# Joint Net-Centric Operations (JNO) Capability Portfolio Management (CPM)
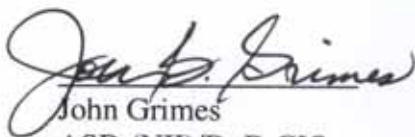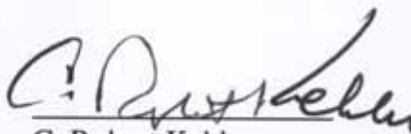
# Business Plan
## Version 1.0

April 16, 2007

# PREFACE

This Business Plan provides the initial framework for JNO CPM operations. It provides the management concept, portfolio content, the operating framework and the planned near-term activities and objectives for the JNO CPM. The Business Plan will be approved by the Command and Control Capability Integration Board (C2CIB). It will be reviewed annually and updated as required by the JNO CPM.
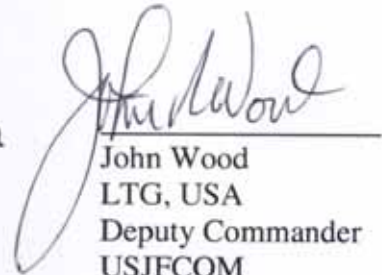
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## 1.0 MANAGEMENT CONCEPT

This section outlines the general management concept for the JNO CPM.  It provides the CPM objectives, mission, scope, capability definition, and concludes with a summary of the JNO joint capability portfolio management concept.

### 1.1 Objectives

The Quadrennial Defense Review (QDR), and the follow-on Strategic Planning Guidance (SPG), emphasized the need to continue building upon the DoD capability-based planning and management efforts to facilitate strategic choices and improve the ability to make capability tradeoffs.   One approach being explored in DoD is joint capability portfolio management.  The intent is to manage groups of like capabilities across the enterprise to improve interoperability, minimize capability redundancies and gaps, and maximize capability effectiveness.  Joint capability portfolios will allow the Department to shift to an output-focused model that enables progress to be measured from strategy to outcomes.

To reach this goal, the Deputy Secretary of Defense, in a memorandum dated September 14, 2006, selected four capability areas as test cases for experimentation with the joint capability portfolio management concept:  (1) Joint Command and Control (JC2); (2) Joint Net-Centric Operations (JNO); (3) Battlespace Awareness (BA); and (4) Joint Logistics (JL).

The JNO portfolio contains the enabling infrastructure for other capability areas and the DoD enterprise.  The importance of the net-centric infrastructure represented in the JNO portfolio to current and future warfighting operations is such that virtually no DoD business, intelligence or warfighting application will be able to function effectively and securely without the successful synchronized delivery and integration of the information transport, information assurance, network management, enterprise services and other JNO capabilities (Figure 1).

The overall objectives for the JNO CPM are to ensure the JNO portfolio is aligned with strategic objectives, the capability mix is synchronized, integrated, and optimized to meet warfighter needs, and is delivered to the joint warfighter more rapidly and efficiently.
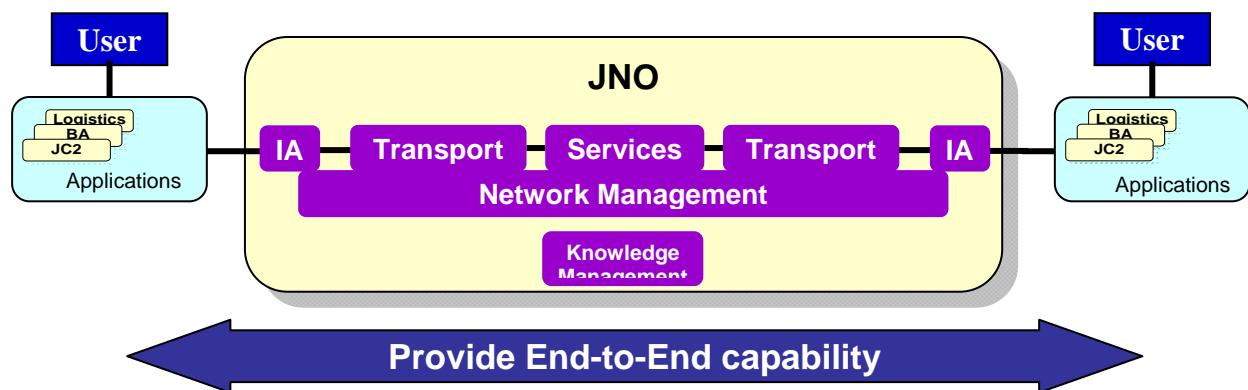


Figure 1.  JNO Enables the Enterprise

## 1.2 Mission

The JNO CPM identifies and balances validated warfighter capability needs across the JNO Joint Capability Area (JCA) Tier 2 capability areas[1] and leads the development of solutions to meet those needs across the range of Doctrine, Organization, Training, Materiel, Leadership, Personnel and Facilities (DOTMLPF).  The JNO CPM conducts portfolio management of a set of net-centric capabilities and associated programs and the development of material and non-material solutions to ensure the timely, synchronized, and integrated delivery of JNO capabilities.

## 1.3 Scope

The scope of the JNO CPM spans the JNO JCA, including the Tier 2 areas of Information Transport, Information Assurance, Enterprise Services, Network Management, and Knowledge Management and the DOTMLPF needs and solutions associated with each area and the integration across these areas to provide warfighting capability.   The JNO CPM will coordinate with other CPMs and organizations to ensure applications within other portfolios are fully supported by the JNO portfolio.  The JNO portfolio content is discussed in greater detail in Section 2.

## 1.4 Capability Definition

In compliance with DAWG guidance, the JNO and other test case portfolios are designed to align with the JCA taxonomy now in use by the Department.  The definition of the JNO Tier 1 JCA was derived from the Net-centric Environment (NCE)[2] Joint Functional Concept (JFC) of April 2005.  JNO is defined as "the ability to exploit all human and technical elements of the joint force and its mission partners by fully integrating collected information, awareness, knowledge, experience, and decision making, enabled by secure access and distribution, to achieve a high level of agility and effectiveness in a dispersed, decentralized, dynamic and/or uncertain operational environment."

The JNO JCA currently includes the following Tier 2 capability areas (see Annex A for additional information):

- Information Transport
- Information Assurance
- Network Management
- Enterprise Services
- Knowledge Management
- Applications

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[1] The JNO itself is a Tier 1 JCA.
[2] The term NCE and NCOE are predecessors to the term JNO.  The next version of the cited JFC will be the "JNO JFC".

For the JNO portfolio test case, one modification to the current Tier 2 taxonomy has been made. Pending a future clarification or change in Tier 2 definition, "Applications" has been omitted to avoid confusion with the content and scope of other supported portfolios, whose content is predominantly applications. "Computing Infrastructure", which is identified as a Tier 3 area in the draft JNO Tier 3 taxonomy, is under consideration to be included for experimentation at the Tier 2 level to be consistent with the Enterprise Wide System Engineering (EW SE) Global Information Grid (GIG) enterprise-wide technical baseline.  In summary, the JNO portfolio provides the transport, IA, services and management foundation for the GIG.

These Tier 2 capabilities, when combined in an integrated whole and delivered as increments, provide the warfighter the following baseline capabilities, as identified in the NCOE Capabilities Based Assessment (CBA) Functional Area Analysis (FAA):

- Transport information end-to-end
- Share situational understanding
- Collaborate
- Identify/store/share/exchange data/information
- Establish appropriate organizational relationships
- Provide adaptive, distributive, cooperative, and collaborative decision-making and planning
- Create/produce information in a smart and assured environment
- Defend systems and networks
- Provide end-to-end assurance and validation of information and information systems
- Process data and information
- Maintain and optimize network functions and resources
- Install and deploy a scalable and modular network
- Continuously develop knowledge, skills, and abilities of individuals and teams

The above baseline capabilities in aggregate provide the key warfighting effect in the JNO definition:  "…achieve a high level of agility and effectiveness in a dispersed, decentralized, dynamic and/or uncertain operational environment."

## 1.5 Summary of JNO Joint Capability Portfolio Management Concept

The JNO CPM employs and functions within a Joint Capability Portfolio Management Concept that adheres to the Department's capability management goal as expressed in the Quadrennial Defense Review (QDR) Institutional Reform and Governance (IR&G) initiative of users' and user needs driving the response of capability providers (Figure 2).

**"As Is" Provider-Driven**

Supply imposes itself on Demand

ARMY
NAVY
AIR FORCE
MARINES
SOCOM
Defense Agencies

Available Capability

**"To Be" User-Driven**

Demand tailors Supply

Joint Warfighter

Desired Capability

ARMY
NAVY
AIR FORCE
MARINES
SOCOM
Defense Agencies
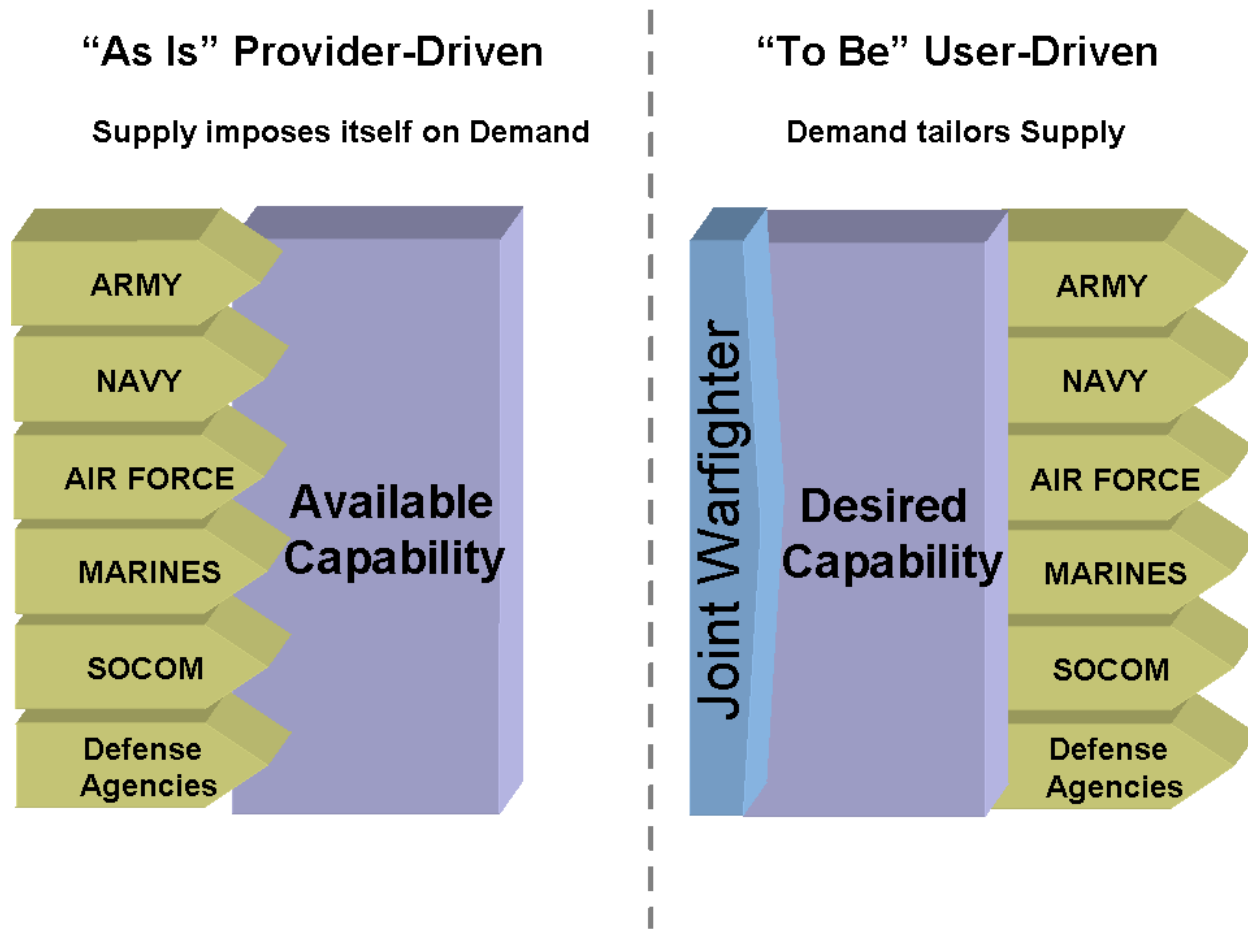
Figure 2. Capability Portfolio Management Goal: Moving to a User-Driven Enterprise

To enable this transition to the joint warfighter driving capability needs the JNO CPM employs an Operational Proponent (OP) (USSTRATCOM), who is designated to manage collection, articulation and prioritization of stakeholder capability needs and gaps, provide validation of CPM balancing decisions, and to lead advocacy with the Joint Requirements Oversight Council (JROC) on capabilities assessment, validation and prioritization products and JCIDS documentation.

The JNO CPM reports directly to a 3/4-star level executive governance board: the Command and Control Capabilities Integration Board (C2CIB), whose membership includes Combatant Commands (COCOMs), Services, Joint Staff, and key OSD Components. The C2CIB provides executive validation, integration and advocacy for the JNO CPM at the 3/4-star level across the three DoD decision systems, executive coordination with corresponding governance entities for other capability portfolios, and executive representation for (or with) the JNO CPM at the Deputy's Advisory Working Group (DAWG).

The CPM engages and spans the three primary Department decision support systems (Planning, Programming, Budgeting and Execution (PPBE), Defense Acquisition System (DAS), and Joint Capabilities Integration and Development System (JCIDS)). The CPM focus is on portfolio

systems engineering and integration, synchronization, and balancing cost, performance and schedule against validated warfighting capability needs and priorities. The JNO CPM leverages the implementation layer to perform these functions and will have visibility into the implementation layer to develop timely and authoritative information for portfolio analyses and decisions and to enact decisions within the authority of the JNO CPM and the JNO CPM's executive governance authorities. These interfaces and relationships are detailed in Section 3.

