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## Mission, vision and values of Dstl



### Mission

Our mission describes the fundamental purpose of the organisation in terms of the impact we want to make in the world. It addresses what we are passionate about doing, what motivates us.

**Our mission is to create the winning edge for UK forces and government through the best use of science and technology.**

### Vision

Our vision describes the kind of organisation we aspire to be. It is an expression of what would constitute success in three, five or ten years.

**Our vision is to be the indispensable source of science and technology at the heart of defence.**

### Values

The type of organisation Dstl becomes corporately, and what will distinguish us from others, will be defined by the way we behave as individuals. Our values describe the way we behave, day by day.

- Supporting each other regardless of position in the organisation
- Cherishing knowledge
- Commitment to the public interest
- Responsiveness
- Excellence
- Creativity

### The work we do

We provide the core science and engineering expertise to government on defence-related science and engineering. We do that work which is most appropriate to do within government, and do not wish to undertake work that can be readily undertaken in the commercial market place or in academia. In those cases, we wish to build value-adding partnerships with such organisations for mutual benefit including licensing our innovative technology.

We undertake three broad types of work:

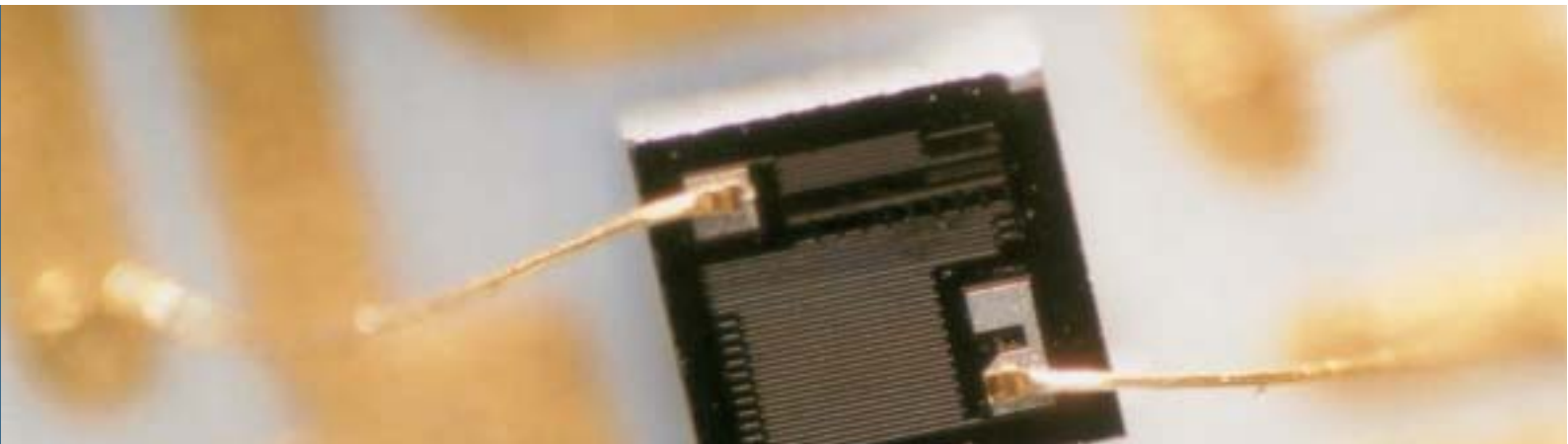
**Systems** - the creation of technically viable system options to meet the customer's capability needs. The assessment of the performance, technical risks and effectiveness of systems. Understanding how to upgrade, support and achieve best value for money in acquisition of systems. Advice on the effective use of systems in operations and providing authoritative understanding of how technical and operational issues impact on high level policy decisions in government.

**Technology** - expertise in defence-specific technologies.

**Science** - creation of deep expertise in core science subjects not readily available commercially with specific emphasis on the life sciences.

Defence Science and Technology Laboratory

Annual Report and Accounts 2002/2003



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## Foreword



Following a busy first year in which we had to rise to the challenge of creating a new organisation with a new role, I am pleased to say that Dstl's second year has been one of consolidation and achievement. Financially, turnover for the year was up 7.5%, and operating profit amounted to £13.3 million, in line with original expectations. We also achieved our targets on ROCE and charge-out rates to our customers. The management structures and processes that we introduced last year have continued to prove successful, enabling us to concentrate on the core business of providing excellent scientific and technical advice to our customers in MOD and more widely in government.

Some of the highlights of the past year are illustrated in this Annual Report. It is worth mentioning in particular the support Dstl provided during military operations in Iraq, including in the operational theatre itself. Op Telic, as it became known, saw the largest deployment of scientific personnel by the UK since the Second World War. Another one of our success stories has been the level of technology transfer to the civil sector demonstrated by new licensing opportunities and a number of successful joint venture companies. We intend to develop this activity further and already have a number of other technologies to be exploited using these arrangements.

In our first Corporate Plan, we defined a set of critical success factors in the three areas most important to Dstl's continued development and future success: customer satisfaction, scientific excellence and staff satisfaction. We have made great strides in meeting our goals, summarised on page 24. In the relatively short time since Dstl was formed, we have won the confidence and trust of our customers in MOD. Our capability and the world class standing of a number of our teams have been recognised in an external technical benchmarking exercise. There have also been positive changes in staff perceptions of Dstl as an employer and the products and services we offer. But we recognise that there are still areas for improvement, and so the Corporate Plan for 2003/4 identifies three themes that will concentrate our effort on key issues, such as ensuring that we work in areas of most value to our customers and that we have the capabilities, skills and facilities to meet their needs in the future.

In the last year we have continued to move further towards Dstl becoming a single unified laboratory. This has involved further rationalisation of our sites to enable us to deliver improved value for money to our customers and a better working environment for our staff. Specifically, staff have been relocated from Chertsey to Fort Halstead and Porton Down, and from Bincleaves to Winfrith.

Both of these moves have already shown significant programme and operational benefits. Ministers also approved our proposal to establish a new hub at Portsmouth, with Fort Halstead and Porton Down as the other core sites. However, at the time of writing, the Portsmouth project has been put on hold while we look at a new option that has arisen at Farnborough. We regret the renewed uncertainty for our staff, and we will make every effort to reach a final decision quickly.

In our Corporate Plan for 2003/4, I predicted a period of relative stability for Dstl. Comparatively speaking I still believe this to be the case, but any organisation that stands still has the potential to grow stale. We will, of course, continue to develop and improve our systems and processes, with the aim of improving service, responsiveness and value for money for customers. A priority will be to ensure that we deliver high quality technical output on the issues that really matter. But we will also be focusing on our longer term objectives to instil a supportive and consistent culture in Dstl, and to provide a flexible working environment which promotes learning and the development of our staff. We will be encouraging everyone in Dstl to commit to these goals.

**Martin J Earwicker FEng**  
Chief Executive

## Finance highlights

Financially, the year under review saw Dstl take a further step in establishing itself, as it was the first full year of operation following the separation of DERA on 1 July 2001. Revised reporting and financial review processes were introduced to ensure a broader understanding of the financial position of Dstl amongst the staff. These changes, combined with tight internal control and the regular monitoring of financial performance, resulted in the National Audit Office being extremely positive in their assessment of Dstl's financial records and procedures.

Turnover for the year was up 7.5% at £343.5million (2002: Dstl element: £319.3 million) A strong performance in a year when Dstl was confirming itself as the indispensable source of science and technology at the heart of defence. In addition, Dstl continued to pursue projects that utilise Dstl technology and expertise to develop and exploit commercial opportunities.

Operating Profit for the period under review amounted to £13.3 million, in line with original expectations. A net exceptional credit amounting to £0.5 million, from the completion of the divorce of the computer networks between QinetiQ and the Dstl trading fund costing less than originally envisaged, resulted in a Profit on Ordinary Activities before interest of £13.8 million.

Dstl generated cash of £7.4 million and cash balances remained positive throughout the period aided by the early settlement of the loan notes from QinetiQ. These loan notes were settled on 4 March 2003 with an adjustment to the interest charge to reflect early settlement.

Capital expenditure was £10.1 million (2002: £17.8 million) of which £2.7 million represents the purchase cost of Portsmouth Main, £1.5 million relating to buildings and facilities at Porton Down and £1.2 million on electronic measuring equipment.

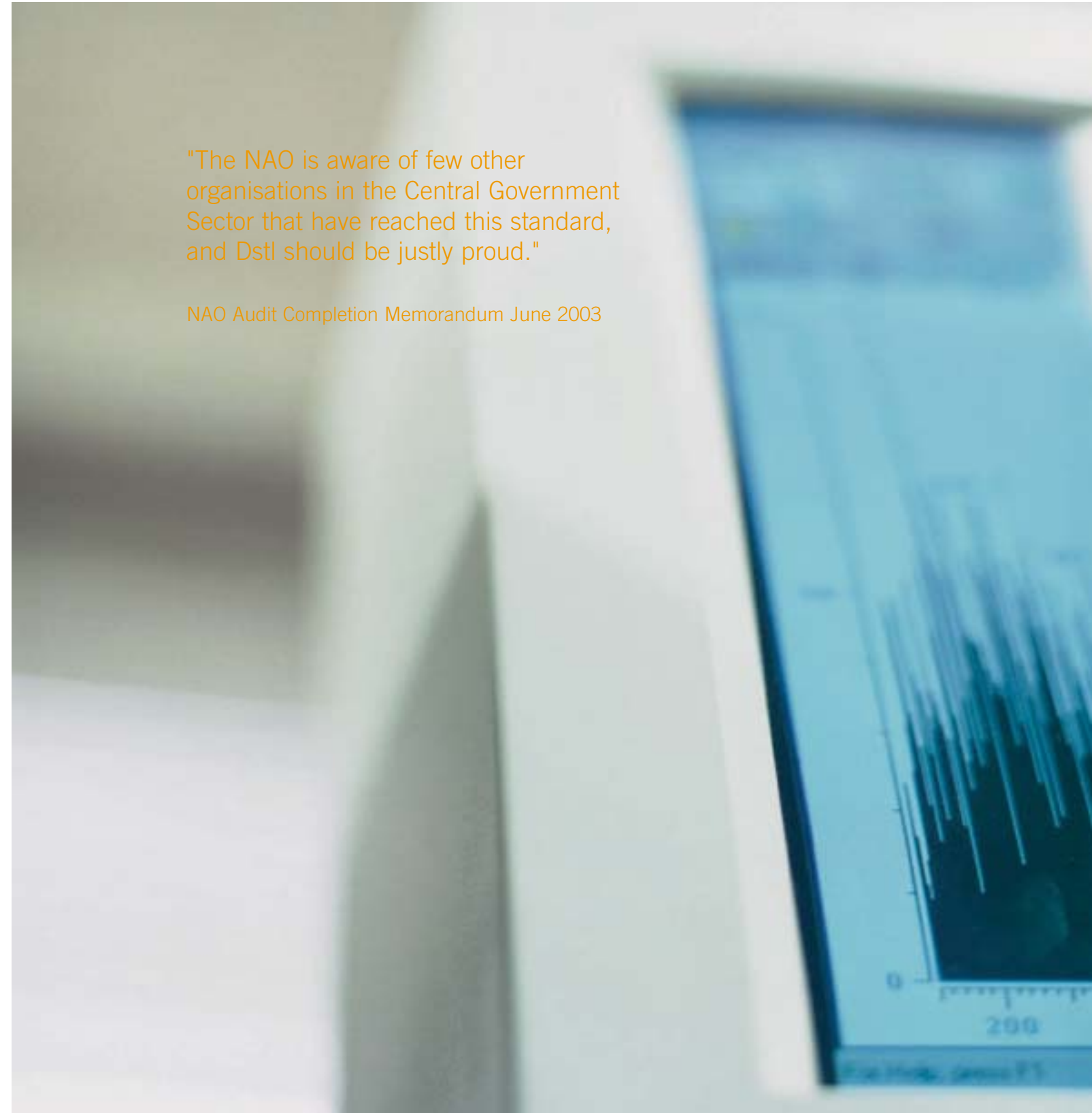
During this period Dstl received interest amounting to £1.5 million from the QinetiQ loan notes and surplus funds being placed on the money markets with Treasury approved institutions. This ensured that all funds were fully utilised. Interest amounting to £0.4 million was expended on the MOD loan that has an outstanding balance of £3.2 million as at 31 March 2003.

