Rapid Improvement Team (RIT) Initiative with Lessons Learned from GTN 21

Lt Col Stewart Laing, GTN 21 PM,
Lt Col Dan Eickmeier, GTN 21 Dep. PM
Mr. John Laychus, DASD(C3I)
Capt John Bedingfield, AFPEO/C2&CS

29 January 2003
Abstract

Rapid Improvement Team (RIT) and Evolutionary Acquisition Decision Review (EADR) process. Outline the RIT initiative as an OSD sponsored program to use evolutionary acquisition to get IT capabilities to the warfighter faster. RIT moves large software intensive programs from "Oversight" to "Insight" transforming the way we think about how to satisfy statutory and regulatory acquisition requirements without impacting or stalling programs that would provide sorely needed mission capabilities. GTN 21 is the first of the RIT programs to successfully pass an EADR that gives the equivalent of a MS B decision. This precedent setting event included much discussion about how to shift the burden off proof of compliance on the part of the program office "oversight" to the burden of review and facilitation on the part of the OSD and Service stakeholders "insight".
Overview

- Rapid Improvement Team (RIT) Initiative Defined
- GTN 21 Overview
- GTN 21 Lessons Learned
The Traditional Acquisition Process Timelines

Planning Process 2+ yrs

Requirements Process (MNS, ORD, CRD) ~1.5 yrs
(Services + JROC*)

Acquisition Process 8-10+ yrs

Programming & Budgeting Processes (PPBS) ~2 yrs

No part of this process is compatible with the pace of technology or the experience of internal IM/IT development in commercial companies

* JROC Cycle is 79 days
Today: Oversight Process That Exceeds IT Innovation Cycle

Concept & Technology Development

System Development

System Acquisition

Operations & Support

Web Services Technology

1 McDougall, Paul, Information Week, “Decoding Web Services”, 1 Oct 01, pg 32
Life Cycle Profiles
(notional)

Typical A/C System Life Cycle

Typical Space System Life Cycle

Typical IT System Life Cycle

TIME

COST

RDT&E
Procurement
O&M
Disposal

Disposal

TIME

COST

TIME

COST
“Information Technology (IT) is a key enabler for transforming military, business, and administrative processes to meet the challenges of the 21st Century. To achieve these objectives, we must strive to reduce the cycle time to deliver mission effective IT capabilities to 18 months or less.”

“...the DoD CIO, USD(AT&L), USD(C), and VCJCS are co-sponsoring a Rapid Improvement Team (RIT) to address this reduction in the time to deliver IT mission capabilities and improve mission effectiveness and efficiency.”

“We have directed the co-chairs to manage this RIT initiative and report its ...recommendations to us not later than October 2001.”

USD(AT&L) and ASD(C3I) Memo, 2 August 2001
RIT Organization Structure

Sponsors
USD(AT&L), ASD(C3I)/CIO
JS/(J8), Comptroller

Executive Council
16 Principals
With 4 Co-Chairs

Senior Integration Team

Pilot Team

New Structure Focuses on the End-to-End Process and Implementation

5 Original Teams Have Identified Recommendations in Thrust Areas
IT RIT Executive Council

Sponsors:
- Mr. Aldridge (AT&L)
- Mr. Lanzilotta (Comptroller)
- Mr. Stenbit (C3I/CIO)
- LTGEN. Carlson (J8)

Joint Chairs:
- Dr. Margaret Myers (DCIO)
- Mr. Bob Nemetz (AT&L)
- Mr. Ron Garant (Comptroller)
- ADM Stanley Szemborski (J-8)

Principals:
- Mr. Dave Borland (Army DCIO)
- Mr. Ron Turner (Navy DCIO)
- Mr. John Gilligan (AF CIO)
- Mr. John Landon (C3ISR OIPT)
- Mr. Dale Uhler (DASN)
- Mr. George Wauer (DOT&E)
- Ms. Diane McCoy (DISA) (AFPEO/CS&CS)
- Mrs Virginia Williamson
- Mr. Bill Curtis (DCIO)
- Mr. John Osterholz (DCIO)
- BG Charles Croom (J-6)
- COL Mike Perrin (J-8)
Overarching Goal

Reduce cycle time to deliver mission effective IT capabilities to 18 months or less.
Risk-Balanced Oversight - The allocation of appropriate supervision and oversight resources consistent with:

- The risks of the investment and;
- The goal to manage and oversee programs at the lowest competent and capable level.