A core competency and activity for the CPM is cross-program (i.e. portfolio-wide) integration and synchronization. Portfolio balancing and investment decisions and recommendations will be informed by validated Joint Capabilities documentation, COCOM Integrated Priority Lists (IPLs) and other validated products of the OP and JS capabilities process. A critical JNO objective is to balance the capability demand, articulated through JCIDS and JNO OP processes, with the available resources and existing programmatic baselines (planned or supply side). To accomplish this objective, the JNO CPM must balance the portfolio across DoD processes and across Tier 2 capability areas. Integration and synchronization is guided by a JNO Capability Delivery Plan (CDP) and architecture, incorporating adherence to the GIG enterprise-wide technical baseline. Synchronization is accomplished by establishing and managing to designated portfolio capability delivery points (capability increments) maintained within an integrated master schedule. Synchronization and integration activities of the JNO CPM is informed by program schedules, cross-portfolio dependencies, portfolio reviews, risk assessments, Independent Program Assessments, intra-portfolio dependencies and integration points. More detailed functions of the CPM are described in paragraph 3.1.2.

The JNO CPM is initially organized as an office with authorities and executive governance as outlined in the Deputy Secretary of Defense (DepSecDef) memorandum dated September 14, 2006 and recapitulated herein. The JNO CPM initial location is within the National Capital Region (NCR) to provide quick and cost-efficient access to DoD process owners, capability portfolio governance bodies, and other capability portfolio leads. To allow faster startup and a lean, focused management organization, the JNO CPM relies on a host organization for many administrative functions (e.g. personnel, security, contracting services, information technology services and facilities support functions, etc). The initial host organization is ASD(NII)/DoD CIO.

The initial JNO CPM (Director) and Deputy Director for Integration is assigned from ASD(NII)/DoD CIO, and a Deputy Director for Capabilities is assigned from CDR USSTRATCOM. The goal for staffing the JNO office is to have a minimum essential strength of 67 personnel by 2QFY2007. Government positions will be filled by matrix or detail through coordination with the providing Staff/Agency/Service. Funding has been reallocated by ASD(NII)/DoD CIO to cover the operating cost for FY2006 and into early FY2007. Annual costs for the minimum essential staffing goal of the JNO CPM organization are estimated at $15M. The staffing plan is further described in paragraph 3.8 and Annex B.

## 2.0 PORTFOLIO CONTENT

The JNO Capability Portfolio is the collection of programs, initiatives, and systems that represent the key enablers for end-to-end warfighting and enterprise capability and that deliver capability in one or more of the JNO Tier 2 capability areas of information transport (or communications), information assurance, enterprise services, network management and/or knowledge management.  It also includes the associated non-materiel doctrine, organization, training, leadership, personnel and facilities necessary to effectively implement JNO capabilities.

The JNO portfolio is defined by the combined content of several relevant repositories.  Specifically, the portfolio includes information technology (IT) and National Security Systems (NSS) binned to the Enterprise Information Environment Mission Area (EIEMA), the Net-Centric Domain of the Warfighting Mission Area, the Net-Centric Functional Capabilities Board (NC FCB) portfolio, and MILSATCOM systems. Advanced Concept Technology Demonstrations (ACTDs) and other net-centric-focused Science and Technology (S&T) initiatives that are purposed to deliver capability in one or more JNO Tier 2 areas are also within the portfolio.  In addition, PA&E has just completed an initial tagging by Joint Capability Area (JCA) of the "Forces" portion of the Future Years Defense Plan (FYDP), which should further inform the CPM's ultimate determination of the JNO portfolio over time.

To provide an initial focus for portfolio management efforts in support of the POM08 assessment, criteria were defined to focus on a selected set of key enabling programs and initiatives that map to JNO Tier 2 capability areas and serve to set the direction and momentum of the portfolio.  Other criteria and considerations for the initial portfolio management focus were:  (a) whether the program is assessed to drive and contribute to end-to-end enterprise capabilities, (b) whether the program corresponds to capability gaps identified in the COCOM Integrated Priority List (IPL) and CONPLAN 7500, (c) contribution to or alignment with Net-Centric goals and Department strategies, (d) whether the size of the investment allows for significant contribution to the trade space, and (e) whether the execution risk is understood.  The bottom box in Figure 3 shows twenty-three programs selected for initial focus during the POM 08 assessment.

Over the PB08 years of FY08-13, the JNO initial portfolio value (i.e. for the focus program set) is approximately $49.2B, but the entire portfolio is estimated as at least twice this amount.  Figure 4 provides a resource breakdown of the initial portfolio by JNO Tier 2 capabilities.  Information Transport is the dominant Tier 2 investment, but significant investment occurs in Information Assurance (IA), Enterprise Services (ES) and Network Management.  Knowledge Management (KM) and the IT domain of Computing Infrastructure are less mature JNO capability areas.  Notably, the JNO portfolio program, GPS III, is binned to Enterprise Services.

Portfolio content review, assessment, investment selection, and re-balancing of the portfolio to meet changing conditions is a continuing, recursive activity of the JNO CPM.  For future assessments, including that underway for PR 09/POM 10, the CPM is working closely with Services and Agencies to include consideration of the entire portfolio in developing balancing recommendations.

Recommendations from any source for changes to the JNO portfolio will be brought to the JNO CPM and then to the C2CIB and DAWG (as needed) for approval. The CPM will establish a process that describes how programs will be added or removed from the portfolio.
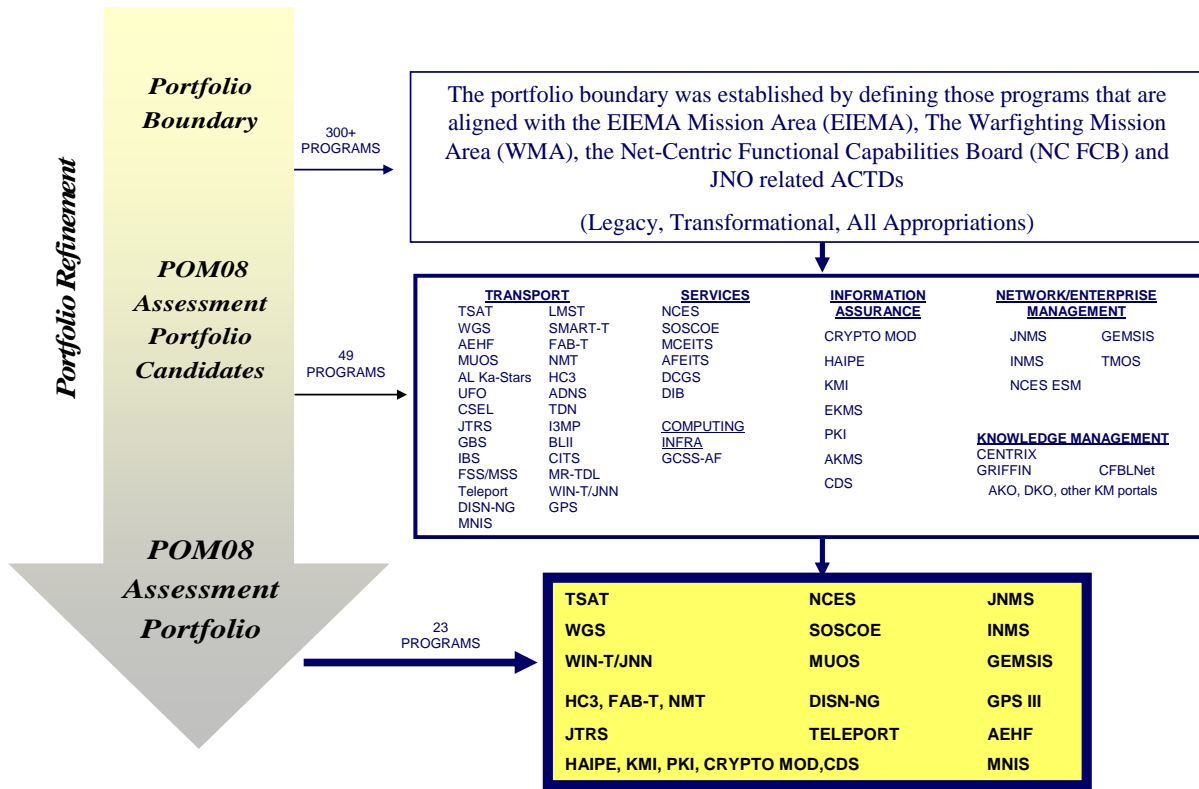
**Portfolio Refinement**

**Portfolio Boundary**

300+ PROGRAMS →

The portfolio boundary was established by defining those programs that are aligned with the EIEMA Mission Area (EIEMA), The Warfighting Mission Area (WMA), the Net-Centric Functional Capabilities Board (NC FCB) and JNO related ACTDs

(Legacy, Transformational, All Appropriations)

**POM08 Assessment Portfolio Candidates**

49 PROGRAMS →

| TRANSPORT | | SERVICES | INFORMATION ASSURANCE | NETWORK/ENTERPRISE MANAGEMENT | |
|---|---|---|---|---|---|
| TSAT | LMST | NCES | | | |
| WGS | SMART-T | SOSCOE | CRYPTO MOD | JNMS | GEMSIS |
| AEHF | FAB-T | MCEITS | | | |
| MUOS | NMT | AFEITS | HAIPE | INMS | TMOS |
| AL Ka-Stars | HC3 | DCGS | | | |
| UFO | ADNS | DIB | KMI | NCES ESM | |
| CSEL | TDN | | | | |
| JTRS | I3MP | COMPUTING | EKMS | | |
| GBS | BLII | INFRA | PKI | KNOWLEDGE MANAGEMENT | |
| IBS | CITS | GCSS-AF | | CENTRIX | |
| FSS/MSS | MR-TDL | | AKMS | GRIFFIN | CFBLNet |
| Teleport | WIN-T/JNN | | CDS | AKO, DKO, other KM portals | |
| DISN-NG | GPS | | | | |
| MNIS | | | | | |

**POM08 Assessment Portfolio**

23 PROGRAMS →

| | | |
|---|---|---|
| TSAT | NCES | JNMS |
| WGS | SOSCOE | INMS |
| WIN-T/JNN | MUOS | GEMSIS |
| HC3, FAB-T, NMT | DISN-NG | GPS III |
| JTRS | TELEPORT | AEHF |
| HAIPE, KMI, PKI, CRYPTO MOD,CDS | | MNIS |

Figure 3. JNO Initial Portfolio Focus Established for POM 08 Assessment (yellow)



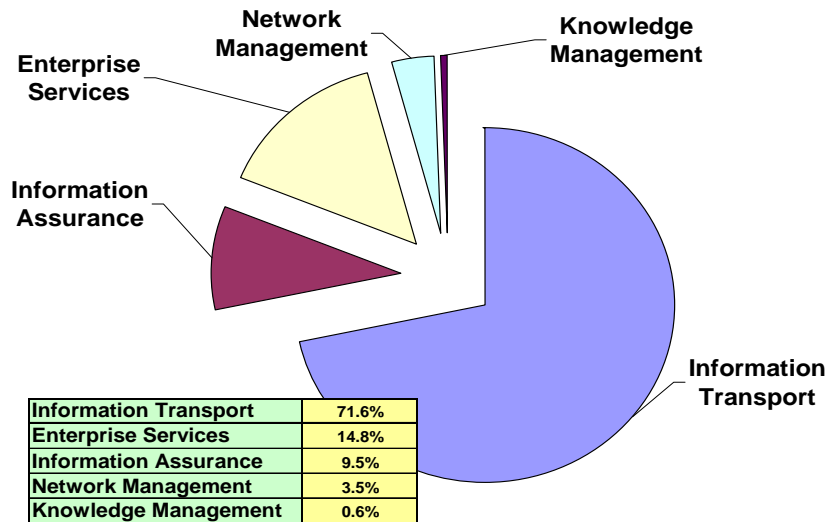| Information Transport | 71.6% |
|---|---|
| Enterprise Services | 14.8% |
| Information Assurance | 9.5% |
| Network Management | 3.5% |
| Knowledge Management | 0.6% |

Figure 4. JNO Initial PB08 Portfolio Breakdown by Tier 2 Capability Area

### 3.0 OPERATING FRAMEWORK

This Section provides the operating framework for the JNO CPM, which includes the definition and operating context of the governance, management and implementation layers, the functions of the CPM, interfaces to the three primary decision processes of the Department (PPBE, DAS, JCIDS), interfaces to IT portfolio mission areas and domains, interface to the DoD CIO, interface to the Joint Command and Control (JC2) CPM and other CPMs, measures of performance, and organization structure.

### 3.1 Governance, Management and Implementation Layers

Authoritative direction is set at the governance level by the senior leadership of the Department. Responsibility for overseeing the implementation of that direction resides at the management level. Implementation is the level at which process turns to product and products fielded with the right direction, resources and expertise. Figure 5 depicts the elements of each of these levels. Each enterprise layer depends upon the other to successfully meet user/customer demand, which in this context means meeting the national and defense strategies and priorities of the President on the one hand, and the needs of joint warfighting forces represented by the combatant commanders and other stakeholders on the other hand. Final decision authority remains with the Secretary of Defense (SecDef)/ DepSecDef or their designated representative, based on what is best for the user/customer and the Department overall.

For the capability portfolio test cases, the Institutional Reform and Governance (IR&G) QDR team and the DAWG have identified the DAWG as the top, strategic level of governance and have recognized the need for a lower level of governance, referred to as "executive level" governance. As stated in IR&G guidance, activities accomplished within the governance layer include:

- Integrates requirements, PPBE, and Acquisition
- Identifies and approves strategic scope of capability portfolios
- Approves Capability Manager's DOTMLPF business plan
- Monitors capability performance (by exception)

The management layer – the focus of this business plan - is defined by the CPM. In general terms, the IR&G team outlined management layer functions for all capability portfolios to include:

- Develops and implements Concept of Operations and Capability Portfolio Roadmap (i.e., Business Plan and CDP, respectively for JNO CPM)
- Identifies the scope of portfolios in terms of programs
- Develops and directs the business and resource plan (DOTMLPF) to include Program Objective Memorandum (POM)
- Integrates solution development, analysis and lifecycle management,
- Assigns tasks to Capability Providers (implementation layer) and monitors performance,
- Manages system configuration across the capability
- Interfaces with customer, other capability managers, and external organizations

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The implementation layer develops solutions, conducts experimentation, delivers products and solutions to the joint warfighter, manages and executes individual programs, conducts tactical level execution, and monitors performance of DOTMLPF for assigned tasks.

