

# Concept of Operations for Contractor Integrated Data Services Planning Workshop

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Hosted by AMSAA  
as Chair of the  
AMC Product Data Management  
Functional Coordinating Group

8 - 10 Sep 99

John Wheeler  
DSN 793-4619

# Introductions

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- Department of the Army
  - Mr. Steve French, ASA(ALT) SAAL-DS
- Army Materiel Command
  - Ms. Lyssie Guyer, AMCLG
  - Mr. James Knowles, AMCRDA-TE
- Industry Representatives
  - Mr. Ed Dlugosz, System Resources Corporation
  - Ms. Stacy Bonnah, Lockheed Martin Information Systems
  - Mr. Jim Finke, Litton / PRC
  - Mr. Pete Everitt, PDIT, Inc.

# Administrative Remarks

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- Sign In Sheet -
  - Please make additions and corrections
- Orientation/Locations
  - Baylor Conference Center, Bldg 103-104, 3rd floor
  - Elevator, Bldg 104
  - Stairs, Bldg 104 or Bldg 103, Fire or Emergency Exits
  - Cafeteria, Bldg 60, 1st floor, SE corner
- Telephone numbers: (309)782-0369/0175 DSN 793-
- Refreshments
- Ideas on possible evening event

# Workshop Management

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- Workshop Structure:
  - Shared Experience
  - Brainstorming Method
  - Outline/Strawman - Discussion - Synthesis
- Workshop Decision Mechanisms
  - Preferred: Consensus
  - Next Preference:
    - Majority Position with recorded Minority Comments
- Workshop Record
  - Charts, meeting records will be published by e-mail and web site

# Workshop Agenda

Wednesday, 8 Sep 99

Thursday, 9 Sep 99

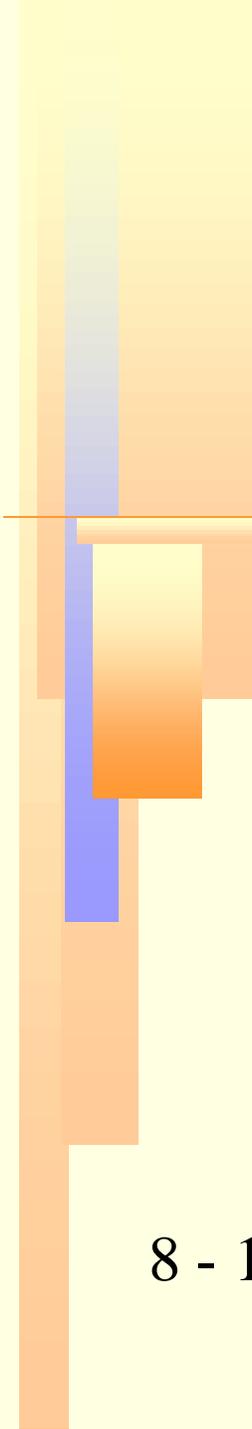
Friday, 10 Sep 99

0800: Introduction - John Wheeler	0800: Meeting Admin - John Wheeler	0800: Meeting Admin - John Wheeler
0815: US Army CIDS - Steve French 0845: Workshop Focus - Gordon Ney	0815: Scope of CIDS (continued) •Problem Statement - Steve McGlone •Vision Statement - Gordon Ney •Aspects of CIDS - Data - John Wheeler - Functionality - John Wheeler	0815: Plan for a CIDS ConOps - continued - Tom Schneider
0830: Workshop Presentations • DOD GCO for CITIS - Ed Dlugosz • STRICOM EC in an IDE - Donna Felix/Stacy Bonnah/Jim Finke		
0930 Break	0930 Break	0930 Break
•Team Redstone IDE - Ann Turnmeyer •PEO MSL Long Rng View- Mel Bartlett •B-2 CITIS - Pete Everitt	•Aspects of CIDS - continued - Enterprise - Gordon Ney - Related Systems - Steve McGlone	1100: Workshop - Actions & Resolutions - John Wheeler  1115: FCG Actions - Gordon Ney
1130 - 1245: Lunch	1130 - 1245: Lunch	1130: Adjourn
•Crusader CITIS - Angelo Castellano 1330: Scope of CIDS •Problem Statement - Steve McGlone	- CIDS Principles - Gordon Ney •Vision Revisited - Gordon Ney 1400: Current Guidance Review - Steve McGlone	
1430 Break	1430 Break	
•Vision Statement - Gordon Ney	1445: Plan for a CIDS ConOps - Tom Schneider	
1630: Adjourn	1630: Adjourn	

