

Information Management Within the Coast Guard's Integrated Deepwater System Program Management Office



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Systems Deepwater Integration

USCG IDS Program

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IT and Systems Strategies

USCG IDS Program



OUTLINE

Deepwater Program Overview

Information Management Vision

Information Management Current State

Transition Strategy

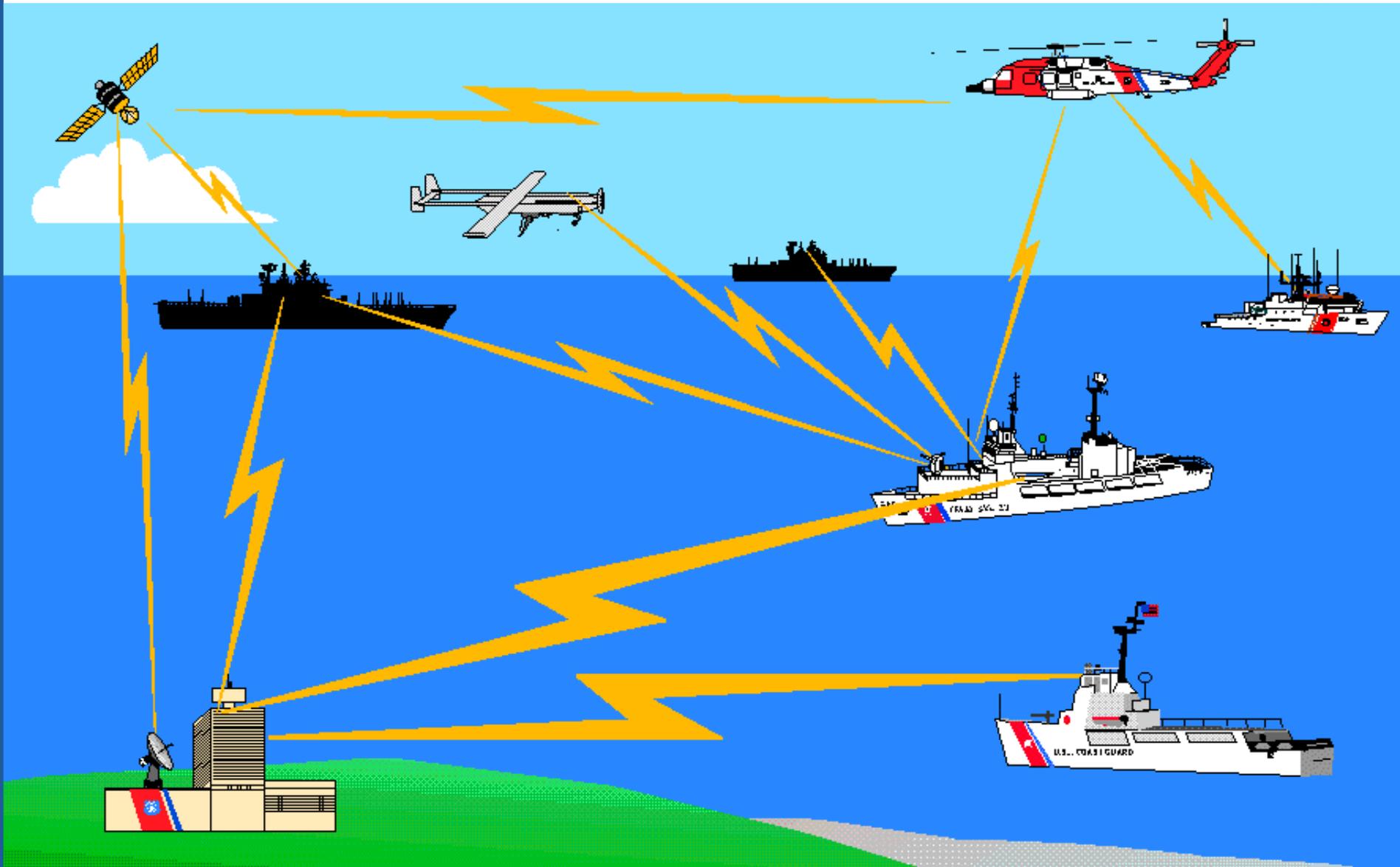
Implementation Plan

Challenges

Deepwater Program Overview



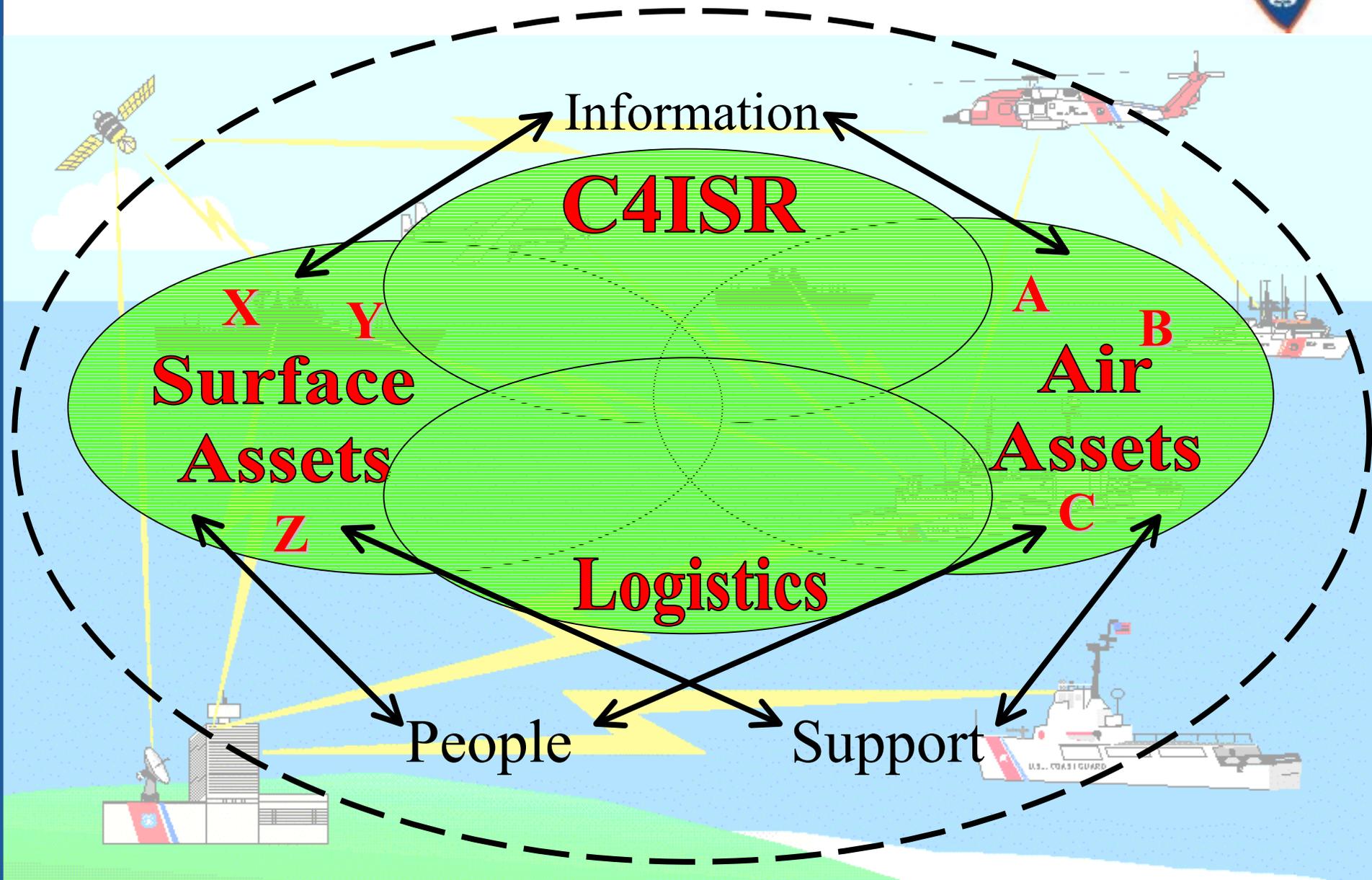
WHAT IS THE IDS?



