimated

[4] Data source utility invoices

Fluorinated gases

Decommissioning and replacement of older equipment resulted in the disposal of fluorinated GHG gases (F-gases) in the reporting year. F-gases are also used in our statutory laboratory containment testing.

As equipment exceeds its design life, we intend to replace it with more efficient units using F-gases with lower global warming potential (GWP).

> Once completed, our Helios Project is on track to deliver a significant reduction in GHG emissions.

Business travel

Our travel is procured through the Crown Commercial Services Framework.

For the reporting year, we took 875 domestic business flights, flying 466,473 passenger kilometres, and took 1,525 international business flights, flying 5,835,912 passenger kilometres (pkm).

The number and passenger kilometres, and therefore emissions, for both domestic and international business flights experienced a steady rise following the lifting of COVID-19 restrictions.

It is our intention to update our Travel Policy and process to require rail travel to be considered first as an alternative to each planned flight, and to promote sustainable travel and transport as the norm.

As MOD does not have a policy in place to compensate for business travel emissions, the GGC Target to report on the implementation of such a policy does not apply.

Our core sites are located in rural locations with limited public transport services. During 2021, our staff commuter bus service contract underwent a comprehensive review of services, including our sustainability objectives, with a view to rolling out a revamped service during 2021/22. The service provided transport links between our main sites and key public transport hubs in support of our staff, customers, and business partners therefore reducing the amount of other forms of transport used to attend site.
To ensure we continued to support and meet our sustainable travel commitments, interests, and overall travel expectations, the review outcome was to continue with the staff commuter bus service. Some changes were made to enhance our services and meet current demands despite our service at Fort Halstead coming to an end due to the planned site de-commissioning. The remaining services were initially relaunched with reductions in some areas where limited use had been previously experienced. However, following staff engagement the service was enhanced to provide additional routes without increasing overall emissions and was relaunched in January 2022.

The revised staff commuter bus service contract proved successful since relaunch averaging approximately 450 passenger journeys a week, peaking at over 600 passenger journeys a week and, to date, providing a total of over 5,500 passenger journeys.

Our telepresence video conferencing with full integration of Voice over Internet Protocol (VOIP) telephone system proved very successful and assisted a reduction in the need for staff to travel.

For further information on our Gross Business Travel...

See page 034

Dstl Gross Business Travel[1]			Baseline year 2017/18	2018/19	2019/2020	2020/21	2021/22
Non-financial indicators	Gross Business Travel (pkm)	Domestic business flights	968,469	1,023,016	1,209,827[2]	77,012	466,473
		International business flights	30,120,783	35,714,598	31,441,116[2]	130,802	5,835,912
		National rail	2,427,415	Note[3]	Note[3]	Note[3]	667,733
		Eurostar rail	Note[3]	Note[3]	Note[3]	Note[3]	19,345
		Car	6,515,075	7,252,956	8,427,405[2]	1,704,381	3,121,071
		Bus	Note[3]	Note[3]	Note[3]	Note[3]	0
		Taxi	Note[3]	Note[3]	Note[3]	Note[3]	54,359
		Total business travel	**40,031,742**	**43,990,570**	**41,078,348**	**1,912,195**	**10,164,893**
		Normalisation per FTE	10,641	11,931	10,203	434	2,162
	Gross Flights (No.)	Domestic business flights	1,070	1,171	1,771[2]	112	875
		International business flights	Note[3]	Note[3]	Note[3]	Note[3]	1,525
		Total number business flights	**1,070**[4]	**1,171**[4]	**1,771**[4]	**112**[4]	**2,400**
Financial indicators (£'000)[1]	Flight		Note[3]	Note[3]	Note[3]	Note[3]	1,661
	Rail		Note[3]	Note[3]	Note[3]	Note[3]	227
	Car		Note[3]	Note[3]	Note[3]	Note[3]	585
	Bus		Note[3]	Note[3]	Note[3]	Note[3]	0
	Taxi		Note[3]	Note[3]	Note[3]	Note[3]	132
	Total cost business travel		**6,964**	**10,902**	**9,000**[2]	**379**	**2,605**

Notes:

FTE – Full time equivalent staff number. 2017/18 = 3,762, 2018/19 = 3,687, 2019/20 = 4,026, 2020/21 = 4,408, 2021/22 = 4,702

[1] Data provided by Dstl Travel Partner

[2] Estimated

[3] Not recorded

[4] Domestic flights only, excludes international flights, data not available

Dstl Greening Government Commitment In-scope Business Travel Data[1]		Baseline year 2017/18	2018/19	2019/20	2020/21	2021/22	End Dec 2022 Target	End Dec 2027 Target
Non-financial indicators (pkm)	In-scope international business flights	30,120,783	35,714,598	31,441,116[2]	130,802	5,835,912	N/A	N/A
Dstl Greening Government Commitment In-Scope ULEV Data[1]		**Baseline year 2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**End Dec 2022 Target**	**End Dec 2027 Target**
Non-financial indicators (%)	In-scope vehicles as ULEV	Note[3]	Note[3]	Note[3]	Note[3]	8%	25%	100%

Notes:

ULEV - Ultra low emissions vehicle

[1] Data provided by Dstl Travel Partner

[2] Estimated

[3] Not recorded

Dstl Gross GHG Emissions			Baseline year 2017/18	2018/19	2019/2020	2020/21	2021/22
Non-financial indicators (tCO_2e)	**Gross Direct Emissions - Scope 1**						
	Energy[1]	Mains Gas	8,778[4]	8,454[4]	8,588[4]	8,840[4]	8,808[4]
		LPG	93[4]	87[4]	52[4]	61[4]	98
		Oil	3,466[4]	5,190[4]	2,252[4]	2,475[4]	4,362[4]
		Fugitive gases	35[5]	Note[3]	19[6]	1,257[7]	1,495[7,8]
	Business Travel	Pool car	207	255	237	72	218
	Total gross direct emissions - Scope 1		**12,579**	**13,986**	**11,148**	**12,705**	**14,981**
	Gross Indirect Emissions - Scope 2						
	Grid electricity[1]		19,302[4]	15,755[4]	14,474[4]	14,088[4]	18,144[4]
	Gross Other Indirect Emissions - Scope 3						
	Energy	National grid transmission and distribution[9]	1,650	1,238	1,133	1,116	964
	Business travel	Domestic business flights[2]	287	339	342	21	73
		International business flights[2]	10,316	13,622	10,880	45	1,200
		National rail[2]	131	Note[3]	Note[3]	Note[3]	29
		International rail[2]	Note[3]	Note[3]	Note[3]	Note[3]	1
		Hire car[2]	1,342	1,326	1,565	256	380
		Pool Car 'well to tank'	78	66	17	17	59
		Bus[2]	Note[3]	Note[3]	Note[3]	Note[3]	0
		Taxi[2]	Note[3]	Note[3]	Note[3]	Note[3]	11
	Water and wastewater		295	299	296	285	368
	Waste		19	15	64	37	46
	Total gross other indirect emissions - Scope 3		**14,118**	**16,905**	**14,297**	**1,777**	**3,131**
	Total gross direct, indirect and other indirect emissions – Scopes 1, 2 and 3		**45,999**	**46,646**	**39,919**	**28,570**	**36,256**
	Normalisation						
	Normalisation gross emissions per FTE		**12**	**13**	**10**	**6**	**8**
	Normalisation emissions per NIFA		**0.4**	**0.4**	**0.3**	**0.2**	**0.3**

Notes:

FTE – Full time equivalent staff number. 2017/18 = 3,762, 2018/19 = 3,687, 2019/20 = 4,026, 2020/21 = 4,408, 2021/22 = 4,702

NIFA – Net internal floor area, as Valuation Office Agency's Code of Measuring Practice: Definition for Rating Purposes. 2017/18 = 127,506 m^2, 2018/19 = 132,012 m^2, 2019/20 = 133,350 m^2, 2020/21 = 133,910 m^2, 2021/22 = 137,204 m^2

[1] Emissions for Dstl consumption, including consumption of tenants and lodgers. This enables all emissions attributed to MOD energy contracts to be included in reporting

[2] Data includes radiative forcing (air travel only), and 'well to tank' emissions

[3] Data not available

[4] Data source MOD/DIO

[5] Dstl Science and Technology use

[6] Laboratory containment testing only

[7] Laboratory containment testing and fugitive emissions from mechanical plant

[8] Estimated

[9] Emissions associated with energy loss that occurs in getting electricity from the power plant to the organisation that purchases

GGC Greenhouse Gas Emissions

Our direct GHG emissions, or Scope 1 emissions, are from sources that are owned or controlled by us, for example burning fuel for heat such as mains gas, oil and LPG, and company vehicles, along with fluorinated gases.

Our energy indirect GHG emissions, or Scope 2 emissions, are a result of purchased electricity.

Other indirect GHG emissions, or Scope 3 emissions, are as a consequence of our activities, but occur at sources owned or controlled by another entity, for example waste disposal, business travel, paper consumption, purchased goods and services, employee commuting, water and wastewater.

As the latest GGC targets have a specific scope for GHG emissions, we have included two parts to our reporting data: gross GHG data and in-scope GGC GHG data.

We purchased renewable electricity through the MOD supply contract. Government policy requires us to account using rolling grid average emissions factor.

Our gross GHG data includes emissions from business travel.

To provide the most comprehensive assessment we included emissions from radiative forcing and 'well to tank'. Radiative forcing is the indirect effects of non-carbon dioxide emissions for flights. 'Well to tank' is the upstream scope 3 emissions associated with extraction, refining and transportation of the raw fuels. Previous Dstl Annual Report and Accounts excluded radiative forcing and 'well to tank' emissions.

The GGC business travel scope excludes radiative forcing and 'well to tank' emissions.

Previous Dstl Annual Report and Accounts can be found at: www.gov.uk/government/collections/dstl-annual-reports-and-accounts

GGC in-scope GHG emissions

MOD has specific scopes for all GHG emission related GGC targets which are described in the notes to the table on the following page. From our performance in the reporting year of a 1% reduction in our in-scope overall GHG emissions, we are at risk of not achieving our MOD disaggregated target of a 30.6% reduction compared to the baseline. Our in-scope direct GHG emissions increased by 8% in the reporting year. Although the previous two reporting years showed a reduction in emissions, we are now at risk of not achieving our MOD disaggregated 6% reduction compared to the baseline.

We improved our pool car fleet by introducing a further two Electric Vehicles (EVs), reducing our need for conventional internal combustion engine (ICE) vehicles. We were unable to support additional EVs due to infrastructure supply issues.

8% of our cars were Ultra-low Emissions Vehicles (ULEVs) during the reporting year. As well as EV charging points being included as standard in the design of our new buildings, we have embarked on a project to enhance our EV charging points and infrastructure which is aiming to complete by the end of the financial year 2022/23. This may affect our success in achieving delivery of the Government's commitment for 25% of cars to be ULEV by December 2022. We continue to be guided by HMT policy regarding staff salary sacrifice schemes for electric and ULEV vehicles.

For in-scope emissions from domestic business travel we reduced our GHG emissions by 53% compared to the baseline therefore, we have achieved the Greening Government Commitment target to reduce in-scope emissions by 30%.

Electric vehicle (EV) charging points are included as standard in the design of our new buildings.

Dstl Greening Government Commitment In-scope Greenhouse Gas Emissions Data		Baseline year 2017/18[4]	2018/19[4]	2019/20[4]	2020/21[4]	2021/22[4]	End 2024/25 Target[5]
Non-financial indicators (tCO_2e)	In-scope overall greenhouse gas emissions[1]	31,640[4,8]	29,487[4,8]	25,365[4,8]	25,465[4,8]	31,412[4]	21,972 tCO2e -30.6%[6]
	In-scope direct greenhouse gas emissions[2]	12,337[4]	13,731[4]	10,892[4]	11,376[4]	13,268[4]	11,599 tCO2e -6%[6]
	In-scope emissions from domestic travel[7]	1,289[4]	1,475	1,638	288	602[4]	902 tCO2e -30%[6]
	In-scope emissions from domestic business flights[3]	136[4]	161	163	10	64[4]	96 tCO2e -30%[6]

Notes:

1 GHG emissions from UK estate electricity, mains gas, oil and liquid petroleum gas (LPG)

2 GHG emissions from UK estate mains gas, oil and LPG

3 GHG emissions from domestic business flights between UK airports on commercial airlines, excluding radiative forcing and 'well to tank' emissions

4 Data source MOD (DIO)

5 MOD disaggregated target for Dstl

6 Against baseline year

7 Emissions from domestic travel commercial flights, rail, grey and white fleet, taxi

8 Dstl previously reported data included EDF specific emissions conversion factor, MOD data used Department for Business, Energy and Industrial Strategy (BEIS) general emissions conversion factor

Waste management

Our waste management services were contracted out to our facilities management partner, EMCOR UK. Our own hazardous waste incinerator was used to process both our own and third-party hazardous and sensitive waste. This facility is regulated via a permit issued by the Environment Agency.

As our Helios project progressed, we again took the opportunity to reuse equipment and goods totalling approximately 26 tonnes. Equipment and goods were collected by the Defence Equipment Sales Authority (DESA) to be sold. Compared to the previous year, DESA provided additional large capacity metal skips free of charge enabling over 41 tonnes to be recycled. In both cases, funds from sales were returned to the MOD.

For the reporting year, 57% of our gross waste was recycled across all three core sites. 31 tonnes of non-hazardous waste was sent to landfill equating to 2% of our gross waste. Overall our total gross weight of waste decreased by 14% compared to the previous reporting year however, it increased by 80% compared to the 2017/18 baseline year.

As the latest GGC scope is limited to specific non-hazardous municipal and commercial waste streams, we have included two parts to our waste reporting data on the following page: gross waste data and in-scope GGC waste data.

Dstl Gross Waste			Baseline year 2017/18	2018/19	2019/20	2020/21	2021/22
Non-financial indicators (tonnes)	Hazardous waste	On-site incineration	232	288	130	37	40
		Off-site disposal	163	29	470	169	78
	Total hazardous waste		**395**	**317**	**600**	**206**	**118**
	Non-hazardous waste	Incinerated (without energy recovery)	Note[1]	Note[1]	Note[1]	Note[1]	120
		Incinerated (with energy recovery)	165	46	613	417	363
		Recycled	265	109	551	1,093	852
		Composted	0	0	0	0	0
		Landfill	6	9	45	0	31
		Anaerobic Digestion	0	0	0	0	5
		ICT equipment	0	0	0	14	3
	Total non-hazardous waste		**436**	**164**	**1,209**	**1,524**	**1,374**
	Total waste		**831**	**481**	**1,809**	**1,730**	**1,492**
	Normalisation						
	Normalisation of waste per FTE		0.2	0.1	0.5	0.4	0.3
	Normalisation of waste per NIFA		0.007	0.004	0.01	0.01	0.01
Financial indicators (£'000)	Hazardous waste – disposal cost		129	104	503	403	350
	Non-hazardous waste – disposal cost		64	8	488	453	778
	Total disposal cost		**193**	**112**	**991**	**856**	**1,128**

Dstl Gross Paper		Baseline year 2017/18	2018/19	2019/20	2020/21	2021/22
Non-financial indicators (tonnes)	Paper	24	32	21	9	13[3]
Financial indicators (£'000)	**Total paper cost[2]**	**39**	**52**	**31**	**12**	**12[3]**

Notes:

FTE – Full time equivalent staff number. 2017/18 = 3,762, 2018/19 = 3,687, 2019/20 = 4,026, 2020/21 = 4,408, 2021/22 = 4,702

NIFA – Net internal floor area, as Valuation Office Agency's Code of Measuring Practice: Definition for Rating Purposes. 2017/18 = 127,506 m², 2018/19 = 132,012 m², 2019/20 = 133,350 m², 2020/21 = 133,910 m², 2021/22 = 137,204 m²

[1] Included in 'Incinerated with energy recovery' figures

[2] Cost of paper procured via Government contract

[3] Estimated

GGC in-scope waste management

The in-scope GGC waste is limited to specific European Waste Catalogue (EWC) Codes for municipal and commercial waste streams produced in the UK.

For the reporting year, 36% of our in-scope waste was recycled, composted or sent to anaerobic digestion, with 64% sent for incineration and conversion to energy. 0% of our waste was sent to landfill which exceeded the expectation of the GGC target that less than 5% of waste should be sent via this route. Overall, our total in-scope weight of waste increased by 7% compared to the 2017/18 baseline year, and increased by 6% compared with the previous reporting year. Our performance puts us at risk of not meeting the GGC target of a 15% reduction in overall amount of waste compared to the baseline.

The review of our waste management practices was completed, resulting in enhancements to our procedures. However, improving our recycling remains a challenge for us. We have enhanced our waste signage and provided communication to staff on waste streams. Despite this, contamination of recyclable waste remains a concern and will be an area for our future focus.

A food waste disposal stream was successfully trialled during the reporting year, which will be expanded across our estate in the coming months.

Our embedded 'Steptoe' online reuse platform provides the opportunity to internally advertise items that would otherwise be disposed of to be shared and exchanged between Dstl Divisions.

Customer Single Use Plastic (CSUP) breaks down into micro-plastics which can have severely detrimental effects on ecology, and risks being transferred up the food chain. Although MOD's scope to remove CSUP excludes us, we took the decision to implement the initiative to assist in improving our environmental impacts. We commenced assessing where we use CSUP at Dstl.

We provide bespoke waste management training for our staff which was further enhanced in the reporting year for specific user groups.

A GGC sub-target is to reduce paper use by at least 50% from the baseline year. We made excellent progress initially achieving the target in 2020/21. Although we reduced our paper consumption by 46% in the reporting year compared to the baseline, there was an increase from 2020/21. Our blended and flexible ways of working have supported the reduction in paper use over recent years.

Dstl GGC In-Scope (Gross) Water Data[3]			Baseline year 2017/18[3]	2018/19[2]	2019/20	2020/21	2021/22	End 2024/25 Target[4]
Non-financial indicators (tonnes)	In-scope waste[1]	Incinerated (without energy recovery)	8[2]	9	1	9	9	N/A
		Incinerated (with energy recovery)	197[2]	206	0	152	259	N/A
		Recycled (excluding food)	188[2]	196	61	238	153	N/A
		Composted	0[2]	0	0	0	0	N/A
		Landfill[5]	0[2]	0	95	0	0	5%
		Anaerobic Digestion – Food waste only	0[2]	0	0	0	1[5]	Report
		Total In-scope waste	**393[3]**	**411**	**157**	**399**	**422**	**334 tonnes -15%**
Non-financial indicators (%)		**Total in-scope recycled/composted/ Anaerobic Digestion waste**	**48%[2]**	**48%**	**39%**	**60%**	**36%**	**70% (in year)**
Dstl GGC In-scope Paper Data			**Baseline year 2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**End 2024/25 Target**
Non-financial indicators (tonnes)	In-scope paper		24	32	21	9	13[2]	12 tonnes -50%
Dstl GGC In-Scope ICT Waste Data			**Baseline year 2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**End 2024/25 Target**
Non-financial indicators (tonnes)	In-scope ICT waste	Recycled	0	0	0	10[2]	2	N/A
		Incinerated (without energy recovery)	0	0	0	4[2]	1	N/A

Notes:

1 In-scope waste EWC Codes
- Paper and Cardboard 15 01 01 and 20 01 01
- Plastic 15 01 02 and 20 01 39
- Metallic packaging and metals 15 01 04 and 20 01 40
- Glass 15 01 07 and 20 01 02
- Residual waste 20 03 01
- Dry mixed recycling 20 03 01
- Food (biodegradable kitchen waste) 20 01 08

2 Estimated

3 Gross data provided by DIO. Weights per disposal stream proportioned

4 MOD disaggregated target for Dstl

5 Food waste trial period

Water

All of our incoming water supplies at our core sites are measured through the Aquatrine water contract. The leak rates for our Porton Down and Portsdown West sites remained below the contract limitation.

We closely monitored water consumption to ensure it was used efficiently and effectively as part of ongoing operations. However, in having a reduced head count on site due to COVID-19 restrictions we continued with the flushing of our water infrastructure as a preventative measure to reduce the risk from Legionella bacteria in precedence over efficiency measures. In doing so, our water consumption increased substantially but the potential risk to health reduced.

Our Water Resilience project commenced implementation. As well as improved resilience, the project also identified sustainable water opportunities. This project includes automatically raising an alarm if a sudden increase in water consumption above the norm is detected, improved metering to enhance monitoring and targeting, improved distribution of potable water to improve water quality, and sourcing materials locally where practicable. Although it has unfortunately been necessary to fell some trees, the project includes a 3:1 planting scheme.

In addition to the GGC headline target to reduce water consumption by 8% compared to the baseline, we are anticipating additional water consumption and returning effluent to groundwater targets from the Environment Agency over the next few years.

Our Scope 1 water is abstracted. Our Scope 2 water is purchased as mains water supplies.

As the GGC scope for water includes gross consumption, one table has been provided below which reflects our overall and GGC performance. Our water consumption increased by 29% in the reporting year compared to the baseline. Our performance puts us at risk of not achieving the GGC target of an 8% reduction in consumption compared to the baseline.

For details of our approach to sustainable procurement...

See pages 042-043

Dstl GGC In-Scope (Gross) Water Data[3]		Baseline year 2017/18	2018/19[2]	2019/20	2020/21	2021/22	End 2024/25 Target
Non-Financial Indicators (m³)	Scope 1 – abstracted	165,548[1]	159,419[1]	78,855[1]	129,837[1]	243,156[3]	N/A
	Scope 2 – mains water supplies	115,041[1]	125,257[1]	202,770[1]	140,655[1]	118,994	N/A
	Total water consumption	**280,589[1]**	**284,676[1]**	**281,625[1]**	**270,492[1]**	**362,150**	**258,142** **-8%**
Dstl Gross Water Data		**Baseline year 2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**End 2024/25 Target**
Non-Financial Indicators (m³)	Normalisation of gross water consumption per FTE	75	77	70	61	77	N/A
	Normalisation of gross water consumption per NIFA	2	2	2	2	3	N/A
Financial indicators (£'000)	Water supply costs[2]	1,370	1,354	1,695	705	1,662	N/A

Notes:

FTE – Full time equivalent staff number. 2017/18 = 3,762, 2018/19 = 3,687, 2019/20 = 4,026, 2020/21 = 4,408, 2021/22 = 4,702

NIFA – Net internal floor area, as Valuation Office Agency's Code of Measuring Practice: Definition for Rating Purposes. 2017/18 = 127,506 m², 2018/19 = 132,012 m², 2019/20 = 133,350 m², 2020/21 = 133,910 m², 2021/22 = 137,204 m²

1 Total consumption figures provided by MOD/DIO, pro-rata between abstracted and mains water supplies. Include consumption by 3rd party tenants and lodgers. This enables all consumption attributed to MOD water contracts to be included in reporting

2 Financial data taken from invoices.

3 Estimated

Sustainable construction

We aim to achieve Defence Related Environmental Assessment Methodology (DREAM) rating of 'Very Good', progress against the rating is tracked and reviewed.

