



Defence Research 2010 exhibition



Defence Research 2010 provided delegates with the opportunity to network with Prime Contractors and notable SMEs



Dr Phil Packer, Dstl Programme Leader, CBRN



Live equipment demonstration



Dr Frances Saunders, Chief Executive of Dstl



Defence Research 2010 attracted a capacity audience of key defence industry buyers and suppliers

# Defence Research 2010: Event Review

Defence Research 2010, which took place at the Birmingham International Conference Centre in March, saw the MOD present its annual research programme to industry, academia and other suppliers over the course of a two-day conference and exhibition.

The event drew together some of the most senior figures in UK defence research from MOD organisations such as Defence Science and Technology Laboratory (Dstl) and Defence Equipment and Support (DE&S), alongside industry colleagues who help deliver the ongoing research programme.

Changes to the management of science, innovation and technology across British defence means that the Dstl has become the key focus for these areas. The organisation is now responsible for leading the defence science and technology (S&T) research programme – designing, formulating and commissioning programmes with industry (large and small), academia and other research organisations.

Dr Frances Saunders, Chief Executive of Dstl, outlined the MOD's research investment programme in her keynote address on the first day of the conference. She also highlighted the importance of research and development in delivering battle-winning equipment and technologies, and the importance of suppliers being involved in the whole journey from great ideas and research through to frontline deployment.

Dr Saunders said: "As the person who is now responsible to formulate and commission the MOD research programme, it is incumbent on me to make the case for industry and academic research. We could just leave research to somebody else and simply buy off the shelf the results of that research. But we estimate that our current level of R&D spend has put us around 12 years ahead – in terms of equipment and quality of technology – of an opponent who is just buying off the shelf. And it is exploiting that advantage effectively that saves lives and wins wars."

Dr Saunders noted that research is not just about kit and technology, but also about the full range of research from how social sciences may influence future operations to how the battlefield of the future may be on a television or computer screen.

She continued: "It is vital to the success of current operations that we are ahead of the competition and stay ahead. And not just ahead in the conventional fields of science and technology, but be increasingly alert to new areas of science and what that might mean for defence. For example the boundaries of biology and physics are yielding a whole host of bio-inspired technologies from novel sensors to advances in autonomous systems that mimic birds or insects. The breadth of emerging technologies is only limited by the uses we can imagine for them."

**"It is vital that we open up opportunities to the SME community, particularly in view of the economic and operational pressures"**

"But we need to develop those ideas from the drawing board to exploitation in military systems more quickly and efficiently than our adversaries. And in addition we need to be alert to fields that we did not previously regard as important to defence. We need inventive people looking at that research and development to see how it could be adapted to be of use to the MOD. We are interested in every branch of science and technology, and are looking to work with people and organisations that have never worked with us before. The next big leap in defence technology, or the next small innovation that has a large impact on our soldiers' lives, could come from someone who today hasn't even thought their work could be of interest to us."

Dr Saunders also noted the importance of research on defence and how it will be easier to work with the MOD: "A key part of my job is to make sure we maximise the impact the science and technology can have on defence, ensuring the MOD is alert, ready and able to gain the greatest benefit from the money we spend. To do that Dstl will form better links with industry and academia, and the wider science and technology base, with all those within the MOD that use and exploit technology."

"This will make it easier for SMEs, academia and even individual inventors to understand the MOD's requirements, approach us with their solutions and receive help, advice and funding to develop their ideas and bring them in to service."

Dr Saunders also talked about the Defence Technology Plan, the key research and development priority areas which set the agenda for investment as well as the future visions – open ended projects designed to promote a longer-term perspective.

Other highlights during the conference included an enlightening address from Major General Alan Macklin, Director of the Programmes and Technology Group at DE&S, who provided a military perspective on how technology can provide support to operations, as well as contributions from Dr Nicholas Joad, Dstl Domain Leader, Air; Graham George, Dstl Team Leader, C41STAR and Human Sciences; Dr Gina Lindsley, Dstl Team Leader, Weapons; John Hunt, Dstl Team Leader, Land; and Dr Phil Packer, Dstl Programme Leader, CBRN.

Helen Almey, Head of the Centre for Defence Enterprise (CDE), the MOD's gateway for UK industry, academia and innovators to help ensure our Armed Forces are best equipped now and in the future, led one of the most informative and engaging sessions of the event, detailing the forward plans for the CDE and how it will align with Dstl under the new changes.

As well as these MOD-led seminars, industry representatives from BAE, QinetiQ and MBDA also presented sessions on subjects as diverse as industrial/academic partnering, maritime surveillance and complex weapons delivery.

In addition to the conference, delegates got a chance to browse the exhibition hall where a wealth of companies and organisations such as Rolls-Royce, BAE Systems, QinetiQ, EADS Astrium, Lockheed Martin, UKTI, Cranfield University, MBDA, General Dynamics and Midlands Aerospace Alliance appeared alongside notable SMEs such as Blue Bear Systems, Plextek and Advanced Defence Materials.

Gavin Copeland, part of the MOD's Defence Science and Technology team, commented: "Defence Research 2010 was a hugely successful event and demonstrates the MOD's ongoing commitment to wide supplier engagement. The 2010 event was a significant advance on the previous year, and we hope to continue this level of engagement in the future as we move forward under our new organisation."

## Further information

To view the conference slides, please visit:  
Website: [www.defenceresearch.co.uk](http://www.defenceresearch.co.uk)  
For further information on Dstl, please visit:  
Website: [www.dstl.gov.uk](http://www.dstl.gov.uk)  
For further information on the CDE, please visit:  
Website: [www.science.mod.uk](http://www.science.mod.uk)