



Industry Day Briefing

September 8, 2008





Industry Day Agenda

- 1100 – 1145** Check In
- 1100 – 1545** *Submit anonymous questions in designated boxes*
- 1200 – 1300** Welcome/Opening Remarks (PEO-EIS)
 - Naval Network Environment (NNE) Vision (DoN CIO)**
 - United States Marine Corps NGEN Objectives (USMC C4)**
 - United States Navy NGEN Objectives (OPNAV N6)**
 - Network Operations (NETWARCOM)**
- 1300 – 1345** Current NMCI Environment (NMCI PM)
- 1345 – 1430** NGEN Requirements and Architecture (NGEN PM)
- 1430 – 1515** NGEN Notional Segmentation (NGEN PM)
- 1515 – 1545** Industry Interaction (PEO-EIS PCO)
- 1545 – 1600** Closing Remarks (PEO-EIS)

Welcome/Opening Remarks



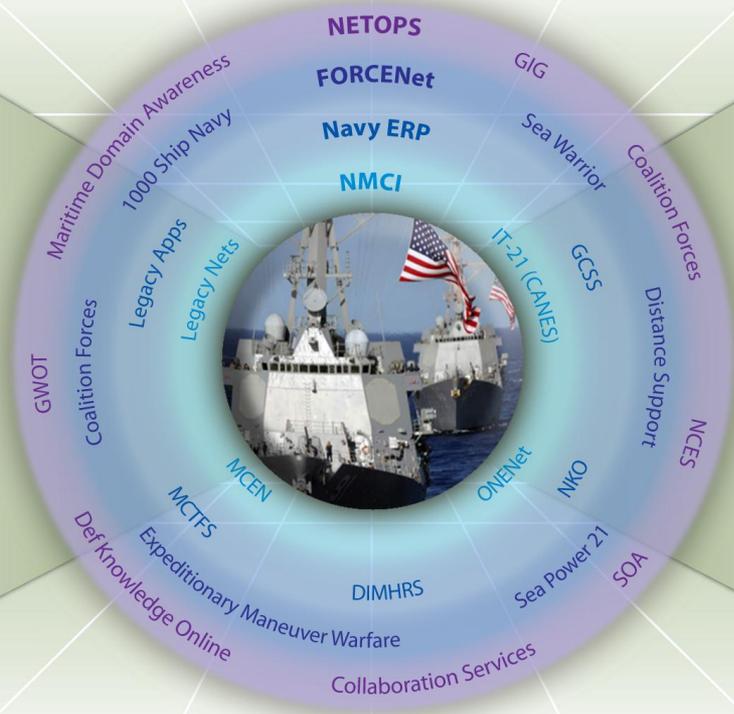
RDML Tim Flynn

Program Executive Officer, Enterprise Information Systems





Naval Networking Environment (NNE)

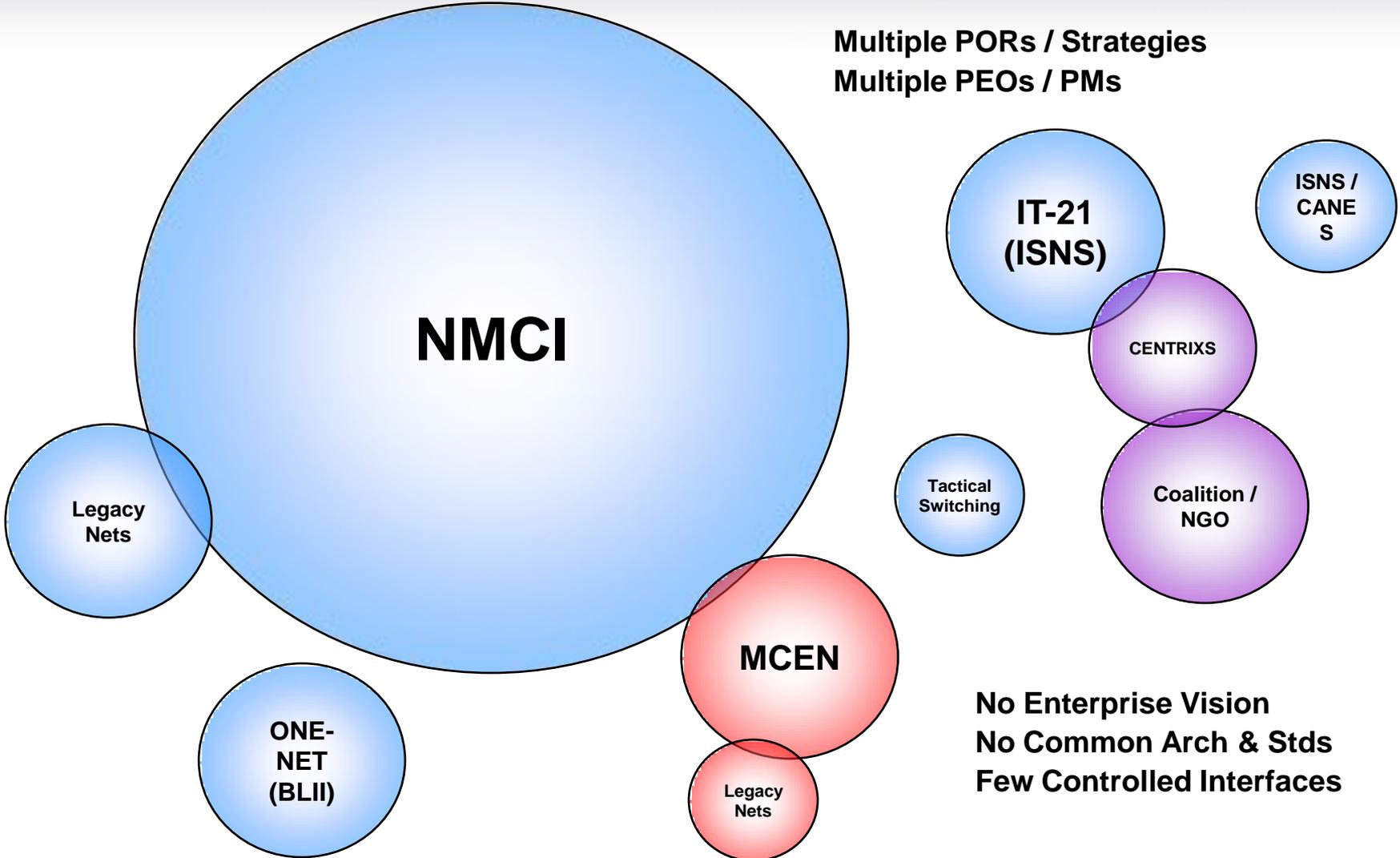


**NGEN Industry Day
September 8, 2008**

**Robert J. Carey
Department of the Navy
Chief Information Officer**



NAVAL NETWORKING ENVIRONMENT (NNE) 2010



Multiple PORs / Strategies
 Multiple PEOs / PMs

No Enterprise Vision
 No Common Arch & Stds
 Few Controlled Interfaces



DEPARTMENT OF THE NAVY

NNE ~ 2016

•The NNE ~ 2016 is:

- An iterative set of integrated, phased programs that will guide the DON towards a future Net-Centric enterprise environment
- Highly secure and reliable enterprise providing ubiquitous access to data, services and applications from anywhere across all program and operational boundaries
- Bound by a common Enterprise Architecture and standards, and a common governance and operational construct

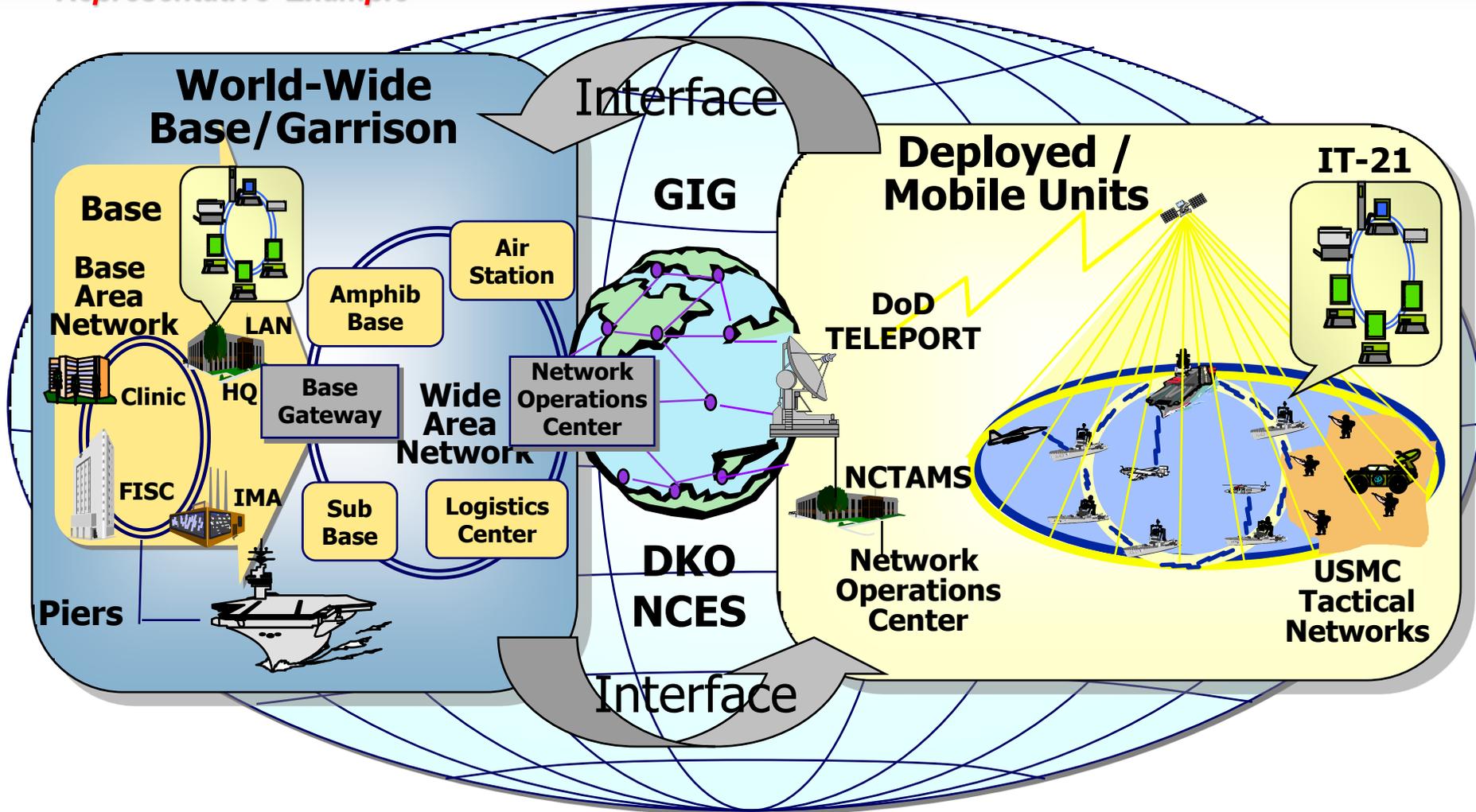
The NNE~2016 Strategy document can be found at
<http://www.doncio.navy.mil>