### 3.1.1 Governance Layer Functions

The governance layer is described in this document as context for the management layer and CPM relationships. Figure 5 illustrates the governance, management and implementation layer context and key relationships applicable to the JNO CPM.
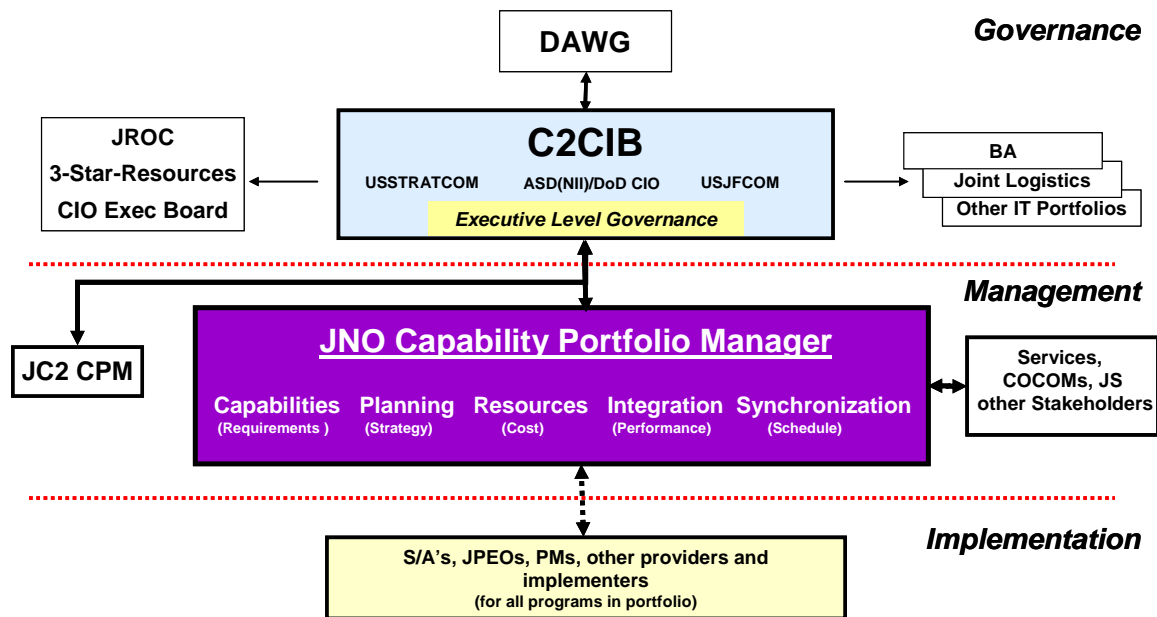


Figure 5. JNO CPM Relationships

The C2CIB is executive level governance body for the JNO CPM. The JNO CPM reports directly to the C2CIB, and vetting support is provided through an SES-level JNO Advisory Group and a Senior Steering Group that supports both JNO and JC2.

The C2CIB is tri-chaired by the Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer (ASD(NII)/DoD CIO), Deputy Commander, US Joint Forces Command (USJFCOM); Deputy Commander, US Strategic Command (USSTRATCOM). C2CIB membership includes: the Director Joint Staff, Under Secretary of Defense for Acquisition, Technology and Logistics USD(AT&L); and Director, Program Analysis and Evaluation who together represent the DoD process leadership. Remaining core members include the Services, combatant commands, and appropriate OSD offices and agencies, as requested. The C2CIB serves as the Executive Level of Governance board between the JNO CPM and the DAWG. It assesses and validates CPM investment strategies, recommendations, action plans and initiatives and provide advocacy for the CPM portfolio at the 3- and 4-star level. The complete set of responsibilities of the C2CIB is detailed in its charter.

ASD (NII)/DoD CIO, in coordination with USD(AT&L), is the primary interface for the JNO CPM on the C2CIB for acquisition matters. USSTRATCOM, as the JNO Operational Proponent (OP), is the primary interface for capability matters. ASD (NII)/DoD CIO, as the Principal Staff Assistant for JNO CPM matters, has primary responsibility for JNO CPM Planning, Programming, Budgeting and Execution (PPBE) matters, including validation and advocacy for PPBE issues at the 3- and 4-star level within the Department decision bodies.

### 3.1.2   Management Layer Functions

The JNO CPM ensures the JNO portfolio is aligned with strategic objectives and the capability mix within the portfolio is optimized and balanced to meet warfighting needs, as depicted in Figure 6.
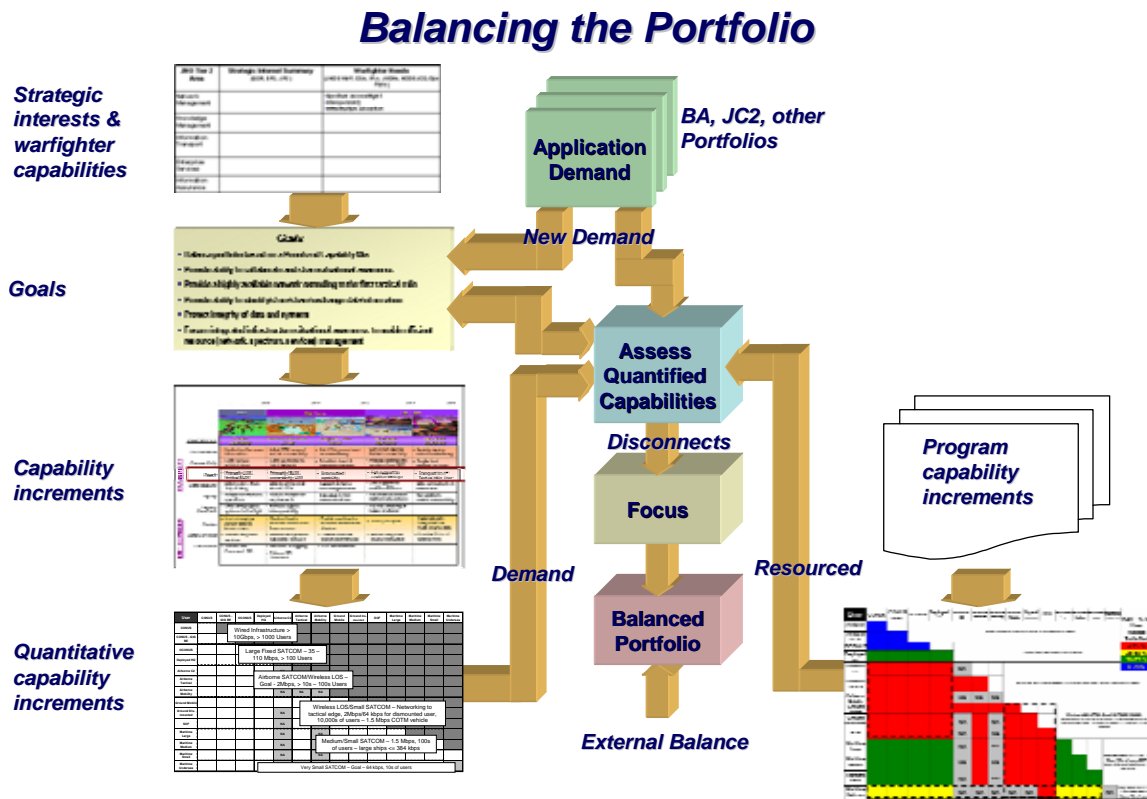


Figure 6  Balancing The Portfolio

The CPM concept is a "thin layer" centralized management – decentralized execution approach that leaves in place and heavily leverages the implementation layer. The JNO CPM provides one face at the management level for stakeholders and capability providers to coordinate with and across the current DoD decision processes on behalf of the warfighter and warfighter support customers.

Below is a summary of CPM general functions and tasks:

- Capabilities: CDRUSSTRATCOM serves as the JNO OP. The OP leverages existing processes, forums, and expertise across the department in collecting stakeholder needs and gaps, providing the CPM with JNO requirements priorities, and representing the portfolio in the JCIDS process. Based on capability priorities specified by the JROC and OP the CPM conduct trades to balance and deliver optimized portfolio capability within cost, schedule, and performance constraints, and submit recommendations to the C2CIB.

- Planning and Resources: Based on the Capability Delivery Plan and program execution status, the JNO CPM develops and provides program and planning recommendations to the DepSecDef through the C2CIB and DAWG. The JNO CPM is recognized as a distinct source of issue nominations Program and Budget Reviews. The JNO CPM monitors and provides recommendations to the C2CIB as required on all JNO reprogramming actions. In order to ensure the integrity and credibility of acquisition and budgeting processes, the entire CPM assessment and POM issue paper development process is transparent and collaborative with input from Component Headquarters Elements during all phases.

- System Engineering and Integration (SE&I): To ensure an integrated capability is delivered, a key CPM function is cross-program SE&I. Specific tasks include building and federating a JNO technical/systems architecture and ensuring adherence to the GIG enterprise technical baseline and /or architecture in conjunction with the Enterprise-Wide System Engineering (EW SE) activity. Approaches to federate architectures for JNO are worked closely with ASD(NII)/DoD CIO Architecture and Interoperability (A&I) Directorate. This role heavily leverages the implementation layer and is focused on cross-program SE&I activities, as distinct from program SE&I activities. The JNO CPM works with Enterprise-Wide SE efforts to: identify the need for net centric interoperability documentation to guide systems development within the portfolio; ensure such guidance is provided to program managers for systems in the JNO portfolio; help ensure the guidance is incorporated into formal capabilities documentation such as Capability Development Documents (CDDs) and Capability Production Documents (CPDs); and, help ensure adherence to the guidance. The CPM will publish the JNO Architecture in accordance with the general timeline shown in Annex E.

- Synchronization: In order to provide synchronized capability, the CPM develops a CDP that sets specific delivery points, describes the JNO portfolio warfighting capability improvements, and incorporates the"to-be" JNO architecture at those delivery points. At these points, an integrated capability (incrementally fielded) will be delivered with increasing capability at each following delivery point. In order to ensure successful execution to the CDP, the CPM has assigned synchronization managers. These managers are responsible for monitoring and working directly with the individual program managers and the Services to ensure program execution. The CPM identifies programs that are no longer in compliance with the synchronization plan and develops recommendations to address the issues to include rebalancing actions within the portfolio. The CDP is shared with other portfolios to inform them on delivered capability.

The JNO CPM strives to develop and employ an integrated, streamlined management process with specific authorities to expedite decision-making and recommendations to the C2CIB and the

Department's decision processes (JCIDS, PPBE, & DAS).  It is recognized as essential for the success of the capability portfolio management approach that CPMs leverage and integrate with existing DoD processes.  The C2CIB Secretariat is responsible for developing recommendations addressing streamlining and reducing duplicative forums.  The JNO CPM recommends streamlined process improvements to the IR&G and the DAWG through the C2CIB.

### 3.1.3  Implementation Layer Functions

Under this capability portfolio management approach, the Services and Defense Agencies continue to manage and execute their respective JNO programs across DOTMLPF and fielding processes.  JNO development is executed in collaboration with and through existing capability providers (Component Headquarters Elements and Acquisition Executives, Service Program Managers (PMs) and Executive Offices, Joint Program Executive Offices (JPEOs), and Agencies)) based upon existing roles, equities and expertise to deliver capabilities across the DOTMLPF spectrum.

The Component providers of the programs and systems in the portfolio continue to develop and acquire the systems but in the context of the capabilities to be delivered by the portfolio.  Component Headquarters and Acquisition Executives, JPEOs, PMs and supporting organizations will provide full information on their programs as required by the JNO CPM to manage the portfolio including RDT&E, O&M and Procurement lines.  Components accept information tasking requirements from the JNO CPM to help the CPM prepare POM inputs that are consistent with CPM guidance, develop architectures, conduct trade studies and risk assessments, perform system engineering and integration, and monitor implementation layer test planning.  Components participate in portfolio reviews and individual program reviews to determine synchronization, integration, interoperability, programmatic alignment (e.g., cost, schedule) and compliance with guidance, outcome expectations, and risk criteria.

The CPM develops collaborative mechanisms and processes for the Services to provide input, feedback and advice to the JNO CPM related to Change Proposals (CPs), POM Issues and other recommendations. This enables the Services to identify direct or indirect impacts of proposed CPM recommendations, and provide to the CPM a comprehensive, authoritative understanding of Service architectures, capabilities, capability gaps, concepts, campaign plans and pre-decisional Service POMs as related to the JNO portfolio.

### 3.1.4  Data Transparency

The CPM works closely with the DoD CIO, USD(AT&L), PA&E and the Components to identify data required to manage the JNO portfolio and ensure transparency of such data.  The CPM uses multiple authoritative data sources in DoD to obtain data required for portfolio management including:  Defense Programming Database Data Warehouse (DPD DW), DoD Acquisition Management Information Repository (DAMIR), Knowledge Management/Decision Support (KM/DS), DoD Architecture Repository System (DARS), DoD Information Technology Portfolio Repository (DITPR), and Select and Native Programming Information Technology (SNaPIT).  The CPM also works with all DoD stakeholders to establish an approach (business

rules, data structure changes, knowledge management tools) that will strengthen the linkage of authoritative information to capabilities without compromising information flexibility.

## 3.2 Interfaces with DoD Processes

In the near-term, the CPM is using and leveraging existing decision processes without creating redundant processes, as discussed in following sections. In the mid- and longer-term, the Institutional Reform and Governance (IR&G) initiative envisions streamlined decision framework and processes, including further institutionalizing the CPM approach. The following outlines the near-term relationship of the JNO CPM and these decision processes.

