

2. AMENDMENT/MODIFICATION NO. P00018	3. EFFECTIVE DATE SEE BLOCK 16C.	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (if applicable)
6. ISSUED BY SPACE AND NAVAL WARFARE SYSTEMS COMMAND CONTRACTING OFFICER: 02-N ELLEN H. POLEN 4301 PACIFIC HIGHWAY, OT-4, ROOM 1019 SAN DIEGO, CA 92110-3127 PHONE: (619) 524-7388		7. ADMINISTERED BY (if other than item 6) CODE	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) ELECTRONIC DATA SYSTEMS CORPORATION 13800 EDS DRIVE HERNDON, VA 20171 ATTN: NMCI CONTRACTS CODE 1U305 FACILITY CODE	(*)	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
	X	10A. MODIFICATION OF CONTRACT/ORDER NO. N00024-00-D-6000
		10B. DATED (SEE ITEM 11) 06 October 2000

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods:

(a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)
NOT APPLICABLE

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

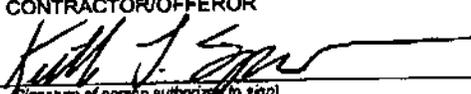
(*)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR CLAUSE 52.212-4 (CHANGES)
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return ORIGINAL copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

-SEE HEREIN-

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Keith Spencer, NMCI Contract Manager	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Ellen H. Polen, Contracting Officer
15B. CONTRACTOR/OFFEROR  <small>(Signature of person authorized to sign)</small>	15C. DATE SIGNED 11 Sep 2001
16B. UNITED STATES OF AMERICA BY  <small>(Signature of Contracting Officer)</small>	16C. DATE SIGNED 11 Sept 2001

1. This modification is issued to make the following changes to the basic contract:

a. Part One -- Revise CLIN 0037 as follows:

Delete:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037	Reserved		\$	\$

Insert:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037	TFW Portal Capability Upgrade		\$	\$

The Contractor shall upgrade the functional and technical requirements of the NMCI portal to provide a standardized Web-based interface to allow sharing and managing both structured and unstructured information for an operational and test upgrade effort. The NMCI portal shall support integration of disparate Navy applications and data sources to form a Web-based, service-centric capability. The enterprise portal interface shall be personalized and customizable by the end user and by organizational commands. The end user shall be able to subscribe to desired services and have these services provided at each log-on to the NMCI portal. Organization commands shall be able to tailor the view provided to each user within the command. Each NMCI portal view shall provide a standard Navy banner that can be customized with tabs for Navy and organizational command access. The Contractor shall demonstrate portal capability to ashore users in accordance with Attachment 13.

b. Part One--Add CLIN 0037AA as follows:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037AA	Operational Portal Integration Services Date of Order – 30 September 2001	1	\$1,970,085	\$1,970,085

c. Part One--Add CLIN 0037AB as follows:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037AB	Operational Portal Integration Services 01 October 2001 – 30 November 2001	2	\$1,970,085	\$3,940,170

d. Part One--Add CLIN 0037AC as follows:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037AC	Operational Seat Integration Services 01 December 2001 -- 31 January 2002	2	\$830,390	\$1,660,780

e. Part One -- Add CLIN 0037AD as follows:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037AD	Operational Seat Ongoing Services 01 February 2002 -- 30 April 2002	3	\$435,554	\$1,306,662

f. Part One -- Add CLIN 0037AE as follows:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037AE	Test Site Integration Date of Order -- 30 September 2001	1	\$116,729	\$116,729

g. Part One -- Add CLIN 0037AF as follows:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037AF	Test Site Integration 01 October 2001 -- 30 November 2001	2	\$116,729	\$233,458

h. Part One -- Add CLIN 0037AG as follows:

Item	Service	Quantity	Monthly Service Price	Total Amount
0037AG	Test Site On-going Services 01 December 2001 -- 30 April 2002	5	\$22,680	\$113,400

i. Part Three -- Add Attachment 13, NMCI Portal Service Requirements.

