



BG Randal A. Dragon, USA
Commanding General,
Brigade Modernization Command



Training and Simulations Conference

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PURPOSE: Provide the Training and Simulations community an update on the use of models and Simulations in support of the Network Integration Events

AGENDA:

- The Agile Capabilities Process
- Operational Characteristics
- Operating Environment
- Where are Today
- Where we are Headed
- Where are the Gaps
- The Future



The Capabilities Integration Agile Process

Simultaneous Plan, Prepare, Execute, Assess



NIE 12.2



CS 13-14 Integrated Network Architecture Baseline

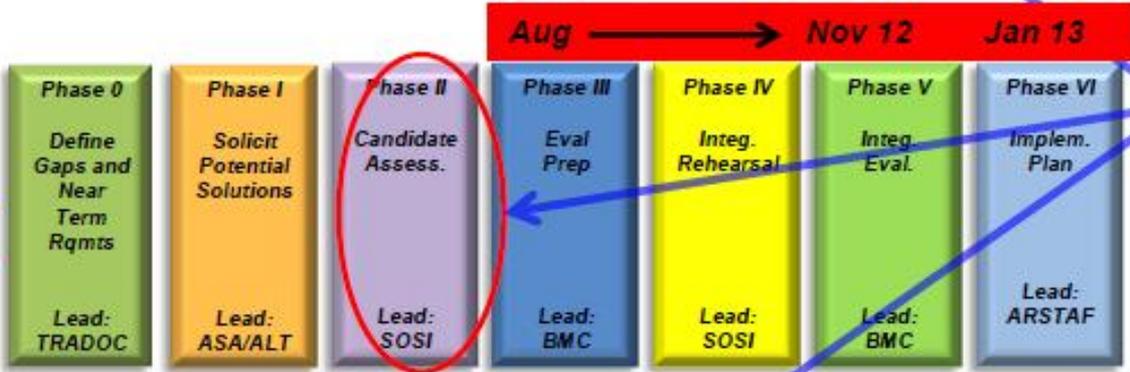
Increasing Industry Participation

-CS Integrated Baseline

- NETOPS

NIE 13.1

Full Industry Participation



Where We Are Now

• Evaluate MNVR alternatives

• Transport Convergence – OPS/INTEL Convergence

• COE Platform/Dismount

• MCOTM refinement

NIE 13.2

Leverage RFP process to compete solutions





The Agile Capabilities Process

A New Way of Doing Business



TRADITIONAL APPROACH

5 + Years to Develop Concepts

Not Adaptive or Flexible
Annual Process

Old/Too Narrow
Doesn't Change w/Technology or
Operating Environment

Slow, Deliberate and Expensive
Iterative and Too Many Regulations

Piecemeal Evaluations
Sequential / Not Integrated
Evaluations Did Not Reflect OE

No Technology and Alternatives
Many Losers With the Process
Time Intensive and Bureaucratic

Buy for the Entire Army

CONCEPTS

GAPS

REQUIREMENTS

DEVELOPMENT

EVALUATIONS

ACQUISITION

FIELD

AGILE PROCESS

Complete
2 Years

Complete
Warfighter Involved in Gap
Analysis
Portfolio Reviews
PEO-I/A TEC/BMC = TRIAD
Focus on the Network - #1 Priority

In Progress
Buy Fewer More Often
Lab Efficiencies Improving
Evaluate Differently
More Alternatives Available
More Winners / Stay in the Game
PEO-I/OTC Robust Presence at
Bliss/WSMR

Initiating Movement
Acquisition/Test Reform
OTC/CTSF moves
Fielding Occurs IAW Priority