Doc X - The sum of information needed to enable a decision maker to set the program on a given acquisition path with a defined level of oversight appropriate to the risk involved.

Information - Utilize an information-based portal providing real-time visibility of IT programs in a joint/shared, secure database open to the community to pull from to do their job.
IT Spiral Development & Acquisition Process Cycles

DoDI 5000.2 inflexible, time consuming oversight process
Our Goal: More Timely Knowledge & Less Control

The RIT Pilot will utilize the Army’s Acquisition Portal and the EADR process to move us from oversight to insight.
Spiral EADR Process Approach Supports 5000.2 Agile Acquisition

Notional Data  Integrity - Service - Excellence
Evolutionary Acquisition Decision Review (EADR) Process Objectives

- EADR process objectives
  - Establish an agile acquisition process involving strong Customer and PEO participation (and OSD where appropriate)
    - Allocates funds that are aligned with operator prioritized requirements
    - Aligns oversight process with spiral development strategy
    - Delivers functional capability within the customer’s current funding envelope
  - Establish a responsive and disciplined requirements process
    - Retains corporate ability to make timely decisions and change direction as required
EADR process objectives (continued)

- Align program documentation and performance metrics to IT Spirals
- Identify the management infrastructure to manage program and incremental spirals
  - Processes, tools, and manpower
- Satisfy DoDI 5000.2 mandates and applicable EA AFIs/OIs
  - Across spirals at various stages of acquisition
IT RIT Process

“As-Is” IT Acquisition Process

RIT Proposals

Conduct Pilots

Plan Implementation, Integration & Measure Results

Implement Changes

Potential Pilots:
Validate Ideas
Generate New Ideas

Other Sources:
Industry Best Practices
Independent Review Team

RGS PPBS AMS

• Assess & Benchmark Current Performance
• Quantify Impact of Proposed Changes on Time / Quality
• Pilot/Test (only if necessary)
• Gain Buy-in & Approval

• Vet Change/ Resolve Issues
• Change Policies & Practices
• Issue Guidance
• Provide or Ensure Training
• Become “Change Agents” -- New Culture, Rewards

“To-Be” IT Acquisition Process
Innovation, agility and speed to meet emerging threats -- e.g., Homeland Defense

Delivery of mission-effective IT capabilities to the warfighter within threat / technology cycle times

Shift to risk-based oversight with reduced burden and staffing

Delegate responsibility and accountability to lowest levels -- process owners & developers

Establish improved DoD “End-To-End” IT Acquisition, Management and Oversight Policies and Processes that rapidly deliver mission effective IT capabilities to the warfighter and other users
Summary

- IT RIT developed set of recommendations focused on reducing acquisition cycle time and improving effectiveness.
- Integration of recommendations with the current “As-Is” system (RGS, PPBS and AMS) underway.
- RIT restructured for implementation and risk mitigation.
  - Implementation/Integration Team
  - Pilot Team
    - New Concepts Exploration/Experimentation
- Positioned for near- and mid-term change.
  - Fix long-standing problems in near-term, position for “radical” change.
  - Pilot and explore new ideas to feed the new process.
  - Evolve to a ”To-Be” new way of doing business (mid- to long-term)
Pilot Candidates