NAVY / MARINE CORPS INTRANET

OV-1

Representative Example

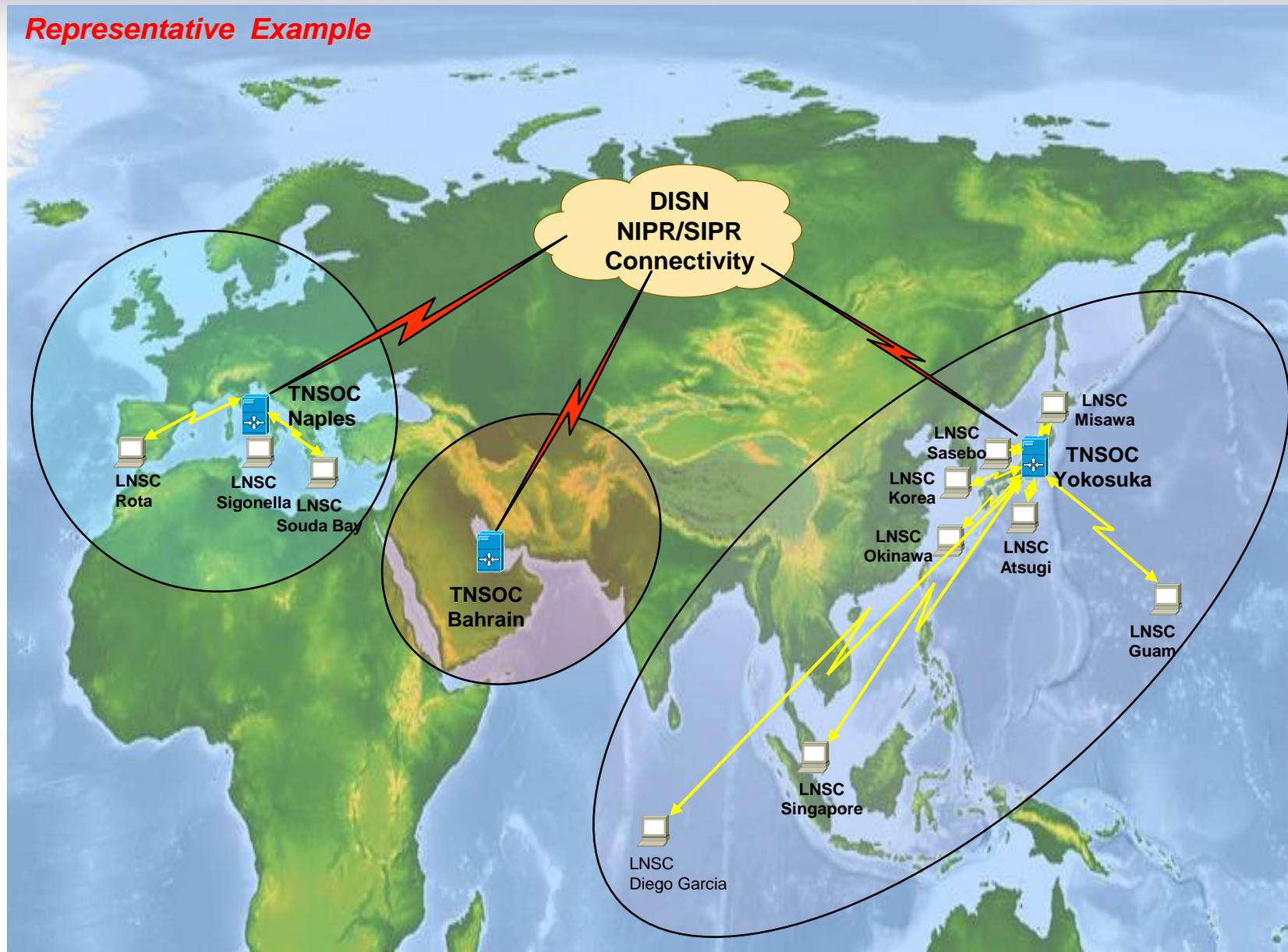


Common infrastructure and services



OCONUS NAVY ENTERPRISE NETWORK OV-1

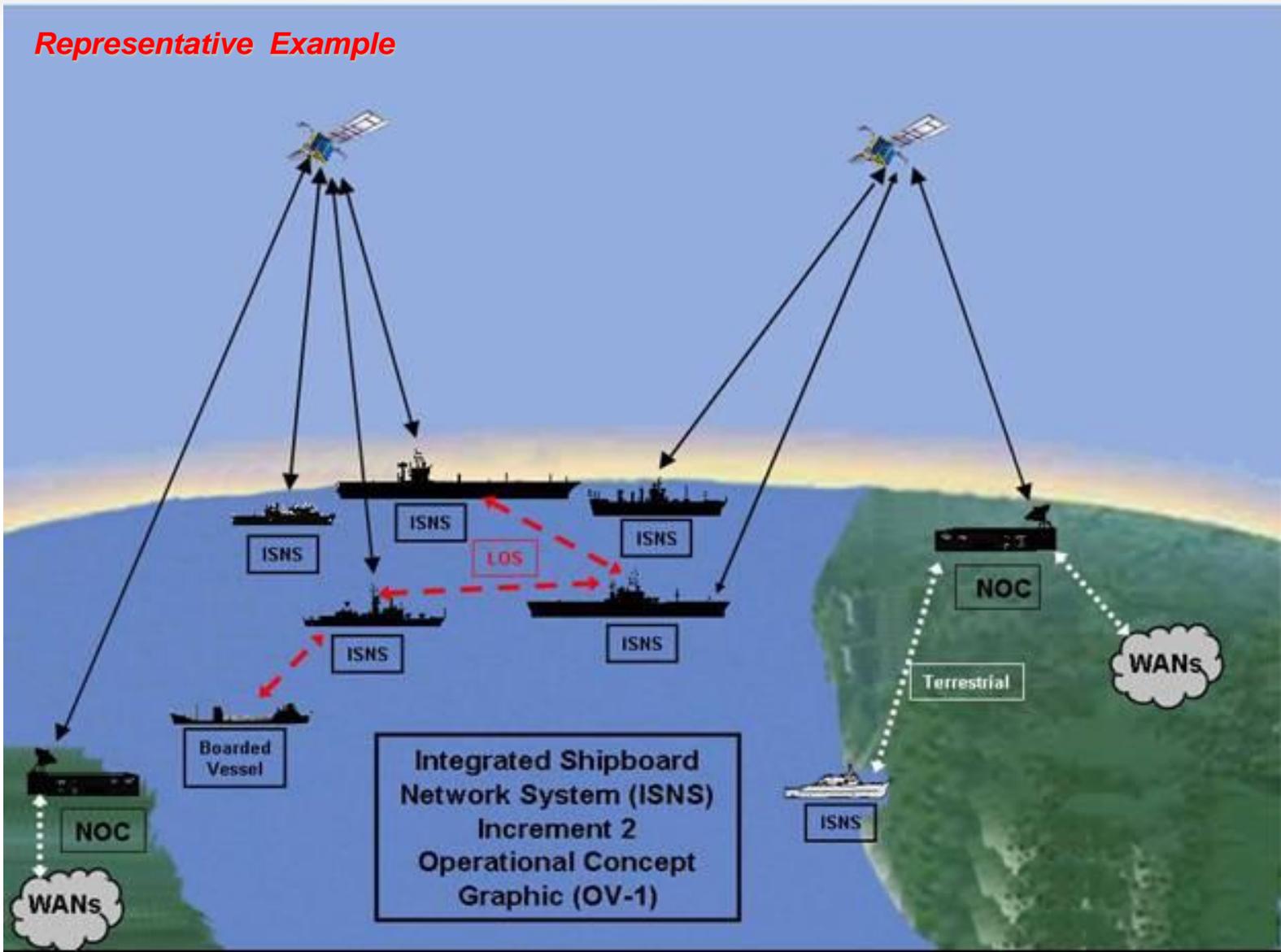
Representative Example





INFORMATION TECHNOLOGY FOR THE 21ST CENTURY/ INTEGRATED SHIPBOARD NETWORKING SYSTEM OV-1

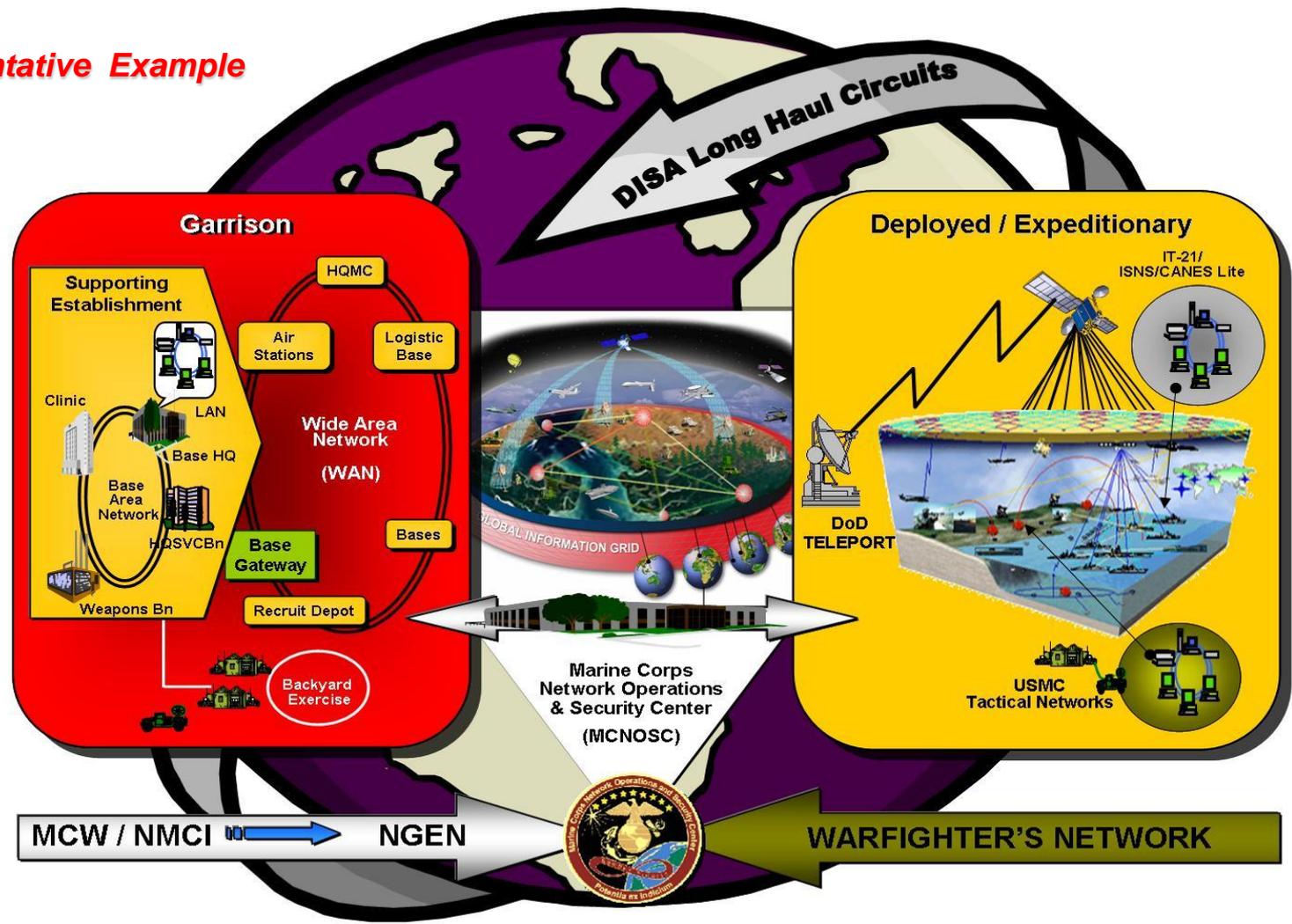
Representative Example





MARINE CORPS ENTERPRISE NETWORK OV-1

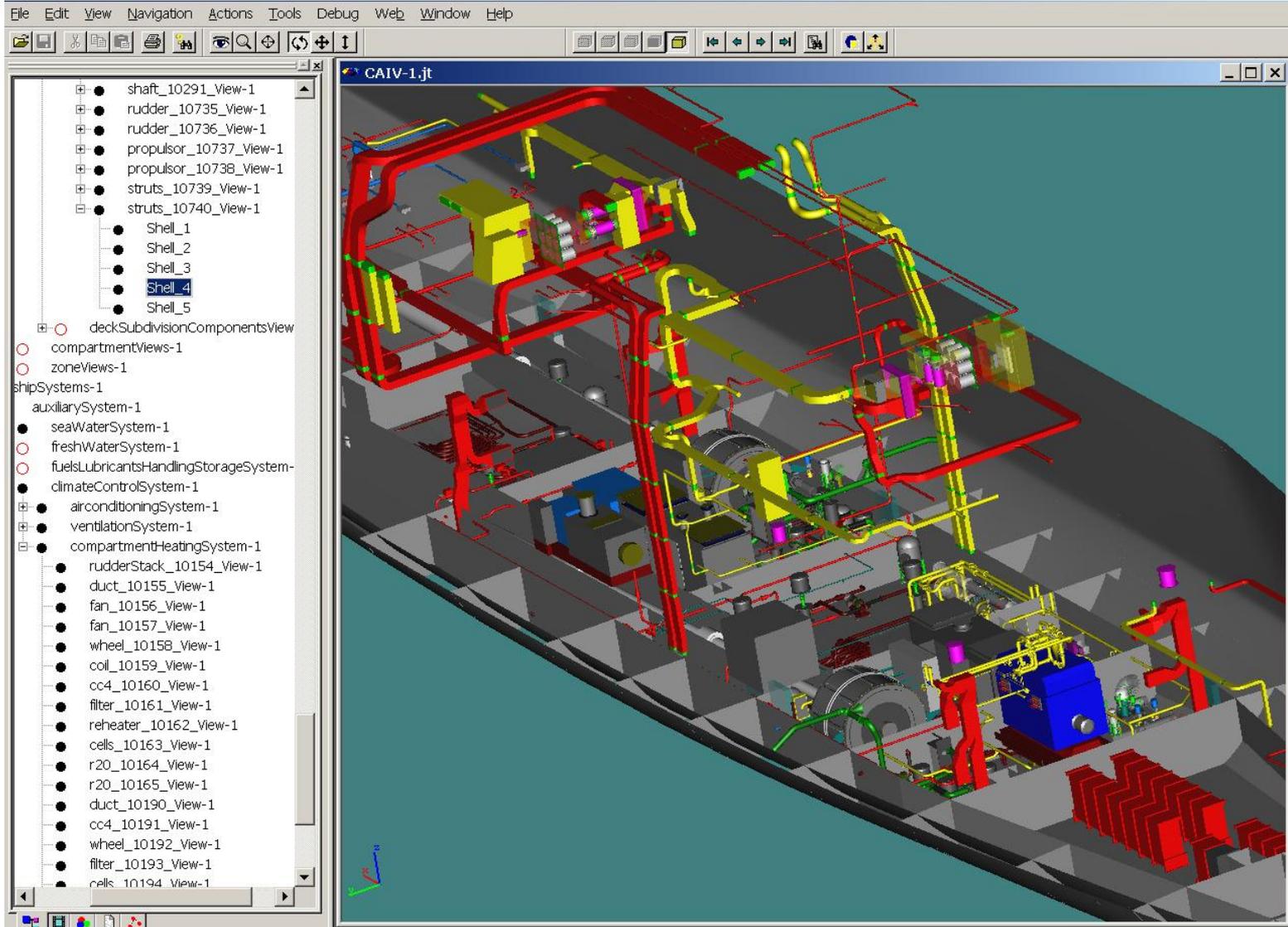
Representative Example





LEGACY NETWORKS

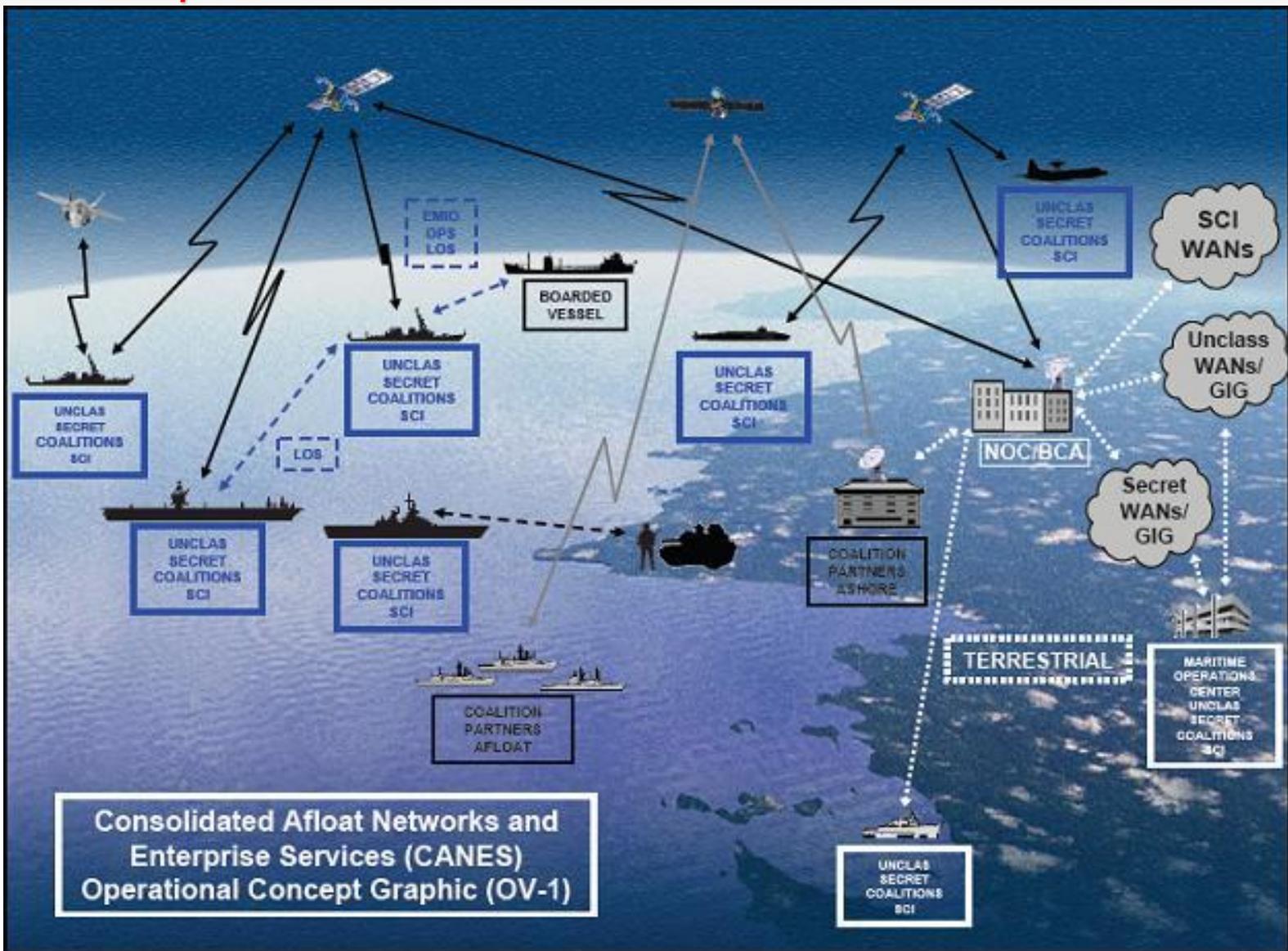
Representative Example





CONSOLIDATED AFLOAT NETWORKS AND ENTERPRISE SERVICES - OV-1

