



HTDV Test and Evaluation (T&E) Effort

Clifton Ching
ONR Mid Pac
3 October 2008



Why Government T&E?



- Provide independent assessments that will assist Tech Companies with technology insertion into DoD programs
 - **Independent assessments** from “Honest Broker” Government Labs in **operational environments** lend **credibility** to Tech Company claims
- Provide baseline assessments upon which Tech Companies can improve or modify products



How Can They Help Me?



- Assist in finding DoD Points of Contact
- Assess DoD “State of the Art” in field of interest
- Help in assessing Technical Readiness Level (TRL)
- Define Metrics
- Develop Test Plans
- Execute Evaluation/Assessment Tests
- Access to Military Bases, Ranges, Equipment, Personnel
- Provide Assessment Reports



Who are these T&E guys?



- Marine Corps Evaluation Center (MEC)
 - MARFORPAC, Camp Smith
- Naval Undersea Warfare Center (NUWC)
 - Pacific Division, Ford Island
- Space and Naval Warfare Systems Command (SPAWAR)
 - Pacific C4ISR Division, Pearl City



Transitioning into DoD Programs

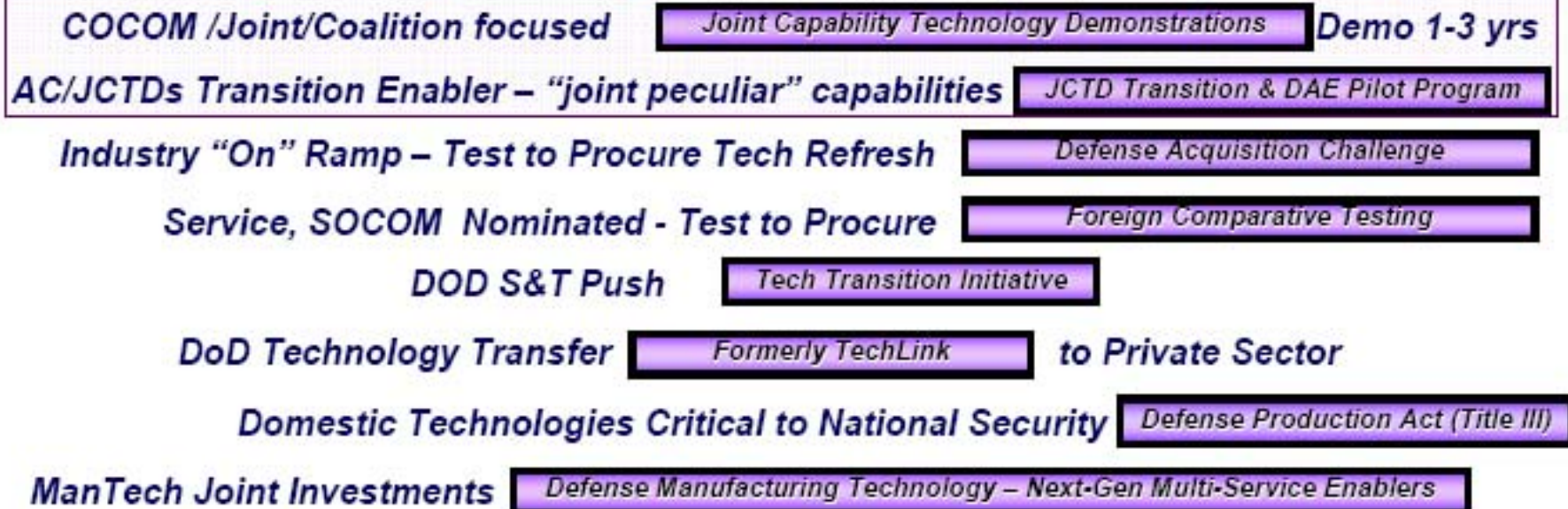
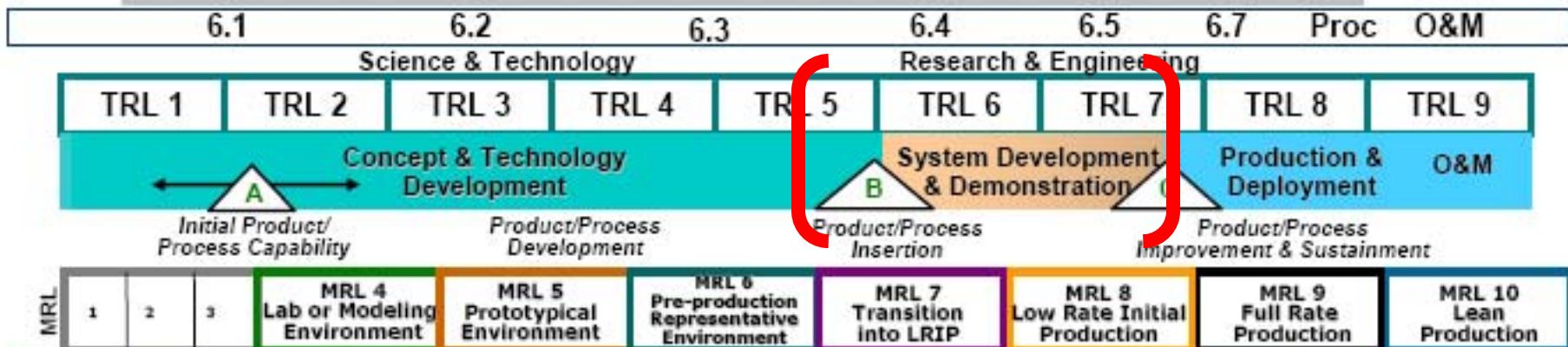