### 3.2.1 PPBE

The JNO CPM exercises authorities provided by the DepSecDef to have visibility of and manage investments within the JNO portfolio. With C2CIB endorsement, the JNO CPM provides analysis and recommendations to resource reviews such as 3 Star Programmers and DAWG reviews. The C2CIB provides executive level validation for JNO CPM decisions and issues and advocates for the CPM as appropriate in 3 and 4-star PPBE forums. The JNO CPM participates in the strategic planning process and provides input for the Strategic Planning Guidance (SPG). The JNO CPM uses the existing PPBE process to issue JNO portfolio planning guidance to the strategic programming process (e.g., Joint Programming Guidance, Chairman's Program Recommendations) and interacts with the implementation layer to review POM content and execution year actions. The JNO CPM participates in the annual Program and Budget Review (PBR) and Comptroller execution reviews and is working with IR&G, Comptroller and PA&E to tailor annual PBR to match the CPM trade-space. It is proposed that the JNO CPM will co-chair JNO execution reviews with the Comptroller.

The CPM develops JNO portfolio planning and programming (e.g., POM) guidance for C2CIB approval and issuance to Services and Agencies (either directly or via current PPBE processes according to authority granted to the C2CIB). Services and Agencies must notify CPM prior to deviating from guidance.

The CPM identifies deviations from guidance to the C2CIB, PA&E, and Comptroller. The CPM also develops and submits change proposals (CPs) and POM issues to PA&E as part of the annual PBR process. In developing CPs and issues, the JNO CPM can identify offsets from within the entire JNO portfolio.

### 3.2.2 DAS

The JNO CPM, with approval of the C2CIB, USD(AT&L) and DAWG will manage the JNO portfolio consistent with the principles of DoD Directive 5000.1 and DoD Instruction 5000.2, in support of the Milestone Decision Authorities (MDAs) for all programs in the JNO portfolio. ASD (NII)/DoD CIO, in coordination with USD (AT&L) is the primary interface for the CPM on the C2CIB for acquisition matters. In addition, the JNO CPM conducts cross-program assessments to evaluate portfolio synchronization and capability delivery. This approach envisions focused, "contiguous", non-duplicative portfolio and program assessments, leveraging

existing Program Status Reviews (PSR)) and including risk assessments and mitigation plans and approximately quarterly IPRs for the C2CIB.  The assessments evaluate the program execution and determine the associated risks in delivering the required program products (capabilities) within the established schedule, costs and performance objective boundaries.

For programs of record within the portfolio, in support of the MDA, the JNO CPM participates in concept decision, acquisition milestone and investment balance reviews.  Through this participation the CPM provides a portfolio perspective to programs under review, and coordinates on acquisition strategies, acquisition program baselines (APBs), systems engineering plans, risk assessments/AoAs, test and evaluation master plans (TEMPs) or other acquisition documentation developed by the implementation layer. The JNO CPM provides input to technology strategy/planning and ACTD/JCTDs, and provides technical and issue analysis to communities of excellence and MDAs as required.  As an example of efficiency streamlining, the program reviews required by the Program Decision Memorandum (PDM) III ground network study will be leveraged to meet the need for a corresponding CPM Cross-Program review.

### 3.2.3 JCIDS

The JNO Operational Proponent is the lead sponsor for capabilities matters within the Net-Centric FCB, the JCB and the JROC engagement activities.  The JNO OP translates top level guidance into JNO capability guidance and provides priorities to the JNO CPM for portfolio balancing and capability development based upon JROC approved gaps.  Capability priorities and gaps are identified and validated in JNO capability based assessments (CBAs), Joint Capability Documents (JCDs), JNO capability prioritization and optimum capability mix approved by JNO SWarFs, the Joint Staff Capabilities Gap Assessments, and external-portfolio dependencies on JNO.  The OP leads the development and refinement of JNO concepts, capabilities specification and solutions through analysis and experimentation, to include assigned CBAs and Functional Solutions Analyses (FSAs), operational architecture products, and capability documents associated with portfolio items.

The OP works with other Combatant Commands, the Joint Staff, Services and agencies to integrate and streamline the capabilities development and oversight process for the JNO portfolio (e.g., development and approval of FSAs and Evaluation of Alternatives (EoAs) and other JCIDS documents (Initial Capability Document (ICD), CDD, CPD, Joint DOT_LPF Change Request (DCR)), with a focus on prompt decision-making within the approved governance structures to expedite delivery of capabilities to warfighters.

Specific actions and initiatives the OP employs to integrate and streamline capabilities processes include:

- Expanded use of the NC FCB Working Group by the JNO CPM.  The CPM and NC FCB have agreed to leverage the NC FCB Working Group for integration and synchronization of efforts between JCIDS and the CPM test-case.  This agreement will allow the Services and COCOMs another entry point into the CPM processes without having to dedicate a new and separate set of personnel resources.

- Expanded use of the JNO Senior Warfighter Forum (SWarF) to discuss near and mid-term operational capability needs and gaps and to establish COCOM priorities and positions. Outputs drive JNO CPM actions and influence the Department's capability, acquisition and budget processes.

Additional details of how the OP is working with the NC FCB, COCOMs and other stakeholders to integrate and streamline capabilities processes are addressed in Annex C.

### 3.3 Interface with IT Mission Areas and Domains

Capability portfolio management concepts were developed by the Department with an understanding of existing Department governance structures and regulations, to include Information Technology (IT) portfolio management as established under DoD Directive 8115.01 (October 2005). Capability portfolio management, as implemented by the DAWG, seeks to streamline and strengthen the management of key cross-cutting Department capabilities. In particular, the investment content of the four initial CPMs, JNO, JC2, BA, and JL, is contained completely or in large part within the IT Mission Areas defined in DoDD 8115.01. As such, the Deputy Secretary of Defense is directing that CPMs benefit from exceptional process or governance streamlining and authorities.

The management and governance approach described herein for the JNO capability portfolio remains consistent with policy stated in DoDD 8115.01, as well as responsibilities assigned to the ASD(NII)/DoD CIO. Specifically, the IT investment content of the JNO portfolio is being managed effectively as a portfolio within the Enterprise and encompasses content from at least two of the defined IT Mission Areas (i.e. Enterprise Information Environment (EIE) and Warfighting). CPMs, however, interface with DoD decision support systems as required in the directive, albeit in a somewhat streamlined way.

While the JNO CPM is not subordinate to EIE IT subportfolio managers that are permitted (but not specified) under DoDD 8115.01 or to other governance structures that have been implemented for those sub-portfolios, it is the intent of the JNO CPM to leverage and work collaboratively with related subportfolio managers (e.g. Domain Owners) and their governance structures. Although the JNO CPM along with the JC2 CPM are the execution arms of the C2CIB, mutually supportive relationships are being established between the JNO and JC2 CPMs and IT subportfolios to cross inform and leverage the CPM analytical capabilities and management authorities to achieve IT portfolio management objectives more quickly.

The tenets of this JNO CPM business plan guide harmonization and coordination with EIE and Warfighting IT Mission Area sub-portfolio structures to achieve DAWG goals and meet DoD policy direction including:

- For all JNO portfolio programs, the JNO CPM serves as the primary execution arm of the ASD(NII)/DoD CIO for balancing requirements and investments between and across JNO Tier 2 capability areas and the corresponding EIE Domains and for implementing balancing actions approved or validated by the C2CIB.

- As directed by the ASD(NII)/DoD CIO, the JNO CPM provides mission area level cross-domain balancing and analysis extending as appropriate to the JNO portfolio boundary in support of DoD CIO responsibilities as Lead for the EIEMA.

- Under the guidance of the C2CIB and in coordination with EIEMA and Warfighter Mission Area (WMA) Domain Owners, the JNO CPM has the primary responsibility to conduct portfolio-wide engineering, integration, synchronization, and capabilities analyses for all programs within the approved JNO portfolio.

- As directed by respective mission area leads and in accordance with DoDD 8115.01, EIEMA and WMA Domain Owners may perform Domain-level analyses with recommendations, which will be provided to and inform JNO CPM cross-program and cross-Domain balancing activities and development of the CDP.

- EIE Domain Owners will continue to lead maintenance of respective Domain investment inventories within existing IT repositories (e.g. DoD IT Portfolio Repository (DITPR) and Select and Native Programming Information Technology (SNaPIT) and for resolving IT domain overlaps that affect EIEMA domains.   The JNO CPM is responsible for identifying JNO-primary program elements within the Defense Programming Database DPD Data Warehouse (e.g. FYDP) and for resolving overlaps between JNO and other JCA portfolios.

- The JNO CPM participates in the EIEMA Investment Review Board (IRB) to maintain situational awareness of cross-program dependencies, impacts and stakeholder requirements outside the JNO portfolio and to share JNO CPM cross-Domain analyses. Except as directed by the ASD(NII)/DoD CIO, the EIEMA IRB will generally defer to the JNO CPM and C2CIB on matters pertaining to the JNO portfolio and the JNO CPM will generally defer to the EIEMA IRB for IT investment recommendations outside the JNO portfolio.

- The CPM will work with the WMA Lead and the EIEMA Lead to evolve the WMA, JCA and EIEMA JNO-related taxonomies to be consistent, support the CPM and IT PfM efforts, and facilitate integration/federation of JNO and Component architectures.  The JNO CPM will advocate the continuing extension of JCA to a common taxonomy at Tiers 3 and 4.

The JNO CPM will work with the IT PfM Leads and the IR&G Leads to continue to define appropriate integration and streamlining of portfolio activities and eliminate inefficiencies represented by overlapping portfolio governance and management activities within the Department.

Other CPMs and the Defense Intelligence Mission Area (DIMA), Warfighter Mission Area (WMA), and Business Mission Area (BMA) leads will identify key dependencies (technical and programmatic) of their portfolio programs/portfolios on the JNO portfolio.  JNO CPM will provide these portfolio managers JNO capability delivery points, and technical interfaces through the JNO CDP.

## 3.4 Authorities

JNO capabilities - individual JNO programs as well as Tier 2 capability areas - are highly inter-dependent.  Delivery of increased JNO capability levels to the warfighter requires a rigorous synchronization and configuration management effort across multiple programs, which is a unique central function and benefit of the JNO CPM.  Initially, consistent with the DepSecDef memoranda dated September 14, 2006, and March 15, 2007, the JNO CPM is authorized authorities in the following manner:

- Full and timely visibility into Service and Agency JNO investments and programs, including cost, schedule, performance, technical and risk factors, including execution year.

- Access to pre-decisional POM build status for JNO programs, as required prior to final POM submission to OSD.

- Advance notice and justifications for all reprogramming actions and requests and change proposals affecting the portfolio – JNO funds will not be reprogrammed without notice to or concurrence of the JNO CPM unless otherwise directed by the C2CIB or DAWG.

- To conduct JNO CPM-led Portfolio and Program Assessments and other information requests in coordination with PMs, PEOs, and JPEOs – the CPM has an open and direct line of communication with the MDA and with the PM for each program in the portfolio (which will be channeled or coordinated in most cases through Service focal points of contact).  Specifically, the CPM is authorized to schedule and conduct execution and risk assessment reviews directly with PMs (or PEOs) for incorporation into the CPM portfolio management functions. The JNO CPM will ensure that the Component and/or Service Points of Contact (POCs) are invited to participate in these reviews and assessments as well as OSD/JS representatives as appropriate. The JNO CPM performs program assessments from a portfolio perspective (e.g., impacts of changes to a program schedule on the portfolio incremental capabilities) and recommendations directly to the MDA for all milestones and at other appropriate times. The JNO CPM will complete program reviews and assessments in conjunction with existing program reviews (e.g., Program Status Reviews) and existing program oversight activities to the maximum extent possible.  For example, in the case of space systems, the CPM will leverage the streamlined acquisition review process established in NSS 03-01.  Direct technical discussions and information exchanges with the programs is also required to enable portfolio architectures and associated system engineering functions.  The JNO CPM will not have directive authority to the PM.  Component headquarters will designate a single point of contact to whom the JNO CPM will provide task requests.  Components will respond to all JNO CPM requests in a timely and comprehensive manner.

- To identify and recommend offsets from anywhere within the JNO portfolio envelope as defined in the Portfolio Scope.

- To generate a CDP and resource recommendations to align end-to-end portfolio capability deliveries in an integrated manner. Upon C2CIB / DAWG approval, task recommended actions through the appropriate acquisition/resource processes and authorities.

As appropriate, the JNO CPM will request additional authorities based on validated needs and demonstrated performance in accordance with Attachment A of the DepSecDef memorandum dated September 14, 2006.

## 3.5  Interface with the DoD CIO

The JNO CPM informs the ASD(NII)/DoD CIO as Principal Staff Assistant (PSA), as the DoD CIO for Information Technology governance (e.g. EIEMA), and as the senior Tri-Chair of the C2CIB.  This enables the dual-hat ASD(NII)/DoD CIO to craft better informed strategic decisions within other executive and strategic level governance bodies, including the CIO Executive Board, C2CIB and the DAWG.  While the JNO CPM remains a management layer function, the C2CIB Tri-Chairs may use CPM products, expertise and authorities to benefit broader IT governance effectiveness, including the CPM's robust cross-domain analysis and balancing capability.

Effectively, the DoD CIO is the integration point for the EIEMA and C2CIB portfolio processes.  This is a critical function that supports the Clinger-Cohen statute as well as Information Technology portfolio oversight.  The JNO portfolio is an enabler not only for the other CPMs, but for the entire Department, to include areas such as the business systems, medical, personnel, etc.  The DoD CIO provides the single integration point to ensure portfolio management responds effectively to enterprise needs and objectives.

## 3.6 Capability Portfolio Integration Points

There are capability dependencies and integration points between and beyond the established capability portfolios.   BA, JL, JC2, and other business, warfighting, and intelligence stakeholder applications depend upon JNO provided capabilities.  For example, Enterprise Services over secure communications networks enable JC2 sharing of situational awareness.  The JNO CPM, in coordination with EW SE, will be the nexus for a process to manage the requirements coming from the other portfolios that must be satisfied by the infrastructure, and the development and use of jointly approved standards.  This will require a robust Configuration Management (CM) process that is managed across all the portfolios.