# Army CIDS

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- Mr. Steve French, ASA (ALT) SAAL-DS
  - file name: CIDS Brief.ppt



# Planning Workshop

## Focus and Expected Results

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Gordon Ney  
DSN 793-6586

# AIB Task

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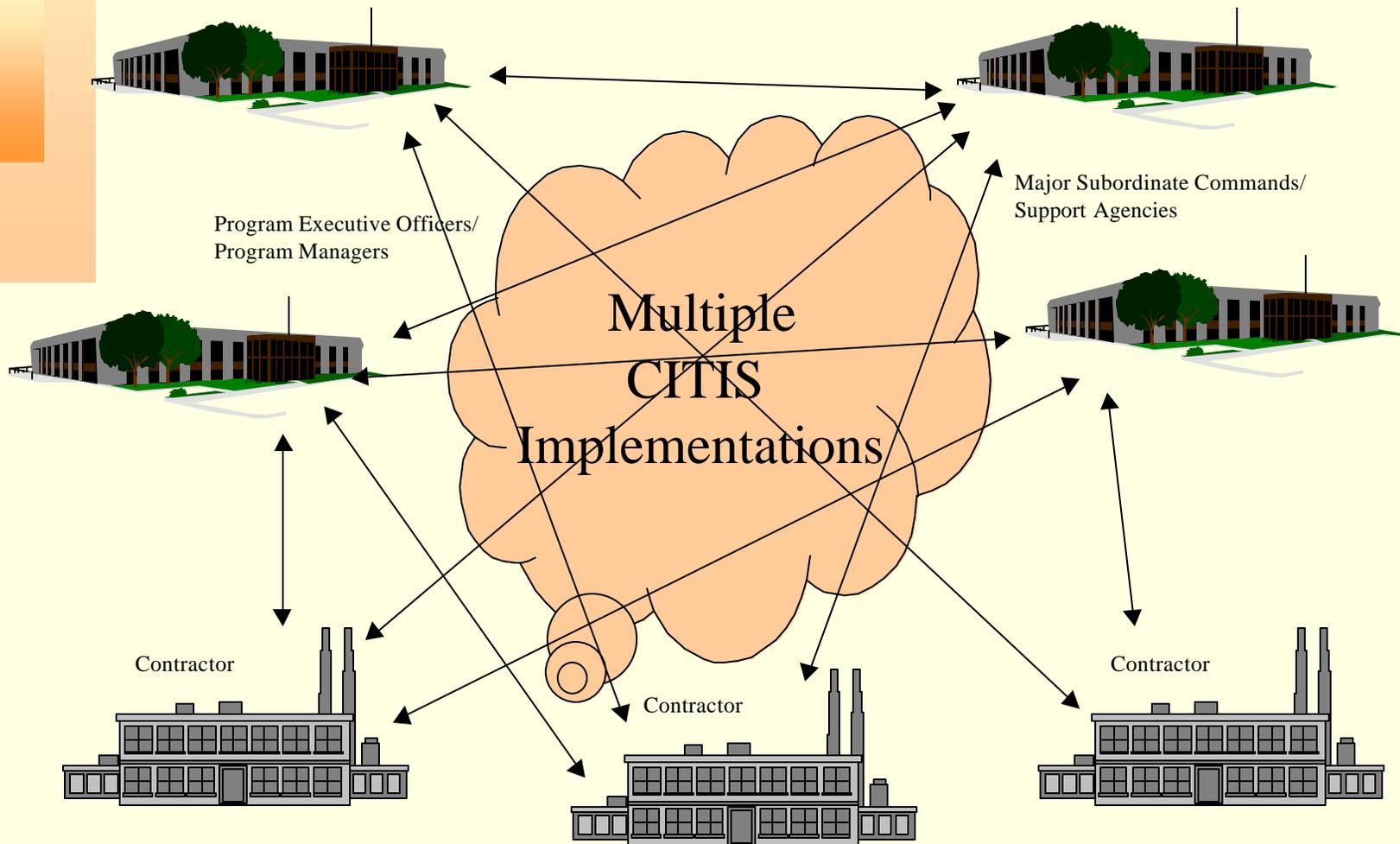
- Acquisition-Engineering Information Board (AIB)  
3 - 4 Jun 99 Meeting, Final Results  
**“A Contractor Integrated Technical Information Service (CITIS) Concept of Operations is required.”**
- Responsibility of the Product Data Management Functional Coordinating Group (PD FCG).
- Plan of Action required at AIB meeting, 22 Sep 99
- Scope expanded:
  - From Technical data to all data
  - From AMC to include PEO/PM community

