CONCEPT OF OPERATIONS

For

RAPID ACQUISITION INCENTIVES - NET CENTRICITY (RAI-NC)

Prepared by: Jim Mulder, 703-604-1489 x126

FOREWORD

The Department is currently undergoing a vital transformation of its military forces. To fully leverage of these new combat capabilities we must also transform our combat support processes and implementing technologies.

The Rapid Acquisition Incentives – Net Centricity (RAI-NC) initiative provides us with the capability to transform our business systems. The RAI-NC initiative has been established by the Deputy Secretary of Defense to provide incentives for all Department of Defense (DoD) Components to innovate and to accelerate information technology initiatives supporting net-centric business transformation and the implementation of the President's Management Agenda.

This Concept of Operations for RAI-NC sets forth the process to submit, select, obtain funds, execute and oversee pilot initiatives that will help the Department move forward successfully toward completion of its Transformation Goals.

John P. Stenbit
DoD Chief Information Officer

Executive Summary

The Deputy Secretary of Defense directed the Department of Defense Chief Information Officer (DoD CIO) to establish a $110 million central investment initiative (FY 2004, $10M, FY 2005-2009, $20M, research, development, test and evaluation funds) to encourage DoD acceleration of information technology initiatives in support of the Department's net-centric business transformation goals, and implementation of the President's Management Agenda. This project will fund and provide for pilot projects that will:

(1) Support the advancement of net-centric tenets and transformational processes.
(2) Field business case driven proof of concept pilot projects.
(3) Provide pilot projects capable of being successfully scaled into DoD Enterprise solutions.

The Office of the DoD CIO expects to pilot an estimated 5-20 pilot projects each fiscal year which will be 6 to 12 months long each. Each pilot project will be required to meet the selection criteria that, schedule, and performance goals and the means to measure them. Each pilot will be business case-based with objectives that:

(1) Improve business processes and then apply technology in a net centric environment.
(2) Test new concepts/technologies that espouse net centricity.
(3) Transform business processes to improve effectiveness, efficiency, and service delivery.
(4) Promote interoperable solutions across DoD.
(5) Maximize COTS and minimize duplication of applications.
(6) Align DoD with appropriate e-government efforts.
(7) Align with other net centricity efforts.

The Department of the Navy (DON) has been designated as the Executive Agent (EA). In this capacity, the DON will provide support for the management and oversight of the DoD RAI-NC initiative in two phases. Phase I (FY03), Development and Initial Evaluation, will include preparing for the electronic receipt of DoD Component pilot submissions and finalizing weighting factors and the details of the selection criteria and processes. The EA will work with the submitter of each pilot project to ensure the application is complete, evaluate and prioritize the applications, and provide the results to the DoD CIO for approval and selection. In Phase II (FY04 through FY09), Management and On-going Evaluation, the EA will provide: (1) project initiation evaluation, (2) management oversight, (3) results documentation, and (4) independent assessments of selected pilot projects.

In support of the agile warfighter, systems must be designed to be "net centric." This requires features such as network connectivity and security to be included in the design from the beginning. Our information technology resources must be fully capable of providing access to consistent, quality and timely data, fused into information by applications, with availability to the requisite decision-makers at all levels and at all times. The RAI-NC initiative will enable substantial forward movement towards transforming to the Department's desired net-centric environment.

I. BACKGROUND

To assist in accelerating transformational efforts, the Deputy Secretary of Defense (DEPSECDEF) approved Management Initiative Decision (MID) 905 on December 22, 2002, directing implementation of key initiatives. MIDs are tools employed by the DEPSECDEF to complement the PBD process and are intended to realign behavior toward the transformation goals of the Department. MID 905 sets forth 11 initial actions required by the Department to transform from a platform-centric information technology (IT) environment to a customer-focused, net- centric environment. The DoD CIO has been assigned the responsibility of overseeing execution of MID 905-directed initiatives. This Concept of Operations establishes the process and activities for the Rapid Acquisition Incentive- Net Centricity (RAI-NC) initiative, a crucial element of the Department's transformation goals.