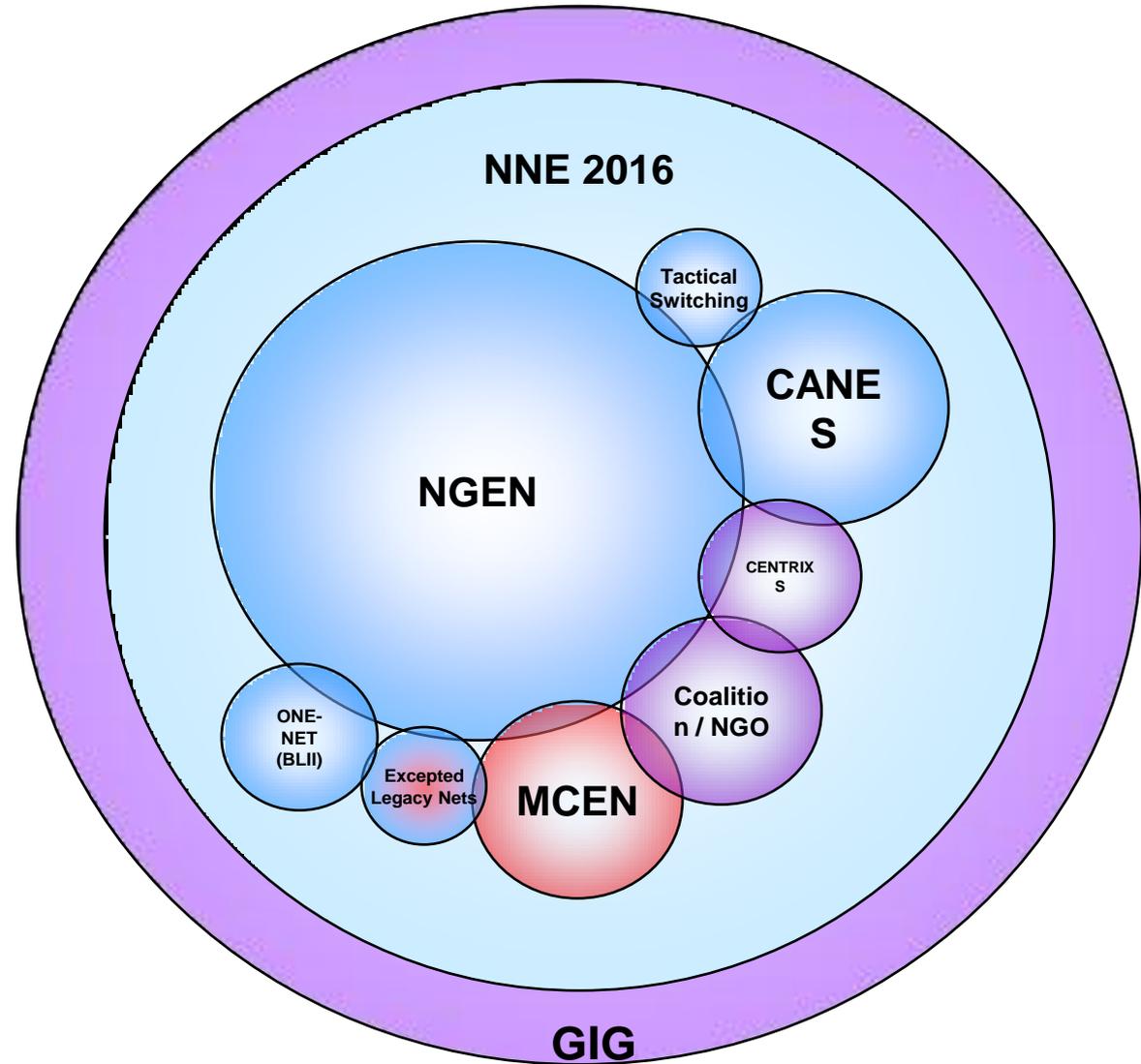
Representative Example



Consolidated Afloat Networks and Enterprise Services (CANES) Operational Concept Graphic (OV-1)



NAVAL NETWORKING ENVIRONMENT (NNE) 2016 VERSION 1.1





NEXT GENERATION ENTERPRISE NETWORK (NGEN)

A secure, reliable capability that focuses on the warfighter first enabling command and control as well as our business and administrative functions. NGEN will provide a state of the art, global networking environment that is responsive to the operational commander, unleashes the collaborative nature of the Millennium Generation and