- Traditional Acquisition – Hardest
 - Primes are reluctant to bring in new subcontractors
- ACTD/JCTD – Hard
 - Rapid Technology into the Hands of Warfighter – Technology needs to be somewhat mature
- Evolutionary Acquisition – Easier
 - Spiral Development
 - Offers many technology entry points



Advanced Systems & Concepts Portfolio

OSD/Advanced Systems & Concepts





Test and Evaluation CONOPS



- 1) Tech Company requests T&E assist from HTDV**
- 2) HTDV will validate necessity and timing**
- 3) HTDV will contact ONR MIDPAC to determine appropriate Government Activity for T&E support**
- 4) ONR will coordinate a meeting between Tech Company and Government Activity to determine scope and cost of T&E assessment**
- 5) HTDV review/modify estimated scope and cost**
- 6) ONR approve final scope and cost**
- 7) Govt Activity execute assessment**
- 8) Deliver report to ONR and HTDV**
- 9) HTDV include report in Tech Company Quarterly Report**



Backups

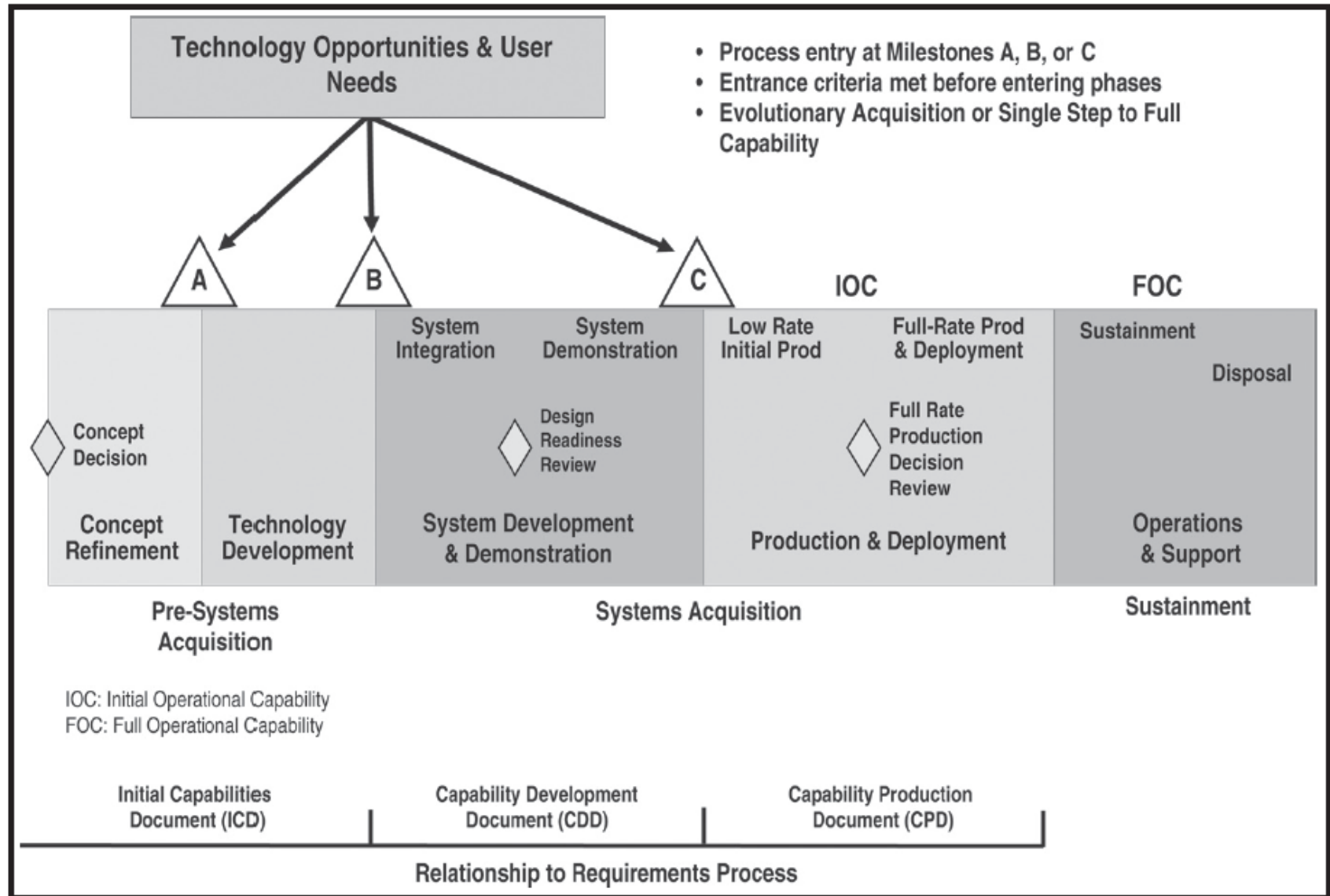


Figure 7-1. Defense Acquisition Management Framework



Traditional Acquisition



- Major Acquisition Category (ACAT)
Programs of Record (Hundreds of \$Ms)
 - Ships, Aircraft, Weapon Systems
- Well defined requirements
- Well defined schedule
- Test and Evaluation Master Plan (TEMP)



