

[dstl] **SCAF Workshop – Update on
NATO’s Research Study on
Collaborative Influences
NATO SAS-090 Workshop**

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SCAF Workshop, Preston, Tuesday 7th June 2011

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Caveat

The views represented are those of the individual presentation author(s), not of Dstl or UK MoD; or of the equivalent SAS-090 departments referenced.



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An introduction to Dstl

*Maximising the impact of science and
technology for the defence and
security of the UK*

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Who we are

- MOD's science and technology (S&T) agent
- Trading Fund
- Turnover (2010/11) £572 million
- 3500 staff (including 100 military) > 70% active scientists, engineers and analysts
- Integral part of the UK government and MOD
- Work with more than 40 government departments and agencies



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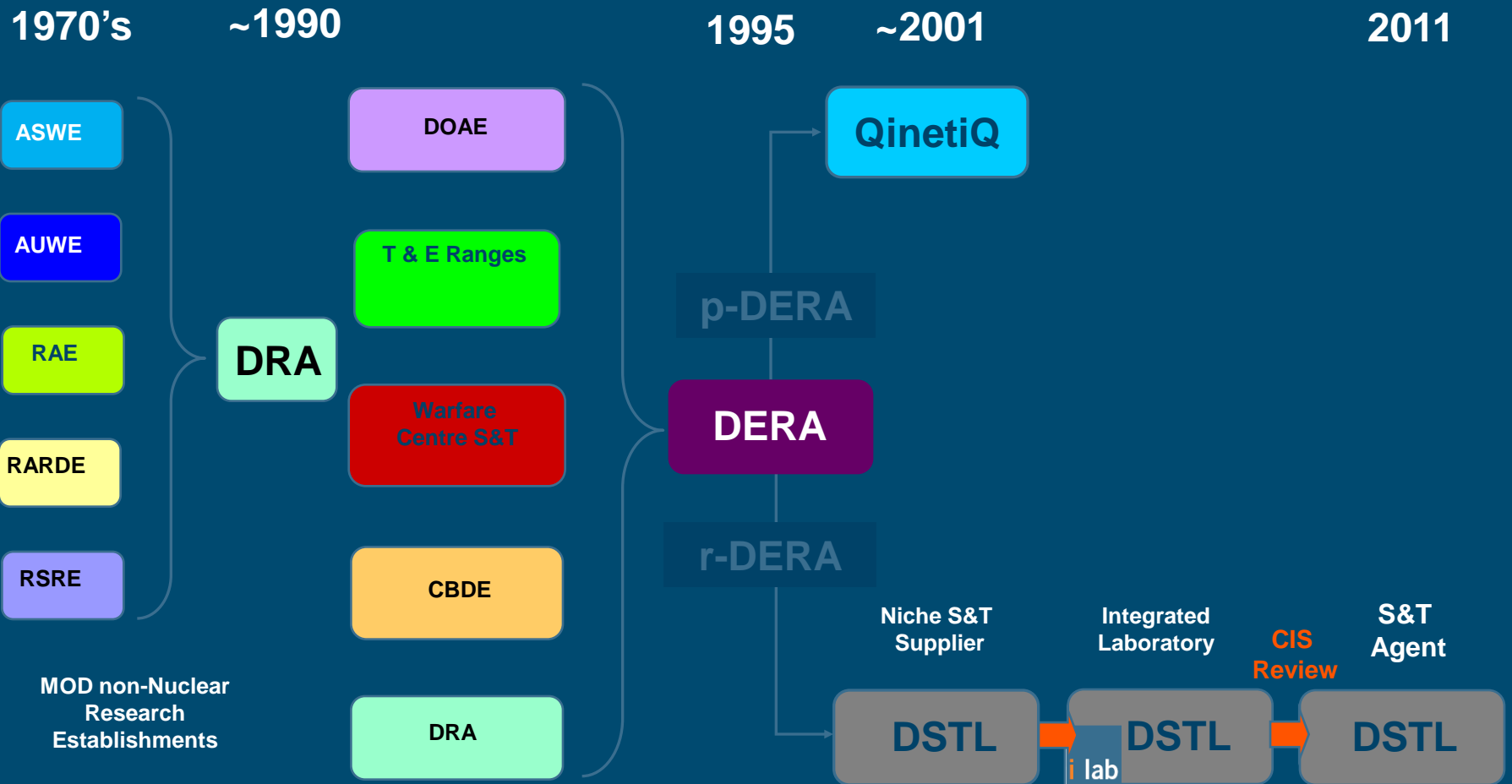
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Dstl's continuing evolution