**AF** - GCSS-AF, ILS-S, IMDS, SCS, GTN21, FIRST

**NAVY** - NAVSEA (ERP)- NEMAINS, NTCSS, GCSS-M

**ARMY** - TC-AIMS II

**DISA** - GCSS(CINC/JTF)

**Health Affairs** - Systems TBD
Pilot Program Oversight Approaches

- AF (GCSS-AF, ILS-S, IMDS, SCS, FIRST, GTN-21)
  - EADR (Evolutionary Acquisition Development Review)
  - Decision Authority - PEO- Brig Gen (sel) Dehnert /Ms Williamson

- Health Affairs (TMIP)
  - Capitalize on existing MHS IM/IT program governance
  - Decision Authority - ASD (Health Affairs) - Dr. Winkenwerder

- DISA (GCSS-CC/JTF)
  - Periodic reviews to monitor progress following initial program review
  - Decision Authority - Principal Director - Ms McCoy

- Army (TC-AIMS-II)
  - Draft DA acquisition process for RIT Pilot
  - Decision Authority – ASD (C3I) – Mr. Stenbit

- Navy (NTCSS)
  - Virtual Oversight thru use of portal for decisions
  - Decision Authority – DASN(C4I/EW/Space) - Dr. Uhler
RIT Pilot Phases & Milestones

Jan 02
Phase 1
Organization

Jun 02
Phase 2
Execution

Dec 03
Mar 04
Phase 3
Evaluation

- Pilot Formulation
  - Pilot Team Formed
  - Pilot Projects Status Updated
  - Recommendations Reviewed
  - Component Oversight Clarified

- Risk-balanced Oversight
  - Risk Radar, P/C/S
  - SW Acquisition Capability
  - Metrics Selected

- Portal Approach Formulated
  - Army AIM
  - Air Force SMART
  - DAU PMCoP

- Implement Pilot Process
  - Component Decision Process
  - PEO/PMO Risk Management
  - SW Acquisition Capability
  - Observe Component Decision Process
  - Portal-based RIT Team Insight
  - Move to information-based insight

- Implement a DoD IT/NSS CoP
  - To share Pilot information with the entire IT community

- Final RIT Pilot Report
  - Blueprint for IT Acquisition
Overview

- Rapid Improvement Team (RIT) Initiative Defined
- GTN 21 Overview
- GTN 21 Lessons Learned
To gather the family of transportation customers and providers of lift into an integrated Defense Transportation System (DTS) **data infrastructure** that will provide the Intransit Visibility (ITV) and the C² decision support information necessary to meet customer requirements.
The Mission

- Provide near-real time visibility...
  - Global, multi-modal movement
  - Passengers, Cargo, Patients
  - Peace, War, Contingencies
- Provide the Warfighter with C2 Decision Support Capabilities
DoD, Service, & Commercial Interfaces:
- AIR Ops
- LAND Ops
- SEA Ops
- UNIT
- SUPPLY
- COMMAND & CONTROL

DTS Customers
Deploying Units
Materiel Mgrs
TMOs/ITOs
Depots
Service HQs
Systems

WEB BASED
Classified - Secret
Unclassified - Sensitive/Protected
Replacement System Strategy

Shortcomings in Current GTN System
- Does not satisfy all ORD requirements
- Obsolete technology
- Replacement strategy chosen

Full and Open Competition, Best Value
- Competition critical for innovation, quality and affordability
- Allows current technology insertion
- Will satisfy all ORD requirements
- Significant lessons learned from current program
Acquisition Strategy

**Phase I**
- Source Selection
  - Evaluate Proposals
    - Written
    - Oral (In-Plant)
    - Interim Ratings
    - SSA Rebuttal
    - Discussions

**Phase II**
- Down Select
  - Deliverables:
    - DBDD
    - Technical Approach
    - IMP/IMS

**Execution**
- Development
- Operations
- Maintenance

**Acquisition Strategy Formulation**
- Industry Days (5)
- One-on-Ones (40+)
- Web Accessible Info
- RFI
- Sources Sought
- Draft RFPs
- RFP Release