The Secretary of Defense is very clear and very upbeat in his expectations about the value of a net-centric environment. In a net-centric environment, we are dependent on a network to provide us the ability to operate freely. This means that the network must be reliable, and diverse information pathways must be in place to achieve that reliability. The goal is to transform our environment to a state where interoperability and information assurance are the rule and not the exception. As [Retired Vice Admiral] Art Cebrowski [DoD Director, Force Transformation] said, "If you are not interoperable, you are not on the net, you are not contributing, you are not benefiting, and you are not part of the information age."

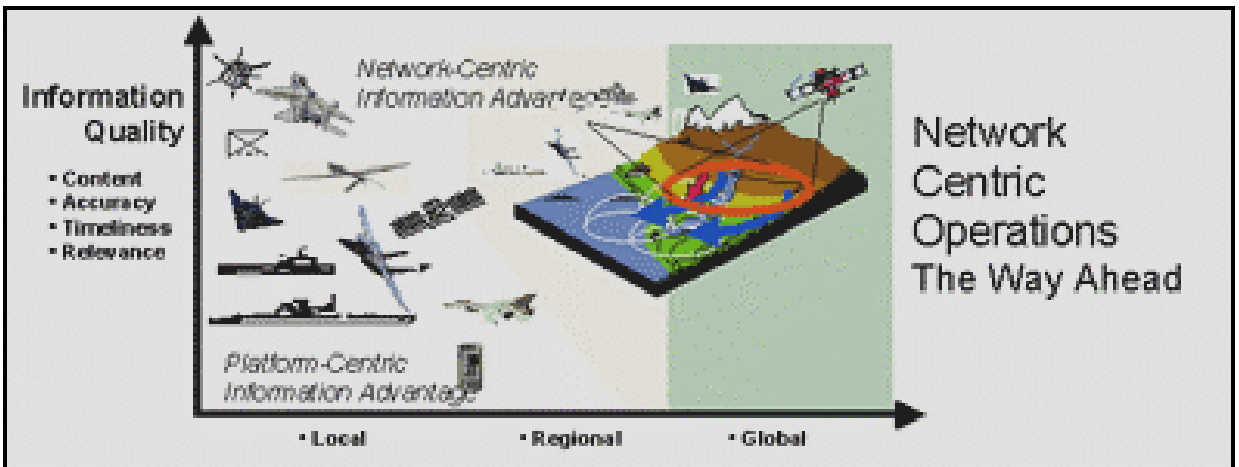


Figure 1

Figure 1 illustrates the future opportunity by showing how transformation from today's platform-centric environment to tomorrow's net-centric environment can create the required information advantage. By increasing richness and reach simultaneously, net centricity allows us to connect together our arsenal of advanced and extraordinarily capable combat, intelligence and business platforms and provide them with timely and accurate data. Net centricity will enable users to augment data available from their own systems and capabilities with data from other locations and other sources well removed from the normal sensor range of the platform itself. In a net-centric environment, global information and local data sources will be fused to provide

what we call "power to the edge." Our goal is to support this transformation by supporting and encouraging initiatives.

One of the implications for the technology development community is that systems must be designed to be "net ready." This means that features such as network connectivity and security must be included in the design from the beginning. There will be major changes in how we think about achieving interoperability because it will be impossible to specify in advance all the exact connectivity required. With the help of the Joint Staff, we will move from today's mandatory interoperability key performance parameter to a net-centric or net-readiness parameter. We will need to design the appropriate "net ready" mechanism using commercial standards. As we move from platform-centric systems to network-centric capabilities, we will need net-ready platforms with on-board data accessible and consumable by off-board users.

II. NEED

The Department must begin immediately to transform its networks and applications baselines to ones capable of fully supporting future net-centric based operations and data access. Our information technology resources must be fully capable of providing access to consistent, quality and timely data, fused into information by applications, and provided to the requisite decision makers at all levels.