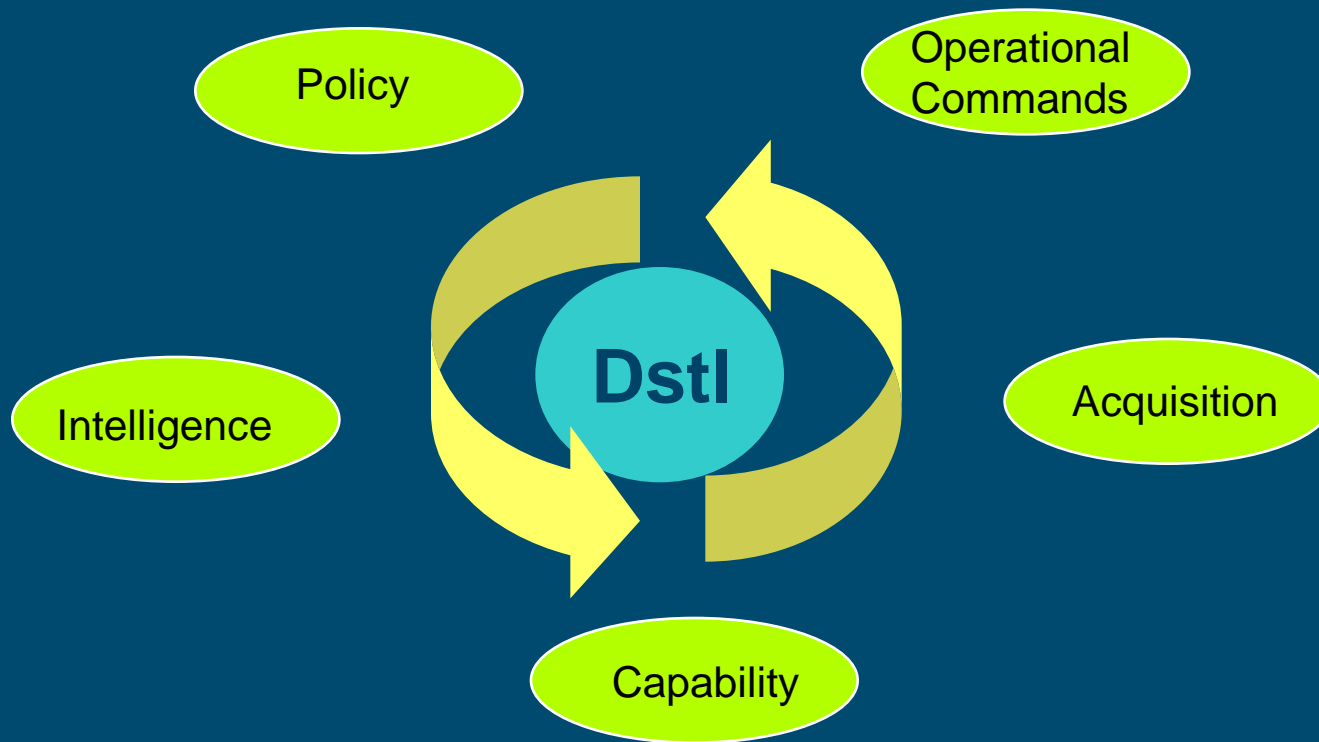
Where we are today



Dstl's purpose

- Dstl's purpose is to maximise the impact of science and technology for the defence and security of the UK.
- Part of MOD and accountable to government, the tax payer and UK armed and security forces personnel whom we support in the field.
- Dstl carries out work in-house in niche areas that are sensitive, operationally critical, international or highly classified; such cases that industry cannot, or will not, undertake – for example, Urgent Operational Requirements (UOR's) for theatre.

