



Defense Information Systems Agency

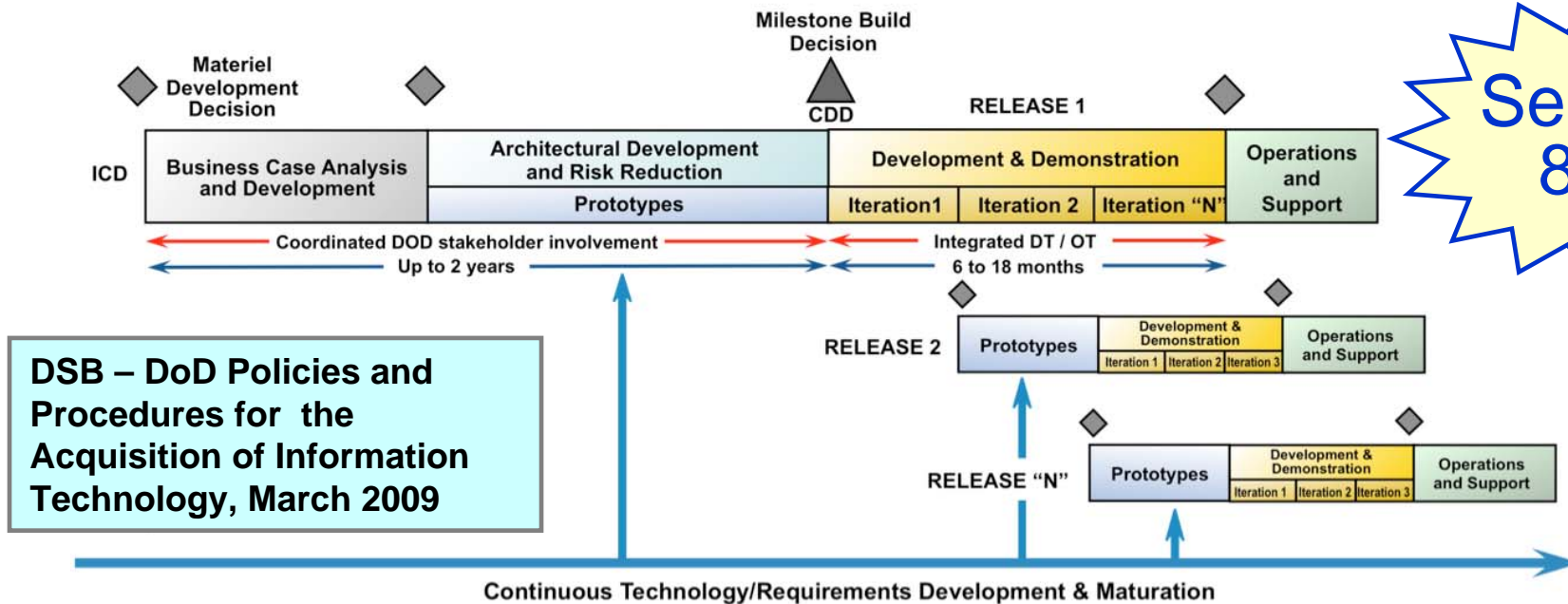
A Combat Support Agency

# Test and Evaluation for Agile Information Technologies

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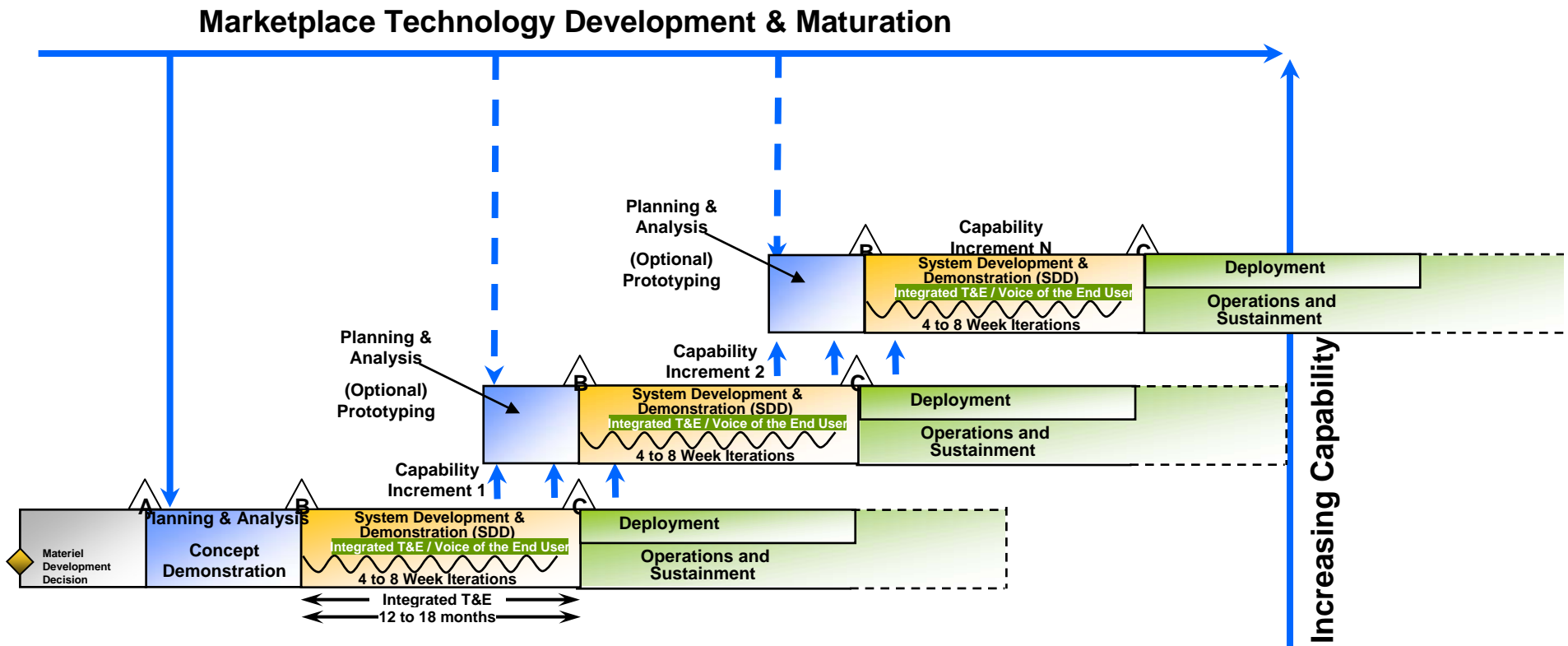
**Dr. Steven Hutchison**  
**DISA Test & Evaluation Executive**  
**May 12, 2010**

# New DoD Acquisition Process for IT



- Modeled on successful commercial practices
  - Agile software Development
- Multiple, rapidly executed increments or releases of capability
  - Releases divided into ~6 month iterations
  - Iterations tested and potentially deployable
- Early and continual involvement of the user
- Integrated testing