The process set forth in this Concept of Operations will enable substantial forward movement towards the required future baseline. The RAI-NC effort will provide for the structured selection and development of specific pilot projects that will serve to:

1. Support the advancement of net centric tenets and transformational processes.
2. Field business case driven proof of concept pilot projects.
3. Provide pilot project results capable of being scaled across the DoD Enterprise.

To meet this need, the Department expects to pilot an estimated 5-20 pilot projects each fiscal year that will be 6 to 12 months long each. Each pilot project will be required to meet very rigid selection criteria established by the DoD CIO that provide cost, schedule, and performance goals and the means to measure them. Each pilot will be business case-based with objectives that:

1. Improve business processes and then apply technology in a net centric environment.
2. Test new concepts/technologies that espouse net centricity.
3. Transform business processes to improve effectiveness, efficiency, and service delivery.
4. Promote interoperable solutions across DoD.
5. Maximize COTS and minimize duplication of applications.
6. Align DoD with appropriate e-government efforts.
7. Align with other netcentricity efforts.

The DEPSECDEF has directed the DoD CIO to establish a $110 million central investment project (FY 2004, $10M, FY 2005-2009, $20M, research, development, test and evaluation (RDT&E)). This initiative will provide DoD Components resources for approved pilot projects based on the selection process contained in this Plan.

III. VISION AND PRINCIPLES

The vision of the RAI-NC initiative is to:

Deliver business case-driven pilot projects and IT initiatives providing scalable proof of concept demonstrations which serve to support transformational, net-centric based processes.

Pilot projects will be carefully selected in order to accelerate the convergence of infrastructure, information and culture in information technology solutions that enhance the transformation of DoD business processes. These pilot projects will provide not only proof of concept support but also the capability to scale to broad implementation when proven successful. Pilot project activities will effectively merge the visions and goals of DoD transformation, net centricity, and the President's Management Agenda into common solutions that accelerate the DoD business transformation as shown in Figure 2.

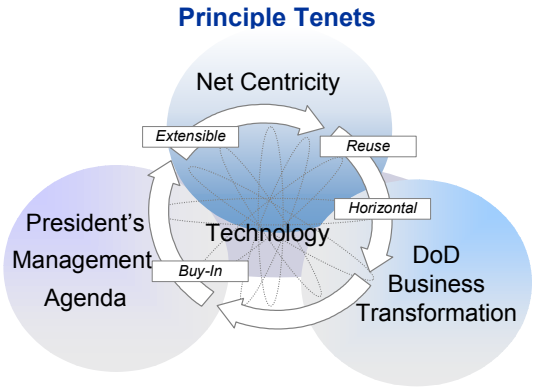


Figure 2

All pilot projects will be designed to incorporate appropriate elements of the following DoD net centric principles:

A. Infrastructure:

1. There are no technical limitations on the capabilities to access, retrieve, share, disseminate, or fuse information/data.
2. The network is secure, dependable and reliable with seamless connectivity and collaboration capabilities at all times across geographical, organizational and mission boundaries.
3. The network has the capability to collect, process, disseminate, maintain and protect an uninterrupted flow of information.

B. Information:

1. Every data element is posted/published and its structure and content are maintained by an authoritative source.
2. Information and data are available to the people that want it, the way they want it, when they want it.
3. People depend on and trust the data and information.
4. Information/data are protected, secure, and resilient against information warfare, terrorist, and criminal activities.

C. Culture:

1. DoD Component information management (IM) goals, objective, plans, etc., are in sync with the DoD CIO enterprise plans.
2. Out-year planning and execution year budgets reflect net-centric focus.
3. Mission and business IM processes have been re-engineered.

Further, the following five key IT enterprise tenets must be employed in order to fully obtain the vision for net centricity.

1. "Only handle information once." Collecting information or replicating data entry is costly and adversely impacts operational efficiency. "Only handle information once" requires that technology and processes be reengineered and integrated to minimize time and effort dedicated to data collection and entry.