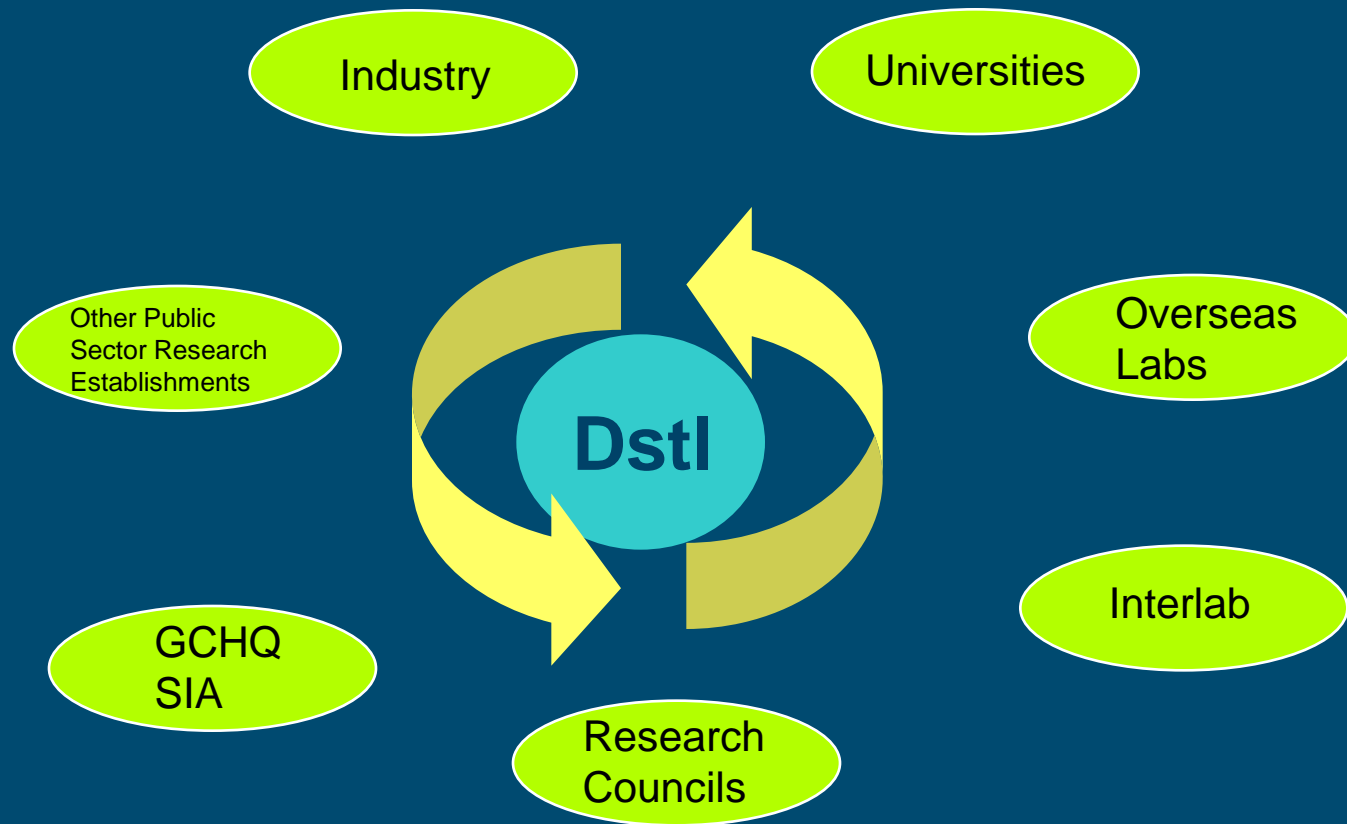
Who we work for in MOD



Cross-government working

- Dstl is primarily focused on defence S&T and continues to be strongly aligned with MOD's overall mission.
- But we also work with more than 40 government departments and agencies to exploit our expertise and knowledge, with the aim of enhancing the safety and security of UK citizens and interests.