Our construction projects can include responsible sourcing certificates, undertaking Construction Pollution Control Plans, evaluation of local supply chain for procurement, and training schedule for operators to use the building most efficiently where practicable.

As we are not the 'Waste Producer' for construction and demolition waste, weights are not included in the 'Waste Management' section of this report. Our major construction projects, over £300,000, produce a Site Waste Management Plan that measures and reports on volumes and disposal streams.

Our Construction Spoil Policy ensures safety and environmental protection are delivered in the disposal of spoil.

We intend to develop a Sustainable Construction Guidance document in excess of the Building Regulations and DREAM 'Very Good' rating. The guidance will support decarbonisation, and assist project and programme managers, and maintenance staff to include sustainability and social value in new build and refurbishment works.

Climate adaptation

By adapting to climate change we protect our staff, estate, and capability by making them less vulnerable to its impacts and improving our resilience. We have developed our Climate Change Risk Assessment for Porton Down. The assessment for Portsdown West has begun and is to continue into the next reporting year. We also intend to commence development of our Climate Change Adaptation Strategy over the next reporting year.

Conservation and biodiversity

The Porton Down Site of Special Scientific Interest (SSSI) constitutes one of the largest uninterrupted tracts of semi-natural chalk grassland in Britain. The grassland and scrub areas of the Porton Down SSSI support nationally rare flora and fauna, including many orchid species such as Lady Orchid, a large Juniper population and breeding Stone-curlew. As part of the UK Government's biodiversity targets, we continued with an intensive programme of scrub management and conservation in order to achieve 'Favourable Condition' status.

The Dstl Porton Down Stone-curlew Conservation Project was established in 2014 to improve productivity and achieve a sustainable Porton Down Stone-curlew population. Monitoring of breeding attempts continued as part of our Section 106 Agreements while we continued with ongoing electric fencing of plots to protect nests from mammalian predation and improve nesting success. We achieved ongoing significant advances in protecting nests at the egg stage, however fledgling success still remained challenging. In response, we are carrying out further research into factors around this issue.

Winter 2021/22 brought an end to a four year programme of woodland management for the rare Duke of Burgundy butterfly population. Ash trees suffering from Ash Die Back were removed to open up areas, creating more light on the woodland floor to benefit primroses; the larval food plant of the Duke of Burgundy. Corridors were made with glades to join up core populations. This work was funded from the DIO Conservation Stewardship fund. Future monitoring will be undertaken to assess how the population has benefited.

Our Porton Down site is one of 16 UK Environmental Change Network sites that have been running for over 25 years. We collect a wide range of long-term data, sharing it with the network coordinators at the Centre for Hydrology and Ecology providing a unique national resource to help improve the UK's understanding of how and why environments change. We implemented a plan to provide further biodiversity enhancements and staff well-being at our Portsdown West site to complement the wildlife pond, wildflower meadow, sustainable mowing programme and bee boxes already established. We intend to commence a Dstl wide Nature Recovery Plan to align with the GGC. At Porton Down, work continued to provide a staff well-being area including a pond, seating, tree planting, various wildlife habitats and planting areas. Flower beds with mown pathways were created.

We managed 131 hectares of previously farmed fields where biodiversity enhancements have been provided, benefiting farmland birds that have experienced a national decline in numbers over many years, and providing large areas for pollinating insects, which have also experienced decline.

Archaeology Scheduled Monuments

We have over 200 monuments on our Porton Down site making it an important area for archaeology. 34 of the monuments are included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. Over the past five years we undertook our Monument Protection Plan to reduce the 16 Scheduled Monuments on the 'at risk register' as a consequence of natural ecological encroachments. Excellent progress was made with now only one monument remaining on the 'at risk' register. Work to remove the remaining 'at risk' monument is programmed for the coming year, after being delayed due to COVID-19 access restrictions.

Commitment	Work Achieved in 2021/22
Scrub clearance from chalk downland	→ Approx. 5.0 hectares of new scrub cleared[1] → Approx. 25 – 30 hectares of scrub cleared that had been cut at least once before
Dstl Stone-curlew Conservation Project	→ 17 plots in total → 13 plots fenced → 10 breeding pairs → 8 fledged young → 0.80 productivity → 10 pair average over five year → 0.67 five year productivity average
Archaeology	→ Maintenance of monuments worked on in the last five years
Biodiversity enhancements	→ 11 fields taken back into our management for biodiversity enhancements over past five years → 24 hectares of seeds sown for biodiversity

Notes:

[1] New scrub: scrub not cut for at least 20 years

Sustainable Information Communication and Technology (ICT)

Our IT Strategy 2020/25 aligns to the Defence Digital Strategy. The management of our ICT is contracted out to our partner Sopra Steria Limited (SSL). We enhanced our contract with SSL to include social value, and intend to further review in the next reporting year on sustainability. We also intend to commence production of a Data Centre Strategy in the next reporting year, including increasing metrification and enhancing sustainability.

COVID-19 restrictions and our flexible working approach led to a substantial increase in working from home. This was supported by digital tools to work collaboratively with each other and our customers. Compared with the previous year, the number of end user devices increased by 38% and peripheral equipment, such as monitors, increased by 3%.

We have demonstrated best practice by ensuring purchased ICT equipment was manufactured to the latest technology, and the use of precious metals was limited. Standard practice involves systems set up to reduce energy consumption, and guidance is given to staff on the efficient use of equipment.

Our ICT waste is contracted out to our partner Euro Recycling. Compared to the previous year, recycled shredded hazardous ICT waste increased from 1.06 tonnes to 2.4 tonnes, and waste incinerated with energy recovery reduced by 64%. 0% of digital waste was sent to landfill in the reporting year, an excellent achievement. Due to sensitivities, non-shredded non-hazardous ICT waste is not recycled.

The use of electronic-conferencing reduced by 10.4% from the previous year. This impact may be due to the relaxation of COVID-19 restrictions towards the end of the reporting year, which allowed for more person-person interaction.

We use various cloud platforms, some of which are powered by solar photovoltaic arrays with battery storage and use reduced amounts of water to operate, therefore reducing our supply chain emissions.

Sustainable procurement

Our procurements and contract management are delivered in line with UK Government and MOD policies, ensuring we comply with the requirements of the Health, Safety and Environmental Protection Policy Statement issued by the Secretary of State for Defence. We apply the MOD Sustainable Procurement Policy, which embeds the Government Buying Standards into all applicable procurements and requires the Dstl Commercial Lead to confirm with the Project Manager that Sustainable Procurement objectives in the specification comply with applicable legislation and Government Buying Standards. MOD's Sustainable Procurement policy incorporates various other directives such as Timber Procurement Policy, Energy Efficiency Directive and the Modern Slavery Act, which are also applied, as appropriate, to Dstl's procurements. Dstl remains an active member to the Defence Commercial Climate Change and Sustainability Community of Interest, contributing to the development and introduction of complimentary Defence Commercial strategic direction and policy.

This year the Cabinet Office Social Value (SV) Model requires all procurements subject to the Public Contract Regulation (PCR) to include SV into the evaluation criteria. This has now been further extended to incorporate social value into applicable defence and security PCR procurements. The benefits of the SV Model are already being delivered from PCR procurements where the model has been applied. Of particular note is the Dstl contract for the provision of Smart Working Furniture. As a direct result of applying the SV model, the successful bidder now undertakes a number of sustainable initiatives through the delivery of the contract. The supplier has engaged directly with local colleges to provide apprenticeship programmes and any surplus furniture that can still be utilised is donated to local schools. The supplier combines deliveries to reduce emissions and also removes and reuses any packaging. Furthermore, all wood waste generated from the manufacturing process is used to fuel the factory heating system and the supplier owns a recycling plant to undertake the preliminary aspect of recycling of cardboard and metal.

Notwithstanding these benefits, Dstl has also proactively considered more environmentally friendly and sustainable ways of procuring as opposed to some more traditional routes. For example, this year we sourced in excess of 250 items of pre-owned furniture from a local organisation saving use of critical raw materials in manufacturing new items and avoiding the furniture being disposed of.

In the application of Cabinet Office Procurement Policy Note 06/21, Dstl are required to ensure that Carbon Reduction Plans are requested from Bidders in procurements with a value >£5 million per annum. Dstl's supplier for employee transport services has the largest low-carbon fleet outside of London and has upgraded 800 buses to EuroVI compliance. This means for every Dstl staff member transferring from a single occupancy car to make use of our transport service, 150-180 grams per kilometre of carbon dioxide equivalent emissions is saved.

Through our Facilities Management (FM) provider, we have instigated a number of sustainability initiatives including the introduction of food waste bins and identifying single use plastic within catering services. EMCOR's sub-contractor delivers catering and food provision to Dstl sites using 85% local SMEs, with an 80% workforce from within a 10 mile radius.

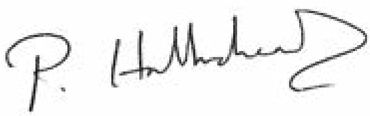
Our sustainable strategy, driven by Dstl strategic objective two, is intended to create a culture of sustainable procurement across our whole business and through our supply chain. In 2021/22, 21% of Dstl's external spend was with SMEs. In 2021/22, 75% of Dstl's direct suppliers were SMEs, showing a consistent level as previously reported for 2020/21 (75%) which was an increase from 2019/20 (74%). Additionally, approximately 43% of our contract tasks were placed with SMEs, showing a consistent level as previously reported for 2020/21 (43%) which was an increase from 2019/20 (41%).

Community

Many of our staff continue to volunteer within the local communities surrounding our sites. We recognise that volunteering is a rewarding way to use our unique skills while making a big difference within our communities. Members of our staff contribute to a wide variety of voluntary roles, from helping out with local sports clubs, the MOD-sponsored Cadet and scouting and guiding organisations, to more formal voluntary roles such as volunteering with school governing bodies and the Samaritans. We also support members of our staff who are Armed Forces Reservists.

In addition to these volunteering activities, Dstl employees are encouraged to register as Science Technology Engineering and Maths (STEM) Ambassadors, working with schools, colleges and universities to encourage more young people to pursue further study and careers in Science, Technology, Engineering and Maths.

Under the Dstl corporate charity approach, 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. Our annual remembrance service in November ensures contributions to the Royal British Legion can be made by our community. Throughout 2021/22, we have also continued to support our employees who choose to take part in fundraising activities in their own time.



Paul Hollinshead
Chief Executive

8 September 2022

Case Study #05

Multi-Domain Integration

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Novel technology to understand urban environments

Multi-Domain Integration (MDI) requires configuring military capabilities to be able to sense, understand and orchestrate effects at the optimal tempo across the operational domains and levels of warfare. This demands the fusion of information from all sensing platforms, whether on land, at sea, in the air, in space, or in cyberspace, to enhance understanding.

Dstl led a unique urban military experiment in Portsmouth and its Naval Base, known as the Contested Urban Environment exercise (CUE2021), funded by the MOD's Chief Scientific Adviser, primarily to assess innovative sensing and intelligence technologies and capabilities to enhance understanding in built up environments.

The experimentation is vital to understand and adapt to the changing operating environment. There are many challenges to finding and dealing with threats, such as those experienced when operating in and around dense, tall buildings and within modern urban areas or 'smart cities', and with differences of culture and language.

Working alongside partners from Australia, Canada, New Zealand and the USA, Dstl tested a variety of sensing capabilities through a combination of field experimentation and analytical techniques:

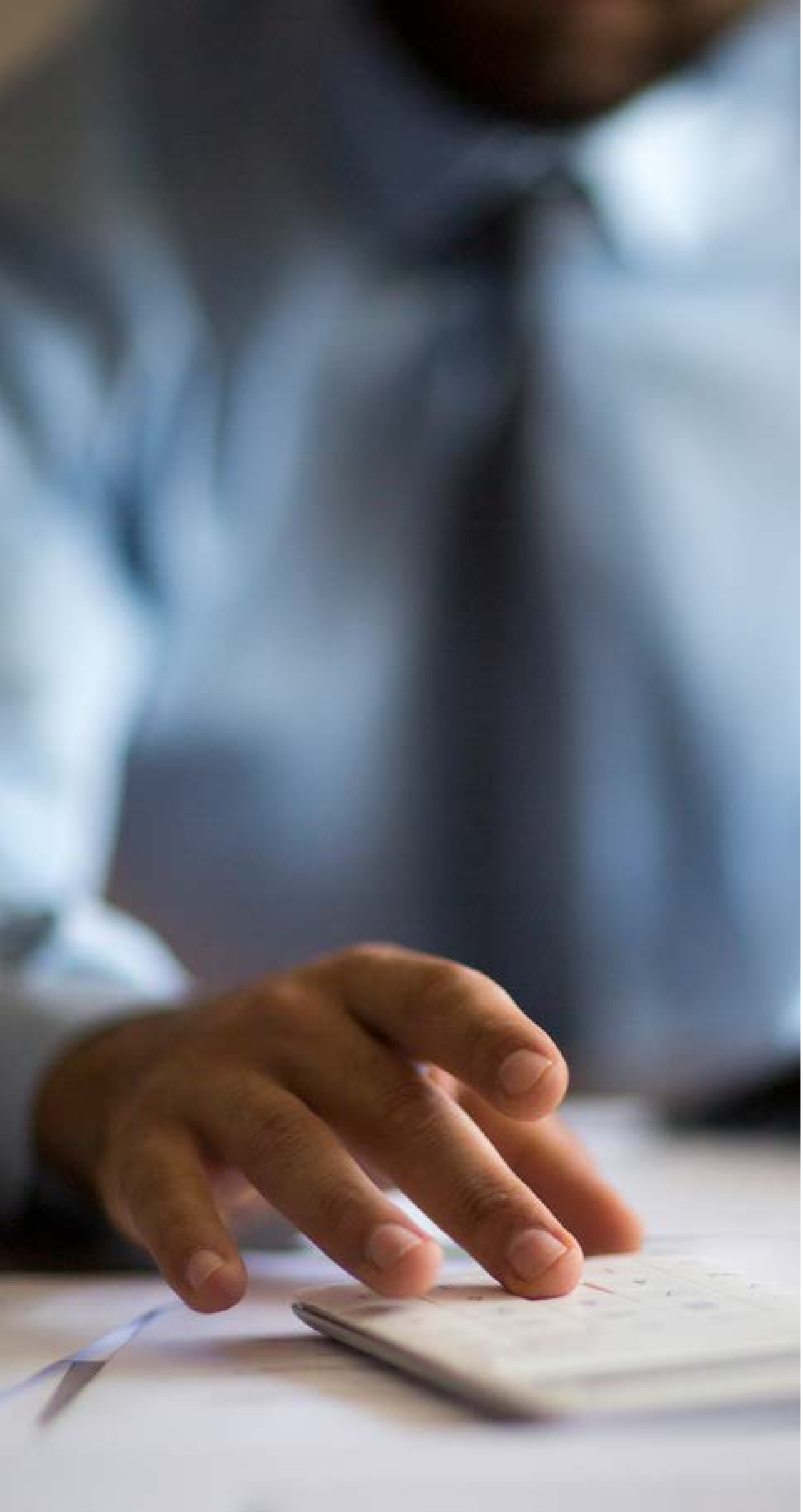
- Highly distributed autonomous sensors that exploit artificial intelligence (AI) and machine learning (ML) to identify threats;
- Advanced technologies to support intelligence, surveillance and reconnaissance activities on the ground, in the air and at sea;
- Advanced sensors and technologies for detecting uncrewed air vehicles used in urban environments;
- Understanding the city environment and the interactions of natural and human systems;
- Technologies that support soldiers operating in dense urban terrain by supporting navigation and the detection of threats;
- Architectures, tools and techniques for the fusion of data and information from multi-domain sensors to create a single Common Operating Picture.

CUE also involved robotic and autonomous systems to support logistics re-supply to deliver to the frontline casualty evacuation and handling optimised for the complexity of an urban environment.

Accountability Report

Our Accountability Report presents information on Dstl's key accountability requirements to Parliament as the primary user of our Annual Report and Accounts.

Our Accountability Report contains three sections:



3 / Corporate Governance

Directors' report

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

2021/22 may well go down in history as a defining year for Dstl. Not only did the organisation deliver a record increased level of S&T for defence and security, it also achieved that in the context of operational constraints of COVID-19 whilst providing continued support to the national effort in tackling the pandemic, and more recently in supporting operations in respect of Ukraine.

I am therefore all the more grateful to all Board colleagues for their unstinting support to the organisation in what has been a successful year of delivery in challenging circumstances. In particular, I would like to thank Doug Umbers for stepping into the role of interim Chief Executive for the duration of most of the year and for the smooth transition to Paul Hollinshead who we welcome as our new Chief Executive.

For much of the year the Board has been focused on assuring the deliverability of ambitious plans to meet the unprecedented growth in demand for S&T, both for the year under review and for the remainder of the Spending Review period over which time further growth is forecast. The Board focused not just on the delivery, but also on the quality of the science, through the External Review Colleges. I am particularly pleased with how the Board was able to ensure that successfully tackling this growth

challenge was supported by good collaborative working with colleagues in MOD Head Office, notably those who are responsible for setting the strategy for S&T and its commissioning.

The Board has also continued to maintain a strong focus on Health and Safety (H&S). Not only have we evidenced further progress in what are termed 'human factors' in determining a good H&S culture, we also had the opportunity to recognise colleagues who demonstrated innovation in H&S as a business enabler in presenting the annual Giles Cowling Award to a scientist at one of our Board meetings.

Diversity and Inclusion (D&I) has been a further topic of Board focus. It was particularly pleasing to invite colleagues who represent the various D&I support networks to one of our Board meetings to hear first-hand the challenges to, and progress being made in, developing a culture that respects all Dstl colleagues and those in partner organisations, enabling everyone to give their best in the workplace.

With the easing of pandemic restrictions, the Board was able to resume visits to areas of the organisation to see and learn about the extraordinary range of work Dstl undertakes and the impact it has. This included an inspiring visit where we met several of the 125 apprentices that Dstl employs. On behalf of the Board, I would therefore like to pay particular tribute to all Dstl colleagues whose work often goes unnoticed but plays such a vital role in the defence, security and prosperity of the nation.

We look forward to supporting the Executive and MOD in building on the extraordinary achievements of 2021/22.

Adrian Belton

Adrian Belton

Chair of the Dstl Board

8 September 2022

> 2021/22 may well go down in history as a defining year for Dstl.

For details of our Board members...

See page 048

Our leadership

The Dstl Board and Executive Management Committee (for the financial year 2021/22)

Our Board provides a forum for independent, non-executive support and challenge to our Chief Executive and our Executive Management Committee members. It monitors Dstl's performance against its delivery objectives and ensures the organisation is compliant with the appropriate policies and standards.

For more information about Dstl Board members...

See pages 050-053

Members of the Dstl Board as at 31 March 2022	
→ **Adrian Belton**	Non-executive Chair
→ **Brian Bowsher**	Non-executive member
→ **Jeremy Monroe**	Non-executive member
→ **Tara Usher**	Non-executive member (MOD)
→ **Sarah Spurgeon**	Non-executive member
→ **David Tonkin**	Non-executive member
→ **Paul Hollinshead**	Chief Executive - appointed 14 February 2022
→ **Andrew Bell**	Chief Technical Officer
→ **David English**	Chief Finance Officer
→ **Doug Umbers**	Chief Operating Officer - interim Chief Executive 2 April 2021 to 13 February 2022

The Dstl Executive Management Committee (for the financial year 2021/22)

Our Executive Management Committee ensures the effective and efficient strategic leadership and operational delivery of Dstl. It monitors business delivery and financial performance to ensure our strategic direction remains appropriate to our customers' needs. It also ensures that we operate safely and securely by reviewing performance and managing risks.

For more information about the Dstl Executive Management Committee...

See page 058-059

Members of the Dstl Executive Management Committee (EMC) as at 31 March 2022	
Paul Hollinshead	Chief Executive Officer (CEO) - appointed 14 February 2022
Andy Bell	Chief Technical Officer (CTO)
Matt Chinn	Division Head – Platform Systems Division (PLS)
Simon Earwicker	Division Head – Chemical, Biological and Radiological Division (CBR)
David English	Chief Finance Officer (CFO)
Paul Kealey	Division Head – Cyber and Information Systems Division Head (CIS)
Linda Knutsen	Division Head – Exploration (EXP) - appointed 26 April 2021
Mike Smith	Division Head – Counter-Terrorism and Security Division (CTS)
Doug Umbers	Chief Operating Officer (COO)
Robyn Wedderburn	Chief People Officer (CPO)

Non-executive members of the Dstl Board (as at 31 March 2022)

Adrian Belton

Chair

Appointed as chair of the Board on 1 August 2019

→ Key strengths

Corporate governance, risk management, financial management, strategic leadership and stakeholder management at the interfaces of the public, private and academic sectors.

→ Experience

Adrian was Chief Executive of the Government's Food and Environment Research Agency (FERA) from 2009 to 2014, having established it from a four way merger including the Central Science Laboratory (CSL) and the UK Government Decontamination Service. He was Chief Executive of the CSL from 2008 to 2009. From 2014 to 2016, Adrian was Chief Executive of the Construction Industry Training Board (CITB) from where he stepped down from full-time executive work to pursue a non-executive career. His earlier career was with Barclays where he held a number of senior executive roles, followed by roles in local Government and in establishing a new Non Departmental Public Body in Defra.

→ Declarations of Interest in year

Non-executive Director of NHS Property Services Limited; and Chair Designate of the Council of the University of Sheffield (from 1 August 2022), meantime Lay member of Council.

