



2010 DTIC CONFERENCE
March 22-24, 2010

Celebrating 65 Years of Providing Access to Defense Information

Evolution of Information Services in the UK Defence Establishment

March 24, 2010

Ms. Diane Schnurpusch, Moderator



Evolution of Information Service in the UK Defence Establishment

DoD Field Activity Since 2004 DoD Field Activity Since 2004 DoD Field Activity Since 2004 DoD Field Activity Since 2004 DoD Field Activity Since 2004

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Knowledge Management and Exploitation
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Defence Science and Technology
Laboratory (Dstl)



Evolution of Information Services in the UK Defence Establishment

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Summary

- Introduction
 - UK Defence Enterprise
 - Dstl
 - KIS KM&E
- Evolution of Library and Information Services
- Current Position
- Looking to the Future

UK Defence Enterprise



And many More

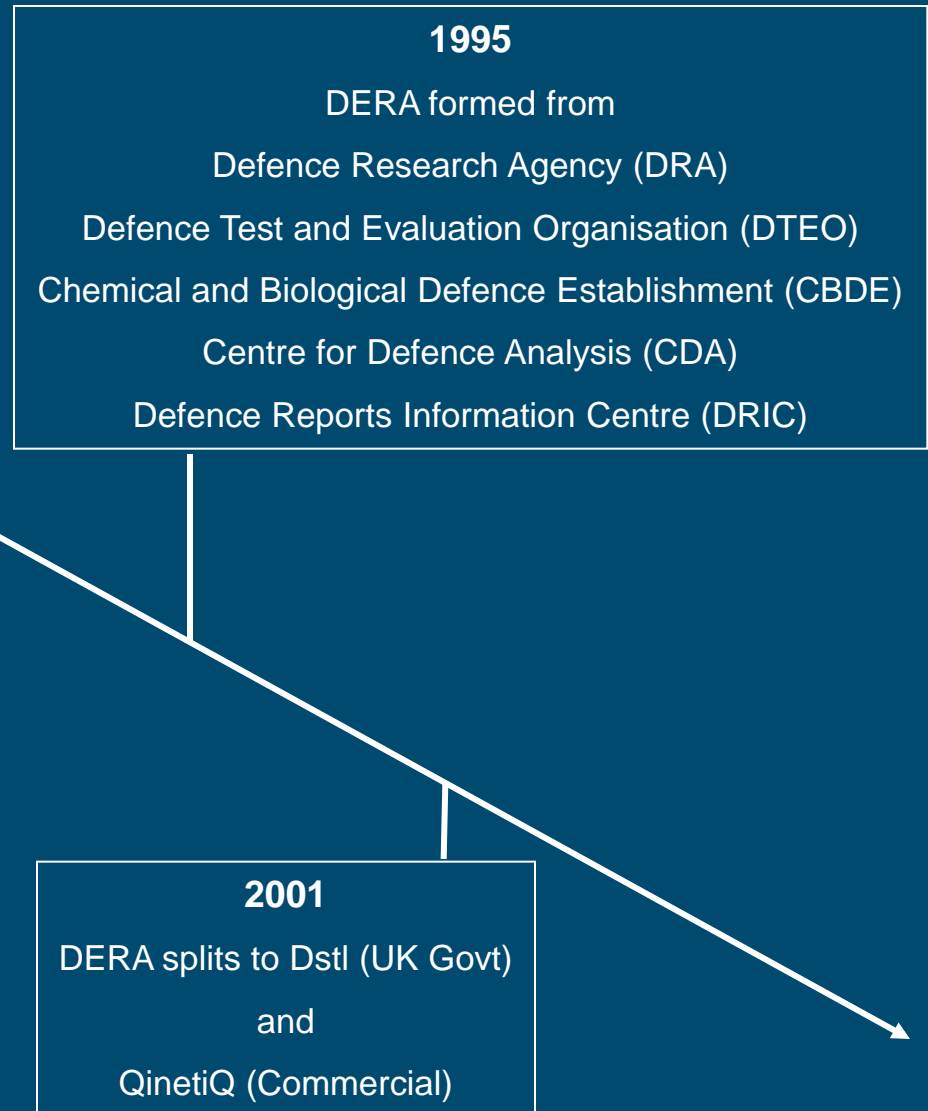


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Dstl is part of the
Ministry of Defence

Dstl's Evolution



Who is Dstl?