Return on capital employed was 9.2% (2002: 7.9%) before taking account of exceptional items and unusual impairments and 9.6% (2002: 4.6%) once these are taken into account. A dividend to be paid to MOD of £6.0 million (2002: £6.0 million) is proposed.

Performance against Key Targets and Key Targets for 2003/4 are given on pages 22 and 23.

"The NAO is aware of few other organisations in the Central Government Sector that have reached this standard, and Dstl should be justly proud."

NAO Audit Completion Memorandum June 2003



## People

We are committed to enabling our employees to realise their full potential. In the last year, the emphasis has been on improving processes to underpin this commitment. Our career levels process has been reviewed and made more consistent, the competency framework has been refreshed and the performance and development procedures simplified. In addition, target salaries have been introduced and pay increases are centrally determined based on an individual's contribution.

The technical excellence and high calibre of Dstl staff is recognised in the continuing increase in the number offered secondment and exchange opportunities within the rest of MOD and other government departments, both in the UK and overseas. We place considerable emphasis on the role that interchange/secondment opportunities can provide in the overall career development of staff. A significant aspect is the opportunity to extend technical breadth and to become involved in policy-related and strategic issues as well as the development of personal contacts and the exchange of ideas.

During the past year, 40 new secondments took place in comparison with 24 the previous year. Over 100 staff are now on secondment in the UK and a further 30 people are filling appointments overseas. We also encourage inward secondment/interchange and this programme is developing to include people from academia and industry as well as the rest of MOD. Staff are also able to take advantage of exchange schemes set up through International Research Collaboration programmes and we welcome overseas participants to the UK through these initiatives.

Dstl has a continuing requirement to recruit high calibre people and we are pleased that, in a competitive market, we continue to meet and exceed our recruitment targets. We are particularly pleased that we have increased our overall position this year in The Times Top 100 Graduate Employers survey from position 100 to 81 and in the research and development career sector of the survey from position 8 to 5.

Of the 464 people who joined Dstl in the period of the report, 358 were on permanent appointment with 10 fixed term appointments and 95 casual appointments. The latter included 59 student placements, which are particularly valuable in allowing students to sample what we can offer as a graduate employer. 32.5% of new staff were women (a small increase on the previous year), 3.2% were from the ethnic community (nearly double the previous year) and 1.1% were disabled.

Recruitment was carried out under the Civil Service Commissioners' fair and open competition rules.

Dstl staff have the opportunity to develop their careers through internal moves and jobs are, where appropriate, filled from the Job Opportunities internal advertisement process. 270 job opportunities were advertised in the last year. During the year, 126 staff resigned and 44 took normal age retirement at age 60. No posts were declared surplus but 9 took early retirement.

### Statement by Dstl trades unions

Once again, the past year has been a very busy one for the Dstl trades union side. We have been building on the trades union representation structure which we formed last year, and generally have been very successful. However, we need to develop a much wider pool of active TU members to ensure that the load on any one is manageable. We are grateful for the help and understanding of management in this effort. In particular we welcome the Chief Executive's view that trade union activity is positive, can be taken as evidence of an individual competence, and is an asset to career progression.

The most prominent discussions between TUs and Dstl management were over site rationalisation. Following receipt of the formal consultation document, we consulted fully with our members and submitted a comprehensive response. Although we remain unconvinced of the value of the rationalisation, the TU effort has now transferred to making the resulting relocations as smooth, painless and financially bearable as possible for staff.

Pay negotiations were conducted this year within a very constrained mandate from the Treasury. However, through negotiation, we believe that we obtained the best we could for the majority of staff. The TUs still do not agree with the concept of non-consolidated awards in basic pay and will be returning to the issue in future negotiations.

Many of the human resource procedures have been revised or updated during the year. We have been fully involved in reviewing these from a staff perspective and have managed to make some minor improvements.

We are continuing to increase our involvement in the organisation's health and safety which, following the fatal accident at Shoeburyness, has taken on a very high priority.

In summary, this has been a somewhat uncertain and difficult year for staff and a busy one for the trades unions. However there have been significant achievements and, in partnership with Dstl management, we look forward to building on these.

People are key to the success of Dstl. It is important to attract and retain the best people to ensure that technical capability is maintained, improved and developed.



### Staff opinion survey

A total of 360 staff, from across the Laboratory, took part in the second Dstl Staff Opinion Survey in October 2002. It was conducted by MORI, the independent research company in accordance with the Market Research Society Code of Conduct.

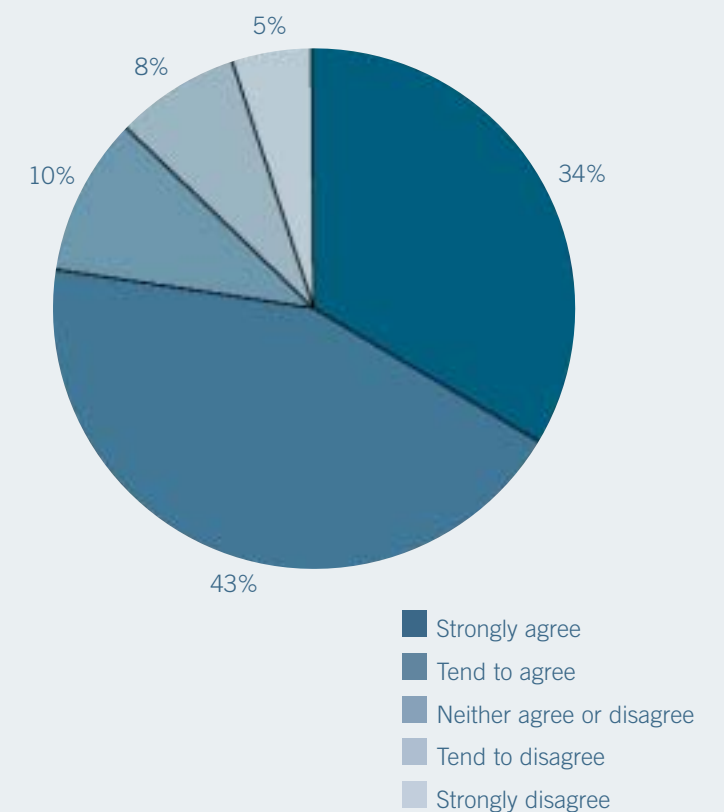
This year's findings are positive overall, building on a good set of results in 2001. Dstl has consolidated, and in some cases improved on, key strengths and action areas identified by staff in the 2001 survey.

There has been a further positive change in the way staff would speak about Dstl as an employer. 67% of staff, including some of those who had previously reserved judgement, are now inclined to speak positively about the organisation. Dstl has strengthened its position ahead of the MORI normative figure for all companies measured on this question.

Employees continue to feel very positive about Dstl's products and services. Three-quarters would speak highly about them, an increase of 10 percentage points since last year.

It is also reassuring to note that 77% feel positive about being part of Dstl. This is particularly welcome in the year in which we have been developing as an organisation and have announced our site rationalisation plans.

I feel positive about being part of Dstl



## Research and development

Dstl only undertakes research that is best carried out in government. Research is focused on those areas that will make a real difference to MOD, the UK military and government. To achieve the high added value product required, Dstl ensures that its research draws on and complements relevant work elsewhere whether it be in industry, academia or by its international research partners. Dstl has to maintain a research base that operates at the forefront of those areas identified as core to its role. To do this, Dstl is committed to the maintenance of high calibre teams and state of the art facilities.

### Electric armour – a breakthrough in active protection

Shoulder launched, rocket propelled grenade shaped charge anti-armour weapons are cheap and widely available. These weapons represent a significant threat as they can defeat lightly armoured vehicles.

The idea of defeating an explosively formed metal jet from an anti-armour shaped charge weapon using electrical energy was formulated by Dstl some years ago. In the meantime research and development to take the concept forward has proceeded apace, tackling the requirements for the whole system, including electrical generation, making significant improvements in efficiency and further reducing the already low system weight.

Recently an electric armour system was fitted to a fighting vehicle which was then attacked by shaped charge weapons on both its sides and roof. In all cases the prototype electric armour defeated the incoming weapon.

Manoeuvre warfare will see an increasing demand for speed and therefore lighter vehicles will be needed. This technology represents a major advance in the development of the armoured vehicles of the future. As the first demonstration of active protection this provides the UK with a significant technical lead.

### Non-thermal effects of RF & microwaves

Safety guidelines for RF/microwave exposure are largely based on the risk from elevation of body temperature. There are public concerns regarding the existence of non-thermal effects. Dstl has used models – cell cultures, simple organisms (nematodes) and isolated tissue slices – to identify effects from weak continuous and pulsed fields,



and to investigate the mechanisms of action. Reproducible effects have been demonstrated at non-thermal levels of these fields. The implications for human health, if any, have not yet been identified. Dstl models are being employed to investigate effects from communication systems such as the new Airwave system for UK emergency services.

### Stand-off detection of biological agents

Protecting people from the effects of biological weapons requires the most sensitive techniques of detection, as only a few organisms can cause a potentially fatal infection. It also requires early warning so that the most effective protective measures can be taken. In many situations it will be difficult to send complex instruments with their operators the necessary distance towards an enemy so that this early warning can be achieved. Dstl is pioneering techniques that use laser beams to probe the atmosphere over distances of several kilometres to detect the clouds of particles that would be associated with the dispersal of biological weapons. The beams of invisible ultra-violet light cause chemicals present in biological materials to fluoresce and this can be used to distinguish these materials from the dust that is always present in air. An innovative design of simple, but highly sensitive, optics is used to collect and measure both the distinguishing fluorescence and the light scattered by all particles. In this way it should be possible to distinguish anthrax particles from a cloud of dust caused by traffic or the wind.



### Military bomb disposal

A key tool in the armoury of military bomb disposal officers is a remote control vehicle, which allows operations to be conducted more safely through separation of personnel from the hazard. Advances in the field of materials science, control systems, manipulation techniques and communications, drawn in from industry and academia, have allowed a significant advance in the capabilities of remote control vehicles in this role. This test bed system (pictured right) was developed for trials to investigate how much more of the bomb disposal mission can be completed remotely, and how much more quickly it can be done. Semi-autonomous systems will be of increasing importance in emergency response as well as battlefield missions and Dstl is at the forefront of work to develop the technology and provide better military capability.