2. "Post before processing." The second tenet of net centricity will provide users immediate access to data and eliminate delays normally caused by processing or analyzing information before it is disseminated.

3. System users must have the technical capability to access data when it is needed. The ability to "pull" data when it is needed, in the form that it is needed, is a vital component of net centricity. This concept gives data control to users by allowing them to "pull" data as needed instead of having massive amounts of information "pushed" to them regularly, regardless of whether or not they need it.

4. Collaboration technologies must be utilized to assist users in making sense of the data that is pulled. For example, to address most defense-related issues, a diverse group of subject matter experts collaborate to maximize benefits obtained from information that has been gathered. Often, the expertise needed to comprehensively analyze complex information does not reside in one organization or location. As a result, the capability to collaborate with experts within and outside DoD will be a value-added feature of net centricity.

5. Diverse network paths must provide users with the capability to operate freely in an environment that is reliable and secure. When operational, the net centric environment will eliminate current interoperability concerns and strengthen information assurance.

IV. PROCESS

A structured submission, selection and oversight process will be established to assure constancy of purpose, operation and fielding. This competitive process will be analytically based and business case supported. Selection criteria will be weighted to emphasize the tenets and principles of net centricity. Short duration, high impact candidates are preferred and will receive favorable consideration.

For purposes of this Plan, an RAI-NC project is a business case based pilot project of fixed scope, cost and duration, which is undertaken to prove or demonstrate the effectiveness or applicability of a transformational net centric technology, concept or process. Pilot projects are expected to be highly scalable, transportable and return significant value as well as be strongly and actively supported by their domain sponsor. Pilot projects not having high net centric value or merely submitted because the effort fell below the Component budget cut-off line may not expect to be resourced. The following are not considered to be pilot projects and should not be submitted:

1. Pilot projects which are not directly supporting net centricity or e-government.

2. A problem or need without a proposed, tangible solution.

3. An application that proposes a very general concept but does not solve a specific business problem.

4. A proven concept currently under implementation.

5. An existing product to be placed on the web, unless it provides a new customer service or transforms a current business problem.

6. Pilot projects of very local impact or requiring a sole source purchase.

Pilot project plans will specifically address information assurance aspects as well as compliance with the DoD Enterprise Architecture (GIG) and need to be incorporated in the Financial Management Enterprise Architecture (business view of the GIG). Each pilot project will also address plans for full deployment and resource availability for operations and maintenance. In keeping with the tenets of net centricity, pilot submission and status reporting will be web based. Oversight will generally consist of progress reports, milestone status and, in some instances, progress reviews. The DoD CIO is the process owner and may modify this process as operational experience is obtained.

The DoD CIO is responsible for overseeing the management and execution of the RAI-NC process. It is expected that the DoD CIO will appoint a DoD Component Executive Agent (EA) who will have the responsibility to execute the operational aspects of the process. The EA will provide support to the DoD Deputy CIO for this process; however, management of the initiative resides with the DoD Deputy CIO. The EA will further provide an independent assessment to assure that the pilot project is executable from many views to include, technical, architectural, managerial, operational, costs and domain owner viewpoints. Pilot project efforts will each be supported by an opportunity analysis.

