



House of Commons
Defence Committee

**The work of the Defence
Science and Technology
Laboratory and the
funding of defence
research: Government
Response to the
Committee's Eighth
Report of Session 2006–07**

Tenth Special Report of Session 2006–07

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The Defence Committee

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The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at:

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Committee staff

The current staff of the Committee are Philippa Helme (Clerk), Eliot Wilson (Second Clerk), Ian Rogers (Audit Adviser), Stephen Jones (Committee Specialist), Adrian Jenner (Inquiry Manager), Richard Dawson (Committee Assistant), Camilla Brace (Secretary) and Stewart McIlvenna (Senior Office Clerk).

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Report



The Defence Committee published its Eighth Report of Session 2006–07 on The work of the Defence Science and Technology Laboratory and the funding of defence research on 1 March 2007, as House of Commons Paper HC 84. The Government’s response to this report was received on 25 April 2007. This is appended below.

Appendix: Government response

The MoD welcomes the publication of this report. The report rightly draws attention to the high quality of UK defence research work undertaken by Dstl and its staff. It also underscores the significant contribution they make to UK Armed Forces' operations overseas.

The MoD welcomes the Committee's conclusions that:

- **Dstl's new Framework Document provides a clearer statement of the top-level objectives for the organisation. (Paragraph 20)**
- **Dstl has been proactive in networking with other organisations in defence research in the UK and overseas and that international collaboration in defence research offers substantial benefits to the UK. (Paragraph 24)**
- **Since its formation, Dstl has demonstrated a strong financial track record increasing its profits and its net assets. (Paragraph 39)**
- **There are advantages to Dstl remaining a Trading Fund, notably its ability to retain profits for future investment in the business, but that MoD should review on a regular basis, whether Trading Fund status continues to remain the most appropriate option. (Paragraph 42)**
- **The MoD has recognised the risks to Government Departments associated with owning in part or whole companies such as Ploughshare Innovation Limited and has put in place governance arrangements to address them. (Paragraph 80)**
- **The Defence Technology Strategy will have a significant impact on Dstl's future work, and that Dstl will need to ensure that its areas of expertise, programmes and capabilities are aligned with the requirements of the MoD set out in the Strategy. (Paragraph 91)**
- **MoD must not make reductions in the funding of longer-term defence research to fund the costs of operations in Iraq and Afghanistan. (Paragraph 100)**

The MoD's response to specific issues raised in the report are set out below.

Providing the necessary resources to achieve Dstl's key objective to maintain and sustain its capability to support the MoD in the future. (Paragraph 22)

The MoD notes and shares the Committee's view on the importance of this objective. Dstl and its MoD customers continue to work closely together to ensure that it is achieved.

Ensuring that the UK provides sufficient research funding for Dstl to be able to retain its current position as a worthwhile collaborative partner with the US and other nations. (Paragraph 24)

The MoD recognises the importance and benefits of appropriate international collaboration and will continue to invest in this. Dstl's role is key and its expertise is recognised and highly valued by partner nations.

It is the MoD's intention broadly to maintain spend on research at the current level and to maintain Dstl's share of that spend. As the Defence Technology Strategy published by MoD last year made clear, investment must also come from industry.

Reviewing the Key Targets set for Dstl to ensure they are challenging and reflect their central function; providing expert advice to Government. (Paragraph 31)

Dstl's Key Targets are reviewed, updated as necessary, and re-published annually. The Key Targets for 2007/08 are in the process of finalisation and will be laid before Parliament in May 2007. MoD judges that these Key Targets for 2007/08 will be challenging and have a strong emphasis on delivering quality services to Government customers.

Opening up to competition some of the defence research budget currently allocated to Dstl and allowing Dstl to compete for defence research work currently carried out by others. (Paragraph 39)

Under the provisions of its Framework Document, Dstl's role is to undertake only the science and technology work that must be done within government. This is defined as work that needs a high level of independent advice and/or support that is free of any external influences; or advice and support on matters of special sensitivity (political, security, international relations); or where only Dstl has the relevant facility or capability. Those parts of the former Defence and Evaluation Research Agency which undertook work which does not fall into these categories were transferred to QinetiQ in 2002. As such, contracts which are placed with Dstl are limited to those where there is no alternative capability which could offer competition.