Dstl is committed to the maintenance of high calibre teams and state of the art facilities.



## Technical and exploitation

This year Dstl published its first Technical Strategy. The purpose of this document is to set out our view on the important science and technology issues influencing defence over the next ten to fifteen years. The document is the result of a comprehensive process of investigation, analysis and consultation with colleagues in MOD and elsewhere. In it we identify several key thrust areas where we believe science and technology research could make a significant difference to future military capability.

Thrust areas cover a diverse range of activities from the need to address equipment research associated with future manning of the armed forces to the requirement to solve challenging problems arising from the detection and identification of difficult targets.

However, writing down our strategy is just the first stage. We have, therefore, started to review our programmes of work to check that they are fully aligned with our view of future needs and in parallel we are assessing the skills and experience of our people to ensure that we have the right mix of capabilities to meet these emerging needs. Finally, we will continue to measure our technical performance to ensure that our work is of a high technical standard.

Ultimately we are committed to the principle that Dstl's resources are used to solve the key issues facing MOD in the future. Our Technical Strategy is the first step in a process of change that will ensure that we have the right capabilities delivered at the right time to meet MOD's future needs for science and technology advice.

### Knowledge transfer

Dstl has a clear policy of giving the highest priority to MOD and government work and ensuring that we protect our impartiality and independence. However, we also have an obligation to support government policy in developing the contribution of publicly funded science to wealth creation. We already have a good track record in this area with a number of successful joint venture companies currently in place and we continue to license our technologies extensively. This year we have consolidated our position. Firstly, together with our shareholder partners, we have achieved successful second round funding for two important joint



ventures – Alaska Food Diagnostics and Acolyte Biomedica, which will enable them to proceed towards commercial development of diagnostic products. We have also put in place measures to capture and stimulate new ideas for technology exploitation arising from our mainstream programmes in support of MOD, thus completing a virtuous circle which ensures that the fruits of current exploitation are used to develop seedcorn for the future. We have already identified a number of potential joint ventures and new licensing opportunities based on ideas emanating from this process. We believe that Dstl has the capacity to expand this area further.



### Acolyte Biomedica Ltd is developing rapid methods for identifying bacterial infections and their sensitivity or resistance to antibiotics.

Acolyte's novel technology platform, known as BacLite™ is set to revolutionise clinical diagnostic microbiology by replacing current methods taking 48-72 hours with an instrument-based system giving an answer in two to four hours. BacLite is able to read results direct from the patient specimen, reducing the laborious manipulation of bacterial cultures. The current market accessible by Acolyte's technology is estimated to exceed £1bn per annum.

BacLite is derived from military technology developed to detect biological warfare agents and represents a highly successful example of the civil application of defence technology. BacLite is based on ultrasensitive bacterial detection technology developed by Dstl. This uses the bioluminescent detection of adenylate kinase (AK), an enzyme found in all bacteria. AK provides a much more sensitive method of detection than standard techniques using adenosine triphosphate (ATP). BacLite couples AK detection to selective extraction methods to provide microorganism identification. Furthermore, the sensitivity of AK allows BacLite to monitor growth of organisms in the presence of selected antibiotics, enabling rapid information back to the physician as to which antibiotic to use. The proof of principle of the detection technology has already been demonstrated and Acolyte has recently taken delivery of a breadboard instrument system for automation of its assay methods. The next phase of this joint venture will develop the technology and instrument concepts to a point where they can be demonstrated to potential partners as working laboratory instruments. A design for a fully-automated BacLite system suitable for the hospital microbiology laboratory is shown opposite.

## Changing the way our forces operate

In 2002 the Secretary of State for Defence published the New Chapter of the Strategic Defence Review, responding to events of 11 September 2001. One of its central themes was the need for a "networked capability that will be fundamental to joint and coalition warfighting in the information age".

Network Enabled Capability (NEC) is MOD's initiative to address this need. At its simplest, NEC aims to integrate three elements:

- sensors, to gather information;
- command and control facilities, to exploit the information and to support military decision making;
- strike assets, to deliver military effect through a comprehensive network of communications and IT systems.

NEC offers the potential for dramatic increases in capability – the ability to decide and act more quickly and with greater agility, control and precision so that information advantage can be translated into synchronised and overwhelming military effect.

### Concept development

Achieving NEC will require many diverse components of military capability to work together in a mutually supportive manner, both now and in the future. A NEC concept is required to capture agreements on and communicate the principles that underpin NEC across the many stakeholders. Dstl, through its research programmes, is spearheading development of an overarching concept for NEC and supporting its realisation in the context of specific military capabilities. NEC cannot be treated solely as an equipment capability issue. Successful delivery of NEC will require parallel developments in and alignment with, for example, military doctrine, training and support policies. It will also require revised approaches to acquisition management. Moreover, Allied nations are developing closely related approaches. Sustaining and indeed improving Allied and Coalition interoperability is a key requirement of NEC.

Dstl's NEC concept research is informing:

- concepts for flexible force structures and agile task-based teams;
- new command styles and methods of working that will exploit NEC;
- policies and strategies for information sharing and exploitation;
- NEC capability planning and investment decisions;
- the design of reconfigurable, secure integrated information networks;
- management of the complex NEC equipment programme.

### Technology research

The successful realisation of NEC depends on the innovative application of technology, and in particular, information technology. Civil investment in IT research dwarfs that of defence, hence MOD's strategy is to exploit civil technology developments wherever possible. Frequently, it is necessary to adapt or develop these technologies to make them suitable for use in the defence environment. In some circumstances (for example, some aspects of IT security), bespoke development remains necessary to provide solutions to stringent defence needs.

As well as carrying out certain elements of the research, Dstl is also working closely with MOD's external research suppliers to ensure that their contribution to NEC is fully aligned with requirements and priorities.

### Experimentation and demonstration

The design and delivery of large-scale IT systems on the scale of NEC is a formidable task. MOD is placing great emphasis on major demonstrations and experiments, in the laboratory and in the field.

Dstl is an integral part of the MOD team responsible for planning and co-ordinating the NEC demonstration and experimentation programme. Its Joint Command and Battlespace Management Applied Research Technology Demonstrator (JCBMARTD) is providing a focus for NEC research experimentation and demonstrating the outputs of the research in a representative context. It also provides the host facility for the annual Joint Warrior Interoperability Demonstrator (JWID) programme, which seeks to demonstrate the military utility of emerging IT solutions.

## Network Enabled Capability – an overarching concept for future warfare



### NEC core themes

Dstl is working closely with MOD stakeholders (including joint and single-Service doctrine/warfare centres), OGDs, NGOs, allies and industry, to ensure a common understanding of NEC and to help align NEC-related activities.

Dstl was at the centre of the development of the NEC Core Themes, which aim to focus the many aspects of NEC into related groups to promote common understanding of NEC objectives.

The themes have now been endorsed by MOD as the key vehicle for describing and tackling NEC related issues. They provide a common reference point supporting coherent discussions among the many NEC stakeholders.

Agile mission groups	Enabling the dynamic creation and configuration of mission groups that share awareness and co-ordinate and employ a wide range of systems for a specific mission
Fully networked support	Allowing the ready use of non-frontline government bodies, industry, academia and public service capabilities to support operations
Flexible working	Enabling assets to reconfigure rapidly to meet changing mission needs, allowing them to work together with minimum disruption and confusion
Synchronised effects	Achieving overwhelming effects within and between Mission Groups by co-ordinating the most appropriate assets available in the battlespace through dynamic distributed planning and execution
Effects-based planning	Taking an approach to planning that focuses on the use of military and non-military effects required against an enemy and is integrated with other planning processes in the battlespace
Shared awareness	Providing a shared understanding and interpretation of a situation, the intentions of friendly forces and the potential courses of action amongst all elements in the battlespace
Full information availability	Enabling a user to search, manipulate and exchange information of different classifications captured by, or available in all sources internal and external to the battlespace
Resilient information infrastructure	Ensuring information resources can be managed and that secure and assured access is provided with the flexibility to meet the needs of Agile Mission Groups
Inclusive flexible acquisition	Co-ordinating process across MOD, OGDs and industry that promotes the rapid insertion of new technologies, facilitates coherence between acquisition programmes and provides an incremental approach to delivering 'net-ready platforms'

## Support in Iraq: Op Telic

For Dstl, support to what became known as Op Telic started in September 2002. Preliminary work was initiated on tasks such as data preparation, model development, and advising on equipment use in new environments. Dstl was able to draw on current research and expertise to give policy advice on a range of possible operational environments, with particular emphasis on likely chemical and biological threats. Research programmes were also modified to take into account possible urgent operational requirements (UORs).

As military involvement in Iraq became more probable, more than 100 Dstl staff were trained for possible deployment to an operational theatre. This was achieved through the 'Scientific Support in Crisis and War' project funded by MOD and administered by Dstl. Staff were trained in mine awareness, nuclear biological and chemical (NBC) procedures, and weapon safety, and had the necessary medicals and inoculations. They were also issued with the military equipment that they would need on a deployment.

As the pace of build-up to possible operations quickened, so the scope of Dstl support widened, focusing on both the analysis of contingency plans and the provision of specific scientific advice to a range of customers. These included Permanent Joint Head Quarters (combat analysis, casualty profiling), Director Joint Warfare (chemical, biological and radiological (CBR) advice), and other government departments such as the Department for International Development (post conflict scenarios) and the Department of Health (impact of a large conflict on the Health Service).

'Exercises' in the Middle East quickly turned into real operations. Staff were deployed with the National Contingent Commander in Qatar, with HQ 1 Div in Kuwait and Iraq, to air bases in Qatar, Kuwait and Saudi Arabia, and to the Naval Task Force in the Gulf. Around 30 staff spent significant time in theatre supporting combat analysis of operational plans and targeting analysis, providing logistics support, and advising on the impact of CBW issues on concepts of operation. Living under austere field conditions, staff had to contend with extremes of weather as well as the challenges of advising commanders in a fast paced, modern conflict.

While the actual fighting phase of the operation has finished, Dstl still has considerable resources focused on Op Telic. Analysis staff are still deployed in Iraq to support the military contributions to reconstruction, and scientific staff continue to give in-theatre advice to UK forces on a wide range of science and technology topics. An important part of the ongoing activity is to ensure that wider operational experiences can be taken into account in Dstl research programmes, as well as supporting the wider MOD 'lessons identified' process.



Dstl support has been characterised by rapid and effective response based on the capability established through its peacetime research programme and unique links with industry and government.

Dstl was able to draw on current research and expertise to give policy advice on a range of possible operational environments, with particular emphasis on likely chemical and biological threats. Dstl supported all phases of Op Telic with major contributions to:

- policy issues
- planning, what-ifs, risk management, UORs
- combat and aftermath support
- data collection and lessons identified

Dstl support has been characterised by rapid and effective response based on the capability established through its peacetime research programme and unique links with industry and government.

