Uncovering the Mysteries of MoD Support Costs

Neil Morrill - Dstl

Steve Robinson – Galorath

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Dstl key facts

- Part of the Ministry of Defence
- Formed in 2001 when remainder of the Defence Evaluation and Research Agency was reconstituted as a Government-owned company (QinetiQ) in preparation for privatisation
- Dstl's mission:

  Creating the winning edge for UK Forces and Government through the best use of science and technology

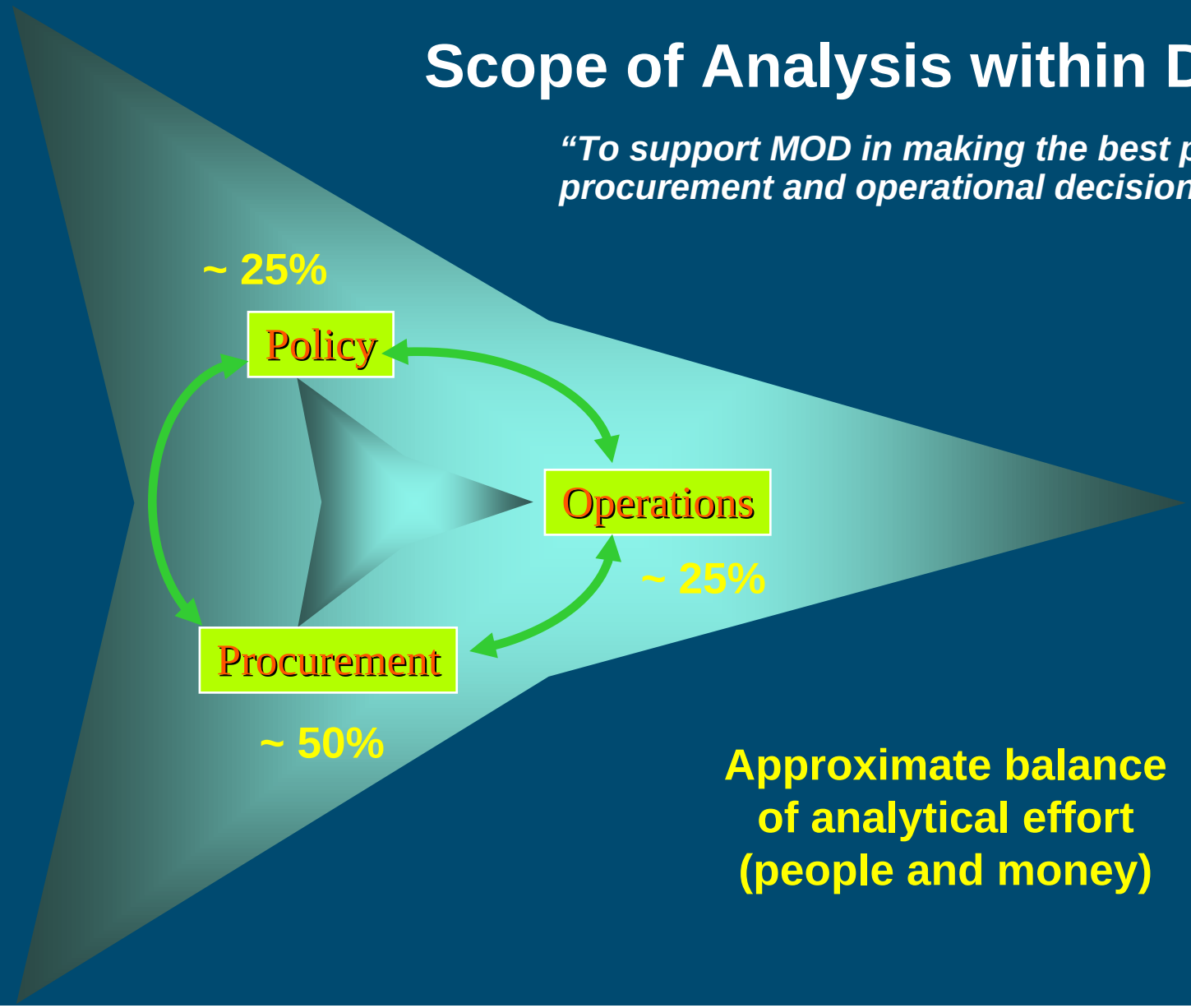
- 3500 staff (including 100 military)
- Operates as a Government Trading Fund (ie 100% 'contract' funded), turnover £380 million