# Issues to be Addressed

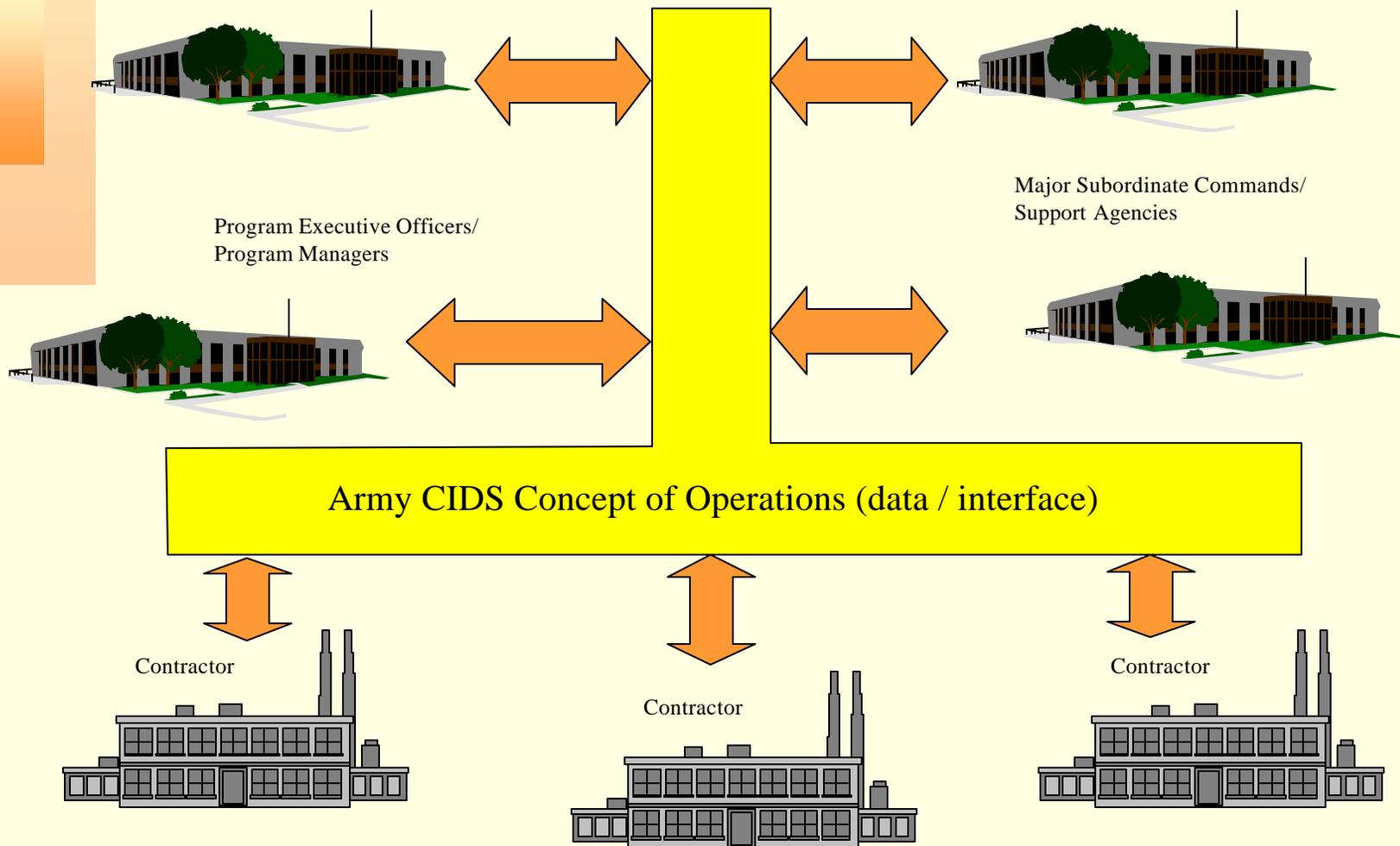
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- Each activity controls own CITIS implementation
- Many different perspectives and approaches
- Many competing technologies and protocols
- Very high probability that
  - Individual CITIS instances will not interoperate
  - Costly conflicting requirements will be placed on both Contractor and Army data management systems
- Results: Higher cost and lost opportunities
- Solution: Army Concept of Operations to provide:
  - harmonized set of data elements
  - standard set of interface protocols
  - implementation guidance

# Existing CITIS Practice



# Operations Through the Army CIDS Concept



# Benefits of a Army Concept of Operations

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- Coordinated Army CIDS Concept of Operations will:
  - foster improved flow of information both
    - between Army and contractor and
    - within the Army
    - between Army and other components
  - allow uniform implementation of both the
    - contractor CIDS functionality, and
    - Army interface to that functionality
- Significant Potential Cost Savings and Increased Capability

# Expected Workshop Outputs

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- Problem Statement
  - What is wrong with the current situation?
- Vision Statement
  - What is the best of the possible solutions?
- Outline of the Important Aspects of CIDS
  - What is the scope of CIDS?
- Review of Current Guidance
  - How well does it support our Vision?
- Plan for developing a Concept of Operations for CIDS
  - What do we need to accomplish?