Brian Bowsher

Non-executive member

Appointed to the Board on 1 September 2018

→ 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 (STFC). He has also been a member of the governing bodies of CERN (the European Council for Nuclear Research), the Square Kilometre Array, and the Diamond Light 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

Member of Atomic Weapons Establishment Pension Scheme and Member of Southampton University School of Chemistry Advisory Board.

Jeremy Monroe

Non-executive member, Chair of the Remuneration Committee

Appointed to the Board on 1 February 2017

→ Key strengths

Transformation and management of change; IT strategy; programme design; commercial experience; customer relationships.

→ Experience

Jeremy started in manufacturing with a physics degree and changed to management consultancy, in time 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. Latterly he designed, sold and led large public sector IT enabled transformational projects, particularly for the MOD and the Home Office, building organisational relationships that lasted many years. His final role at IBM was as Global Leader Defence and Intelligence, bringing people together across the globe.

→ Declarations of Interest in year

Chair of VSPM Ltd; Director of Falstaff Consulting Ltd; trustee of Seafarers UK charity.

Non-executive members of the Dstl Board (as at 31 March 2022)

Sarah Spurgeon

Non-executive member

Appointed to the Board on 1 July 2018

→ 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 the Department of Electronic and Electrical Engineering at University College London; she is currently a Vice President of the IET as well as Vice President Publications of the International Federation of Automatic Control and was a past President of the Engineering Professors' Council and a Past President of the Institute of Measurement and Control. 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 is currently a member of the Police Science Council.

→ Declarations of Interest in year

Professor, University College London; Vice President of the Institute of Engineering and Technology; and Member of the Police Science Council.

David Tonkin

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

Appointed to the Board on 1 September 2017

→ 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 UK and Europe Chief Executive, the UK's largest engineering consultancy. He now fulfils a series of non-executive positions and coaching roles.

→ Declarations of Interest in year

Chair and Director of the Railway Industry Association; and Director of Tonkin Consulting Ltd.

Tara Usher

Non-executive member (MOD)

Appointed to the Board on 1 October 2019

→ Key strengths

MOD civil servant and former City solicitor, banker and company secretary: governance, assurance and portfolio management. Conduit with MOD Head Office.

→ Experience

Tara co-heads the MOD Enabling Organisations Sponsorship Team. Tara joined MOD in 2018 after working for the Department for Transport, first as a legal adviser (maritime and aviation) and subsequently in policy and governance roles. Her work included creating a new governance and portfolio management framework for DfT's large-scale capital investments and later leading the sponsorship team for the newly created National Highways England GovCo. Prior to joining the Civil Service Tara worked in the City, initially at the law firm, Freshfields, and latterly in investment banking. Tara is also the MOD Board representative for the UK Hydrographic Office and the Single Source Regulations Office (SSRO).

→ Declarations of Interest in year

Head of Enabling Organisations Sponsorship at MOD; MOD Non-executive Member for UK Hydrographic Office; and MOD Observer on the SSRO Board (from October 2021).

Executive Management Committee members on the Dstl Board (as at 31 March 2022)

Paul Hollinshead

Chief Executive

Appointed to the Board on 14 February 2022

Key strengths

Management of large complex projects and organisations; leading multi-disciplinary teams; and setting strategy and direction.

Experience

Paul joined Dstl as Chief Executive in February 2022, having led complex, large science and technology programmes in the defence and civil sector for more than 20 years. His varied career has included policy and strategy work including involvement in several strategic defence reviews and national strategy development in the Prime Minister's Strategy Unit. He was Head of Wealth Creation at DERA, Science and Innovation Director in the Department of Energy and Climate Change, and led nuclear research collaboration with the USA. Paul was most recently Operations Director for Defence Test and Evaluation and a Director in the Defence Nuclear Organisation. He was the Procurement Director and Senior Responsible Owner for a large portfolio of complex defence and energy programmes including submarines, strategic systems, nuclear infrastructure and green energy.

Andy Bell

Chief Technical Officer

Appointed to the Board on 22 October 2018

Key strengths

Strategic outlook; broad science and technology knowledge; leadership; cross-government experience; change programmes.

Experience

Following a degree (University of Oxford) and PhD in Chemistry, and three post-doctoral research posts (in Japan, France and the UK) 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. Andy led the CAST integration to Dstl, returning to Dstl with CAST in 2018. Andy recently stepped down as a Trustee of the Royal Society of Chemistry, is a Non-Executive Member of the Ploughshare Innovation Ltd Board and Chair of a Charitable Trust improving youth accessibility to music making.

Declarations of Interest in year

Non-executive director (NED) of Ploughshare Innovations Ltd.

David English

Chief Finance Officer

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

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 achieved a first class honours degree in Avionic Systems Engineering at Bristol University and some hands-on engineering in industry. During his MOD career, David has worked in the Defence Evaluation and Research Agency, central MOD finance, Defence Equipment & Support, and has been a Private Secretary to the Defence Secretary. He has also completed an MBA with distinction at Imperial College and is a graduate of the Higher Command and Staff Course.

Declarations of Interest in year

Non-executive director (NED) of Ploughshare Innovations Ltd.

Executive Management Committee members on the Dstl Board (as at 31 March 2022)

Doug Umbers

Chief Operating Officer*

**Acted as interim Chief Executive from 2 April 2021 to 13 February 2022. Appointed to the Board on 10 December 2018.*

→ Key strengths

A strategic people leader; broad commercial and operational delivery experience in both the private and public sector; programme and project management; and customer focus.

→ Experience

Doug has spent 11 months of the year in review as the interim Chief Executive of Dstl. Before joining Dstl, Doug was the interim Chief Operating Officer at FCDO Services, a trading fund owned by the Foreign and Commonwealth and Development Office (FCDO). 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, the intelligence services, the mobile operators and the BBC. 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

Non-executive Director on the RAF Audit, Risk and Assurance Committee; Ordinary Shares with Babcock International.

“

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.

Total length of service by the Board's Non-executive members as at 31 March 2022

Board member	Total length of service	Date of most recent appointment	Date of expiry
→ Adrian Belton	2 years, 8 months	1 May 2022	31 January 2024
→ Brian Bowsher	3 years, 7 months	1 September 2021	31 August 2024
→ Jeremy Monroe	5 years, 2 months	1 February 2020	31 January 2023
→ Tara Usher	2 years, 6 months	1 October 2019	30 September 2022
→ Sarah Spurgeon	3 years, 9 months	1 July 2021	30 June 2024
→ David Tonkin	4 years, 7 months	1 September 2020	31 August 2023

Case Study #06

Maritime

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AI increases capability at sea

For the first time, AI has been used by the Royal Navy at sea as part of Exercise Formidable Shield, Europe's largest and most complex air and missile exercise. The culmination of almost 10 years of research and collaboration by Dstl enabled the latest AI to be brought into the command spaces on a Type 45 destroyer (HMS Dragon) and Type 23 frigate (HMS Lancaster).

Mass attacks from ship or shore-based missiles or by swarms of uncrewed aerial vehicles (UAVs) could be a feature of future conflicts. As well as overwhelming radar operators with multiple signals, mass attacks could lead to ammunition wastage, as multiple ships each engage the same target. AI within systems aims to enable ship combat operators to avoid duplication and select the optimum defensive measures whether hard kill (missile destroyed) or soft kill (missile diverted using chaff, decoys or signal jamming).

Dstl collaborated with industry partners to ensure the new AI-based applications work alongside existing radar and combat management systems. Roke's Startle AI system is designed to help ease the load on sailors monitoring the 'Air Picture' in the Operations Room, providing live recommendations and alerts. The Sycoiea system from CGI builds upon this with Threat Evaluation and Weapon assignment identifying the nearest threat and how best to deal with it.

Exercise Formidable Shield was an At Sea Demonstration designed to improve allied interoperability and capabilities with 15 ships, more than 10 aircraft, and around 3,300 military personnel involved.

Statement of the Accounting Officer's responsibilities

Under Sections 7(1), (2) and (5) of the Government Resources and Accounts Act 2000, His 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 2021/22 as a whole gives a fair, balanced and understandable view of Dstl's activities for the year ended 31 March 2022 and its financial position as at 31 March 2022 (page 088)
- 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 082).

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 Dstl's assets, are set out in Managing Public Money published by HM Treasury.

Parliamentary Accountability and Audit Report

See pages 082-088

Governance statement

This Governance statement, for which I, Paul Hollinshead 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.

For a portion of FY 2021/22, the arrangements I describe were under the leadership of my predecessors as Accounting Officer, Doug Umbers (2 April 2021 to 13 February 2022) and Gary Aitkenhead (who departed Dstl on 1 April 2021).

> Public money is safeguarded, properly accounted for and used economically, efficiently and effectively.

Scope of responsibility

For the period until 1 April 2021, Gary Aitkenhead was Accounting Officer for Dstl. From 2 April 2021 until 13 February 2022, Doug Umbers acted as Accounting Officer. For both transitions, there was an effective transfer of responsibilities with oversight by the Dstl Board.

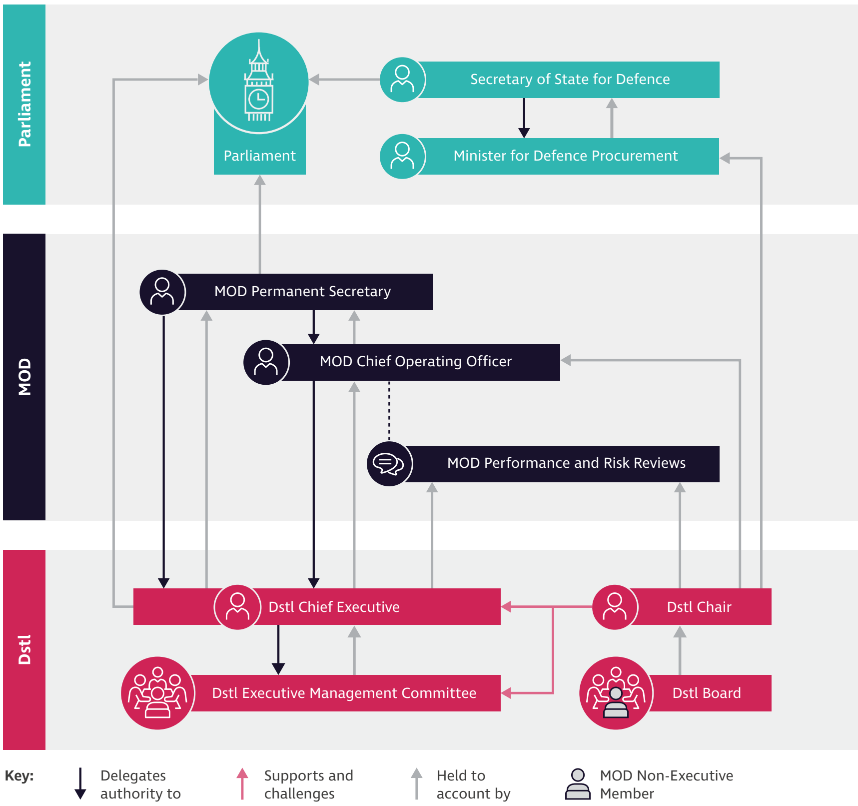
As Accounting Officer for Dstl, it is my responsibility to ensure that there is a sound system of governance, risk management and internal control in place. In addition, I ensure that Dstl business is conducted in accordance with Managing Public Money so that public money is safeguarded, properly accounted 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 performance reporting.

Our corporate governance

We continue to comply with HM Treasury's Code of Good Practice on Corporate Governance in Central Government Departments (2016). As at 31 March 2022, our corporate governance framework is summarised as below:



Dstl's relationship with MOD is defined by the Dstl Framework Document, which was refreshed in July 2021, and described by the MOD Accounting Officer System Statement. Dstl's Operating Model was agreed by the MOD Operating Model Board on 31 March 2022, as a component of the Defence Operating Model.

The Dstl Board

Under Adrian Belton's leadership, the Board held eight regular meetings during the year, including one held virtually in line with the prevailing COVID-19 restrictions.

Membership

Gary Aitkenhead left the Board on 1 April 2021. Doug Umbers remained a member of the Board throughout the year: as interim Chief Executive 2 April 2021 to 13 February 2022, and as Chief Operating Officer for the remainder of the year. Paul Hollinshead joined the Dstl Board as Chief Executive on 14 February 2022.

Non-Executive Members Sarah Spurgeon and Brian Bowsher were each reappointed to a second three-year term on 1 July 2021 and 1 September 2021 respectively.

The Chief People Officer attends by invitation to represent our most important asset - our people.

Attendance of Board meetings in 2021/22

Board member	Date started	Date ended	Number of meetings attended	Number of meetings that could have been attended
Adrian Belton (Chair)	–	–	8	8
Jeremy Monroe	–	–	8	8
David Tonkin	–	–	8	8
Sarah Spurgeon	–	–	8	8
Brian Bowsher	–	–	8	8
Tara Usher	–	–	7[1]	8
Gary Aitkenhead	–	1 April 2021	0	0
Paul Hollinshead	14 Feb 2022	–	1	1
Andy Bell	–	–	8	8
David English	–	–	7	8
Doug Umbers	–	–	8	8

Notes:

[1] At the August 2021 Board meeting, MOD NEM Tara Usher was represented by MOD's Director Defence Sponsorship and Organisational Policy, Mark Preston.

Business 2021/22

The business taken at Board meetings reflects the responsibilities of the Dstl Board, 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.

The year's business has examined the full range of risks and issues facing Dstl, with particular focus on Dstl's response to the Spending Review settlement. Board agendas have devoted time and attention to scaling up the skills and infrastructure needed to deliver this enhanced Portfolio in a safe and sustainable way. These discussions have benefitted from participation by colleagues from MOD Head Office's Directorate of Defence Science and Technology.

Two External Review Colleges (ERC) were held during the year, providing an independent assessment of the health of Dstl's capability, following a hiatus necessitated by COVID-19 restrictions. The Board also considered the findings of a 'Follow Up Review', which scrutinised the progress that had been made since previous ERC reviews.

Other matters considered by the Board included the effective handovers between Chief Executives; oversight of major programmes such as Helios; safety; and diversity and inclusion.

Annual review of effectiveness

The Board conducted a self-assessment of its performance through August and September 2021. This assessment was positive about the operation and business of the Dstl Board, but noted the need to reinvigorate its Remuneration Committee to better oversee the handover of senior staff between Chief Executives. The Terms of Reference for this committee was refreshed, along with the agreement of a new Board Charter. This clarified, but did not substantially change, the role of the Board or its committees.

Audit and Risk Assurance Committee

The ARAC met four times during 2021/22.

Membership

There are four NEMs who sit on this committee – David Tonkin (Chair), Brian Bowsher, Jeremy Monroe and MOD NEM Tara Usher. I attend by invitation, as do my Chief Finance

Officer, my Chief Operating Officer, my Head of Finance, and my Head of Risk, Assurance and Governance. Representatives from the National Audit Office and MOD Defence Internal Audit also attend by invitation.

The ARAC conducted its regular review of Dstl's financial performance, the Corporate Risk Register, the outcomes of internal and external audits, Dstl's counter-fraud activities, and information risk and assurance. The ARAC also reviewed individual Division risk management and assurance approaches and those of Dstl's Safety Technical Authorities. The quarterly Assurance Report continued to be a key source of information used to ensure the Board and Accounting Officer's needs are being met, providing a holistic picture of Dstl's governance, risk management and internal control systems.

Commenting on the work of the committee over the past year, the 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 and risk framework. The assurance framework has been reviewed to ensure that the Line One controls, those at the day-to-day level in the business across the divisions are operating effectively and there is a consistent approach in how they are applied and monitored.

The assurance framework provides a series of themes against which the committee's regular assurance report, reports progress on the four levels of assurance so a comprehensive position can be assessed. The committee is now increasing its focus on the operational risk register and the divisional risk registers to build a better feel on how the whole risk profile is managed within the organisation. The inclusion of reviews of the Safety Technical Authorities has also highlighted another important assurance process. The risk deep dives have continued both through the board and the committee to assess the adherence to the risk register and the planned mitigations. The committee is increasingly exposing the divisional management to the work of the committee to again get a better understanding of the effectiveness of the assurance and risk framework throughout the organisation. The committee's focus will continue to provide the Board with the necessary assurance that the organisation maintains the delivery of its strategic plans in an effective and proportionately controlled manner."

A self-assessment of the effectiveness of the ARAC was last reported in June 2021, which continued to demonstrate a high level of satisfaction with its current effectiveness. A further self-assessment was conducted at the end of the financial year 2021/22 and will be reported in early 2022/23.

Attendance at Dstl Audit and Risk Assurance Committee for 2021/22

	Role	Number of meetings attended	Number of meetings that could have been attended
→ **David Tonkin**	NEM/Chair	4	4
→ **Jeremy Monroe**	NEM	3	4
→ **Brian Bowsher**	NEM	4	4
→ **Tara Usher**	MOD NEM	2[1]	4

Notes:

[1] At the February ARAC, MOD NEM Tara Usher was represented by MOD Deputy Head Enabling Organisations Sponsorship

Remuneration Committee

The Remuneration Committee met in February 2022 and agreed a refresh of the Terms of Reference and discussed the Remuneration of the Senior Leaders within Dstl. There has been no formal meeting of the Nomination Committee although one will be scheduled for financial year 2023, ahead of the end of tenure departures of two of the non-executive members of the Board.

Executive Management Committee

My Executive Team has continued to refine its ways of working, including informal, twice-monthly Executive Management Committee (EMC) meetings. In autumn 2021, the Executive Team began a short exercise to review the way that Executive meetings were operating, and agreed to bring the business previously discussed in quarterly Strategy and Performance meetings into routine EMC meetings. Starting January 2022, the second EMC meeting in each month is now focussed on Strategy, Performance, or the Internal Change Portfolio, on a quarterly cycle.

As COVID-19 restrictions have evolved through the year, so too have our meeting arrangements. Some meetings have been held virtually, with many adopting a hybrid approach. We were pleased in March to meet in the new Derby Centre facility at Portsdown West.

Gary Aitkenhead left Dstl on 1 April 2021. Membership of the EMC further changed on 26 April 2021 with the appointment of Linda Knutsen to lead our new Exploration Division, and on 14 February 2022 with the appointment of Paul Hollinshead to lead Dstl. Doug Umbers acted as interim Chief Executive, chairing the EMC from 2 April 2021 to 13 February 2022.

The Executive Management Committee membership as of March 2022

Paul Hollinshead
Chief Executive

- **Andy Bell** – Chief Technical Officer
- **Matt Chinn** – Division Head Platform Systems
- **Simon Earwicker** – Division Head Chemical, Biological, Radiological Sciences
- **David English** – Chief Finance Officer
- **Paul Kealey** – Division Head Cyber and Information Systems
- **Linda Knutsen** – Division Head Exploration
- **Mike Smith** – Division Head Counter-Terrorism and Security
- **Doug Umbers** – Chief Operating Officer
- **Robyn Wedderburn** – Chief People Officer

Executive Management Committee sub-committees

The EMC's efficiency is improved with the use of four formal sub-committees, the purposes of which are outlined in the table opposite. The Terms of Reference for these sub-committees were each refreshed through the year. These changes were not substantial, except for the Safety Committee, where the Executive agreed to rename it to 'Dstl Health and Safety Committee', removing Environmental Protection from its scope to ensure the Committee was better able to concentrate on improving and maintaining Dstl's safety. Environmental Protection remains a priority for Dstl, and a new Environmental Protection working group has been established by our Head of Estates. More information on Dstl's sustainability can be found on page 024.

The temporary Business Continuity sub-committee continued to lead our response to COVID-19. Through Spring 2022, this committee has met only as required as Dstl followed the government policy of learning to live with COVID.

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. The IMC is chaired by the Chief Finance Officer and is held monthly.
→ **Health and Safety**	To address cross-cutting health, safety and welfare (HS&W) issues, risks and organisational change, informed by assurance and performance data and emerging themes from incident reporting and investigation. The sub-committee meets at least six times per year. From 2 April 2021 to 30 April 2022, the sub-committee was chaired by Division Head Chemical, Biological and Radiological. Before and after this period it was chaired by the Chief Operating Officer.
→ **The Delivery Committee for S&T (DCS&T)**	To support the Chief Executive in governing and risk-assuring S&T planning, delivery and operation and ensures that Dstl develops and executes effective and integrated plans for stewarding S&T capability and delivering S&T impact. In addition, the DCST is responsible for approving, championing and assuring Dstl's S&T Portfolio and Strategic Engagement Plans. The DCS&T is chaired by the Chief Technical Officer and held quarterly.
→ **Business Continuity (BUSCOM)**	To ensure that Dstl adapts to, responds to and recovers from matters that could affect business continuity (such as COVID-19) while providing key S&T tasks for customers in addition to managing and monitoring the risks to the business. The BUSCOM is chaired by the Chief Finance Officer and meets as and when required e.g. during the height of the COVID-19 pandemic, the BUSCOM met weekly.

Our risk management

Dstl's risk framework ensures we counter or exploit the uncertainties faced by both Dstl and our delivery partners. We have embedded our risk management practices across the organisation which allow us to consider both near-term tactical risks as well as long-term strategic risks against our objectives.

Dstl's central risk management function defines, supports and maintains our risk management practices. They conduct assurance and continuous improvement exercises, alongside their support to the Executive and Board to ensure risk management arrangements are proportional and effective.

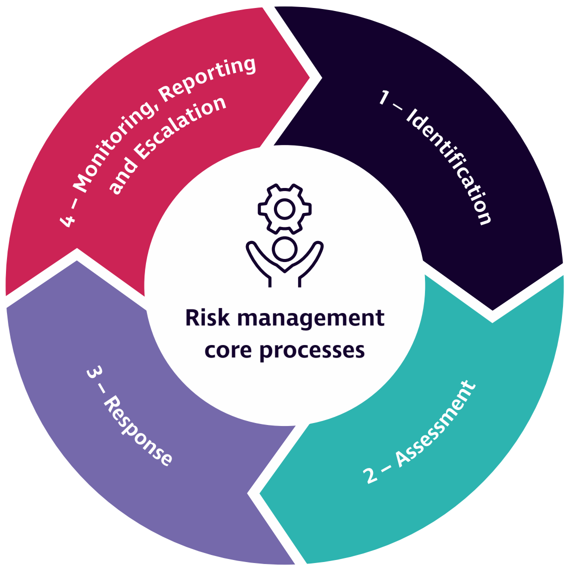
Our Executive Management Committee and Board regularly review our Corporate Risks. In addition, the Board and its ARAC undertake assurance of these risks to review the effectiveness of the mitigation plans and ensure the level of risk carried by the organisation is within both its tolerance and delegation.