Evolutionary Acquisition



- Spiral Development – Incremental Builds
 - Build – **Test** – Build
- Technology Insertion
 - Transition to Program of Record
 - Program Managers use Testing as a Risk Mitigation Strategy
 - How Mature is the Technology?
 - What is the Technical Readiness Level (TRL)?
 - Operational User Assessment



ACTD - JCTD



- DoD Programs to rapidly insert technology into the hands of the warfighter
 - ACTD - Advanced Concept Technology Demonstrations
 - Global Hawk, Spartan, Thermobaric Bomb, Non-Lethal Weapons (Approx \$550M in 2001; \$120M from AC&S, \$426M agency partners)
 - JCTD – Joint Concept Technology Demonstations
 - Stand-off Chem-Bio detection
 - ACTD evolved into Joint program in 2003

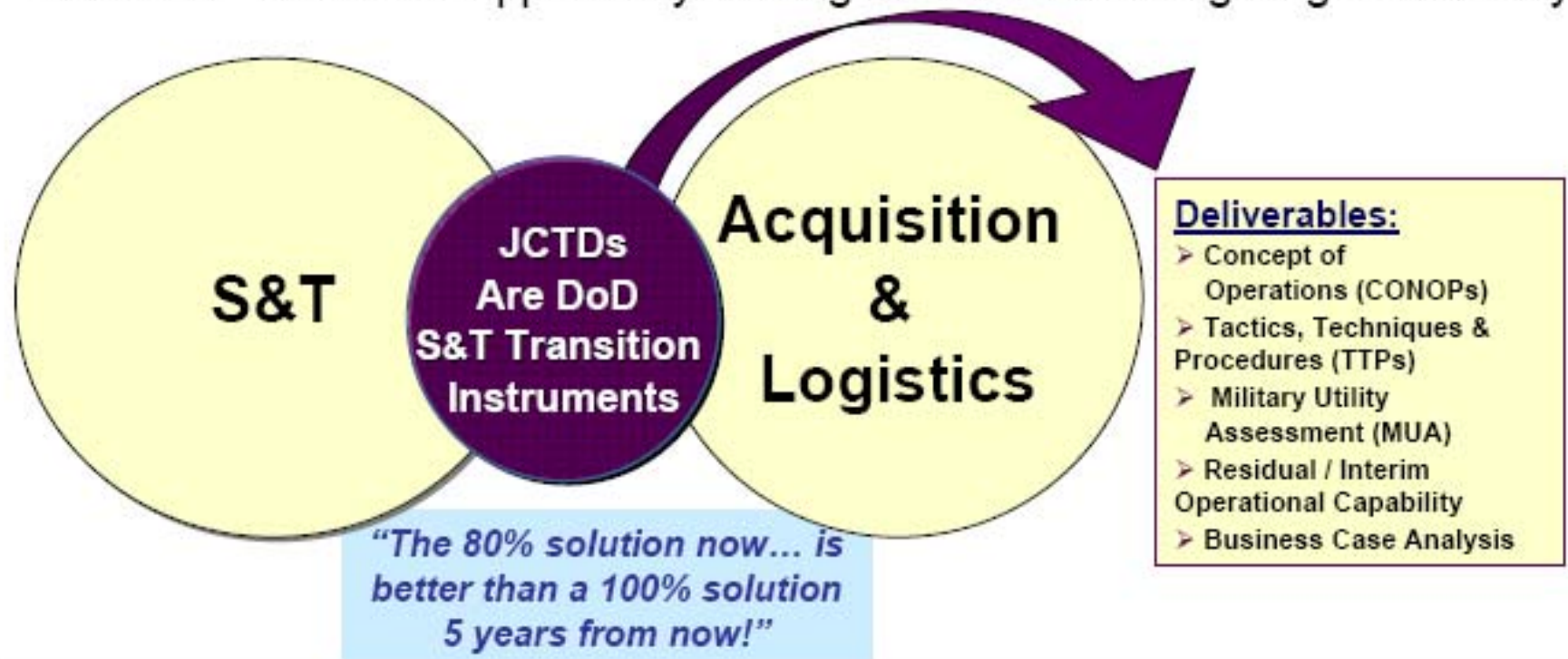


JCTDs Bridge S&T and Acquisition



DSD/Advanced Systems & Concepts

- Fill gaps between S&T and Acquisition for Combatant Commands
- Demonstrate Joint & Coalition Operational Capabilities
- Provides Transition Opportunity serving DoD's S&T/Warfighting Community



*JCTDs are not science projects but are agile solutions programs...
JCTDs transition capabilities to Warfighters*