# Planning Workshop Presentations

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# Contracting for the New Millennium: Paperless Acquisition

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- Edward Dlugosz, Technical Director, System Resources Corporation
  - file name: ??

# STRICOM Electronic Commerce in an Integrated Digital Environment

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- Donna Felix - STRICOM IDE Office
  - file name : Army\_Concept\_Operations.ppt
- Stacy Bonnah - Lockheed Martin Information Systems
  - file name: ??
- Jim Finke - Litton - PRC
  - file name: ??

# Team Redstone on Contractor Integrated Technical Information Services

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- Ann Turnmeyer - AMCOM IDE Office
  - file name: CIDS Charts-Ann.ppt
- Mel Bartlett - PEO Tactical Missiles
  - file name: CIDS Charts-Mel.ppt

# B-2 CITIS Lessons Learned

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- Pete Everitt - Product Data Integration Technologies
  - file name: B-2 CITIS Lessons Learned.ppt

# Crusader CITIS

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- Angelo Castellano - OPM Crusader/TACOM ARDEC
  - file name: crusader.ppt

# Scope of Contractor Integrated Data Services

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# Problem Statement

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- Approach: Brainstorming Session
  - Ground Rules: No interruptions, Analysis later
  - Write three issues/concerns on current situation
  - Use complete sentences: Subject, Verb, Single thought
  - Rank: Worst concern - Highest rank
- Gather Issues and Group into Concern Areas
- Collectively Rank the Concern Areas
- Summarize into a Problem Statement

# Strawman Problem Statement

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- Each activity controls own CITIS implementation
- Many different perspectives and approaches
- Many competing technologies and protocols
- Very high probability that
  - Individual CITIS instances will not interoperate
  - Costly conflicting requirements will be placed on both Contractor and Army data management systems
- Results: Higher cost and lost opportunities

# Vision Statement

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- Review purpose and time frame of Vision Statement
- Example: the ACMS Vision Statement
- Strawman CIDS Vision Statement
- First Draft: revise or rewrite
  
- Later: Vision Statement - revisited

# Vision Statement: Foundations

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- A Vision Statement is:
  - The main theme
  - The seed
  - The touchstone
  - The central idea
- A Vision Statement has an event horizon
  - Close enough to be relevant
  - Long enough to be achievable
  - Partial and Full Realization dates

# *Automated Configuration Management System Vision Statement*

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ACMS will provide the required data when it is needed and in a form that the user can apply to accomplish the mission. The required data consists of all the engineering data necessary to completely define an item for the intended purposes of specifying, designing, analyzing, manufacturing, maintaining, sustaining, testing, inspecting, and dispositioning that item over its entire life span. The ACMS must also operate in a diverse Army environment, integrate with other MSC business processes, and communicate with other MSC, government and industry information management systems.

# *Contractor Integrated Data Services Vision Statement - Strawman*

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Contractor Integrated Data Services will  
provide the right data,  
to right persons,  
in a useable paperless form,  
on time and at an affordable cost,  
to allow successful completion of the Army  
mission.

To accomplish this, Contractor Integrated Data  
Services will interoperate seamlessly with the  
Army Integrated Digital Environment.

# Aspects of Contractor Integrated Data Services

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- Range of CIDS Data Content
- Range of CIDS Functionality
- Levels of Enterprise
- Relationship to Existing Systems and Programs
- Guiding Principles
- Other aspects . . .

