

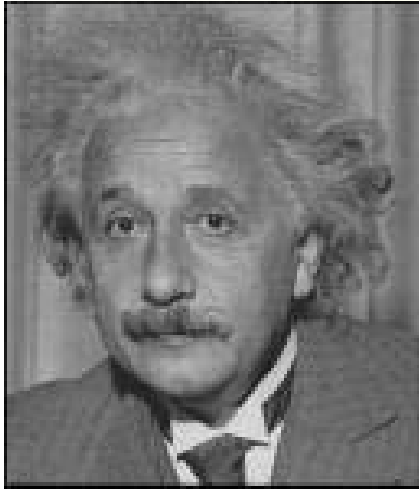
Transforming the Way the DoD Manages Data

An Army Officer recently observed,

“The Global Information Grid (GIG) exists to connect people with information”

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We can't solve problems by using
the same kind of thinking we
used when we created them.

Albert Einstein



National Defense Strategy

- March 2005, National Defense Strategy:
 - Identifies a critical needed capability to “conduct network-centric operations.”
 - Explicitly recognizes the need for fundamental change processes, policy, and culture.



Barriers to Identifying, Accessing and Understanding Data

Defining The Data Problem



User needs it but is **unaware** this data exists

Organization “A”

Data Strategy Approach:
Discovery
Metadata

User knows this data exists but **cannot access it** because of organizational and/or technical barriers

Organization “B”

Data Strategy Approach:
Web Enabling,
Web-service Enabling

User knows data exists and can access it but may not know how to make use of it due to **lack of understanding** of what data represents

Organization “C”