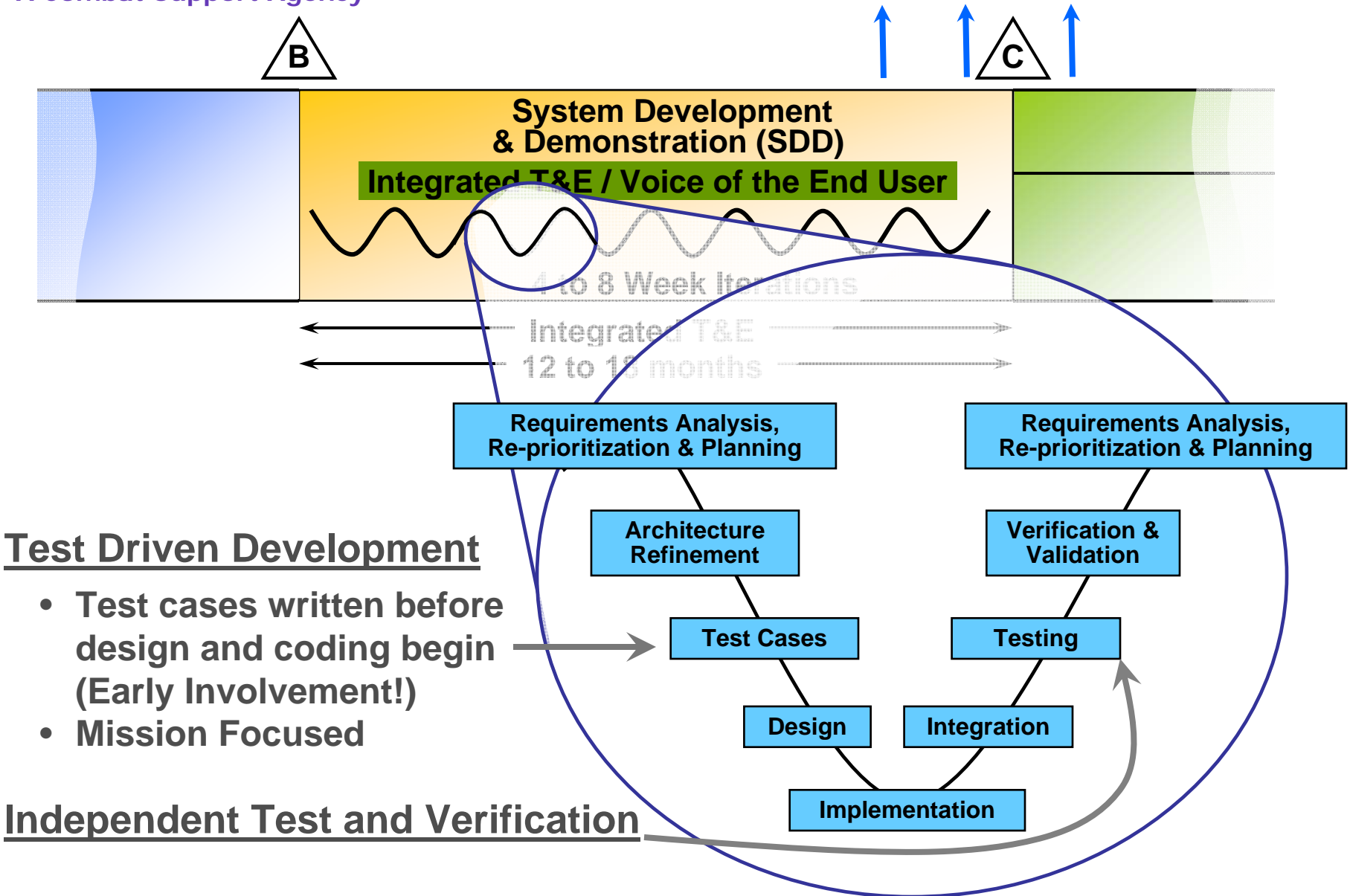
# National Academies Proposed Model



## Acquisition Management Approach for Software Development and Commercial off-the-shelf (COTS) software Integration IT programs

National Academy of Sciences: Achieving Effective Acquisition of Information Technology in the Department of Defense, December 2009