empowers our future warriors. It will build on the lessons learned in developing the world's largest intranet, allowing the control and cost visibility necessary to migrate off expensive vulnerable legacy networks.

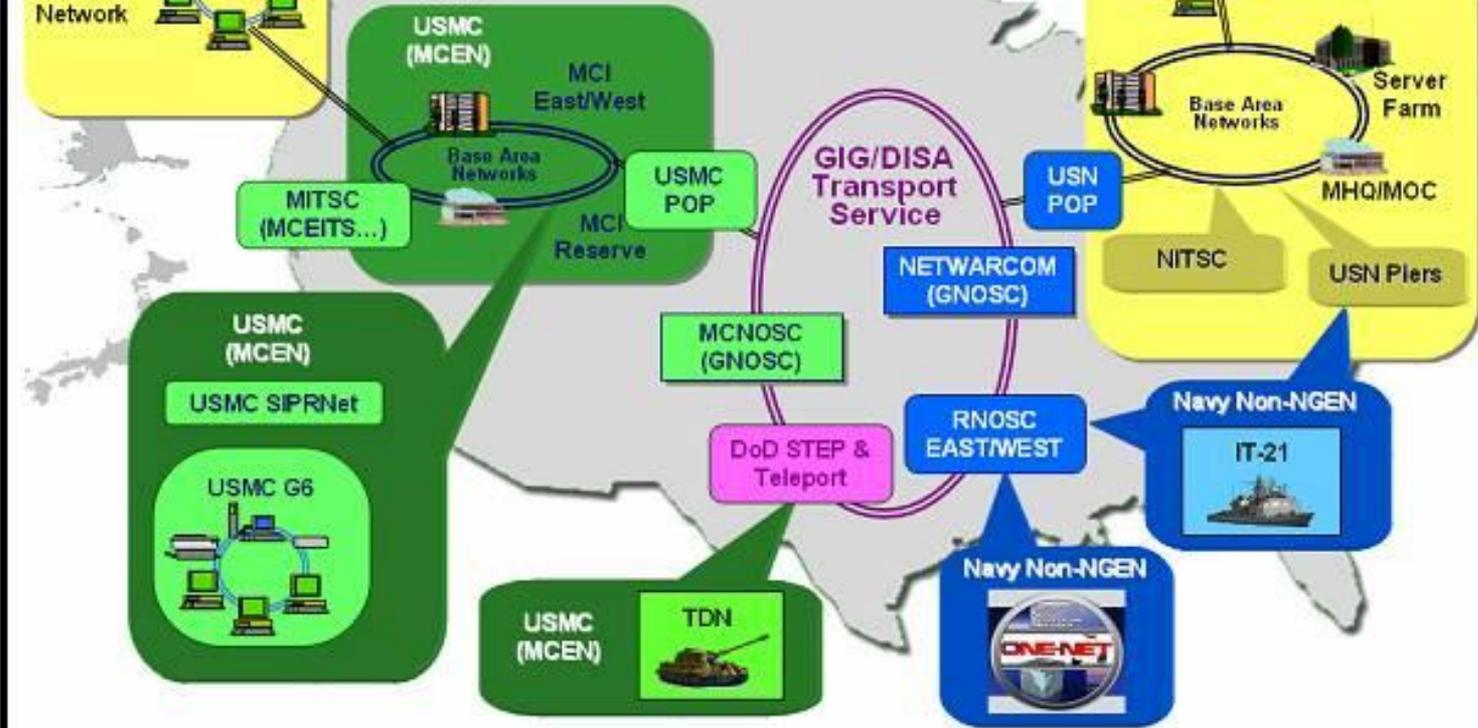
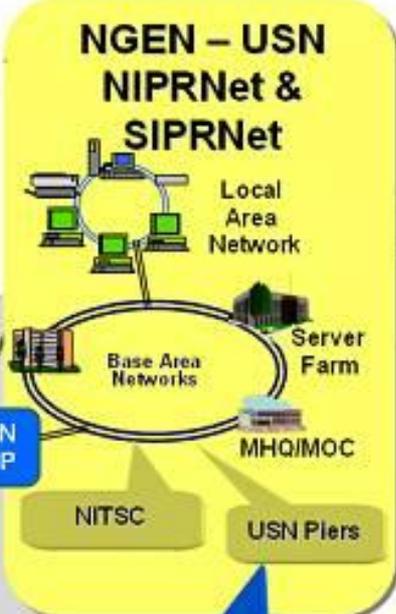
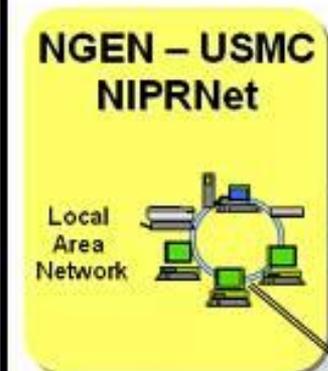
NGEN is the first step towards the NNE



NGEN OV-1

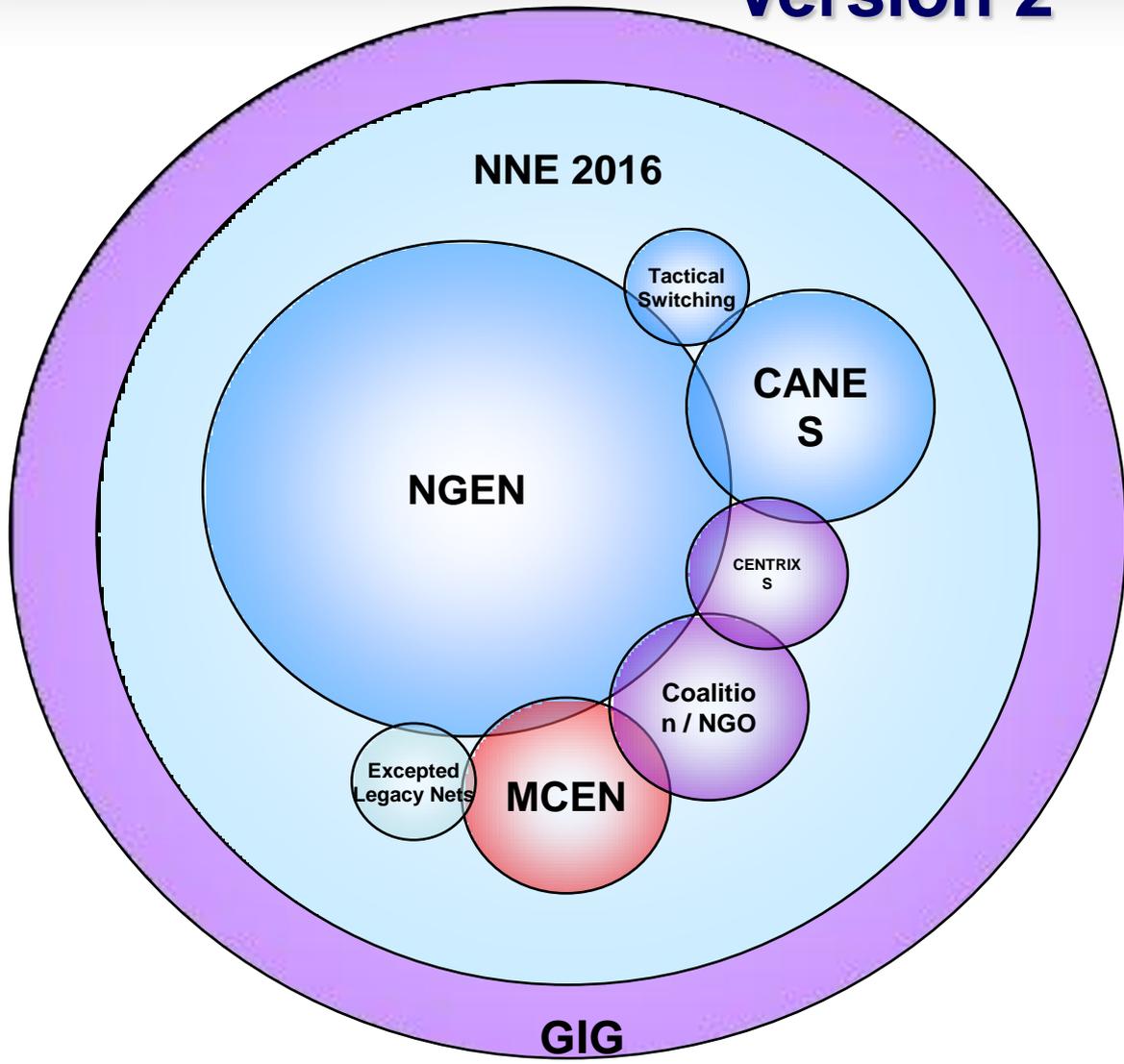
Representative Example

Navy and Marine Corps authorized users and systems shall be able to rapidly and seamlessly access data and services across both Navy and Marine Corps management domains*