There are capability, technical and migration/schedule dependencies between the portfolios.  Capability-based dependencies include transport for secure movement of video, imagery, voice and data, and secure access to users, applications and services across the Enterprise.  Technical dependencies include integration of the inherent communications for the portfolios, synchronized migration to Internet Protocol (IP) based applications and services, message format translation (mediation) and common use of interoperability standards such as Net-Centric Implementation Documents (NCIDS).  For those interfaces and standards that affect end-to-end interoperability and performance, the EW SE Working Groups will be utilized as appropriate.

The following outlines the specific integration points and relationships between the CPM portfolios.

### 3.6.1  JNO-JC2 CPM Relationship

Integration points and functional relationships between the Joint Net-Centric Operations (JNO) and the Joint Command & Control (JC2) capability portfolios for the purpose of establishing cross-portfolio synchronization are summarized below.

- JC2 will identify key dependencies (technical and programmatic) of the JC2 programs/portfolio on the JNO portfolio; this will be primarily through the JC2 Campaign Plan and will use the Joint Capability Area (JCA) taxonomy

- JNO will provide the JC2 portfolio manager JNO capability priorities, delivery points, and technical interface requirements, e.g., through the JNO CDP

- The portfolio resource trade space should remain within the boundaries of each portfolio

- The JNO and JC2 CPMs will harmonize the following activities to the extent possible:
    o Use of tools and supporting analyses
    o System engineering activities, e.g., architectures and end-to-end threads
    o Interaction with the Information Technology Portfolio Management processes (IT PfM)

- The JNO and JC2 CPMs will establish cross portfolio common integration events within respective CPM annual plans as required for example: POM Issue development process, Fiscal Guidance and Capabilities Based Assessments (CBAs)

The JNO and JC2 CPMs have established and maintain a routine engagement process between the portfolios but at minimum will have working level meetings on a monthly basis and senior coordinating meetings on a quarterly basis.  These relationships will be documented as required in a Terms of Reference (TOR) between the JNO CPM and the JC2 CPM.

## 3.6.2  JNO-Other CPM Relationships

The Battlespace Awareness (BA) and Joint Logistics (JL) CPMs will identify key dependencies (technical and programmatic) of their portfolio programs/portfolio on the JNO portfolio; JNO, BA and JL are using the Joint Capability Area (JCA) taxonomy.  JNO provides the BA and JL portfolio managers JNO capability priorities, delivery points, and technical interface requirements, e.g., in the JNO CDP.   Monthly and quarterly exchange meetings among JNO, JC2 and the Battlespace Awareness (BA) CPMs are being conducted at the action officer and senior executive levels, respectively.  Issue-driven interactions take place as needed.

## 3.7 Measures of  Performance

Delivering needed capabilities to the joint warfighter more rapidly and efficiently is the ultimate criterion for success of this effort.  The JNO CPM will develop and maintain a plan for measuring CPM Test Case progress and success. This plan will address two major aspects of the JNO Test Case.  First, it will establish metrics and parameters to measure the progress in JNO capability delivery and second, it will address test case metrics for the CPM itself.  The capability delivery metrics will address alignment to strategic direction, warfighter capability

needs, and portfolio capability synchronization and integration. The CPM management metrics will address management objectives and process improvement. The initial plan is included as Annex D. Progress against these metrics will be presented to the C2CIB (DAWG as required) and IR&G on an annual basis.

## 3.8 Organization Structure

Capability portfolio management will have budget and programmatic implications beginning in FY07 and continuing throughout the FYDP for selected programs and systems assigned to each test case portfolio. Establishing this new construct will require some realignment of existing resources and/or funding for full time personnel (government/contractor mix) to implement the capability portfolio management proof of concept. These personnel will provide the organizational support necessary for the capability manager to provide oversight and linkage across the Department's planning, acquisition, programming and execution processes.

The CPM will identify requirements for its staff to have acquisition certification, education or training as required and will work toward meeting these objectives (e.g., through selected courses at DAU) as the role and the functions of the CPM mature.

Figure 7 details the organizational structure and functional teams for the JNO CPM at IOC in FY 2007. Staffing details are provided in Annex B. The CPM Director is a senior SES official with two SES-level deputies, one for Capabilities, and the other for Integration. To establish collaboration and transparency and foster efficiency of the CPM, the Services will provide one person with program integration expertise to be assigned or matrixed to the CPM as referenced in Annex B to serve as a single point of contact for their Service. This will bring immediate and direct Service perspective to all CPM activities. The JCS J6 will also provide representatives to the JNO CPM as defined in Annex B. The presence of these individuals on the staff of the CPM is anticipated to result in a highly collaborative relationship between the CPM and the Services and other key stakeholders on all JNO related matters.
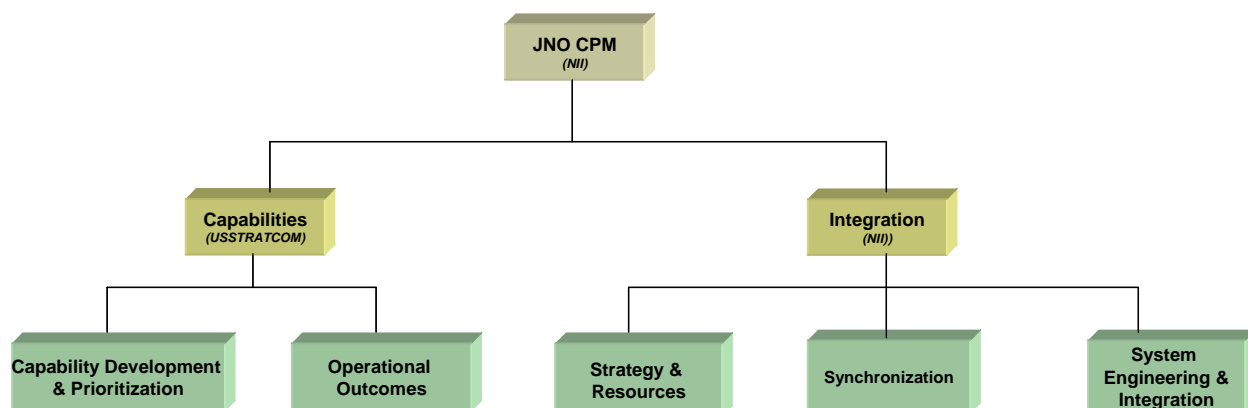


Figure 7. JNO CPM Organization Structure

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## 4.0 PLANNED ACTIVITIES

### 4.1 Implementation Timeline

Three implementation phases are planned for the stand-up of the CPM office: Phase I (through end of FY2006) was a startup phase in which full staffing was not yet on board; Phase II (FY2007), a build phase, during which time full staffing is reached; and Phase III (FY2008+) is a period of steady state operations. The activities and the objectives of each phase are provided in Annex E. One of the key early integrating activities in Phase II is to conduct and oversee a PR 09/POM 10 assessment process for the JNO portfolio. This process is defined below in paragraph 4.2 and detailed in Annex F.

All activities and objectives will be periodically reviewed and updated by the CPM and major adjustments will be briefed to the C2CIB as necessary.

### 4.2   JNO CPM PR 09/POM 10 Assessment Process

In his September 14, 2006 and March 15, 2007 memoranda, the DepSecDef directed the Capability Portfolio Managers (CPMs) to ensure their portfolios are aligned with strategic objectives, the capability mix within each portfolio is optimized to meet warfighting needs, and directed assessments and related actions for PR 09 and POM 10 guidance.

To meet these objectives the JNO CPM will establish an assessment process centered on focus areas and will lead focus teams composed of Combatant Command (COCOM), Service and Agency representatives in a collaborative process to resolve capability gaps, synchronize capabilities and programs, and mitigate portfolio risks.

The JNO CPM will present recommendations from this assessment review to the C2CIB, the DAWG and the Joint Requirements Oversight Council, and Defense Acquisition Board as appropriate.

Annex F details the framework for the assessments, schedule, Component roles, and focus areas.

**Annex A**

**Current JNO JCA Tier 2 Definitions**

**Knowledge Management:**  The ability to systematically discover, select, organize, distill, share, develop, and use information in a social domain context to improve warfighter effectiveness. (Derived from NCOE JIC)

**Information Assurance:** The ability to provide the measures that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities. (DoD Directive 8500.1, Information Assurance)

**Network Management:**  The ability to provide the network with the desired level of quality, agility, and trustworthiness. NM focuses on the configuration, availability, performance and manageability of network services and the underlying physical assets that provide end-user services, as well as connectivity to enterprise application services. (Derived for Joint Concept of Ops for GIG NetOps)

**Enterprise Services:** The ability to provide well-defined, enterprise network functions that accept a request and return a response through an interface with a user or another service such as collaboration, messaging, or information discovery and storage.  (Derived from NCOE JIC)

**Information Transport:**  The ability to provide the physical communications media over which assured connectivity takes place, supported by switching and routing systems, and the computing infrastructure.  (Derived from NCE JFC)

**Applications[3]:** The ability to provide a locally resident software program or group of programs that interfaces directly with Joint Force decision-makers and communities of interest, which carries out generalized or mission-specific tasks or processes for which a computer is used, i.e., word processing, spreadsheets, graphics, database management, and communications packages. (Derived from NCOE JIC)

Although Computing Infrastructure is currently placed in the draft Tier 3 level of the JCA JNO taxonomy, the JNO experimental portfolio recognizes Computing Infrastructure effectively at the Tier 2 level to better reflect the organization of the EWSE GIG technical baseline.  According to the definition developed by the DoD CIO's Computing Infrastructure IT Domain, computing infrastructure (at the enterprise level) includes DoD enterprise automated computing systems, computer related programs, initiatives, or capabilities, and associated DOTMLPF, that are used in the acquisition, storage, manipulation, management, control, and display of data or information.  The primary portfolio management emphasis is on hardware, software operating systems, and hardware/software operating systems support.

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[3] For capability portfolio experimentation, "Applications" is omitted from the JNO portfolio to avoid confusion and conflict with other capability portfolios which are primarily composed of applications.

# Annex B

## CPM Staffing

| Staff Element | Duty | Qty | Function/Remarks | Billets | | | Billet Source(s) |
|---|---|---|---|---|---|---|---|
| | | | | Mil | Civ | Cont | |
| **CPM Management** | Director | 1 | Manages and directs all CPM activities; SES/FOGO with acquisition background (shown as Civ, but can be military or civilian or IPA) | | 1 | | NII/CIO |
| | Deputy Dir for Capabilities | 1 | Manages and directs capability identification and development; 1 Star/SES | 1 | | | STRATCOM (Mil or Civ) |
| | Deputy Dir for Integration | 1 | Manages and directs all technical and programmatic integration; 1 Star/SES (can be civilian or IPA) Acquisition background | | 1 | | NII/CIO |
| | CPM Administrative support | 1 | Office administrative support | | | 1 | |
| **Strategic Planning and Resource Management** | Strategic Planner | 1 | Resp for Strategy, external portfolio integration, and resource analysis activities | | 1 | | NII/CIO |
| | Technical Director | 1 | Direct and coordinate all technical activities and design guidance | | | 1 | |
| | Integration analyst | 1 | Dependencies and integration points with JCC, BA Joint Logistics, Integrated Master Schedule | | | 1 | |
| | Contract Specialist | 1 | Budget development/maintenance, contract monitoring for CPM operations | | 1 | | NII/CIO |
| | Senior Budget analyst | 1 | Develop resource guidance, investment process, POM coordination and oversight | | 1 | | TBD |
| | Budget analyst | 1 | POM/Budget monitoring/Comptroller execution review | | | 1 | |
| | Statistician/ analyst | 1 | Portfolio inventory baseline | | | 1 | |
| | M&S engineers/ analysts | 2 | C2 Constellation, ForceNet and LandWarNet Specialists; focused on warfighter measures of effectiveness | | | 2 | |
| | Computer systems analyst | 1 | Project Management and IT Tool support | | | 1 | |
| **Systems Engineering and Integration (SE&I)** | SE&I Manager | 1 | Direct and coordinate all technical activities, design guidance, and architecture | | 1 | | NII/CIO |
| | Chief Engineer | 1 | Overall lead for technical analysis, system engineering and integration | | | 1 | |

| Staff Element | Duty | Qty | Function/Remarks | Billets | | | Billet Source(s) |
|---|---|---|---|---|---|---|---|
| | | | | Mil | Civ | Cont | |
| | Comms Systems engineers | 4 | Comms system engineering and integration analysis, performance assessments and support across JNO; SATCOM engineer, RF/wireless communications engineer, communications Systems engineer | | | 4 | |
| | Network engineer | 3 | Technical analysis and monitoring for network architecture and integration across JNO | | 1 | 2 | TBD |
| | Network Management Engineer | 2 | Technical analysis and monitoring for network management architecture and integration across JNO | | | 2 | |
| | IA analyst/ Systems Engineer | 2 | IA systems engineering support and analysis in support of capability integration, vulnerability and performance assessment | | | 2 | |
| | Computer Systems Engineer | 1 | Enterprise services and computing infrastructure program assessment and integration | | | 1 | |
| | Knowledge Management Specialist | 1 | Knowledge management program and S&T analysis and definition | | | 1 | |
| | Architectural engineer | 2 | Technical and systems architecture | | | 2 | |
| | Test and evaluation engineer | 2 | End-to-end spiral master test planning, test coordination, test integration and documentation | | | 2 | |
| | Configuration Mgmt. specialist | 2 | CM guidance and compliance; system architecture support; principal fielding advisor | | | 2 | |
| **Portfolio Synchronization** | Synchronization Manager | 1 | Program execution coordinator, capability delivery manager, integrated master schedule and inter-program guidance | | 1 | | NII/CIO |
| | Capability Delivery Coordinators | 3 | Define and coordinate capability increments | | 3 | | AF/Army/Navy 1 ea[4] |
| | Synchronization Analyst/ Engineer | 6 | Technical support for development of Integrated Master Schedule and Capability Delivery Plan | | | 6 | |
| | Program analyst | 6 | Program execution oversight (NM, IA, Services, SATCOM, Terminals, Radios, Long Haul) | | 6 | | NII/CIO |