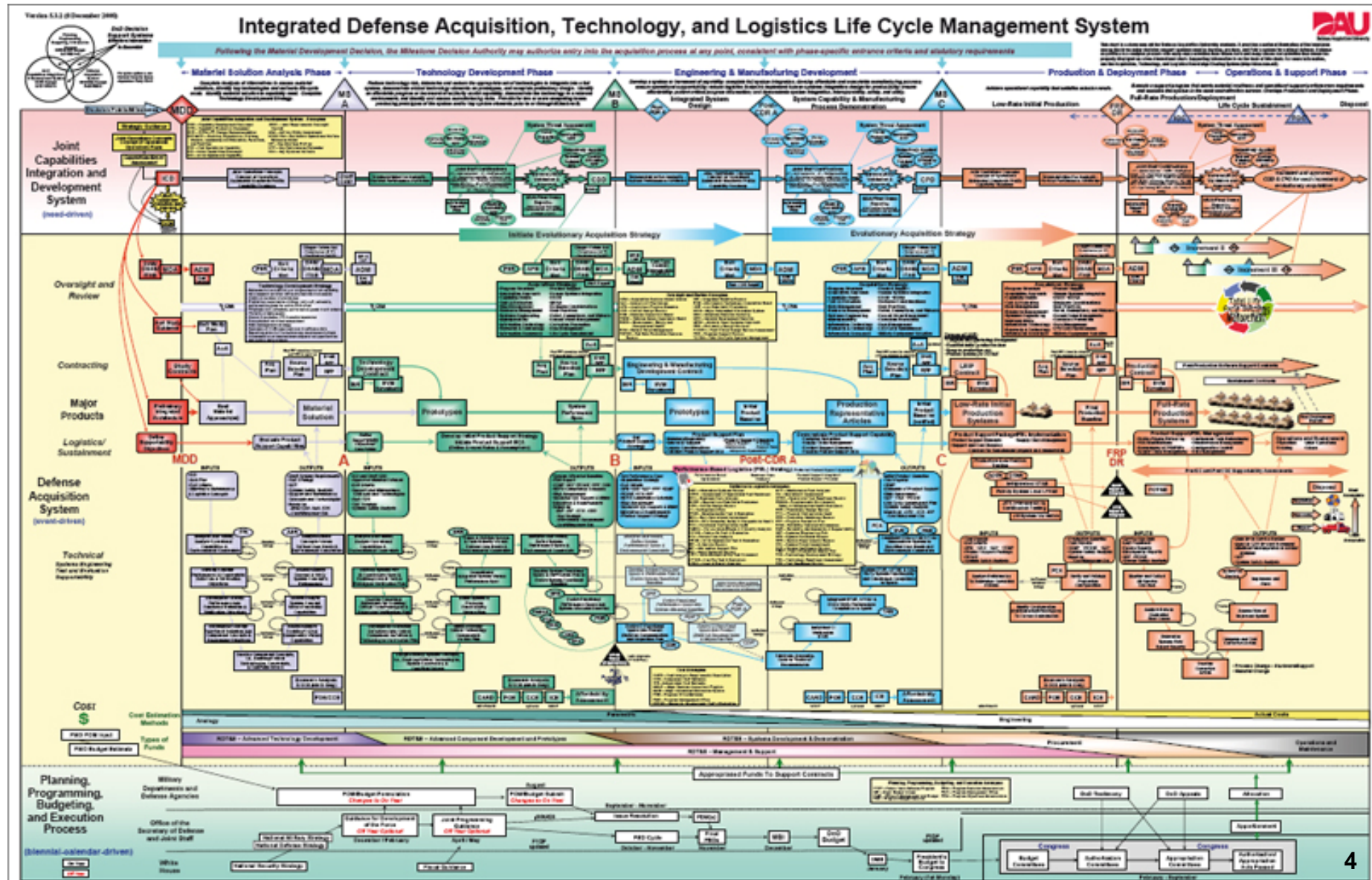
# NAS Model - Details



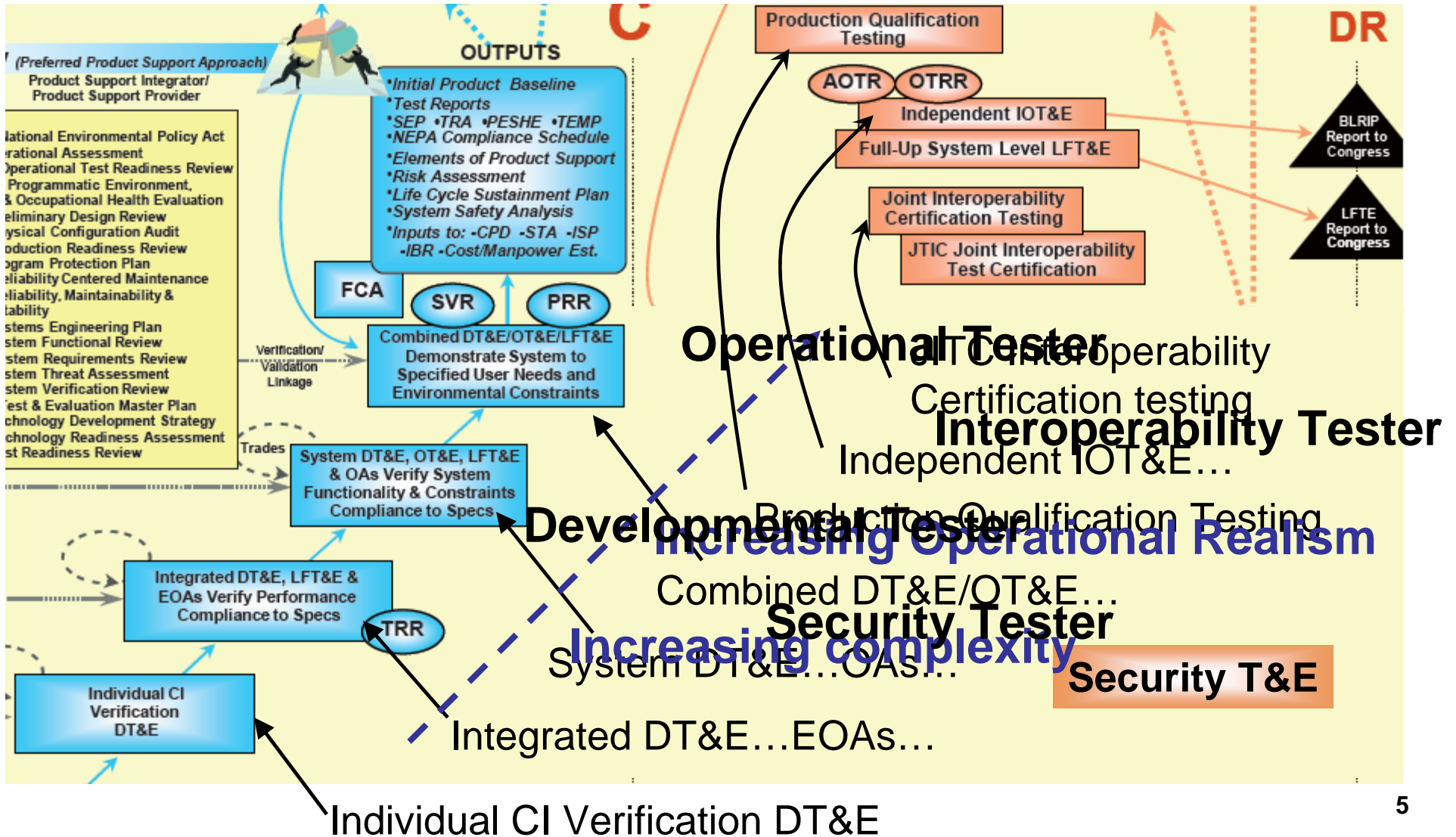