# Range of CIDS Data Content

## ■ *Program Management*

- *Program Planning*
- *Program Control*

## ■ *Systems Engineering*

- *Requirements Analysis*
- *Design Synthesis*
- *Configuration & Data Management*
- *Systems Analysis & Control*
- *Performance Verification*

## ■ *Business & Financial Mgmt*

- *Financial Planning*
- *Budgeting*
- *Funds Execution*

## ■ *Procurement/Contract Mgmt*

- *Solicitation Preparation*
- *Proposal Evaluation / Source Selection*
- *Contract Award*
- *Contract Administration*

## ■ *Logistics Support*

- *Supportability Planning*
- *Provisioning*
- *Spares Ordering & Inventory*
- *Field Maintenance*

## ■ *Test & Evaluation*

- *Test Planning*
- *Testing*
- *Evaluation & Analysis*
- *Feedback to Design*

## ■ *Manufacturing & Production*

- *Industrial Base Assessment*
- *Production Planning*
- *Manufacturing*
- *Quality Control*

# Range of CIDS Functionality

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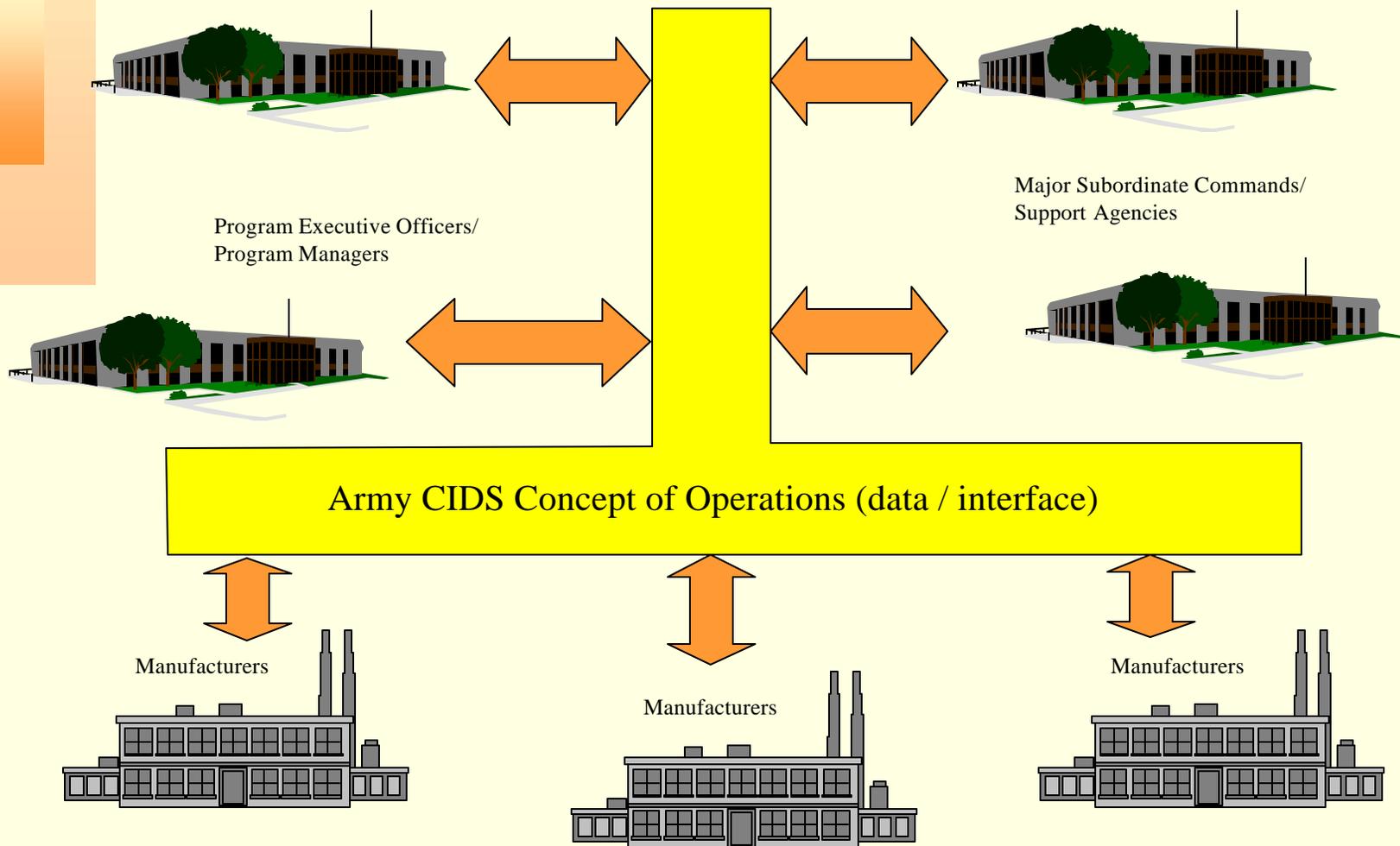
- MIL STD 974 Functions - CDRLS
  - Acknowledge • Approval/Disapproval • Comment
  - Delivery • Receive • Search • Store
- Support Integrated Digital Work Environment
- Tools/Protocols
  - E-mail • FTP • HTML ...
- Interoperable Workflow Management
- Program Management (Scheduling)
- Security Mechanisms
  - Functional requirement consistent with the threat

