



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



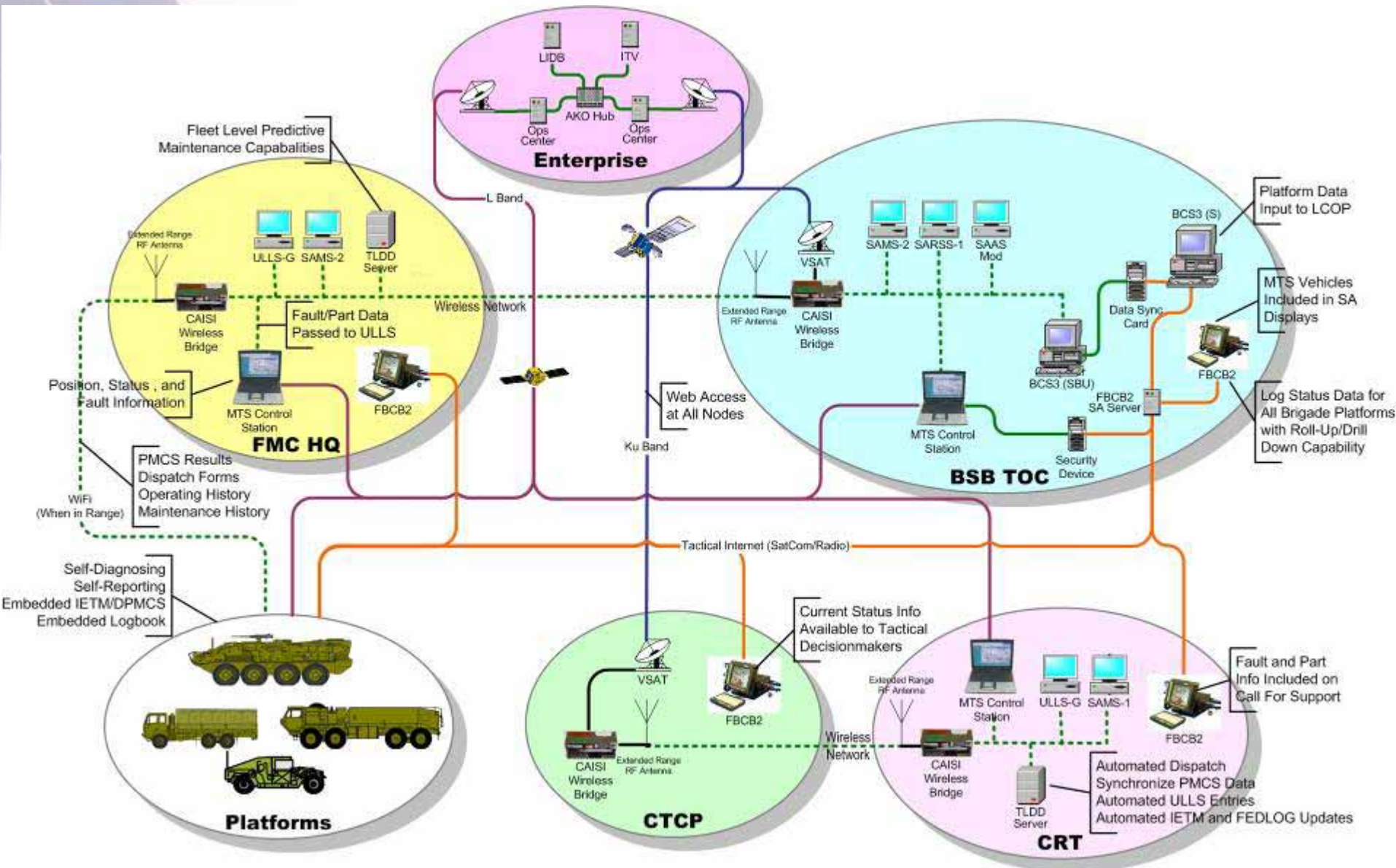
Overview of CLOE SBCT Technical Demonstration

- **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

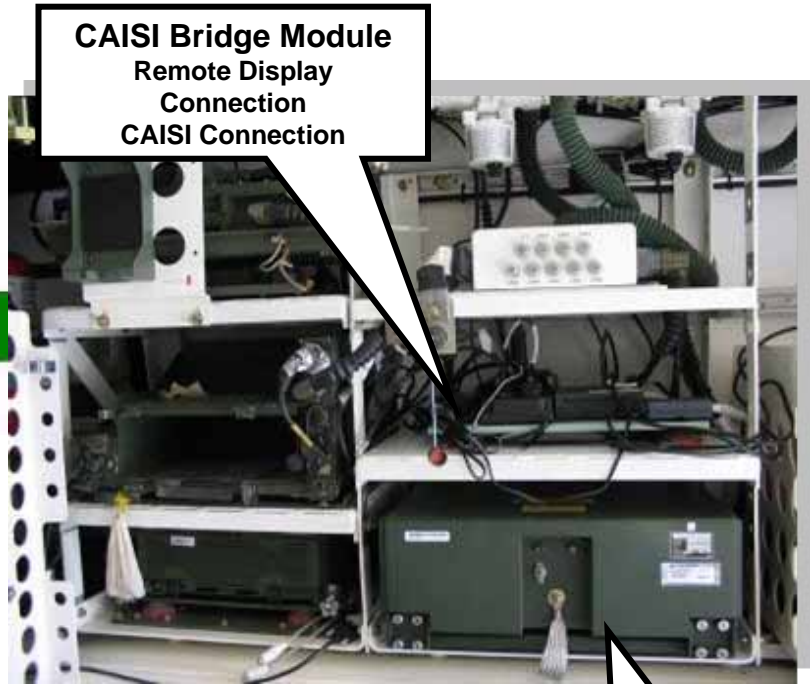




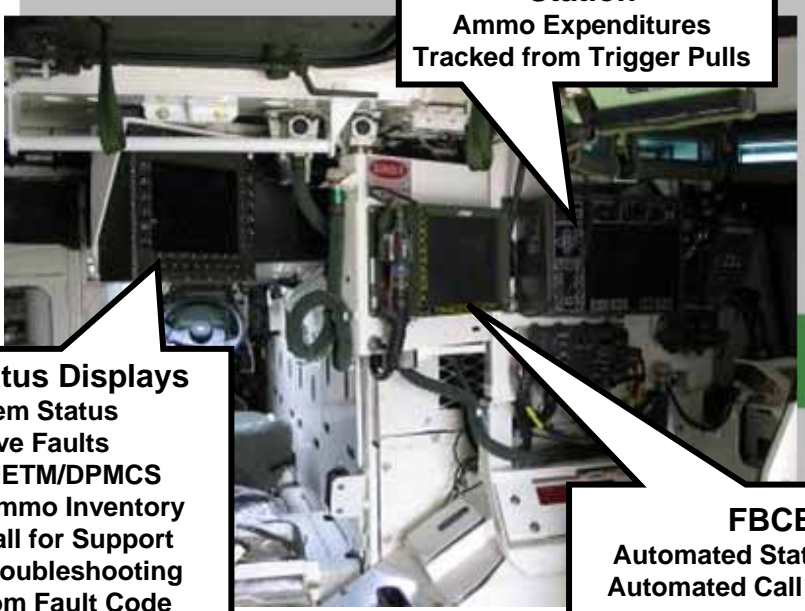
Stryker Configuration



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