# The DoD Acquisition Model

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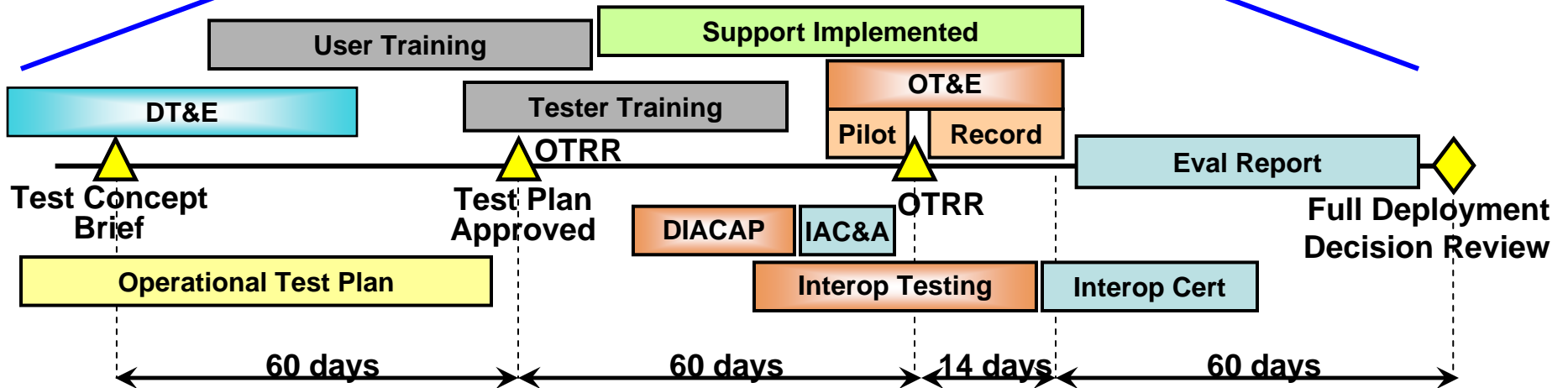
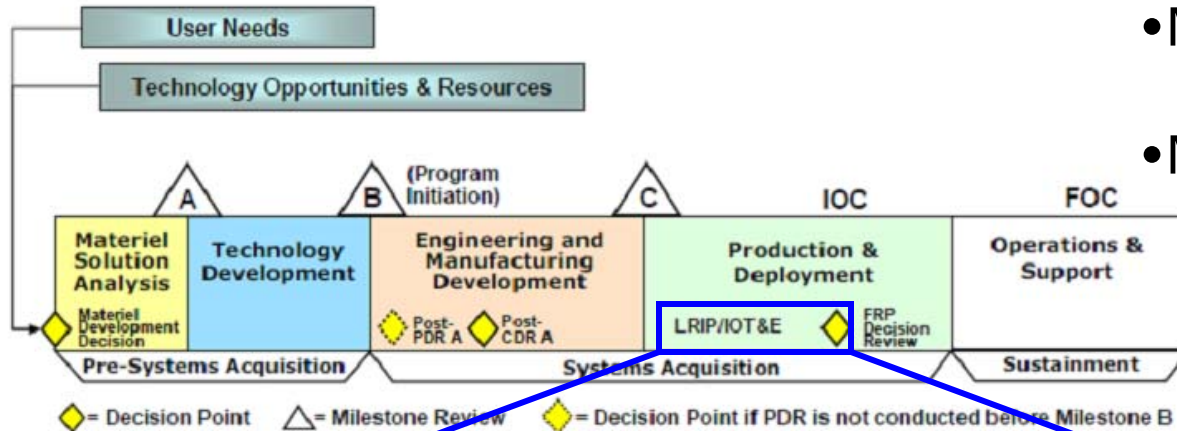