In this year, Dstl has:

- → embedded the refreshed Corporate Risk Register across the organisation, maintaining alignment to our strategic objectives and ensuring we understand both the threats and opportunities we face;
- → supported the organisation through the development of Business Risk Partners to further improve our approach to risk at a divisional level.

Managing risk

Dstl's risk management practices comply with MOD's wider risk processes and assurance arrangements such as MOD's Joint Service Publication 892 and adopts practices from the Government Finance Function's Orange Book.



Our core process for risk management at Dstl consists of an iterative four step process of 1. Identify, 2. Assessment, 3. Response and 4. Monitoring, Reporting and Escalation.

There are a number of mechanisms where risks may be identified such as a formal risk identification workshop or an individual raising a potential concern within their business unit or project. Following the appropriate articulation of a risk, it is assessed by taking into account existing controls to give an indication of significance. Assessed risks are then assigned a response in order to decide how best to manage the risk. Any further mitigations arising from a response plan, together with the totality of the risk, are monitored and reviewed to ensure the risk can be used to improve decision making and inform stakeholders. Through escalation, emerging risks are brought to the attention of relevant areas of the business best suited to enact identified mitigations.

Our control environment

We continue to promote a control environment where our people are committed to doing what is right in line with behaviourial and ethical standards. In addition, we also clearly clarify our people's responsibilities and the limits to their authority. Our written policies and processes, standards of conduct and codes of ethics are available on Dstl's internal Business Management System.

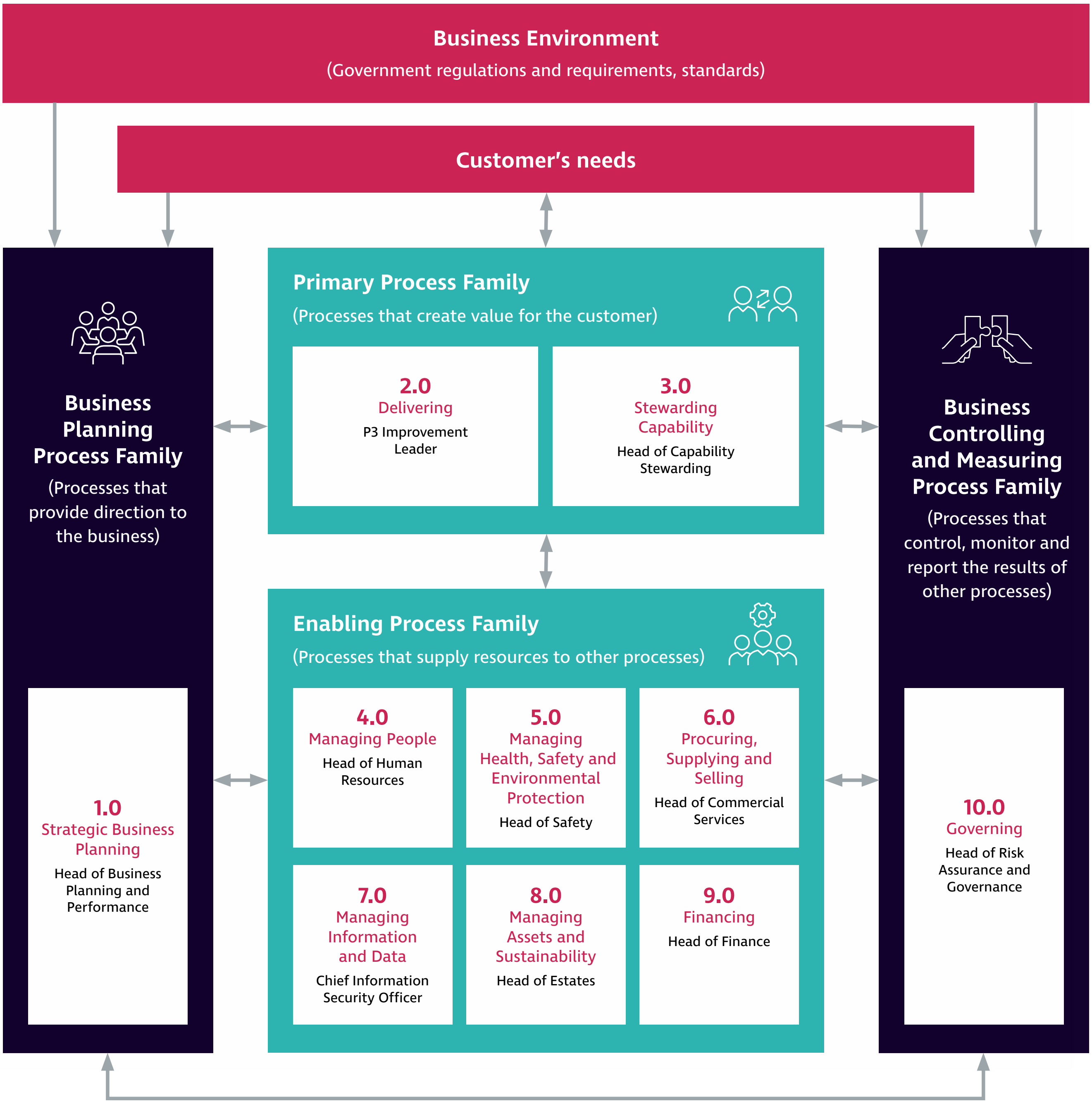
Dstl processes

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 process families – 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.

This year we have continued to adapt some of our process to support the delivery of our business during the COVID-19 pandemic. Through equality impact assessments of our policies and processes and by adhering to accessibility standards, we continue to ensure the inclusivity of our Business Management System.



Our control activities

Our control activities are established through our policies and processes, to mitigate risks to the achievement of our objectives, to ensure the effectiveness and efficiency of our operations, and to ensure compliance with applicable laws and regulations. Their effectiveness is assured through delivery of our assurance strategy, conducting assurance activities across the Four Lines of Defence.

First Line of Defence	Second Line of Defence	Third Line of Defence	Fourth Line of Defence
The way that risks are managed and controlled day to day. 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.	The way the organisation oversees the control framework. Providing assurance that is separate from those responsible for delivery, but not independent of the management chains.	Objective and independent assurance e.g. internal audit. Providing reasonable (not absolute) assurance of the overall effectiveness of governance, risk management and internal controls.	Assurance from external independent bodies. Assurance from independent bodies who may not have familiarity with the organisation but who can bring a new and valuable perspective.
E.g. Line Manager checks of staff training records.	E.g. Health and Safety workplace safety inspections.	E.g. Defence Internal Audit internal audits.	E.g. Health and Safety Executive inspections, National Audit Office audits.

Incident investigations

We are committed to learning from incidents in order to prevent reoccurrence and improve our business, thereby adding value to our stakeholders. To do this we actively promote the reporting of near misses and incidents, with the application of a 'just culture' assuring our people that incident investigations are for the purpose of organisational learning rather than for the purpose of disciplinary action. We assess incidents at our weekly corporate incident triage meeting and investigate significant incidents based on the potential impact the incident could have in balance with the actual harm or damage caused.

Six of the safety incidents reported were reportable to the Health and Safety Executive under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations).

Whistleblowing

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 was one incident raised via our whistle-blowing process. We take such incidents extremely seriously and undertook an assessment of the issue followed by a corporate investigation. This led to the incident in question being concluded satisfactorily.

Identifying and managing conflicts of interests

We take pride in exemplifying integrity and impartiality, which we do through our "Standards in Public Life" process. In line with the Civil Service Management Code, this requires all employees to declare any actual conflict or potential conflict of interest arising between their personal and financial interests and their official dealings as a Civil Servant. These declared interests are scrutinised by line managers, seeking further advice where appropriate. Failure to declare such interests may be treated as misconduct. Declarations made by Senior Civil Servants in Dstl are reviewed by MOD. We publish interests declared by our Board members on pages 050-053.

Protected personal data incidents

In 2021/22, there were no reported breaches of personal information by Dstl declared to the Information Commissioners Office. Dstl has a comprehensive and effective security plan, assured by MOD's Directorate of Security and Resilience. Given the importance of protecting our critical national assets, I have determined that it is not in the public interest to reveal whether or not there has been any significant lapse in security. This statement should not be interpreted as meaning that there were, or were not, any such incidents.

We handled seven Data Subject Access Requests (DSAR) under Data Protection Act (DPA) 18. There were also seven enquiries to the Porton Down Former Volunteers Helpline, all of which were handled in accordance with the DPA.

Fraud management

We have continued to focus on control and monitoring of the procurement process, which is a core objective of our Counter Fraud Policy. We are also now fully aligned with the Cabinet Office's Government Functional Standard. Additionally, we were one of only four parts of MOD to achieve Level 2 (Established) in a fraud risk management maturity model assessment undertaken by MOD Fraud Defence. We continue to explore the possibility of using data analytics to aid detection, with the intention to implement these during the forthcoming year.

During the reporting period, there have been five reports of unusual activity from internal sources. We used our investigation process to investigate the activities, four of which have been satisfactorily resolved. The remaining incident remains under investigation by the relevant authority.

Quality assurance of analytical models

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. Every six months, we declare our business critical models – as defined following the Mcpherson Review in 2013 – to MOD. We continue to share best practice with MOD and wider government, and to improve the quality and operation of such models.

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 2021 to March 2022. From an original audit plan consisting of eight Dstl-sponsored audits, DIA completed all eight.

The Group Head DIA has said *"Overall, and based on the internal audit work delivered throughout 2020/22, DIA can provide substantial assurance over Dstl's systems of governance, risk management and internal control. Our audit work highlighted that adequate processes were in place to plan Science and Technology procurement activities, to manage key fraud risks, and to control operations defined as meeting the Duty Holder construct. Further, Dstl were found to be operating effective control frameworks for the management of Divisional risks and for demonstrating compliance with infrastructure regulations. However, it was recognised there were opportunities to further improve the control environment in selected areas. This included continuing to embed the P3 Assurance Strategy to ensure sufficient coverage across the sub-portfolio of work."*

The internal audits that took place at Dstl in 2021/22, their timings and owners, were:

Audit title	When	Owner
→ **Procurement planning**	September 2021	Chief Finance Officer
→ **Fraud and whistleblowing**	October 2021	Chief Finance Officer
→ **Staff performance management**	November 2021	Chief People Officer
→ **P3 assurance strategy**	January 2022	Chief Technical Officer
→ **Duty holding**	February 2022	Chief Operating Officer
→ **Physical infrastructure compliance project outcomes**	March 2022	Chief Operating Officer
→ **Workplace Management and Facility Manager roles interface**	May 2022	Chief Operating Officer
→ **Divisional risk management**	April 2022[1]	Chief Finance Officer

Notes:

[1] Fieldwork completed in Q4 2021/22 and reported in April 2022

External certification

In March 2022, BSI Assurance UK Ltd conducted Dstl's certification audit, recommending continuation of Dstl's ISO 9001:2015 (Quality Management Systems) and TickITplus (software development) certifications.

Chief Executive's summary

The arrangements I describe above set out how I manage and control the use of resources in Dstl and are the basis upon which I accepted the responsibilities as Dstl's Accounting Officer on 14 February 2022.

> DIA can provide substantial assurance over Dstl's systems of governance, risk management and internal control.

4 / Remuneration and Staff

Remuneration policy

Dstl has no pay costs for ministers. At year end, five directors were members of the Senior Civil Service (SCS) and subject to SCS terms and conditions, including the remuneration policy. These directors were: Paul Hollinshead; Andy Bell; David English; Doug Umbers and Robyn Wedderburn. 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.

Their non-consolidated performance award arrangements fall under SCS rules rather than the Dstl performance-award system.

The remaining directors at year end (Matt Chinn, Simon Earwicker, Paul Kealey, Linda Knutsen and Mike Smith) 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 covered by this report hold appointments which are open-ended. Early termination, other than for cases of misconduct, would result in the individual receiving compensation as outlined in the Civil Service Compensation Scheme.

Further information about the work of the Civil Service Commission can be found at: www.civilservicecommission.org.uk.

Fees paid to non-executive members of the Dstl Board for the financial year 2021/22

This information is subject to audit opinion	Fee 2021/22 £'000	Fee 2020/21 £'000
→ **Adrian Belton**	25-30	25-30
→ **Brian Bowsher**	15-20	15-20
→ **David Tonkin**	15-20	15-20
→ **Jeremy Monroe**	15-20	15-20
→ **Sarah Spurgeon**	15-20	15-20
→ **Tara Usher**[1]		

[1] Tara Usher did not receive a fee in 2021/22; she 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. Tara began her tenure on the 1 October 2019.

Senior management remuneration and pension entitlement

Remuneration paid to executive directors for the financial year 2021/22

Note: This information is subject to audit opinion	Salary Band 2021/22 £'000	Salary Band 2020/21 £'000	NCPA 2021/22 £'000	NCPA 2020/21 £'000	Pension Benefits 2021/22 Nearest £'000	Pension Benefits 2020/21 Nearest £'000	Total 2021/22 £'000	Total 2020/21 £'000
→ **Gary Aitkenhead***	0-5 *145-150*	145-150	-	55-60	2	57	5-10	255-260
→ **Andy Bell***	95-100	95-100	-	-	18	44	110-115	135-140
→ **Matt Chinn**	90-95	85-90	0-5	5-10	19	34	110-115	130-135
→ **Simon Earwicker**	80-85	75-80	0-5	5-10	17	30	95-100	110-115
→ **David English***	80-85	80-85	5-10	-	17	34	105-110	115-120
→ **Paul Hollinshead***	5-10 *145-150*	-	-	-	1	-	5-10	-
→ **Paul Kealey**	85-90	75-80	0-5	5-10	31	30	115-120	115-120
→ **Linda Knutsen**	70-75 *75-80*	-	0-5	-	46	-	120-125	-
→ **Mike Smith**	85-90	80-85	0-5	5-10	24	33	110-115	120-125
→ **Doug Umbers***	120-125	120-125	-	-	48	47	170-175	170-175
→ **Robyn Wedderburn**	90-95	90-95	-	-	36	36	125-130	125-130

Figures in italics denote full-year equivalent salary

Gary Aitkenhead departed Dstl on the 1 April 2021 having taken annual leave until the 9 April 2021. The remuneration aspects listed above are therefore reflective of Gary being paid until the 9th April 2021. Doug Umbers acted as interim CE between the 2 April 2021 to 13 February 2022, with Paul Hollinshead accepting the role of CE from 14 February 2022. Linda Knutsen's role as Exploration Division Head commenced on the 26 April 2021.

Rob Solly (a previous Dstl Division Head) has not been included within the above disclosures as his last day of service was the 26 March 2021.

* 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).

\- denotes that there are no prior year comparatives.

Executive Agency Board members' emoluments

We have shown the details of Board members in the table on page 067. They are summarised as follows:

Note: This information is subject to audit opinion	2022	2021	2020
→ **Salaries, NCPAs and fees (£'000)**	420.4	603.0	580.9

Pension provision for executive directors for the financial year 2021/22

This information is subject to audit opinion	Real increase in pension *[and related lump sum at pension age]* £'000	Total accrued pension at pension age at 31/03/22 *[and related lump sum]* £'000	Cash equivalent value at 31/03/22 £'000	Cash equivalent value at 31/03/21 £'000	Real increase in cash equivalent transfer value as funded by employer £'000
→ **Gary Aitkenhead**	0-2.5	15-20	187	189	1
→ **Andy Bell**	0-2.5 *[0]*	40-45 *[80-85]*	816	766	5
→ **Matt Chinn**	0-2.5 *[0]*	40-45 *[75-80]*	716	671	5
→ **Simon Earwicker**	0-2.5 *[0]*	30-35 *[65-70]*	597	560	4
→ **David English**	0-2.5	35-40	550	516	4
→ **Paul Hollinshead**	0-2.5 *[0]*	50-55 *[145-150]*	1,235	1,229	-1
→ **Paul Kealey**	0-2.5	15-20	223	198	14
→ **Linda Knutsen**	2.5-5	30-35	519	472	31
→ **Mike Smith**	0-2.5	20-25	404	369	13
→ **Doug Umbers**	2.5-5	5-10	130	89	30
→ **Robyn Wedderburn**	0-2.5	0-5	66	36	22

Pension information is provided by MyCSP, the administrators of civil service pensions. All other directors belong to the classic, classic plus or alpha CSPSs. All schemes are part of the civil service pension arrangements. MyCSP have adjusted their processes to meet new Treasury direction. Data from January 2022 has been utilised and calculations projected to the end of March.

Gary Aitkenhead departed Dstl on the 1 April 2021 with Paul Hollinshead accepting the role of CE from 14 February 2022. Linda Knutsen's role as Exploration Division Head commenced on the 26 April 2021.

Rob Solly (a previous Dstl Division Head) has not been included within the above disclosures as his last day of service was the 26 March 2021.

Fair pay disclosure

Relationship between the highest-paid director and the workforce median

Note: This information is subject to audit opinion	2021/22	2020/21
→ **Band of highest-paid director total remuneration**	£145,000-£150,000	£200,000-£205,000
→ **Median Pay**	£38,457	£37,699
→ **Median Pay Ratio**	3.84	5.37
→ **25th Percentile Pay**	£29,228	£28,652
→ **25th Percentile Pay Ratio**	5.05	7.07
→ **75th Percentile Pay**	£47,488	£46,652
→ **75th Percentile Ratio**	3.11	4.34

Reporting bodies are required to disclose the relationship between the remuneration of the highest-paid director in their organisation and the lower quartile, median and upper quartile remuneration of the organisation's workforce. Due to changes in leadership throughout the year, Paul Hollinshead's gross salary banding figure has been used.

The banded remuneration of the highest-paid director in Dstl in the financial year 2021/22 was £145,000-£150,000 (2020/21: £200,000-£205,000). This was 3.84 times (2020/21: 5.37) the median remuneration of the workforce, which was £38,457 (2020/21: £37,699).

In 2021/22, remuneration ranged from £14,608 to £145,000-£150,000 (2020/21: £14,075 to £200,000-£205,000). 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.

Percentage change in total salary and bonuses for the highest paid director and staff average

Note: This information is subject to audit opinion	2021-22		2020-21	
	Total Salary & Allowances	Bonus Payments	Total Salary & Allowances	Bonus Payments
→ **Staff average**	4%	-8%	7%	-4%
→ **Highest Paid Director**	1%	-100%	1%	77%

The -100% recorded under Bonus Payments for the Highest Paid Director for 2021/22 is due to there being no full time CE in post for the reporting year.

Due to changes in leadership throughout 2021/22, Paul Hollinshead's gross salary banding figure has been used.

Case Study #07

Land

Enhancing armoured mobility

The future of the British Army's fighting vehicles has been influenced by Dstl's operational research on lethality, mobility and capability options. During the year significant progress was made of the delivery of the Challenger 2 Life Extension Programme, known as Challenger 3 Main Battle Tank or CR3, and the modular Boxer Armoured Fighting Vehicle Programme, both key parts of the Army's Future Soldier transformation plan. These programmes will help sustain highly skilled engineering jobs in several locations across the UK.

Under Future Soldier, the Army is committed to delivering a modernised warfighting Division by 2030. While future engagements with adversaries will be conducted at greater distance than currently, CR3 will provide the ability to fight and win the close battle. CR3 is protected with world leading new modular armour developed through advances in armour technology provided by the MOD CSA funded armour expertise held within Dstl. This Dstl owned Intellectual Property (IP) is being exploited through the close links Dstl has with MOD and Industry.

The incremental fielding of Boxer from the middle of the decade will enable the Army to operate at range and seize the initiative. The same base vehicle platform can be reconfigured in less than an hour into different roles to suit operational requirements, including an infantry carrier, a specialist carrier, a command vehicle, and an ambulance.

Dstl has also developed Veles, a Crown owned generic camouflage generator tool. Veles produces the optimum pattern for an environment in a few hours and can theoretically test an unlimited number of patterns all of which are original. Ultimately, this means that the Army can be much more reactive to the situations they are in, and can make strides towards ensuring the best possible signature protection for their people and platforms.

Our people

Dstl employs some of the world's brightest people. We recognise that a highly skilled, inquisitive and committed workforce is crucial to the delivery of our high-impact work.

This financial year saw another incredible effort across Dstl as we offered our continued support to the COVID-19 response efforts both nationally, and within our organisation. Our People Engagement Communications Working Group continued to supplement the Organisational COVID-19 Crisis Management Committee, which provided safe working practices, working from home equipment and guidance to enable continued safe ways of working over the last year. We have worked closely with our Employee Networks to ensure we can support all of our colleagues through these unprecedented times.

Our people continue to make us proud and have received prestigious recognition throughout the year. We are delighted to share that within Her Majesty The Queen's Birthday Honours 2021, we had one OBE awarded to an employee for service to UK defence and security support to Global non-proliferation policy and work through the OPCW. In addition, an MBE was awarded to an individual from our Strategic Partners, Sopra Steria for their service to UK Science and Technology in developing a revolutionary High Performance Computing (HPC) environment, enabling the provision of essential COVID-19 modelling and analysis data.

In the New Year Honours 2022, we had one OBE awarded to an employee for services to defence, security and the UK during the COVID-19 pandemic as a member of the COVID-19 Scientific Pandemic Influenza Modelling Group (SPI-M) and for the provision of critical data to the Scientific Advisory Group for Emergencies (SAGE). We also had a Military MBE in recognition of the individual's service to defence and the UK during the COVID-19 pandemic.

We have received several Vice Chief of Defence Staff (VCDS) Commendations for individuals and teams. In the Birthday 2021 Commendations these included an individual plus a number of teams: the SPI-M Modelling Team, the Force Structure Analysis Team, the Electro Optic Threat Evaluation Team and the Energetics Analysis Team. In total 78 individuals were recognised.