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[4] These billets will remain with the Services.

| Staff Element | Duty | Qty | Function/Remarks | Billets | | | Billet Source(s) |
|---|---|---|---|---|---|---|---|
| | | | | Mil | Civ | Cont | |
| | Program Technical Specialist | 6 | Program execution technical support (NM, IA, Services, SATCOM, Terminals, Radios, Long Haul) | | | 6 | |
| Capabilities & Operations | Operational Proponent Manager | 1 | Lead Capability Development & Prioritization | 1 | | | STRAT (Mil or Civ) |
| | Operational Outcomes Manager | 1 | Lead Operational Outcomes Analysis | 1 | | | STRAT |
| | Capabilities Analysts | 4 | Capability and Requirements Process team | | 2 | 2 | STRAT & J6 (Mil or Civ) |
| | Systems engineer | 2 | OV architecture development | | | 2 | |
| | System analyst | 2 | JCB/JROC/COCOM liaison | | 1 | 1 | J6 (Mil or Civ) |
| **CPM Grand Total** | | 67 | | 3 | 20 | 44 | |

**Annex C**

**Capabilities Process Procedures**

Specific actions and initiatives the Operational Proponent will employ to work with the NC FCB, COCOMs and other stakeholders to integrate and streamline capabilities processes include:

- Expanded use of the NC FCB Working Group by the JNO CPM.  The CPM and NC FCB have agreed to leverage the FCB Working Group for integration and synchronization of efforts between JCIDS and the CPM test-case as indicated in figure X below.  This agreement will allow the Services and COCOMs an entry point into the CPM processes without having to dedicate a new and separate set of personnel resources.  This agreement will also facilitate the forming of specific special action teams for the conduct of detailed development and assessment work (e.g. CBA assessment teams) The initial rules of engagement are:

    o Existing NII and STRATCOM member seats on NC FCB WG/FCB remain unchanged
    o The JNO CPM may co-chair the working group for JNO CPM Topics
    o JROC agendas led by NC FCB WG Lead(J6); CPM agendas led by JNO CPM; administrative support provided by NC FCB Secretariat
    o To maintain consistency, NC FCB WG Lead still runs/facilitates meetings and polls members
    o JNO CPM frames topics and describes anticipated WG members' roles
    o JNO CPM coordinates with NC FCB Secretariat to schedule topics for NC FCB WG/FCB; NC FCB Secretariat continues to provide admin support (scheduling, staffing, collaboration tools, posting of briefs/documents on KM/DS, etc.)
    o Standing FCB staffing & read-ahead procedures/timelines to be used (e.g. read-aheads sent NLT 48 hours prior)
    o Secretariat will coordinate with C2 CIB Secretariat to schedule items of mutual interest to the CIB and FCB
    o NC FCB Chair will provide final arbitration, if necessary, to deconflict FCB schedule for any hot topics
    o FCB WG members (via the Secretariat) may request JNO CPM items be briefed to NC FCB for coordination/info
    o JNO CPM may request WG member participation (or access to SMEs) for JNO CPM special action teams
    o JNO CPM provides formal request via normal channels or J6 will help via JSAP process
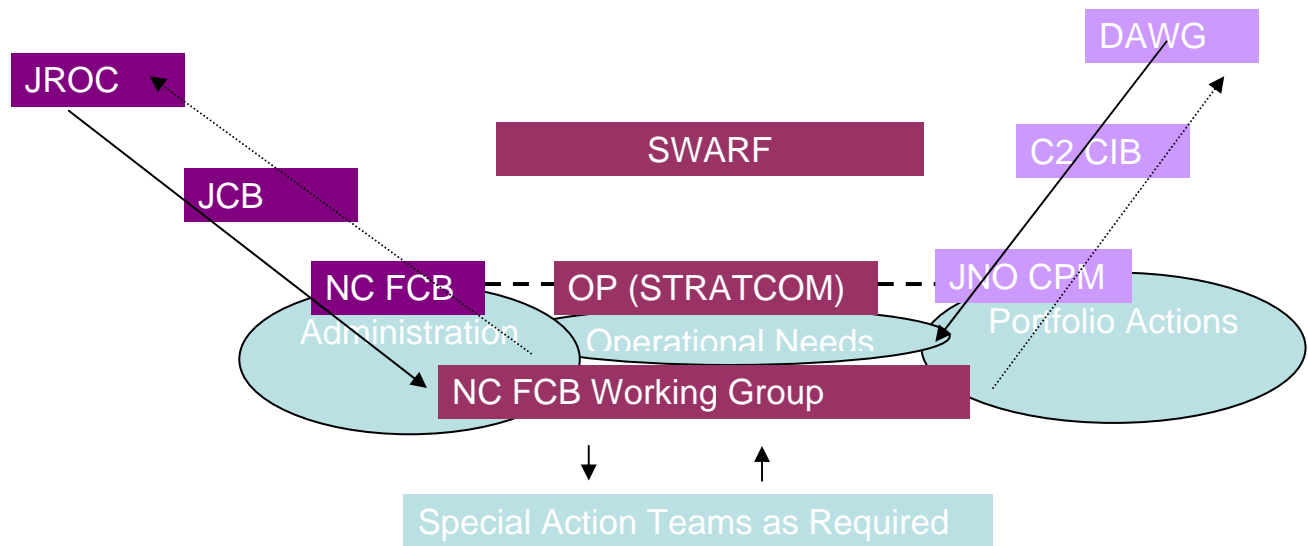
Figure C-1,   Joint use of the NC FCB Working Group

- Early adoption of the principles underlying the EoA process.  This modification to the Analysis of Alternates conducted as part of the CBA seeks to save time in the assessment and approval process by taking into account fiscal realities early in the process.  This prevents unproductive work exploring solutions that don't fit within the fiscal environment.  Regardless of the approval status of the EoA imitative, the OP will implement the underlying principles by focusing CBA activities on 1) gaps that can be filled in a resource constrained environment (e.g. less "ubiquitous connectivity for all users", and 2) on those solutions which are most executable within the constraints of the current PPBE process.

- Offsite development and initial staffing of capability products using dedicated and empowered teams with full stakeholder participation.  The Department, and particularly the Services, have a tremendous amount of expertise in all facets of JNO capabilities.  Often, those resources are difficult to tap within the constraints of formal development and staffing processes such as the Joint Staff Action Processing (JSAP).  By assembling these resources together (either physically or using the network) and empowering a selected group to develop, assess, and conduct initial staff review of a capability products, significant time and resources can be saved over legacy processes.

- Expanded use of the Senior Warfighter Forum (SWarF) to discuss near and mid-term operational capability needs and gaps and to establish COCOM priorities and positions.  Outputs will be used to drive JNO CPM actions and influence the Department's capability, acquisition and budget processes.

- Offsite development and initial staffing of capability products using dedicated and empowered teams with full stakeholder participation.

**Annex D**

**CPM Measures of Performance**

## D1. Overview

This annex provides a plan for measuring JNO CPM test case measures of performance and metrics. This plan will address two major aspects of the JNO test case. First, it identifies initial metrics to measure the JNO progress in delivering warfighter capabilities. In this area, the JNO CPM will measure effectiveness of the portfolio based upon the delivery rate of warfighter capability. For example, have the JNO CPM efforts improved warfighter capability (i.e. faster, more cost effective, and with fewer synchronization issues between programs)?

Second, the plan provides initial metrics to assess the test case CPM in meeting its management objectives. For example, has the JNO CPM achieved its business objectives such as developing an effective portfolio CDP, has it integrated effectively with the major decision processes of the Department as well as providing for process improvements?

This annex puts in place a framework, methods and rules for developing measures, and the initial metrics to measure against. The initial metrics will be refined as required in accordance with the framework. They will be assessed yearly and reported to the C2CIB.

## D2. JNO Capability Delivery Metrics

The QDR directs capability portfolios "to enable decision-makers to make informed choices about how to reallocate resources among previously stove-piped programs, to deliver needed *capabilities to the joint force more rapidly and efficiently"*[5]. Therefore, JNO CPM success is first and foremost measured by its ability to effectively address warfighter capability more effectively and rapidly than in the current process. The capabilities are derived through the CBA process, IPLs, JUONs, Most Pressing Military Issues (MPMI), relevant studies, experiments, exercises, lessons-learned, and from strategic guidance from the DAWG, the Strategic Planning Guidance (SPG), and QDR.

### D2-1. Strategic Alignment

For quantitative or directive guidance, e.g., from the SPG, QDR or DAWG, strategic alignment will be measured directly; otherwise it generally will be a qualitative measure, except in those cases where the guidance can be quantified. For example, the Departmental direction to transition to Net-Centricity will be measured using criteria in the DoD CIO's Net-centric Checklist.

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[5] Quadrennial Defense Review Report (QDR), February 6, 2006, p. 68.

The methods of evaluation are:

- Relevant DoD strategic direction and guidance (e.g., QDR, SPG, and DAWG) is mapped to the JNO portfolio and the CPM has subsequently developed recommendations and actions to align the portfolio with this direction.

- The CPM has developed recommendations that have been accepted and incorporated into the relevant DoD Strategic Planning and Programming documents e.g., SPG, JPG, & CPR

D2-2.  Warfighter Capability Needs

Figure D-1 shows the JNO Tier 2 capability areas and the 13 enabling capabilities derived from the NCOE Joint Capabilities Document (JCD).  While the 13 capabilities often support more than one Tier 2 area, in Figure D-1 they have been associated with the primary area supported. This provides an initial framework for reporting the degree to which validated warfighter needs have been met. Two initial metrics are: have all warfighter capabilities been defined and identified; and, has the warfighter ranked the JNO capabilities relative to other mission requirements that depend on JNO capabilities.
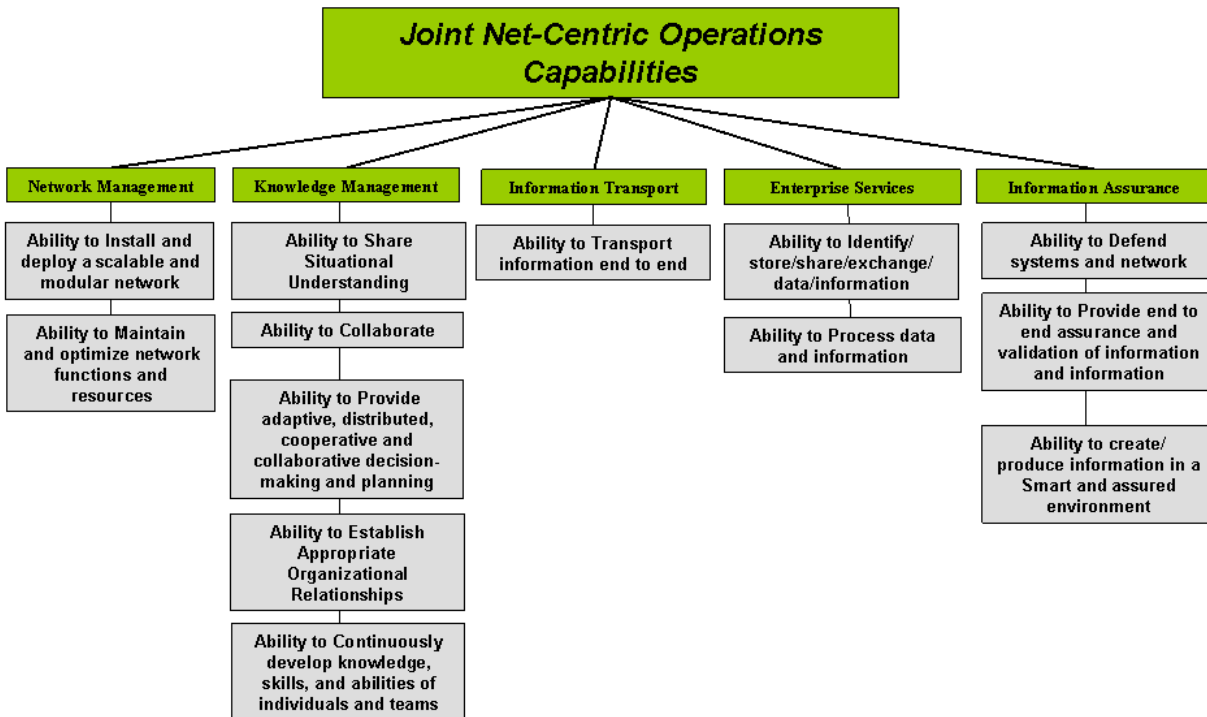


Figure D-1.  Warfighter Capability Needs Mapped to Tier 2 Areas

Each of the 13 capabilities is expressed as the ability to do something, such as exchange information end to end. Each capability will be increasingly achieved over time. For each epoch, gaps in delivering the capability associated with programs in the portfolio will be identified, leveraging the JCD, JUONS, IPLs, studies, exercise/real world lessons-learned, and mission threads. This leads to results-oriented measures: the number of gaps resolved over time; and, the reduction in the high priority gaps over time. More precise metrics that can measure the degree to which the gaps are closed will also be defined in FY07.

A key method of evaluation that will be used to develop and quantify the metrics will be to use mission threads that require some or all of the 13 capabilities. The ability to conduct the activities and tasks (within relevant conditions and standards) will be measured by associating or mapping operational activities and tasks to portfolio program functions that enable them. This mapping will be for the capability increments considered by the JNO. By tracking the flow of information and knowledge needed to accomplish a thread through the existing portfolio programs (i.e., as planned), and through potential alternatives and adjustments to the current portfolio (which may include non-materiel solutions), current process performance and quantifiable improvements resulting from JNO portfolio recommendations can be assessed. The "reach" of the portfolio into elements of the forces over time will be measured and reported. The warfighter will be able to visualize operational impacts on OPTEMPO, survivability and lethality of the force, as well as depth and sufficiency of solutions.

The methods of evaluation are:

- Warfighter capabilities have been defined and identified

- Increment capability needs aligned with warfighter IPLs, JNO CBAs, JUONs etc.

