Keeping up with Technology - Incremental Capability Provision

R Adm Nigel C F Guild
Director - Defence Procurement Agency
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**Supplementary Notes**
See Also ADM001419 for whole conference on CD-ROM. These papers are from the Harnessing Advanced Technology for C4ISTAR, The Second Annual Advanced Technology Conference, held 25-27 September 2001 at The Great Malvern Theatre Complex., The original document contains color images.

**Abstract**

**Subject Terms**

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**Number of Pages**
16
Keeping up with Technology - Incremental Capability Provision

- Smart Acquisition
- Why do we need it?
- Application to Reality
- Lessons learned
Smart Acquisition

Aim:

“To enhance defence capability by acquiring and supporting equipment more effectively in terms of time, cost and performance”
Why do we need it?

- Reducing dominance of Defence in technology and commerce.
- Need to reduce the “time to market” of military capabilities.
Incremental Acquisition

- A fundamental concept from the UK Defence Review Acquisition Organisation studies in 98
- Built on best practise already widely deployed throughout many Defence programmes.
Where can it be applied?

• Almost anywhere!
• Wide ranging examples include:
  • Type 45 Destroyer
  • Challenger Tank
  • Typhoon
  • Operational C4 Systems
Key Differences for C4I Acquisition

- Time
  - We need the capability now
  - Cannot afford project approvals delays
- System complexity
- System life expectancy is shorter
- Continuously emergent requirements
- The target is accelerating away
Programme Examples

- Royal Navy Command Support System (RNCSS)
- Joint Operational Command System (JOCS)
- Both procured from the same supplier (EDS Defence Ltd) using different procurement models
Royal Navy Command Support System

- Detailed requirement capture 1991-1996
- Project approval given in 1996 and a single contract placed with prime contractor in Jul 96
- Incremental software deliveries to end 2001

Outcome
- Customer expectations and needs have changed in the intervening period
- Significant effort required to re-focus capabilities.
Joint Operational Command System

- Requirements capture in 1995/6
- Approvals obtained for overall project
- Each increment contracted individually
- Increment delivered within 12-18 months of contracting

Outcome
- User revisits the detail of the requirement regularly
- Less detail on precise capability up front
- Delivered capability was matched to new technology and User needs
Lessons Learned

• Flexibility
• Have a single consistent requirement
• Gainshare
• Track the commercial market
Incremental Acquisition Process

- Obtain approval for the whole programme.
- Define the initial capability in detail and broad understanding of later increments.
- Recognise the need for regular capability roll out, both for maintenance and new capabilities.
- Leave scope for re-prioritising.
- Add increments as identified.
- Decisions must be made on a whole life cost of ownership basis.
Incremental Issues

- Do not define the total programme capability delivery in detail at the outset.
- If you overspend in the early phases, later phases can fall short of User expectations.
- Commitment to infrastructure is made early (and may not support future detailed requirements).
- Getting agreed and consistent priorities is difficult.
- An increment is only a part of the system and cannot be considered in isolation.
- Can be dealing in all phases of a project at once.
Incremental capability provision is a viable solution to C4I acquisition.

It is not a new concept but a wider understanding of process is emerging.

Success requires:

- Close Customer and Supplier contact
- To understand the risks you are exposed to
- Flexibility
Further information:

- Acquisition Management System
  - via www.mod.uk
- ....
Incremental IS Procurement Model

- Concept
- Assessment
- Demonstration
- Manufacture
- In Service
- Disposal

Initial Gate

Main Gate