In the New Year VCDS Commendations were for one individual, together with the Transport Risk Assessment for COVID Knowledge (TRACK) Team for their support to the Department for Transport on mitigations needed to manage the UK network safely during the COVID-19 pandemic and the Leonardo Collaboration Team. In total 24 individuals were recognised, which included five individuals from other areas of MOD and three from a defence prime.

We were also successful in the Deputy Chief of Defence Staff (DCDS), (Military Capability) Commendations receiving one individual award and two team awards for the Dstl System of Systems Team and the Future Combat Air System (FCAS) Portfolio Review Team. These recognised 40 individuals, 12 of whom were from collaborating defence primes.

Finally, we were very successful at the 2021 MOD Science and Engineering Commendations, sponsored by MOD CSA and supported by the Defence Engineering Champion. We had winners in a wide variety of categories including Diversity and Inclusion; Communicating Science and Engineering; Excellence in Science and Engineering; Mainstreaming S&T; Early Career - Rising Star; Apprentice of the Year; and Exemplary Service. The event culminated in Dstl receiving an Organisational Award to recognise the support provided by individuals to both defence and the UK government during the COVID-19 pandemic to protect the health of the UK's citizens. Overall, 554 Dstl individuals were recognised, 408 specifically for their support to the pandemic and also seven overseas collaborators.

Right size, right shape, right skills

We welcomed over 1,000 new starters to Dstl this year and currently have 275 new starters in the recruitment pipeline beyond accepting our employment offer. In addition, we inducted 71 apprentices onto our programmes, of which 30 are new recruits and 41 are developmental apprenticeships (up from 19 last year of which five were developmental and 14 new recruits). We had a total of 725 applications for our ongoing graduate campaigns, and have so far made 84 offers. We also had 71 inward rotations, seconded from across civil service and other organisations, into our organisation this financial year.

We achieved recognition as one of the top 300 graduate employers as part of UK 300. These awards are based on undergraduate feedback, so it is fantastic to be recognised within our STEM talent key audience.

This year, there were no consultancy services costs at Dstl (2020/21: £nil). We have spent £735,000 on Early Careers Advertising, Experienced Hire recruitment campaigns and STEM Outreach activities which is agreed within Civil Service Frameworks. We work at times with our advertising partner, developing advertising materials and products to use across all media. We have no other advertising or marketing costs at Dstl. Over 14,000 hours of enabling time has been released to allow teams to respond to the huge uplift in recruitment demand this FY. Mean average recruitment processing times have reduced by >40% this year, from application to Disclosure and Barring Service (DBS) check.

Exciting, innovative and supportive workplace

Dstl aims to be a place where everyone can thrive, succeed and achieve their ambitions, regardless of background, different circumstances, experiences or characteristics.

In 2021, we published our new internal Diversity and Inclusion (D&I) Strategy to set out the D&I vision for the organisation for the next three years. Our three strategic objectives are:

- Representation – Strategic objective one, Increase Diversity: We will aim to increase the diversity of our workforce including at the most senior levels, to more closely reflect the society we represent and serve.
- Inclusion – Strategic objective two, Ensure Inclusion: We will develop an open, collaborative and inclusive working environment where the principles of fairness and employee wellbeing are promoted and everyone is encouraged to reach their full potential and take account for their own development.
- Growth and Development – Strategic objective three, Maintain Equality: We will continue to strive for best practice to be an equal opportunity employer and for every person to have access to opportunities, exploring how we can achieve this through data, science and technology, education, and celebrating our achievements.

Representation - Increase Diversity:

This year, to attract people from underrepresented groups, we tailored our advertising with a particular emphasis on graduate campaigns. We also partnered with organisations to promote Dstl as a potential employer for underrepresented groups[1] working or studying in particular fields.

When advertising job opportunities at Dstl, all adverts now include positive action statements and gender neutral language. To support people during the application process, we have offered 'Meet and Engage' sessions and an interview information pack.

We continue to be dedicated to being an inclusive and equal employer and increasing representation of minority demographics within the organisation[2]. Our levels of ambition (LOA) provide motivational goals across the whole employee life cycle which are supported by our Executive Team.

To ensure we continue to target the right audiences, we will review our approach to outreach; refocus the role of STEM Ambassadors; and assess the effectiveness of media

[1] Our Cyber and Information Systems Division piloted this approach with their partnership with 'Women in Data'. On this platform, Dstl jobs and role models are highlighted to female and gender diverse data professionals to encourage more diverse representation in the industry.

[2] In late 2021, Dstl upgraded from iCAS, the enterprise resource planning system and moved over to the Cloud Hosted Enterprise Service Solution (CHESS), a government cloud hosted software solution. Due to this and other unforeseen circumstances, there have been some challenges migrating D&I data from iCAS to CHESS. Therefore, for the purpose of this report, we will be referring back to data from AP08 FY20/21 in iCAS as this is the most up to date complete data set we have.

interventions. Next year, we will also launch a 'Belonging' campaign to share more stories of how our diversity brings strength to Dstl.

Inclusion - Ensure Inclusion:

Inclusion is vital. Our strategy aims to identify any barriers or challenges specific to a minority demographic and strive to remove these challenges so that every person in Dstl feels able to succeed, progress and reach their potential.

With hybrid working increasing, we developed a 'Welcome Pack' to help our new starters to feel part of Dstl. We have also established a community of Divisional D&I networks, led by visible, senior leaders in their Division. This approach helps to support organisational initiatives and also allows Divisions to pilot activities, specific to their own representation challenges.

We continue to adhere to the Equality Act 2010 through supporting our people with disabilities. This year Dstl was certified a 'Disability Confident Employer', a fantastic achievement recognising all the support and adjustments to help our staff overcome disadvantages resulting from their disability. We have also focussed on the development and progression of our people. The 'Women into Senior Leadership (WiSL)' pilot scheme is in its second year, supporting a cohort of 26 women to discuss and address any issues that might be preventing them from progressing. Our mentoring support continues to grow, with the number of gender mixed, peer mentoring circles increasing and our awareness of the benefits of mutual mentoring also building.

Next year, we will deliver a pilot for another development programme for people underrepresented groups, called 'Power of Choice'. We are also reviewing our mandatory training and internal Career Level Review process to address barriers our staff have found.

Growth and Development - Maintain Equality:

In order to maintain equality, we have put a greater focus on data and measurable objectives. We want our people to continue to learn and educate themselves in D&I and regularly celebrate our inclusion and representation achievements.

The recent migration of our organisation's D&I data gave us an opportunity to make our Diversity Data more inclusive. There are new pick lists for D&I information in our enterprise resource planning system, suggested by our Employee Support Networks, which offer a wider variety of options for gender and sexual orientation. Another advance in our data gathering has been the piloting of an online tool for staff to report instances of Bullying, Harassment or Discrimination. This tool was successfully piloted in Platform Systems Division and we are planning to extend it to the wider organisation in the next six months.

We continue to promote campaigns for our people to lead and collaborate inclusively, such as the 'LGBTQ+ Line Managers Guide', developed by our staff network for gender identity and sexual orientation. We also celebrated Neurodiversity week; highlighting the support options and workplace adjustments we offer our neuro-diverse staff to perform at their best.

Next year, as part of our D&I strategy, we will launch an organisational wide diversity declaration campaign called 'Path to 100%'. The more of our people who declare their diversity data, the more fully we can understand the makeup of our workforce and benchmark where we are. We can also use this to inform where we prioritise our resources, monitor and, if necessary, change the impact of our D&I interventions.

We continue to support people with disabilities by adhering to the Civil Service Recruitment Principles of open and fair competition with a guaranteed interview for 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 employees to help them overcome disadvantage resulting from their disability. Our D&I policy sets the overall framework of how we promote and support those with protected characteristics. Our workplace adjustments process ensures that adjustments are available for the continuation of employment of new recruits and during employment to accommodate all our people and, as with the rest of the Civil Service, we have achieved disability confident status.

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.

We continue to drive the working in partnership agenda with our Trade Unions based on mutual trust and respect, and we are jointly reviewing the Dstl and Trade Unions partnership agreement. We work in partnership on issues that affect employees, their terms and conditions of service, and their working environment.

We have ongoing engagement challenges linked to pay and reward within Dstl and our employees are understandably growing weary of the impact of COVID-19. We offer exciting career opportunities and a range of flexible working options alongside a range of rewards and benefits, which are continually reviewed to ensure they are fair and attractive. Our staff turnover for FY2021/22 was 7%.

We therefore need to continue to be creative and flexible in our approach to rewarding our people for the skills they provide, in order to ensure we can attract and retain our workforce and deliver Dstl's strategic aims. We continue to work hard to develop and submit proposals to the Cabinet Office and His Majesty's Treasury.

To that end, we have introduced a new Recruitment and Retention Allowance Framework to reflect the external market and demand for skills for our deep specialists and business critical area specialists. Further work is underway to allocate the approved additional funding for use as part of this framework under our 2021/22 pay case, including negotiation with our Trade Unions. This work is leading the design and development of a wider cross government approach to pay and allowances for S&T. Following our successful design, we are acting as a pilot organisation for the wider Government Science and Engineering profession.

The health and wellbeing of our employees is of utmost importance to us and we work closely with our onsite occupational health team and our Employee Assistance Programme provider to support our employees' wellbeing. We saw 2.2% of hours lost due to sickness absence this year, compared to 1.9% in 2020/21.

Staff redeployment

In Autumn 2020, we assembled a pool of over 50 European Unit (EU) Exit volunteers in case we received MOD direction to deploy them. However, Dstl was not directed to support EU Exit and stood this pool down at the end of January 2021.

We provided a range of support to the COVID-19 pandemic. In total there were 128 deployments, the majority of which were short-term, lasting only a week. However, there were 59 enduring deployments who have all since returned to Dstl. Support across the organisation varied from Level 4 (MOD Grade C2) to Level 8 (MOD Grade B1), with the majority being Level 6 (MOD Grade B2).

Our workforce

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

Note: This information is subject to audit opinion	Permanent (UK) employment contract		Agency and short-term contract staff		Inward secondees		Total	
	2022	2021	2022	2021	2022	2021	2022	2021
→ **Professional and technical staff**	3,337	3,295	247	248	70	64	3,654	3,607
→ **Administrative and industrial staff**	762	732	40	39	0	0	802	771
Total	**4,099**	**4,027**	**287**	**287**	**70**	**64**	**4,456**	**4,378**

Staff costs

Staff costs incurred during the year were:

Note: This information is subject to audit opinion	2022 £m	2021 £m
→ Wages and salaries	185.8	180.5
→ Social security costs (including apprenticeship levy)	20.4	20.0
→ Other pension costs	48.0	47.2
→ Inward secondees	7.7	7.4
→ Agency and contract staff	22.1	19.0
→ Less recoveries in respect of outward secondments	(2.4)	(2.7)
Total	**281.6**	**271.4**

No staff costs were capitalised during the year (**2020/21: £nil**).

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 route – PSR (Public Sector Resourcing) framework RM3749. CTWs are not employees and nor are they off-payroll appointments to public office, for which there is none at Dstl.

All off-payroll engagements	
→ Highly paid off-payroll worker engagements as at 31 March 2022, earning £245 per day or greater	194
of which	
→ Number that have existed for less than one year at time of reporting	78
→ Number that have existed for between one and two years at time of reporting	32
→ Number that have existed for between two and three years at time of reporting	84
→ Number that have existed for between three and four years at time of reporting	0
→ Number that have existed for four or more years at time of reporting	0

→ All highly paid off-payroll workers engaged at any point during the year ended 31 March 2022, earning £245 per day or greater	251[1]
of which	
→ Not subject to off-payroll legislation	0
→ Subject to off-payroll legislation and determined as in-scope of IR35	246[2]
→ Subject to off-payroll legislation and determined as out-of-scope of IR35	5
→ No. of engagements reassessed for compliance or assurance purposes during the year	0[3]
→ Of which: no. of engagements that saw a change to IR35 status following review	0

1 Figure is total of those engaged at any point during the year ended 31 March 2022, and therefore doesn't show those whose contracts have ceased.

2 Dstl does not undertake a reassessment for consistency/assurance purposes due to the small number of contracts falling outside of IR35. All of Dstl's contingent labour requirements are engaged via the Crown Commercial Services' CL One Framework and the supply chain within that framework. 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.

3 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.

Off-payroll and on-payroll engagements of Board members and/or senior officials with significant financial responsibility	
→ 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	16

Exit packages (subject to audit)

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.

The Agency will complete its departure from the Fort Halstead site by 31 March 2023, under the Helios project. All 17 early exits in the current year relate to the project, which has increased due to the site closure nearing maturity.

0

compulsory redundancies during the year ended 31 March 2022.

Exit package cost band	Number of compulsory redundancies		Number of other departures agreed		Total number of exit packages by cost band	
	2022	2021	2022	2021	2022	2021
Less than £10,000	0	0	0	1	0	1
£10,000 - £25,000	0	0	3	1	3	1
£25,001 - £50,000	0	0	4	7	4	7
£50,001 - £100,000	0	0	9	2	9	2
£100,001 - £150,000	0	0	1	0	1	0
£150,001 - £200,000	0	0	0	0	0	0
More than £200,000	0	0	0	0	0	0
Total number of exit packages	**0**	**0**	**17**	**11**	**17**	**11**
Total cost of exit packages (£)	**0**	**0**	**970,766**	**455,255**	**970,766**	**455,255**

Pensions

Pension benefits are provided through the Civil Service pension arrangements. 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.

Existing members of the PCSPS who were within ten years of their normal pension age on 1 April 2012 remained in the PCSPS after 1 April 2015. Those who were between ten years and 13 years and five months from their normal pension age on 1 April 2012 switched or switch into alpha sometime between 1 June 2015 and 1 February 2022. Because the Government plans to remove discrimination identified by the courts in the way that the 2015 pension reforms were introduced for some members, it is expected that, in due course, eligible members with relevant service between 1 April 2015 and 31 March 2022 may be entitled to different pension benefits in relation to that period (and this may affect the Cash Equivalent Transfer Values shown in this report. All members who switch to alpha have their PCSPS benefits 'banked', with those with earlier benefits in one of the final salary sections of the PCSPS having those benefits based on their final salary when they leave alpha. The pension figures quoted for officials show pension earned in PCSPS or alpha – as appropriate. Where the official has benefits in both the PCSPS and alpha the figure quoted is the combined value of their benefits in the two schemes). Members joining from October 2002 may opt for either the appropriate defined benefit arrangement or a defined contribution (money purchase) pension with an employer contribution (partnership pension account).

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. The Executive Agency is unable to identify its share of the underlying assets and liabilities. 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 2021/22 to be paid when the member retires and not the benefits paid during this period to existing pensioners. Details can be found in the resource accounts of the Cabinet Office: www.civilservicepensionscheme.org.uk/about-us/resource-accounts.

Employee contributions are salary-related and range between 4.6% and 8.1% of pensionable earnings for members of classic, premium, classic plus, nuvos and alpha. For the year ending 31 March 2022, the Agency's employer contributions of £47.6 million were payable to MyCSP (2020/21: £46.8 million) at one of four rates in the range 26.6% to 30.3% of pensionable earnings (2020/21: 26.6% to 30.3%), based on salary bands. 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.

Since October 2002, employees joining the Agency can opt for either the appropriate defined-benefit arrangement as above or a ‘money purchase' stakeholder pension with an employer contribution (partnership pension account). The Agency makes a basic contribution of between 8.0% and 14.75% (depending on the age of the member) into the stakeholder pension. The employee does not have to contribute, but where they do make contributions, the employer will match these up to a limit of 3% of pensionable salary (in addition to the employer's basic contribution). For the year ending 31 March 2022, employer contributions of £359,384 (2020/21: £390,108) were paid into partnership pension providers. Employers also contribute a further 0.5% 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 2022 were £12,286 (2020/21: £13,364). There were no prepaid contributions at that date.

This year, no-one retired early on ill-health grounds; there were no accrued pension liabilities in year. Further details about the Civil Service pension arrangements can be found at the website www.civilservicepensionscheme.org.uk.

This year, no-one retired early on ill-health grounds.

Our Staff Composition

As of 31 March 2022, the gender numbers for our non-executive members, senior leadership team members, senior civil service (SCS) and employees were:

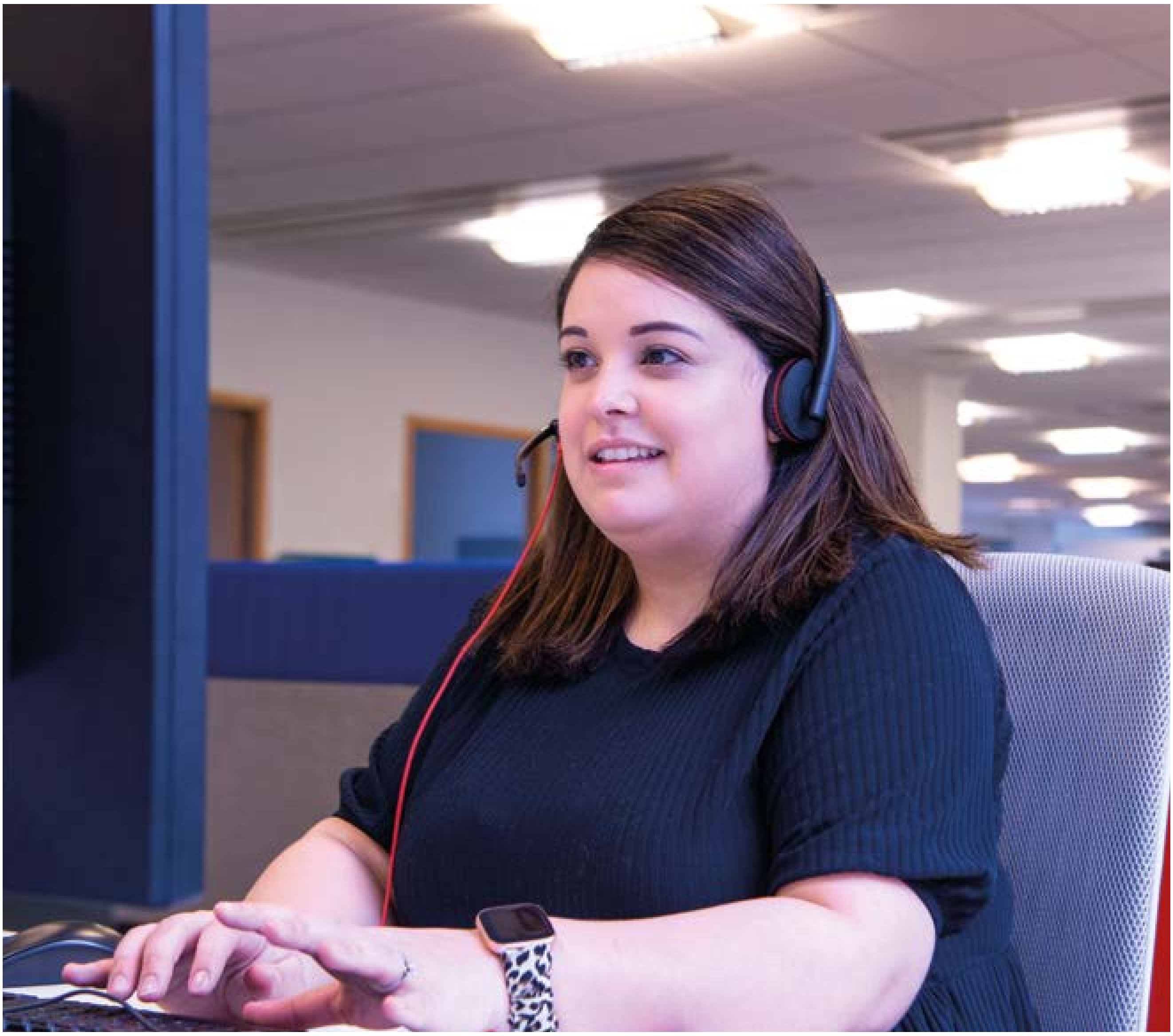
	Male	Female	Total
→ **Non-executive members**[1]	4	1	5
→ **Senior Leadership Team**[2]	8	2	10
→ **Senior civil service**[3]	0	1	1
→ **Employees**[4]	3,205	1,722	4,927
Totals	**3,217**	**1,726**	**4,943**

[1] The MOD non-executive member on the Dstl Board is senior civil service.

[2] The Chief Executive, Chief Finance Officer, Chief Operating Officer, Chief People Officer, and Chief Technical Officer are senior civil service.

[3] There is one other member of the SCS at Dstl who is not a member of the Dstl Senior Leadership Team.

[4] All the above figures are headcount. Employee numbers include our permanent staff, our apprentices, and our fixed-term appointments.



5 / 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.

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.

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, His 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 pages 085-087.

More details on our governance, key roles and our accountabilities relating to the MOD ownership function of Dstl's governance are published in our 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.

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 directly 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.

> We conduct our transactions on a non-cash basis via intra-departmental accounting and bookkeeping constructs.

Remote contingent liabilities (subject to audit)

In addition to any contingent liabilities reported in the Notes to the Accounts, we also disclose relevant material remote contingent liabilities. The likelihood of a transfer of economic benefit arising is too remote to meet the definition of a contingent liability in accounting standard IAS37 (provisions, contingent liabilities, and contingent assets).

Remote contingent liabilities are by nature uncertain and very unlikely, but we recognise that they could lead to further expenditure if certain conditions are met. They could materialise as a combination of unlikely and uncertain future conditions or events that are not wholly within the Agency's control.

Our research activities are clearly related to the activities, materials and equipment used in the defence and security context, and by inference we are therefore exposed to similar hazards and risks during the conduct of trials, experimentation and engineering development. The nature of the special and generic risks and indemnities arising from such activities are self-insured and long-term residual liabilities are underwritten by our parent department.

The following is a potential remote material liability that relates to the Agency's working environment, nature of the activities performed, and equipment used in its operations.

Satellite collision (subject to audit)

The Agency has invested in a new space operation capability, a satellite ground station to task satellites for research purposes. Mitigations are in place against accidents but there remains a remote possibility of satellite collision through software or system failure, or by human error during the operation of a satellite. HM Treasury approval has been received for up to £500 million to cover this remote contingent liability for operations that commenced during October 2020. The contingent liability is estimated to expire by 31 December 2027.