MoD has no plans to provide Dstl with the capability necessary to compete for defence research funded work that is carried out by science and technology providers in the commercial sector. MoD and Dstl believe that the adverse effects on Dstl's current open and productive relationship with these organisations would outweigh the potential benefits from moving Dstl to a commercial competitive, footing with them.

Reviewing, on a regular basis, whether Trading Fund status is the most appropriate option for Dstl. (Paragraph 42)

The MoD keeps the business models of all its agencies under regular review to ensure that their existing status continues to be the best means of supporting wider defence outputs. Dstl's status as a Trading Fund has been examined on two separate occasions since its creation in 2001. A further review, supported by a full cost benefit analysis, is planned to take place after Dstl's i-lab change programme has been completed.

Appointing a permanent Chief Executive as soon as possible. (Paragraph 46)

The MoD notes the Committee's recommendation that a permanent Chief Executive is appointed as soon as possible. The MoD is committed to the success of Dstl and to ensuring that it takes the time necessary to appoint the right person for the job. The recruitment exercise was suspended in October 2006 while the Department reviewed the implications of the Defence Technology Strategy for Dstl in general, and for the Chief Executive post in particular. In the meantime, Dstl remains in excellent management

hands under Frances Saunders. MoD expects to make an announcement on the way ahead shortly.

Ensuring that Dstl is able to retain its position as a leading defence research organisation well into the future by continuing to be able to recruit high quality graduates and retain and develop its current scientists and engineers. (Paragraph 54)

MoD and Dstl will continue to monitor carefully the supply of potential future scientific recruits and will act upon any risks identified. MoD is pleased that Dstl remains a strong draw for graduate engineers and scientists; it is worth noting that Dstl remains high on the list of employers of choice for new graduates.

Dstl has already begun work on profiling its workforce and improving its understanding of the distribution of skills across the age ranges, departmental groups and other factors. Dstl currently have low staff turnover at approximately 4%; however, it will continue to monitor resignations carefully, and analyse information on reasons for leaving.

Dstl is broadening its understanding of the supply of potential recruits through market analysis. It already has positive relationships with 20 key universities and will continue to monitor this and expand as necessary. Dstl is a Times Top 100 Graduate Employer and aims at least to maintain its position in this survey. It will continue to recruit around 100 science and technology graduates a year and has been very successful in reaching this target each year since Dstl was formed. It is currently improving its approach to recruitment, and is devising a new attraction strategy for 2008 and beyond.

Dstl will continue to support the Year in Industry scheme (YII) with around 10-12 YII students per year. YII, which is an activity of the Engineering Development Trust, provides a year's working experience to students who take a working year out before going to university. It also sponsors the YII Contribution to the Business Award and the Chief Executive of Dstl is on the judging panel. In addition Dstl currently takes around 15 to 20 interns a year into the organisation.

Dstl has recently improved its twin track career paths to demonstrate the range of career options for both managers and technical staff. On the pure scientific and technical path, Dstl has a well established Fellowship Scheme which allows some staff to achieve Senior Fellow which holds the same pay grade and status as that of Director. It is currently refreshing the scheme and will re-launch it in 2007. The scheme has a strand aimed at more junior staff to encourage them to develop their technical or scientific careers.

During 2007, Dstl will develop a new Technical Learning and Development Plan linked to the Dstl Capability Development Plan to ensure that the organisation continues to invest in the right areas to meet future customer needs and provide rewarding development opportunities for staff.