Dstl provided unique CBR defence expertise in the form of studies and advice during the pre-

deployment phase, and the deployment of CBR scientists to the coalition headquarters at Doha and with the RAF at Ali Al Salem. These scientists also provided support in theatre to the Joint NBC Regiment and provided a 'reach back' capability to the UK, where Dstl scientists provided round-the-clock support to the NBC Technical Advisory Group based at Winterbourne Gunner.

Dstl's strong links with industry led to the delivery of 14 CBR defence UORs. These included the fielding of the Portable Remote Illness and Symptoms Monitor, the Biological Agent Diagnostic System, a mobile analytical laboratory, as well as numerous enhancements to extend and improve the capabilities of in-service CBR defence equipments. A further example was the enhancement of the protection of UK helicopter platforms against attack from guided missiles.

## Support to acquisition



Dstl provides independent, authoritative and expert advice to MOD acquisition decisions across a wide range of systems

Although MOD is increasingly requesting scientific and technical advice in all the military lines of development, one of Dstl's major roles is to provide advice to support equipment acquisition decisions. Dstl contributes at all stages of MOD's Smart Acquisition cycle: from analysing the shortfalls in military capability, identifying and developing the concepts needed to make these good, through to supporting the selection of equipment suppliers, and beyond, once equipment has entered service.

To make a real difference to decision-making, Dstl must deliver integrated advice based on systems understanding and technical expertise and analysis. The formation of four systems departments has strengthened Dstl's ability to do this. These departments combine an ability to carry out operational analysis at the system and mission level with systems expertise and ready access to a wide range of technical and scientific expertise. It is also the case that a growing number of acquisition decisions cross system boundaries and span the expertise of many departments in Dstl. Here, strong technical and programme co-ordination is essential to provide a coherent output, and Dstl has started to identify technical leads for specific projects to meet this requirement.

To strengthen understanding of the issues of individual decision-makers and the processes within which they operate, Dstl maintains a close dialogue with MOD and its agencies. Dstl works with them to formulate advice and develop good practice in the use of analytic, systems and technical support in the continuing development of Smart Acquisition. Dstl also supports its own teams and individual staff members through the Equipment Acquisition Studies group, which provides advice, information and documentation on MOD's equipment acquisition processes and good practice.

In the past year Dstl has supported most major acquisition decisions for all three services and in all areas of military capability. These have included:

- the down-selection of the Joint Strike Fighter variant for the new Joint Combat Aircraft for the Royal Navy and RAF;
- definition and selection of new precision attack capabilities for the Army and RAF;
- analysis of the cost effectiveness of new concepts to provide a defence medical information capability;
- generating the analytic evidence to help decide the size and shape of the Royal Navy's future logistics capabilities.

### Future Rapid Effect System

The New Chapter of the Strategic Defence Review identified the importance to the UK of acquiring an expeditionary warfare capability, including the need to create a Future Rapid Effect System (FRES) concept based on a system of medium-weight armoured vehicles.

Dstl has played an instrumental role in shaping the FRES programme through:

- supporting the definition of the user's needs through the analysis of military capability requirements;
- exploring the influence of systems and technology options on programme plans;
- assessing the implications for affordability of the developing requirements.

The success of the Dstl programme has been underpinned by the close working of technologists, systems engineers, analysts and military staff in integrated teams under the management of a single technical lead. This 'interworking' approach has proved to be efficient and effective. It is planned to extend this in the next phase of the project with the creation of a deeply integrated systems and analysis programme that will enable efficient exchange of information between the FRES prime contractor, industry and government staff.



## Corporate governance



During the year Dstl has reviewed its approach to corporate governance to ensure that the system of internal control addresses key business issues in a way that adds value, but without being overly bureaucratic. The policy and processes for corporate governance have been endorsed by a special meeting of the Dstl Main Board. The following paragraphs outline progress in the three main areas – risk management, internal audit and business continuity.

### Risk management

Dstl established a risk management process early in its formation. The Corporate Plan for 2002/3 identified a number of top level risks, which have been reviewed at Board level and regularly assessed. The relationship between these and the risks identified in the Corporate Plan for 2003/4 are shown in the table opposite.

A number of factors that could have jeopardised Dstl's progress in its first year did not materialise, and have now been judged to present negligible risk. For example, a highly successful recruitment campaign, together with a good record of continuous professional development and increasing links to professional institutions, contradicted fears that Dstl would not be capable of attracting and developing high quality staff. Other risks, such as the need to keep pace with developments in the global S&T community, are ongoing and have been carried forward, and new ones have been added. Two of these relate to Dstl's plans to consolidate on 3 core sites.

In addition to identifying corporate level risks, Dstl has carried out a bottom-up risk assessment using a common methodology. This has resulted in the creation of a comprehensive risk register to ensure that there are no gaps in the risks recorded at corporate level and also to verify that departments are addressing the relevant high level risks.

Dstl has plans to improve further its capacity to manage risk, and is committed to learning from its experiences. A tragic example was the fatal accident at Shoeburyness in August 2002. Dstl responded with a thorough review of safety/health/environment/fire (SHEF) processes and practices, which resulted in a comprehensive Management Action Plan involving all operational departments and functional areas. The plan was implemented and completed within four months. It has reinforced the importance of embedding a strong health and safety culture in Dstl.

### Internal audit

Dstl has implemented a new process of audit to achieve a better oversight of the various elements of its operations which, at the same time, significantly reduces the burden upon staff. The new approach involves integrated audits of projects in which technical, project management, finance, quality, SHEF and security aspects will be assessed simultaneously. Depending upon the findings from the project audits, it is intended to carry out more specific audits in those functional areas for which it appears appropriate. Dstl has appointed PKF as their internal auditor from April 2003.

### Business continuity

Dstl has local recovery plans in areas where there is a strong customer requirement for continuity of support. There is also a comprehensive plan to ensure the maintenance of corporate IT networks. A business continuity co-ordinator has recently been appointed to develop these into a comprehensive recovery plan for the whole of Dstl.

Full details of Dstl's system of internal control are given in the statement preceding the accounts on pages 27 and 28.

	Corporate Plan 2002/3	Commentary		Corporate Plan 2003/4
CP1/02	Inability to respond to changes in MOD policy with regard to its supply base for science and technology research and advice	Risk modified in the light of current MOD policy and reflected in CP1/03 and CP2/03	CP1/03	Inadequate capability to meet future demands
			CP2/03	Not working on high added value work
CP2/02	An inability of Dstl to manage within its agreed financial framework and as a consequence failing to achieve its financial targets	Risk carried forward	CP3/03	An inability of Dstl to manage within its agreed financial framework and as a consequence failing to achieve its financial targets
CP3/02	Failure to provide an organisation that will attract and develop high quality staff capable of delivering the necessary support to government, including the sustainment of meaningful international co-operation	Risk reviewed and terminated		
CP4/02	Occurrence of a major safety, health, environmental or fire incident, particularly in a sensitive area of Dstl activities	Risk carried forward but words refined slightly	CP4/03	Major security or SHEF incident
CP5/02	A breakdown in the relationship with MOD stakeholders brought about by a lack of trust in the quality and impartiality of Dstl's scientific and technical advice	Risk reviewed and terminated		
CP6/02	Poor relationships with MOD industrial supplier base, including SMEs and academia	Risk reviewed and terminated		
CP7/02	A breakdown in the relationship with the defence research institutes of allies, caused either by lack of confidence in Dstl's technical competence or lack of trust in Dstl as the custodian of their sensitive information	Risk reviewed and terminated		
CP8/02	Failure to keep pace with developments in the global scientific and technology community	Risk carried forward	CP5/03	Failure to keep pace with developments in the global scientific and technology community
CP9/02	Lack of a coherence within Dstl in terms of its processes and practices leading to organisational fragmentation and stove piping	Risk reviewed and terminated.	CP6/03	Failure to achieve site rationalisation
			CP7/03	Significant staff losses as a result of site rationalisation

### Key targets 2002/3

Target	Commentary	Outcome
To achieve a Return on Capital Employed (ROCE) of 6.5%	The ROCE was 9.6%	Achieved
Manpower rate increase kept below the GDP Deflator with 2001/2 as the reference year, ie below £50.4	Achieved for 2002/3 £47.5	Achieved
To conduct customer and staff surveys, agreed by the owner, to obtain baseline scores (including customer assessments of quality, timeliness and costs)	<p>A customer satisfaction survey was carried out by Metra-Martech on behalf of Dstl. Overall, appreciation of Dstl's excellence, integrity, partnership and role were satisfactory to good.</p> <p>A second survey on Dstl staff opinion was carried out by MORI in October 2002. Despite the uncertainties surrounding the affect of site rationalisation plans on staff, Dstl consolidated and in some cases improved on key strengths and actions identified from the 2001 survey.</p>	Achieved
To conduct a benchmarking exercise, agreed by the owner, that compares the scientific and technical capability and standing of Dstl, and its infrastructure and staff cost base, with appropriate organisations. To develop suitable metrics and set baseline scores for these.	Dstl has developed a revised process for technical benchmarking that uses a combination of self assessment and external audit. After successfully piloting the new process we have carried out the self assessment part of the process across the Laboratory and are expecting to complete the external audit by the end of December 2003.	Achieved

### Key targets 2003/4



- 1 Propose simpler method of measuring customer satisfaction and at least maintain overall satisfaction and improved customer understanding of Dstl
- 2 Maintain and by the end of a three-year period show an increase in scores for scientific and engineering capability in the technical benchmarking exercise
- 3 Maintain accreditation to ISO9001: 2000; Good Laboratory Practice, IIP and other mandated quality and safety standards. Implement all recommendations arising from the SHEF audits and Board of Inquiry
- 4 Achieve a ROCE of 6.5% and a MOD dividend of £3million
- 5 Maintain the average charge rate for manpower for 2003/4 and beyond below that for 2001/2 uplifted by GDP deflator
- 6 Achieve planned progress on site rationalisation to meet the 2006 date for transfer of Dstl staff to the new core site
- 7 Agree and implement a Dstl diversity action plan.

### Critical success factors

CSF	Commentary	Assessment
Output indispensable to MOD	In the Customer Satisfaction Survey over 80% of MOD respondents either agreed or strongly agreed that 'Dstl's work and resulting outputs are essential to MOD and its decision making process'	Satisfactory
Close understanding of MOD priorities, issues and cultures	In the Customer Satisfaction Survey over 70% of MOD respondents either agreed or strongly agreed that 'Dstl staff understood well MOD's military priorities and cultural issues'	Satisfactory
Trusted by all parties – a reputation for complete integrity	This was one of the headline outputs from the Customer Satisfaction Survey, with MOD, overseas partners and certain parts of industry and academia having full confidence in Dstl's integrity	Satisfactory
Focus on high added value work that really makes a difference	Work is in hand to achieve more progress in aligning Dstl's activities to meet MOD's future programme needs	Some improvement needed
Technical excellence	A comprehensive technical assessment showed strengths, but also weaknesses in areas such as maintaining capability and facilities, and networking to external research	Some improvement needed
Ability to recruit and retain outstanding scientists and technologists	Dstl is attracting sufficient numbers of high calibre people	Satisfactory
Ability to nurture and maintain partnerships	Dstl has developed strategic partnerships with a number of universities, but needs to address its links with industry which are less mature	Some improvement needed
Access to world-class science and technology	Knowledge networking, Defence Technology Centres and International Research Collaborations are among the activities that are improving Dstl's awareness	Satisfactory
Excellence in management	Dstl has been assessed as fulfilling the requirements of ISO 9001: 2000, which is an independent assessment of its management systems	Satisfactory
A rewarding experience for ourselves	The latest Staff Opinion Survey conducted by MORI showed positive changes in staff perceptions of Dstl as an employer and its products and services	Satisfactory
Financial viability	Dstl's financial results have been satisfactory and formal financial targets have been met	Satisfactory



In the Customer Satisfaction Survey over 75% of MOD respondents consider Dstl to be a technically excellent organisation.

