

The Foundation for Science and Technology Meeting – 21st May, 2008

Speaking Notes

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1. Can Science and Technology make a greater contribution to the defence of the UK?
2. What is the impact of defence science spending on the wider economy in the UK?

Introduction

- Need to take two questions together
- Perspective as an Industrialist
- Demanding future, more dynamic environment

Three Challenges

1. Ensuring we are thinking sufficiently broadly about the definition of defence
2. Embracing contribution of S&T capability both in the products we deliver and the innovation to develop our business model and ultimately supporting MoD in delivering effective military capability for the Armed Forces
3. Improving the delivery of S&T capability in the UK

Each in Turn

1. Broadening definition of Defence
 - More than just COTS (Civil vs Defence)
 - Adjacency with a number of civil markets
 - Information Management
 - Energy and Power Management
 - Competition for Natural Resources
 - National Infrastructure Protection
 - A much more complex environment, more interdependencies

- However more opportunity / scope for innovation and knowledge transfer, especially in an increasing global content
2. Embracing innovation in products we deliver and business model
- Harnessing engineering and process innovation a key challenge
 - Number of examples where UK Plc and the MoD is at leading edge eg contracting for availability
 - Tornado ATTAC example; University of Cambridge work on ISBM. Rolls Royce have similar arrangements
 - Opening the aperture to harness innovation in supply chain. Learn from IBM et al on logistics, etc
3. Improving the delivery of S&T (and Engineering)
- Setting clearer priorities: welcome DTS
 - Ensuring we have the widest possible engagement across Universities, RDA's SME's as so a number of my colleagues in the Defence Sector
 - Improving and focussing on Rapid demonstration of technology / innovation (ref: Capability Visions, New Commercial Models)
 - Shortening technology and innovation cycle times (ref: Loughborough SEIC, UoR performance)

Turning to the question of Economic Contribution of Defence Science and Technology spending on the wider economy.

- Positive contribution in terms of £'s investment and development / retention of key skills
- Industry, including BAE Systems, investment in R&D in defence can have broader applications.

- Initiatives which focus and align support via University Partnership Programme, Schools Science Projects result in a wider understanding of application of knowledge
- A few key statistics / examples:
 - o BAE Systems had the 3rd largest R&D spending of Top 850 UK Companies in 2006
 - o BAE Systems spent £101,000 on R&D for £1 million in sales – over 5 times the national average
 - o Number of our colleagues in defence sector achieve same gearing
 - o Technologies and applications, such as UAS, vary from defence, to fire fighting, traffic management
 - o Corrosion Sensors – based application in preventative infrastructure maintenance

Conclusion

- Defence S&T has and will continue to make a very positive contribution to wider UK S&T agenda
- Significant opportunity to continue to improve and develop delivery of Defence S&T Capabilities
- Wider Partnership is essential to delivering the contribution that S&T and Engineering can make to overall defence / security agenda in a global context