A CONFORMED COPY OF THE REVISED CONTRACT IS MADE A PART OF THIS MODIFICATION AS A RESULT OF THE CHANGES OUTLINED HEREIN.

All other terms and conditions of Contract N00024-00-D-6000 remain unchanged, and in full force and effect.

**N/MCI Contract N00024-00-D-6000
Awarded 6 October 2000**

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**Attachment 13
TFW Operational and Test Portal Upgrade Capability**

Executive Summary

Successful development and deployment of the Task Force Web (TFW) portal upgrade, with support from the Contractor and SPAWAR, shall provide at least 2,000 Navy personnel ashore and 3,000 afloat access to more than 50 Navy- identified applications via the Navy web portal 90 days from contract award. This effort must conform to all security requirements as set forth in the NMCI contract. The Contractor team shall provide integration capability for some applications in accordance with the TFW architecture. The Contractor shall also provide guidance, training, and assistance to application developers, enabling them to produce required interfaces for access via the Navy web portal. The successful development and deployment of these web-enabled applications and the portal environment shall result in greater accessibility and higher productivity of Navy personnel, creating a more cohesive and efficient Navy organization.

To accomplish this aggressive objective, the Contractor shall partner with the government (i.e., OPNAV 09W and SPAWAR) to implement TFW. Specifically, the Contractor shall provide the required ashore infrastructure and support to develop and implement a test portal solution at the Contractor Test Facility and an operational portal upgrade solution at the two established NMCI Network Operations Centers (NOCs). Initially and until 30 April 2002, this upgrade effort shall be limited to a minimum of 2000 users, whereupon version 2.0 portal services shall be provided as a basic seat service at no additional charge. This service does not include the application server infrastructure that needs to support more than 2,000 users. This solution shall be for government purposes only. This includes the infrastructure (hardware, software, engineering, operations and maintenance, help desk, and training) and management of the Contractor portions of this effort. The Contractor shall provide the Navy with a cost effective, practical and reasonable solution within the timeline required; a solution that is open, scalable and accessible across the enterprise. This document provides a listing and a description of those deliverables the Contractor shall provide under this effort.

Portal Upgrade

The Contractor shall develop the overarching architecture as well as the ashore based portions of a portal upgrade that provides application and database access via a portal to TFW participants, including at least 2000 NMCI seats/users, and demonstrate the ability to perform application integration. The Contractor shall develop the migration strategy to accommodate users as the NMCI is implemented across the Navy enterprise. The portal upgrade shall be implemented in a manner consistent with the functional and architectural requirements established by OPNAV 09W including a repository to house the application interface modules. The Contractor shall provide a technology refresh strategy and POA&M to incorporate additional requirements not met in the initial portal implementation.

Operational Portal

The Contractor shall provide an unclassified operational portal leveraging existing NMCI infrastructure. The portal hardware and software shall be identical to the system selected for the Contractor test implementation. The shore sites shall be located in the NMCI San Diego Network Operation Center (NOC), the NMCI Norfolk NOC. The Contractor shall work with the government implementers to develop all necessary agreements and responsibilities to ensure a successful implementation that is seamless between the afloat and the shore implementations. Redundancy of the system shall be provided at each site.

The Contractor shall specify the design down to the "edge-connector" and software load level. The Contractor shall show (by analysis, simulation, similarity, etc.) how the design shall scale across the range of capabilities and domains for an enterprise implementation. Further, the Contractor shall show how the proposed system will mature and evolve in accordance with commercial technology trends and Navy operational requirements and shall not lead to an architectural "dead-end" or vendor lock-in due to unique solutions.

The Contractor shall provide engineering expertise to the afloat integrator, SPAWAR, to support the testing of the classified and afloat portal system. This is essential given that interim authority to operate over SIPRNET is not expected to be granted to the Contractor by the Navy until October 2001 and interim authority to connect to SIPRNET certification is not expected from DISA before mid-November 2001.