A well connected organisation

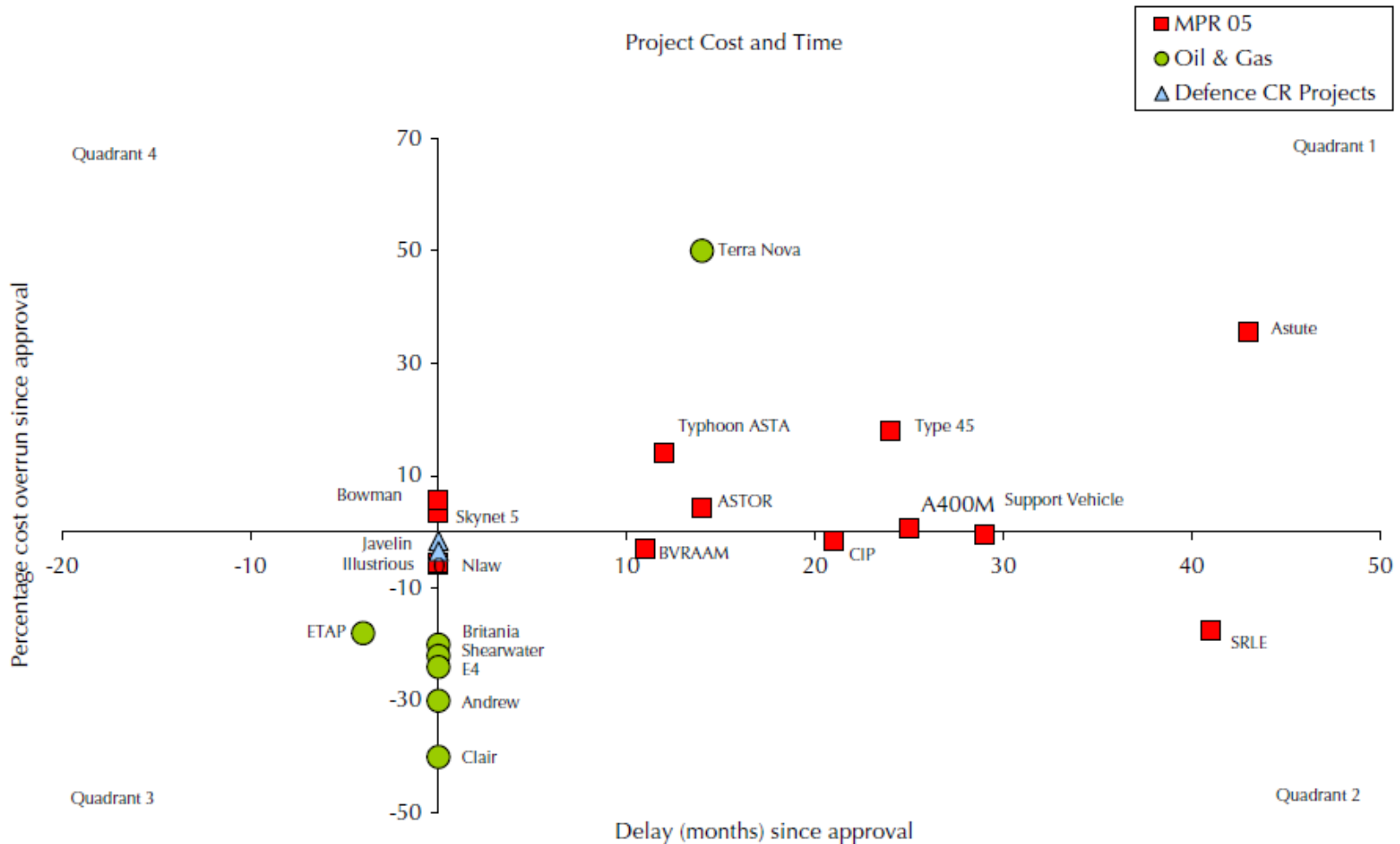


Our policy is to work in partnership with external providers and funders

Aim of NATO SAS-090

The workshop aims are to examine the challenges, pitfalls and possibilities of international cooperation in an era of tightened budgets.

4 Outcomes of studied projects compared to major defence projects



SAS-090 Background & Objectives

- Link to Mr Sverre Kvalvik (NOR, SAS-090 Chair) presentation A1
- [A 1 2011-05-24 Introduction - SAS-090 objectives SK.pptx](#)

CfP - Workshop Topics

1. Lessons learned from international cooperation efforts (acquisition, education, specialisation, etc)
2. Specialisation: experiences from reducing breadth of the defence structure.
3. NATO experiences from past missions; potential interdependencies and likelihood for cooperation / specialization.
4. Suggested frameworks or strategies for approaching international cooperation.
5. Experiences from the defence industry, dealing with multi national defence collaboration projects
6. Costs of doing business with other nations.
7. Critical mass: what are the costs of small scale?