A. Roles:

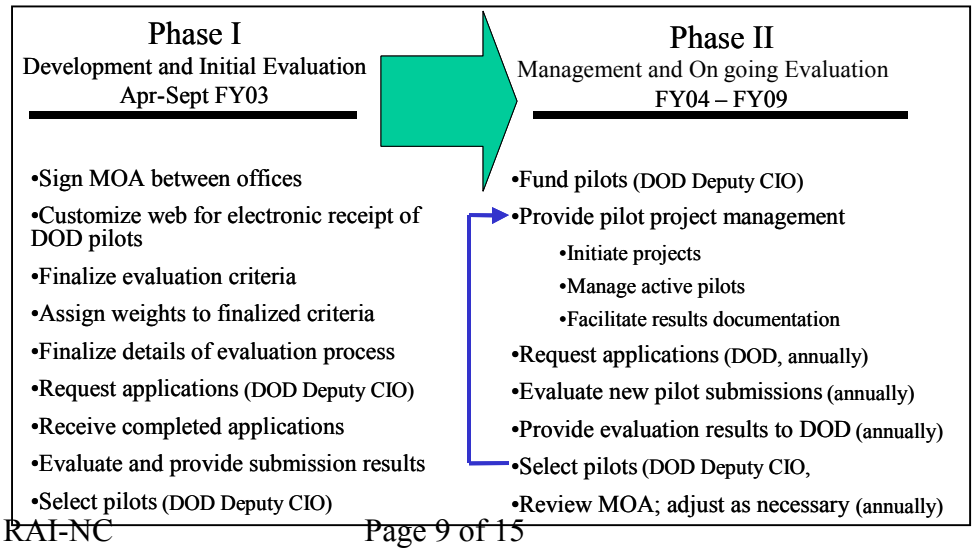
1. The DoD Deputy CIO (DCIO) establishes criteria to be used in evaluating Component submissions, receives recommendations from EA and approves appropriate projects. In addition, the DoD DCIO participates in progress reviews and oversees progress of all MID 905 initiatives.

2. A functional sponsor/domain owner will be identified and endorse each pilot project. The sponsor assures that the process transformation fulfills a validated functional or business problem. The sponsor, EA and developing activity are expected to work together as a collaborative team in the design and delivery of a capability that will fulfill an operational need. No initiatives will be fielded to multiple sites unless the functional sponsor authorizes them. The functional sponsor is responsible for projecting, budgeting and defending any required down stream post-pilot project operations and maintenance resources.

3. The RAI-NC EA works with Component and functional sponsor to provide support to ensure each pilot project submission is complete. The EA receives requests, reviews, and scores those meeting the criteria, and provides a prioritized list to DoD DCIO for review and approval. The EA maintains information for all requested and approved pilot projects, and provides collaboration and knowledge management help to Components. The EA also works with Components to stand up pilot projects, provides ongoing guidance and oversight to assist pilot project leads, assists in conducting progress reviews, as necessary, and ensures documentation is complete.

4. The Component pilot project lead executes the project within milestones and deliverables, provides day-to-day operational management, interacts with the EA to resolve issues and provides monthly pilot project reports to the EA for evaluation and submission to the DoD Deputy CIO.

