Global Combat Support System

NDIA Interoperability and Systems Integration Conference

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Leon Spackman
GCSS Functional Requirements Office
Joint Staff J4
Anteon Corporation
(703) 695-7773
leon.spackman@js.pentagon.mil
Dilbert

- The technology demo
  - The software isn’t 100% complete.
- If it had a user interface you would see something here... here... and sometimes here.
- And then you’d be saying, “I gotta get me some of that.”
- Any questions?
We have the most effective log system in the world but...

- We are not flexible
- We are not mobile
- We are not efficient
- We are not interoperable

We are not ready for 2020.
What Must We Do? The Future Logistics Enterprise

- Implement commercial best practices for weapon system support
  - End-to-end accountability (total life cycle systems management)
  - Strategic partnering
  - Demand capture at source (conditioned-based maintenance$^+$)

- Implement end-to-end warfighter support
  - Commercial distribution model and standards
  - End-to-end accountability for combat commodities

- Integrate the logistics enterprise to support the joint warfighter
  - Processes focused on output
  - Enabled by proven COTS capabilities
A Strategy For Success

Develop a Logistics Enterprise Architecture that allows interoperability within and across DoD elements

- Portfolio Management
- Change Management
- Focus on BPR – vs. changing COTS Software
- Phased Implementation
- “80/20 Rule”
- Leverage Commercial Knowledge Base
- Collaborative Oversight – to Address Complexity and Culture
FLE Architecture Approach

FLE Architecture Principles

• Useful guidance without inhibiting innovation
• Evolve as environment changes over time
• Use best practices
• Business process-centric, not data- or org-centric views

Provide added value to the Warfighter

FLE Architecture Outcomes

• Defined logistics domain
• Performance driven logistics chain
• Foundation for logistics portfolio management
• Integrated architecture from the enterprise (FMMP) through the domain to the service components
Architecture Integration with FMEA Using SCOR

FMEA

Enable Logistics

Plan Logistics

Execute Logistics

Activity Based

Process Based

Enable

Plan

Source

Make

Deliver

Return

FLE-A (SCOR)

Process Based Modeling is Critical to Enterprise Integration
What is GCSS?

• GCSS MNS approved 10 September 1997
• GCSS CRD approved 5 June 2000

• GCSS is a Family-of-Systems
  – independent systems
  – interconnected
  – mix of systems tailored to provide capabilities

“GCSS is not an acquisition program or a standard information system, but an initiative for enhancing combat support effectiveness through system interoperability.”

GCSS MNS, 10 Sep 97
Joint Asset Visibility
- Mobility, Transportation, Movement
- Logistics (Supply, Maintenance, Engineering)
- Personnel and Force Health Protection
- Acquisition and Finance

Joint Decision Support Tools
- Collaborative Planning
- Course of Action Development
- Course of Action Analysis

Logistics Transformation through Real-Time Situational Awareness

WEB-BASED APPLICATIONS (normalized data)

Joint Decision Support Tools:
ICIS
JL ACTD
ELIST
DFAS
JTL ACTD
JFAST
TMIP
DIMHRS
GTN21
SOC-ATS
JTAV
GCSS-MC
GCSS-AF
DIMHRS
GCSS-DLA
GCSS-Army
Any authorized user
Any authorized box
WEB-BASED / WEB-ENABLED BROWSER
PORTAL / SERVER

ZERO LATENCY!
GCSS is a Requirements Based Capability

500 + CC Worldwide CSS Requirements

CC (GO/FO) Validated 129 CSS IRs

Top Priorities

CC 58-129 Working

Due FY09

Specified & Implied Tasks

Requirements Process Continuing

CC Validated 1-57

Due FY06

Mapped to UJTLs

1997 1999 00 01 02 03 04 05 06 09
Logistics Data

Logistic information systems- Today, **30 year old processes**
- stovepiped, lack data normalization
- major management weakness

Logistics information systems- V2020
- relevant, accessible
- real-time, accurate
- most importantly…..actionable

**GCSS Data Must be Interoperable, Normalized, and Shared Across the DoD Enterprise**
• GCSS will operate using data elements linked to each CINC requirement

• Data elements are linked to each CINC requirement using a common data representation (CDR) providing normalized, interoperable data

Interoperability = Relevancy/Currency, Responsiveness (Asset Visibility) Responsiveness (Joint Decision Support Tools) and Availability
Other half of Requirement: KPPs