Overview of Workshop themes

SESSION 1 – ‘THEORY’

- Keynote: ‘Demand for Security within NATO Alliance’ - Neil Davies, Chief Economist, MoD
- Demand for Security within NATO Alliance, Dr Jomana Amara, USA
- Theoretical Perspectives on European Armaments, Dr Vladen Holcner, Col/CZE
- Ergonomics of Force Generation & Structure, Dr Berkok, CAN
- Multinational Approaches in Logistics, Mr Johannes De Nijs, ACT
- Innovative Approaches for Cost Effective Capability Development, Mr Johannes De Nijs, ACT

Overview of Workshop themes

SESSION 2 – APPLICATION ‘LESSONS LEARNED’

- NATO and the Financial Crisis – Dr Binyam Solomon, CAN
- Key Factors of Success for Armaments Cooperation, Col Philip Dunaud, FRA
- Lessons Learned from International Cooperation Efforts, Mr Eric Huybrechts, FRA/OCCAR
- International Acquisition Policy & UK/French Cooperation, Mr Jon Thrower, GBR
- Nordic Defence Cooperation – Tool for Improved Operational and Cost Effects, Mr Trond Heimvik, NOR
- Lessons from Transatlantic Defence Industrial Cooperation, Dr Gustavo Scotti di Uccio, ITA

Presentation Snapshots

- Link #1 to Mr Neil Davies (GBR Keynote) pres. A2

[A 2 201110513 NATO - PRAGUE 24 - 45 MAY 2011 ND.pptx](#)

- Link #2 to Dr Jomana Amara (USA NPS) pres. A3

[A 3 The Demand for Security within the NATO Alliance may 23 DrJA.pptx](#)

- Link #3 to Dr Gustavo Scotti di Uccio (ITA, SAS-090 Panel member) pres. B6

[B 6 110525.10 TADIC to the SAS090 DrGSdU.pptx](#)

In review

- ‘Theory’ #1 (ND) - Financial pressures; misconceptions imports vs. exports, sustaining jobs; pool sharing
- ‘Theory’ #2 (JA) - Networking of countries
- ‘Lessons learned’ #3 (GSdU) - ITAR trade constraints, bureaucracy, TADIC/NIAG, major projects, identifying good lessons learned
- Represents wide ‘breadth’ of strategic & tactical findings; criteria require collating/normalising to try understand scale (+ve / –ve) impacts; recommendations to facilitate timely and measured responses to the findings.

Further questions/debate #1

- Taxonomy (UK, Belgium....United States)
- Transformational aspects – capability, costs, schedule
- Concentrated on Direct vs. indirect (teeth vs. tail)
- Capacity/utilisation/throughput (industry/military)
- National interests vs. Industry perspective – which drive decisions?
- Programmatic aspects – decision for 5..10..20 years?
- Commercial/contractual conditions – do they dictate?

Further questions/debate #2

- Best benefits perception/accrue – Major economy (prime) vs. Club members
- Likelihood of success (uncertainty?)
- Peacetime vs. Operational – capability gaps/UOR (vfm?)
- Operations - free the burden on military resources in theatre (logistics re-supply/strategic lift) – CONDO?
- Technology pull through – civil to defence; exploitation / Return on Investment (RoI)
- Governance / Financial – forecast euro/£/\$
- Balanced against pragmatic realities of national sovereignty and policy.

QUESTIONS, FEEDBACK, COMMENTS?



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Collaboration - Cost Drivers?

Advantages

Disadvantages

Technology

- Modularisation / standardisation
- Better interoperability across NATO
- Clearer requirements definition

- Less Pull/Push Through?
- More complex Requirements

Research & Development

- Improved use of R&D funds / better Return on Investment (RoI)
- More focussed R&D
- Improved metrics / benefits measures; economy of scale

- Duplication of effort
- Less competition
- Poor exploitation
- Higher UPC's linked to amortised recurring costs over smaller qty's

Resources Facilities / Manpower

- Improved utilisation of resources across partner nations

- Shortage of specialist facilities and infrastructure (under utilised)

Schedule

- Reduce project times for R&D + Production

- Long lead timeline for benefits to be realised