



United States Army Logistics Transformation Agency

# Common Logistics Operating Environment SBCT Technical Demonstration

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*Sustaining The Transforming Army... Transforming the Sustaining Army*



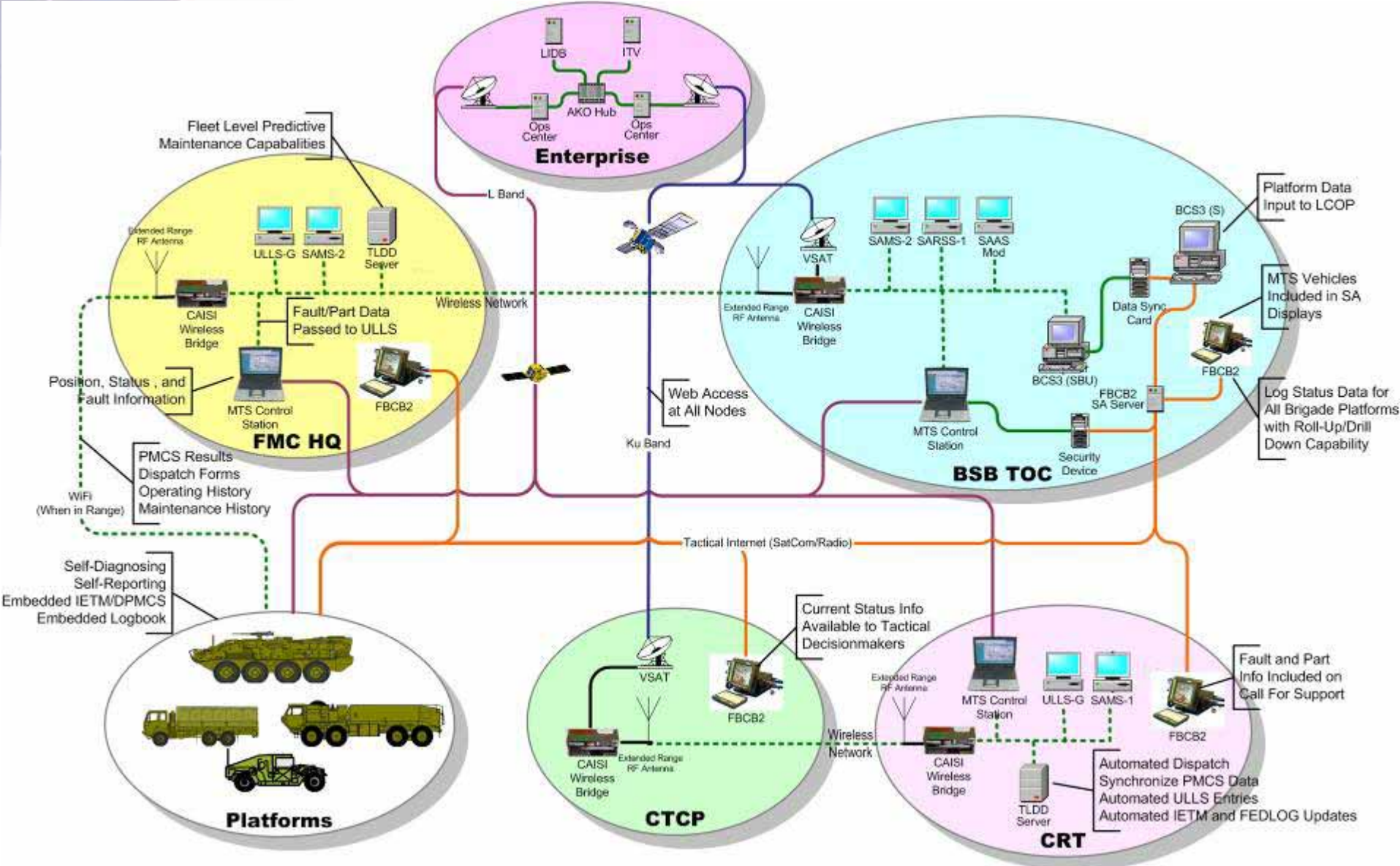
# Overview of CLOE SBCT Technical Demonstration