Dstl's role

- Trusted in-house analysis and advice
- Research
  - in particularly sensitive areas
  - or where deep understanding needed for defence purposes
- Knowledge integration
  - based on global science and technology
- Focus for international research collaboration
  - government to government
- Dstl does not undertake commercial contracts unless directed to do so by MOD

Scope of Analysis within Dstl

"To support MOD in making the best policy, procurement and operational decisions"



Approximate balance of analytical effort (people and money)

Scope of operational analysis in Dstl

Manning, Training and Costs (MTC) Team

- Formed in April 2007 from the Manning Team and Cost Analysis team.
- Expanded to include training to enable us to provide analytical support across more of the 'other' Defence Lines of Development (DLOD).
- Role:
  - Develop the tools, techniques and networks to provide scientific advice to support high level manpower and training decisions.
  - To provide cost estimates, analytical support, advice and guidance to customers, and to provide/develop the tools, techniques and processes to do so.

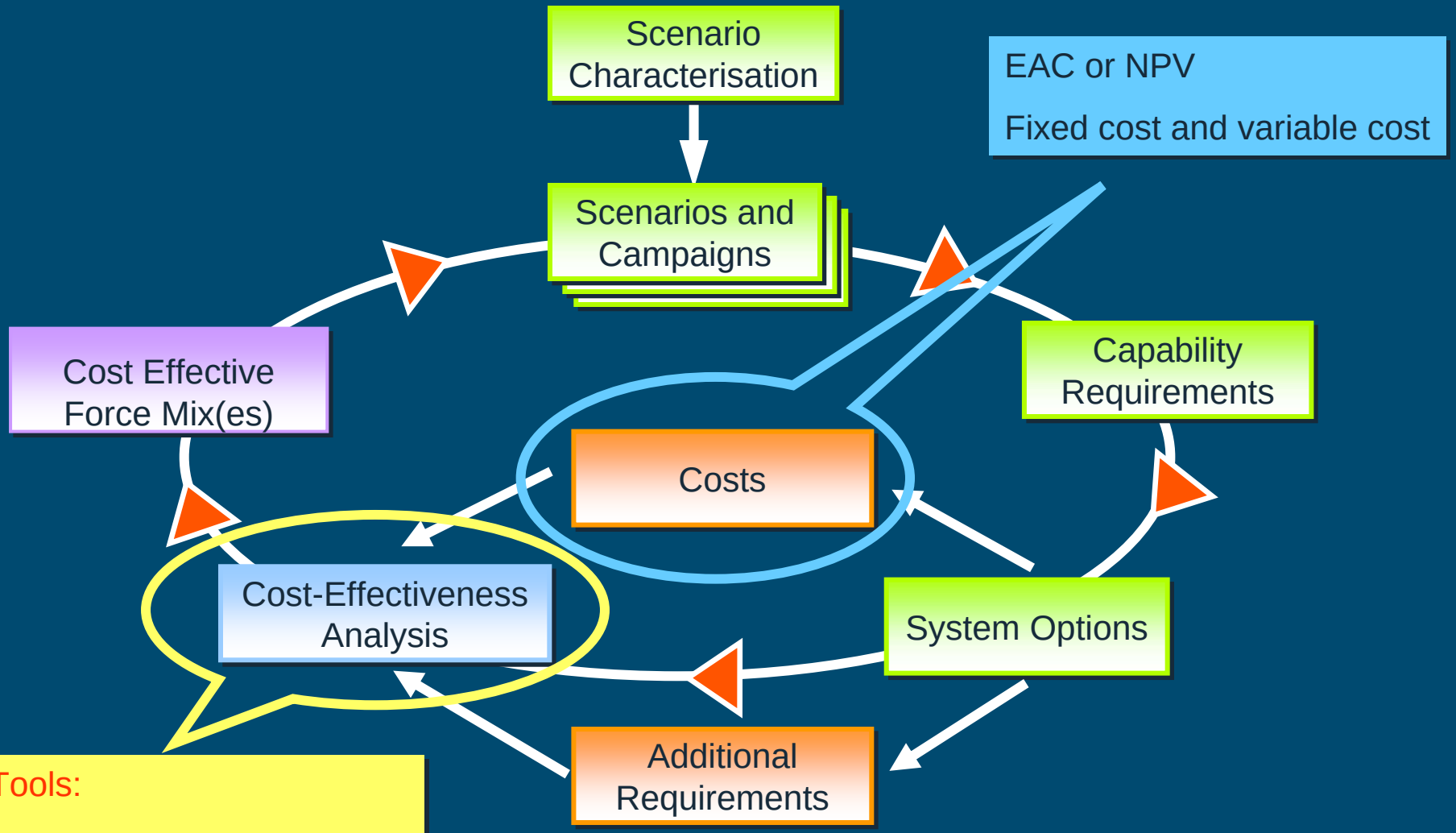
What is a BOI?