NNE~2016 Version 2



- | | |
|---------------|----------|
| NCES | GFEBs |
| DoD / DON ESI | DEAMS |
| MDA | GCCS-M |
| Navy ERP | USMC Max |
| Sea Warrior | MCEITS |
| NSPS | LOGMOD |
| DIMHRS | DCGS-N |
| ETC!!! | |

Examples



SUMMARY

- **As the Department evaluates the steps necessary to achieve its Net-Centric future for NNE~2016, there are several steps that shape the planning for that future**
 - The Network Environment (NNE 2016 v1) is done but will be continually updated as our programs mature
 - The real Networking Environment (NNE 2016 v2), including Navy, Marine Corps and DoD/Joint applications and their supporting systems starts this year
- **Critical to its success:**
 - Aggressively govern the NNE~2016 to determine the right technical solutions, make sure these solutions present the best value, and ensure the Department is organized to execute the solutions
 - Leverage our buying power across the Department focusing on Enterprise standard procurements (HW & SW) and Joint capabilities
 - Leverage OA and SOA concepts to enable highly adaptive, agile, and flexible access to all available data and service sources
 - Enterprise Security must always govern local desires

USMC NGEN Objectives



Mr. James Craft

Deputy Director C-4/Deputy Chief Information Officer of the Marine Corps



- **USMC will be the first element of the DON to transition from the NMCI to the NGEN.**
 - USMC and USN aligned through common Requirements and Concept of Operations documents.
 - Active preparation of current network environment.
 - Unclassified portion of Marine Corps Enterprise Network.



Balance of Warfighter and Business Needs

- **USMC seeking best value and flexibility for meeting network operational and security needs.**
 - Acquisitions/Contracting to support Government-Owned /Government-Operated environment.
 - Segmented approach.
 - USMC retains full network operations and defense functionality (NOC/SOC/CERT).

USN NGEN Objectives



RDML David Simpson
Director, Navy Networks, Deputy Chief of Naval Operations,
Communication Networks (N6)





Navy NGEN Requirements

- **Command & Control of Network Resources**
 - Direct NETOPS Priorities
 - Full ITSM & Security Transparency
 - Government Workforce for Navy NETOPS Leadership
- **Network Agility**
 - Response to Navy network deployment needs
 - Introduction of new capabilities
 - Organizational Change
- **Cost Effectiveness**
 - Reduce Cost & Add Capability over time
 - Increase Navy's ability to optimize our Network Contract Environment over the program lifecycle

- **Security**
- **Warfighting**
- **Governance**
- **Adaptability**
- **Reliability**

Network Operations



Mr. Terry Halvorsen
Deputy Commander, Naval Network Warfare Command





NGEN Industry Day

CAPT Scott N. Weller
Program Manager, Navy Marine Corps Intranet

*Deliver and sustain a single, secure
Navy Marine Corps Enterprise Intranet*

PM NMCI Objectives Crosswalk

DON FY08 Objectives	DON CIO Goals FY08-09	PM NMCI FY08 Program Objectives
1. Provide a Total Naval Workforce capable and optimized to support the National Defense Strategy	6. Develop an agile and integrated IM/IT total force capable of implementing, operating, and managing the power of the net	<p>PM NMCI FY08 Program Objectives</p> <ol style="list-style-type: none"> 1. Deliver contract services 2. Equip and sustain the enterprise 3. Improve information assurance 4. Improve network performance 5. Improve service delivery process 6. Improve client satisfaction 7. Align legacy transition 8. Improve interoperability 9. Develop Information Sharing Environment 10. Support NMCI transition 11. Integrate communications support 12. Support the IM / IT Workforce
2. Use the Navy-Marine Corps Team to aggressively prosecute the Global War on Terror		
3. Build the Navy and Marine Corps Force for Tomorrow	<ol style="list-style-type: none"> 1. Establish and manage a secure, interoperable net-centric Naval IM and IT infrastructure 2. Protect and defend our Naval critical infrastructures, networks, and information to maximize mission assurance 3. Accelerate the migration of our applications and data to a net centric Naval environment to facilitate warfighting and business transformation 4. Create, align, and share knowledge to enable effective and agile decision making to achieve knowledge dominance 5. Ensure Naval IM and IT investments are selected, resources, and acquired to deliver affordable enhancements to warfighter effectiveness 	
4. Safeguard the People and Resources of the Navy-Marine Corps Team		
5. Strengthen ethics as a foundation of exemplary conduct within the Department of the Navy		
6. Provide first rate facilities to support stationing, training, and operations of Naval forces		

- **Capability**

- Single Integrated and Secure IT Environment
- NMCI is operational across the CONUS based DON, PACOM and other DON OCONUS sites including Alaska, Hawaii and Japan
- Network availability above 99%

- **Platforms: desktops, laptops, cell phones & service plans and blackberries**

- Desktops ~254,000
- Laptops ~116,000
- Phone Service ~680
- Blackberry Service ~19,000

- **Classified and unclassified data, the associated capital infrastructure, maintenance, training and man**

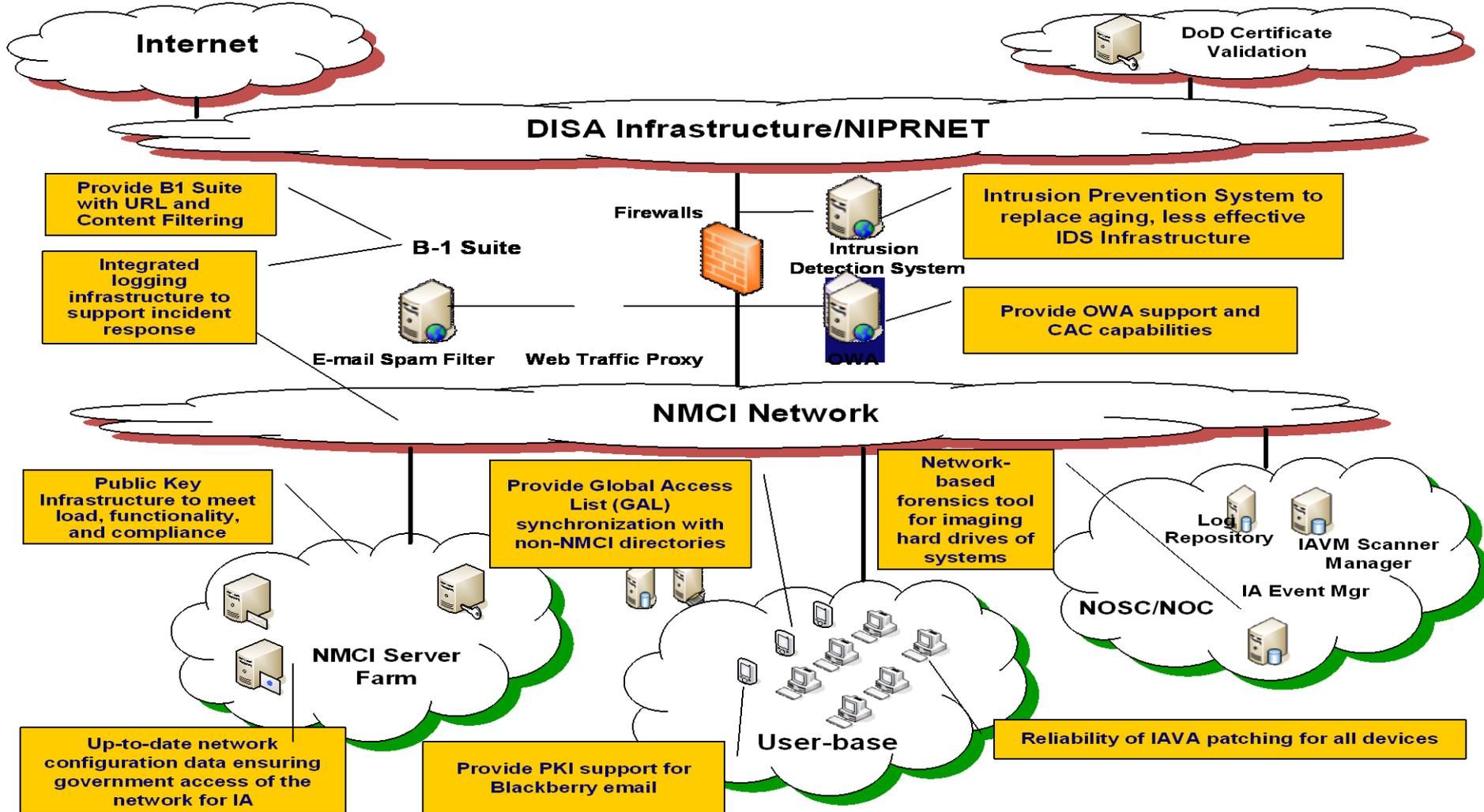


- **NMCI offers a variety of services for**

- **Each Seat Includes:**
 - Fixed Workstation:
 - Network services
 - hardware (keyboard, mouse, monitor)
 - software (operating system, suite of business applications)
 - file share services
 - maintenance
 - **technology refresh @ 48 months**
- **Each Seat Does not Include:**
 - Unique Business Applications (Functional Area Specific)
 - IA administration,
- **Portable Seat:**
 - meets all the requirements for a fixed workstation seat
 - **Plus:**
 - portable computing capability
 - full desktop capabilities from various locations
 - access to resources (e.g., e-mail, files) while away from the office
 - high quality presentations capability while on travel
 - connection to projection system
 - technology refresh @ 36 months
 - two unclassified user accounts

- **Posture meets or exceeds DoD and JTF/GNO standards:**
 - Enterprise level ATO accreditation
 - Robust Defense in Depth mechanisms
 - Comprehensive solution for encryption/protection of client Data at Rest
 - Fully implemented and enforced DoD Cryptographic Log-On (CLO)
 - Advanced client security services, including Host Based Security System, Network Access Control (NAC), Internet web content filtering
 - Anti-virus and anti-SPAM services
 - Multiple layer Intrusion Prevention System and Firewall Suites
 - JTF-GNO standard tools for security scanning and remediation (SCCVI/SCRI)
 - Enterprise Security Information Manager (SIM) for integrated IA monitoring
 - Comprehensive network and client based performance tools and monitoring, providing proactive notice of system degradation
 - Regular security posture reviews to maintain alignment with DoD and JTF-GNO policy