Deepwater Program Overview



IDS



Deepwater Program Overview



NATIONALLY MANDATED MISSIONS

Maritime Safety

- Search and Rescue
- International Ice Patrol

Maritime Mobility

- Lightering Zone Enforcement
- Foreign Vessel Inspection

Maritime Security

- Drug Interdiction
- General Enforcement of Laws and Treaties
- Alien Migrant Interdiction

National Defense

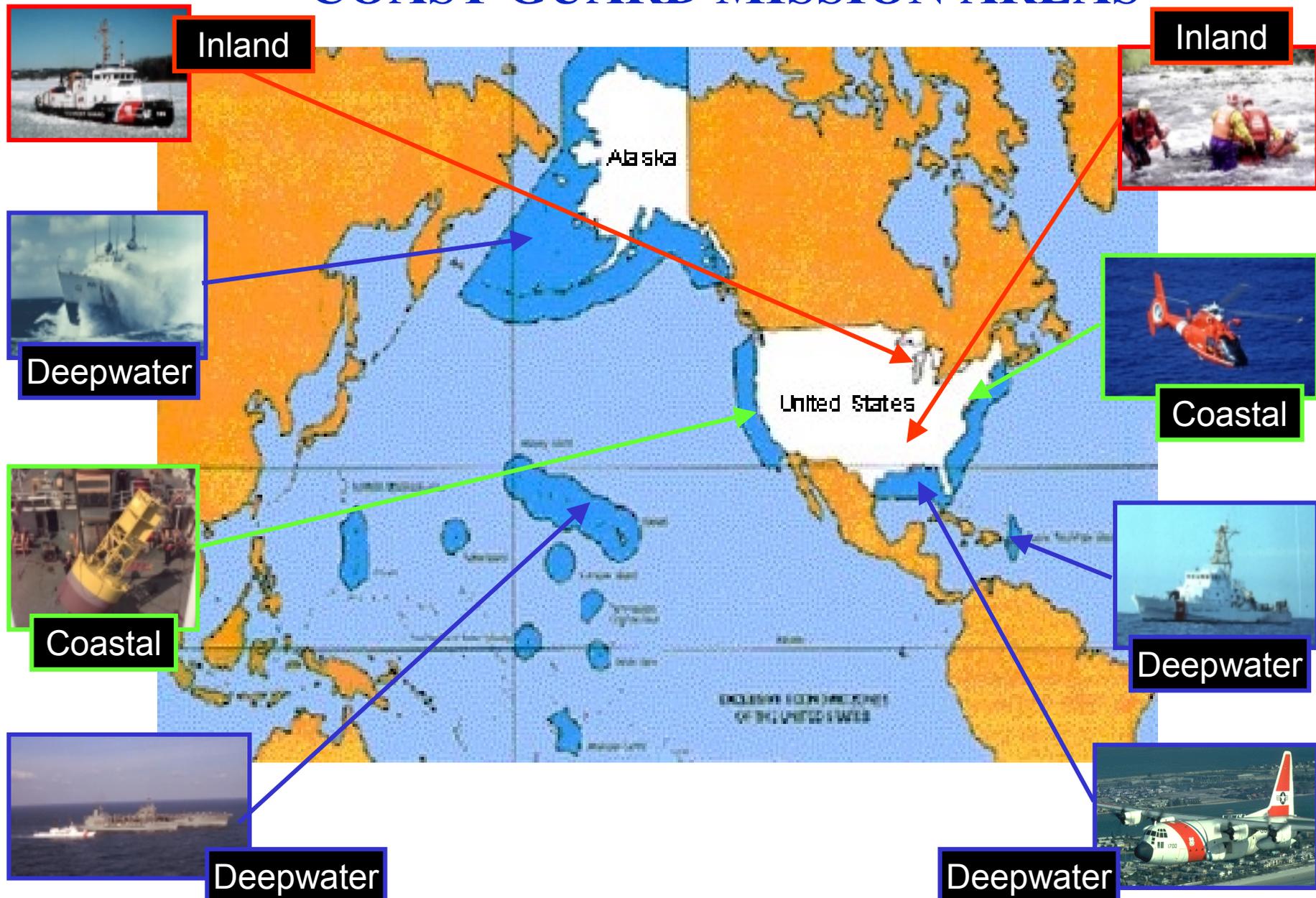
- General Defense Operations
- Maritime Interception Operations
- Port Operations, Security, & Defense
- Environmental Defense Operations
- Peacetime Military Engagement

Protection of Natural Resources

- Marine Pollution Enforcement & Response
- Living Marine Resource Enforcement

Deepwater Program Overview

COAST GUARD MISSION AREAS



Deepwater Program Overview

WHY THE IDS?

1986 - 2005



1982 - 2002

1972 - 1997



- 91 Cutters
- 206 Aircraft
- C4ISR Systems/Network
- Logistics Infrastructure

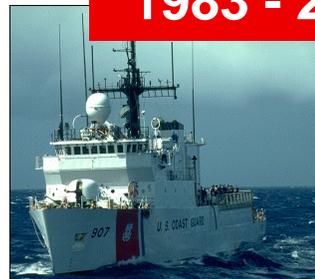
1964 - 2007



1967 - 2008



1983 - 2013



1990 - 2005



1984 - 2004



Deepwater Program Overview

CHALLENGE: Aging Deepwater Assets

- **Capability Gap** - Mission demands exceed capabilities (e.g. speed, sensors, comms)
- **Availability Gap** – Our assets are sailing & flying but critical CasReps are increasing at the expense of capability.