- Balance of Investment: The way in which resources are allocated to competing demands to most cost-effectively achieve one or more desired capabilities

Examples:

- between different systems for countering enemy armour
  - e.g. infantry-deployed anti-tank weapons, tanks, artillery systems, mines, fixed-wing aircraft, attack helicopters
- between alternative ways of improving personnel retention
  - e.g. improving pay, improving living accommodation, long-service incentives, etc

General BOI Methodology

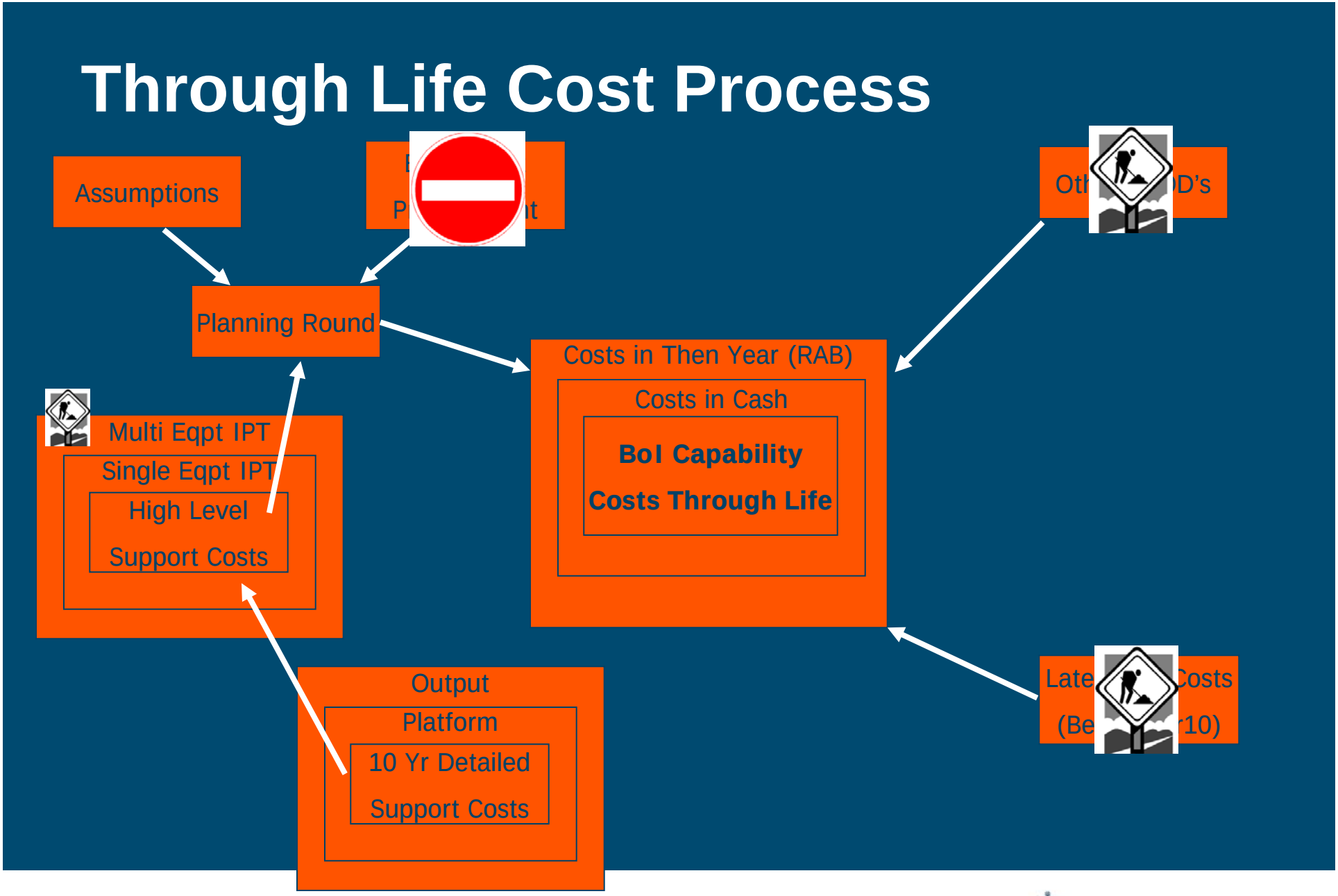


Support Cost Study - Example

Support Cost Study

- Aim – To understand if readily available data sources provide adequate information to conduct BoI analysis
- Approach – Engage with relevant Integrated Project Team's and stakeholders to obtain additional understanding and information
- Output – Conclusions and Recommendations based on findings of analysis
- Case Study – Independent cost analysis of Future Lynx using SEER-H