## Foreword to the accounts

### History and statutory background

The Defence Science and Technology Laboratory (Dstl) was established on 1 July 2001 in accordance with Statutory Instrument 2001 no. 1246.

Dstl was created as a result of the separation of the Defence Evaluation and Research Agency (DERA); Dstl continuing as the Trading Fund. The privatised part of DERA is known as QinetiQ Limited.

### Principal activities

The principal activity of Dstl is the supply of specialist scientific and technical services to the Ministry of Defence.

### Review of the business

The external financial target for the year, which is set by the Treasury, was to achieve a return of at least 6.5% in the form of a surplus on ordinary activities before interest and dividends, expressed as a percentage of average capital employed. The in-year ROCE achieved was 9.6%. However, ROCE based on profits for the year, pre-exceptional items and unusual impairments was 9.2%.

Users of the accounts should note that the comparative figures for 2002 include those for DERA for the period April to June 2002.

### Tangible fixed assets

The changes in tangible fixed assets during the year are summarised in note 11 to the Accounts.

### Research and development

Research and Development are fundamental to the supply of scientific and technical services, which is the principal activity of Dstl. Related costs are chargeable to the customers on whose behalf the work is undertaken. Cost of development on projects where future revenue streams are certain are capitalised at cost.

### Retained profit

A proposed dividend of £6 million will be paid to MOD. Retained profit of £8.9million has been transferred to reserves.

### Employees

Dstl is an equal opportunities employer. Every possible consideration is given to applications for employment, regardless of gender, religion, disability or ethnic origin, having regard only to skills and competencies. The policy is supported by strategies for professional and career development.

Dstl seeks to maximise every communication channel to employees in order to involve them in the running of the organisation. This is done through a variety of methods, including regular in-house newsletters and bulletins, management briefings, trades union consultation and widespread training programmes.

### Environmental

Dstl takes great care to ensure that work is planned and performed to minimise the impact on the environment, including those sites that have been designated Sites of Special Scientific Interest (SSSI). Since its inception as a Trading Fund, no incidents have been reported on any Dstl site that would give rise to a liability in respect of restoration or remedial work. Such liabilities existing prior to the creation of the Trading Fund remain the responsibility of MOD.

### Charitable donations

Dstl made no charitable donations in the year.

### Audit committee

An Audit Committee, comprising Mr David Gould (Chairman) (Deputy Chief Executive DPA), Mr Colin Balmer (Finance Director, Ministry of Defence), Mr Martin Earwicker, Mr Nick Helbren and Mr Mark Hone, reviews the effectiveness of the internal control environment of Dstl and the compliance with its regulatory requirements. During the year the Committee met 3 times. The Committee receives regular reports from the internal and external auditors and reviews the Corporate Risk Register, monitoring their activities and effectiveness.

### Credit payment policy and practice

Dstl's policy is to make payments to suppliers within Government guidelines following receipt of an approved invoice. During the year Dstl paid 97% of invoices within the agreed credit period on receipt of an undisputed invoice, or date of confirmation of receipt of an acceptable service. Trade creditors were equivalent to 34.9 days purchases during the year.

### Audit

These accounts have been audited by the Comptroller and Auditor General in accordance with Section 4(6) of the Government Trading Funds Act 1973. In addition, the Comptroller and Auditor General has reviewed the Statement of Internal Control. The audit certificate and report are on page 31.

## Statement of Internal Control (SIC)

### 1. Scope of responsibility

As Accounting Officer, I have responsibility for maintaining a sound system of internal control that supports the achievement of Dstl's policies, aims and objectives, whilst safeguarding the public funds and departmental assets for which I am personally responsible, in accordance with the responsibilities assigned to me in Government Accounting.

Dstl is an integral part of MOD. The Corporate Plan, agreed with Ministers, sets out the way in which we will deliver excellent and trusted advice on science and technology, and provides critical success factors, targets and key management issues. The Plan also identifies corporate level risks that might impact on our performance, and strategies for risk management.

### 2. The purpose of the system of internal control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of Dstl's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place in Dstl for the year ended 31 March 2003 and up to the date of approval of the annual report and accounts, and accords with Treasury guidance.

### 3. Capacity to handle risk

As an integral element of its system of internal control, Dstl has established a corporate approach to risk management. Dstl policy on corporate governance and the management of risk is set out in the Dstl policy manual issue 2, which has been issued to all staff. This is regularly reviewed and updated as appropriate. The policy is implemented in the Dstl procedure for the management of risk. Dstl has also introduced an Audit Handbook which complies with the Government Internal Audit Standards and details how all audits will be undertaken throughout the organisation.

Dstl has introduced risk awareness training and risk register use as an essential part of its internal training for project managers. Department managers have also been provided with additional guidance for the preparation of department risk registers which states the linkage between their business plan objectives and the risks stemming from these. This has enabled the development of a Dstl-wide risk register. An audit of the risk register showed the consistency of approach at department and corporate level to be satisfactory.

To improve further Dstl's capacity to handle risk, in the coming year it plans to:

- set up an investment panel to review and agree investments to be made by Dstl. Investment appraisal proposals will include analysis of risks relating to the expenditure (April 2003);
- establish a system of key performance and risk indicators (July 2003);
- formalise the procedures and responsibilities of the Dstl Main Board (July 2003);
- review the effectiveness of the risk management process, ie the extent to which it is embedded (August 2003);
- develop a computerised competency profile of Dstl staff linked to risk assessment and other activities (March 2004);
- have increased training and audit on health and safety and made greater use of no-notice inspections (March 2004);
- introduce a risk manual to clarify the way in which risk (or change in risk) is identified, evaluated, and managed. The risk manual will also determine the extent of risk which Dstl regards as acceptable for it to bear. This will become part of Dstl's Assurance Handbook, alongside the Audit and Business Continuity Manuals (March 2004).

## Statement of Internal Control (SIC)

### 4. The risk and control framework

Dstl's procedure for the management of risk uses the strategic risk cycle, principles and terminology set out in the 'Management of Risk' issued by the Treasury in 2001. The procedure sets out a framework to bring about more consistency in the way in which Dstl identifies and assesses risk, reports probability and impact, and develops mitigation and contingency plans.

Dstl introduced a change management panel in November 2002, which implements all changes and improvements in a systematic manner throughout the organisation. Risk is considered at the 'requirements capture' stage, and is then monitored throughout the life span of the project. The panel also draws on best practice through consultation in order to achieve value for money.

### 5. Review of effectiveness

As Accounting Officer, I have responsibility for reviewing the effectiveness of the system of internal control. My review of the effectiveness of the system of internal control is informed by the work of the internal auditors and the executive managers within Dstl who have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter and other reports. I have been advised on the implications of the result of my review of the effectiveness of the system of internal control by the Board, the Audit Committee, and a plan to address weaknesses and ensure continuous improvement of the system is in place.

Dstl has established an Audit Committee, which meets three times a year. The Audit Committee reports to the Dstl Main Board on the implications of assurances provided in respect of risk and control in Dstl and the sufficiency of audit arrangements. The Audit Committee reviews both the internal and external auditing requirements, the adequacy of the financial systems, risk management, control and governance.

The Dstl Main Board reviews the system of internal control through reports from its sub-boards (Finance & Systems, Operations & Programmes, Technical, and Human Resources & Communications). The sub-boards report on the status of their systems of internal control by exception. Where there are control deficiencies, projects are initiated to mitigate them and regular reports are then made to the Main Board using scorecard methodology to illustrate control levels and progress. A member of the Main Board owns the risk management process and sits on the Audit Committee, though other members of the Main Board may be responsible for key risks.

### 6. Significant internal control problems

One of the high impact risks identified in the Corporate Plan for 2002/3 was the occurrence of a major safety, health or fire incident. Following a fatal accident at Shoeburyness during a trial in August 2002, a Management Action Plan has been implemented to reinforce the importance of embedding a strong health and safety culture in Dstl (see section on Corporate Governance page 20).

## Statement of Dstl's and Chief Executive's responsibilities

Under Section 4(6) of the Government Trading Funds Act 1973, the Treasury has directed Dstl to prepare accounts for each financial year in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis, modified for the effect of changing prices on the valuation of fixed assets, and give a true and fair view of Dstl's state of affairs at the year end and of its profit, total recognised gains and losses and cash flows for the financial year.

In preparing accounts Dstl is required to:

- Observe the Accounts Direction issued by the 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 have been followed, and to disclose and explain any material departures in the financial statements;
- Prepare the accounts on a going concern basis, unless it is inappropriate to presume that Dstl will continue in operation.

The Treasury has appointed the Chief Executive as the Accounting Officer of Dstl. His relevant responsibilities as Accounting Officer, including his responsibility for the propriety and regularity of the public finances for which he is answerable and for the keeping of proper records, are set out in the Accounting Officers' Memorandum issued by the Treasury and published in 'Government Accounting' (The Stationery Office).



**Martin J Earwicker FREng**  
Chief Executive

3 July 2003

## Dstl board

The Board meets bi-monthly. The Directors during the year (and subsequent changes) were:

Martin Earwicker	Chief Executive – Dstl
Nick Helbren	Deputy Chief Executive (and previously Director Programmes)
Andrew Baird	Technical Director
Mark Hone	Finance Director
Richard Eade	Human Resources Director (Appointed 1 January 2003)
Mike Jenden	Director of Technology
Simon Mepham	Operations Director (Resigned 6 December 2002)
Richard Scott	Director of Science
Peter Starkey	Director of Analysis & Systems
Major General Peter Gilchrist*	X2/DPA – MOD
Roger Platt*	Senior Vice President, Unilever

\* Non-Executive Directors

## Board remuneration and pensions

The remuneration and pension entitlement of the Dstl Board was as follows:

Name	Note	Age	Salary Band (£k)	Real Increase in Pension at 60 (£k)	Total Accrued Pension at 60 at 31/3/03 (£k)
Martin Earwicker		54	90 - 95	2.5 - 5.0	35 - 40
Nick Helbren		57	65 - 70	0 - 2.5	25 - 30
Andrew Baird		47	60 - 65	0 - 2.5	15 - 20
Mark Hone		41	55 - 60	0 - 2.5	5 - 10
Richard Eade	1	57	10 - 15	0 - 2.5	25 - 30
Mike Jenden		47	65 - 70	0 - 2.5	20 - 25
Simon Mepham	2	48	50 - 55	0 - 2.5	15 - 20
Richard Scott		54	60 - 65	0 - 2.5	20 - 25
Peter Starkey		49	60 - 65	0 - 2.5	20 - 25

All belong to the Classic Civil Service Pension Scheme

The Non-Executive Directors received no remuneration from Dstl.