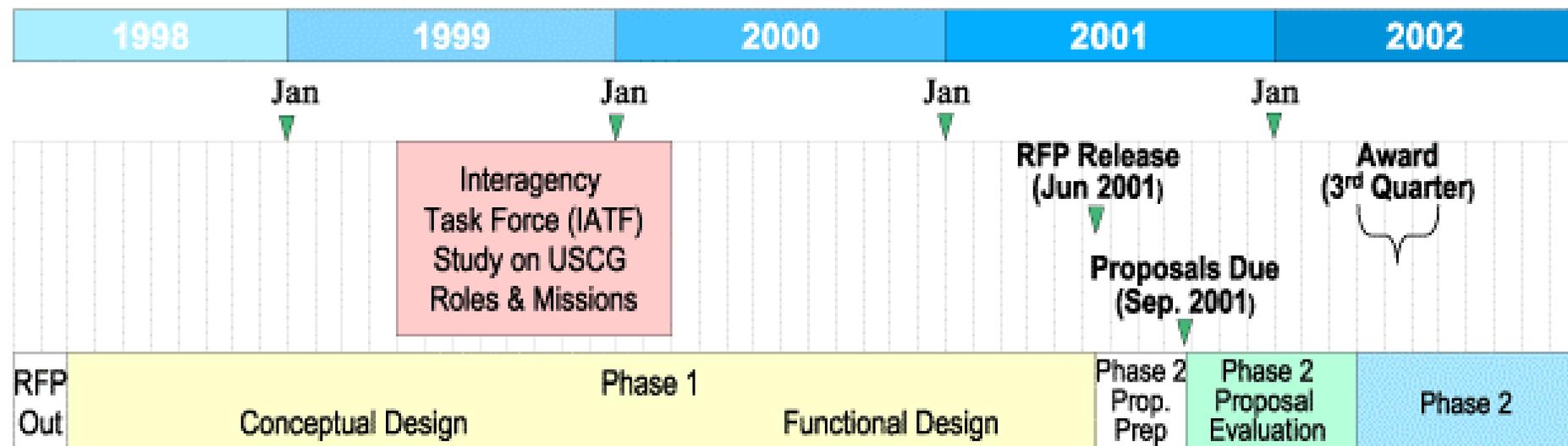


The average age of our Deepwater cutters is 28...The Coast Guard fleet of High and Medium Endurance Cutters is older than 37 of the 39 (naval) fleets worldwide...

Deepwater Program Overview



IDS TIMELINE



Deepwater Program Overview



IDS KEY CONCEPTS

- Integrated System Approach – operationally integrated collection of air, surface, C4ISR and logistics assets, concepts and systems.
- Life Cycle Perspective – System-level Integrated Logistics Support Concept.
- Performance Based – High-level System Performance Specification.
- System Level Metrics – Maximize system operational effectiveness while minimizing total ownership cost.



Deepwater Program Overview

PARTNERSHIP WITH A SYSTEM INTEGRATOR



The Boeing Company

Subcontractors include:

- European Aeronautic, Defense and Space (EADS)
Construcciones Aeronauticas S.A. (CASA)
- European Aeronautic, Defense and Space (EADS)
Eurocopter
- Northrop Grumman Ship Systems Avondale Operations
- John J. McMullen & Associates, Inc.

Integrated Coast Guard Systems

A joint venture consisting of:

- Lockheed Martin Naval Electronics & Surveillance Systems (NE&SS)
- Northrop Grumman Ship Systems
Ingalls Operations

Maritime Systems Alliance

A joint venture consisting of:

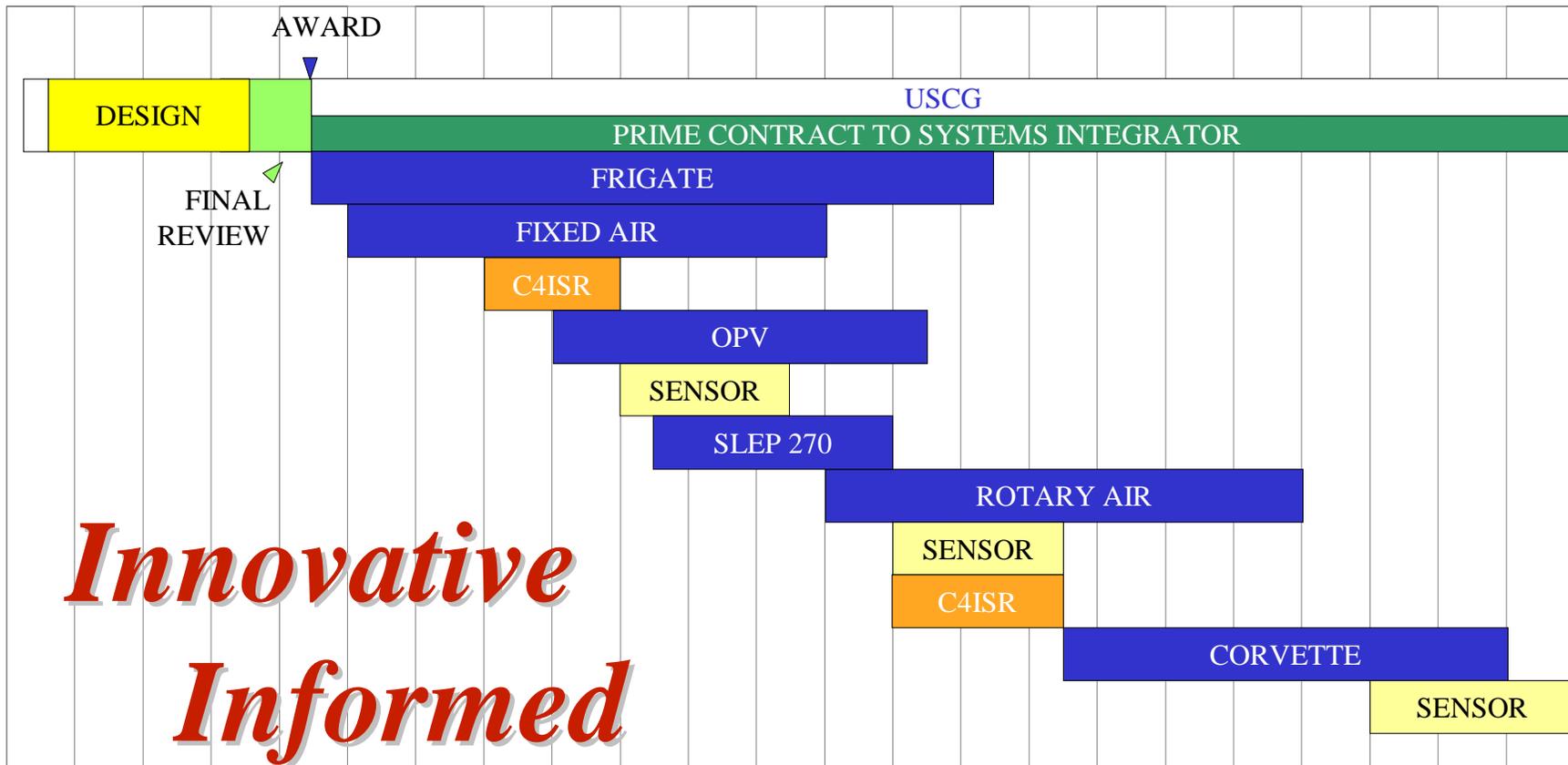
- Science Applications International Corporation
- Raytheon Company
- The Manitowoc Company, Inc.

Deepwater Program Overview



NOTIONAL IMPLEMENTATION PLAN

98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21



Innovative
Informed
Flexible



THE VISION

To implement and maintain an Integrated Digital Environment where users are able to electronically access, share and process all information in support of the program throughout its life-cycle.