Drawing on outside project management expertise to monitor closely progress against cost and time targets relating to the i-lab change programme work so that action can be taken if cost increases or delays look likely. (Paragraph 65)

The construction and refurbishment element of Dstl's major change programme is being delivered via a Prime Contract which accords with the principles of HMG's Public Private

Partnership initiative. The nature of Dstl's Prime Contract centres on a Strategic Partner (in this case Serco Defence, Science and Technology division) who acts as the principal supplier to coordinate the activities of the entire supply chain. A major attribute of this contract centres around Serco acting on behalf of, and in, Dstl's best interests to manage the construction and refurbishment activities. The bulk of cost is directed towards the construction supply chain member, Sir Robert McAlpine (SRM) who are Serco's sub-contractor. Serco's principal obligation to Dstl is to deliver the construction and refurbishment programme to the agreed cost, programme and quality standards set out in Dstl's prime contract. Dstl has a number of measures already in place to address the Committee's recommendations. These are:

- Dstl, Serco and SRM undertook a lengthy preferred bidder period, which helped greatly to ensure that Dstl's requirements would be met within Dstl's level of affordability.
- Dstl's exposure to risk arising from these activities has been carefully assessed and is reviewed on a monthly basis.
- The Prime Contract provides Dstl with full open book rights such that all costs are visible and auditable and can be assessed by Dstl before any payments are approved.
- Serco employ advisors to ensure themselves and Dstl that the contract with SRM is managed properly.
- Dstl's management team plays an active role in overseeing all aspects of the procurement.
- Dstl's procurement project team are subject to regular audits, to date all of which indicate the project to be well managed and on track to deliver its objectives.
- In the event of any issues with Serco's performance, Dstl is able to draw upon advice from its own, and MoD's range of advisors (Quantity surveyors, architects, engineers, etc).

Currently the project is on programme and after nearly 6 months of operation is well positioned to meet Dstl's objectives.

Putting in place arrangements to track both the qualitative and quantitative improvements that flow from the i-lab change programme. (Paragraph 66)

The tracking of benefit realisation is recognised as a key activity in the OGC Managing Successful Programmes methodology which is used to run the i lab programme. Benefit profiles which describe the nature and timescale of the quantitative and qualitative improvements expected to be delivered by i lab were prepared at an early stage in the programme. These are refreshed every six months to reflect the progress made on the improvement activities. Targets have been established for both qualitative and quantitative indicators of improvement and these have been endorsed by the Executive and Board. Progress towards these targets forms part of the Dstl management review process. As the programme moves into the delivery phase quarterly summary reports of benefit realisation form part of the formal programme reporting arrangements and will be regularly reviewed by the Executive and Board.

Why Ploughshare is allowed to retain the income it generates and how MoD/Dstl track the company's performance against its financial and non-financial objectives – including publishing full details in Dstl's Annual Report and Accounts. (Paragraph 79)

Since the HCDC Inquiry was completed, one of Ploughshare's spin-out companies, Acolyte Biomedica Ltd, has been sold to 3M Company. The initial income Ploughshare received under the sale agreement has helped to bring Ploughshare's exploitation income for its first two years to circa £1,430,000. This sale income, though extremely encouraging, does not fully cover Ploughshare's capital and operating costs for its first two years, and Ploughshare's balance sheet accordingly shows a loss for this period. When Ploughshare has achieved two years' reasonable profit on its balance sheet, it will be required to pay a dividend to Dstl and MoD (the return to the taxpayer) as indicated in Companies Act Regulations.

Non-financial objectives include those which contribute directly to Ploughshare's financial performance and those which reflect the impact of successful exploitation on society as a whole. The former include the health of the new IP pipeline within Dstl, and the number of new licence agreements signed, new spin-out companies formed and spin-outs disposed of. The latter includes the different sectors of society where Dstl IP has been exploited, such as health, the environment, education, sport & culture and defence & security.

MoD confirms that Dstl will track Ploughshare's performance against the achievement of both financial and non-financial objectives, and that full details will be provided in Dstl's Annual Report and Accounts.

Ensuring that MoD reviews the arrangements for minimising the risks and potential conflicts of interests associated with owning Ploughshare to confirm that they remain appropriate. (Paragraph 80)

Both before and since the formation of Ploughshare, an oversight group (the Technology Transfer Oversight Group—TTOG) has regularly reviewed the governance arrangements and sensitivities surrounding the proper operation of Ploughshare as Government owned company. Membership of the group comprises key stakeholders from MoD, the Shareholder Executive, Dstl and Ploughshare. The governance arrangements for Ploughshare now in place, including the accountability of the properly constituted Ploughshare Board to the Dstl Main Board, are judged to be effective and robust. However, the TTOG will continue to have an oversight role in keeping the arrangements under review and ensuring that MoD's interests are protected through, inter alia, taking full account of Government best practice guidance.