The Contractor shall administer the ashore based portions of the portal consistent with applicable SLAs and the Operational Plan identified in paragraph 4.2 below. The Contractor shall provide training to government personnel to enable them to develop application interfaces as well as administer and operate and maintain the classified and afloat portal.

Test Portal

The Contractor shall provide a test portal environment for the testing of applications that access and integrate into the portal system. The Contractor shall conduct the testing of applications for the purposes of maintaining the security and stability of the NMCI. In addition to application integration testing, the test lab shall be used for testing hardware and software upgrades prior to release upgrades to the portal system. The test portal environment shall be the baseline system for all operational sites. The test portal environment shall be fully documented.

Deliverables

Deliverables shall be in Microsoft Office 2000 or Visio formats

1.0 Architecture and Engineering

- 1.1 A top-level architecture of the system shall be established. The architecture shall identify items of hardware, software, and manual-operations. It shall be ensured that all the system requirements are allocated among the items. Hardware configuration items, software configuration items, and manual operations shall be subsequently identified from these items. The system architecture and the system requirements allocated to the items shall be documented. 1st Draft due 30 days after contract award. 2nd Draft due 60 days after contract award. Final Architecture Due 90 days after contract award.

2.0 Engineering

- 2.1 Detailed Design Document – The Contractor shall develop and document a detailed design for the interfaces external to the software items, between the software components, and between the software units. The detailed design of the interfaces shall permit coding without the need for further information. 1st Draft due 30 days after contract award. 2nd Draft due 60 days after contract award. Final Due 90 days after contract award.

2.2 Installation and Configuration Instructions. 1st Draft due 30 days after contract award. 2nd Draft due 60 days after contract award. Final Due 90 days after contract award. The Contractor shall establish and document software installation and configuration instructions to include:

2.2.1 Interfaces external to the software item

2.2.2 Security specifications

2.2.3 Human-factors engineering (ergonomics) constraints on personnel, and areas needing concentrated human attention, that are sensitive to human errors and training

2.2.4 Data definition and database requirements

2.2.5 Installation and acceptance requirements of the delivered software product at the operation and maintenance site(s).

3.0 Implementation

3.1 Test Portal Implementation – The Contractor shall produce the ashore portal upgrade environment in a test lab implementing the Contractor architecture (including hardware, software, and O&M support). Due 60 days after contract award.

3.2 Portal Upgrade Implementation – The Contractor shall produce the ashore portal upgrade infrastructure necessary to implement the Contractor architecture (including hardware, software, and O&M support) in two network operating centers. Due 90 days after contract award.

4.0 Management and Data Reporting

4.1 Reviews

4.1.1 Project Status Updates- The Contractor shall provide weekly project status updates to OPNAV 09W staff, in coordination with afloat integrator status reviews, to be held via VTC every Wednesday @1300 Pacific time.

4.1.2 Status Reports - The Contractor shall provide weekly status reports to OPNAV 09W staff. Status reports shall identify any issues that could affect portal schedule and performance. Status reports, to include tracking of resources to the Work Breakdown Structure in Microsoft Project, are due prior to the weekly VTCs.

4.1.3 Implementation Management Plan - This plan shall evolve over the course of the project and the Contractor shall coordinate inputs into the plan with the OPNAV 09W staff and SPAWAR. 1st draft due 7 days after contract award. 2nd draft due 60 days after contract award. Final due 90 days after contract award. Elements of this plan include:

4.1.3.1 Portal System Evolution - The Contractor shall create a technology refresh plan identifying the key requirements that must be met for the portal upgrade implementations to evolve to support an enterprise rollout following the initial implementation. This plan shall evolve over

the course of the portal upgrade effort. This plan shall support the refinement of Government requirements such as the convergence of IT-21/Afloat and NMCI architectures for the successful enterprise implementation of the TFW architecture and make recommendations for the scope and schedule for the portal system evolution, and a supporting cost estimate. This plan is due 3 months after contract award.

4.1.3.2 Risk Mitigation - The Contractor shall provide a Risk Mitigation study for finding ways to mitigate the cost, technical, and management risks associated with the development of the complete architecture.