**Integrated
Digital Environment
(IDE)**



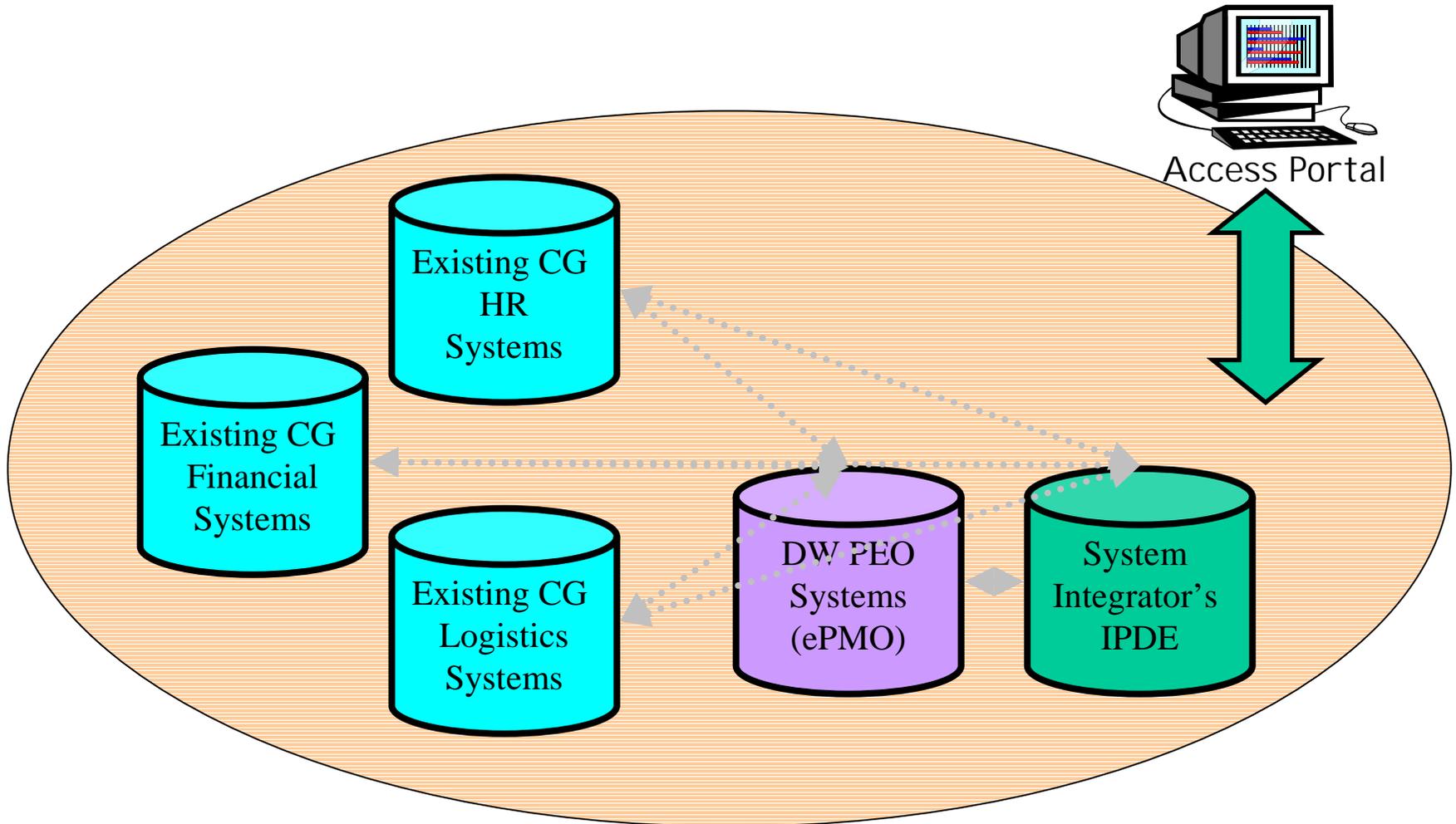
WHAT IS AN IDE?

An architecture that provides controlled access to all information and links the entire acquisition community, including the program office, the prime contractor, subcontractors, vendors, suppliers, support agencies, and end-users. An IDE fulfills all requirements to initiate, manage, administer, and oversee program execution and operation support.

**Integrated
Digital Environment
(IDE)**

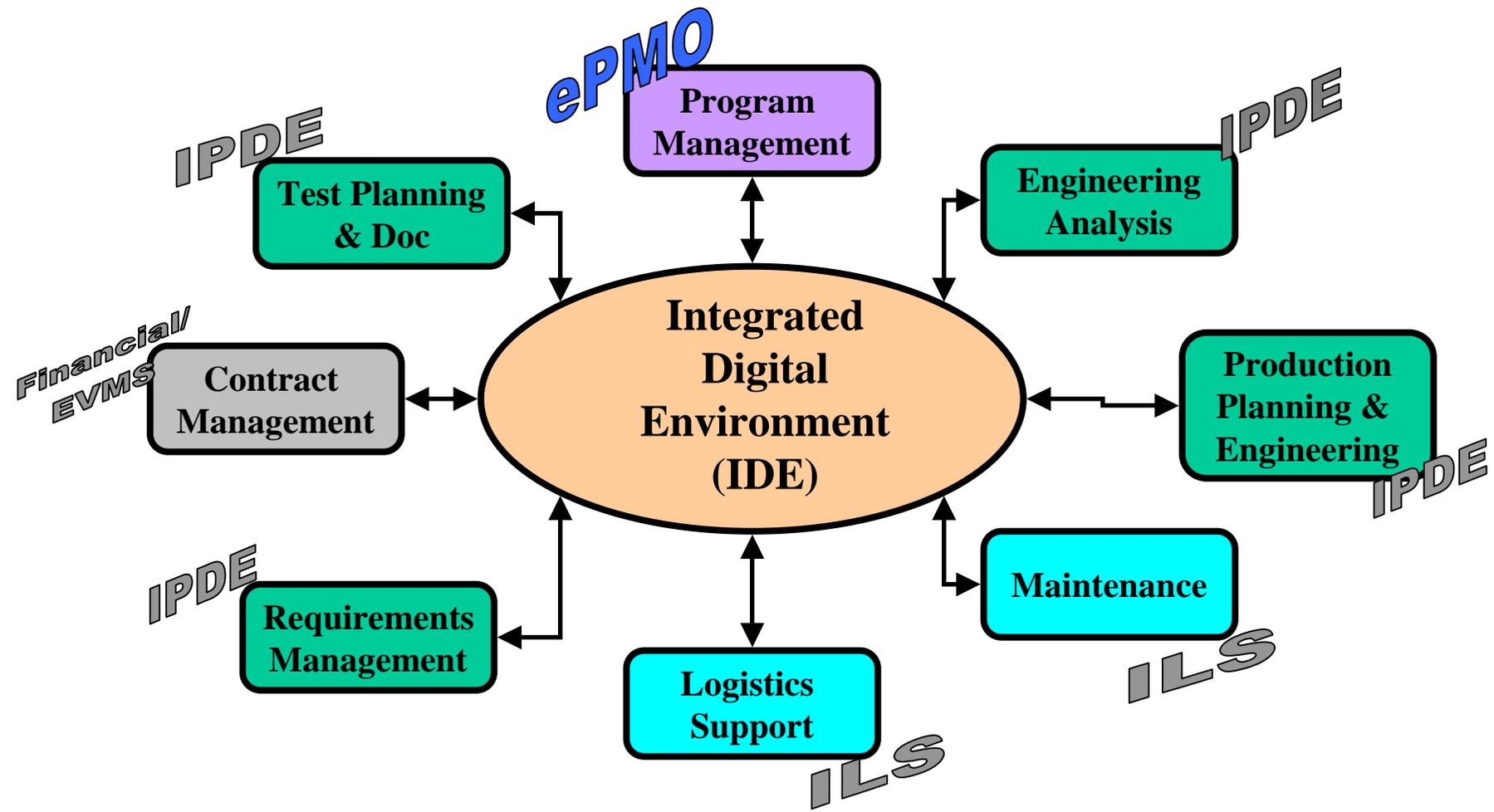


DEEPWATER IDE





WHAT IS AN IPDE?