# Levels of Enterprise

- *Program Executive Officer*
- *Program Manager*
- *Major Subordinate Command*
- *Major Subordinate Command Sub-Element*
- *Geographic Site*
- *Virtual Organization*
- *Army Materiel Command*
- *Army*

- *Minimum Functionality to support mission need*
- *Functionality varies at different enterprise levels*
- *Common Ground Rules*
  - *Interface and Data Elements*
- *Consistency between child and parent in overall enterprise*
- *Modular Concept of Operations*
  - *Document for each level*
  - vs.
  - *One Document for all*
- *Perspective beyond the Program Manager Integrated Product Team*

# Operations Through the Army CIDS Concept



# Legacy or Related Efforts

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## ■ Technical Data:

- All CAD and PDM Systems in AMC
- JEDMICS
- TD/CMS
- AMCS
- ICAPP
- ECALS
- MEARS
- TDP Tracker

## ■ Financial Data:

- SAACONS
- SPS
- PADDS

## ■ Programmatic Data:

- AIM
- WEAMS

## ■ Logistics Data

- LOG MOD
- CCSS
- JCALS

# Relevant Information on Existing Systems

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- Description of System
- Timeline of effort
- Impact
- Role

# CIDS Concept of Operations Guiding Principles

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- Interface Standards Based
- Use Contractor Information Systems and data formats whenever possible
- Supports digital work environment
- Support sharing and integration of data between programs
- Use of Concept of Operations details requirements will be mandatory if CIDS is used.

# Vision Statement - Revisited

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■ Final Version

# Review of Current Guidance on Contractor Integrated Technical Information Services

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# Guidance to Be Reviewed

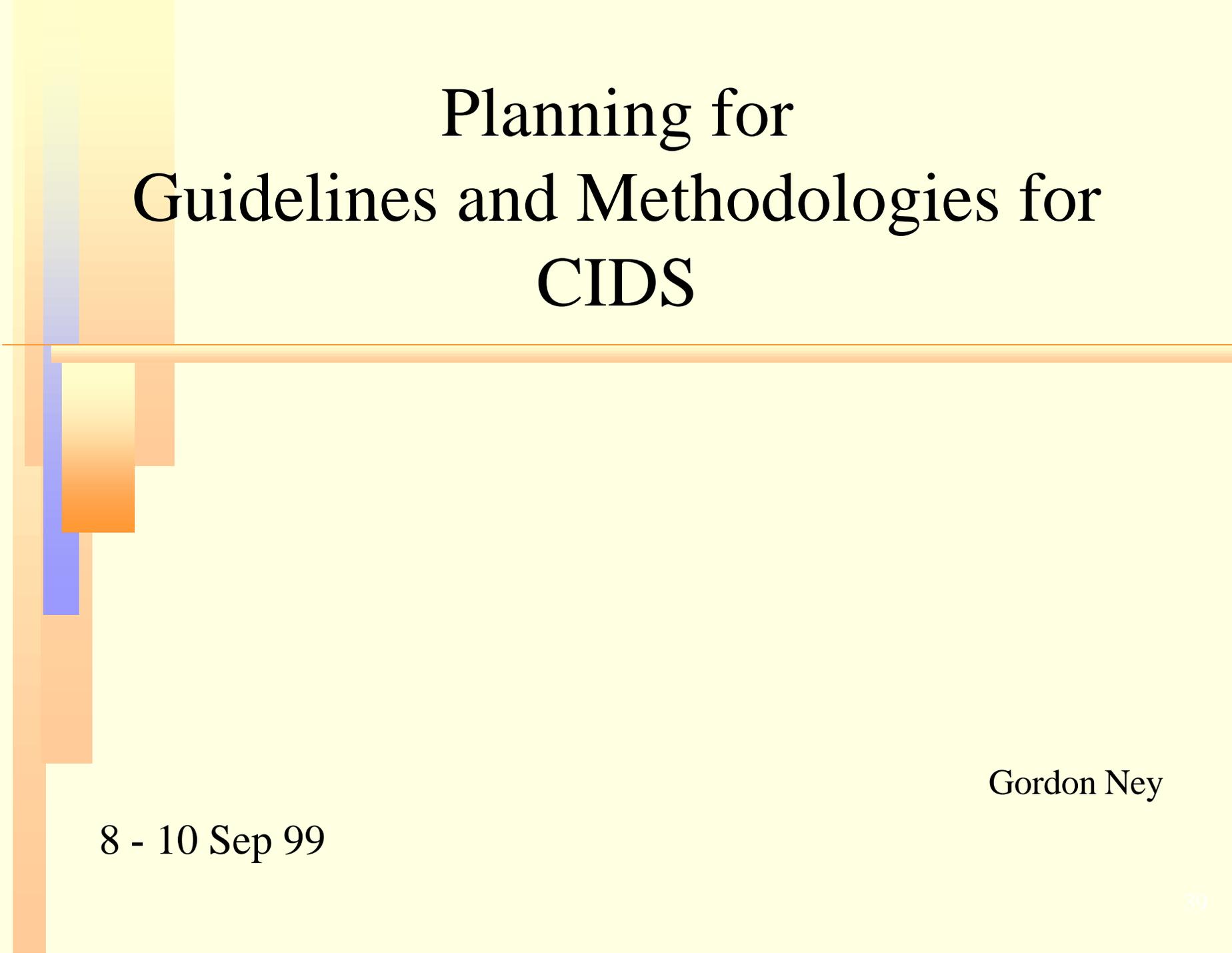
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- DOD 5000.2 - R, 23 Mar 98, Excerpts on CALS and Data Requirements
- MIL STD 974, 20 Aug 93, Contractor Integrated Technical Information Service (CITIS)
- AMC Policy Memo, 6 Jan 99, CITIS for Engineering and Technical Data
- AMC Policy Memo, 25 Jan 99, Policy for Implementing Joint Computer-Aided Acquisition and Logistics Support (JCALS) System #99-01
- Army Transition Plan to Digital Operations, 1 Mar 99
- DOD Program Manager's Desktop Guide for Continuous Acquisition and Life-Cycle Support (CALS) Implementation, 14 March 1997