4.1.3.3 Market Analysis - The Contractor shall provide the Government with analysis identifying economic costs and benefits associated with the proposed implementation. The Contractor shall identify key cost drivers and their anticipated impact on the portal upgrade effort as well as on the ultimate operational portal system.

4.2 Operations Plan - The Contractor shall deliver an Operational Plan three months after start of implementation. The Contractor shall coordinate inputs into the plan with the OPNAV 09W staff and SPAWAR. 1st draft due 30 days after contract award. 2nd Draft due 60 days after contract award. Final due 90 days after contract award. Elements of this plan include:

4.2.1 Disaster Recovery - The Contractor shall provide a disaster recovery plan for the portal upgrade implementation that supports redundancy, fail-over and system recovery.

4.2.2 Operational Metrics - The Contractor shall support the OPNAV 09W staff in the establishment of operational metrics for the portal upgrade. During initial operations, the metrics shall be collected and used to determine initial changes that may be required. These changes can then be tested in the lab environment. One of the proposed metrics to be collected shall be the number of times an application is accessed and by which organizations. The Contractor shall collect and consolidate operational metrics for NMCI systems and report them at the weekly update meetings (4.1.1).

4.2.3 Help Desk – The Contractor help desk shall coordinate with the IT-21 help desk to optimize support for the portal. This help desk shall be available 24 hours a day and 7 days a week. The Contractor shall support the lead integrator in the establishment of help desk support metrics. The Contractor shall collect and consolidate these metrics from NMCI help desks and report at the weekly update meetings (4.1.1).

4.2.4 User Activity Metrics - The Contractor shall support the lead integrator in the establishment of user activity metrics. These metrics shall track user access, portal activity and computer-based training use. The Contractor shall collect and consolidate these metrics for NMCI systems and report them at the weekly update meetings (4.1.1).

4.2.5 Security Incident Reporting – Data shall include any configuration changes, computer incidents, network incidents, INFOCON status, and intrusion detection reaction alert status. The Contractor shall collect and consolidate this data for NMCI systems and report it at the weekly update meetings (4.1.1).

4.3 Plan of Actions and Milestones (POA&M)– The Contractor shall produce a POA&M in accordance with the functional requirements breakdown. This POA&M shall be produced through the NMCI release management process used to implement the technology refresh provisions of the NMCI contract.

4.4 Schedule - The Contractor shall provide a consolidated work break down structure and project plan reflecting the Contractor deliverables and tasks. The Contractor elements shall be provided to the OPNAV 09W staff no later than one week after contract award. This plan shall provide those activities required for the success of the TFW portal upgrade implementation over the following periods:

- 3 months for the implementation of the portal upgrade.
- 2 months for the initial operations of the portal.

5.0 Training and Documentation

5.1 Integrator's conference - The Contractor shall provide an integrator's conference that includes executive level sessions and application interface module developer's sessions. The sessions shall be of sufficient depth to allow a programmer to develop interface modules to access Navy applications and databases. In addition, the Contractor shall produce an interface repository and an interactive development environment to support the rapid development of the required interface protocols and message content for this conference. Executive level sessions are due 15 days after contract award. Application interface module developer's sessions are due 30 days after contract award.

5.2 Application certification – The Contractor shall provide training of test site personnel on the application certification process. Due 60 days after contract award.

5.3 Afloat Integrator Training – The Contractor shall provide training of afloat integrator personnel responsible for the operation of the afloat installations. Due 60 days after contract award.

5.4 End-User Training - The Contractor shall provide e-learning training for TFW end-users.

6.0 Application interface and integration support

6.1 Application Interface Support - The Contractor shall field a team of software interface developers knowledgeable in TFW and NMCI architectures, and portal and enterprise application integration technology to work with a selected set of the initial 120 applications. This team shall assist in the migration of the selected applications to the portal system and be responsible for the first set of application interface

modules for the selected applications. These modules shall be housed and maintained on the repository established by the Contractor. Support shall begin following the Integrator's Conference (5.1).