**Designated RIT Pilot**

**Timeline**
- FY01 - FY02
  - 2nd Qtr FY02
  - 3rd Qtr FY02
  - 4th Qtr FY02
Two-Phase Approach

- Two Phase Approach

- Phase I - Risk Mitigation & Data Gathering
  - Firm Fixed Price
  - At least 2 contracts – $2M per contract *
  - 4-Month Period of Performance

- Deliverables
  - Tailored Database Design Document (DBDD)
  - Integrated Master Schedule (IMS)
  - Technical Approach & Integrated Master Plan (IMP)

- Cost Proposal received after tech eval completed

* Award made to Northrop Grumman Information Technologies, TRW, CSC, and Harris
Two-Phase Approach (cont)

- Phase II - Development and O&M (up to 16 years)
  - Cost Plus Award Fee
  - Exercise Option on single Phase I Contract
  - 3-Year Development to IOC
  - 2-Year Development to FOC
  - 2 Years O&M Between IOC & FOC
  - 1-Year Follow-on O&M Post FOC
  - 10-Year Follow-on Maintenance
  - Actual Durations Depend on Proposed Schedule
Program Management

Source Selection Authority
Delegated

Milestone Decision Authority

ASD(C3I)

SAF/AQ

AFPEO/C2&CS

System Program Director (SPD)

USTRANSCOM
USTRANSCOM Stakeholders

**USTRANSCOM CINC & DCINC**

- **J6**
  - System Administration
  - System Operators

- **J3**
  - Functional Administration
  - Requirements
  - Outreach
  - ITV Planning/Metrics

**GTNPMO**
- Contractor Oversight
- Program Management
- Technical Requirements
System Characteristics

- Hardware: COTS
- Software: COTS & Developed
- Primary Site: Scott AFB
- Alternate Site: DECC STL
- User Interface: Web-Based—No Deployed Code
- Large Database
- Multiple Interfaces
  - Aggregate Data from many sources
  - No direct data input
  - Supply aggregated data to end users/customer systems
Overview

- Rapid Improvement Team (RIT) Initiative Defined
- GTN 21 Overview
- GTN 21 Lessons Learned
Oversight as exception processing
Continuous access to info for comment vice shepherd through long approval process
  Post to AIM (Doc X)
Periodic Evolutionary Acquisition Decision Reviews (EADRs) replace formal milestones
Establish 18 month max delivery cycle
Designated GTN 21 from ACAT 1AM to 1AC
MDA lowest appropriate level (AFPEO/C2&CS)
Proposed IT EADR

Example:

Approved:
- What are we buying?
  - Requirements
- How are we buying it?
  - Funding
  - Acquisition approach
  - EADR Approach
- What are the risks?
  - Risk ID complete

Documentation
- MNS
- Draft ORD (w/ Interoperability KPP)

Exit Criteria
Approved:
- What are we buying?
  - Requirements
- How are we buying it?
  - Funding
  - Acquisition approach
- What are the risks?
  - Mitigation Plans complete
  - Incentive Plan

Documentation
- Doc X
  - Evol Pgm Baseline
    Year 1: Baselined
    Yrs 2-8: Forecast
  - Updates

Senior Official Involvement Critical to Success
**Key Stakeholders involved (VTC)**

- **MDA:**
  - Deputy AFPEO (C2&CS), Co-Chair

- **User:**
  - TCJ3/4, Co-Chair
  - JSJ4

- **CIO:**
  - TCJ6, Co-Chair
  - AFCIO
  - DASD(C4ISR)

- **Test**
  - OSD(T&E)
  - AF/TE
  - AFOTEC

- **Budget/Cost:**
  - TCJ8
  - OSD Comptroller
  - SAF/FMC
  - AFCAA

- **Acquisition:**
  - SAF/AQC/AQI/GCQ
  - AFMC/DR
  - ESC/AE/JA
GTN 21 EADR Outline

