



Ministry
of Defence

Impact of Government Acquisition trends on Test & Evaluation

September 2014

A personal view from the UK

- **As the ‘Complex Weapons Senior Responsible Owner’**
 - Significant consumer of T&E services and products
- **As the Core Evaluation Capability Lead in Defence**
 - Policy, investment (dis-investment!) responsibilities for strategic Evaluation Capability

Poacher and Gamekeeper in one role!

UK Policy Foundations

■ Why Does UK Government Sponsor T&E?

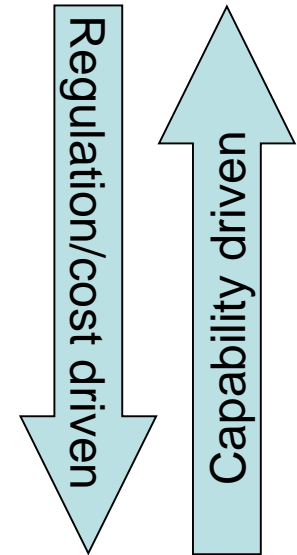
- Is equipment/capability safe?
- Is equipment/capability what we contracted for?
- Is equipment/capability suitable for warfighter use?

■ ‘Test’ and ‘Evaluation’ are different

- Test gathers data
- Evaluation draws conclusions based on data and experience
- Can sometimes be separated – but at risk

■ ‘Independent’ T&E often demanded

- but rarely 100% achievable



Some Acquisition Pressures

- **Off the shelf and international purchase**
 - Use of civil products/subsystems
 - Collaborative development
- **Volume reductions**
 - Contingency uncertainty
 - Capability increase
- **Fiscal pressures**
 - Out-sourcing
- **Changing Societal Norms and Legal scrutiny**

Trends (1) – Visible cost

■ ‘Fixed’ T&E base increasing % of spend

- Lower acquisition volumes
- Fixed assets and manpower
- Increasing complexity of the Evaluation task

■ Cost of T&E activity increasing

- Regulatory demands
- ALARP interpreted as ALAP
- Late additions to address non-compliance / regulatory change

■ Alternative approach?

- ‘First beneficial use’; Limited or UCR release
- Care that this is not simply a ‘cost deferral’ strategy

Trends (2) – Concealed cost

■ Over-testing or misdirected testing

- Testing to verify rather than discover
- Application of blanket standards
 - Requirements specify what we have always done, not what is needed
- Plans do not allow for ‘surprises’

■ Alternative approach?

- Formally challenge T&E plans: integrated, end-to-end, risk-aware, technically & operationally contextualised
- Incorporate T&E in Development Programme
- Up-skill in-house resources
- Formally, and separately, cost the T&E requirement

Trends (3) – Interdependence

- Increasing interdependence, system complexity
- Drive to share assets & resources domestically & internationally

BUT

- **Demand for ‘independent T&E’**
 - We don’t trust what/whom?
 - Independent of Manufacturer, Seller, Approver.....?
- **Alternative Approach**
 - Shared TEST vs shared EVALUATION
 - Data and Risk ownership, intellectual property interoperability
 - Appetite for data release between governments?

Strategy - 1 Non-traditional test data

- **Evaluation is through-life, not just for acceptance**
 - Agile approvals processes
 - Many are already 'way down' this path
- **Data re-use**
 - Contractual barriers
 - Technical barriers
 - Organisational barriers
 - Think & plan early, do once

Strategy 2 - Test and cost the Requirement

- **What is the link between KURs and campaign effectiveness?**
- **What is the link between confidence in performance and campaign effectiveness**
- **What Evaluation costs are driven in at Concept or Equipment KUR Stage?**



Strategy 3 – Evaluation Capability is ‘just’ another Defence Enabling Capability

■ Understand

- through-life costs of sustainment
- impact of investment or dis-investment on campaign outcome
- benefits and constraints of international coalitions

■ Remember

- the enablers need to get there early
- If you haven't the enablers YOU CAN'T do the job!

Final Thoughts

- **Before you think how to make it**
 - Think how to test it

- **Smart Systems are great**
 - Until you try to underwrite their performance

- **In data we trust**
 - But only if we know and trust who collected it

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