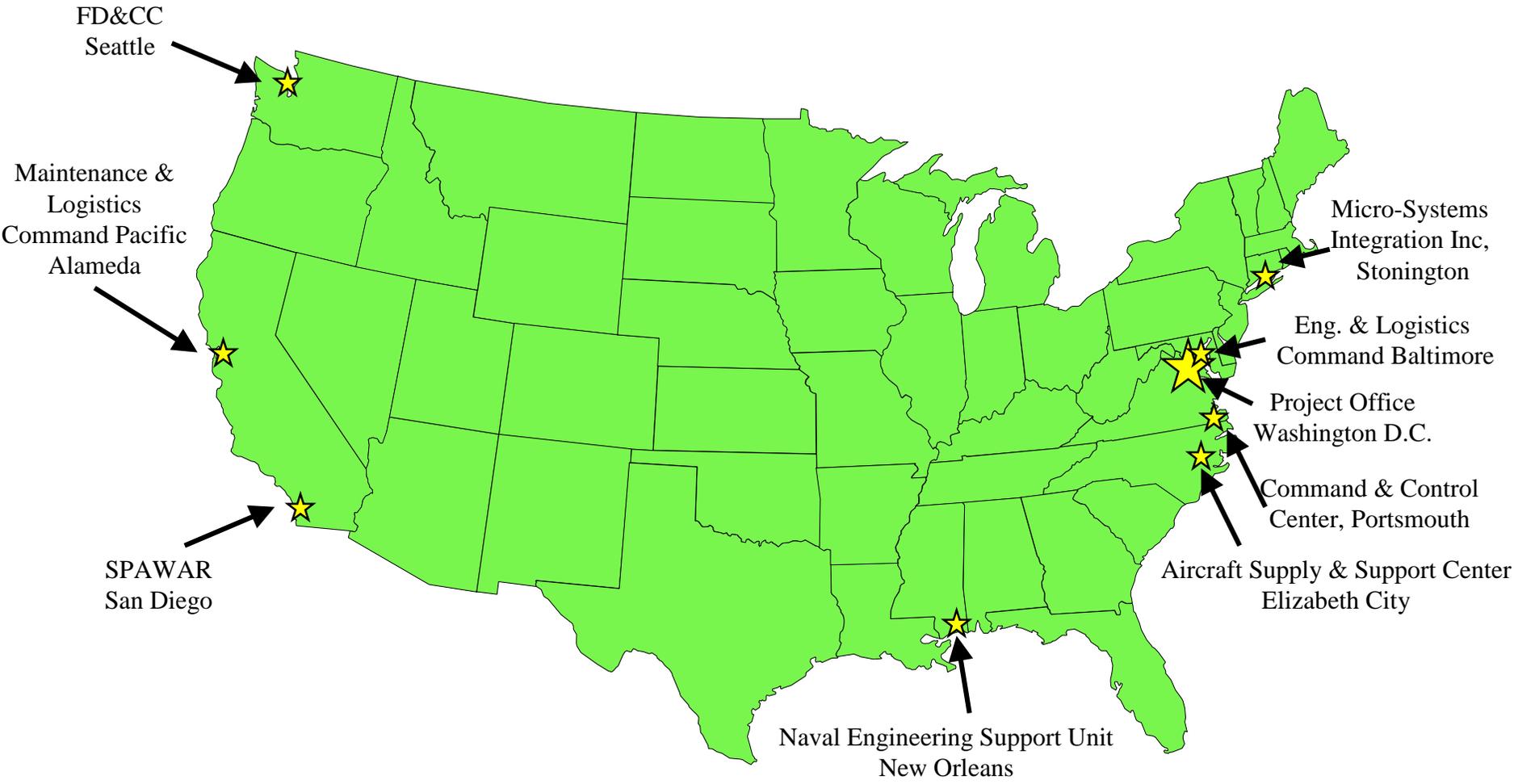


Information Management Current State

EXPANSIVE PROGRAM INPUT



To list a few ...



FD&CC
Seattle

Maintenance &
Logistics
Command Pacific
Alameda

SPAWAR
San Diego

Naval Engineering Support Unit
New Orleans

Micro-Systems
Integration Inc,
Stonington

Eng. & Logistics
Command Baltimore

Project Office
Washington D.C.

Command & Control
Center, Portsmouth

Aircraft Supply & Support Center
Elizabeth City



DEEPWATER STANDUP

Outlook

- Calendaring (group meetings/room reservations)
- To Do (personals)
- Routing (email)
- Knowledge sharing

- Document Control (not IPDE)
- Calendaring (meeting planning)
- Routing
- Knowledge Sharing (library, announcements)

MS Project

- Work scheduling
(Voloview, Autocad)

CAD

- Viewing and redlining drawings

Access dB

(each in separate databases available in HQ shared folders)

- Work scheduling (CDRL Reviews)
- MPTs To-Do List
- Risk Management
- Security (roster)
- Intend to add training/billets

Excel

- Billet planning
- Budgets
- WBS

- **100 Enterprise Applications**
- DW PEO Web Homepage
 - RFP interaction with SI s
 - KM (document library, news)
 - Job postings



DEEPWATER PHASE I

Outlook

- Calendaring (group meetings/room reservations)
- To Do (personals)
- Routing (email)
- Knowledge sharing

Collaboration Tool

- Document Control (not IPDE)
- Calendaring (meeting planning)
- Routing
- Knowledge Sharing (library, announcements)

MS Project

- Work scheduling
(Voloview, Autocad)

CAD

- Viewing and redlining drawings

Access dB

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Excel

- Billet planning
- Budgets
- WBS
- Lotus Notes (EasySource) - vendor evals
- DW PEO Web Homepage
 - RFP interaction with SI s
 - KM (document library, news)
 - Job postings



LESSONS LEARNED

1. Information management must have visible support from senior leaders.
2. An information manager should be appointed to establish a common vision and policy.
3. Project members must be policed to ensure information management policies are strictly followed.
4. Culture must be changed to encourage members to share information.