- Number of prioritized gaps resolved (over time) IAW Figure D-1.

- Delivery of portfolio capability (across the DOTMLPF) into all elements of the force over time (i.e., depth and sufficiency of the force fielded)

- Capabilities relative to other mission requirements (e.g., other capability portfolios) that depend on JNO capabilities have been ranked or prioritized

- Technical Measures of Performance (MOPs) for the JNO Tier 2 capability areas including:

    o Transport
        ▪ Network availability, latency, capacity, vulnerability
    o Network Management (NM)
        ▪ Situational awareness of networks
    o Information Assurance (IA)
        ▪ Probability of attack success/detection rates
        ▪ Attack response times

- Time/cost to securely establish an operational COI
  - Enterprise Services (ES)
    - Percent of users at the tactical edge with access to ES
  - Knowledge Management (KM)
    - Situational awareness enabled – emphasis on sharing with coalition partners

D2-3. Portfolio Capability Synchronization and Integration

The portfolio is more than the sum of its parts. It provides end to end capabilities that individual programs cannot achieve by themselves. Just as the DoD acquisition process measures the health of individual programs the CPM must measure the health of the overall portfolio. The CPM will develop and maintain a CDP and architecture which defines and guides the integrated capabilities to be delivered in each increment (epoch). The CDP will provide a schedule for portfolio deliveries and a basis for synchronizing recommendations. To oversee and manage incremental delivery, the CPM will track and report the degree to which the CDP schedules are being met and how well implementation compliance with the JNO architecture is occurring. Early or late delivery of each increment will be a metric. Another metric of concern to senior leadership is the overall cost of the portfolio over time. The JNO CPM will report total costs and any cost growth that occurs over time.

One of the goals of the JNO CPM is to reduce synchronization problems in the portfolio. For example, the JNO CPM will make recommendations to adjust "late to delivery" milestones that adversely impact on integrated increments. First key dependencies will be identified as a baseline.

Management of the portfolio will entail measurement and weighting of risk. The measure for risk is operationally focused, and is initially defined as the risk of not meeting goals for a capability or Tier 2 area. The metrics will be expressed as synchronization costs and in terms of capability enhancements. For example, the saving from elimination or reduction in duplicative capabilities/systems, or the depreciation cost of delivering a component capability which is not operationally useful because another necessary component is late-to-delivery.

The methods of evaluation are:

- IAW the CDP, number of identified and resolved or acted upon portfolio synchronization issues (e.g., MUOS terminals aligned with space segment)

- Reduction in overall portfolio risk (will require development of portfolio risk measurement methodology)

- Identification and correction of critical disconnects (e.g., KMI development not synchronized with TSAT, WIN-T etc.)

- Reduction in duplicative program capabilities

- Increased speed of delivery of capabilities to the warfighter

- Percent of programs compliant with the JNO architecture, the Net-centric Checklist, NR-KPPs and mature NCIDS

## D3. JNO CPM Management Metrics

This section provides management and process improvement objectives to measure and assess the effectiveness of the CPM Management for the test case CPM activity.

D3-1.   Management  Objectives

The methods of evaluation are:

- An effective management structure is established and implemented

- Business Plan is approved by the C2CIB

- Functions, roles, responsibilities, relationships to Governance and Execution levels are identified and being executed IAW the Business Plan

- The CPM is an active and effective participant in all three DoD decision processes: PPBE, DAS, JCIDS

- Established an effective systems engineering capacity that is capable of:  defining and assessing the end-to-end performance, identifying and averting integration issues, coordinated with other Department engineering efforts e.g., Enterprise Wide System Engineering (EW SE).

- Related IT portfolio management efforts are informed and leveraged: Information Technology (IT) Portfolio Mission Area processes; and,  NSA GIG IA Portfolio (GIAP) Management process

- Percent of execution of the Business Plan Phase I activities  successfully completed IAW Annex E of the Business Plan

- Percent of execution of the Business Plan Phase II activities successfully completed IAW Annex E of the Business Plan

- Percent of execution of the Business Plan Phase III activities successfully completed IAW Annex E of the Business Plan

- Provided input on technology strategy and planning to technology demonstration programs.

- Established effective relationships with the JC2, BA and JL capability portfolio efforts; TOR have been established for each CPM.

- Test case measures of performance are established and approved by the C2CIB

.D3-2. Process Improvement

The methods of evaluation are:

- Issued specific portfolio guidance to the Components.

- Established an effective and collaborative capability portfolio POM review process

- Obtained Passive Resource Authority (IAW DSD Sep 14, 2006 Memo)
    o The JNO CPM requests and receives the authority to require Components to get CPM approval for proposed changes to a given capability area's resource profile in the program, budget, and execution years.

- Obtained Active Resource Authority (IAW DSD Sep 14, 2006 Memo)
    o If necessary, the JNO CPM requests and receives active resource authority to more effectively manage and influence the JNO portfolio, e.g., CPM requested authority to establish a capability portfolio level budget

- Provided for Improved Portfolio Transparency
    o The JNO CPM, in coordination with the other test case managers, IR&G, and other Department stakeholders, establishes an approach (business rules, data structure changes, knowledge management tools) that will strengthen the linkage of authoritative information to capabilities without compromising information flexibility

- A repeatable methodology and toolset established to evaluate the JNO portfolio based on capability, performance, cost and risk is developed and applied
    o Portfolio assessment methodology linking capabilities to solutions
    o A risk process and methodology is developed and applied
    o Linkages to the DoD decision processes, JCIDS, PPBE and DAS are identified
        ▪ Proposed changes to these processes to enable capability portfolio management to succeed are considered and those that are approved are rapidly inserted in guidance and policy

**Annex E**

**Implementation Timeline**

Selected activities and milestones for the phased implementation of the CPM are summarized below.   These will be periodically reviewed and updated by the CPM and major adjustments will be briefed to the C2CIB as necessary.

**E1.  Phase I:  Sept 06**

- Coordinate/secure initial JNO CPM staffing, facilities and logistical support
- Conduct FY 08-13 JNO portfolio review and assessment for synchronization and integration issues; develop POM issues as required
- Present POM 08 Assessment to the DAWG that provides:
  - Strategic Perspective and Context
  - Capability Mix
  - Cross-Component Program Assessment
- Initiate capability needs and gaps identification/prioritization process
- Initiate CDP and architecture development
- Develop draft MOE/MOP

**E2.  Phase II:  FY07**

- Participate in Comptroller execution reviews
- POM08:  provide supporting analyses and JNO portfolio changes to C2CIB (as required)
- Present Strategic Plan to the DAWG
- Conduct JNO SWarF
- Conduct PR 09/POM10 Assessment Process (detailed in Annex F)
- Initiate Functional Solutions Analyses (FSAs) as assigned
- Complete CDP and initial JNO technical/systems architecture (ver. 1)
- Review and adjust portfolio scope as required
- Conduct program reviews and support C2CIB and MDA acquisition oversight functions as required
- Develop DOTMLPF change requirements documentation and JNO ICDs per NCOE JCD and FSAs
- Complete personnel MOAs; secure permanent facilities and logistical support for CPM
- Measure and report MOEs/MOPs to the C2CIB and the DAWG

**E3.  Phase III:  FY08-09**

- POM10 and FY08 Budget:  Conduct similar activities as previously stated in Phase II
- Present Strategic Plan to the DAWG
- Conduct JNO SWarF (as required)
- Develop version 2 of JNO CDP and architecture
- Employ JNO architecture, system engineering plan, capability increment synchronization plan and streamlined capabilities products to balance portfolio and issue direction to Components as necessary
- Review and modify portfolio scope as required
- Conduct program reviews and support C2CIB and MDA acquisition oversight functions as required
- Update DOTMLPF change requirements documentation and JNO ICDs as required
- Measure and report MOEs/MOPs to the C2CIB and the DAWG

**Annex F**

**JNO CPM PR 09/POM 10 Assessment Process**

**F1. Objectives**

The JNO CPM will conduct a collaborative portfolio review and assessment as the foundation for engaging with the Department PPBE process for PR 09 and POM 10 planning. The JNO approach strives to synchronize FY 09-13 investments and capability delivery corresponding to capability priorities of the JNO Operational Proponent (including JNO SWarF results) and JROC- validated capability gaps.

The overall objective for the JNO CPM assessment is to balance the portfolio based on a prioritized capability mix to achieve the following portfolio goals:

- Provide a highly available network extending to the first tactical mile
- Provide ability to identify/store/share/exchange data/information
- Provide ability to collaborate and share situational awareness
- Protect integrity of data and systems
- Ensure integrated infrastructure situational awareness to enable efficient resource (network, spectrum, services) management

Expected outcomes of the JNO focus area teams and overall assessment process are:

- Agreement on adjustments to pre-decisional and final Service and Agency budget submissions for FY09-13 to address time critical balancing recommendations
- Development, coordination and submission of an integrated issue paper for the FY09-13 Program Review addressing residual issues determined by the JNO CPM to need resolution in the current budget cycle
- Identification of issues and guidance for the POM 10 cycle and input for the Strategic Planning Guidance
- Recommendations for non-material initiatives or DOTMLPF change requests

**F2. Capability Focus Areas and Teams**

The JNO CPM PR 09/POM 10 portfolio assessment is centered on the initial focus areas and teams in Figure F-1, grouped by JCA Tier 2 area. Additional focus areas may be identified following the JNO SWarF. In Figure 1, individual objectives are tagged by the anticipated timeframe for impact of recommendations or products, i.e., N is defined as near-term, M is defined as mid-term and F is defined as far-term.

| Tier 2 | Focus Team Objectives | Lead |
|---|---|---|
| **Knowledge Management** | **M** Accelerate multinational information sharing; leverage MNIS / AIS AoAs <br> **F** Knowledge Management DOTMLPF Change Recommendations; FSA | KM FSA: Army, STRATCOM |
| **Network Management** | **N** Integrated Network Management data architecture; enables GIG network management SA and QOS <br> **M** Integrated Spectrum Management capability <br> **M** Network Management DOTMLPF Change Recommendations; FSA | JNO |
| **Enterprise Services** | **N** Identify piloting opportunities for accelerated CES implementations <br> **M** Accelerate CES to the Tactical Edge | CES Domain/JNO & DISA/Army CES PDM Team |
| | **N** Synchronize GPS user equipment | NII (GPS binned as ES) |
| **Information Assurance** | ▪ Synchronize IA architecture/programs with JNO architecture/programs <br> ▪ Implement IA Task Force recommendations <br> ▪ Network vs. Network Defense strategy | IA Domain, JNO, PA&E & STRATCOM |

| Tier 2 | Focus Area | Focus Team Objectives | Lead |
|---|---|---|---|
| **Information Transport** | Integrated Satellite Gateway Synchronization | **M** Unified gateway solution (e.g. STEP/Teleport/JNN FRHN) <br> **M** Funding strategy | JNO; DISA Tech Lead |
| | UHF Availability Gap and Transition to MUOS | **N** Integrated Waveform (IW) capability <br> **M** Mitigate UHF availability gap <br> **F** Solution for fielding MUOS terminals to ground domain | JNO & J6 |
| | DISN Technology Refresh and Expansion | **N** Maintain DISN availability; address technology refresh requirement <br> **M** DISN expansion strategy | PA&E, JNO |
| | Protected and Strategic SATCOM | **F** Synchronize EHF terminals | JNO |
| | Joint Airborne Networking | **M** Unified Joint Airborne Networking solution | JNO & J6 |
| | Unprotected Wideband SATCOM | **M** Synchronize Airborne terminals <br> **F** Wideband replenishment plan | JNO |
| | Tactical Networks for Ground Forces | **M** More tactical network capability to joint ground force in 2014 | PA&E, Army & JNO |

Figure F-1 JNO Focus Areas and Teams as briefed to DAWG

COCOMs, Services and Agencies are requested to participate on focus teams to address actions, progress, issues, resources (pre-decisional budget proposals, known shortfalls + suggested offsets) and DOTMLPF plans for each focus area. The intent is to resolve capability gaps, expedite delivery of capability to the tactical edge, achieve synchronization of capabilities and programs, increase interoperability and commonality, and mitigate risks.

Per DepSecDef direction, Services and Agencies are requested to provide visibility of their JNO-related budget proposals and change requests (specifically changes proposed to the PB08 position for JNO portfolio PEs). See Table F-1 for priority PEs, but all major changes within the JNO portfolio are of interest.