# Possible Comments on Guidance

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- Great Guidance
- Applicable/Usable
- Do we need a document of this type at all?
- Needs update/revision
- OBE
- Beyond salvage
  
- Are needed Standards Missing?



# Planning for Guidelines and Methodologies for CIDS

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Gordon Ney

# Outline of Plan for CIDS Guidelines and Methodologies

## ■ Proposed Plan:

- IPT continues with periodic meetings
- Output: Guidelines and Methodologies for Army CIDS

## ■ Two alternatives

- Alt 1- short time frame with tech support kr (6 mo effort)
- Alt 2- short time frame based on use of IPT resources and dedicated internal folks (6 mo effort)
  - 4 mtgs IPT
  - dedicated resources
    - salary 10 FTE
    - per diem/travel 10

# Costing of Major Steps Short Time frame Tech Spt Kr (6 mos)

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- CIDS IPT meetings
  - Number of meetings, est. 4
  - Travel Costs / meeting, est 40 people
- Workshop with IPT, DoD & Industry
- Technical support contract task order
  - Publish 2 Drafts of Guidelines & Methodologies
  - Publish Final Guidelines and Methodologies
  - Level of effort 10 FTEs
  - technical direction of contractor

# Backup Charts

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# Expected Use of Guidelines and Methodologies

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- Target Audiences:

- Program Manager
- Industry Partner

- Usage

- Provides the PM with interoperability requirements for program specific CIDS implementations
- Provides contractor community with unified interface requirements for contractor CIDS implementations
- Gives external framework within which both Government and contractor IDEs must operate

