

Civil sector R&T: lessons for defence

Dr Jeffrey Bradford

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This brief presentation aims to offer relevant insights from other industries to the defence sector R&T challenge

- The automotive majors are increasingly reliant on their supply chain for R&T
- The pharmaceuticals sector is a high investor in R&T though the smaller firms tend to be the more innovative
- The mobile telephony sector invests in R&T through multiple paths simultaneously and suffers rapid obsolescence
- These three sectors (and others) share challenges around mobilising R&T with the defence sector

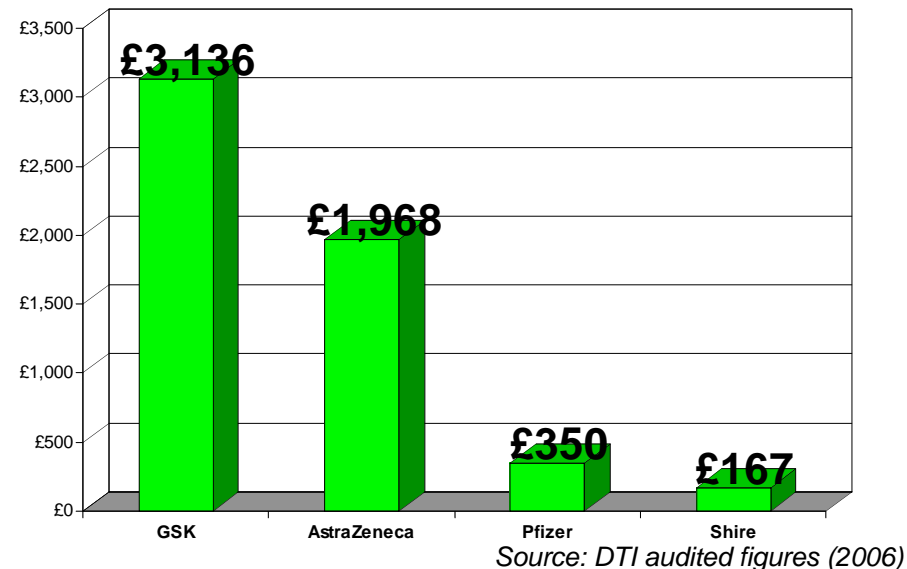
Case study 1: The Automotive sector is largely a mature industry where project management and execution is key

- The automotive majors are increasingly reliant on their supply chain for R&T
- Basic 'platform' technology is a century old (1910 model-T Ford)
- 1970s electronics accounted for 10% of R&T which is estimated to exceed 40% by 2010
- Automotive 'primes' R&T has been static at 4% since 1998 whilst suppliers share will likely increased 33% by 2010



Case study 2: Pharmaceuticals sector where harnessing R&T presents a similar challenge to the defence sector

- The pharmaceuticals sector is a high investor in R&T though the smaller firms tend to be the more innovative
- R&T costs of £0.5 – £1.0 Billion plus per medicine
- 10-12 years development
- 30% success rate
- 1 in 10,000 reach market



Case study 3: Mobile telecommunications shared with defence R&T increasingly short lifespan of technology generations

- The mobile telephony sector invests in R&T through multiple paths simultaneously and suffers rapid obsolescence
- by electronics and software development cycles of less than two years - mirroring Moore's law in computing
- Mobile operators spend under 5% on R&T (Vodafone despite a market capitalisation in excess of GSK)
- Skilled at capability trade-offs to bring product to market on time



This brief tour of other sector experiences offers some trends and implications for defence acquisition

- The “Google earth” model – technologies once seen as the exclusive purview of nations now available for free. BOYD is back with a vengeance
- Defence spends more than some industries on R&T but some are more focused on turning research into actual product
- Failure to harness greater use of COTS potentially harms long term competitiveness of the defence industry in private hands