Data Strategy Approach:
COIs,
Metadata Registry



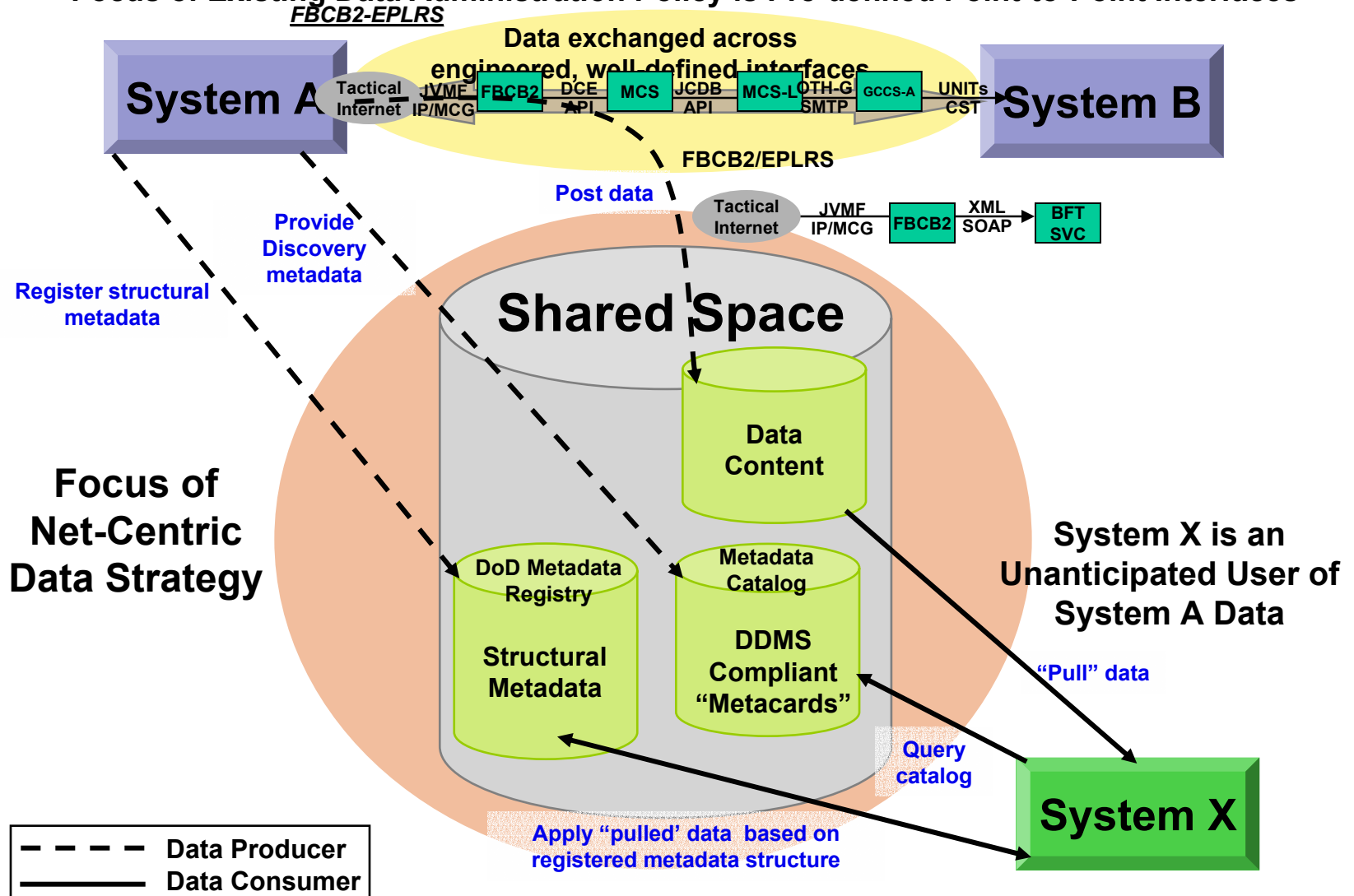
Data Sharing in a Net-Centric DoD

- DoDD 8320.2 (signed Dec 2, 2004) directs implementation of the Net-Centric Data Strategy
- The Net-Centric Data Strategy (signed May 9, 2003) is a key enabler of the Department's transformation
- The Strategy provides the foundation for managing the Department's data in a net-centric environment, including:
 - ✓ Ensuring data are **visible, accessible, and understandable** when needed and where needed to accelerate decision making
 - ✓ “**Tagging**” of all data (intelligence, non-intelligence, raw, and processed) with **metadata to enable discovery** by known and **unanticipated** users in the Enterprise
 - ✓ **Posting** of all data to **shared spaces for users to access** except when limited by security, policy, or regulations
 - ✓ Organizing around **Communities of Interest** (COIs) that are supported by Warfighting, Business, Enterprise Information Environment, and Intelligence Mission Areas and their respective Domains.



Net-Centric Data Strategy Enables Unanticipated Users

Focus of Existing Data Administration Policy is Pre-defined Point-to-Point Interfaces



What is a COI?

- COIs are described in the DoD Net-Centric Data Strategy
- A COI is ...
 - a *Community*
 - *Of* people
 - who are all *Interested* in something
 - and need to share information
- What does a COI do?
 - *Work together to resolve the issues that affect their community*
 - *Establish community standards on how information will be exchanged within the COI*
- What can't a COI do?
 - *COIs do not operate systems or provide services*
 - *COIs do not submit POMs*
 - *COIs do not direct changes to ICDs, ORDs, CDDs, or CPDs*

However, members of COIs do!



SAMPLE

Community of Interest (COI) Steering Committee Template

Date:

POC:

Version 1.2.5



Purpose of the COI

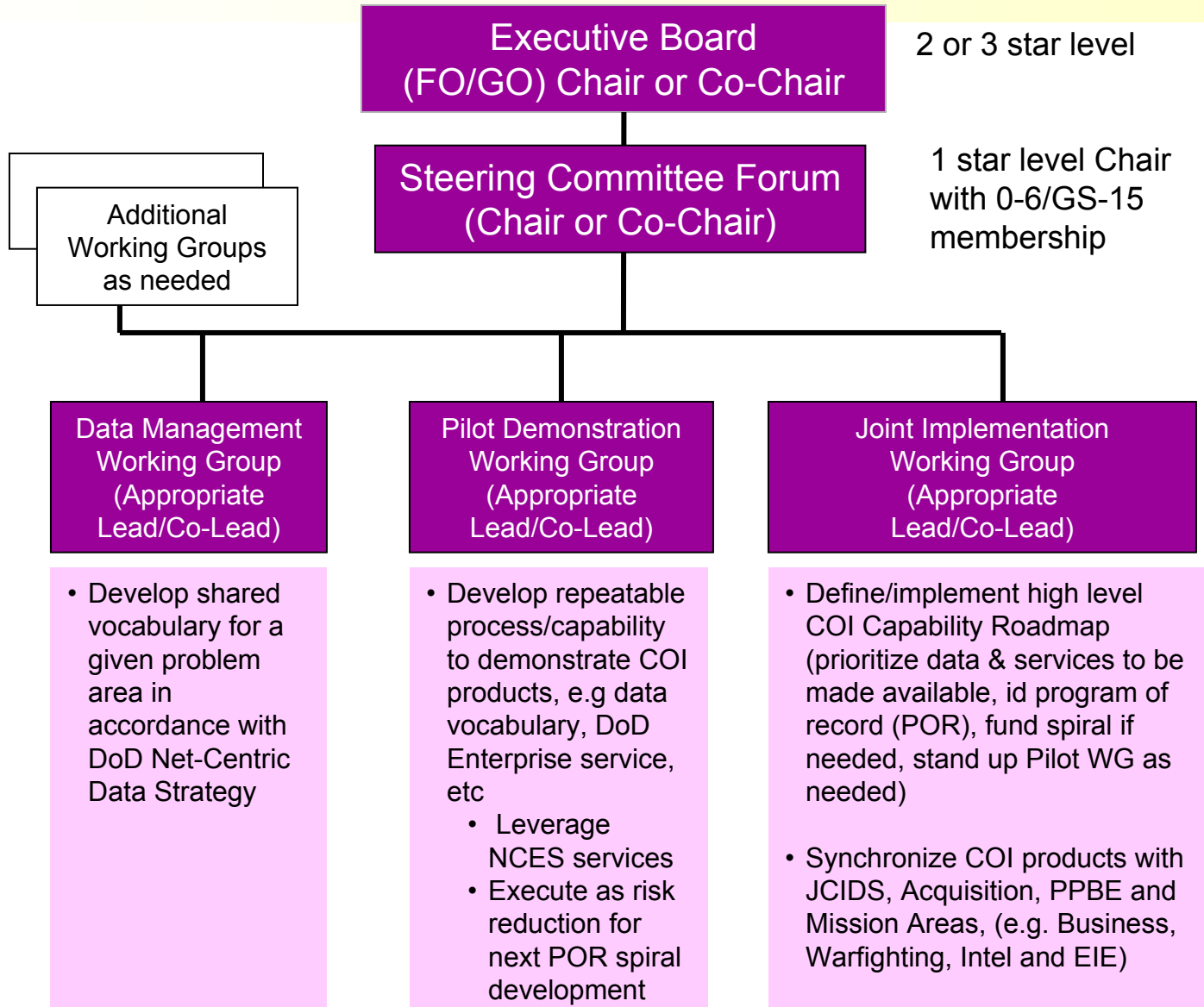
- **One sentence that describes the information sharing problem this community is tackling.**

Definition of a COI from DOD Directive 8320.2 –

Community of Interest (COI). A collaborative group of users that must exchange information in pursuit of its shared goals, interests, missions, or business processes and therefore must have shared vocabulary for the information it exchanges.



Sample COI Organization Chart



FOR DISCUSSION PURPOSES ONLY

Pilot Purpose

Purpose: One sentence that describes the net-centric capabilities the COI pilot will demonstrate, and designates the lead component for the pilot.



Pilot Scope

Scope:

- (1) What programs of records or other sources will advertise data as a web-service IAW the agreed COI vocabulary?**
- (2) What value-added services will be demonstrated?**
- (3) What network(s) will be used to demonstrate net-centric capabilities?**
- (4) What joint exercise(s) will be used to demonstrate net-centric capabilities?**
- (5) What organizations are participating?**