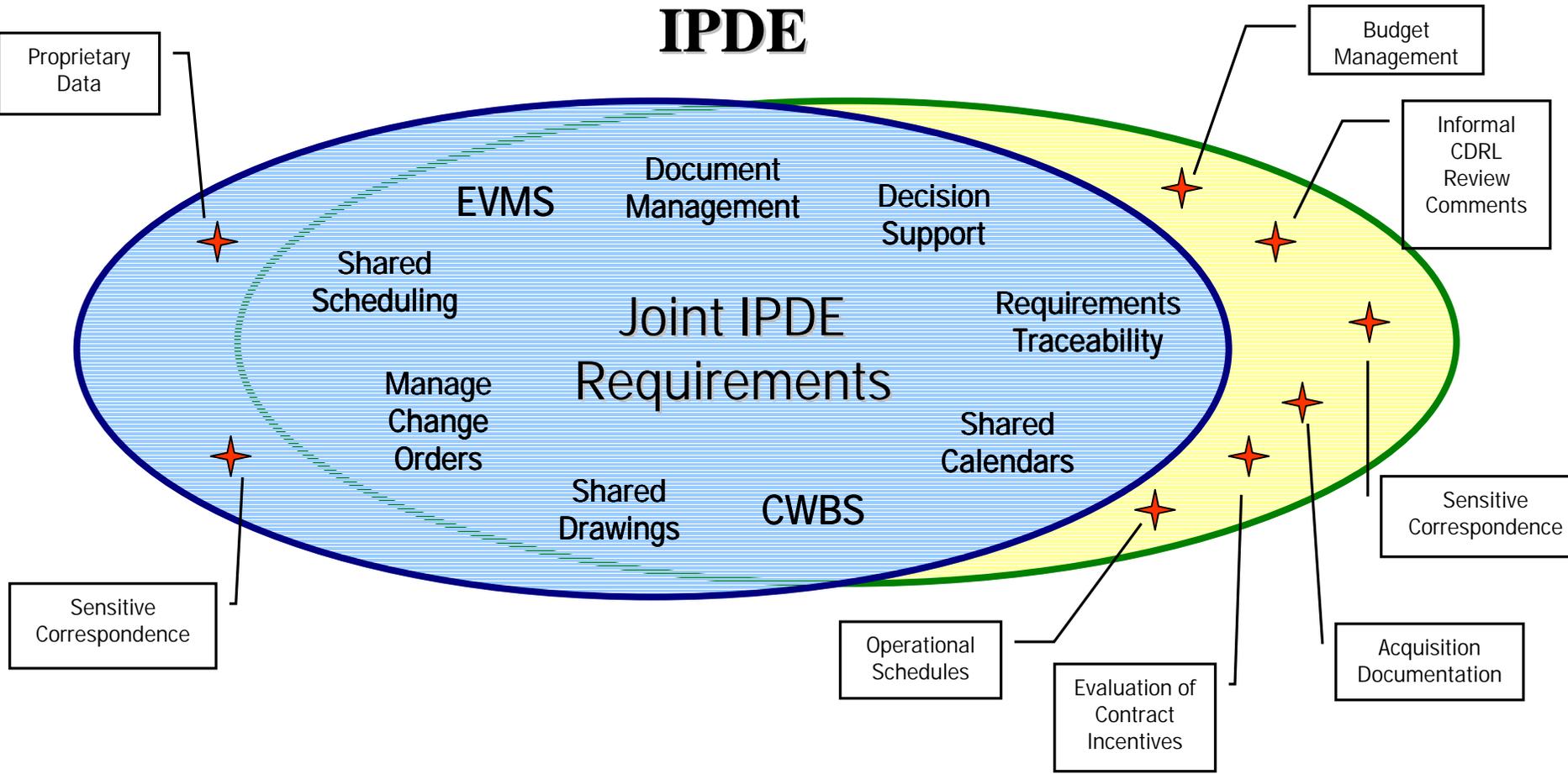
Information Management Current State



DEEPWATER PHASE II

System Integrator
IPDE Requirements

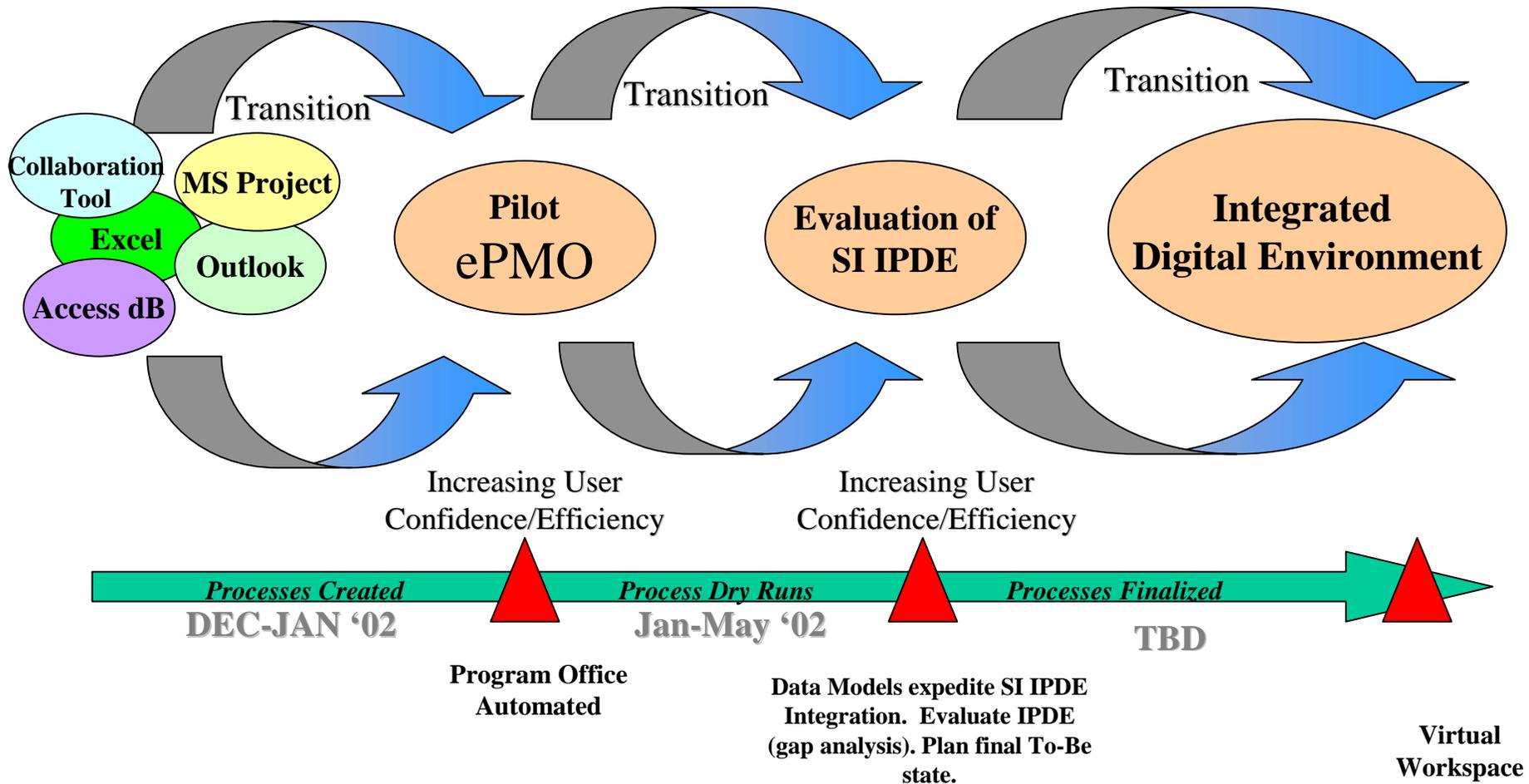
Coast Guard ePMO
Requirements



Transition Strategy



DEEPWATER PHASE II





SIX ELEMENTS TO THE STRATEGY

1. Pursue an incremental approach to implementing information management tools.
2. Leverage Best Practices: the architecture framework of the DoD PM IDE Guide.
3. Leverage techniques and technologies that have worked for similar programs.
4. Align with CG architecture & IT strategies.
5. Culture change: Disciplined use of technology and skills to manage workflow, documents, and resources.
6. Process and Data Modeling