Continuous IA Architecture Improvements in Work

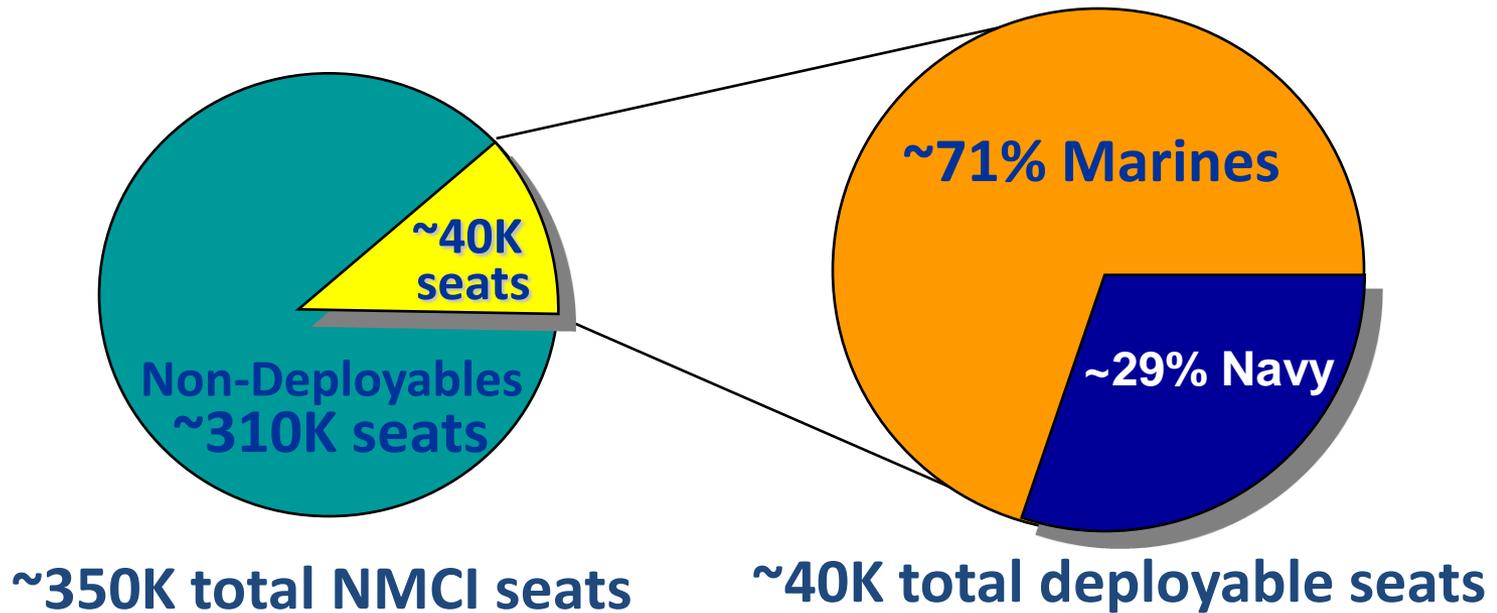


By the Numbers

Users	660,000
Locations	~85 locations with > 1000 Seats ~480 locations with < 1000 Seats ~1700 very small site locations with 1-20 Seats
Seats delivered	370,000
Seats refreshed yearly	~120,000
Server Farms	~52
Network Operations Centers	4
Daily browser transactions	~124 million
Emails sent daily	~4 million
Ownership	Contractor owned; contractor operated

By the Numbers

- A deployable is an NMCI asset (laptop) taken by a user to a forward location, modified for local use (shipboard) and reconfigured for NMCI operation before return to the network



- **Customer satisfaction**
 - Currently exceeds 87%
 - 5TH consecutive quarter of upward trend
- **Tech refresh**
 - Seats refreshed to date: 200,000
 - All NMCI seats will have been refreshed by end of year 2009



- **Supporting the Warfighter**
- **Interoperability**
- **Security**
- **Adhering to DoD acquisition policies and regulations**
- **Customer satisfaction**

NGEN Acquisition Requirements and Architecture



Capt. Tim Holland
Program Manager, Next Generation Enterprise Network





NGEN Mission

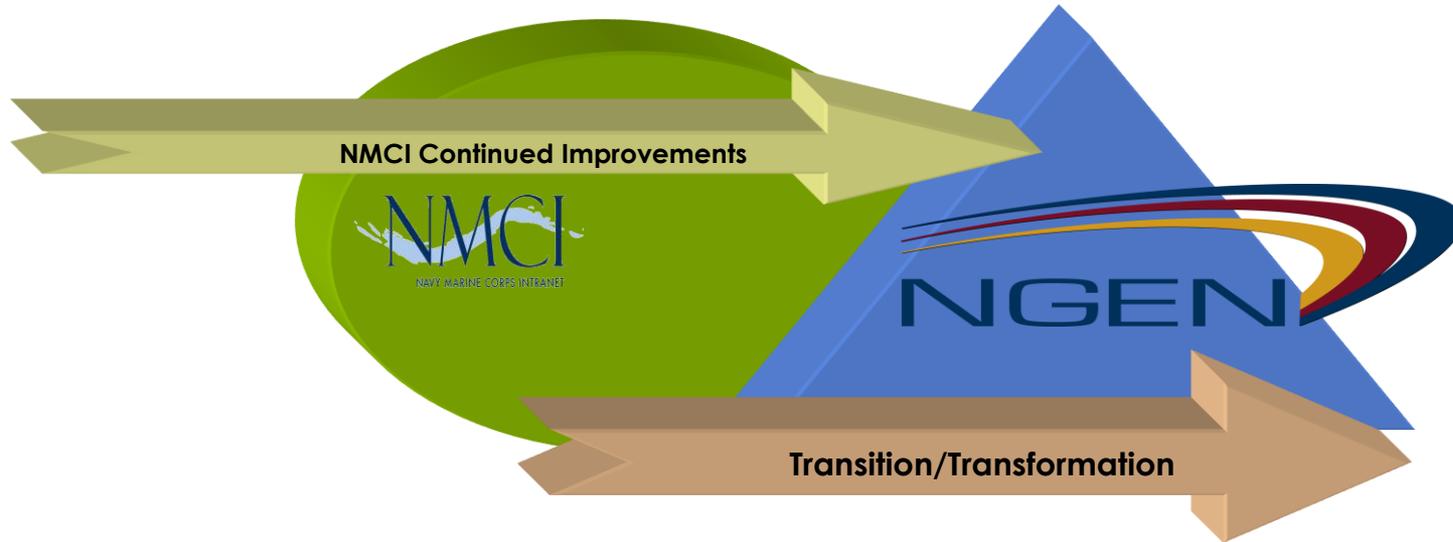
To develop, acquire and deploy a global, enterprise-wide integrated network that provides the DON workforce access to the required information technology systems with full life-cycle support for the war fighter and business enterprise.



NMCI/NGEN Transition Strategy

CURRENT STATE

FUTURE STATE



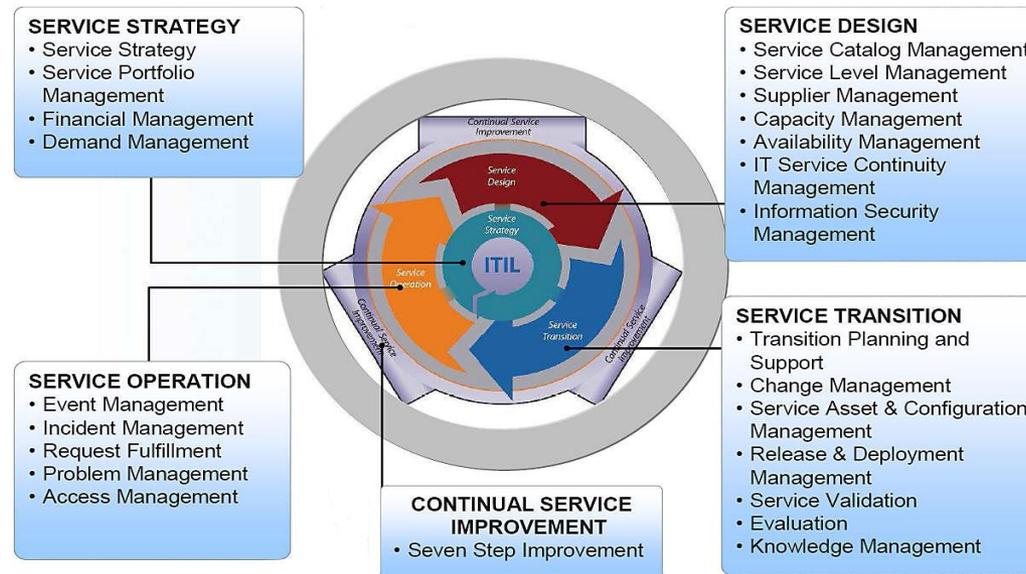


Key Performance Parameters

Key Performance Parameters with objectives and thresholds:

		Threshold	Objective
C2 System Availability	Email Availability SLA 103.1.1 >= 99.7%	Critical services = 99.7%	Critical services = 99.9%
C2 System Performance	Email Performance SLA 103.1.2A >=95.0% <=5min SLA 103.1.2B >=99.5% <=10min	E-mail: 99% < 10 min	E-mail: 98% < 4 min
C2 Network Availability	Intranet Availability SLA 107.1A (Large Sites) 99.8%	99.99%	99.999%
C2 Problem Resolution	User Problem Resolution SLA 101 (Basic Level Users) >= 80% <= 4 hours >= 90% <= 96 hours >= 99% <= 336 hours SLA 101 (Mission Critical Users) >=90% <=2 hours >=99% <=24 hours Network Problem Resolution SLA 102 (Large Sites) >= 25% <= 1.0 hour >= 75% <= 4.0 hour >= 98% <= 18.0 hour	98% < 60 min	98% < 60 min
Net Ready	Reference GIG Standards	<ul style="list-style-type: none"> • Exchange information (email) in less than five minutes between any two persons; Emergency • Action Message capability for C2 support • Less than 5 minutes of network downtime per year • Problem resolution anywhere on network in less than 1 hour for C2 infrastructure 	

Service Management: DON use of processes, functions and roles to manage services over the NGEN lifecycle.