- 6.2 Application Developer's Guidance - The Contractor shall build on the government furnished Portal Integration Developers Guidance Version 1.1, dated 2 July 2001^f, to produce the final application interface guidance. Application Developers shall use this guidance to produce interfaces that are interoperable with the Contractor infrastructure implementation of the TFW architecture solution. Also, this guidance shall support application owners in the migration of applications into the portal system. The Contractor shall evolve this guidance as lessons are learned. Guidance shall be available on-line from 2 weeks after contract award through → contract period of performance.
- 6.3 Repository (open source site) – The Contractor shall establish and maintain an interface repository for use by TFW authorized application developers. Also, the Contractor shall provide feedback to application developers on the certification status of their developed interfaces and, if necessary, offer detailed corrective guidance to the application developers should their interfaces fail certification. Available on-line from 2 weeks after contract award through contract period of performance.
- 6.4 Application Certification Plan - The Contractor shall provide a certification plan for infrastructure components necessary to achieve TFW goals. This plan shall be consistent with the current NMCI certification process. Due 30 days after contract award.

7.0 Extent to which the Contractor Approach Can Meet Functional Requirements

The matrix provided below describes the TFW functional requirements. The Contractor is committed to providing the functionality as defined in the matrix below and will upgrade the functional and technical requirements of the existing NMCI portal to provide a standardized Web-based interface to allow sharing and managing of both structured and unstructured information for the operational and test portal capability upgrade efforts. Specifically the NMCI portal:

- Shall support integration of disparate Navy applications and data sources to form a Web-based, service-centric capability
- Shall provide interactions with the Navy applications through a Contractor architected logical repository
- Shall support single sign on capability for portal access
- Shall be customizable to be personalized by the end user and by organizational commands
- Shall allow the end user to be able to subscribe to desired services and have these services provided at each log-on to the NMCI portal
- Shall allow organization commands to be able to tailor the view provided to each user within the command
- Shall provide a standard Navy banner that can be customized with tabs for Navy and organizational command access

These above capabilities, which represent the intent of the functional requirements of the matrix, will be demonstrated in an operational portal to be observed by the DoN.

Portal Requirements Matrix

Color & Notes Legend:

Requirement that will be implemented in v1.1 of NMCI (Nov, 2001)

1 Technical refresh will be used to identify new product to address this requirement in v2.0 at no cost.

2 Some additional elements may be required which may result in additional costs.

Convention:

Y: Supported

N: Not Supported

P: Partially Supported

Requirement	Title	Objective	NMCI				TFW		Notes
			v1.0	v1.1	v2.0	v1.1	v2.0		
2 Navy Enterprise Application Portal Requirements									
2.1 Presentation Requirements									
2.1.1 Personalization									
1	The enterprise portal shall provide administrators with the ability to customize the content and format of portal views at both individual and user group levels.	(T)		P	P	P	P	Y1	
2	The enterprise portal shall provide users with the ability to customize both the content and format of the desktop through a list of available portal services.	(T)	Y	Y	Y	Y	Y	Y	
3	The enterprise portal shall support the development of a navigation bar to include links to the portal homepage, the user's command menu, the channel registry, document management system search facility, user's workspaces, the user's profiles, and help.	(T)	Y	Y	Y	Y	Y	Y	
4	The enterprise portal shall allow the user to add, minimize/maximize, detach, and delete any "user controllable" pane within the browser.	(T)	P	P	P	P	P	Y1	Cannot support Detach
5	The enterprise portal shall allow the user to modify the size, the number, and the placement of any "user controllable" pane within the browser window.	(T)	P	P	P	P	P	Y1	Size of the pane can not be modified by the user, unless it is a separate browser window. However, number and placement controls are available.
6	The enterprise portal shall not restrict the user's workspace in terms of column width, total column span, row height, and total row span.	(O)	P	P	P	P	P	P1	Not user modifiable, templates are preset.
7	The enterprise portal shall provide the ability to configure detached panes to have the same look and feel as the main portal screen.	(T)	N	N	N	N	N	Y1	
8	The enterprise portal shall allow administrators to program both mandatory and selectable default layouts and content components.	(T)	Y	Y	Y	Y	Y	Y	
9	The enterprise portal shall provide the administrator the ability to lock specific components of the organizational enterprise portal layout so these components will always be displayed in the predefined locations and they cannot be moved, minimized or deleted by users.	(T)	Y	Y	Y	Y	Y	Y	
10	The enterprise portal shall allow users to subscribe to individual objects or a predefined pane of objects.	(T)	Y	Y	Y	Y	Y	Y	Basic portal users can subscribe to any CDA they are authorized to access.
11	The enterprise portal shall allow users to define the schedule, format, delivery pane, and preferred alert method when subscribing to an object, such as a report.	(O)	P	P	P	P	P	P2	Can be achieved by developing connectors that provide subscribe facility.
12	The enterprise portal shall retrieve personal configuration settings for each user upon login.	(T)	Y	Y	Y	Y	Y	Y	
13	The enterprise portal shall incorporate the default settings provided by the administrator in the default personal configuration setting.	(T)	Y	Y	Y	Y	Y	Y	
14	The enterprise portal shall provide the users the ability to save or update personal configuration settings.	(T)	Y	Y	Y	Y	Y	Y	
15	The enterprise portal shall notify each affected user of changes to the organizational default settings.	(O)	P	P	P	P	P	P2	Not on Citrix roadmap, but will be evaluated.
16	The enterprise portal interface configuration shall be based on privileges defined by user, group, and roles.	(O)	P	P	P	P	P	Y1	Customization at Individual User's level is not available, but Customization at Group Level is available.
17	The enterprise portal shall deny access to unauthorized channels.	(T)	Y	Y	Y	Y	Y	Y	

Portal Requirements Matrix

18	The enterprise portal shall suggest services based on user or group portal usage patterns.	(O)	N	N	N	N	N	N	N	N	N	N	N
19	The enterprise portal shall allow users to select the portal user profile option.	(O)	N	N	N	N	N	N	N	N	N	N	V1
20	The enterprise portal shall provide administrators with profiling metrics on channel usage patterns.	(O)	N	N	N	N	N	N	N	N	N	N	N
21	The enterprise portal shall share user roles and privileges information with third-party products.	(T)	P	P	P	P	P	P	P	P	P	P	Y1
22	The enterprise portal shall support a consistent user interface for all applications.	(T)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
23	The enterprise portal shall support the configuration of a consistent user interface for all applications.	(T)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
24	The enterprise portal shall be accessible to all Navy domains, allowing authorized users access from anywhere, anytime.	(O)	P	P	P	P	P	P	P	P	P	P	Y2
25	The enterprise portal shall be accessible to groups not in the .mil domain performing transactions with Navy units.	(O)	P	P	P	P	P	P	P	P	P	P	Y2
26	As part of the enterprise portal internationalization capability, it shall support the following foreign languages: Chinese, Czech, Danish, Dutch, French, German, Hungarian, Bulgarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian-Croatian, Hebrew, Spanish, Swedish, Ukrainian. For the remainder of this document, the phrase "foreign languages" will only include languages described.	(O)	P	P	P	P	P	P	P	P	P	P	Y2
27	The enterprise portal shall support searching of foreign language documents.	(O)	P	P	P	P	P	P	P	P	P	P	Y2
28	The enterprise portal shall support index and categorization of foreign language documents.	(O)	N	N	N	N	N	N	N	N	N	N	N
29	The enterprise portal shall support screens rendering in foreign language based on user preference.	(O)	N	N	N	N	N	N	N	N	N	N	N
30	The enterprise portal shall provide translation services for foreign language content and documents to and from English.	(O)	N	N	N	N	N	N	N	N	N	N	N
31	The enterprise portal shall support speech annotation.	(O)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
32	The enterprise portal shall support the display of the following multimedia file formats: <input type="checkbox"/> Audio Formats (.aiff / .mid / .wav / .mp3/4) <input type="checkbox"/> State Graphic Formats (.gif / .jpeg / .nif / .bmp / .tiff) <input type="checkbox"/> Video/Animation Formats (.mpeg / .ram / .avi / .ra / .flv / .mov) <input type="checkbox"/> Text/Document Formats (ASCII / pdf / MS Office product formats as natively supported by MSIE/office object inheritance) <input type="checkbox"/> Markup Languages (HTML / XHTML / XML / XSL / PDML / SGML) <input type="checkbox"/> Compression Types (zip / gz / gnu / tar / BinHex / MIME / Unicode)	(T)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
33	The enterprise portal shall support multiple panes of audio/visual presentations that run simultaneously.	(T)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
34	The enterprise portal shall present content in format compatible with mobile devices for any pane that supports that format.	(O)	N	N	N	N	N	N	N	N	N	N	N