- **Purpose** Demonstrate Technical and Operational Feasibility of Enablers Required to Implement the Common Logistics Operating Environment on an SBCT
- **Location** Ft Hood - Central Region Test, Integration, and Support Facility and Central Technical Support Facility
- **Schedule** Late August thru Early November 2004
- **SBCT Elements Included** Stryker, HEMTT, HMMWV, FMTV, BSB TOC, HQ FMC, CTCP, CRT





# Operating Concept

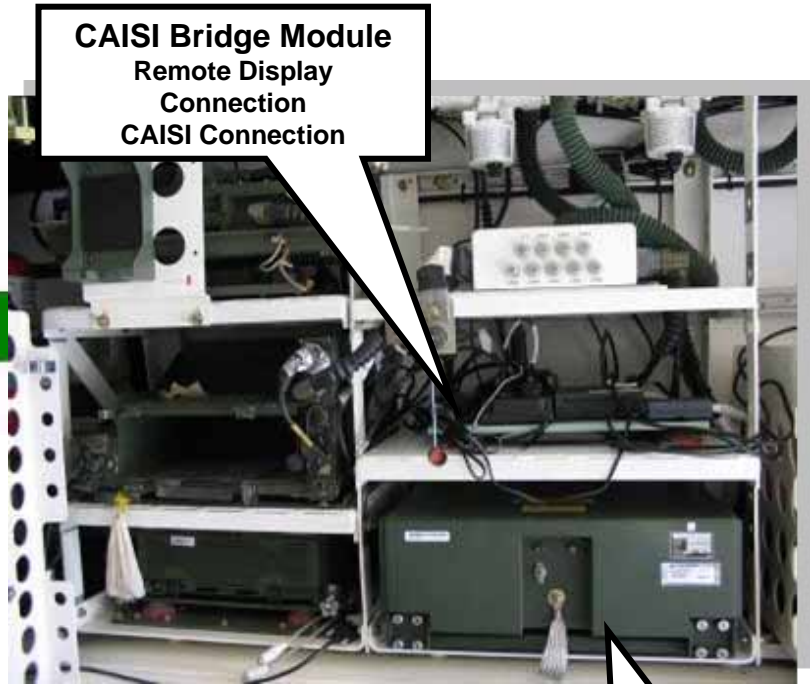




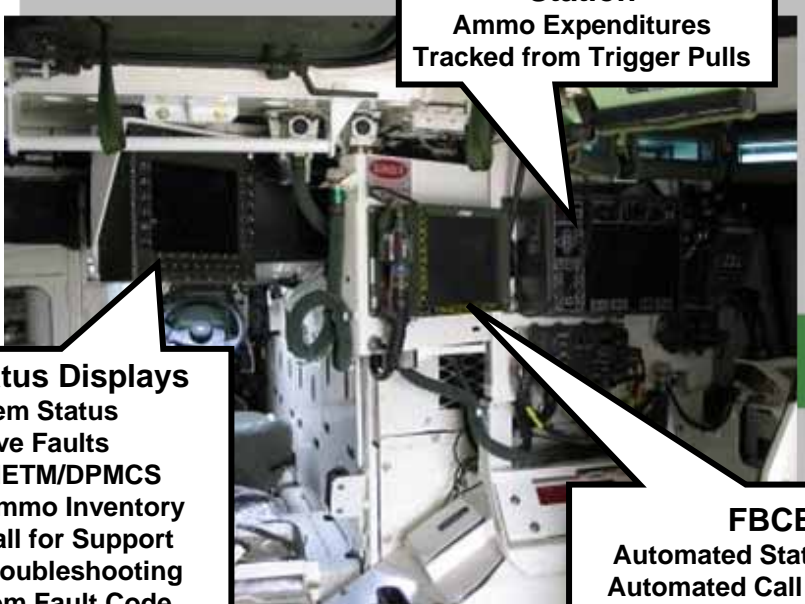
# Stryker Configuration



**Tablet PC**  
Wireless  
Access to All  
ETM/VDT  
Functions



**CAISI Bridge Module**  
Remote Display  
Connection  
CAISI Connection



**Remote Weapons Station**  
Ammo Expenditures  
Tracked from Trigger Pulls

**Crew Status Displays**  
System Status  
Active Faults  
Launch IETM/DPMCS  
Manage Ammo Inventory  
Initiate Call for Support  
Launch Troubleshooting  
Track from Fault Code

**FBCB2**  
Automated Status Reports  
Automated Call for Support

**ETM**  
Server Functions  
IETM/DPMCS  
Digital Logbook  
Prognostics  
Ammo Inventory





# Stryker

**Timely/  
Accurate  
Data**

- Reporting frequency set by tactical commander
- Automated Status Reporting
- Automated PMCS
- Synchronize PMCS Data with ULLS Data
- Diagnostic Info on Call For Support and in PMCS
- Time-critical Data Via FBCB2, otherwise via CAISI
- Linked Fault Reports with Parts Info



**Self-  
diagnosing/  
reporting**

- ED/EP Linked to FBCB2
- Enhanced ETM by Adding Embedded Software
- Automated Fuel/Ammo Reporting
- WiFi for Automated PMCS Download
- EPLRS & L-Band FBCB2
- Multi-purpose On-board Computer System



# Tactical Wheeled Vehicle Configuration

Portable Display  
Wireless Access to  
All Embedded  
Functions



Ruggedized Computer  
Status Displays  
Automated Status Reporting  