1. Appointed to the Board during the year
2. Resigned from the Board during the year

No additional remuneration or other allowances were paid to members of the Board.

None of the Board members, key managerial staff or other related parties has undertaken any material transactions with Dstl during the year.

The salary bands set out above relate only to emoluments paid during the period of each Director's membership of the Board.

## The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament

I certify that I have audited the financial statements under the Government Trading Funds Act 1973. These financial statements comprise the Defence Science and Technology Laboratory (Dstl) profit and loss account, the balance sheet, the statement of total recognised gains and losses, the cashflow statement, the table of board members' remuneration and pension entitlement, and related notes, and have been prepared under the historical cost convention as modified by the revaluation of certain fixed assets and the accounting policies set out in Note 1 to the financial statements.

### Respective responsibilities of the Defence Science and Technology Laboratory, the Chief Executive and Auditor

As described in the Statement of Dstl's and the Chief Executive's responsibilities, the Dstl and Chief Executive are responsible for the preparation of the financial statements in accordance with the Government Trading Funds Act 1973 and Treasury directions made thereunder and for ensuring the regularity of financial transactions. The Dstl and Chief Executive are also responsible for the preparation of the other contents of the Annual Report. My responsibilities, as independent auditor, are established by statute and guided by the Auditing Practices Board and the auditing profession's ethical guidance.

I report my opinion as to whether the financial statements give a true and fair view and are properly prepared in accordance with the Government Trading Funds Act 1973 and Treasury directions made thereunder, and whether in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. I also report if, in my opinion, the Foreword is not consistent with the financial statements, if the Accounting Officer has not kept proper accounting records, or if I have not received all the information and explanations I require for my audit.

I read the other information contained in the Annual Report and consider whether it is consistent with the audited financial statements. I consider the implications for my certificate if I become aware of any apparent misstatements or material inconsistencies with the financial statements. I review whether the statement on corporate governance reflects the Agency's compliance with Treasury's guidance 'Corporate governance: statement on internal control'. I report if it does not meet the requirements specified by Treasury, or if the statement is misleading or inconsistent with other information I am aware of from my audit of the financial statements.

### Basis of audit opinion

I conducted my audit in accordance with United Kingdom Auditing Standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements. It also includes an assessment of the significant estimates and judgements made by Dstl and Chief Executive in the preparation of the financial statements, and of whether the accounting policies are appropriate to Dstl's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by error, or by fraud or other irregularity and that, in all material respects, the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. In forming my opinion I have also evaluated the overall adequacy of the presentation of information in the financial statements.

### Opinion

In my opinion:

- the financial statements give a true and fair view of the state of affairs of the Defence Science and Technology Laboratory at 31 March 2003 and of the surplus and total recognised gains and losses and cash flows for the year then ended and have been properly prepared in accordance with the Government Trading Funds Act 1973 and directions made thereunder by Treasury; and
  - in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.
- I have no observations to make on these financial statements.

### John Bourn

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

7 July 2003

## Dstl Profit and Loss Account

For the year ended 31 March 2003

	NOTE	2003 £ MILLION	2002 £ MILLION
<b>Turnover</b>	<b>2</b>	<b>343.5</b>	<b>498.8</b>
Cost of sales		(109.7)	(145.9)
<b>Net income</b>		<b>233.8</b>	<b>352.9</b>
Net operating expenses - non-exceptional items		(220.5)	(328.6)
Operating profit before unusual impairments		13.3	24.3
Net operating expenses - unusual impairments		-	(5.5)
<b>Operating profit</b>		<b>13.3</b>	<b>18.8</b>
Exceptional item	4	0.5	(3.3)
Loss on disposal of fixed assets	11	-	(2.9)
<b>Profit on ordinary activities before interest</b>		<b>13.8</b>	<b>12.6</b>
Interest receivable	8	1.5	3.4
Interest payable	9	(0.4)	(1.1)
<b>Profit for the financial year</b>		<b>14.9</b>	<b>14.9</b>
Dividends	10	(6.0)	(6.0)
<b>Retained profit for the year</b>	<b>21</b>	<b>8.9</b>	<b>8.9</b>
Return on Capital Employed	5	9.6%	4.6%
ROCE before exceptional items and unusual impairments	5	9.2%	7.9%

All operations are continuing.  
The notes on pages 37 to 48 form an integral part of these accounts.

## Balance Sheet

As at 31 March 2003

	NOTE	2003 £ MILLION	2002 £ MILLION
<b>Fixed assets</b>			
Tangible assets	11	109.5	103.8
Investments	12	0.3	0.1
		109.8	103.9
<b>Current assets</b>			
Stocks and work in progress	13	5.8	5.5
Debtors	14	137.4	122.8
Cash and cash equivalents	23	29.7	22.3
		172.9	150.6
Creditors: Amounts falling due within one year	15	(127.4)	(104.0)
<b>Net current assets</b>		<b>45.5</b>	<b>46.6</b>
<b>Total assets less current liabilities</b>		<b>155.3</b>	<b>150.5</b>
Financed by:			
Creditors: Amounts falling due after more than one year	16	7.2	10.8
Provisions for liabilities and charges	17	7.6	11.7
		14.8	22.5
<b>Capital and reserves</b>			
Public dividend capital	20	50.4	50.4
Revaluation reserve	21	18.1	16.3
<b>Profit and loss account</b>	<b>21</b>	<b>72.0</b>	<b>61.3</b>
		140.5	128.0
<b>Total</b>		<b>155.3</b>	<b>150.5</b>

The accounts were signed on 3 July 2003



Martin Earwicker, Chief Executive



Mark Hone, Finance Director

The notes on pages 37 to 48 form an integral part of these accounts.

## Statement of total recognised gains and losses

For the year ended 31 March 2003

	NOTE	2003 £ MILLION	2002 £ MILLION
Profit for the financial year		14.9	14.9
Unrealised surplus on revaluation of tangible fixed assets	11,22	3.6	90.8
Transfer to MOD (Net)	22	-	576.2
<b>Total gains and losses recognised since the previous annual report</b>		<b>18.5</b>	<b>681.9</b>

The notes on pages 37 to 48 form an integral part of these accounts.

## Cash flow statement

For the year ended 31 March 2003

	NOTE	2003 £ MILLION	2002 £ MILLION
<b>Cash flow from operating activities</b>			
Net cash inflow / (outflow) from operating activities		24.7	(19.7)
<b>Returns on investments and servicing of finance</b>			
Interest received		1.5	3.4
Interest paid		(0.4)	(1.1)
Net cash inflow from returns on investments and servicing of finance		1.1	2.3
<b>Net cash inflow / (outflow) before capital expenditure</b>		<b>25.8</b>	<b>(17.4)</b>
<b>Capital expenditure and financial investment</b>			
Payments to acquire tangible fixed assets		(10.1)	(17.8)
Receipts from sale of tangible fixed assets	11	-	4.7
Payments for investments		(0.2)	(0.8)
Net cash outflow from capital expenditure		(10.3)	(13.9)
<b>Acquisitions and disposals</b>			
Cash Outflow on Transfer to MOD		-	(58.0)
Net cash outflow from acquisitions & disposals		-	(58.0)
Dividends paid		(6.0)	(5.0)
Cash inflow / (outflow) before management of liquid resources		9.5	(94.3)
<b>Management of liquid resources</b>			
Net cash inflow / (outflow) before financing		9.5	(94.3)
<b>Financing</b>			
Repayment of long term loan	24	(2.1)	(2.1)
Capital payments under finance leases		-	(0.3)
Net cash outflow from financing		(2.1)	(2.4)
<b>Increase / (Decrease) in cash</b>	<b>23</b>	<b>7.4</b>	<b>(96.7)</b>

The notes on pages 37 to 48 form an integral part of these accounts

## Notes to the cash flow statement

For the year ended 31 March 2003

### Reconciliation of Operating Profit to Operating Cash Flows

	NOTE	2003 £ MILLION	2002 £ MILLION
Operating profit		13.3	18.8
Depreciation charge on owned tangible fixed assets	3,11	8.0	16.4
Depreciation charge on tangible fixed assets held under finance lease	3,11	-	0.1
Impairment of tangible fixed assets	3,11	-	5.5
Adjustment/downward valuation of tangible fixed assets	3,11	-	0.6
(Increase) / Decrease in stocks and WIP		(0.3)	1.7
(Increase) / Decrease in debtors		(14.6)	0.9
Increase / (Decrease) in creditors due within one year		23.4	(47.1)
Decrease in creditors due after more than one year		(1.5)	(5.9)
Cash outflow from utilisation of provisions	17	(4.1)	(7.4)
Exceptional Items	4	0.5	(3.3)
<b>Net cash inflow / (outflow) from operating activities</b>		<b>24.7</b>	<b>(19.7)</b>

### Reconciliation of Net Cash Flow to Movement in Net Funds

	NOTE	2003 £ MILLION	2002 £ MILLION
Increase / (Decrease) in cash and liquid resources	23	7.4	(96.7)
Cash used to repay long term loan (including amounts falling due within one year)		2.1	2.1
MOD Loans written off at Vesting		-	24.0
Disposal of finance leases		-	1.4
Cash used to repay finance leases		-	0.3
Changes in net funds		9.5	(68.9)
Balance brought forward		17.0	85.9
<b>Balance carried forward</b>		<b>26.5</b>	<b>17.0</b>

### Analysis of Net Funds

	NOTE	1 APRIL 2002 £ MILLION	CASH FLOWS £ MILLION	OTHER CHANGES £ MILLION	31 MARCH 2003 £ MILLION
Cash	23	1.2	0.2	-	1.4
Short term deposits	23	21.1	7.2	-	28.3
Cash and cash equivalents		22.3	7.4	-	29.7
Debt due within 1 year	15	(2.1)	-	-	(2.1)
Debt due after 1 year	16	(3.2)	2.1	-	(1.1)
Debt		(5.3)	2.1	-	(3.2)
<b>Total</b>		<b>17.0</b>	<b>9.5</b>	<b>-</b>	<b>26.5</b>

## Notes to the accounts

### 1 Accounting policies

#### (a) Accounting convention

The accounts are prepared under the historical cost convention modified to include the revaluation of tangible fixed assets.

These accounts have been prepared in accordance with the accounting principles and disclosure requirements of the relevant edition of Trading Funds - Accounting Guidance issued by HM Treasury.

The accounts have been prepared so as:

- To give a true and fair view of the income and expenditure, total recognised gains and losses and cash flows of the Trading Fund and of the state of affairs as at the end of the financial year and
- To provide disclosure of any material income or expenditure that has not been applied to the purposes intended by Parliament, or material transactions that have not conformed to the authorities which govern them.

#### (b) Joint ventures

Various Joint Ventures exist to allow Dstl's technology to be developed for commercial purposes. These Joint Ventures are not consolidated. They are accounted for in accordance with FRS9 under the net asset method due to their immateriality.

#### (c) Research and development

Research and development costs are chargeable to the customers on whose behalf work is undertaken. Development expenditure is capitalised in the balance sheet where there is a clearly defined project, the expenditures are separately identifiable, the project is technically and commercially feasible, all costs are recoverable by future revenue and the resources exist to complete the project. No development costs are capitalised in these accounts.