- **Compliance:** with the DII COE level 6 / level 8
- **Security:** NIPRNET and SIPRNET IAW DoD 5200.28 STD
- **Interoperability:** Integrate corporate logistics data into a common operational logistics picture providing real-time logistics situational awareness
  - **Relevancy / Currency:** data accuracy and data age 95%/100% accurate from Authoritative Source
  - **Responsiveness:** in providing timely responses to queries Asset Visibility-less than 60/30 seconds 95% of the time JDST- less than 120/30 seconds 95% of the time
  - **Availability:** accessibility and connectivity to data 95% / 99% down to the JTF Headquarters level
“Power Point” to Execution is Difficult !!!

“Top 10 Issues…”

• Data interoperability (Data standards, Integration and Normalization)

• Linkages between SIPRNET and NIPRNET

• Information Assurance

• Service comms backbone

• Data currency based on business practices
“Power Point” to execution is difficult !!!

“Top 10 Issues…” (continued)

- Automatic Identification Technology (AIT)/Automated Information Systems (AIS) Interface
- Business Rules for NIPRNET Info Exchange
- Implications of OSD(C) Financial Management Enterprise Architecture
- DoD IT Acquisition Process
- Interoperability including Inter-agency/Coalition/Host Nation
GCSS FoS Management Structure

Governed by CJCSI 6723.01A (8 Apr 2002)
GCSS (CC/JTF) Objective

Real-time command and control of the logistics pipeline

Close link between command and control and combat support

One fused picture of combat support for course of action development, analysis and collaborative planning
GCSS (CINC/JTF) Components
GCCS Mission Applications

Combat Support Data Environment

Enterprise Content Integrator

Data Mart
UST

Portal

Security & DOD PKI
Enterprise System Management

Pull On Demand

GTN
COP Tracks
GSORTS
JOPES
JTAV
GDSS
NIMA
DIMHRS
Medical
JEB/CFDB

Medical

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GCSS FY03 Master Schedule

GCSS (CC/JTF) V3.0
- Strategic Air & Sea-lift analysis capabilities
- Static COP Map Available on Portal
- Air Tracks added to COP via Integrated COP-TSE
- System Security (Account Management Enhancements) & Infrastructure Improvements (Rapidly deployable Data Segments)

GCSS (CC/JTF)
- Tools for Visibility into Sustainment Pipeline (Sustainment Visibility Tool)
- Dynamic COP Map Available on Portal
- Upgraded Portal Queries
- Enhanced Account Administration
- Enhanced CSDE to Support Sustainment Visibility Tools
- Initial Personnel data feeds

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ICSF Migration / Deliver Client Side Segments / Support Operational Demos / Finalize ICSF Server Support

Sep ‘02 1st Qtr 2nd Qtr 3rd Qtr 4th Qtr

(*Dec ‘02) (Feb ’03) (May’03) (Aug ’03)

GCSS (CC/JTF)
- Queries for Inventory Assets, Unit Movement, Material Item Lookups, In Transit Assets, Geo Lookups, Code Lookups
- Updates to CSDE (data environment, NIMA AAFIF Tables, automated Metacatalog Parser)
- CSDE Server ported to Solaris 8
- Final ICSF Client/Server Delivery to GCCS (delivered as part of GCCS V4.0)

GCSS (CC/JTF)
- Access to the buildup of a force capability in accordance with or without an Operational Plan (Capability Assessment Tool & Force Browser Tool)
- Automated JPERSTAT Tool

(Increment 1) (Increment 2) (Increment 3)

Aug ‘03

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Logistics Collaboration as a Force Multiplier

Provide the Warfighter with real time operations & logistics collaborative capability to support planning and execution

CSS Enterprise from a Warfighter Perspective

POWER PROJECTION
- Force Provider
- Strategic Lift
- Support Options

LOG PLANNING
- Log Prep of Theater
- Log Estimates
- Support Options

EXECUTION TRACKING
- Track Log Readiness
- Assess Log Readiness
- Weapons Systems
- Classes of Supply

Shared Knowledge

Integrated OPS Picture

Ops Virtual Workspace

Class III

Log Virtual Workspace

Class IV

GCCS

J3 STAFF

Supporting CINCs

GCSS

CSS STAFF

Network Centric

Weapons System Readiness

Components Inter-Agency Coalition

Force Readiness
Questions??