2006 Combat Vehicle Conference

"Today's Legends: How our legacy systems will contribute to the future."

Program Executive Office
Ground Combat Systems

Acquisition Excellence

Mr. Robert Halle

Deputy Project Manager, Modular Brigade Enhancements,

PEO GCS

24 Oct 06

PM MBE Mission

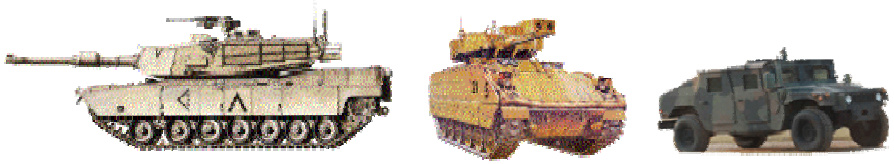
PM Modular Brigade Enhancements will serve as the

Army's centralized manager

for integrating combat capabilities into the Army's Modular Brigade Force

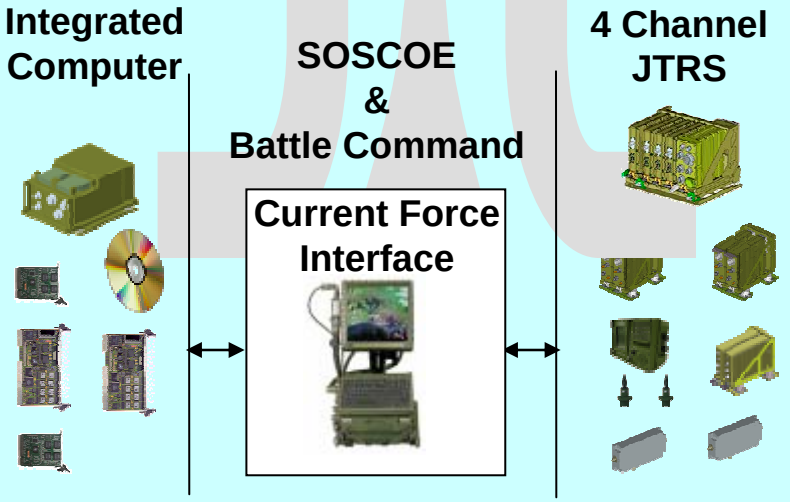
“Spin Out 1” to the Current Force

FUTURE COMBAT SYSTEMS
FCS
One Team-The Army/Defense/Industry



Abrams | Bradley | HMMWV

Network Capability Integration Kit



Capability Improvements:

- Force protection
- Precision networked fires
- Interoperability

Milestones:

- First Network Kit Delivery –2007
- Software Qualification –2007
- Milestone C –2008

Unattended Munitions

Unattended Ground Sensors | Non-Line-of-Sight Launch System | Intelligent Munitions System

Relevant to Today’s Force

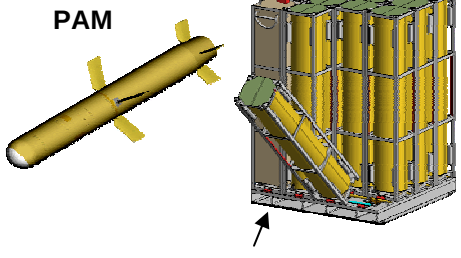
Approved for public release, distribution unlimited, TACOM 26 Sep 2006, FCS Case # GOVT 06-6154

Spin Out 1 Systems

Non Line-of-Sight – Launcher system

One NLOS-LS System consists of:

- **1 Container Launch Unit (CLU) with 1 CCS and 15 PAMs**
- **Hand held control device in Computer Communication System (CCS) (PDA)**
- **Unit will have Training Prototype CLUs with CCS**
- **Platform Independent**
  - **–preferred vehicle is FMTV**
  - **– May be fired from any transport vehicle**



CLU – Container/Launch Unit
PAM – Precision Attack Missile
CCS – Computer & Communications System

Intelligent Munitions System

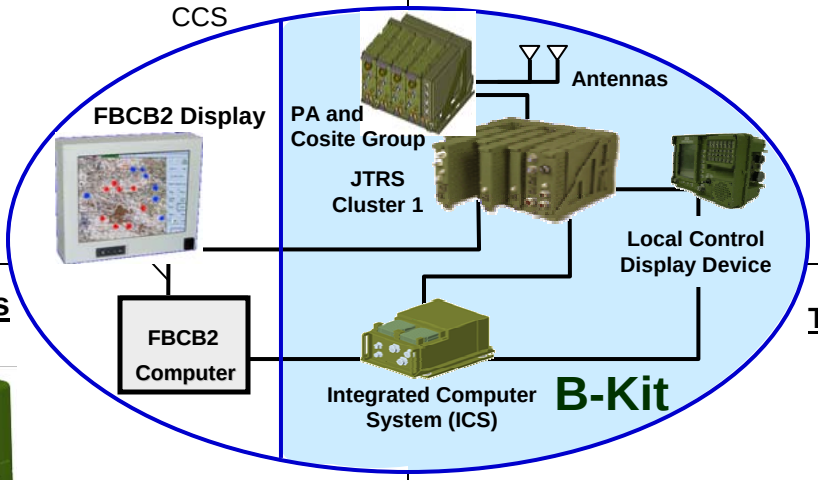
One IMS System consists of:

- **1 Control Station and 8 Dispenser Modules**
- **With the set the Army Unit gets 1 Control Station & 1 Dispenser Module**
- **With 7 Dispenser Modules in War Reserve: Control Station components will be repair parts (battery, antenna)**

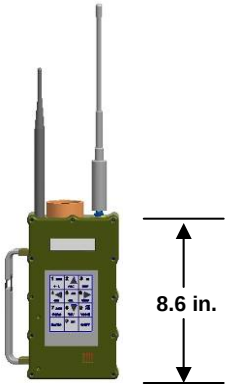
IMS Controller (Laptop)

Dispensing Module
- **Gateway**
- **Munitions**
- **Sensors**

IMS – Intelligent Munitions System



Urban –Unattended Ground Sensors



Imaging Sensor

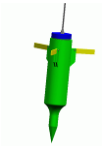
Intrusion Detect Sensor

One U-UGS System consists of:

- **2 Gateways**
- **5 Imaging Nodes**
- **10 Intrusion Detection Nodes**

Tactical – Unattended Ground Systems

Gateway



RN Sensor

ISR Sensor

EO/IR Sensor

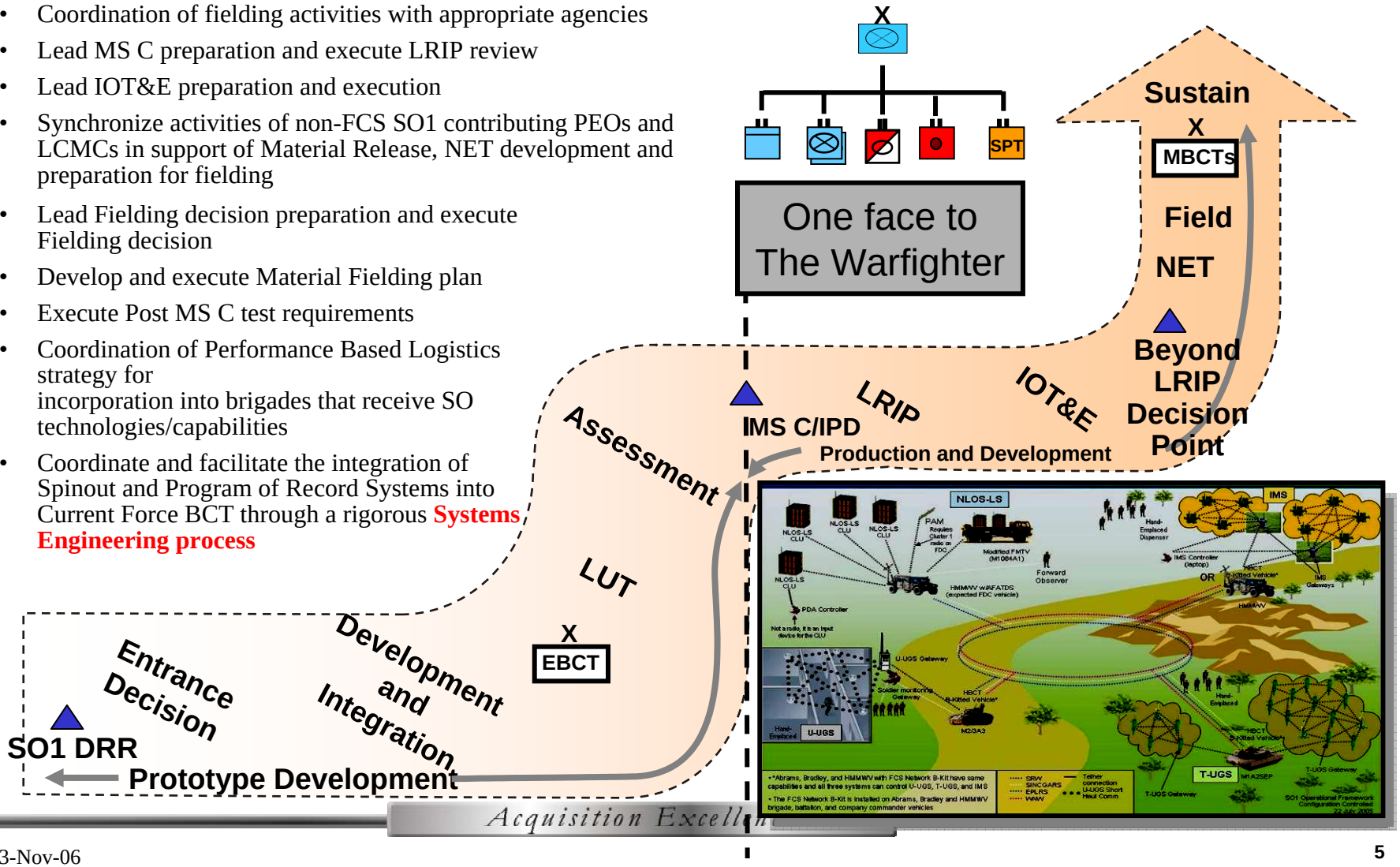
One T-UGS System consists of:

- **2 Gateways**
- **8 ISR nodes**
- **2 EO/IR Sensor Nodes**
- **1 RN Node**
- **1 HCLM Node**

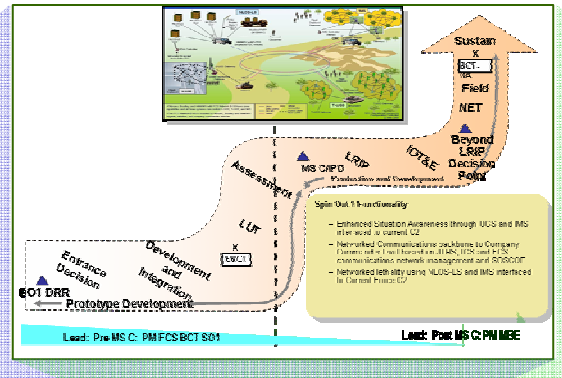
ISR – Intelligence, Surveillance, and Reconnaissance
EO/IR – Electro-Optic Infrared Sensor
RN – Radiological Nuclear
HCLM – Hazard/Clear Lane Markers

PM MBE Mission

- Coordination of installed performance for current platforms integrated with FCS content
- Coordination of fielding activities with appropriate agencies
- Lead MS C preparation and execute LRIP review
- Lead IOT&E preparation and execution
- Synchronize activities of non-FCS SO1 contributing PEOs and LCMCs in support of Material Release, NET development and preparation for fielding
- Lead Fielding decision preparation and execute Fielding decision
- Develop and execute Material Fielding plan
- Execute Post MS C test requirements
- Coordination of Performance Based Logistics strategy for incorporation into brigades that receive SO technologies/capabilities
- Coordinate and facilitate the integration of Spinout and Program of Record Systems into Current Force BCT through a rigorous **Systems Engineering process**



Innovative Spinout Management Strategy



PM Spin Out/LSI
SO content focus
COL Chris Deluca

PM Modular Brigade Enhancements
Fielding focus
COL Ray Jones

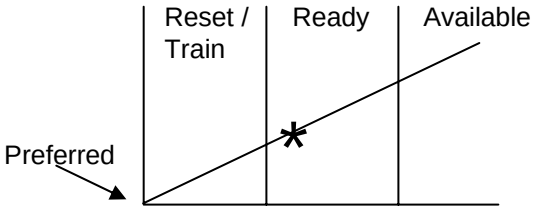
Management Approach

- Tri-Chair Led Program Management Reviews
- SE based Program Management (SEP to be developed)
  - *Integrated Master Schedule*
  - *Risk Management tracking*
- Leveraging each other organizations
- Close interface with all SO organizations
- PM FCS(BCT) and PEO GCS closely aligned
- Spin Out Integration Board (SIB) controlling SO content
- Mutual planning on all SO major milestones through BLRIP
- One Face to the Warfighter