LEVERAGE BEST PRACTICES

Architecture Framework of the DoD PM IDE Guide:

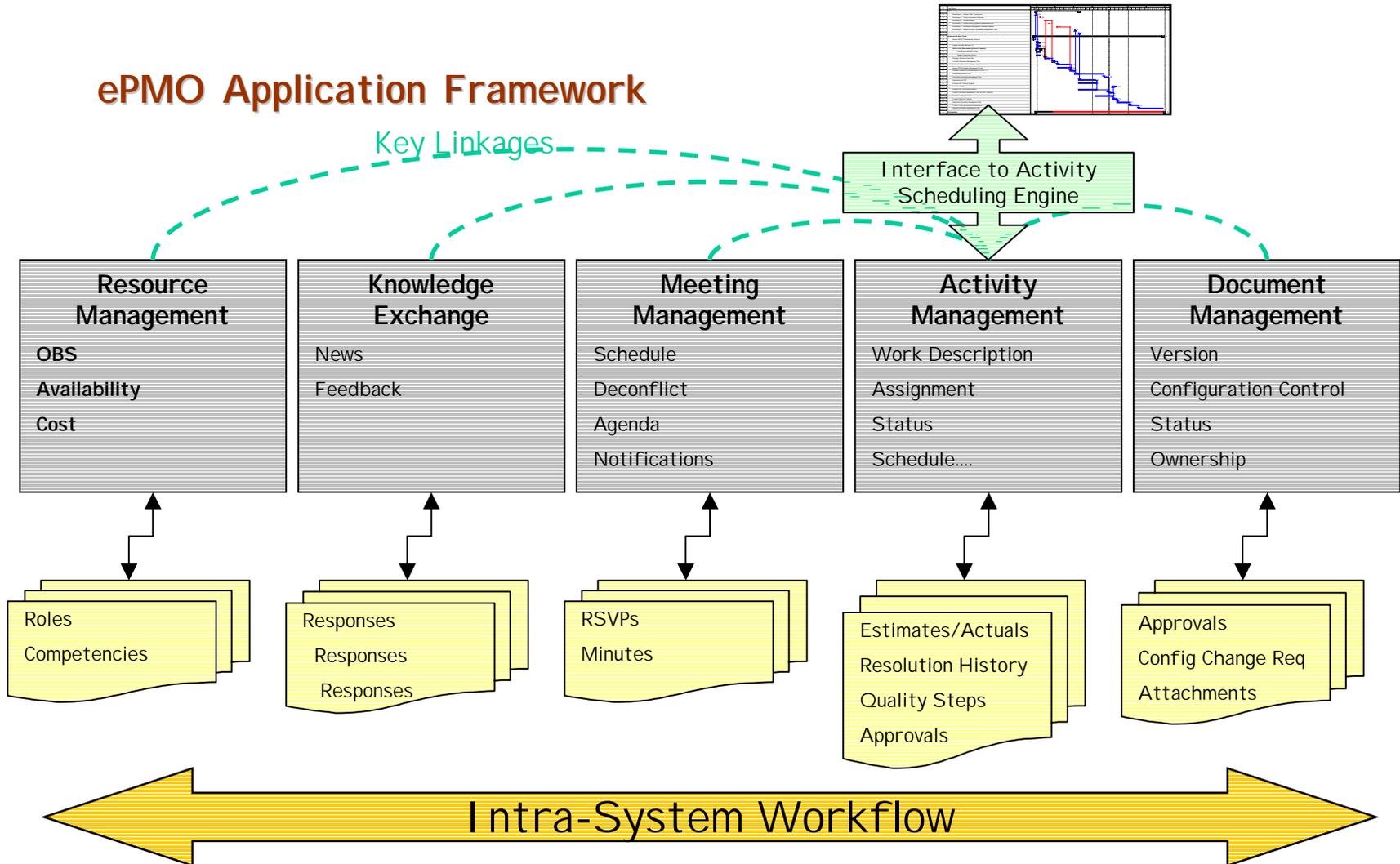
Architecture Layer
Functional Layer - operational elements and business objectives
Process Layer - activities and information flows, business rules and policies.
Access Layer - provides access to public and secure domains, supports process layer business rules.
Integration Layer - technical infrastructure standards, connectivity, security.
Application Layer - applications and tools.
Data Layer - defines all data required throughout program office