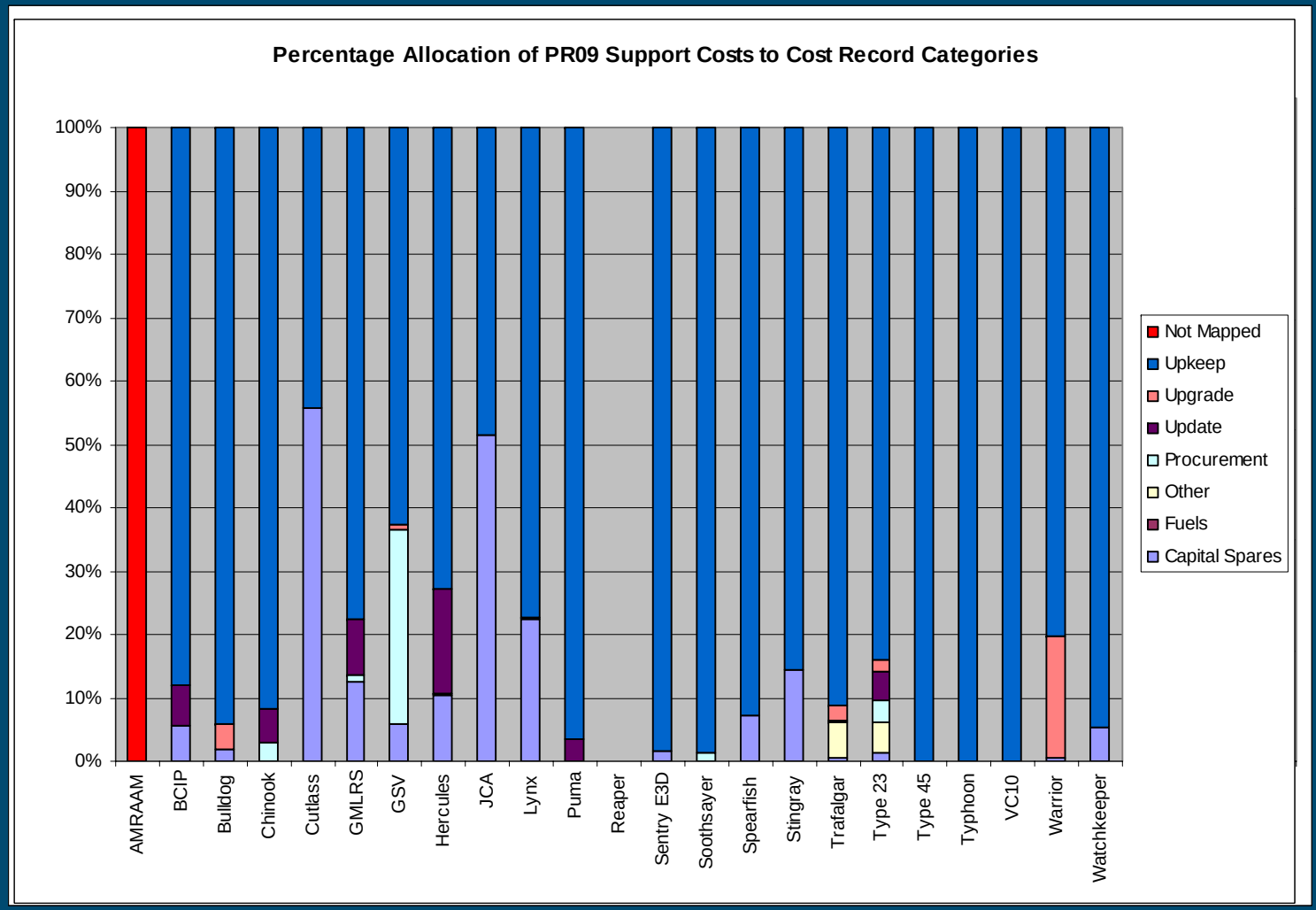
Through Life Cost Process



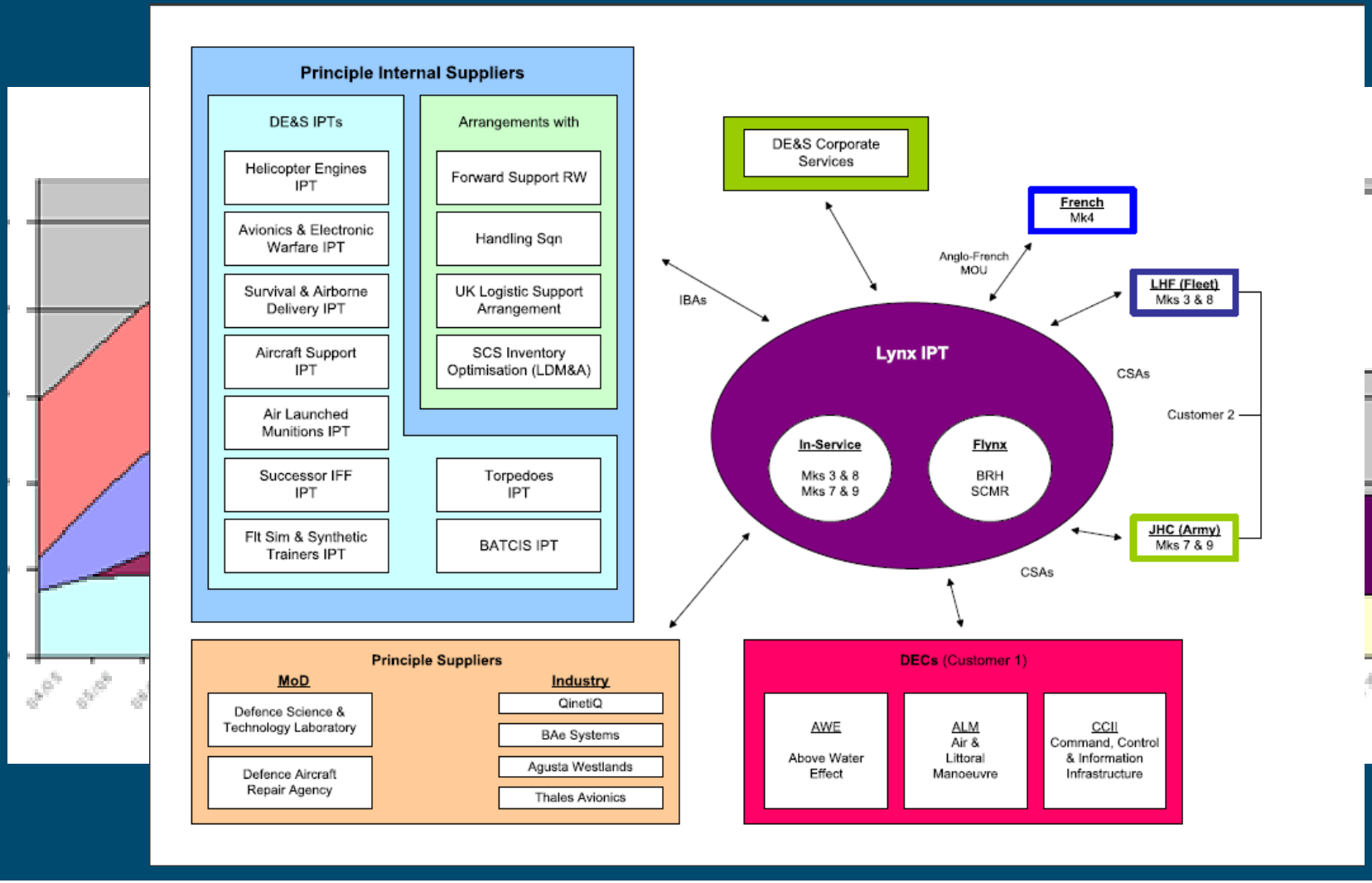
Candidate Projects

Dstl is part of the
Ministry of Defence

Overall Analysis



Lynx – Case Study



Lynx - Case Study

Establish what proportion is covered in the Equipment Support Plan (ESP)