# T&E in Acquisition Lifecycle



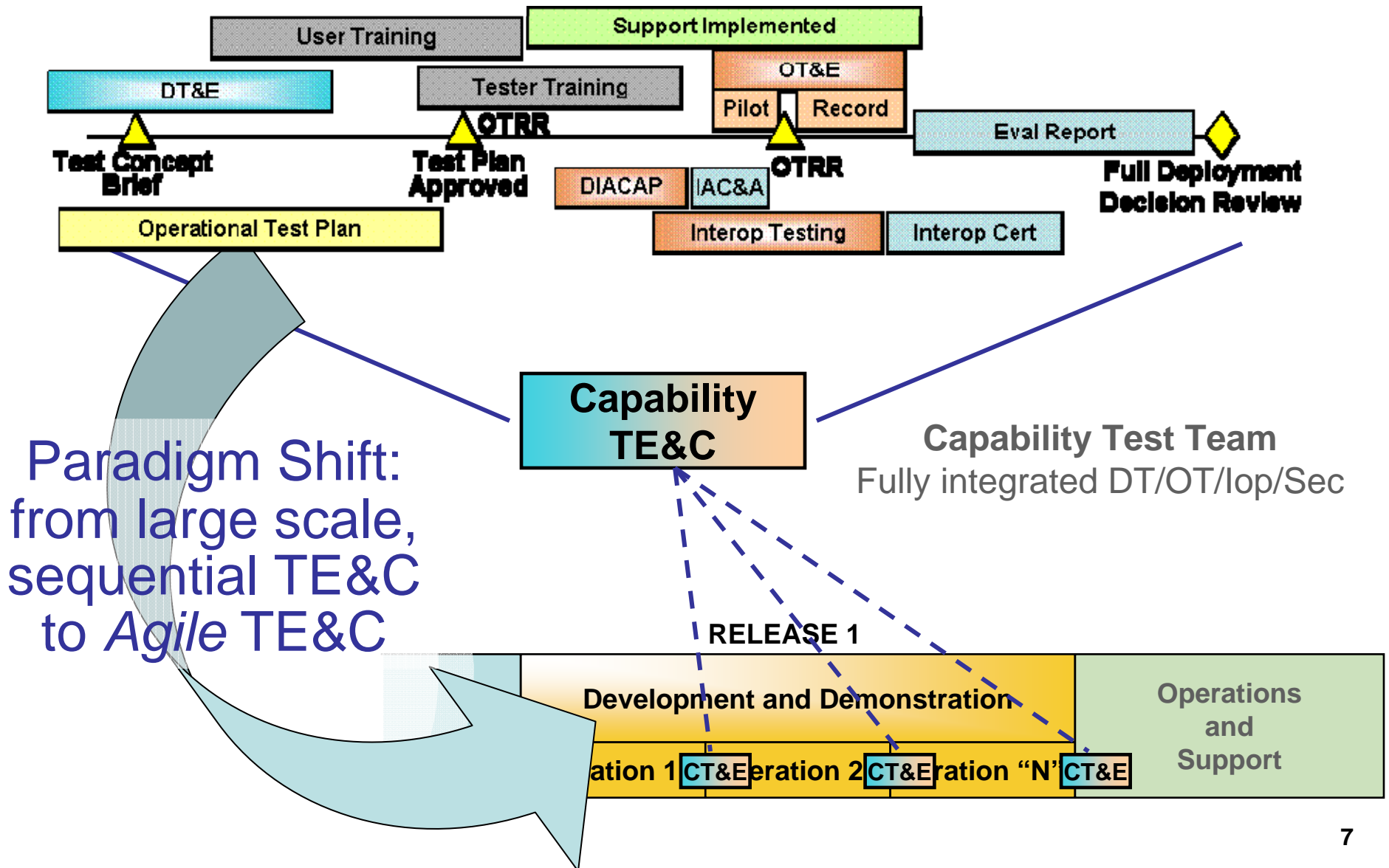
# DoD Test, Evaluation & Certification

- Multiple Test Orgs
  - DT, OT, Iop, IA
- Multiple Decision Makers
  - MDA, JS J6, DAA