#### (d) Tangible fixed assets

Tangible fixed assets are stated at valuation less accumulated depreciation. The valuation bases for different classes of asset are as follows:

- Land and Buildings
    - Open market value for existing use
    - Open market value
  - Legacy and Acquired Facilities
    - Net recoverable amount
  - Plant, machinery, computers and office equipment
    - Net current replacement cost
- Land and buildings are valued on a whole site basis.

A facility is a collection of fixed assets operated together to provide discrete services. Fixed assets included as legacy and acquired facilities incorporate, as appropriate, land, buildings, plant and machinery, computers and office equipment. The net recoverable amount is calculated as the greater of:

- the estimated net present value of the cash flows deriving from the continued use of the asset less an allowance for profit to be earned in accordance with the Government Profit Formula; and
  - the estimated net sale proceeds of the asset.
- In order to meet the Treasury's requirement for modified historic cost accounting, tangible fixed assets are revalued in the years between professional valuations using the following indices:

- Land
    - Gross Domestic Product Deflator Index
  - Other Assets
    - Relevant indices published by the Office for National Statistics
- Depreciation is provided evenly over the useful economic lives of the assets, which are generally considered to be the following:
- Freehold Land: Not depreciated
  - Freehold Buildings: 20-25 years.
  - Legacy and Acquired Facilities: 1-10 years.
  - Plant & Machinery: 3-25 years.
  - Computers & Office Equipment: 3 years.
- Plant and machinery, and computers and office equipment are capitalised where their historical cost of acquisition is greater than £10,000. The revaluation reserve is released to the Profit and Loss Account in accordance with FRS15.

#### (e) Leased assets

Assets held under finance leases are capitalised as tangible fixed assets and depreciated over the term of the lease. Rentals are apportioned between reductions in the capital obligations included in creditors and finance charges, which are charged to the Profit and Loss Account.

Expenditure under operating leases is charged to the Profit and Loss Account as incurred.

#### (f) Work in progress

Work in progress represents costs incurred on specific contracts, not classified as long-term contracts, and is stated at the lower of cost (or net replacement cost if materially different) and net realisable value. Cost represents direct materials and labour and other directly attributable overheads.

## Notes to the accounts

### (g) Long term contracts

Amounts recoverable on long term contracts are stated at cost (or net current replacement cost if materially different), plus attributable profits less provision for any known or anticipated losses and payments on account, and are included in debtors as amounts recoverable under contracts.

### (h) Insurance

In common with other Government-owned organisations, Dstl carries commercial insurance only where it is considered cost effective. It carries its own risks in respect of fire, explosion, common law, third party etc., and its operating costs include claims against self-insurance. In the event of a loss occurring which exceeds the ability of the organisation to bear the cost, Dstl will consult with MOD about the action to be taken.

### (i) Pensions

Past and present employees are covered by the provisions of the Principal Civil Service Pension Scheme (PCSPS) which is a defined benefit scheme and is unfunded and non-contributory. Dstl recognises the expected cost of providing pensions on a systematic and rational basis over the period during which it benefits from employees' services by payment to the PCSPS of amounts calculated on an accruing basis. Liability for payment of future benefits is a charge on the PCSPS.

The requirements of FRS17 for the disclosure of the surpluses and deficits arising from pension arrangements are not relevant for these financial statements.

### (j) Foreign currencies

Transactions denominated in foreign currencies are translated into sterling at the rates of exchange ruling at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated at the rates ruling at that date. The resulting exchange differences are dealt with in the determination of profit for the financial year.

### (k) Corporation tax

Dstl has applied for exemption from corporation tax under Section 829(2) of the Income and Corporation Taxes Act 1988 and consequently the requirements to account for current tax and deferred tax under FRS16 and FRS19 are not relevant for these financial statements. Annual exemption is obtained under Section 829 of the Income and Corporation Taxes Act 1988.

### (l) Going concern

The accounts have been prepared on the basis that Dstl is a going concern.

### (m) Turnover

Turnover represents amounts invoiced to customers (net of VAT), and, in the case of long-term contracts, the value of work done in the year.

### (n) Transfer to MOD

Under SI 2001/1246 certain assets and liabilities were transferred to MOD for nil consideration. The substance of this transaction was a statutory expropriation rather than the disposal of a business arising from a commercial decision. For this reason Dstl believe that treating the disposal through the Profit and Loss Account would be inappropriate: it is more appropriate to treat it as an adjustment of reserves. Accordingly the net assets have been set-off against public dividend capital, loans from MOD and revaluation reserves to the extent that they match those items, and the balance has been written-off to retained surplus through the Statement of Recognised Gains and Losses.

## 2 Turnover

Turnover by major class of customer is analysed as follows:

	2003 £ MILLION	2002 £ MILLION
MOD:	296.0	420.3
Research	162.2	228.7
Non-Research	133.8	191.6
Non-MOD	47.5	78.5
Government Departments	14.1	12.7
Non-Exchequer income	33.4	65.6
<b>Non-Exchequer royalty income</b>	-	<b>0.2</b>
<b>Total</b>	<b>343.5</b>	<b>498.8</b>

All turnover relates to the same class of business, which is the supply of scientific and technical services.

This is conducted principally in the UK in sterling, and no other geographical market has contributed significantly to turnover. Non-Exchequer income includes £14.8 million (2002: £17.5 million) relating to QinetiQ Limited (see Foreword to the Accounts - History and Statutory Background).

## 3 Operating profit

This is stated after charging/(crediting):

	2003 £ MILLION	2002 £ MILLION
Auditors' remuneration - audit services - UK	0.1	0.1
Depreciation charge for the year:	8.0	22.6
Depreciation of owned assets	8.0	16.4
Depreciation of assets held under finance leases	-	0.1
Exceptional costs of impairment of tangible fixed assets	-	5.5
Adjustment to valuation of tangible fixed assets	-	0.6
Operating lease rentals - land and buildings	9.4	12.9
- plant and machinery	-	0.1
Travel, subsistence and hospitality	3.3	10.0
Foreign exchange (gains)/ losses	0.1	(0.2)
Restructuring costs	-	2.6
Other operating income	(7.2)	(23.2)

**4 Exceptional items**

	£ MILLION
Costs relating to the increase in costs of the early retirement provision	3.0
Release of costs relating to the completion of the divorce of the computer networks between QinetiQ plc and Dstl trading fund	(3.5)
<b>Net Exceptional Costs</b>	<b>(0.5)</b>

**5 Key corporate financial target**

Dstl has a return on capital employed target, defined as follows:

- a) Return - modified historical cost profit on ordinary activities before interest and dividends  
 b) Capital employed - average net assets, being total assets less total current liabilities

The target for the year for return on capital employed was 6.5%.

	2003 £ MILLION	2002 £ MILLION
Profit on ordinary activities before interest	13.8	12.6
Total assets less current liabilities	155.3	150.5
Less: long term creditors excluding provisions	(7.2)	(10.8)
Capital employed at year end	148.1	139.7
Average capital employed during the year	143.9	271.0
ROCE	9.6%	4.6%
ROCE before exceptional items and unusual impairments	9.2%	7.9%

**6 Board members' emoluments**

Details of members' emoluments are shown in the Foreword to the Accounts  
 They are summarised as follows:

	2003 £ THOUSAND	2002 £ THOUSAND
<b>Salaries</b>	<b>536.7</b>	<b>511.1</b>

**7 Employee information**

The average number of persons (including members of the Board) employed during the year was :

	31 March 2003 NUMBER	31 March 2002 NUMBER
Professional and technical staff	2,518	3,888
Administrative and industrial Staff	669	1,166
Secondees	92	150
<b>Total</b>	<b>3,279</b>	<b>5,204</b>

Staff costs incurred during the year in respect of these employees were:

	2003 £ MILLION	2002 £ MILLION
Wages and salaries	89.7	141.3
Social security costs	6.7	11.0
Other pension costs	12.6	19.3
<b>Total</b>	<b>109.0</b>	<b>171.6</b>

The employees of Dstl are eligible to be members of the Principal Civil Service Pension Scheme (PCSPS), a final salary scheme. The PCSPS is an unfunded multi-employer defined benefit scheme, it is not possible for Dstl to identify its share of the underlying assets and liabilities.

A full actuarial valuation was carried out at 31 March 2000 and details can be found in the separate scheme statement of the PCSPS. For 2002-2003, normal employer contributions of £12.6 million were payable to the PCSPS (2001-2002: £19.3 million) at rates in the range 12% to 18.5% of pensionable pay.

Employer contribution rates are reviewed every three years following a scheme valuation by the Government Actuary. The contribution rates reflect benefits as they are accrued, not when the costs are actually incurred and they reflect past experience of the scheme.

**8 Interest receivable**

	2003 £ MILLION	2002 £ MILLION
<b>Interest receivable on deposits and QinetiQ Loan</b>	<b>1.5</b>	<b>3.4</b>

**9 Interest payable**

	2003 £ MILLION	2002 £ MILLION
<b>MOD Loan</b>	<b>0.4</b>	<b>1.1</b>

**10 Dividends**

	2003 £ MILLION	2002 £ MILLION
<b>Proposed dividends</b>	<b>6.0</b>	<b>6.0</b>

Dividends are set by agreement with the Secretary of State

## 11 Tangible fixed assets

The accounting policy for Tangible Fixed Assets is covered in note 1. Tangible Fixed Asset movements during the year were as follows:

	FREEHOLD LAND AND BUILDINGS £ MILLION	LEGACY FACILITIES £ MILLION	PLANT & MACHINERY £ MILLION	COMPUTERS & OFFICE EQUIPMENT £ MILLION	ASSETS UNDER CONSTRUCTION £ MILLION	TOTAL £ MILLION
Gross modified historic cost:						
Balance brought forward	80.3	0.7	40.5	3.2	15.6	140.3
Additions	-	-	1.0	0.1	9.0	10.1
Disposals	-	-	(1.7)	(0.7)	-	(2.4)
Transfers	1.2	-	4.5	0.5	(6.2)	-
Downward revaluation	-	-	-	(0.1)	-	(0.1)
Revaluations	3.1	-	0.5	-	-	3.6
<b>Balance carried forward</b>	<b>84.6</b>	<b>0.7</b>	<b>44.8</b>	<b>3.0</b>	<b>18.4</b>	<b>151.5</b>
Depreciation:						
Balance brought forward	(15.4)	(0.5)	(19.1)	(1.5)	-	(36.5)
Charge for year -						
historical	(2.4)	(0.1)	(3.3)	(1.0)	-	(6.8)
supplementary	(0.9)	-	(0.3)	-	-	(1.2)
downward revaluation	-	-	-	0.1	-	0.1
Disposals	-	-	1.7	0.7	-	2.4
Revaluations	-	-	-	-	-	-
<b>Balance carried forward</b>	<b>(18.7)</b>	<b>(0.6)</b>	<b>(21.0)</b>	<b>(1.7)</b>	<b>-</b>	<b>(42.0)</b>
Net modified historic cost:						
<b>Balance carried forward</b>	<b>65.9</b>	<b>0.1</b>	<b>23.8</b>	<b>1.3</b>	<b>18.4</b>	<b>109.5</b>
Balance brought forward	64.9	0.2	21.4	1.7	15.6	103.8

The valuation of land and buildings was conducted by GVA Grimley, Chartered Surveyors in March 1999. The basis of the valuation was either Existing Use (EUV), Open Market (OMV) or Recoverable Amount (RA). For EUV the land includes stamp duty and legal costs for acquisition. For OMV disposal costs are not included.