The layered approach supports a phased development strategy



LEVERAGE TECHNOLOGIES

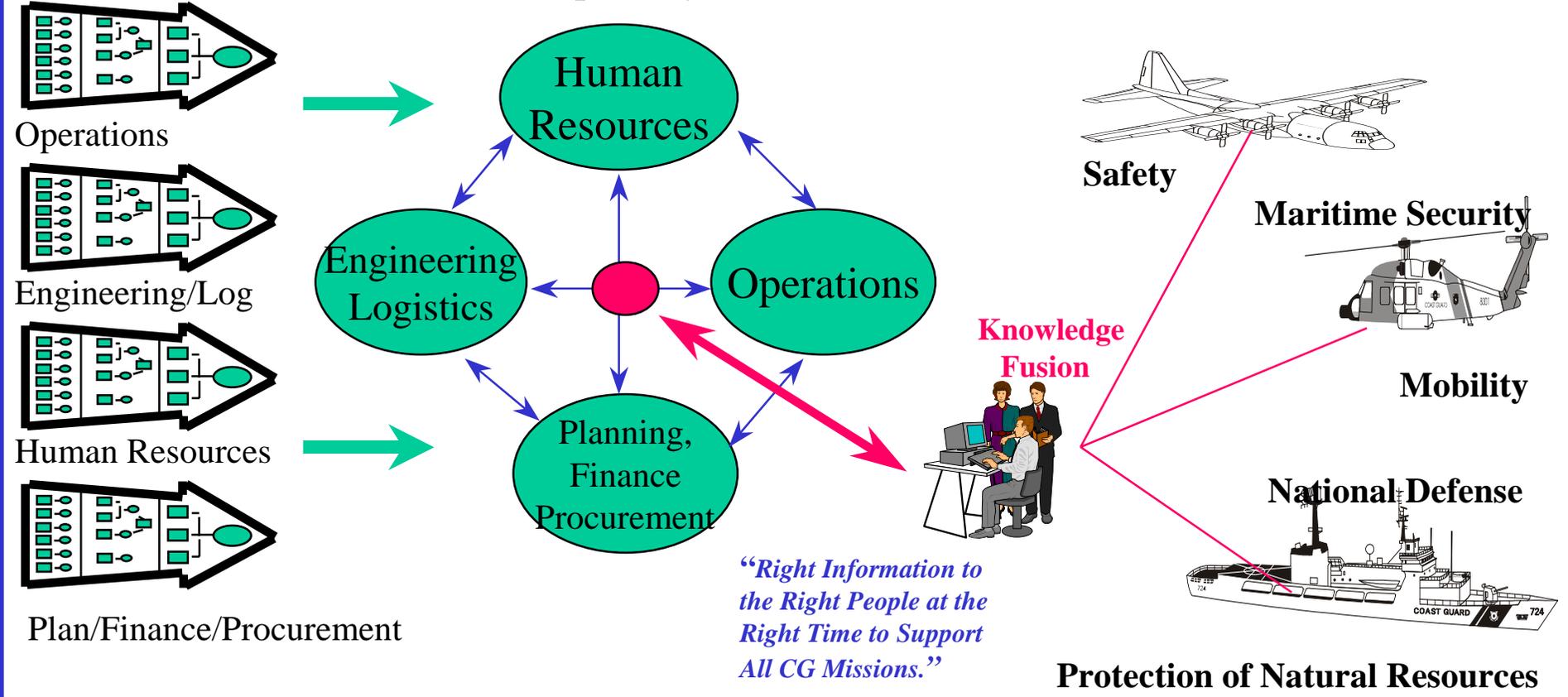
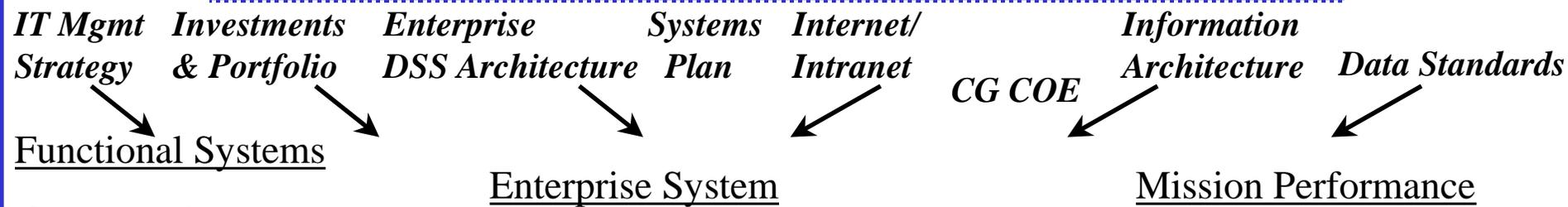
ePMO Application Framework





Transition Strategy

ALIGN WITH CG ARCHITECTURE & IT STRATEGIES





CULTURE CHANGE

Disciplined use of technology and skills to manage workflow, documents, and resources

- If it's not in ePMO, it's not in the program!
 - No more stovepipes
 - One stop shopping for all program management information.
- New Position: Information Manager
 - Enforces discipline defined in Info Mgmt Plan



NEAR-TERM PLAN

Develop Pilot ePMO Tool

Configure Application

Populate database (PMP and PEO Project Plan)

Build Training Curricula & User Documentation

Train Staff

Rollout and Manage Pilot

Build Information Management Requirements

Build Data Models

Enterprise (PMO) Process Model

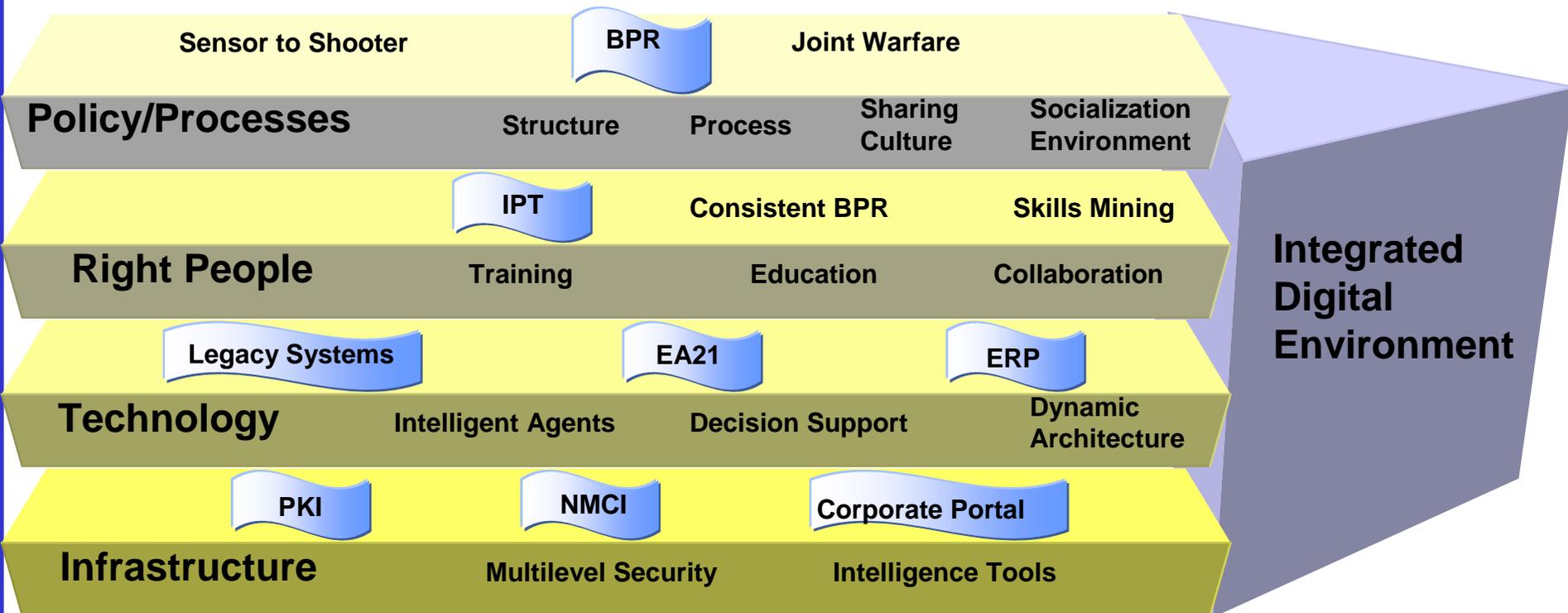
Dry Run Critical PMO Processes

IDS Contract Award

Evaluate System Integrator IPDE DB & Interface Design



GUIDING STRATEGY



DEEPWATER INFORMATION MANAGEMENT MODEL



Senior Leadership Support

- Information, like People and Funding, is a resource to be managed.
- Plan adequate funding w/ follow-on

Planning

- Roles/Responsibilities
- Policies & Procedures
 - Data Security
- Architecture Planning

Best Practices

- Hire experience
- Match tool to PM Maturity
- Ready, Fire, Aim
- IDE Guide

Staffing

- Information Manager
- Implementation Team

Modeling

- Physical Data Models
- Logical Data Models
 - Process Models

Questions



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