

# ITEA 2011

## A view of Training and Evaluation



Dr Dai Morris

Joint Training, Evaluation and Simulation - Test and Evaluation

# “The future character of conflict (FCOC)”

- “No matter how clearly one thinks, it is impossible to anticipate precisely the character of future conflict. The key is to not be so far off the mark that it becomes impossible to adjust once that character is revealed”
  - Declining technological advantage
  - The centrality of ‘influence’ over ‘pure’ kinetic effect
  - Hybrid adversaries and asymmetric threats
  - The Battlespace:
    - Congested, Cluttered, Contested, Connected and Constrained
  - Uncertainty as the new certainty



# Dilbert on FCOC

We need to have the capability to rapidly react, modify, adapt



# JTES Deductions

- Coherent **through-life Capability** Evaluation
  - To clearly identify the capability gaps we are carrying, or which become exposed through the life of the capability
    - **Focussed on capability**, not just kit
    - Evaluating critical components, not just what can be measured
    - Exploiting '**non-traditional Test**' information wherever possible
- Agile to rapidly adapt as 'jobs' come along in a '5C' context
  - Reconfigurable to **identify and deliver** against critical needs
    - Warning times will always be shorter than we would want
    - Formal distinction and definition of levels of proof
- Based on Common Components, exploiting common data
  - Common thinking, scenarios and threat definitions
  - Underpinned by a pan-DLoD solution analysis and Bol toolset
  - Data is discoverable and accessible but not all in common format



# 'Test Capability'

- Capture of Test Data to support Evaluation must be an **enduring activity**
  - Data capture in OA, Development, OTE, Training, Operations
  - Data standards, context access and ownership must be managed across all sources
- 'Test' cannot be completely divorced from evaluation but we can aim to:
  - Be **location agnostic**
    - Agile, transportable range instrumentation
  - Be **source agnostic**
    - Access data from User, Crown, OEM, Specialist Test House, Overseas
    - Coherent methods & processes needed to ensure access
    - Interoperability of instrumentation with Training Capability AAR etc
  - Better understand **cost drivers** (cost of access vs cost of activity)
    - Multi-role sovereign strategic assets, Danger Areas etc



# Some key implications

- Evaluation and Training need to be thought of in a more unified way
  - ‘Non Traditional’ Test data from Training AAR
    - ‘Training is just more Test, Testing is just more Training’
    - Build Evaluation needs into Training (and operational) systems
  - Realistic evaluation of non-equipment issues
    - And equipment issues with ‘real’ people
  - Enduring Evaluation
    - Evolving threats, Doctrine / Tactics changes
    - Emergent behaviours from complex systems
- Better Experimentation is a natural bi-product
  - Must distinguish between “discovery” & “hypothesis-based” activity
  - Training based activity good for the former
    - but not necessarily for the latter

But .....



# Communities need to work together

- Its not just about data exchange
  - Quality (calibration, purity, context )
  - Legal / contractual issues
  - Organisational (a Test & Training Command?)
    - ▶ The Programme Office must buy-in
- Scarce Asset deployment and use
  - Primacy of the Warfighter Preparation cycle
- Valuation of captured data to justify investment
  - To whom, when and why?
- Some may see a fundamental tension of desired outcome
  - “Testers want to break it, trainers want to make it work”
    - ▶ Articulate common, Capability Goals



# Questions