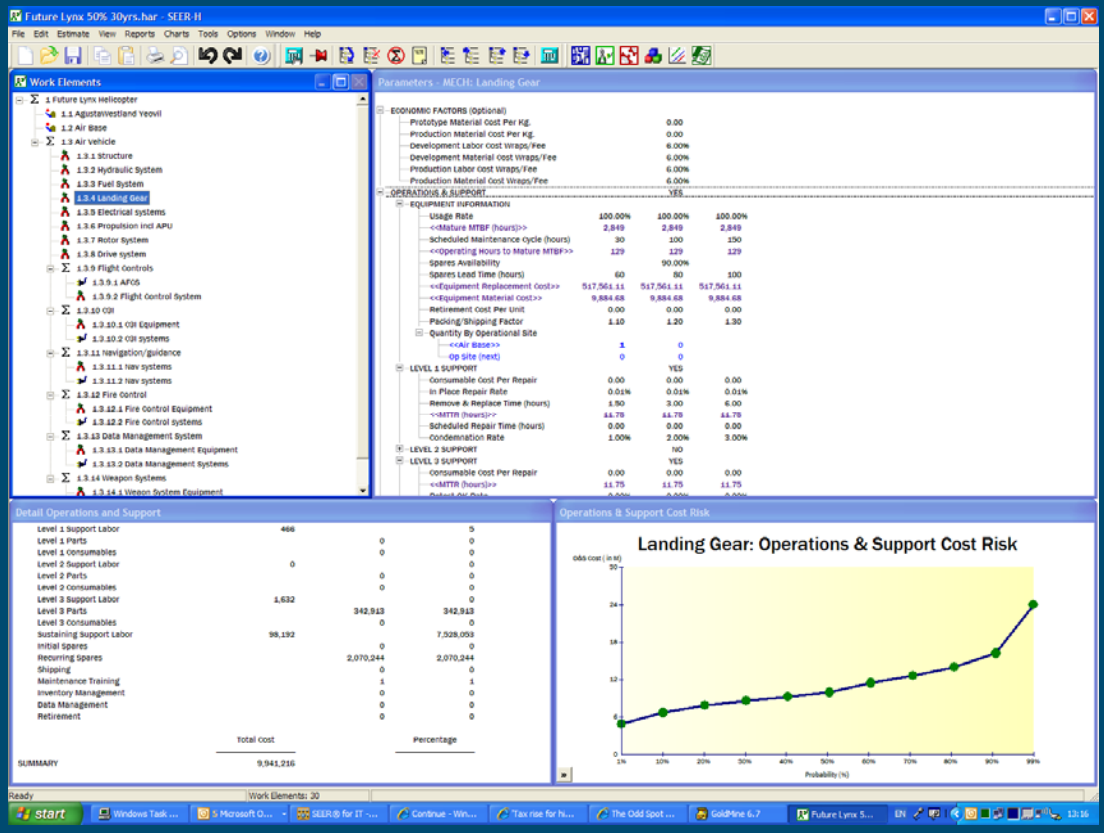
- Discussions with Finance Branches of stakeholder organisations
  - Data was not readily available
- Capitation Rates for existing Lynx aircraft
  - Excluded cost of money and depreciation
  - Based on assumptions made ESP covers between 22% and 44%
  - Operating cost of bases, fuel, training, operators (crew)

Future Lynx – SEER Case Study

- Equipment Breakdown consisting of:
  - Airframe
  - Hydraulic System
  - Fuel System
  - Landing Gear
  - Electrical System
  - Propulsion
  - Rotor System
  - Drive System
  - Flight Control
  - C3I
  - Navigation
  - Fire Control
  - Data Management
  - Weapon System

Future Lynx – SEER Case Study

- SEER-H with the following assumptions:
  - Life – 30 Yrs
  - Number of Helos – Total number likely to be procured
  - Utilisation – 1.5% to 3%



Future Lynx – SEER Case Study

- Output from SEER-H
  - Support for procured aircraft:
    - 50% probability - £2,900M
    - 80% probability - £5,500M
  - Range of £100M - £185M per year through life
- Comparison between SEER-H and MoD Data
  - MoD data reasonable at the low to mid point of the SEER range

Study Outcome

- Observations
  - New process implemented during FY09/10
  - For BoI studies, possible risk of double counting
  - Using Lynx as an example, ESCoM covers between 22-44% of capability WLC
  - Independent check with SEER-H shows support at the lower end of the predicted range
- Conclusions
  - Readily available data not sufficient to provide cost information for BoI studies
  - Stakeholder involvement required for detailed analysis
- Recommendations
  - Future iterations with new candidate projects
  - Independent WLC analysis

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Questions ?