- Based at Porton Down, Portsdown West and Fort Halsted
- ~ 4000 Staff

“Our mission is to create the winning edge for UK Forces and Government through the best use of science and technology”

What does Dstl do?

Threat, risk and option analysis

Supporting policy decision makers

Supporting military capabilities

Supporting the procurement process

Science on the front line

Science on the Home Front



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Dstl's Structure

CE (3*), Board
and Executive

• Operational Departments

- Policy and Capability Studies
- Naval Systems
- Sensors and Countermeasures
- Land Battlespace Systems
- Security Sciences
- Air and Weapons Systems
- Joint Systems
- Detection
- Information Management
- Biomedical Sciences
- Environmental Sciences (acting)
- Physical Sciences

• Support Functions

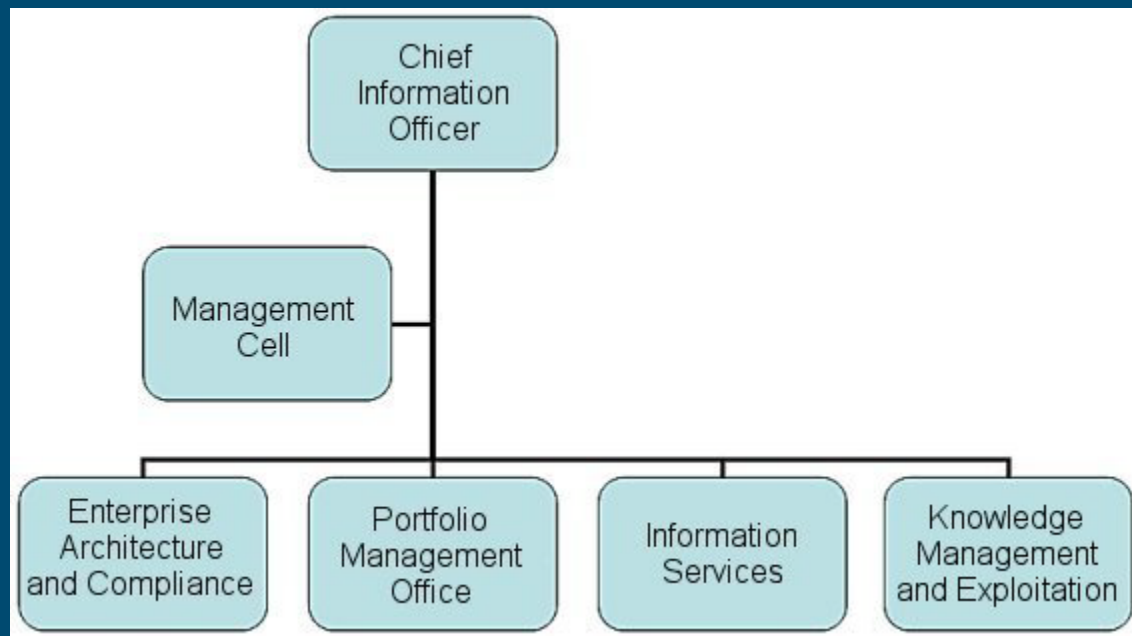
- Estates
- Safety, Health, Environment & Fire
- **Knowledge and Information Services**
- Programme Support
- Technology Transfer
- Security
- Commercial Services
- Governance and Planning
- Communications
- Shared Services
- Finance
- HR



Knowledge and Information Services

Formed from the merger of Knowledge Services and Business Systems in 2006

KIS ensure Dstl has ready access to the necessary information and the means to exploit that information in order to deliver benefit to our customers.



Merger

It has taken some time to see the benefits of the merger; good communication and strong direction from the management was required to achieve this.

- Combining IT infrastructure and LIS in one department has offered many benefits
 - Improved IM tool development capability
 - Awareness of firewall issues
 - Improved hardware and software access
- The downside
 - Change always causes uncertainty in staff
 - Steep learning curve for LIS and IT professionals

Knowledge Management and Exploitation

- The KM&E group:
 - Provide the physical Library service
 - Provide access to electronic web content (eLibrary)
 - Consult and support knowledge and information management
 - Provide information exploitation services
 - Offer information literacy training
 - Provide DPoC for operational departments

More than a Library!