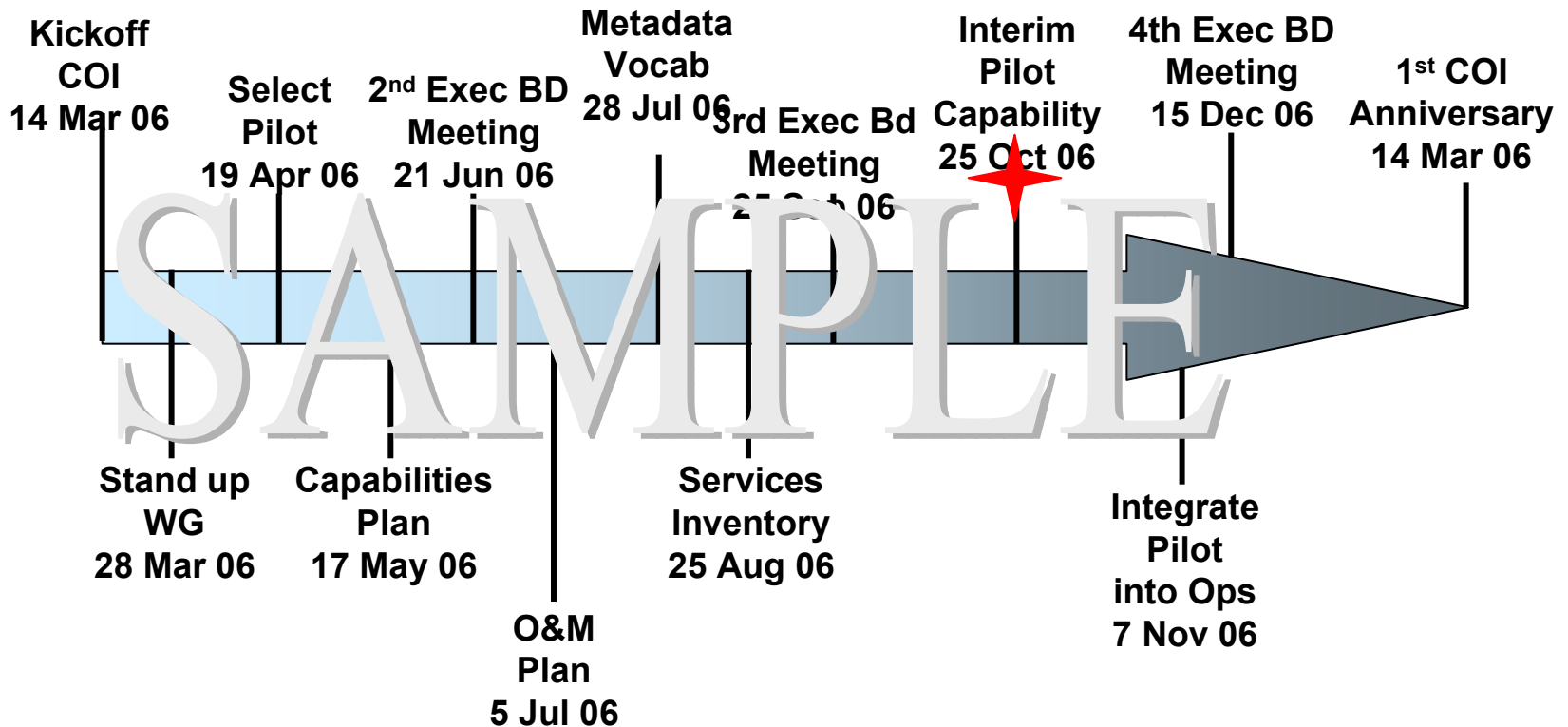
Scope of the Data Management Working Group Task to Support the Pilot

Describe the initial community vocabulary that is necessary to support the COI pilot.



COI Pilot POA&M

High-level Graphic with dependencies, decision points, and final demonstrated illustrated.