B. Time lines:



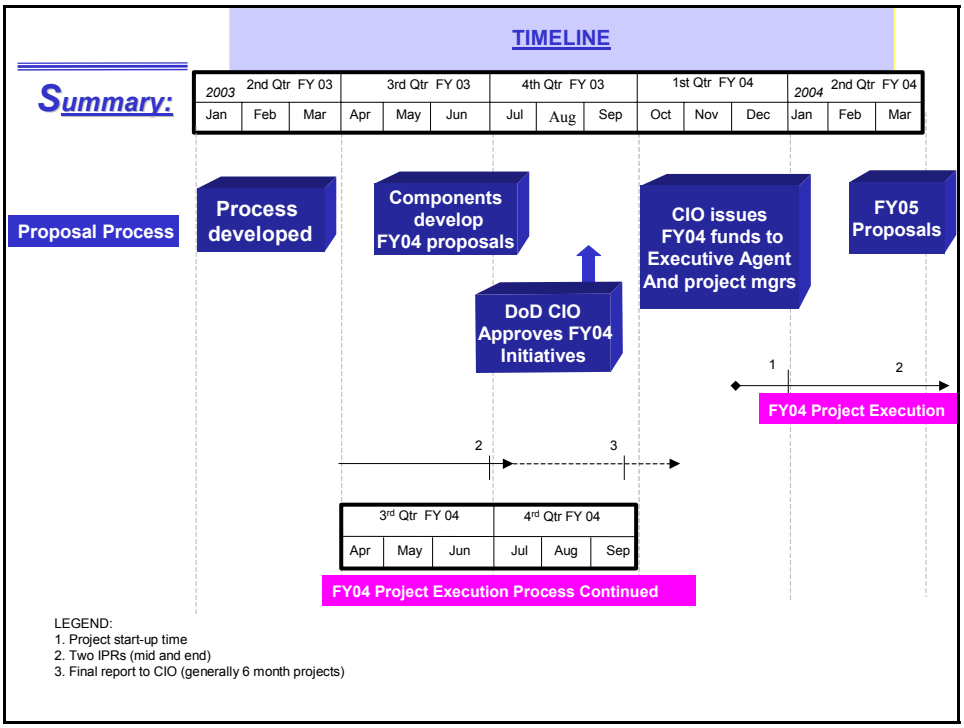


Figure 2. Annual Cycle

Specific events and their schedule for the remainder of FY03 are shown in the Appendix under Timeframe for FY03.

C. Resources Management:

Upon C3I receipt of funds each fiscal year, the DoD Deputy CIO Project Manager (PM) will document the allocation of funds in support of an approved pilot project by requesting that funds be sent to the EA for transmitting to the organizations, as shown in Figure 2 above. The funding documents will include the title of the pilot project, a brief description of implementation and expected outcome. Attachments to the funding documents will include a copy of the detailed pilot project application documenting the planned implementation with associated milestones and a copy of the DoD CIO approval memorandum. The agency/service is expected to accept the funding document, obligate the funds and allow the Pilot PM to execute the funds according to the approved plan.

The DoD CIO will withhold about 10 percent of the annual funds to provide the opportunity later in the year for out-of-cycle submissions containing an exceptional business case.

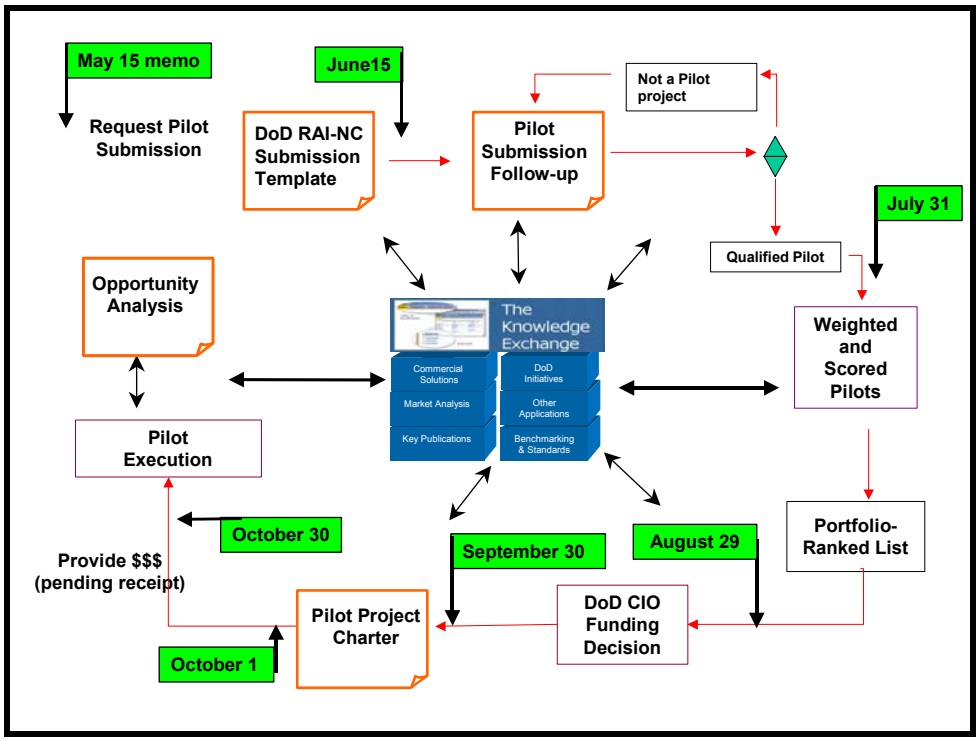


Figure 3. The Pilot Project Process

D. Progress Reviews:

Pilot project progress reviews will be based on information regarding cost, schedule and performance milestones and objectives provided in the application submission. These reviews will be scheduled for the DoD Deputy CIO.