Making a swift decision on the future of the Defence Diversification Agency. (Paragraph 85)

The Minister for the Armed Forces laid a written statement before Parliament on 27 March 2007 announcing MoD's decision to close the Defence Diversification Agency later this year. The work required to take this forward is now underway and MoD expects closure to be completed by the Summer.

Aligning Dstl's areas of expertise, programmes and capabilities with the requirements MoD has set out in the Defence Technology Strategy. (Paragraph 91)

Dstl's Corporate Plan for the period 2007 to 2012 has recently been approved by MoD. This Plan lays out the high-level strategy which Dstl will follow to develop its capabilities to meet MoD's future needs, reflecting the impact of the DTS. Work is already in hand to revise Dstl's Future Business Strategy (first published in July 2006), in response to DTS and other indicators of product and market trends. This will be complemented by the publication in July 2007 of Dstl's first Technical Capability Strategy—which is being developed through close collaboration between MoD and Dstl staffs. The work involved is building on the strong working level interaction that characterised the development of the Defence Technology Strategy (DTS), the drafting of which involved considerable Dstl input drawing on existing Dstl Group and Department level Capability Development Plans. Dstl measures the extent to which customer needs are understood and addressed at Group and Department level through its 3-yearly Technical Benchmarking process. Progressive improvements in performance are mandated in terms of a relevant Business Plan key target and have been satisfactorily delivered over the period of the Benchmarking round completed just prior to DTS publication (as previously reported to the Committee). This process is now being reviewed by a joint Dstl/ industry/ academia team led by the Lord May which will bring forward recommendations for process improvement in April 2007 aimed at providing the basis for the next measurement cycle.

Clarifying what progress has been made in securing a greater contribution to Research and Development by industry through the road map laid down in the Defence Technology Strategy. (Paragraph 96)

Following a meeting of the National Defence Industry Committee (NDIC) on 2 November 2006, a Working Group (WG) entitled 'Encouraging Investment in R&D' was established with the objective 'To investigate and propose alternative business models for defence R&T which would attract greater investment from industry and other third parties. The scope of the task shall include formulation of options for improved exploitation of technology, identification of mechanisms to enable a more certain and rapid return on investment, and the counteraction of any identified inefficiencies of current processes'.

The Working Group has produced a discussion paper which identifies five areas that have the potential to make the risk/reward balance more favourable for industry and would therefore encourage greater investment. At recent NDIC meetings the Working Group was tasked with taking forward their proposals and agreed in principle how the Commercial Practices Group and the R&D Sub-Group would be taking forward their work. It is noteworthy that, in common with a number of other committees and groups, the NDIC R&D Sub-Group has been restructured so that it is better aligned to the implementation requirements of Defence Technology Strategy.

Ensuring that the cost of the operations in Iraq and Afghanistan does not impact adversely on the defence research budget and compromise future UK military capability. (Paragraph 100)

We note the concerns expressed by the Committee that research funds used for direct support to operations could potentially impact on the funding available for longer-term

research. We can reassure the Committee that the cost of research in support of Urgent Operational Requirements are funded from the Treasury Reserve, not the core Defence budget, so it does not impact on the funds available for long-term research.

Making the case for an increase in the investment in defence research in the current Spending Review and ensuring that MoD and the Treasury understand the impact on the UK's future defence capability and MoD's ability to retain high quality scientists in defence research if the investment is not made. (Paragraph 107)

The MoD notes and shares the Committee's view on the need to maintain an appropriate level of investment in defence research. Future levels of MoD research spend will be reviewed in, and in the light of the outcome of, the Comprehensive Spending Review 2007. Government has an important role to play but, as emphasised in the Defence Technology Strategy which MoD published last year, investment must also come from industry.