# Expected Content of Guidelines and Methodologies

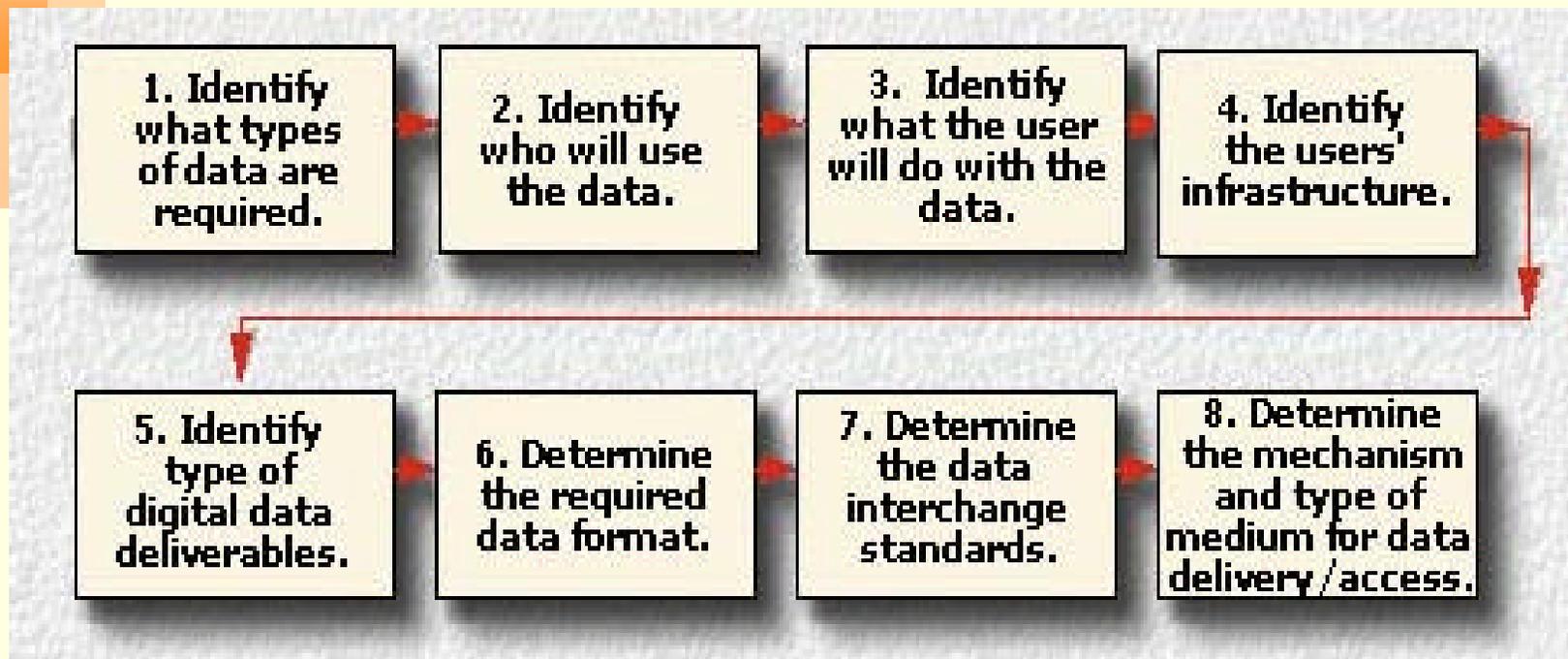
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- Description of target environment that will realize our Vision
- Description of how we will operate within the target environment when our Vision is realized
- May depict how we will operate in different scenarios, acquisition/logistics support strategies, ...
- May be Single Document / Multiple Documents ...
- Guidance and Methodologies ...

# Time Line

	Sep FY99	2Q FY00	3Q FY00	Sep FY00
I. Workshop				
a. AIB Status Brief	X			
II. Next Steps				
a. CIDS IPT meetings				
b. Publish Draft Guidelines & Methodologies				
c. Workshop with DoD & Industry				
d. Other ...				
III. Publish Final Guidelines and Method				Final

# DoD Steps to Develop a GCO for CITIS



# Problem

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Government Organizations are establishing contractual agreements which are inadequate to support acquisition and life cycle support of weapons systems with contractors for the storage, maintenance, distribution and management of contractually required data. Additionally, the data covered by these agreements is insufficient and the ownership and rights to that data is inadequately defined to support acquisition and life cycle support of weapons systems.

# Background

Army leadership perceives that Government Organizations may be establishing inadequate contractual agreements which may be inadequate to support acquisition and life cycle support of weapons systems for the storage, maintenance, distribution, and management of contractually required data. Contractual agreements may be inadequate in terms of

- articulation of functional capabilities required,
- the potential for utilization of the data, and
- consistency and compatibility among and between other CITIS arrangements.

Additionally, the data covered by these agreements may be insufficient and the ownership and rights to that data may be inadequately defined to support acquisition and life cycle support of weapons systems.

# Problem Statement

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Current Contractor Integrated Technical Information Services (CITIS) may be inadequate to support long-term efficient & cost effective exchange of data in a digital environment for support of life cycle weapons systems management. Current CITIS implementation guidance is inadequate in terms of

- articulation of functional capabilities required,
- the potential for utilization of the data, and
- consistency and compatibility among and between other CITIS arrangements.

# Contractor Integrated Data Service

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A service provided by a contractor (prime or 2nd party) to receive (if appropriate), store, maintain, distribute and manage contractually specified data in support of weapons systems acquisition and life cycle support. The agreement for service must specify:

- a. Data covered by the service
- b. Ownership of that data
- c. Authorized uses of that data
- d. etc.