Information Technology Service Management (ITSM) Framework: Implementation provides the foundation for DON seam

Network Operations (NETOPS)





NetOps CONOPS Overview

- **Objective**
 - *Outline how DoN will operate and defend NGEN*
- **Goals**
 - **Align IT services with existing military chains of command**
 - **Balance the efficiency/effectiveness of global end-to-end management with the responsiveness of regionally and locally delivered support**
 - **Use industry Information Technology Service Management (ITSM) best practices to deliver NetOps capabilities**
 - **Ensure adequate DoN visibility and control over operation of the network**
 - **Address required coordination between governance, acquisition and operations to affect timely changes**
 - **Effectively integrate with non-NGEN initiatives to provide the full spectrum of NetOps capabilities**

Information Assurance (IA)





Guiding Principles of NGEN IA

- **Implementation of DoD and DON security policies**
 - Protection of information at rest, in use and in transit.
- **Continued evolution of a defense in depth architecture**
 - Assured interoperability between Management Domains (MDs)
 - Customized security policies and solutions based on operational needs
- **Cross Domain information flow**
 - Use of NSA-accredited point solutions or services
 - Separation and access control



Key Elements of NGEN IA

- **Transactional Information Protection -- Granular end-to-end security controls to enable protected information exchange within the variable trust net-centric environment.**
- **Digital-Policy Enabled Enterprise -- Dynamic response to changing mission needs, attacks, and system degradations through highly automated and coordinated distribution and enforcement of digital policies.**
- **Defense Against Adversaries -- Persistently monitor, track, search for, and respond to threat activities.**
- **Integrated Security Management -- Dynamic and automated net-centric security management seamlessly integrated with operations management.**
- **Enhanced Integrity and Trust of Net-Centric Systems -- Robust IA embedded within enterprise components and maintained over their life-cycle.**



Program Tenets

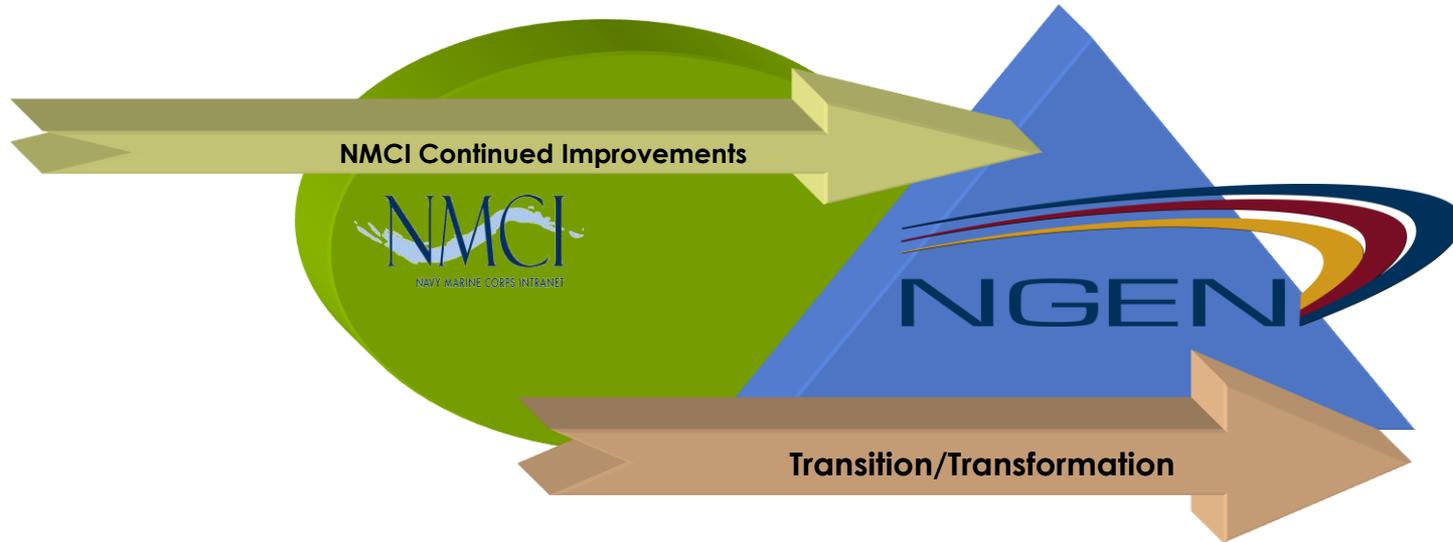
- Ensure Continuity of Service at critical points on the network
- Increase capability to get ahead of the security threat
- Government will retain design approval and operational control of the network



NMCI/NGEN Transition Strategy

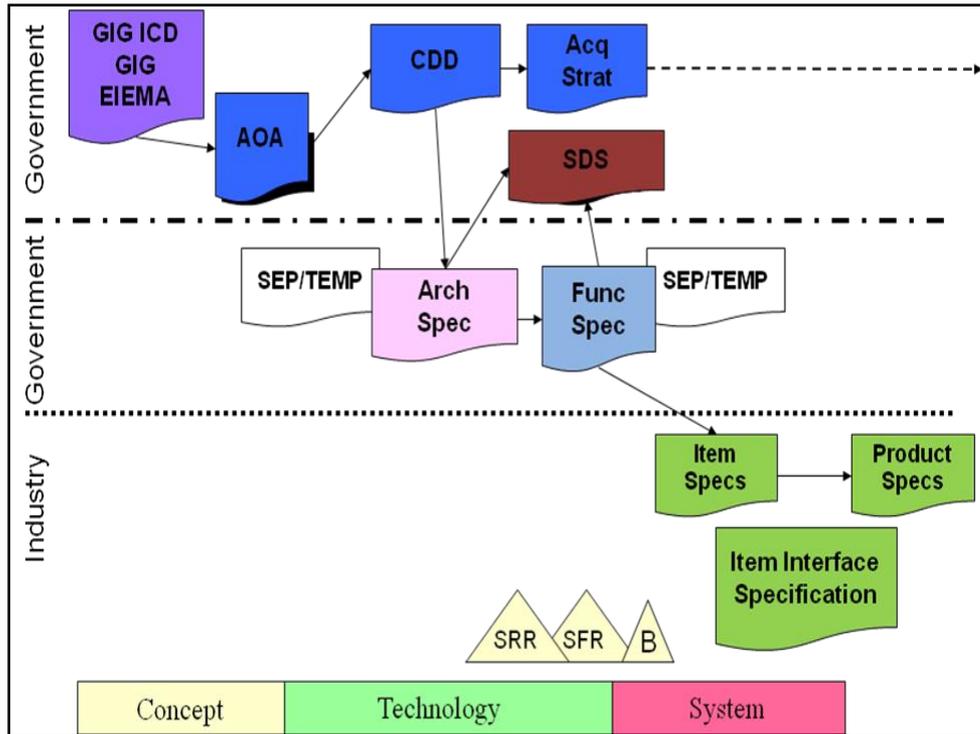
CURRENT STATE

FUTURE STATE



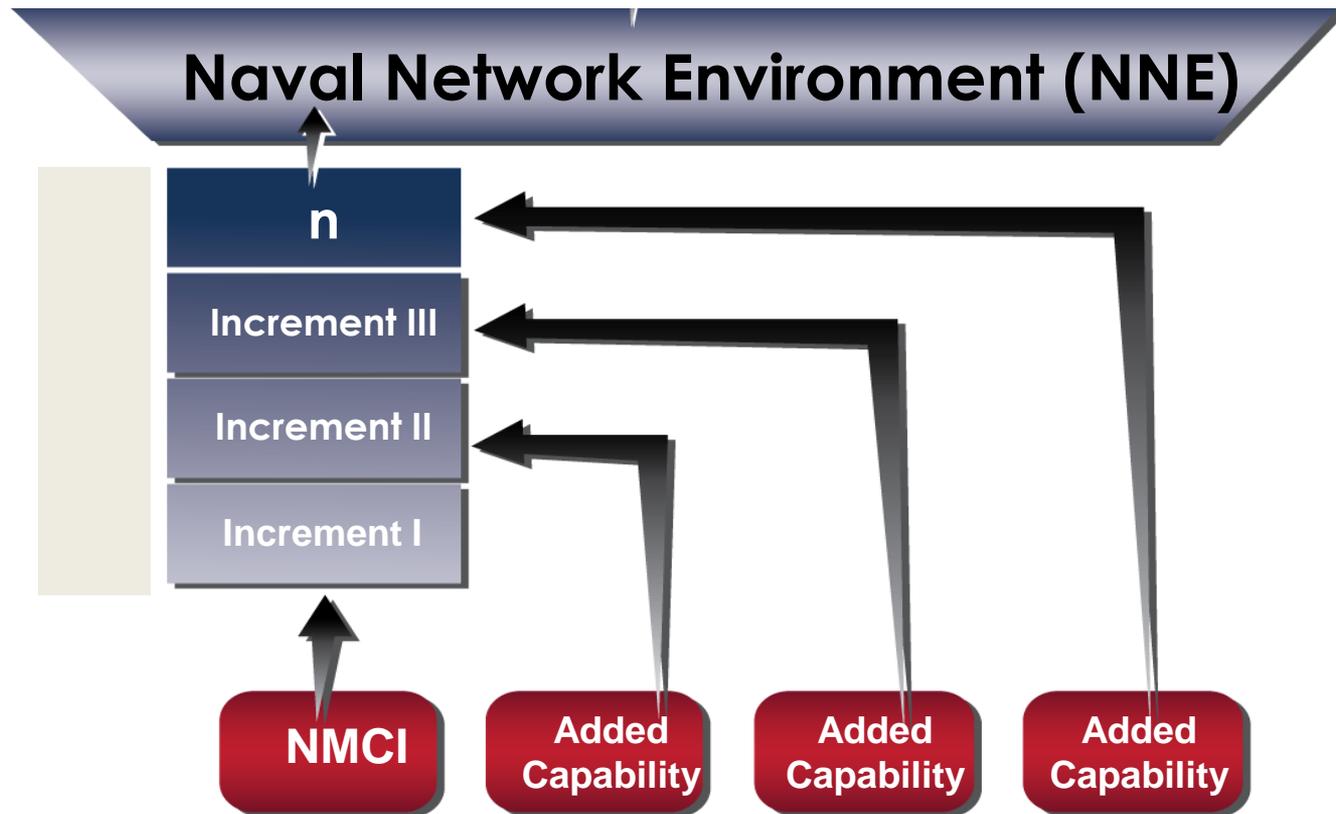
NGEN Architecture





- NGEN design approved by government
- NGEN will heavily rely on industry partners to provide innovative solutions in network design and architecture
- Government will provide architecture and functional specifications
- Industry will provide item and product specifications

Strong government/industry partnership key to NGEN design success!