The objective of the progress reviews is to ensure that DoD Components have sufficient planning horizons to allow for capability and requirement alternatives prior to the execution year. Progress reviews will also serve as a vehicle to illustrate continuing involvement and support by the functional sponsor, enable expanded opportunity analysis and identify exit criteria. These reviews will ensure continued oversight by the DoD CIO throughout the execution year for those pilot projects that are selected to receive funds. Supporting Exhibit 300 and other budget documents can be easily derived via the Opportunity Analysis as shown in the Figure 3 process description.

Appendix

Selection Process and Criteria

Part 1 Submittal Rules

1. Your pilot project submissions are very important to us. You should submit an application to our office in the time required. We will review and evaluate submissions annually. A list/portfolio of pilot projects to be funded will be provided in August. Submission information, templates, and guidelines as well as on line submission can be made at http://www.dod.mil/c3i.

2. You should have read and understand how your pilot project will be evaluated, and what your responsibilities are if you are selected for funding prior to submitting your application.

3. REMEMBER: PILOT PROJECTS SHOULD MEET THE FOLLOWING BROAD CRITERIA AT A MINIMUM:

    a. Have applicability and impact DoD Enterprise-wide. Pilot projects, which solely apply or benefit the submitting activity or office, are not desired and will score poorly.
    b. Have a total cost of less than $1 million dollars.
    c. Have a completion timeframe of 6 to 12 months.

4. The following are a few guidelines to consider when completing your application:
    a. Keep your pilot project description as concise as possible. The best pilot projects are not necessarily the most complex. Remember, your pilot project submission is being considered along with scores of others, so length is not the goal.
    b. Provide sufficient detail to allow your pilot project to be properly evaluated.
    c. Complete all fields.
    d. Your point of contact should be the individual who will act as the Program Manager/Technical Lead for this pilot project. Our office will be contacting this individual within five days after the receipt of your submission, and should be available, and capable of answering detailed questions concerning this pilot project.
    e. Avoid the use of acronyms. If an acronym is used, please define it.
    f. Do not attach graphs, slides or amplifying information with your online pilot project submission. If additional materials are needed for clarification of your submittal, a net-centric representative will contact you.

Timeframe for FY03

March 19: Meet with PDCIO re: Implementation of Incentive Fund

March 25-28: Internal C3I coordination

March 31-April 4: CIO Executive Board Coordinators information heads up (electronically)

May 15: MOA for EA signed and process and criteria finalized

May 15: DoD CIO memo to Components requesting pilot project candidates

June 30: Quarterly progress report to DoD CIO

July 31: Candidate proposals due to DoD CIO

August 15: EA submits candidates

August 29: Selected candidates announced

September 15: Review and adjust MOA if needed

September 30: Annual Progress Report to DEPSECDEF

October to December: Funds released upon allocation

Step 1 – Pilot Project Determination:

In this step, a determination is made as to whether the proposed pilot project idea, as described, constitutes a "net-centric pilot project." If it is determined that it is not a pilot project, the submitting activity will be notified via e-mail, stating that the pilot project will not be considered further under Step 2 of the evaluation process.

For purposes of this evaluation, the following definition is used to determine if a submission is a "net-centric pilot project:"

> "… a pilot project of limited scope, cost and duration which is undertaken to prove or demonstrate the effectiveness or applicability of a technology, concept, or process the benefit of which is to improve current Department business processes."