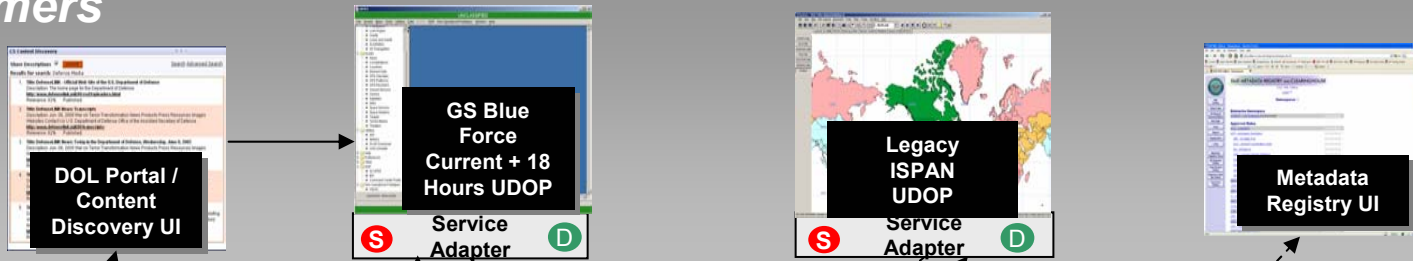


COI Pilot Systems Architecture

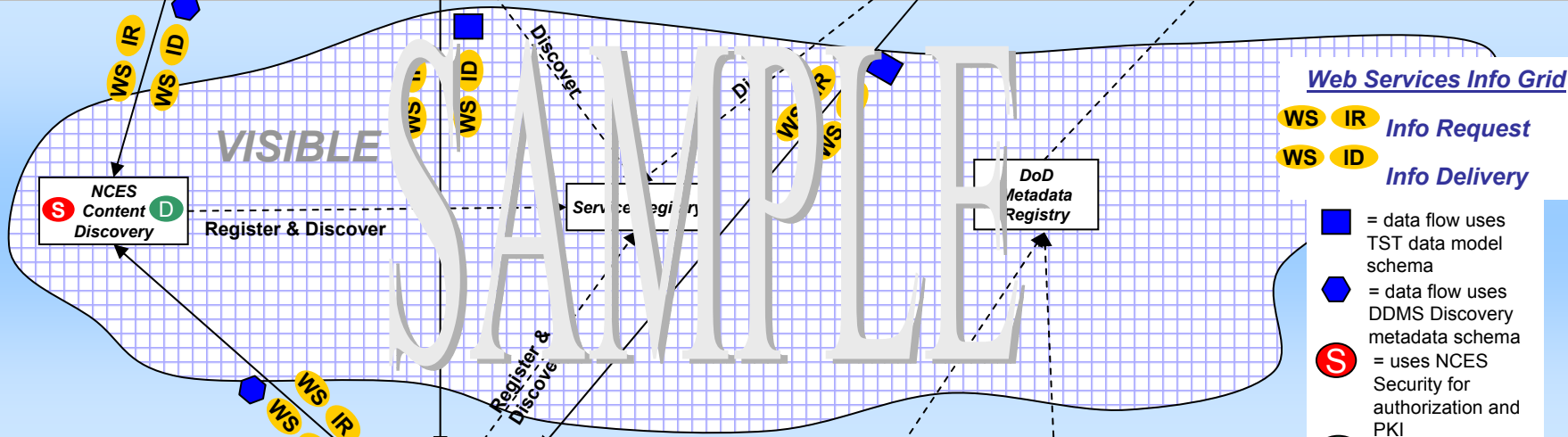
GS COI Blue Force Current + 18 Hours Service UDOP (DRAFT)

Consumers

Developers



NCES Services



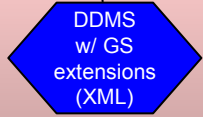
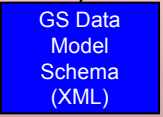
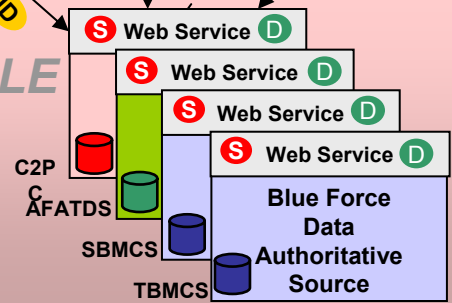
Web Services Info Grid

- WS IR Info Request
- WS ID Info Delivery

- Blue square = data flow uses TST data model schema
- Blue hexagon = data flow uses DDMS Discovery metadata schema
- Red circle with S = uses NCES Security for authorization and PKI
- Green circle with D = uses NCES Service Discovery for web service registry
- Dashed line = register during development or at initialization

ACCESSIBLE

UNDERSTANDABLE



Producers/
Developers

COI Pilot Metrics

Metrics to assess the return on investment (ROI) (resources as well as net-centric capabilities and agility) of the pilot.

Start-point:

#1 - Changes and impact to Programs of Record (POR) involved in the COI Pilot

#2 - Initial and incremental costs of web service interfaces to advertise Program of Record (POR) data

#3 - User assessment of demonstrated net-centric capabilities

#4 – Feedback on ease of use and adoption of CES pilot services

#5 – Ease of adding additional services to pilot

#6 – Level of effort to agree on initial COI vocabulary



COI Resources

Identify resources required to conduct the pilot.

Identify resources broken out by program of record that provides the resources (as a technical risk mitigation effort), and DoD or non-DoD Component that owns the programs.

Identify resource shortfalls, impacts, and risk mitigation efforts.



Reference Links

The DoD Net-Centric Data Strategy

<http://www.defenselink.mil/nii/org/cio/doc/Net-Centric-Data-Strategy-2003-05-092.pdf>

Data Sharing in a Net-Centric DoD, DODD 8320.2

<http://www.dtic.mil/whs/directives/corres/html/83202.htm>

DoD Discovery Metadata Specification (DDMS)

<http://metadata.DoD.mil/>

DDMS Schema information

<http://diides.ncr.disa.mil/mdreg/user/DDMS.cfm>

COI Directory

<https://gesportal.dod.mil/sites/coidirectory>