- The problem
 - Poor IM and exploitation leads to research projects re-inventing the wheel and loss of information.
 - The amount of information available is so large that researchers can suffer from information overload / anxiety.
- The Hypothesis
 - Projects will benefit from support from Information Professionals
 - Need to leverage the maximum benefit from sources and resources

The KA experiment

- Knowledge Agents
 - Recruited with S&T backgrounds and taught Information and Knowledge Competencies
 - Need to be excellent communicators
 - Interest in defence or military history useful
 - Work in small task teams or autonomously



What do they do?

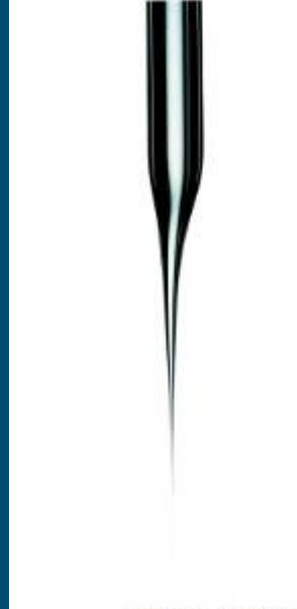
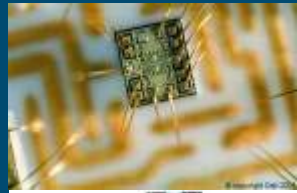
- Literature based research
 - Retrieval, training, reporting
 - Literature analysis and visualisation
 - Tacit information capture
 - Consult on and develop IM tools
 - Facilitate creativity in groups
-
- Produce and deliver a range of products and services aimed at;
 - Keeping the clients informed
 - Aiding clients in learning about new areas
 - Providing information products which support the creation of new knowledge and information
 - Supporting development of innovative solutions to client problems
 - We believe that good KM practice supports organisational learning.

Departmental Point of Contact

- Provides focus for department's Knowledge and information needs
 - Physically work in department facilities regularly
 - Improved communication and trust
 - Overview of work being carried out for the department by KIS
 - Reduces wheel re: invention
 - Understand the department's programme of work
 - Understand department's Information needs
 - Tell KM&E of these to inform selection
 - Builds network of experts
 - Can be used to solve other departments' problems

Physical Libraries

- Dispersed organisation – 5 sites in 2001 – 3 in 2010
- Tight financial constraint
 - Estates and paper journals expensive
- Small focussed collections of physical assets on each site – new starters induction
- Electronic journal and reference book access
- Internet facilities, quiet and meeting rooms
- Coffee and communication!



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The Legacy of the Library Catalogue

- DRA merged 16 separate Research Establishment Catalogues
 - Content – Defence Reports and Library Holdings
 - Format – Records slightly different in each catalogue
 - Classifications – Recorded inconsistently
- SIRSI Workflows used to house amalgamated catalogue



Where is it now?

- Reports collection separated from library holdings
- Data scripted out of SIRSI and cleaned
- Bespoke application developed to manage library holdings
 - Fit for purpose
 - Users empowered to manage own withdrawals
 - Can be developed in the future to improve service



Reports Collection


















- Full-text collection of S&T research
- Meta data standard
 - Agreed by DGInfo
 - Extended to suit Athena enabling searching and access control
- Accessible throughout MoD on Dstl extranet
- Front end in SharePoint searches full-text documents stored on a file server
 - Very little customisation required
- Hits in document highlighted



- Project Athena is more than just the reports collection
 - Value must be leveraged from the collection