35	The enterprise portal shall provide the ability for content distribution automatically tailored for bandwidth or client-type considerations.	(O)	N	N	N	N	N	N	N	No deployment of mobile devices for 1.0 or 1.1.
36	The enterprise portal shall provide natural language interfaces, establishing a reading level standard for content, and developing intuitive navigational tools. (action - 5)	(O)	N	N	N	N	N	N	N	
37	The enterprise portal shall comply with Section 508 Web Accessibility Standard of the Rehabilitation Act (29 U.S.C. 794d).	(T)	Y	Y	Y	Y	Y	Y	Y	
38	The enterprise portal shall provide remote access to centralized, browser-based portal and administration services.	(T)	P	P	P	P	P	P	Y1	
39	The enterprise portal shall provide ability to schedule administration job.	(O)	Y	Y	Y	Y	Y	Y	Y	
40	The enterprise portal shall provide administrators with the ability to add panes.	(T)	Y	Y	Y	Y	Y	Y	Y	
41	The enterprise portal shall support a distributed architecture.	(T)	Y	Y	Y	Y	Y	Y	Y	
42	The enterprise portal shall support performance, monitoring and metrics tools.	(T)	P	P	P	P	P	P	P	Available w/NMCI Enterprise Management Tools
43	The enterprise portal shall support a registry containing metadata describing pane modules and pointers to them. Enterprise portal presentation logic interacts with the pane providers through the use of this registry-specified information.	(T)	P	P	P	P	P	P	Y	
44	The registry shall support content management capability such that a search engine may be plugged in and used to index and allow querying of its contents by end users.	(T)	P	P	P	P	P	P	Y	
45	The registry shall support permissions granted to users by mapping the user's Distinguished Name concatenated with the user login information to access controls that enable content. This should allow the selective disabling of and/or hiding of the visibility of the existence of pane modules based on user and group.	(O)	P	P	P	P	P	P	Y1	Permissions for Individual User not available
46	The registry shall provide remote access to a centralized, browser-based management interface allowing administrators to add, remove, and modify registry entries as necessary when pane modules are added, removed, or changed.	(T)	P	P	P	P	P	P	Y1	
47	The administration interface should incorporate basic search capabilities.	(T)	P	P	P	P	P	P	Y	
48	The enterprise portal shall support access to the following application server types: J2EE, .net, coldfusion, lotus domino, CGI, Oracle, etc.	(T)	P	P	P	P	P	P	Y	As long as portal can support access
49	The enterprise portal shall provide remote access to centralized, browser-based management of user accounts / roles.	(T)	Y	Y	Y	Y	Y	Y	Y	
50	The enterprise portal shall provide administrators the ability to define permissions for individuals, groups, and roles within the organization.	(T)	P	P	P	P	P	P	Y	Permissions for Individual User not available, but is available for groups
51	The enterprise portal shall provide ability to track user activities / audit logs.	(T)	P	P	P	P	P	P	Y	
52	The enterprise portal shall provide the ability for an administrator to push alerts or notifications to users.	(T)	Y	Y	Y	Y	Y	Y	Y	NMCI v1.0 assumes the use of Integration Broker
53	The enterprise portal shall support SSL and PKI for all portal infrastructure components.	(T)	P	P	P	P	P	P	Y1	Product currently supports SSL for version 1.0. Version 2.0 will provide integrated PKI solution.