Table F-1 Primary PE's in JNO Portfolio

| | |
|---|---|
| PE 0206313M - Marine Corps Communication Systems | PE 0303602F Transformational SATCOM System (TSAT) |
| PE 0303109N -Satellite Communications (SPACE) | PE 0303604F Advanced EHF MILSATCOM Procurement (AEHF) |
| PE 0303126K Long Haul Communications – DCS | PE 0303610A Teleport Program |
| PE 0303135F Public Key Infrastructure | PE 0303610F MILSATCOM Teleport Sites |
| PE 0303135G Public Key Infrastructure | PE 0303610K Teleport Program |
| PE 0303135K Public Key Infrastructure | PE 0303610N MILSATCOM Teleport Sites |
| PE 0303136G Key Management Infrastructure | PE 0310704A Warfighter Information Network - Tactical (WIN-T) |
| 0303140A Information Systems Security Program | PE 0603421F NAVSTAR Global Positioning System III (GPS III) |
| PE 0303140F Information Systems Security Program | PE 0603430F Advanced EHF MILSATCOM (Space) (AEHF) |
| PE 0303140G Information Systems Security Program (CDS, Crypto Mod, HAIPE, KMI) | PE 0603782A - Warfighter Information Network (WIN-T) - Tactical - DEM/VAL |
| PE 0303140K Information Systems Security Program (CDS, Crypto Mod, HAIPE) | PE 0603845F Transformational SATCOM (TSAT) |
| 0303140N Information Systems Security Program ( Public Key Infrastructure) | PE 0603854F Wideband Gapfiller System (WGS) |
| PE 0303142A - SATCOM Ground Environment (Space) | PE 0604280A Joint Tactical Radio Systems (JTRS) |
| PE 0301144K Joint/Allied Coalition Information Sharing (Multinational Information System (MNIS)) | PE 0604280F Joint Tactical Radio Systems (JTRS) |
| PE 0303170K Net-Centric Enterprise Services (NCES) | PE 0604280N Joint Tactical Radio Systems (JTRS) |
| PE 0303600F Wideband Gapfiller System (WGS) | 0604665A FCS Network Hardware & Software (formerly PE 0604645A/F61 (partial)) |
| PE 0303601F MILSATCOM Terminals (FAB-T) | PE 0604783A Joint Network Management System (JNMS) |
| Joint Network Node (JNN) (no PE assigned) | PE 0605172N Multinational Information Sharing (MNIS) |
| | PE 116040BB SOF C2 Activities (JTRS(JEM), IA only) |

Focus Teams will operate semi-independently and the JNO CPM will serve as integrator of products and recommendations. Focus Teams will report status and results on a regular basis to the JNO CPM and the JNO Advisory Group, as briefed in the February 2007 SSG and March C2CIB meetings (see Figure F-2).
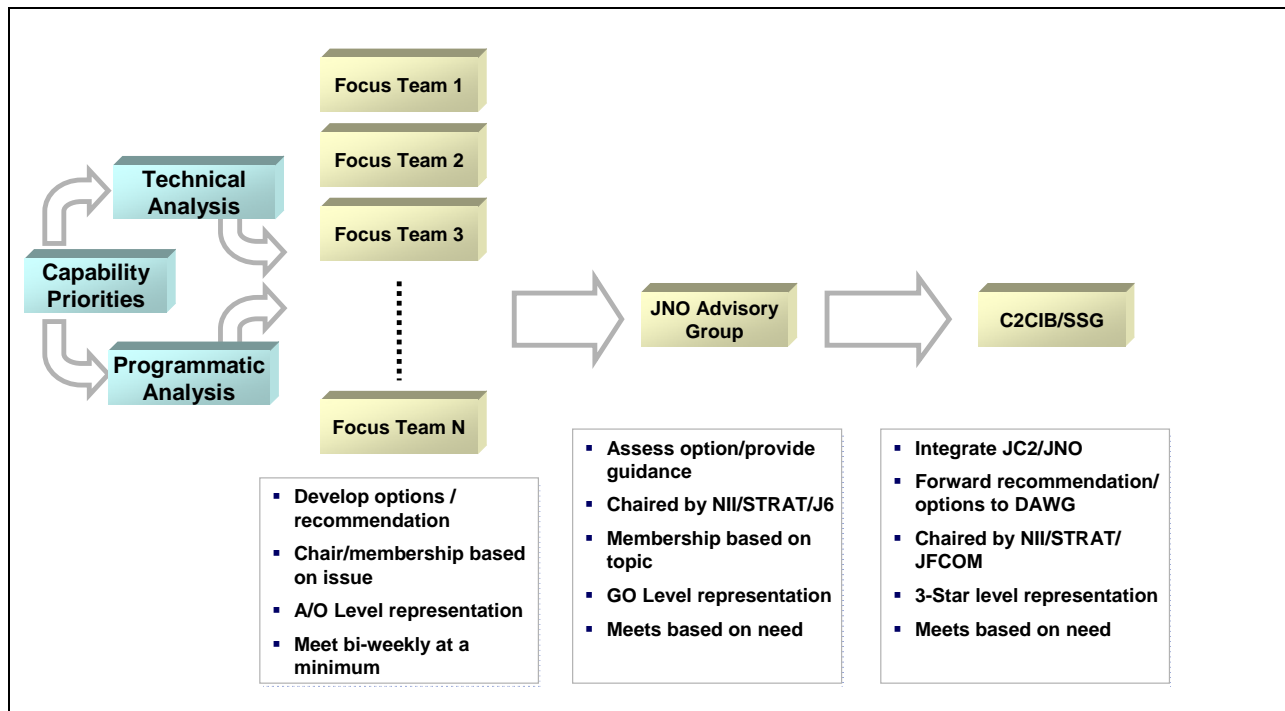
Figure F.2  Focus Team Process Overview

Assessment results and recommendations will be vetted at appropriate intervals during the course of the assessment through the JNO CPM executive governance structure (C2CIB).  Major findings, balancing recommendations and issues will be reported to the DAWG with decision recommendations as appropriate.

On-going in parallel with focus teams will be development of a JNO capability delivery and architectural framework in which to evaluate, optimize and balance the JNO portfolio going forward.  This evolving framework and preliminary results of functional solutions analyses will provide informing inputs to focus teams as appropriate.

**F3. Assessment Schedule**

The JNO portfolio assessment period will run from the release of this memo through late August. Some of the focus teams are already underway, and others will begin by April 2007.  Figure F-3 provides a general schedule for conducting the review and assessment, selected milestones for informing studies and efforts.  Individual focus team leads will publish team-specific schedules and milestones that are consistent with the schedule.

In April 2007, a JNO Senior Warfighter's Forum (SWarF) will endorse warfighter capability needs and priorities (includes the Joint Staff Capability Gaps Assessment (CGA)) which will in turn inform definition of capability increments and portfolio and balancing recommendations. Several technical and programmatic analyses will inform the assessment central to certain focus

areas/teams.  These include PDM-directed studies (e.g. Tactical Networking for Ground Forces, and Gateway/Teleport) and other analyses.

PR 09 change proposals are due by mid-August and issue nominations will be submitted to D, PA&E by mid-September.  POM 10 Strategic Planning Guidance is planned for release in November 2007.
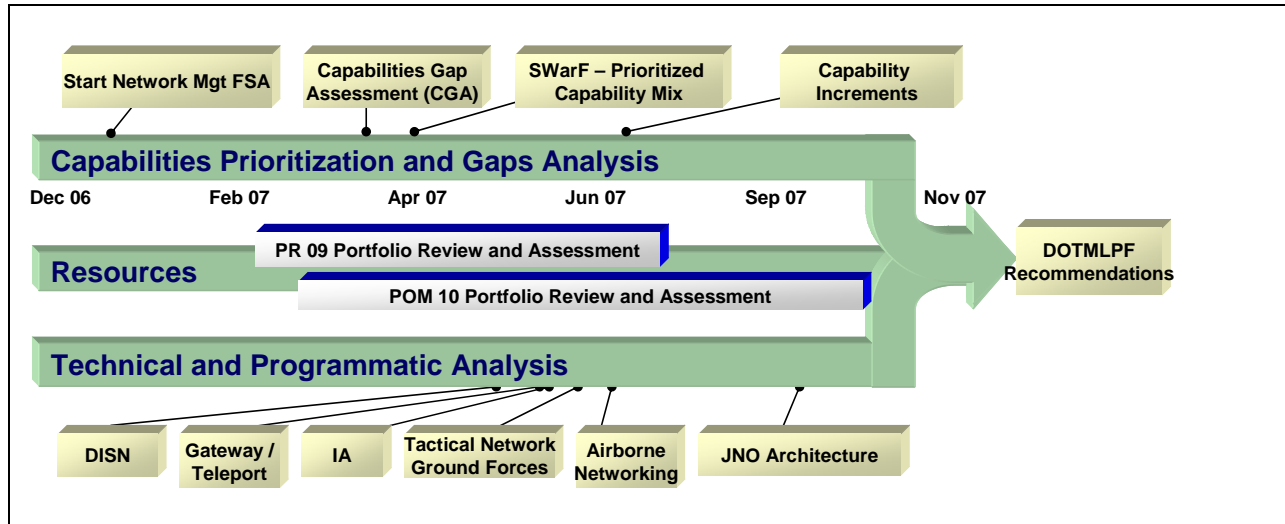


Figure F-3. Assessment Schedule and Selected Milestones

Additional information will be disseminated by the Focus Team leaders through the respective Focus Area team membership representative.   The JNO CPM points of contacts for this assessment process are COL Leo Thrush, JNO, at 703-607-0751, email:  leo.thrush@osd.mil or Mr. Kevin Meyers at 703 607-0291, email:   kevin.meyers@osd.mil.

## Annex G

## Glossary

| | |
|---|---|
| ACTD | Advanced Concept Technology Demonstrations |
| AEHF | Advanced Extremely High Frequency |
| AoA | Analysis of Alternatives |
| APB | Acquisition Program Baseline |
| ATR | Above Threshold Requirements |
| BMA | Business Mission Area |
| BA | Battlespace Awareness |
| BTA | Business Transformation Agency |
| BTR | Below Threshold Requirements |
| CBA | Capabilities Based Assessment |
| CDP | Capability Delivery Plan |
| CDD | Capability Development Document |
| CDS | Cross Domain Solutions |
| CPD | Capability Production Document |
| CPM | Capability Portfolio Manager |
| CP | Change Proposals |
| C2CIB | Command and Control Capability Integration Board |
| COCOM | Combatant Commander |
| CONPLAN | Concept Plan |
| CM | Configuration Management |
| CM | Crypto Modernization |
| CES | Core Enterprise Services |
| CPD | Capability Production Document |
| DARS | Defense Architecture Repository System |
| DAS | Defense Acquisition System |
| DAWG | Deputy Secretary of Defense Advisory Working Group |
| DepSecDef | Deputy Secretary of Defense |
| DISN-NG | Defense Information System Network - Next Generation |
| DITPR | DoD IT Portfolio Repository |
| DCR | DOT_LPF Change Request |
| DOTMLPF | Doctrine, Organization, Training, Materiel, Leadership, Personnel and Facilities |
| DPD | Defense Programming Database |
| EIE | Enterprise Information Environment |
| EIEMA | Enterprise Information Environment Mission Area |
| ES | Enterprise Services |
| EW SE | Enterprise-Wide Systems Engineering |
| EoA | Evaluation of Alternatives |
| FAA | Functional Area Analysis |
| FAB-T | Family of Advanced Beyond-Line-of-Sight Terminals |
| FCB | Functional Capabilities Board |
| FSA | Functional Solutions Analysis |

| | |
|---|---|
| FYDP | Future Years Defense Plan |
| GDD | GIG Description Documentation |
| GEMSIS | Global Electromagnetic Spectrum Information System |
| GIG | Global Information Grid |
| GPS-III | Global Positioning System III |
| HAIPE | High Assurance Internet Protocol Encryptor |
| HC3 | High Capacity Communications Capability |
| IA | Information Assurance |
| ICD | Initial Capability Document |
| IIPT | Integrating IPT |
| INMS | Integrated Network Management System |
| IP | Internet Protocol |
| IT | Information Technology |
| IR&G | Institutional Reform and Governance |
| IPL | Integrated Priority List |
| IRB | Investment Review Board |
| JCA | Joint Capability Area |
| JCD | Joint Capability Document |
| JCIDS | Joint Capability Integration and Development System |
| JC2 | Joint Command and Control |
| JFC | Joint Functional Concept |
| JL | Joint Logistics |
| JNMS | Joint Network Management System |
| JNN | Joint Network Node |
| JNO | Joint Net-Centric Operations |
| JPEO | Joint Program Executive Office |
| JROC | Joint Requirements Oversight Council |
| JS | Joint Staff |
| JSAP | Joint Staff Action Process |
| JTRS | Joint Tactical Radio System |
| KM | Knowledge Management |
| KM/DS | Knowledge Management/Decision Support |
| KMI | Key Management Infrastructure |
| MDA | Milestone Decision Authority |
| MNIS | Multinational Information Sharing |
| MOE | Measure of Effectiveness |
| MOP | Measure of Performance |
| MPMI | Most Pressing Military Issues |
| MUOS | Mobile User Objective System |
| NC | Net Centric |
| NCES | Net-Centric Enterprise Services |
| NC FCB | Net Centric Functional Capabilities Board |
| NCR | National Capital Region |
| NMT | Navy Multiband Terminal |
| NSS | National Security System |
| NCOE | Net-Centric Operational Environment |

| | |
|---|---|
| NM | Network Management |
| OIPT | Overarching IPT |
| OP | Operational Proponent |
| PPBE | Planning, Programming, Budgeting and Execution |
| PSA | Principal Staff Assistant |
| PBR | Program and Budget Review |
| PKI | Public Key Infrastructure |
| PDM | Program Decision Memorandum |
| POC | Pont of Contact |
| POM | Program Objective Memorandum |
| PM | Program Manager |
| QDR | Quadrennial Defense Review |
| SecDef | Secretary of Defense |
| SOSCOE | System-Of-Systems Common Operating Environment |
| SNaPIT | Select and Native Programming Information Technology |
| S&T | Science and Technology |
| TEMP | Test and Evaluation Master Plan |
| TSAT | Transformational Satellite |
| WGS | Wideband Gapfiller System |
| WIPT | Working IPT |
| WIN-T | Warfighter Information Network – Tactical |
| WMA | Warfighter Mission Area |

.

## Annex H

## References

1. Deputy Secretary of Defense Memorandum, September 14, 2006, Subject: Capability Portfolio Management Test Case Roles, Responsibilities, Authorities and Approaches
2. DoD Directive 8115.01, DoD IT Portfolio Management, Oct 10, 2005
3. Charter, Command and Control Capability Integration Board (C2CIB), Oct 2, 2006
4. Net-Centric Operational Environment Roadmap, June 2006
5. Chairman of the Joint Chiefs of Staff Instruction 3170.01E, "Joint Capabilities Integration and Development System," May 11, 2005
6. DoD Directive 7045.14, "The Planning, Programming, Budgeting, and Execution System (PPBE)," May 22, 1984, Certified Current as of November 21, 2003
7. DoD Directive 5000.1, "The Defense Acquisition System," May 12, 2003
8. DoD Instruction 5000.2, "Operation of the Defense Acquisition System," May 12, 2003
9. Secretary of Defense Memorandum, "Operational Availability (OA)–05/Joint Capability Areas", May 5, 2006
10. Deputy Secretary of Defense Memorandum, March 15, 2007, Subject: Institutional Reform and Governance Actions to Critical Path (ACP)