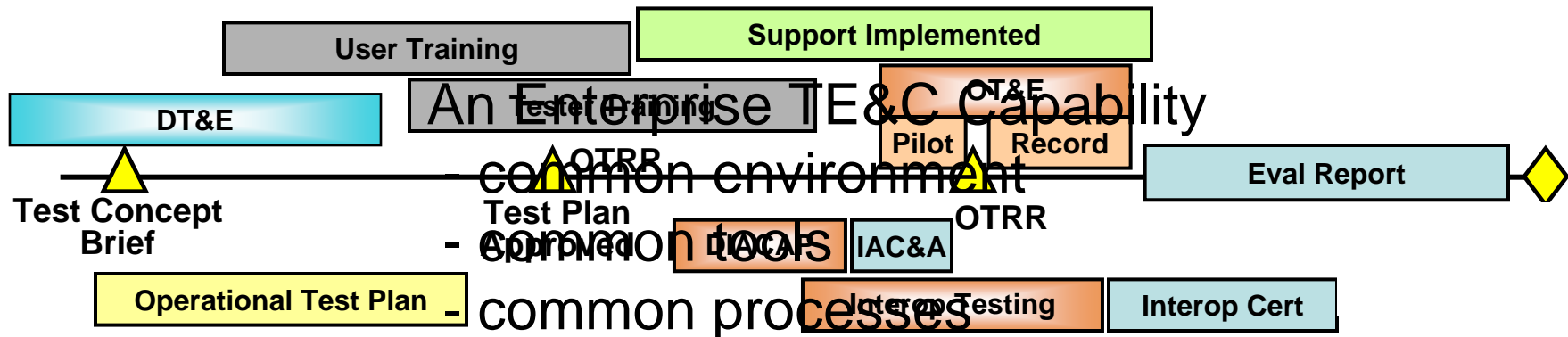
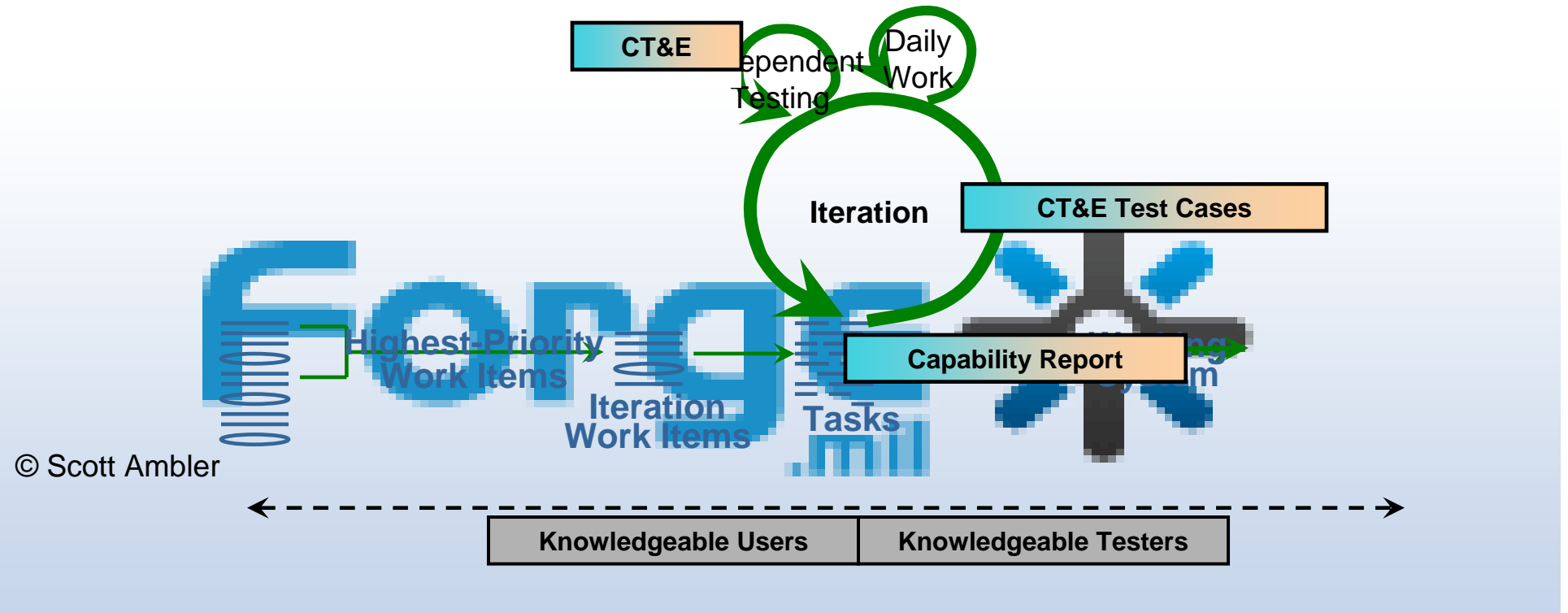
**T&E Plan – Test – Report (PTR) cycle can exceed six months!**

