



Training an Integrated ADF through simulation

An Army perspective

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PURPOSE:

To provide an overview of the Army intent for LVC
Simulation Capability Development

&

Discuss how the Army will contribute to an integrated
ADF system



- How does the Australian Army achieve advantage?
 - Size?
 - Platform superiority?
 - Decision superiority
 - Human performance advantage



Army Simulation Vision

An integrated Live, Virtual and Constructive (LVC)
simulation systems architecture

to support the delivery of foundation warfighting
training from individual through, combined arms
to joint collective training



Where are we now?

- Well I wouldn't start from here....
- Coming to the end of 1st Generation implementation of simulation systems
 - Stand alone
 - Usually proprietary hardware and software
 - Usually procured through related platform project
- An emphasis is placed on new simulation capabilities fusing with the extant LVC architecture IOT ensure greater efficiency in training.
- World class platform simulation systems with only part realised potential.



M1A1 Tank Simulator (Advanced Gunnery Training System)

a part task training system





**ARH 'Tiger' Simulator
Latent potential for
collective training**



Where do we want to be?

- ***Training is capability output focused & simulation-enabled.***
 - The development of simulation capability is directed by a training design and management focus not a platform acquisition focus.
- Simulation systems are based on an agreed (open?) architecture that allows integration across the combined arms and joint fighting systems.
- ADF investment in simulation is coordinated to the extent it can be used to efficiently contribute to the generation of joint effects.



FORCOMD Simulation CONOPS



CBT BDE



Live Instrumented Simulation Training

Training Framework

Weapons & Fires Virtual Hub

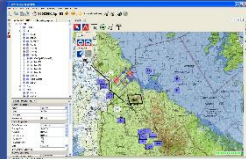


Collective Hub





LVC Fusion



**Constructive Trg
(Collective)**



**Virtual Trg
(Individual)**

Battle Simulation Sites



**CBT BDE LIS
Capability**

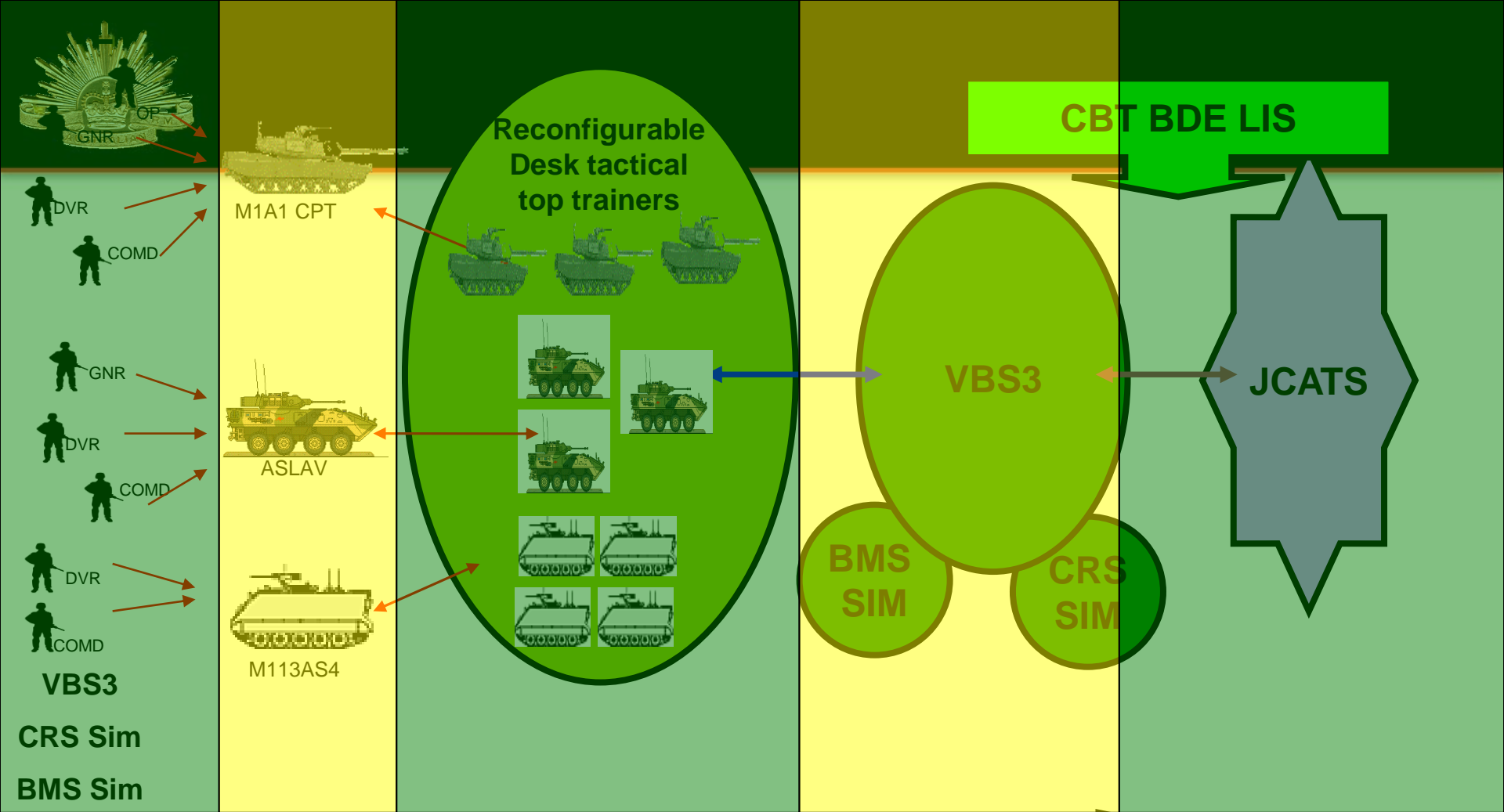


**Virtual Trg
(Collective)**



Observations

- Perfect is the enemy of good enough.
 - How much system connectivity do we really need?
 - Army's immediate priority will be constructive – live training connectivity.
- There is enormous potential in virtual simulation to advance a deeper range of human performance attributes.
 - Resilience.
 - Ethical decision making.
 - Application of complex rules of engagement.
- Army supports the HQJOC approach to a federation of simulation systems



Example Concept - LVC Sim Architecture ISO ACR FWF Trg

Individual component skills trainer

High Fidelity / Immersion
Indiv & crew trainer

- a. Immersive desktop Tactical trainer
- b. Linked to CPT for High Fidelity COMD trainer
- c. Injects other FE

Low Fidelity virtual simulation
First Person – BG
Networked To Desktop and CPT
Combined Arms effects

Constructive simulation
BG-BDE-JTF-Coalition
Networked VBS3 for visualisation
Joint effects



Questions