Losses and special payments (subject to audit)

There were no individual losses of £300,000 or more. Dstl recorded stores losses totalling £21,000, all of which were investigated and relate to closed cases. There was one project write-off totalling £269,000, that relates to a delayed capital procurement that was curtailed early to avoid further loss. The projects revised delivery date surpassed the expected period of use.

Consultancy

This year, there were no consultancy services costs at Dstl (2020/21: £nil).

Fees and charges

We charge for goods and services in accordance with the principles in Managing Public Money. Our core activity is to provide S&T services to MOD and wider Government. Please see pages 014-017 for details of these services. Operating income recognised in return for the provision of these services is disclosed in Note 3 to the financial statements on page 105. The cost of providing these services, purchase of direct goods and services, can be found in Note 4 on page 106. Other operating income is derived from receipts relating to non-core activities. Further details can be found in accounting policy Note 1 (t) to these financial statements on page 099.

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; we do not classify these as administrative costs. All our operating expenditure is associated with delivery of our S&T outputs. See page 016 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.

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 (Dstl) for the year ended 31 March 2022 under the Government Resources and Accounts Act 2000.

The financial statements comprise Dstl's:

- Statement of Financial Position as at 31 March 2022;
- Statement of Comprehensive Net Expenditure, Statement of Cash Flows and Statement of Changes in Taxpayers' Equity for the year then ended; and
- the related notes including the significant accounting policies.

The financial reporting framework that has been applied in the preparation of Dstl's financial statements is applicable law and UK adopted international accounting standards.

In my opinion, the financial statements:

- give a true and fair view of the state of Dstl's affairs as at 31 March 2022 and its net income for the year then ended; and
- 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 for opinions

I conducted my audit in accordance with International Standards on Auditing (UK) (ISAs UK), applicable law 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 2019. I have also elected to apply the ethical standards relevant to listed entities. I am independent of Dstl in accordance with the ethical requirements that are relevant to my audit of 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

In auditing the financial statements, I have concluded that Dstl's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work I have performed, I have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on Dstl's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

My responsibilities and the responsibilities of the Accounting Officer with respect to going concern are described in the relevant sections of this certificate.

The going concern basis of accounting for Dstl is adopted in consideration of the requirements set out in HM Treasury's Government Financial Reporting Manual, which require entities to adopt the going concern basis of accounting in the preparation of the financial statements where it anticipated that the services which they provide will continue into the future.

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 and does not include the financial statements nor my auditor's certificate and report. The Accounting Officer is responsible for the other information.

My opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in my certificate, 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 I identify such material inconsistencies or apparent material misstatements, I am required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work I have performed, I conclude

Continued on page 86

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 part of the Remuneration and Staff Report to be audited has been properly prepared in accordance with HM Treasury directions made under the Government Resources and Accounts Act 2000.

In my opinion, based on the work undertaken in the course of the audit:

- the parts of the Accountability Report subject to audit have been properly prepared in accordance with HM Treasury directions made under the Government Resources and Accounts Act 2000;
- the information given in the Performance and Accountability Reports for the financial year for which the financial statements are prepared is consistent with the financial statements and is in accordance with the applicable legal requirements.

Matters on which I report by exception

In the light of the knowledge and understanding of Dstl and its environment obtained in the course of the audit, I have not identified material misstatements in the Performance and Accountability Report.

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

- I have not received all of the information and explanations I require for my audit; or
- adequate accounting records have not been kept by Dstl 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 subject to audit are not in agreement with the accounting records and returns; or
- certain disclosures of remuneration specified by HM Treasury's Government Financial Reporting Manual have not been made or parts of the Remuneration and Staff Report to be audited is not in agreement with the accounting records and returns; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Responsibilities of the Accounting Officer for the financial statements

As explained more fully in the Statement of Accounting Officer's Responsibilities, the Chief Executive as Accounting Officer is responsible for:

- maintaining proper accounting records;
- the preparation of the financial statements and Annual Report in accordance with the applicable financial reporting framework and for being satisfied that they give a true and fair view;
- ensuring that the Annual Report and accounts as a whole is fair, balanced and understandable;
- internal controls as the Chief Executive as Accounting Officer determines is necessary to enable the preparation of financial statement to be free from material misstatement, whether due to fraud or error; and
- assessing Dstl's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Chief Executive as Accounting Officer anticipates that the services provided by Dstl will not continue to be provided in the future.

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.

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a certificate that includes my opinion. 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.

Extent to which the audit was considered capable of detecting non-compliance with laws and regulations including fraud

I design procedures in line with my responsibilities, outlined above, to detect material misstatements in respect of non-compliance with laws and regulations, including fraud. The extent to which my procedures are capable of detecting non-compliance with laws and regulations, including fraud is detailed below.

Continued on page 087

Identifying and assessing potential risks related to non-compliance with laws and regulations, including fraud.

In identifying and assessing risks of material misstatement in respect of non-compliance with laws and regulations, including fraud, we considered the following:

- the nature of the sector, control environment and operational performance including the design of Dstl's accounting policies and key performance indicators.
- inquiring of management, Dstl's head of internal audit and those charged with governance, including obtaining and reviewing supporting documentation relating to Dstl's policies and procedures relating to:
  - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
  - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud; and
  - the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations including Dstl's controls relating to Dstl's compliance with the Government Resources and Accounts Act 2000 and Managing Public Money;
- discussing among the engagement team including relevant internal specialists, regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

As a result of these procedures, I considered the opportunities and incentives that may exist within Dstl for fraud and identified the greatest potential for fraud in the following areas: revenue recognition, posting of unusual journals, complex transactions and bias in management estimates. In common with all audits under ISAs (UK), I am also required to perform specific procedures to respond to the risk of management override of controls.

I also obtained an understanding of Dstl's framework of authority as well as other legal and regulatory frameworks in which Dstl operates, focusing on those laws and regulations that had a direct effect on material amounts and disclosures in the financial statements or that had a fundamental effect on the operations of Dstl. The key laws and regulations I considered in this context included Government Resources and Accounts Act 2000, Managing Public Money, tax legislation and employment law.

Audit response to identified risk

As a result of performing the above, the procedures I implemented to respond to identified risks included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described above as having direct effect on the financial statements;
- enquiring of management, the Audit and Risk Assurance Committee and legal counsel concerning actual and potential litigation and claims;
- reading and reviewing minutes of meetings of those charged with governance and the Board and internal audit reports; and
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

I also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of my certificate.

Other auditor's responsibilities

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

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.

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

16 September 2022

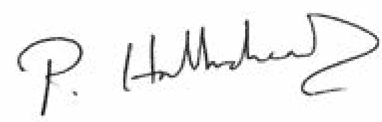
Dstl Annual Report & Accounts 2021/22

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 085).

The Dstl Board endorsed this report out of committee on 8 September 2022, and I, as Accounting Officer, signed the accounts on 8 September 2022.

I can confirm that our annual report and accounts gives a fair, balanced and understandable view of Dstl's activities for the year ended 31 March 2022 and of our financial position as at 31 March 2022. 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 043, as well as signing the Accountability Report here, which meets Dstl's key accountability requirements to Parliament. I have also signed our Statement of Financial Position on page 092, 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 an interesting read and helpful in furthering your understanding of Dstl's business and performance over the past financial year.



Paul Hollinshead
Chief Executive

8 September 2022

Financial Statements

Our 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 His 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 095. Changes are driven by a desire to align, where appropriate, with the policies of our parent department (MOD), subject to relevance and materiality considerations.

Our Financial Statements Report contains six sub-sections:

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.

6 / Accounting Information

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.

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 His 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 095.

Our desire to align with the policies of our parent department, MOD, where appropriate, drives these changes, subject to relevance and materiality considerations.

We have prepared our accounts under International Financial Reporting Standards (IFRS).

View the notes which form an integral part of these accounts

See pages 095-122

Statement of Comprehensive Net Expenditure (SoCNE)

for the year ended 31 March 2022

	Note	2022 £ million	2021 £ million
Operating income from contracts with customers	2	833.6	725.9
Other operating income		42.2	16.9
Total operating income	3	**875.8**	**742.8**
Staff costs		(281.6)	(271.4)
Purchase of direct goods and services		(431.8)	(335.3)
Depreciation, amortisation and impairment charges		(25.8)	(52.9)
Provision expense		(3.0)	(3.8)
Infrastructure running costs		(95.5)	(90.5)
Other operating expenditure		(36.6)	(27.9)
Total operating expenditure	4, 5	**(874.3)**	**(781.8)**
Net operating income / (expenditure)		**1.5**	**(39.0)**
Finance income	6	0.0	0.0
Finance expense	7	0.0	0.0
Net income / (expenditure) for the year		**1.5**	**(39.0)**
Other comprehensive net income / (expenditure)			
Items which will not be reclassified to net operating income / (expenditure):			
Net surplus / (deficit) on revaluation of property, plant and equipment	SoCiTE	19.4	(2.7)
Net surplus / (deficit) on revaluation of intangible assets	SoCiTE	0.0	(0.1)
Items which may be reclassified to net operating expenditure:			
Net surplus on revaluation of non-current financial asset investments	SoCiTE	0.0	0.0
Total comprehensive net income / (expenditure) for the year		**20.9**	**(41.8)**

The notes on pages 095-122 form an integral part of these accounts.

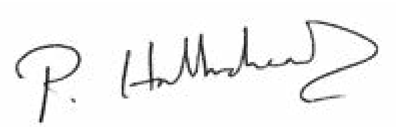
Statement of Financial Position (SoFP)

as at 31 March 2022

	Note	2022 £ million	2021 £ million
Assets			
Non-current assets			
Property, plant and equipment	8	690.9	623.3
Financial assets	9	1.6	1.4
Intangible assets	10	12.4	4.6
Receivables	13	2.1	3.1
Total non-current assets		**707.0**	**632.4**
Current assets			
Work in progress	12	0.1	0.1
Receivables	13	28.2	27.5
Cash and cash equivalents	14	16.4	20.9
Total current assets		**44.7**	**48.5**
Total assets		**751.7**	**680.9**
Current liabilities			
Trade payables and other liabilities	15	239.9	175.9
Short-term provisions	16	8.2	9.1
Total current liabilities		248.1	185.0
Non-current assets less net current liabilities		**503.6**	**495.9**
Non-current liabilities			
Trade payables and other liabilities	15	3.8	1.7
Long-term provisions	16	1.2	1.2
Total non-current liabilities		5.0	2.9
Assets less liabilities		**498.6**	**493.0**
Taxpayers' equity and other reserves			
Revaluation surplus	SoCiTE	222.3	202.9
General fund	SoCiTE	276.3	290.1
Total taxpayers' equity		**498.6**	**493.0**

The notes on pages 095-122 form an integral part of these accounts

The financial statements were signed on 8 September 2022.
The Accounts were authorised for issue on the date of certification by the Comptroller and Auditor General.



Paul Hollinshead

Chief Executive

Statement of Cash Flows (SoCFs)

for the year ended 31 March 2022

	Note	2022 £ million	2021 £ million
Cash flows from operating activities			
Net operating income / (expenditure)	SoCNE	1.5	(39.0)
Adjustments for non-cash transactions:			
Depreciation and impairment	4, 8	23.5	51.3
Loss on sale of property, plant and equipment	4	0.4	0.0
Write-on of building asset	3	0.0	(0.2)
Amortisation and impairment	4, 10	2.5	1.3
Reclassification of previous year property, plant and equipment spend as revenue	8	1.7	1.5
Reclassification of previous year intangible asset spend as revenue	10	0.0	0.4
Notional audit fee	4	0.1	0.1
Impairment / (reversal of impairment) of non-current financial asset	4	(0.2)	0.3
Provisions provided in year	4	3.0	4.2
Provisions not required written-back	4	0.0	(0.4)
Net operating expenditure before changes in working capital		**32.5**	**19.5**
Decrease in work in progress		0.0	0.2
Decrease in trade receivables and other receivables		0.3	4.4
Increase in trade payables and other liabilities[1]		74.3	15.3
Use of provisions		(4.0)	(0.3)
Net cash inflow from operating activities		**103.1**	**39.1**
Cash flows from investing activities			
Purchases of property, plant and equipment[1]	8	(77.3)	(77.9)
Purchases of intangible assets[1]		(7.2)	(0.9)
Finance income		0.0	0.0
Net cash (outflow) from investing activities		**(84.5)**	**(78.8)**
Cash flows from financing activities			
Net funding received from MOD in-year[2]	SoCiTE	(23.1)	10.5
Net cash inflow / (outflow) from financing activities	14.1	**(23.1)**	**10.5**
Net financing			
Net decrease in cash and cash equivalents		(4.5)	(29.2)
Brought forward cash and cash equivalents		20.9	50.1
Carried forward cash and cash equivalents	14	**16.4**	**20.9**

[1] Increase in cash inflows from trade payables and other liabilities is after taking account of £8.1 million decrease in non-cash movement for purchase of non-current assets (2020/21: £6.1 million increase), and an increase in capital provision of £1.3 million (2020/21: £5.0 million).

Property, plant and equipment additions of £68.4 million in Note 8 includes a decrease in non-cash trade payables and other liabilities, and provisions of £8.9 million.

Intangible asset additions of £8.0 million in Note 10 include an increase in non-cash trade payables and other liabilities of £0.8 million.

[2]

	Note	£ million
Cash received from MOD		565.0
Bookkeeping adjustments for transactions with MOD		(588.1)
Net funding received from MOD in-year	**SoCiTE**	**(23.1)**

The notes on pages 095-122 form an integral part of these accounts

Statement of Changes in Taxpayers' Equity (SoCiTE)

for the year ended 31 March 2022

	Note	General Fund £ million	Revaluation Surplus £ million	Total Taxpayers' Equity £ million	Total Comprehensive Net Expenditure £ million
Balance at 1 April 2020		**312.5**	**205.7**	**518.2**	
Net equity investment received from MOD during the year		10.5		10.5	
Surplus on revaluation of property, plant and equipment	8		3.2	3.2	3.2
Transfer to general fund realised depreciation			(5.9)	(5.9)	(5.9)
Transfer to general fund realised amortisation			(0.1)	(0.1)	(0.1)
Net gains and losses recognised in the Statement of Comprehensive Net Expenditure		**0.0**	**(2.8)**	**(2.8)**	**(2.8)**
Auditor's remuneration (notional)	4	0.1		0.1	
Net operating expenditure	SoCNE	(39.0)		(39.0)	(39.0)
Net finance income	6, 7	0.0		0.0	0.0
Transfer to revaluation surplus realised depreciation and amortisation		6.0		6.0	
Balance at 31 March 2021		**290.1**	**202.9**	**493.0**	**(41.8)**
Net equity investment received from MOD during the year[1]	14.1	(23.1)		(23.1)	
Surplus on revaluation of property, plant and equipment	8		27.0	27.0	27.0
Surplus on revaluation of intangible assets	10		0.1	0.1	0.1
Transfer to general fund realised depreciation			(7.6)	(7.6)	(7.6)
Transfer to general fund realised amortisation			(0.1)	(0.1)	(0.1)
Net gains and losses recognised in the Statement of Comprehensive Net Expenditure		**0.0**	**19.4**	**19.4**	**19.4**
Auditor's remuneration (notional)	4	0.1		0.1	
Net operating expenditure	SoCNE	1.5		1.5	1.5
Net finance income	6, 7	0.0		0.0	0.0
Transfer from revaluation surplus realised depreciation and amortisation		7.7		7.7	
Balance at 31 March 2022		**276.3**	**222.3**	**498.6**	**20.9**

Net equity investment received from MOD

	Note	£ million
Balance at 31 March 2021		168.6
[1] Net equity investment received during the year	14.1	(23.1)
Balance at 31 March 2022		**145.5**

The notes on pages 095-122 form an integral part of these accounts

Notes to the accounts

1. Accounting policies

(a) Statement of accounting polices
The financial statements have been prepared in accordance with the 2021/22 Government Financial Reporting Manual (FReM) issued by HM Treasury. The accounting policies contained in the FReM 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) below), intangible assets (see Note 1(j) below), and non-current financial assets (see Note 1(d) (ii) below).

(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.

The Agency's going concern assertion has not been affected by the COVID-19 pandemic or the Ukraine conflict.

(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) below), 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 DRC estimation technique for the valuation of freehold land employs the Alternative Site Approach. This represents the lowest price the Agency would pay for an alternative plot of land that is in an appropriate location, and is appropriate for the Agency's operations.

→ **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 significant 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. MOD revalues 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. The Agency considers the lease to be an operating lease because agreement has been made with the owner to exit the site and terminate the lease on 31 March 2023.

There are a few other non-material property operating leases where the Agency occupies a building, or part of a building under terms that have a duration of five years or less. It is unlikely that these leases would be extended to the point where the Agency would consume substantially all of the asset's useful economic benefit, and therefore it is considered appropriate to account for them as operating leases. Commitments under leases are disclosed in Note 17. The impact of adoption of the new standard for leases, IFRS16: Leases, from 1 April 2022 is discussed in Note 1(y), below.

(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 £125.3 million (2020/21: £95.1 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 resulted in an estimate of 32% of all annual holiday to be outstanding at the year end. The total annual holiday accrual liability is £8.7 million (2020/21: £8.7 million). A variance of 5% to the proportion of holiday entitlement would vary this liability by £1.4 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. 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 obsolete. 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 2021.

Provisions relating to disputes with suppliers are measured following assessment of a range of settlement values attributed to likely outcomes that mature as negotiations progress. For further details, see Note 16.

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

Remote Contingent Liabilities
The measurement of the satellite collision remote contingent liability, has been derived on a worst case scenario by assessing the typical insurance cover held by commercial space companies for satellite loss and service disruption. For further details, see Page 083.

Contingent Liabilities
The measurement of the supplier contract amendments contingent liability has been derived from negotiations between DSTL and the supplier, an agreement of £295k limit of liability for each contract was deemed an appropriate value in respect of the inherent Covid-19 risks.

(e) Basis of consolidation
The Executive Agency has not consolidated its wholly owned subsidiary, Ploughshare, on grounds of materiality. See Note 1(d)(i) above.

(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. The Executive Agency classifies and measures its property, plant and equipment in accordance with IAS 16: Property, Plant and Equipment as adapted by the FReM.

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

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

For land, the DRC is derived with reference to the lowest amount that a purchaser would pay to acquire an alternate site appropriate for its operations in a relevant location at the valuation date. This would not necessarily be the value that the Agency's land could be sold for.

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.

Assets under construction are capitalised during the period of construction and on completion of the project or on delivery of an asset with phased deliveries, the costs are transferred to the asset register.

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. They are not material and are therefore only separately disclosed within the property, plant and equipment note in the year of their acquisition.

(h) Donated assets
Property, 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 or amortised 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 revalued, and depreciated or amortised 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 customer retains an interest in that asset, 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 during the period that the customer has an interest in the asset.

(j) Intangible assets
Intangible assets are capitalised in accordance with IAS 38: Intangible Assets as adapted by the FReM.

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 are held on MOD's non-current asset register where Defence Statistics indices are applied. For consistency, the Agency applies the same 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.

(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) Grant funding agreements
The terms and conditions of a grant agreement follow guidance provided by the Cabinet Office. Grant payments provided to academia bodies for eligible science and technology research are to cover expenditure incurred by the recipient for specified funded activities. The Agency will not pay the grant until it is satisfied that the grant recipient has paid for the funded activities in full and the funded activities have been delivered during the funding period. Eligible science and technology research may be funded by a single payment for specified performance criteria, or by a series of payments linked to multiple performance milestones. Where funding is provided to the Agency to design, put in place and project manage a grant agreement, the Agency is acting as a principal, and revenue and cost of sales are recognised as the performance criteria and deliverables specified in the agreement are met.

(n) Work in progress
Work in progress represents the value of partially completed milestones on firm-price contracts, and is stated at the lower of cost and net realisable value.

(o) 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 issuing an invoice to the customer.

(p) Financial instruments
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 19.

(q) 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.

(r) 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 paid and payable to the schemes in respect of the accounting period. Details of rates and amounts of contributions during the year are disclosed in Our People, starting on page 072.

(s) 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.

(t) Operating income
The amount of operating income recognised by the Executive 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. Pre-contract costs, which are not material, are expensed within other operating expenditure.

More than 93% 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. Consequently, the Agency does not adjust the contract prices for the time value of money.

(u) 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.

(v) 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 trading is at cost.

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

(x) 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 discloses 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 the associated footnote 2.

(y) 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.

The following new standard will be adopted by the Executive Agency as directed, interpreted or adapted by the FReM from 1 April 2022:

IFRS16: Leases
The standard was issued during January 2016 and intended to replace the previous standard for leases, IAS17. The standard provides a single lessee accounting model for recognising, measuring, presenting and disclosing leases. It requires recognition of all lease agreements whose duration extends beyond 12 months and the value of the underlying asset is not low. Measurement of a right of use asset will mainly be the present value of lease payments discounted using the implicit interest rate within the lease agreement. There will be a matching lease liability. The right of use asset will be depreciated on a straight-line basis during the term of the lease, and there will be an associated finance expense. 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. Where the implicit interest rate within the lease is not available, the lease payments will be discounted by the incremental borrowing rate as promulgated by HM Treasury. Re-measurements using revised rates will only occur where the lease term is amended.

The standard has been reviewed. The Agency's only material lease agreement is for the Fort Halstead site. Terms have been agreed with the lessor to exit by 31 March 2023, which takes this lease agreement outside of the scope of IFRS16.

The following is the expected opening SoFP adjustments relating to implementation of the standard on 1 April 2022.

	Buildings £ million	Plant and Machinery £ million	Total £ million
Right of use asset	2.0	0.1	2.1
Lease liability due within 1 year	(0.3)	0.0	(0.3)
Lease liability due after more than 1 year	(0.5)	0.0	(0.5)
Prepayment	0.0	(0.1)	(0.1)
General fund	(1.2)	0.0	(1.2)

Lease payments have been discounted using rates promulgated by HM Treasury for use during 2022/23.

The following is a comparison of the impact to SoCNE that IFRS16 is expected to have during 2022/23 when compared to the current standard for lease accounting, IAS17. It excludes lease arrangements that are outside of the scope of IFRS16 from the rentals expense for IAS17.