Automated Fault Reporting  
Diagnostics/ Prognostics  
MTS  
IETM/DPMCS  
Digital Logbook



Global  
Positioning  
System



FMTV  
Cab





# Tactical Wheeled Vehicles

Timely/  
Accurate  
Data

- Reporting frequency set by tactical commander
- Automated Status reporting
- Automated PMCS
- Time-critical data via MTS, otherwise via CAISI
- Synchronize PMCS data with ULLS data
- Linked fault reports with parts info
- Diagnostic info on trouble reports and in PMCS

Self-  
diagnosing/  
reporting

- Multi-purpose computer
- Interface to vehicle sensors
- Fuel reporting
- ED/EP linked to MTS
- WiFi
- A/D converter
- GPS
- Satellite transceiver





# CLOE Savings for the Warfighter

## Summary of SBCT PoE Simulation Results

### OR rates:

- Base Case
- CLOE Enabled

### Combat Vehicles

74.2%  
81.8% (+7.6%)

### All SBCT Vehicles

80.6%  
86.0% (+5.4%)

### Average vehicle downtime:

- Base Case
- CLOE Enabled

9.5 days  
7.3 days (-23%)

### % NMC vehicles repaired:

- Base Case
- CLOE Enabled

72.8%  
79.0% (+6.2%)

**Increased OR Rates  
= Greater Warfighter  
Capabilities = Victory**

Base Case:  
▪ No Satellites  
▪ Manual PMCS

**CLOE Enablers have Proven Results**

CLOE Enabled SBCT:  
▪ Satellites  
▪ Digital PMCS on all platforms



## Conclusions

- **CLOE SBCT operating concept is technically feasible.**
- **Publish and subscribe architecture provides flexible, modular interfacing for multiple software products.**
- **Requires some hardware additions/modifications, but primarily upgrades to software.**
- **Minimal impact on tactical bandwidth**
- **Operating concept has substantial benefits both inside and above brigade.**
- **Recommendation to proceed with implementation.**



**A COMMON LOGISTICS  
OPERATING ENVIRONMENT  
IMPROVES BUILDING AND SUSTAINING  
COMBAT POWER**

**QUESTIONS**