Synchronizing Spin-Outs with ARFORGEN

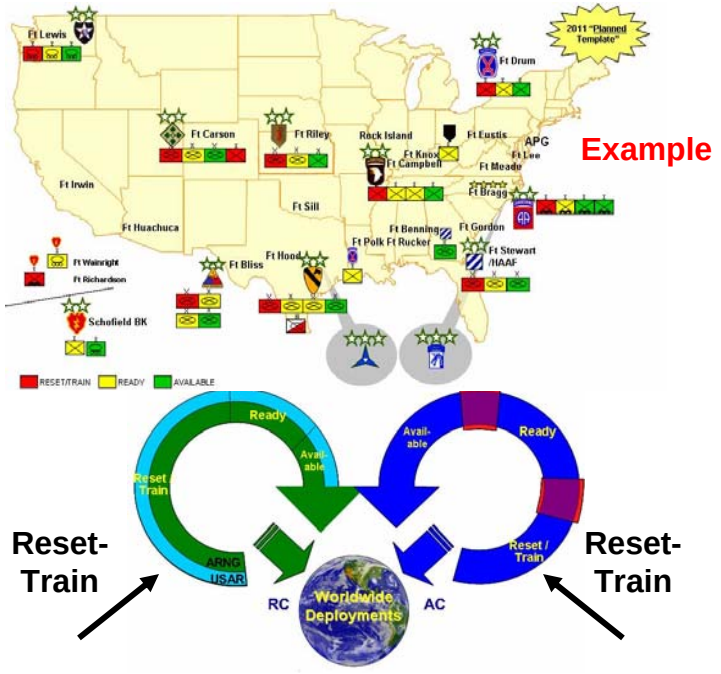
Army's Operational Priorities

- Network, U-UGS, T-UGS, IMS, NLOS-LS
- Field the highest-payoff FCS spin-out systems to as many BCTs as fast as possible
- Intent is for all BCTs to receive FCS sensors and common network capabilities



* NLT Equipment Delivery Date – EDD2 (MRE/CTC minus 45 days)

VCSA: "No drive by fieldings!"



Concept for Fielding FCS Spin-Outs

- Field FCS spin-outs to BCTs in the Reset/Train force pool
  Rationale: quality unit training with new ISR and network battle command capabilities significantly improves the payoff during operational employment
- Include ARNG, APS and Theater Equipment
- Revisit fielding FCS spin-outs to units until all BCTs have received Spin-Out 4 capabilities or converted
- Continue fielding FCS spin-outs simultaneously with FCS unit conversions

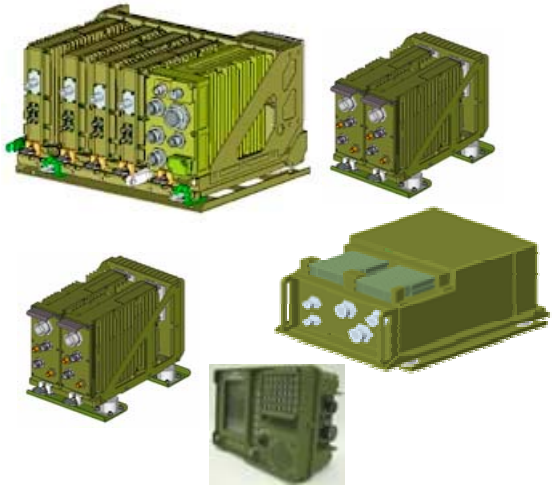
FY 10 Reset/Train Group 1 receives Spin 1
FY 11 Reset/Train Group 2 receives Spin 1
FY 12 Reset/Train Group 3 receives Spin 1/2

FY 13 Reset/Train Group 1 receives Spin 1/2
FY 14 Reset/Train Group 2 receives Spin 1/2/3
FY 15 Reset/Train Group 3 receives Spin 1/2/3

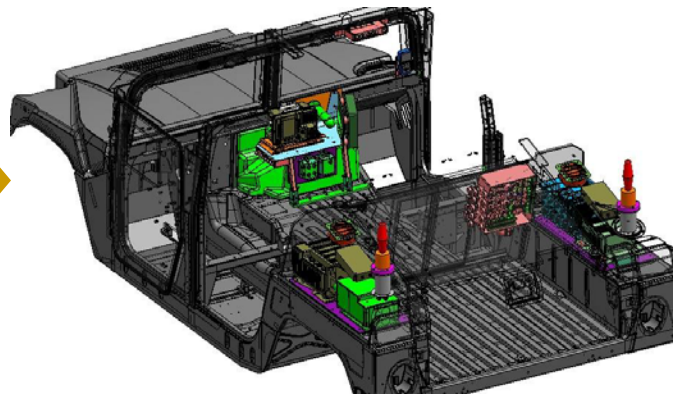
FY 16 Reset/Train Group 1 receives Spin 1/2/3/4
FY 17 Reset/Train Group 2 receives Spin 1/2/3/4
FY 18 Reset/Train Group 3 receives Spin 1/2/3/4

A/BKit Integration Example

Standard SO1 BKit



Currently only focusing on one tactical vehicle variant AKit design to support the SO1 LUT



- Challenge: Specific configurations of tactical vehicle variants vary from brigade to brigade
- Path Forward: Designing a standardized A/BKit to fit multiple tactical vehicle variants and configurations

The Challenge

- Synchronize multiple programs across multiple organizations
- Synchronize acquisition strategy with standup of Evaluation Brigade Combat Team
- Align Life Cycle Management Command (LCMC) processes with capability based acquisition
- Develop a single Army Integrated Master Schedule and Plan to manage spin out
- Develop a process to manage, report, and predict integrated capabilities vs. program metrics
- Establish a budget and contract structure that supports capability management vs. individual project management
- Organize a program office that acts and thinks in terms of capability management (Break the “Stovepipes”!)