Year ending 31 March	IAS17 Rentals Expense £ million	IFRS16 Depreciation £ million	IFRS16 Finance Expense £ million	IFRS16 Irrecoverable VAT £ million	IFRS16 Total Charge £ million
2023	**0.5**	0.8	0.0	0.1	**0.9**
2024	**0.3**	0.7	0.0	0.0	**0.7**
2025	**0.2**	0.6	0.0	0.0	**0.6**

The main IFRS16 impact to the SoCNE is due to the dilapidation provision relating to a property lease to accommodate the Dstl Missile Evaluation Centre (DMEC) facility at Farnborough (see Note 16). This provision was expensed in a previous financial year. The transition accounting to implement IFRS16 from 1 April 2022 will derecognise the provision through the general fund, and then recreate it, with a contra debit to the right of use asset. This will result in a higher depreciation expense when compared with the rental expense currently incurred under IAS17. The SoFP impact will be the introduction of right of use assets, and lease liabilities.

The following new standard will be adopted by the Executive Agency as directed, interpreted or adapted by the FReM:

IFRS17: Insurance contracts
The standard was issued during May 2017 and will replace the previous standard for insurance contracts, IFRS4. The standard has not yet been implemented by the International Accounting Standards Board. HM Treasury are considering their interpretation and necessary adaptions of the standard for public sector context, and anticipate adoption during 2023/24.

The objective of the standard is to ensure insurance contracts are accounted for on a consistent basis, measured at the present value of future cash flows. It sets clearer requirements on recognition, classification, and measurement of assets and liabilities in relation to insurance contracts.

Currently, no future impact of the standard is expected as the Agency does not have any assets or liabilities recognised for insurance contracts.

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 scientific and technical services. The Agency derives more than 93% of its operating revenues from MOD, and more than 98% of its revenues from wider Government. More detailed disclosures can be found in Note 20, related-party transactions.

The measure of profit presented to the Board, the chief decision-maker, is the underlying operating profit that excludes the significant non-recurring operating items described in Note 5, and separately identified below. No measure of segmental assets and liabilities has been disclosed because this information is not regularly provided to the Board.

More than 98% 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.

Operating segment analysis for the year ending 31 March 2022:

		Chemical, Biological and Radiological Division	Cyber and Information Systems Division	Counter-Terrorism and Security Division	Exploration Division[1]	Platform Systems Division	Defence and Security Accelerator	Corporate	Internal Trading Adjustments	Total as per Financial Statements
	Note	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ milion	£ million
MOD Chief Scientific Adviser		60.7	111.4	51.6	36.8	160.3	2.4	2.5		425.7
MOD other		28.4	51.3	66.9	9.4	166.8	23.6	0.1		346.5
Wider Government		8.1	1.2	35.1	1.9	0.1	1.3	(0.2)		47.5
Non-Exchequer income		4.0	0.6	1.0	0.0	1.1	0.1	7.1		13.9
Operating income from contracts with customers	3	101.2	164.5	154.6	48.1	328.3	27.4	9.5		833.6
Other operating income	3	3.3	10.1	3.9	5.1	9.4	9.0	1.4		42.2
Income from other operating segments[2]		11.6	17.5	14.2	30.1	23.1	0.0	2.9	(99.4)	0.0
Operating income (internal and external)		**116.1**	**192.1**	**172.7**	**83.3**	**360.8**	**36.4**	**13.8**	**(99.4)**	**875.8**
Underlying net operating income / (expenditure)[3]		(6.3)	18.3	2.4	1.5	20.8	2.5	(37.5)		1.7
Significant non-recurring operating items	5	0.0	0.0	0.0	0.0	0.0	0.0	(0.2)		(0.2)
Net operating income / (expenditure)[4]		**(6.3)**	**18.3**	**2.4**	**1.5**	**20.8**	**2.5**	**(37.7)**		**1.5**
Finance income	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Finance expense	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Net income / (expenditure) for the year		**(6.3)**	**18.3**	**2.4**	**1.5**	**20.8**	**2.5**	**(37.7)**		**1.5**

[1] Mainly the former Defence and Security Analysis Division.

[2] 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.

[3] Underlying net operating income / (expenditure) is the measure of profit or loss routinely presented to the Board.

[4] Within net operating income / (expenditure) are depreciation, amortisation and impairments expensed as follows:

	Note	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Depreciation and impairment of property, plant and equipment		0.0	0.0	0.0	0.0	0.0	0.0	23.5		23.5
Amortisation and impairment of intangible assets		0.0	0.0	0.0	0.0	0.0	0.0	2.5		2.5
Impairment of investment in non-current financial asset		0.0	0.0	0.0	0.0	0.0	0.0	(0.2)		(0.2)
Total depreciation, amortisation and impairment	4	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**25.8**		**25.8**

Continued on page 103

The comparatives for the year ending 31 March 2021:

	Note	Chemical, Biological and Radiological Division	Cyber and Information Systems Division	Counter-Terrorism and Security Division	Exploration Division[1]	Platform Systems Division	Defence and Security Accelerator	Corporate	Internal Trading Adjustments	Total as per Financial Statements
		£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
MOD Chief Scientific Adviser		38.9	87.8	45.7	39.7	146.9	2.6	2.7		364.3
MOD other		24.1	45.5	58.3	11.2	135.7	17.3	0.4		292.5
Wider Government		11.4	0.9	39.1	2.0	0.1	1.8	0.9		56.2
Non-Exchequer income		3.7	1.2	1.2	0.0	0.2	0.0	6.6		12.9
Operating income from contracts with customers	3	78.1	135.4	144.3	52.9	282.9	21.7	10.6		725.9
Other operating income	3	1.5	3.7	2.3	0.0	4.7	0.0	4.7		16.9
Income from other operating segments[2]		7.9	13.9	12.5	40.0	21.4	0.0	1.4	(97.1)	0.0
Operating income (internal and external)		**87.5**	**153.0**	**159.1**	**92.9**	**309.0**	**21.7**	**16.7**	**(97.1)**	**742.8**
Underlying net operating income / (expenditure)[3]		(10.0)	9.5	(0.3)	7.4	15.7	2.5	(28.1)		(3.3)
Significant non-recurring operating items	5	0.0	0.0	0.0	0.0	0.0	0.0	(35.7)		(35.7)
Net operating income / (expenditure)[4]		**(10.0)**	**9.5**	**(0.3)**	**7.4**	**15.7**	**2.5**	**(63.8)**		**(39.0)**
Finance income	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Net income / (expenditure) for the year		**(10.0)**	**9.5**	**(0.3)**	**7.4**	**15.7**	**2.5**	**(63.8)**		**(39.0)**

[1] Mainly the former Defence and Security Analysis Division.

[2] 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.

[3] Underlying net operating income / (expenditure) is the measure of profit or loss routinely presented to the Board.

[4] Within net operating income / (expenditure) are depreciation, amortisation and impairments expensed as follows:

	Note	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Depreciation and impairment of property, plant and equipment		0.0	0.0	0.0	0.0	0.0	0.0	51.3		51.3
Amortisation and impairment of intangible assets		0.0	0.0	0.0	0.0	0.0	0.0	1.3		1.3
Impairment of investment in non-current financial asset		0.0	0.0	0.0	0.0	0.0	0.0	0.3		0.3
Total depreciation, amortisation and impairment	4	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**52.9**		**52.9**

A summary of the business activities of the operating segments

→ 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 maintains and develops a range of capabilities that achieve the Division's vision of delivering transformational information superiority. Working with partners, the Division offers the capabilities that provide the skills, knowledge, expertise and facilities that underpin the outcomes needed to support Defence in Cyber, C4ISR and Space related areas – both now and in the future.

→ 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 Executive Agency.

→ **Exploration (EXP) (consists of mainly the former Defence and Security Analysis Division)**

The EXP Division was newly created at the beginning of the year and consists mainly of the former Defence and Security Analysis Division (DSA). The Division identifies and accelerates the delivery of transformative technology, systems, concepts and strategy for Defence and Security.

→ **Platform Systems (PLS)**

The PLS Division provides a single focus for platform-based capability covering all mission and weapons systems, and the related integrated survivability capabilities. The Division is responsible for all advice and solutions to capability gaps that require platform based solutions. This Division primarily supports the Front Line Commands.

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

DASA consists of personnel from Dstl, MOD including 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 and facilities management
- business information and communication 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	2022 £ million	2021 £ million
MOD		772.2	656.8
Chief Scientific Adviser	Over time	425.7	364.3
Other	Over time	346.5	292.5
Non-MOD		61.4	69.1
Wider Government	Over time	46.6	54.5
Wider Government	At a point in time	0.9	1.7
Non-Exchequer income	Over time	9.3	8.2
Non-Exchequer income	At a point in time	4.6	4.7
Total		**833.6**	**725.9**

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 specialist scientific and technical services. This is conducted principally in the UK in sterling. No other geographical market has contributed significantly to operating income. See Note 2 for operating segment disclosures.

	2022 £ million	2021 £ million
Other operating income		
Transferred from deferred income for non-MOD customer-funded non-current assets	0.2	0.2
MOD donated non-current assets	26.7	11.5
MOD other operating income[1]	13.7	0.0
Other miscellaneous income	1.6	5.2
Total	**42.2**	**16.9**

The main items representing other miscellaneous income includes receipts totalling £0.5 million from Home Office (2020/21: £3.8 million) for the transitioning of former Centre for Applied Science and Technology staff and facilities into the Agency, and £0.4 million recovery of non-salary costs for outward secondees (2020/21: £0.4 million). Income received from Ploughshare totalled £0.2 million for the provision of patent protection services and reward to inventors (2020/21: £0.2 million).

CBR Division received £0.2 million income for support to Public Health England (2020/21: £0.2 million) and £nil for the provision of biological samples (2020/21: £0.4 million).

During a 2020/21 visit to the Porton Down site by VOA, they valued a structure as a building asset that the Agency had expensed in a previous year. This was written-on as other operating income during 2020/21 at the valuation of £0.2 million.

Department for Business, Energy and Industrial Strategy (BEIS) provided £0.3 million grant income to fund Sentinel & Presympton (2020/21: £nil).

[1] MOD Defence Innovation Unit (DIU) provided £13.7 million of other operating income; Defence and Security Accelerator Division received £9.0 million contribution towards the Defence and Security seed fund; and Exploration Division received £4.7 million contribution towards Ploughshare's accelerator fund (2020/21: £nil).

Other operating income excludes recovery of salary costs for outward secondees which is treated as an offset against staff costs. See Our People on page 072.

4. Other expenditure

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

	2022 £ million	2021 £ million
Staff costs[1]		
Wages and salaries	185.8	180.5
Social security costs (including apprenticeship levy)	20.4	20.0
Other pension costs	48.0	47.2
Other staff costs	27.4	23.7
	281.6	**271.4**
Other cash items		
Purchase of direct goods and services	431.8	335.3
Operating lease rentals:		
Property	3.6	3.4
Plant	0.1	0.0
Travel, subsistence and hospitality	1.8	1.3
Training	1.9	1.4
Professional services	10.9	7.0
Foreign exchange losses	0.0	0.1
Purchase of other indirect goods and services	113.3	105.1
Total cash costs	**845.0**	**725.0**
Non-cash items		
Depreciation and impairment charge for year:	23.5	51.3
Depreciation of owned property, plant and equipment	24.7	18.0
Exceptional costs of impairment of property, plant and equipment	2.7	25.7
Exceptional costs of reversal of impairment of property, plant and equipment	(10.6)	0.0
Adjustment valuation of property, plant and equipment	6.7	7.6
Amortisation and impairment charge for the year:	2.5	1.3
Amortisation of software licences	0.9	1.2
Adjustment valuation of software licences	1.6	0.1
Loss on disposal of owned property, plant and equipment	0.4	0.0
Impairment / (impairment reversal) of non-current financial asset investment[2]	(0.2)	0.3
Auditor's remuneration and expenses[3]	0.1	0.1
Provisions provided in year	3.0	4.2
Provisions not required written-back	0.0	(0.4)
Total non-cash costs	**29.3**	**56.8**

[1] Staff costs are disclosed in more detail in Our People on page 072.

[2] Reversal of impairment of the carrying value of the Executive Agency's investment in Ploughshare. See Note 9.

[3] The notional audit fee for 2021/22 is £100,000 (2020/21: £93,000). 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 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.

	2022 £ million	2021 £ million
Helios[1]	7.9	9.7
Impairment of property, plant and equipment[2]	2.7	25.7
Reversal of Impairment of property, plant and equipment[3]	(10.6)	0.0
Impairment of non-current financial asset[4]	0.0	0.3
Reversal of impairment of non-current financial asset[4]	(0.2)	0.0

[1] Costs of withdrawal from the Agency's site at Fort Halstead under the Helios Project. This includes a provision for costs expected to be incurred to exit the lease agreement.

[2] The impairment consists of:
a) A downward revaluation of £1.0 million by Valuation Office Agency (VOA) of building assets at the Porton Down site as at 1 November 2021; and
b) Index movements, mainly impacting buildings, reducing asset values by a further £1.4 million; and
c) A write-down of £0.3 million relating to an asset under construction where a delayed procurement surpassed the expected period of use.

[3] Reversals of previous impairment relate to building assets. The valuation performed by VOA as at 1 November 2021 resulted in a reversal of impairment of £9.4 million. Index movements reversed previous impairments by a further £1.2 million.

[4] An assessment of the value of the Agency's investment in Ploughshare resulted in a reversal of previous impairment. The Agency values the non-current financial asset on a fair value through profit or loss basis taking the approach described in Note 1(d)(i).

6. Finance income

	2022 £ million	2021 £ million
Interest received and receivable from bank accounts	0.0	0.0
Total	**0.0**	**0.0**

7. Finance expense

	2022 £ million	2021 £ million
Interest paid and payable on loans	0.0	0.0
Unwinding of provision discounting	0.0	0.0
Total	**0.0**	**0.0**

No payments were made under the Late Payments of Commercial Debts (Interest) Act 1998 (2020/21: £145).

8. Property, plant and equipment

Property, plant and equipment movements during the year:	Land	Buildings	Plant and Machinery	Transport	IT and Communication Equipment	Assets Under Construction	Total
	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Valuations and gross modified historic cost							
Balance at 1 April 2020	104.5	343.8	47.4	0.4	20.7	124.0	640.8
Transfers between asset class	0.0	(0.3)	0.3	0.0	0.0	0.0	0.0
Additions	0.0	0.2	2.6	0.0	0.4	86.6	89.8
Transfers	0.0	0.0	12.2	0.1	26.4	(38.7)	0.0
Transfers from intangible assets under construction	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Transfers to intangible assets under construction	0.0	0.0	0.0	0.0	0.0	(2.6)	(2.6)
Reclassified as non-capital spend[1]	0.0	0.0	0.0	0.0	(0.1)	(1.4)	(1.5)
Disposals	0.0	0.0	(0.2)	0.0	(2.7)	0.0	(2.9)
Revaluations	5.5	(3.0)	0.5	0.0	0.8	0.0	3.8
Impairment	0.0	(26.5)	0.0	0.0	0.0	(0.5)	(27.0)
Balance at 31 March 2021	**110.0**	**314.2**	**62.8**	**0.5**	**45.5**	**167.6**	**700.6**
Additions	0.0	0.0	7.3	0.2	1.2	59.7	68.4
Transfers	0.0	13.3	6.5	2.1	5.7	(27.6)	0.0
Transfers to intangible assets under construction	0.0	0.0	0.0	0.0	0.0	(2.2)	(2.2)
Reclassified as non-capital spend[1]	0.0	0.0	0.0	0.0	0.0	(1.7)	(1.7)
Disposals	0.0	(0.5)	(2.1)	(0.1)	(6.5)	0.0	(9.2)
Revaluations	(9.0)	41.2	2.2	0.0	0.3	0.0	34.7
Impairment	0.0	(2.5)	0.0	0.0	0.0	(0.3)	(2.8)
Impairment Reversal	0.0	11.7	0.0	0.0	0.0	0.0	11.7
Balance at 31 March 2022	**101.0**	**377.4**	**76.7**	**2.7**	**46.2**	**195.5**	**799.5**
Depreciation							
Balance at 1 April 2020	0.0	(28.6)	(14.7)	(0.3)	(11.7)	0.0	(55.3)
Charge for year:							
historical	0.0	(5.9)	(5.7)	(0.1)	(6.3)	0.0	(18.0)
supplementary	0.0	(4.1)	(0.8)	0.0	(2.7)	0.0	(7.6)
impairment	0.0	1.3	0.0	0.0	0.0	0.0	1.3
Disposals	0.0	0.0	0.2	0.0	2.7	0.0	2.9
Revaluations	0.0	(0.4)	0.0	0.0	(0.2)	0.0	(0.6)
Balance at 31 March 2021	**0.0**	**(37.7)**	**(21.0)**	**(0.4)**	**(18.2)**	**0.0**	**(77.3)**
Charge for year:							
historical	0.0	(6.1)	(8.3)	(0.8)	(9.5)	0.0	(24.7)
supplementary	0.0	(5.7)	(0.6)	0.0	(0.4)	0.0	(6.7)
impairment	0.0	0.1	0.0	0.0	0.0	0.0	0.1
impairment reversal	0.0	(1.1)	0.0	0.0	0.0	0.0	(1.1)
Disposals	0.0	0.1	2.1	0.1	6.5	0.0	8.8
Revaluations	0.0	(6.9)	(0.7)	0.0	(0.1)	0.0	(7.7)
Balance at 31 March 2022	**0.0**	**(57.3)**	**(28.5)**	**(1.1)**	**(21.7)**	**0.0**	**(108.6)**
Net modified historic cost:							
Balance at 31 March 2022	**101.0**	**320.1**	**48.2**	**1.6**	**24.5**	**195.5**	**690.9**
Balance at 1 April 2021	110.0	276.5	41.8	0.1	27.3	167.6	623.3

[1] **Reclassified as non-capital spend**
Included within this balance are purchases of bulk items that individually do not meet the capitalisation criteria and consumables that had been erroneously included in assets under construction.

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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.

Accounting Policy Notes 1(d) and 1(f) provide the basis of valuation.

The land and building assets at Portsdown West were valued by Valuation Office Agency (VOA), an Executive Agency of HM Revenue and Customs, as at 1 November 2019. The land and majority of building assets at Porton Down were valued by VOA as at 1 November 2021.

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

During the year there were acquisitions of plant and equipment that were funded by non-MOD customers. They are not material, and are not separately identified.

Included within property, plant and equipment and assets under construction are assets donated by MOD and wider Government.

The following is a sub-set of the note relating to these donated assets:

	Buildings	Plant and Machinery	Transport	IT and Communication Equipment	Assets Under Construction [1]	Total
	£ million	£ million	£ million	£ million	£ million	£ million
Valuations and gross modified historic cost						
Balance at 31 March 2021	0.0	8.0	0.1	2.3	20.0	30.4
Additions	0.0	5.2	0.1	0.4	21.6	27.3
Transfers	1.2	5.2	2.1	0.8	(9.3)	0.0
Transfers to intangible assets under construction	0.0	0.0	0.0	0.0	(0.7)	(0.7)
Reclassified as non-capital spend	0.0	0.0	0.0	0.0	(1.5)	(1.5)
Revaluations	0.0	0.4	(0.1)	0.0	0.0	0.3
Balance at 31 March 2022	**1.2**	**18.8**	**2.2**	**3.5**	**30.1**	**55.8**
Depreciation						
Balance at 31 March 2021	0.0	(1.2)	(0.1)	(0.5)	0.0	(1.8)
Charge for year:						
historical	0.0	(3.5)	(0.8)	(0.9)	0.0	(5.2)
Revaluations	0.0	(0.1)	0.0	0.0	0.0	(0.1)
Balance at 31 March 2022	**0.0**	**(4.8)**	**(0.9)**	**(1.4)**	**0.0**	**(7.1)**
Net modified historic cost:						
Balance at 31 March 2022	**1.2**	**14.0**	**1.3**	**2.1**	**30.1**	**48.7**
Balance at 1 April 2021	0.0	6.8	0.0	1.8	20.0	28.6

[1] Within AUC is a balance of £7.2 million for re-provisioning facilities and accommodation at Porton Down as part of the integration of former Centre for Applied Science and Technology (CAST) staff. CAST had been an arm's length body of the Home Office, and their primary provider for science and technology. From 1 April 2018, this responsibility transferred to the Agency, and as part of the transition, the Home Office were invoiced for the cost of the integration, which included the capital cost of creating new facilities. From late October 2020, the source of funding was amended. The Home Office transferred a capital budget to the Agency's owning Department MOD to cover the completion of these facilities. The balance within donated AUC represents the capital cost invoiced and paid by the Home Office up until the capital budget transfer. The facilities are expected to complete during 2022, and once brought into service, will no longer be disclosed as donated assets because they are part-funded.

9. Non-current financial assets

	Note	Subsidiary Undertaking £ million
Valuation		
Balance at 1 April 2020		1.7
Additions		0.0
Impairment	11	(0.3)
Balance at 31 March 2021		**1.4**
Reversal of impairment	11	0.2
Balance at 31 March 2022		**1.6**

The Executive Agency's wholly owned subsidiary, Ploughshare, is not consolidated on grounds of materiality. See Note 1(d)(i).

The Agency re-assessed the value of its investment in Ploughshare as at 31 March 2022, which resulted in a reversal of impairment for the year of £0.2 million (2020/21: impairment of £0.3 million).

See Note 1(d)(ii) for details of the approach taken to calculate the recoverable amount. The method of accounting is fair value through profit or loss.