Capability Domains

 <p>Above & Underwater Systems (AUS) The Above and Underwater Systems domain covers a wide range of science and technology for above water naval systems and for successful application in the underwater battlespace.</p>	 <p>Air & Littoral Manoeuvre (ALM) The Air and Littoral Manoeuvre domain covers a range of technology and capability areas that are needed to conduct joint and coalition manoeuvre in the littoral and land battlespace.</p>
 <p>CBRN Defence The Chemical, Biological, Radiological Nuclear Defence domain includes information in support of the UK's policy of maintaining political and military freedom of action despite the presence, threat or use of chemical, biological or radiological weapons.</p>	 <p>CCII & NEC The Command, Control & Information Infrastructure and Network Enabled Capability domain covers capabilities to enable the delivery of timely, relevant and precise information to decision makers and warfighters between the front line and headquarters.</p>
 <p>Counter-Terrorism (CT) The Counter-Terrorism domain addresses a wide range of S&T disciplines relevant to counter-terrorism including operational analysis, CBRN threat reduction, explosives, electronics and network analysis.</p>	 <p>Deep Target Attack (DTA) The Deep Target Attack domain encompasses the attack of surface targets at range using all major strike platforms, artillery, and rocket systems.</p>
 <p>Electronic Systems (ES) The Electronic Systems domain covers the key technology areas that underpin MoD's electronic and opto-electronic systems used in equipment and operations.</p>	 <p>Ground Manoeuvre (GM) The Ground Manoeuvre domain encompasses the close or direct battlespace environment.</p>
 <p>Human Capability (HC) The Human Capability domain includes aspects of embedding the human as a vital component across all areas of military capability and in particular includes human performance, dependability and capability.</p>	 <p>ISTAR The Intelligence, Surveillance, Target Acquisition, and Reconnaissance domain covers systems that provide an awareness of the intentions of potential adversaries to meet decision makers' needs.</p>
 <p>Joint Training, Evaluation and Simulation (JTES) The Joint Training, Evaluation and Simulation domain cuts across all capability areas, including operational analysis, experimentation, simulation and synthetic environments, joint collective training and test & evaluation.</p>	 <p>Logistics and Support to Operations (LSO) The Logistics and Support to Operations domain covers technologies and equipment to support the delivery of the Joint Logistic Capability necessary to deploy, sustain, support and provide medical care facilities on deployed operations.</p>
 <p>Operating Environment (OE) The Operating Environment domain includes aspects of the physical, chemical, biological, and human environment; including prediction of the state of the natural environment.</p>	 <p>Theatre Airspace (TA) The Theatre Airspace domain encompasses the control of air battlespace, and covers ground based, airborne and maritime force air defence, and the outputs of 'enabling research' to support air systems across other domains.</p>
 <p>Weapon and Platform Technologies (WPT) The Weapon and Platform Technologies domain covers cutting-edge and cross cutting technologies in key areas that underpin MoD's ability to acquire, own and use weapons and platforms.</p>	

- Researchers must be aware of more than UK defence S&T
- Products aim to save staff the time of looking for literature and merge information from defence and open source literature, e.g. Capability Domain Web Pages

Athena products

- Capability Domain Web Pages
- Defence S&T Newsletters
- Defence Reporter
- Defence Weekly Summaries
- Defence Technology Alerts
- Defence Research Abstracts



What has been achieved

- Coherent department providing IT infrastructure, library and Knowledge and Information Exploitation services
 - No longer information provision now facilitate its exploitation
- Multidisciplinary teams of good communicators enable better understanding of users' needs and engender trust
- Improved understanding of the value of information to research and visibility of open source
- A challenging and enjoyable role for the Information services staff in Dstl.

But what do we still need to consider?

- Emerging web technologies offer real opportunities
 - Must not use them just because they are there
 - Is there a business need for them? Do they solve a problem?
- Benefits must always be tempered by costs and security
- Younger members of staff may need very little training or explanation of what they are and how they work
 - Conversely older members of staff might need significant support to use and understand the benefits.
- Communication is key to the successful deployment of any new tools!

E Book Readers

- RBS is now a mature display format
 - Increasing numbers of e books available
 - Significant numbers of these are free
- Plastic Logic have launched a business E Book
 - A4, Plastic substrate – rugged, reads many file formats
 - Ticks many CSR boxes
- How are we going to manage e formats?
 - Loans without breaching copyright

- Even if it isn't from current e readers, something will beat paper eventually

Podcasts

- Podcasts are a good format for delivery of news and topical discussion
 - Could be used to deliver newsletters
 - Experts could deliver their thought on emerging technologies
- Some people learn better from the spoken word than the written one
 - Situations where the spoken word is more accessible than reading
 - Whilst driving, on the train.
- Security is an issue

Questions ?



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