All EUVs are higher than OMV. The reasons for the differences are :

- planning for alternative use not established;
- site locations generally not in areas of high land demand;
- Dstl facilities are specialist and have a higher replacement cost than their value;
- the specialist nature of some facilities would have no market elsewhere;
- the liabilities included in the sites such as SSSIs affect land value.

If Tangible Fixed Assets had not been modified for the effects of changing prices, they would have been included as follows:

	FREEHOLD LAND AND BUILDINGS £ MILLION	LEGACY FACILITIES £ MILLION	PLANT & MACHINERY £ MILLION	COMPUTERS & OFFICE EQUIPMENT £ MILLION	ASSETS UNDER CONSTRUCTION £ MILLION	TOTAL £ MILLION
Cost or Valuation:						
Balance brought forward	77.4	0.7	39.1	3.9	15.6	136.7
Additions	-	-	1.0	0.1	9.0	10.1
Disposals	-	-	(1.6)	(1.2)	-	(2.8)
Transfers	1.2	-	4.5	0.5	(6.2)	-
Revaluations	(1.9)	-	-	-	-	(1.9)
<b>Balance carried forward</b>	<b>76.7</b>	<b>0.7</b>	<b>43.0</b>	<b>3.3</b>	<b>18.4</b>	<b>142.1</b>
Depreciation:						
Balance brought forward	(16.1)	(0.5)	(18.3)	(1.8)	-	(36.7)
Charge for the year	(2.4)	(0.1)	(3.3)	(1.0)	-	(6.8)
Disposals	-	-	1.5	1.2	-	2.7
Revaluations	1.9	-	-	-	-	1.9
<b>Balance carried forward</b>	<b>(16.6)</b>	<b>(0.6)</b>	<b>(20.1)</b>	<b>(1.6)</b>	<b>-</b>	<b>(38.9)</b>
Net Book Values:						
<b>Balance carried forward</b>	<b>60.1</b>	<b>0.1</b>	<b>22.9</b>	<b>1.7</b>	<b>18.4</b>	<b>103.2</b>
Balance brought forward	61.3	0.2	20.8	2.1	15.6	100.0

Disposal of tangible fixed assets

	2003 £ MILLION	2002 £ MILLION
Gross modified historic cost of tangible fixed asset disposals	(2.4)	(13.5)
Depreciation	2.4	5.9
	-	(7.6)
Net proceeds - cash	-	4.7
<b>Loss on disposals</b>	<b>-</b>	<b>(2.9)</b>

## 12 Investments

	Joint Ventures and Associates £ MILLION	Other Investments £ MILLION	Total £ MILLION
Cost			
At 1 April 2002	0.1	-	0.1
Additions	0.2	-	0.2
<b>At 31 March 2003</b>	<b>0.3</b>	<b>-</b>	<b>0.3</b>
Amount provided			
Net Book Value	-	-	-
<b>At 31 March 2003</b>	<b>0.3</b>	<b>-</b>	<b>0.3</b>
At 1 April 2002	0.1	-	0.1

**Investments**

The principal subsidiary and associated undertakings and joint ventures at 31 March 2003 are shown below.

Name of company	Principal area of operation & country of Incorporation	Proportion of voting rights and shares held <sup>1</sup>	Year end	Aggregate reserves at 31 March 2003 <sup>2</sup> £ million	Loss for year ended 31 March 2003 <sup>2</sup> £ million	Nature of business
Joint Ventures						
Alaska Food Diagnostics Limited	Great Britain	47.0%	30 June	1.4	0.5	R&D
Acolyte Diagnostics Limited	Great Britain	37.4%	30 April	0.3	1.3	R&D
Lucigen Limited	Great Britain	50.0%	31 December	0.4	0.1	R&D
Associates						
Tetricus Limited	Great Britain	26.0%	31 December	-	-	R&D

(1) Percentage of ordinary share capital unless otherwise stated.

(2) Results taken from unaudited management accounts.

**13 Stocks and work in progress**

	2003 £ MILLION	2002 £ MILLION
<b>Work in progress</b>	<b>5.8</b>	<b>5.5</b>

**14 Debtors**

	2003 £ MILLION	2002 £ MILLION
Trade debtors	37.5	23.8
Amounts recoverable under contracts	93.6	82.0
Other debtors	0.3	0.2
Loan due from QinetiQ	-	16.5
Prepayments and accrued income	6.0	0.3
<b>Total</b>	<b>137.4</b>	<b>122.8</b>

The loan due from QinetiQ was settled in full on 4 March 2003.

**15 Creditors: amounts falling due within one year**

	2003 £ MILLION	2002 £ MILLION
Current instalment on long term loans	2.1	2.1
Payments received on account	27.3	12.3
Trade creditors	16.0	10.2
Taxation and social security	8.8	6.6
Other creditors	1.5	1.2
Accruals and deferred income	62.1	60.7
Rationalisation, redundancy and early retirement costs	3.6	4.9
Proposed dividend	6.0	6.0
<b>Total</b>	<b>127.4</b>	<b>104.0</b>

**16 Creditors: amounts falling due after more than one year**

	NOTE	2003 £ MILLION	2002 £ MILLION
MOD loan	18	1.1	3.2
Rationalisation, redundancy and early retirement costs		6.1	7.6
<b>Total</b>		<b>7.2</b>	<b>10.8</b>

**17 Provisions for liabilities and charges**

	TOTAL £ MILLION
Balance brought forward	11.7
Utilised in year	(5.0)
Additions in year	5.7
Released in year	(4.8)
<b>Balance carried forward</b>	<b>7.6</b>

**18 Long term loan**

The Government loan is repayable by instalments which bear interest at 8.375% per annum which is fixed for the duration of the loan.

	2003 £ MILLION	2002 £ MILLION
Analysis of repayments:		
- Between one and two years	1.1	2.1
- Between two and five years	-	1.1
<b>Total</b>	<b>1.1</b>	<b>3.2</b>

**19 Operating leases**

Operating lease rentals due within one year:

	2003 £ MILLION	2002 £ MILLION
Buildings		
Leases expiring within:		
- one to two years	3.0	3.1
- over five years	22.5	5.3
<b>Total</b>	<b>25.5</b>	<b>8.4</b>

There were no material operating leases for other categories.

**20 Public dividend capital**

	2003 £ MILLION	2002 £ MILLION
Balance brought forward	50.4	275.4
Net movement in year	-	(225.0)
<b>Balance carried forward</b>	<b>50.4</b>	<b>50.4</b>

**21 Revaluation and other reserves**

NOTE	REVALUATION RESERVE £ MILLION	PROFIT AND LOSS ACCOUNT £ MILLION	TOTAL £ MILLION
At beginning of year as previously reported	16.3	61.3	77.6
Retained profit for the year	-	8.9	8.9
Release from revaluation reserve	(1.8)	1.8	-
Revaluation of tangible fixed assets	11 3.6	-	3.6
<b>Balance carried forward</b>	<b>18.1</b>	<b>72.0</b>	<b>90.1</b>

**22 Reconciliation of movements in government funds**

Government funds represent reserves and long term loans with MOD

NOTE	2003 £ MILLION	2002 £ MILLION
Retained profit for the year	8.9	8.9
Movements on revaluation reserve	21 3.6	90.8
Transfer of long-term loan due within one year to creditors	24 (2.1)	(2.1)
Release from reserves on transfer to MOD	-	(576.2)
Net movement in government funds	10.4	(478.6)
Balance brought forward	131.2	609.8
<b>Balance carried forward</b>	<b>141.6</b>	<b>131.2</b>

**23 Analysis of the balances of cash as shown in the balance sheet**

	2003 £ MILLION	2002 £ MILLION
Cash at bank and in hand	1.4	1.2
Short term deposits	28.3	21.1
<b>Balance carried forward</b>	<b>29.7</b>	<b>22.3</b>

Of which:

Analysis of changes in cash and cash equivalents during the year

	2003 £ MILLION	2002 £ MILLION
Balance brought forward	22.3	119.0
Increase/(decrease) in cash and liquid resources	7.4	(96.7)
<b>Balance carried forward</b>	<b>29.7</b>	<b>22.3</b>

**Financial Instruments**

The Trading Fund's principal financial instruments comprise loans from MOD, cash and short-term deposits. The main purpose of these financial instruments is to raise finance for the Trading Fund's operations and invest surplus funds. The Trading Fund has various other financial instruments such as trade debtors and trade creditors, that arise directly from its operations.

It has been the Trading Fund's policy throughout the year that no trading in financial instruments shall be undertaken.

The main risks arising from the Trading Fund's financial instruments are liquidity risk and foreign currency risk. The Board reviews and agrees policies for managing each of these risks. These policies have remained unchanged throughout the year.

The Trading Fund's objective is to maintain a balance between continuity of funding and flexibility through the use of bank current account facilities and investment of surplus funds in short term interest bearing accounts.

The Trading Fund has limited transactional currency exposures. Such exposure arises from sales or purchases by an operating unit in currencies other than sterling.

The Trading Fund does not use forward currency contracts to eliminate such exposure to currency losses.

**24 Analysis of changes in financing during the year**

NOTE	2003 £ MILLION	2002 £ MILLION
PUBLIC DIVIDEND CAPITAL		
Balance brought forward	50.4	275.4
Net movement in year	-	(225.0)
<b>Balance carried forward</b>	<b>50.4</b>	<b>50.4</b>

**Long term loans**

	NOTE	2003 £ MILLION	2002 £ MILLION
Balance brought forward		3.2	23.8
Transfer to creditors due within one year	22	(2.1)	(2.1)
Disposal during the year (Element of MOD Loan due after one year)		-	(18.5)
<b>Balance carried forward</b>	<b>18</b>	<b>1.1</b>	<b>3.2</b>

**Finance lease obligations**

Balance brought forward	-	1.7
Repayment of capital element of finance lease	-	(0.3)
Disposal during the year	-	(1.4)
<b>Balance carried forward</b>	<b>-</b>	<b>-</b>

**25 Capital commitments**

	2003 £ MILLION	2002 £ MILLION
Capital expenditure that has been contracted for, but has not been provided for in the accounts.	3.9	0.7
Capital expenditure that has been authorised but has not been provided for in the accounts.	1.2	2.5

**26 Government accounting – losses and special payments**

There were no losses or special payments exceeding £100,000 in the year.

**27 Contingent liabilities**

A Health and Safety incident occurred in the year. There is a possibility that legal proceedings may follow. At the date of signing these accounts no firm prediction can be made as to whether any liability may result.

**28 Related party transactions**

Dstl is an Executive Agency of the Ministry of Defence (MOD).

MOD is regarded as a related party. During the year Dstl had various material transactions with the Ministry and other Government bodies. All transactions are carried out on contract terms and are subject to the normal course of internal and external audit.

Dstl did not enter into any material transactions with non-MOD related parties during the year.

**29 Post-balance sheet events**

No events have occurred subsequent to the financial year end which require disclosure in these financial statements.