10. Intangible assets

Intangible asset movements during the year were:

	Purchased Software Licences £ million	Software Assets Under Construction £ million	Total £ million
Gross modified historic cost			
Balance at 1 April 2020	6.1	0.8	6.9
Additions	0.0	0.3	0.3
Transfers	2.6	(2.6)	0.0
Transfers from property, plant and equipment assets under construction	0.0	2.6	2.6
Transfers to property, plant and equipment assets under construction	0.0	(0.2)	(0.2)
Reclassified as non-capital spend	0.0	(0.4)	(0.4)
Balance at 31 March 2021	**8.7**	**0.5**	**9.2**
Additions	5.2	2.8	8.0
Transfers	2.3	(2.3)	0.0
Transfers from property, plant and equipment assets under construction	0.0	2.2	2.2
Disposals	(1.9)	0.0	(1.9)
Revaluations	0.1	0.0	0.1
Balance at 31 March 2022	**14.4**	**3.2**	**17.6**
Amortisation			
Balance at 1 April 2020	(3.3)	0.0	(3.3)
Charge for year:			
historical	(1.2)	0.0	(1.2)
supplementary	(0.1)	0.0	(0.1)
Balance at 31 March 2021	**(4.6)**	**0.0**	**(4.6)**
Charge for year:			
historical	(0.9)	0.0	(0.9)
supplementary	(1.6)	0.0	(1.6)
Disposals	1.9	0.0	1.9
Balance at 31 March 2022	**(5.2)**	**0.0**	**(5.2)**
Net modified historic cost:			
Balance at 31 March 2022	**9.2**	**3.2**	**12.4**
Balance at 1 April 2021	4.1	0.5	4.6

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The following is a sub-set of the note relating to intangible assets donated by MOD:

	Purchased Software Licences £ million	Software Assets Under Construction £ million	Total £ million
Gross modified historic cost			
Balance at 31 March 2021	0.2	0.3	0.5
Additions	0.4	0.4	0.8
Transfers	0.8	(0.8)	0.0
Transfers from property, plant and equipment assets under construction	0.0	0.7	0.7
Balance at 31 March 2022	**1.4**	**0.6**	**2.0**
Amortisation			
Balance at 31 March 2021	(0.1)	0.0	(0.1)
Charge for year:			
historical	(0.3)	0.0	(0.3)
Balance at 31 March 2022	**(0.4)**	**0.0**	**(0.4)**
Net modified historic cost			
Balance at 31 March 2022	**1.0**	**0.6**	**1.6**
Balance at 1 April 2021	0.1	0.3	0.4

11. Impairments

Impairments occurring during the year were charged either to profit or loss, or other comprehensive net expenditure as follows:

	2022 Profit or Loss £ million	2021 Profit or Loss £ million	2022 Other Comprehensive Net Expenditure £ million	2021 Other Comprehensive Net Expenditure £ million
Investment in non-current financial asset[1]	0.0	0.3	0.0	0.0
Investment in non-current financial asset impairment reversal[1]	(0.2)	0.0	0.0	0.0
Property, plant and equipment assets under construction[2]	0.3	0.5	0.0	0.0
Property, plant and equipment valuation[3]	2.4	25.2	10.5	6.4
Property, plant and equipment valuation impairment reversal[4]	(10.6)	0.0	0.0	0.0
Total	**(8.1)**	**26.0**	**10.5**	**6.4**

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

2 The impairment relates to a delayed procurement whose revised delivery date surpassed the expected period of use. The 2020/21 impairment relates to the Identity Access Management system (iDAM) (£0.3 million) and Services Integration Tooling (SIT) (£0.2 million) where the objectives and expected benefits derived from these capital project investments were not met.

3 The impairment relates to the application of indices, and professional valuations of property assets during the year. The main impairment flowing through other comprehensive net expenditure relates to a £9.0 million downward valuation of the Porton Down land following VOA valuation as at 1 November 2021.

4 The impairment reversal relates to the application of indices and professional valuations of property assets during the year.

12. Work in progress

	2022 £ million	2021 £ million
Total work in progress	**0.1**	**0.1**
Central Government bodies	0.0	0.1
Non-public sector organisations	0.1	0.0

13. Trade receivables and other assets

Amounts falling due within one year:

	2022 £ million	2021 £ million
Trade receivables	**8.2**	**6.8**
Central Government bodies	6.7	5.1
Trading funds	0.1	0.0
NHS Trusts	0.0	0.8
Local authorities	0.0	0.1
Non-public sector organisations	1.4	0.8
Contract assets	**8.1**	**10.1**
Central Government bodies	6.2	8.2
NHS Trusts	0.0	0.5
Non-public sector organisations	1.9	1.4
Deposits and advances – staff receivables	**0.2**	**0.2**
Other receivables	**0.1**	**0.1**
Central Government bodies	0.1	0.1
Prepayments and accrued income	**11.6**	**10.3**
Central Government bodies	1.1	0.6
Local authorities	0.7	1.1
Non-public sector organisations	9.8	8.6
Total	**28.2**	**27.5**

Amounts falling due after more than one year:

	2022 £ million	2021 £ million
Deposits and advances – staff receivables	**0.1**	**0.2**
Prepayments and accrued income	**2.0**	**2.9**
Central Government bodies	0.1	0.0
Non-public sector organisations	1.9	2.9
Total	**2.1**	**3.1**

Prepayments mainly consist of software licence agreements and software maintenance agreements £7.0 million (2020/21: £8.8 million) of which £1.8 million (2020/21: £2.6 million) relates to periods beyond a year; and rentals, service charges and rates on property leases £1.0 million (2020/21: £0.9 million).

14. Cash and cash equivalents

	2022 £ million	2021 £ million
Balance brought forward	**20.9**	**50.1**
Net change in cash and cash equivalent balances	(4.5)	(29.2)
Balance carried forward	**16.4**	**20.9**
The following balances were held at:		
Government Banking Service	14.3	17.1
Commercial banks	2.1	3.8
Balance carried forward	**16.4**	**20.9**

14.1. Reconciliation of cash flows arising from financing activities to net equity investment

	Cash Received from MOD	VAT Recoverable Transferred to MOD	Goods and Services Provided to MOD	Goods and Services Provided by MOD	Payroll Financed by MOD	Total Net Cash Inflow from Financing Activities
	Cash flows	Non-cash flow bookkeeping for transactions with MOD				
	£ million	£ million	£ million	£ million	£ million	£ million
Balance at 31 March 2021	1,787.0	(142.9)	(2,393.0)	83.6	833.9	**168.6**
Net change in financing activities for the year	565.0	(56.0)	(814.8)	27.6	255.1	**(23.1)**
Balance at 31 March 2022	**2,352.0**	**(198.9)**	**(3,207.8)**	**111.2**	**1,089.0**	**145.5**

15. Trade payables and other liabilities

Amounts falling due within one year. Long-term payables are held undiscounted. The effect of discounting is not material:

	2022 £ million	2021 £ million
Other taxation and social security	**2.2**	**2.1**
Contract liabilities	**10.2**	**7.5**
Central Government bodies	4.6	0.8
Non-public sector organisations	5.6	6.7
Trade payables	**59.9**	**37.4**
Central Government bodies	1.4	0.6
Local authorities	3.8	2.8
Non-public sector organisations	54.7	34.0
Other payables	**4.6**	**2.2**
Central Government bodies	0.9	2.2
Non-public sector organisations	3.7	0.0
Pay and expenses – staff payables	**4.6**	**4.6**
Accruals and deferred income	**158.4**	**122.1**
Central Government bodies	4.6	5.2
Local authorities	12.7	11.4
Non-public sector organisations	139.2	104.3
Staff	1.9	1.2
Total	**239.9**	**175.9**

Amounts falling due after more than one year:

	2022 £ million	2021 £ million
Other payables	**1.9**	**0.0**
Non-public sector organisations	1.9	0.0
Accruals and deferred income	**1.9**	**1.7**
Central Government bodies	1.8	1.3
Local authorities	0.1	0.2
Non-public sector organisations	0.0	0.2
Total	**3.8**	**1.7**

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Trade payables mainly relate to the purchase of direct goods and services £56.5 million (2020/21: £33.7 million) of which £49.9 million relates to subcontracted research (2020/21: £26.4 million).

Other payables mainly consist of the pension liability associated with holiday pay accrual £2.0 million (2020/21: £2.1 million).

Within accruals are direct costs £125.3 million (2020/21: £95.1 million) of which £110.6 million is subcontracted research (2020/21: £85.2 million). Capital accruals account for £9.2 million (2020/21: £4.8 million). Deferred income mainly relates to customer funded assets where the customer has retained an interest in the asset £2.0 million (2020/21: £1.9 million) of which £1.7 million falls due after more than one year (2020/21: £1.7 million).

16. Provisions for liabilities and charges

	Dilapidations and Remediation £ million	Facilities Management Provider Redundancies £ million	Supplier Claims £ million	Early Departure Costs £ million	Total £ million
Balance at 1 April 2021	4.7	0.3	5.0	0.3	10.3
Provided in the year	0.5	0.3	1.3	1.0	3.1
Provisions utilised in the year	(3.2)	0.0	0.0	(0.8)	(4.0)
Balance at 31 March 2022	**2.0**	**0.6**	**6.3**	**0.5**	**9.4**

Analysis of expected timing of cash flows:

	Dilapidations and Remediation £ million	Facilities Management Provider Redundancies £ million	Supplier Claims £ million	Early Departure Costs £ million	Total £ million
Between 1 April 2022 and 31 March 2023	0.8	0.6	6.3	0.5	8.2
Between 1 April 2023 and 31 March 2024	0.0	0.0	0.0	0.0	0.0
Between 1 April 2024 and 31 March 2026	1.2	0.0	0.0	0.0	1.2
From 1 April 2026 thereafter	0.0	0.0	0.0	0.0	0.0
Balance at 31 March 2022	**2.0**	**0.6**	**6.3**	**0.5**	**9.4**

No amounts are expected to be called after 31 March 2026 and therefore no further analysis is necessary for amounts after this date. The provision that is expected to crystallise after more than a year has been discounted. The discount value is not material.

Dilapidations and remediation

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. Utilisation of the provision will not be until beyond the expiry date of the new lease, 31 March 2025.

The Agency has an obligation to repair the roof of a listed building at the Fort Halstead site. This provision is expected to be utilised during the year ending 31 March 2023.

The Agency's early departure from the Fort Halstead site on 31 March 2023 has been agreed. During the year as negotiations matured the provision estimate was revised resulting in an increase of £0.5 million. £3.2 million of the provision has been utilised, £2.4 million relates to the compensation for early exit and £0.8 million represents payment for dilapidations in the year. The remaining £0.8 million of the provision is for additional dilapidations works expected to be utilised in 2022/23.

Facilities management provider redundancy costs

The Agency is committed to leaving the Fort Halstead site. On departure of the site, the Agency will be obligated to meet the redundancy costs for the employees of its facilities management partner based at the site. The provision is measured after considering some underlying variables such as staff turnover and future pay reviews, and will remain under review as the exit strategy matures. During the year, a review of the estimate resulted in the provision being increased by £0.3 million.

Supplier claims

The Agency has some supplier disputes in relation to its S&T services. Negotiations continue and settlements are expected to be reached during the year ending 31 March 2023.

Early departure costs

The Executive Agency meets the additional cost of benefits beyond the normal Civil Service pension arrangements in respect of employees who depart early. The Agency provides for this in full when the early departure agreement becomes binding. Payment values are established by My Civil Service Pension. The closing balance relates to the Agency's exit of the Fort Halstead site under the Helios Project.

Comparatives for the year ending 31 March 2021:

	Dilapidations and Remediation £ million	Facilities Management Provider Redundancies £ million	Supplier claims £ million	Early Departure Costs £ million	Total £ million
Balance at 1 April 2020	1.3	0.4	0.2	0.0	1.9
Provided in the year	3.6	0.0	5.0	0.5	9.1
Provisions not required written-back	(0.2)	(0.1)	(0.1)	0.0	(0.4)
Provisions utilised in the year	0.0	0.0	(0.1)	(0.2)	(0.3)
Balance at 31 March 2021	**4.7**	**0.3**	**5.0**	**0.3**	**10.3**

Analysis of expected timing of cash flows:

	Dilapidations and Remediation £ million	Facilities Management Provider Redundancies £ million	Supplier Claims £ million	Early Departure Costs £ million	Total £ million
Between 1 April 2021 and 31 March 2022	3.5	0.3	5.0	0.3	9.1
Between 1 April 2022 and 31 March 2023	0.0	0.0	0.0	0.0	0.0
Between 1 April 2023 and 31 March 2026	1.2	0.0	0.0	0.0	1.2
From 1 April 2026 thereafter	0.0	0.0	0.0	0.0	0.0
Balance at 31 March 2021	**4.7**	**0.3**	**5.0**	**0.3**	**10.3**

17. Commitments under leases

Operating leases

Commitments under non-cancellable operating leases to pay rentals after 31 March 2022 are analysed as follows:

	2022 £ million	2021 £ million
Property		
Due within one year	4.0	4.1
Due after one year but within five years	0.1	13.2
Total	**4.1**	**17.3**
Plant and equipment		
Due within one year	0.2	0.1
Total	**0.2**	**0.1**

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. There is no contingent rent or any significant restrictions concerning the use of the property.

During 2020/21, the Agency had given the landlord five years notice to cancel the lease in October 2025. Agreement has been reached to exit the site at an earlier date of March 2023. The agreement includes resolution of the 1 April 2017 rent review, and amounts payable by the Agency to transfer the risk of any future remediation of the site for contamination. These financial statements include a provision to settle the early exit. See Note 16.

18. Capital commitments

	2022 £ million	2021 £ million
Property, plant and equipment		
Capital expenditure that has been contracted but has not been provided for in the accounts	27.0	15.3
Capital expenditure that has been authorised but has not been provided for in the accounts	38.6	22.6
Intangible assets		
Capital expenditure that has been contracted 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.

This increased approval to £254.0 million at 2021 prices comprises £219.5 million capital and £34.5 million revenue. Within the approved £219.5 million capital authorisation, £91.8 million has been capitalised on completed projects. For the Core Enclosure element of the Helios Project, and the Chemical Weapons Defence Centre, which are both in progress, £119.1 million has been capitalised, £2.4 million has been contracted but has not been provided for, and £6.2 million has been authorised but not yet contracted.

19. Financial instruments

The Executive Agency reviews its credit risk by applying the simplified approach of the expected credit loss model to trade receivables and contract assets. There is currently no expectation of current or future material loss.

During the year ended 31 March 2020, the Agency released its doubtful debt provision of £2.6 million relating to its subsidiary, Ploughshare. Following Ploughshare’s capital reconstruction in that year, and a revised charging arrangement, there is no expectation of future credit losses. See Note 9.

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 93% of the Agency's sales are with MOD. Consequently, 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 risk. The Chief Financial 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.

The Agency’s customer profile leaves little exposure to credit risk. Approximately 98% of the Agency’s operating income is derived from wider government. No customers have requested a payment holiday, and there is no evidence that the Ukraine conflict will result in a bad debt write-off or impairment of contract assets.

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 the carrying value due to the short-term nature of these financial instruments.

The Agency's investment in its wholly owned subsidiary, Ploughshare, 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.

20. 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:

	2022 £'000	2021 £'000
Operating income	812,507.3	668,859.0
Purchases	28,921.2	23,792.9
Receivables	22.5	0.0
Prepayments	359.6	457.4
Accruals[1]	2,096.1	2,335.0

[1] The comparative for 2020/21 has been restated. An accruals adjustment had been made following receipt of final intra-Departmental accounting from MOD. This adjustment had not been made to the related-party accruals disclosure.

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:

	2022 £'000	2021 £'000
Operating income	258.5	219.9
Purchases	6,990.0	1,455.0
Receivables	0.0	67.0
Accruals	0.0	0.0

Tetricus Ltd

During 2020/21, the Agency sold its investment in Tetricus for £34,746.

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[1]		Trade Receivables[1]		Trade Payables[1]	
	2022 £'000	2021 £'000	2022 £'000	2021 £'000	2022 £'000	2021 £'000	2022 £'000	2021 £'000
Cabinet Office (excluding My Civil Service Pension)	221.4	1,452.0	6,315.5	2,170.1	0.0	66.3	14.6	82.6
Centre for Protection of National Infrastructure	1,506.6	1,514.2	8.0	0.0	182.7	148.5	0.0	0.0
Defence Chemical, Biological, Radiological and Nuclear Centre	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Defence Electronics and Components Agency	6.0	7.7	76.4	263.2	0.0	2.4	87.5	0.0
Department of International Trade	0.0	14.0	0.0	0.0	0.0	16.8	0.0	0.0
Department for Business, Energy and Industrial Strategy	1,378.2	18.3	0.0	0.0	74.8	0.0	0.0	0.0
Department for the Environment, Food and Rural Affairs	1,575.4	281.8	0.0	58.3	521.1	108.4	0.0	0.0
Department for Transport	6,400.9	11,202.5	0.0	0.0	19.1	267.8	0.0	0.0
Department of Health and Social Care	0.0	3,598.5	1,808.5	0.0	0.0	0.0	0.0	0.0
Engineering and Physical Sciences Research Council	0.0	0.0	1,544.1	1,944.7	0.0	0.0	86.0	251.6
Foreign and Commonwealth Office	76.4	85.5	0.0	9.3	111.2	120.5	0.0	0.0
Government Office for Science	182.4	0.0	0.0	0.0	117.5	0.0	0.0	0.0
Government Communications Bureau	17.2	772.2	88.2	301.7	0.0	403.0	0.0	0.0
Government Communications Centre	1,440.2	2,951.3	231.6	2,462.9	46.1	194.1	0.0	0.0
Government Communcations Planning Directorate	2,234.9	0.0	4,185.3	0.0	153.8	0.0	0.0	0.0
Government Legal Department	0.0	0.0	64.9	32.3	0.0	0.0	0.0	0.0
Health and Safety Executive	765.4	301.6	109.4	195.0	817.7	209.5	0.0	42.5
HM Prison Service	331.4	0.0	0.0	0.0	276.4	0.0	0.0	0.0
Home Office	28,114.3	32,040.1	124.7	31.0	1,224.1	2,259.0	4.0	134.8
Innovate UK	22.0	408.9	0.0	0.0	0.0	0.0	0.0	0.0
Medical Research Council	503.5	430.3	0.0	0.0	88.9	86.9	0.0	0.0
Meteorological Office	60.6	0.8	72.0	60.1	0.0	0.0	0.0	0.0
Metropolitan Police	146.0	0.0	0.0	0.0	227.3	0.0	0.0	0.0
National Crime Agency	211.0	355.0	0.0	0.0	153.2	63.0	0.0	0.0
Porton Biopharma	581.2	665.4	0.0	0.0	168.8	467.1	0.0	0.0
Science and Technology Facilities Council	0.0	0.0	377.3	486.3	0.0	0.0	0.0	120.0
Scottish Government	0.0	0.0	309.1	0.0	0.0	0.0	0.0	0.0
The Bio-technology & Biological Sciences Research Council	0.0	0.0	550.0	0.0	0.0	0.0	0.0	0.0
The Mayor's office for Policing & Crime	0.0	0.0	373.1	0.0	0.0	0.0	0.0	0.0
UK Health Security Agency (formerly Public Health England)	841.7	3,215.7	416.4	563.4	1,431.0	1,236.8	115.5	10.1
UK Space Agency	939.2	864.8	0.0	0.0	457.4	35.0	0.0	0.0

[1] 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.

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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 page 066. Tax and pension payments are made by MOD on behalf of the Agency.

21. Contingent liabilities

During the previous financial year, the Agency had agreed two contract amendments, both limited to £295,000 and with the same supplier, to cover additional building construction costs incurred because of the Covid-19 pandemic. The limited liability relates to the possibility that the supplier and its supply chain cannot meet its obligations due to the risk of not being able to source labour or materials. A reasonable value for this risk could not be agreed within the firm price of the original contracts because of the inherent uncertainty of the impact of the pandemic. One of these limited liability contract amendments remain extant until the end of April 2022.

For remote contingent liabilities, see page 083.

22. Events after the reporting period

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

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.

7 / Glossary

AI	Artificial Intelligence
APP	Air Platform Protection
ARAC	Audit and Risk Assurance Committee
C4	Command, Control, Communications and Computers
CAST	Centre for Applied Science and Technology
CMRE	Centre for Maritime Research and Experimentation
CPNI	Centre for the Protection of National Infrastructure
CRR	Corporate Risk Register
CSA	Chief Scientific Adviser
CSAT	Customer Satisfaction Survey
CSUP	Customer Single Use Plastic
CT	Control Total
CTW	Contracted Temporary Worker
CUE	Contested Urban Environment
DASA	Defence and Security Accelerator
DESA	Defence Equipment Sales Authority
DIA	Defence Internal Audit
DIO	Defence Infrastructure Organisation
DPA	Data Protection Act
DREAM	Defence Related Environmental Assessment Methodology
DSAR	Data Subject Access Request
DST	Defence Science and Technology
EMC	Executive Management Committee
EV	Electronic Vehicle
EWC	European Waste Catalogue
FCAS	Future Combat Air System
FOAM	Freedom of Action and Manoeuvre
FReM	Financial Reporting Manual
FTE	Full-Time Equivalent
FY	Financial Year
GGC	Greening Government Commitment
GHG	Greenhouse Gas
GWP	Global Warming Potential
IADS	Integrated Air Defence Systems
ICE	Internal Combustion Engine
IFRS	International Financial Reporting Standards
IR	Integrated Review
ISO	International Organisation for Standardisation
ISR	Intelligence, Surveillance and Reconnaissance
IT	Information Technology
JSP	Joint Services Publication
KPI	Key Performance Indicator
LOA	Levels of Ambition
MDI	Multi-Domain Integration
MOD	Ministry of Defence
MyCSP	My Civil Service Pension
NCPA	Non-Consolidated Performance Award
NCSC	National Cyber Security Centre
NEM	Non-Executive Member
NGAS	Next Generation Air Survivability
NICD	National Innovation Centre for Data
NMH	New Medium Helicopter
NZ50	Net Zero Greenhouse Gas Emissions by 2050
P3	Portfolio, Programme and Project
PCR	Public Contract Regulation
PM	Performance Measure
Q	Quarter
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations

S&T	Science and Technology
SAGE	Scientific Advisory Group for Emergencies
SCS	Senior Civil Service
SEMS	Safety Environmental Management System
SME	Small and Medium-sized Enterprise
SPI-M	Scientific Pandemic Influenza – Modelling
SR	Spending Review
SSL	Sopra Steria Ltd
SSRB	Review Body on Senior Salaries
SSSI	Site of Special Scientific Interest
STEM	Science, Technology, Engineering and Mathematics
SV	Social Value
UAV	Uncrewed Aerial Vehicle
ULEV	Ultra-low Emissions Vehicle
UOR	Urgent Operational Requirement
VCDS	Vice Chief of Defence Staff
VOA	Valuation Office Agency
VOIP	Voice Over Internet Protocol

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