Operational Characteristics



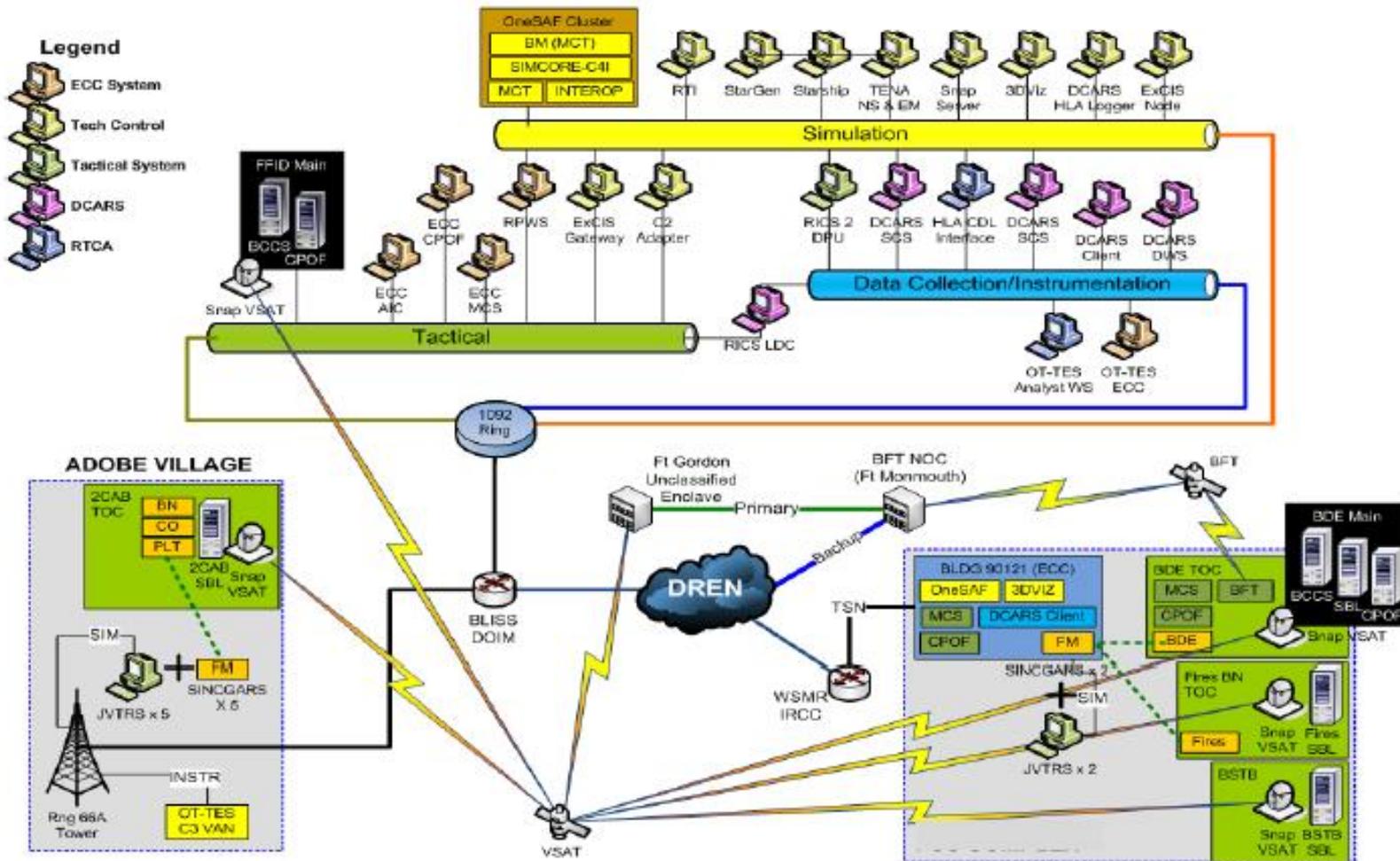
- Provided robust simulation wrap to stimulate Mission Command Systems in an operational environment.
- Live-Virtual-Constructive (LVC) Centric scenario tailored to the exercise/evaluation.
- Provide an extensive simulation wrap with continuous operations in support of Network Integration Event (NIE) (in excess of 1100 uninterrupted hours of run time).
- Company to Division level training and evaluation scenarios.
- Extended Training area (8100 Sq KM).
- New DOTML-PF requirements in every event.



Operating Environment



Simulation/Data Collection/Tactical Network





Where We are Today



- We are using virtual and constructive simulations to provide a realistic simulation wrap-around and stimulation of Tactical Mission Command Systems
- NIE 12.2 used the Battle Lab Collaborative Simulation Environment (BLCSE) Federation for both training at Company and Battalion level prior to STARTEX
- NIE 12.2 used a LVC federation to replicate the 170th Brigade Combat Team at entity level as the adjacent brigade to 2/1AD under the control of 101st AASLT Div
- NIE 12.2 used Virtual UAV's at Div and BCT level driven by OneSAF (One Semi-Automated Force) and VBS2 (Virtual Battle Space 2), controlled at the Tactical Operations Center level
- Innovative solutions integrating live, virtual and constructive components



Where we are Headed



- NIE 13.1 and 13.2 will use an LVC federation for pre-event training of Company Command Posts, as well as Battalion and Brigade Tactical Operations Centers
- Introduce Joint /Coalition forces into the fight using our LVC federation
- Future NIE's will also use distributed simulations to create a virtual battle space with units participating from home stations
- Integration of additional live tactical elements requiring stimulation



Where are the Gaps



- Common interaction architecture (High-Level Architecture (HLA) or Distributed Interactive Simulation (DIS) and a single version as a common standard for all) and a common Federated Object Model (FOM) that does not require middleware.
- Common terrain models between simulations.
- Standardize Packet Data Unit (PDU) (Fire, Detonate, Damage, Strength) interaction between models.
- Menu of relevant Scenarios
- Continue development and refinement of Entity level simulations and Virtual/Gaming technologies by leveraging industry standards. Aggregate simulations are not the answer for training below division level.
- Test-bed site for new and emerging simulations or gaming technologies.
- Integration of Live/ soldier instrumentation with LVC federation



The Future



Operational Environment

Area of Responsibility/ Area of Interest

Update Training Support materials

Energy Accountability

Challenge Soldiers & Leaders



Effects of Drawdown

Reversibility & Expansibility

Fiscally informed

Update TTP and Doctrine

Accelerated Capabilities Process

Agile Capabilities Lifecycle Process



Integrated Evaluations

Endstate
The Army of 2020 possesses the best trained and educated Soldiers, civilians, and leaders, organized and equipped in a versatile mix of adaptable units capable of providing decisive action in any operation.

“Turbulent Times”

Informed Recommendations & Decisions

Achieved

Create Opportunities to Incrementally Achieve Army 2020 Endstate