# TE&C Paradigm Shift Capability TE&C

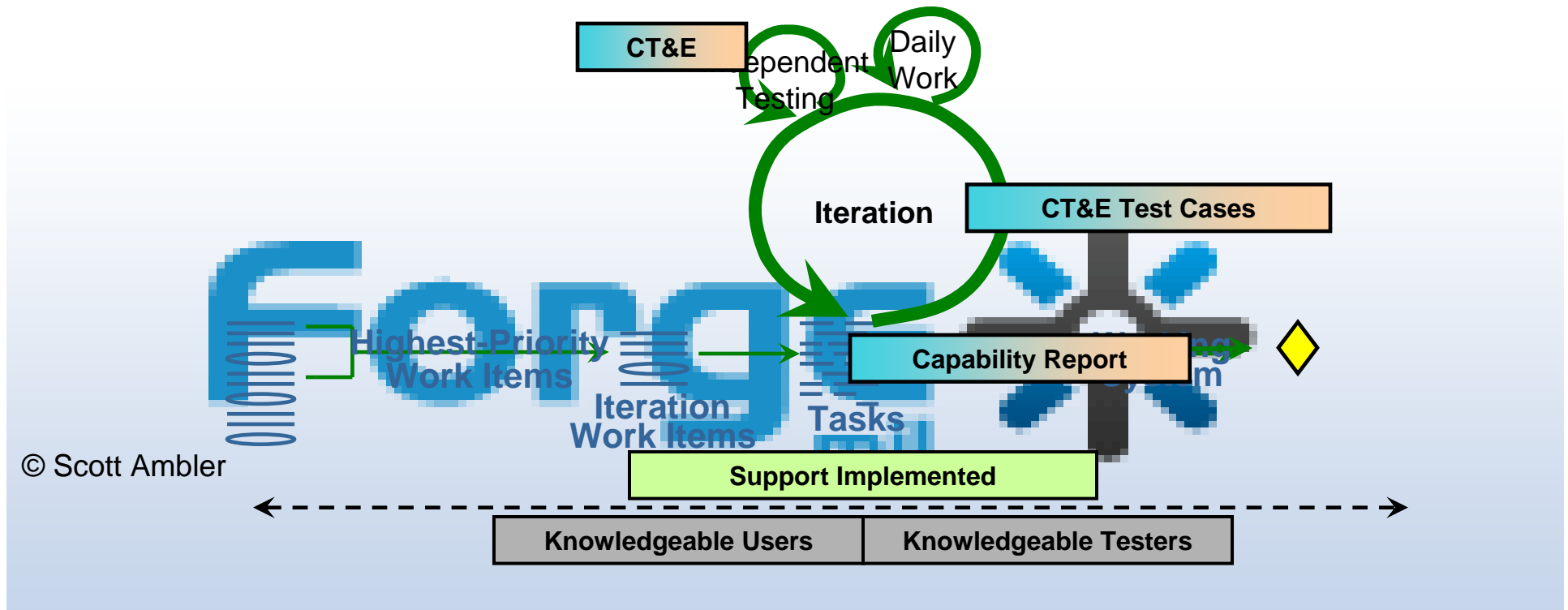




# Capability TE&C



# Capability TE&C



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- **Responsible Test Organization**
  - Coordinates test assets
- **Empowered Capability Test Team**
  - Executes testing
- **Ready access to knowledgeable users**
- **Automation essential!**
- **Rapid Plan –Test – Report Cycle**
  - Risk based; mission focused
  - Relevant critical technical parameters
  - Relevant key performance parameters
  - Relevant interoperability measures
  - Relevant security measures



## Summary

- New IT Acquisition model is coming
- TE&C processes must adapt
  - Responsive to iterative, incremental development
  - Responsive to User priorities
  - Lean processes!
  - High optempo
- Dramatically reduced TE&C timelines
- Objective: Rapid fielding of enhanced IT capabilities to the Warfighter