NGEN Notional Segmentation





Segmentation Approach

- **RFI in May 2007**
- **Broke down existing network into functions**
- **Included industry best practices**
- **Government reviewed challenges of breaking up into segments**
- **Continued industry feedback sought**

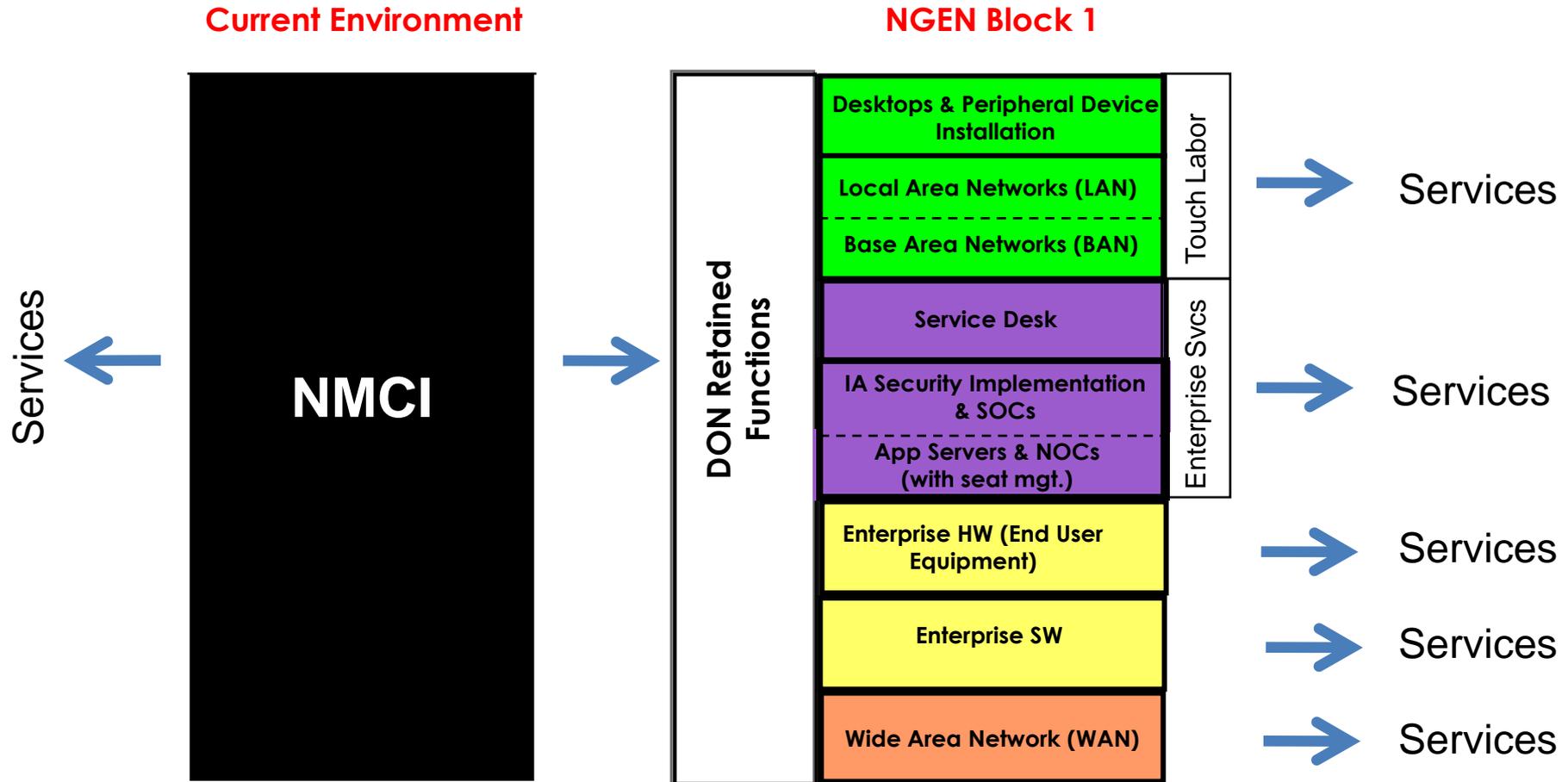


Generic Services Segmentation

Segment	Services Included
Storage / Data Center Services	<ul style="list-style-type: none">- Servers
End User Computing	<ul style="list-style-type: none">- Seat Management (seats, provisioning, gold disk, move/add/change (MAC), break/fix, messaging, LAN, Mobile Devices)
Network	<ul style="list-style-type: none">- Voice (transport, telephony, etc.), Data (WAN, MAN, BAN), Video (VTC), conferencing, etc.
Application Management	<ul style="list-style-type: none">- Infrastructure applications management and monitoring.
Help Desk/ Service Desk	<ul style="list-style-type: none">- Global Point of Contact (POC) for Level 1 to Level 1.5 solutions
Information Assurance	<ul style="list-style-type: none">- Security (Policy is a retained function. Operation adhered to by each of the Contractors); Security Operations Center (SOC)
Service Coordination	<ul style="list-style-type: none">- Service Coordination
DON Retained	<ul style="list-style-type: none">- Network Operations, Program Management, Contract Management, Technical Authority, In-service Engineering



Notional NGEN Segmentation Approach



NGEN Industry Interaction



Debbie Streufert
Procuring Contracting Officer, PEO-EIS





NGEN Industry Interaction

Step 1 – Release
Information to
Industry

Posted
21 Aug 08

Step 2 – Conduct
Industry Day

8 Sep 08
(Reagan Bldg)

Step 3a – Written
Industry
Presentations
RFI

Will Post
9 Sep 08

Step 3b – Possible
Oral Industry
Presentations
based upon written
responses

Step 4 –
Continued
Industry
Interaction





Foundational Information to Industry

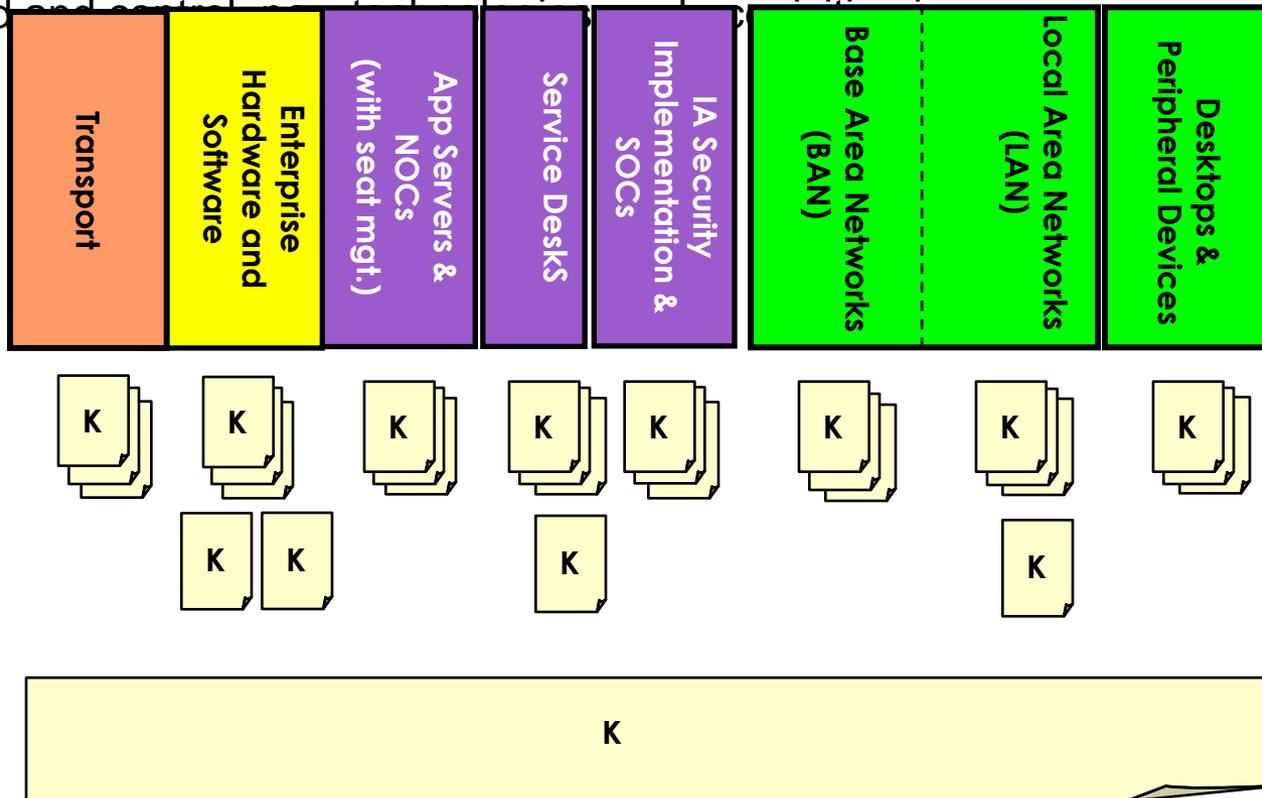
Step 1: Release Foundational Information to Industry

PCO posted information about the NMCI environment, ordering history, legacy network and applications NMCI processes. These documents include:

- NMCI VIP Support
- NGEN Requirements Document v2.0
- NetOps CONOPS
- Deployables Embarkable Configuration Guide
- Advanced Automated Electronic Classrooms
- Tech Refresh Lifecycle and Discipline Guide
- Missing Lost Stolen and Damaged (MLSD) Equipment Process
- Security Certification and Accreditation Process
- NMCI Engineering Services (Overarching CLIN 5000) PWS, Process and Workflow
- End User Communication Process
- Baseline Change Management Process
- Facilities Issues and Business Rules
- Miscellaneous Facilities Issues and Business Rules Playbook
- NMCI Requirement to Award Process Tool User Handbook

- Step 1: Released RFI**

In May 2007, DON conducted market research to request industry thoughts regarding command and control systems for the following categories:





NGEN Industry Interaction Plan

- **Step 2: Conduct Industry Day “Foundational Concepts”**
 - Breadth and complexity of NMCI
 - Notional Segmentation approach and transition to NGEN
 - Availability of foundational information on the current environment
 - Methods of responding to questions
 - Question boxes located in the back of the facility
 - Online on the e-commerce website at <https://e-commerce.spawar.navy.mil>
 - Non-administrative questions and responses will be posted in an anonymous manner on the e-commerce website.
 - We will publish a list of contractors that have attended and their contact information



Request for Information

- **Step 3: RFI for White Papers**

- An RFI will be posted tomorrow to request Industry input. DON is requesting industry white papers to discuss possible transition and segmentation strategies.
 - Advantages and/or disadvantages of the notional segmentation approach
 - Proposed alternatives
 - Transition approaches for the notional segmentation or alternatives



Administrative Issues for RFI

- Less than or equal to 5 pages
- Courier New font, type size 12
- Microsoft Word document or Power Point slides
- Submit through e-commerce or:
 - BPt-FMUSNGEN-contractSupport@BearingPoint.com
- We will consider all submissions
- DON may publish the results of the RFI but DON will not respond to individual white papers
- All of this information will be included in the RFI



Industry Point of Contact List

- **PEO-EIS is developing a Point of Contact (POC) list of contractors interested in contacting other contractors participating in the NGEN competition**
- **The list will include company name, point of contact name, e-mail address and phone number**
- **Names and numbers will be collected**
 - at registration or during the briefing (dropping information in the question boxes)
 - while taking the after-briefing survey
 - Via the email addresses contained in the brochure or in the synopsis
- **The Industry Point of Contact list will be posted at <https://e-commerce.spawar.navy.mil>**



Post NGEN Industry Day Survey

- **The PEO-EIS survey provides you the opportunity to evaluate the Industry Day briefing**
 - Requests feedback on the applicability of the material presented during the briefing and posted on the website prior to Industry Day
 - Quick look feedback on the notional segmentation approach
 - Provide a point of contact for interested industry partners
- **Participation is voluntary**
- **Identification of your company is voluntary**



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Step 4 –
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Interaction

Closing Remarks



RDML Tim Flynn
Program Executive Officer, Enterprise Information Systems