- What Are We Buying?
- How Are We Buying It?
- What Are the Risks?
- Clinger-Cohen Act Compliance
- Test Strategy
- Security Strategy
- Documentation
- Summary/Recommendation

- Mapped goals of the EADR with MS B requirements in DODI 5000.2
- Tailored to Program Needs
- Evidence of total compliance posted on AIM
RIT Lessons Learned for GTN 21

- Designation From 1AM to 1AC Effects
  - MDA Has Day-to-Day Knowledge of Program
  - Streamlined CCA Confirmation
  - OSD Gray Beards Still on Board

- Teaming with Key Stakeholders Throughout Acquisition Process
  - Test IPT Critical to Successful Test Strategy
  - CCA IPT Resolved GTN 21 Unique Situation
  - C4ISP Not Affected by RIT – 18 Month Process
RIT Lessons Learned for GTN 21 (cont.)

- EADR Minutes Serve as ADM, Streamlines Approval—Reduces cycle time
- User Involvement Still Critical to Success
  - Author CCA Compliance Items (I.E. BPR, MPMs)
  - Author and Coordinate MNS, AoA, ORD
  - Participate in SAMP, TRD, RFP, C4ISP
- Change From Oversight to Insight with Expert Help Another Key
  - Initiative Sharing – Information Pull Vs. Document Push
  - IIPT Was First Step; RIT Takes It Rest of the Way
RIT Lessons Learned for GTN 21 (cont.)

- **Document X (AIM)**
  - Central Repository for Stakeholders to Pull All Program Information
  - Initial Move From Document Focus to Information Focus
  - Need a program information structure upon which to build common repository
  - Define views for communities of interest
- Pre-brief to EADR Co-chairs and Information Flow Prior to EADR Helped Set Expectations
Recommendations

- Delegate MDA to Lowest Appropriate Level
- Use EADRs for All IT Programs
- Continue to Foster Culture
  - From Oversight to Insight
  - Information Pull vs. Document Push
  - Signature/approval process not there yet
- C4ISP Process Too Long - Integrate with Doc X
- Document X vs. myriad program documents
  - Build common common program information repository
  - Provide views for communities of interest (i.e. C4ISP)
- IIPT Still Needed, but Facilitated by AIM
- Align Financial Management Process (AFCAIG) with EADRs
Abbreviations

A/C - Aircraft
AFI - Air Force Instruction
AFPEO/C2&CS - Air Force Program Executive Officer for Command Control & Combat Support
AOA - Analysis of Alternatives
APB - Acquisition Program Baseline
ASD(C3I) - Assistant Secretary of Defense for Command Control Communications and Intelligence
C2 - Command and Control
CAIV - Cost as an Independent Variable
CINC - Commander in Chief
CONOPS - Concept of Operations
CRD - Capstone Requirements Document
DAB - Defense Acquisition Board
DoDI - Department of Defense Instruction
USD(AT&L) - Under Secretary of Defense for Acquisition Technology and Logistics
EA - Evolutionary Acquisition
EADR - Evolutionary Acquisition Decision Review
Evol - Evolutionary
FoS - Family of Systems
FOC - Full Operational Capability
IOC - Initial Operational Capability
ISC2 - Intelligence Surveillance Command and Control
IT - Information Technology
JROC - Joint Requirements Oversight Council
KPP - Key Performance Parameter
MOB - Mission Operations Board
MDAP - Major Defense Acquisition Program
MNS - Mission Need Statement
N/UWSS - NORAD/USSPACECOM Warfighting Support System
OAB - Operations Approval Board
OI - Operating Instruction
O&M - Operations and Maintenance
ORD - Operational Requirements Document
OSD - Office of the Secretary of Defense
PEO - Program Executive Officer
Pgm - Program
PPBS - Planning, Programming, and Budgeting System
RDT&E - Research, Development, Test and Evaluation
RFP - Request for Proposal
SAMP - Single Acquisition Management Plan
TEMP - Test and Evaluation Master Plan