The following **are not** considered to be pilot projects, and will not be considered:

- A proven concept currently under implementation.
- A complaint, without a tangible solution.
- An existing product to be placed on the Web, unless it provides a new service or solves a problem.
- An application that proposes a very general concept (e.g., eCommerce), but does not solve a specific business problem, unless a slice of the idea or pilot project can be executed independently and adheres to these guidelines.
- A sole source purchase of hardware or software.

- The concept proposed in the submission is not technically feasible or contradicts existing Department standards and policies.

Step 2 – Detailed Pilot Project Assessment:

In this step, the remaining pilot projects from Step 1 will undergo a detailed assessment to determine how well each pilot project meets the following detailed criteria and sub-criteria.

A weighted scoring process will be used to evaluate and rank the applications, based on a detailed assessment of the pilot projects presented in the applications, and their ability to meet these three principle criteria.

Impact. Will address the breadth, cost and schedule of the pilot project.

1. CROSS FUNCTIONALITY - The scope of the pilot project as it relates to broad multi-component or multi-functional interoperability. Pilot projects which are very narrow and stovepipe in application or which solely apply or benefit the submitting activity or office, will receive lower ratings. The emphasis is on development of Joint Capability.

2. LEVEL of COMPLIANCE - The extent to which the pilot project fulfills the overall net centricity criteria and architectural tenets set forth by the DoD CIO and Management Improvement Directive (MID) 905. Also considered is the degree to which the pilot project accomplishes transformation of DoD business processes and supports E-Gov initiatives.

3. MEASURABLE RESULTS AND BUSINESS VALUE - Evaluates the degree to which the pilot project will provide metrics which track progress, deliverables and results. The submitter should also be able to articulate a plausible expected business value.

4. COST to IMPLEMENT - The total cost to fully execute the pilot project, as shown on the project application. This cost includes all hardware, software, labor (organic & contractor), and travel, etc. In general, project costs should not exceed $1M nor include post-pilot deployment and operations costs.

5. TIME to IMPLEMENT - The total time planned to complete the pilot project, from receipt of funding through execution and closeout is expected to be within 6-12 months.

Executability: This criterion determines the likelihood of the proposed pilot project's success and evaluates its risk based on the following:

6. PROJECT PLANNING - The degree to which a management framework and advance planning are in place to ensure proper execution of pilot project.

7. FEASIBILITY OF CONCEPT- Evaluates whether the pilot project is feasible and practical in terms of the proposed processes, technology, cost, and schedule.

8. RISK MANAGEMENT - The extent to which technical, cost, schedule and managerial risk elements have been addressed and mitigated.

9. LEADERSHIP SUPPORT/SPONSORSHIP - Evaluates the stated level of functional, organizational and technical management and leadership support for the pilot project.

Transformation: Evaluates the extent to which each pilot project will employ such transformational processes and technology such as those listed below.

10. PROCESS REENGINEERING/TRANSFORMATION - The pilot project either incorporates or enables transformational processes and best practices in the functional area impacted. The pilot project supports conversion of a process to significantly improve quality and responsive customer support by using techniques that rely on collaboration and near real time review and response in order to reduce process cycle time.

11. INFORMATION ASSURANCE - The extent that pilot project meets recent DoD IA guidance and utilizes the Public Key Infrastructure. The pilot project incorporates interoperability and redundancy plans to adequately provide reliability that the end user needs by operating on diverse network paths in a reliable and secure environment.

12. COMMERCIAL PRODUCTS and STANDARDS USAGE - The pilot project makes use of commercial standards and/or COTS products.

13. ONLY HANDLE INFORMATION ONCE - The pilot project exhibits an 'enter once – use many' philosophy of data entry, and espouses the "post before process and pull data rather than push data" philosophies. The pilot project applies standard and shared data and privacy concepts and policies consistent with Department data management strategies.

14. LEGACY APPLICATION REDUCTION - Provides an assessment of whether, or not, the pilot project will facilitate the elimination of legacy applications through net-centric applications and improved connectivity.