54	The enterprise portal shall support authentication services via valid Class 3 DoD PKI digital certificate.	(T) Class 3	P	P	P	P	P	Y1	Dependent upon single sign-on implementation.
55	The enterprise portal shall support authentication services via valid Class 4 DoD PKI digital certificate.	(O) Class 4	N	N	N	N	N	N	Depends upon DoD support for Class 4 PKI.
56	The enterprise portal shall provide the ability to pass user authentication information from the enterprise portal to the services and applications through the data adaptor.	(T)	P	P	P	P	P	Y	Assumes the use of SSO product, may not cross IA boundaries.
57	The enterprise portal shall support authentication services via a valid user ID and password.	(T)	Y	Y	Y	Y	Y	Y	
58	Strong authentication shall be required for any user access to the enterprise portal, and all such accesses shall be audited.	(T)	P	P	P	P	P	Y	Assumes the use of SSO product, may not cross IA boundaries.
59	Error feedback for user authentication shall contain no information regarding which part of the authentication information is incorrect.	(T)	Y	Y	Y	Y	Y	Y	
60	The enterprise portal shall limit the number of unsuccessful login attempts. The number of unsuccessful logons shall be configurable by an administrator.	(T)	P	P	P	P	P	Y	Assumes the use of SSO product, may not cross IA boundaries.
61	The enterprise portal shall have the ability to limit the number of concurrent logons. The number of simultaneous logons shall be configurable by an administrator.	(T)	P	P	P	P	P	Y	Assumes the use of SSO product, may not cross IA boundaries.
62	The enterprise portal security architecture shall support the use of "single sign-on" (SSO).	(O)	P	P	P	P	P	Y	May be restricted to a network enclave.
2.2.5.2 (cont)									
63	The enterprise portal shall support confidentiality. The portal shall provide a centralized mechanism to enforce access control at or above the object level (i.e., functions, data) based on a subject's (user, applications) valid identification, authentication, roles, and permissions.	(O)	P	P	P	P	P	Y1	
64	The enterprise portal shall provide one or more mechanisms to permit applications to ensure confidentiality of sensitive transmitted data via data encryption using government-approved means in accordance with appropriate PKI policy. Approved Secure Sockets Layer (SSL) methods shall be used to provide confidentiality of the data in transit.	(T)	P	P	P	P	P	Y1	
65	The enterprise portal shall provide a capability for centralized user account creation in a heterogeneous environment with the ability to define a unique user identifier and login name (within administrative domain).	(T)	P	P	P	P	P	Y1	
2.2.5.3 Integrity									
66	The enterprise portal shall support the use of SSL to preserve the integrity of the information while in transition between the client and the server.	(T)	Y	Y	Y	Y	Y	Y	
67	The enterprise portal shall comply with DoD Mobile Code policy.	(T)	Y	Y	Y	Y	Y	Y	
2.2.5.4 Non-repudiation									
68	The enterprise portal shall ensure non-repudiation using digital signatures based on DoD PKI Class 3 or Class 4 certificates and keys. SSL/PKI shall be used for non-repudiation as assurance that the sender of data is provided with proof of delivery and the recipient is provided with proof of the sender's identity, so neither can later deny having processed the data.	(T)	P	P	P	P	P	Y	
2.2.5.5 Accountability									
69	The enterprise portal shall provide a mechanism to capture audit logs for selected actions deemed necessary by the system administrator, in order to provide him/her the ability to reconstruct events and determine individual responsibility for security related issues.	(T)	P	P	P	P	P	Y1	

70	The enterprise portal shall provide an audit mechanism capable of automatically collecting, processing, and identifying security-relevant events that meet security audit requirements.	(O)	Y	Y	Y	P	Y1	TFW change in scope to include servers and users outside the scope of NMCI requires inclusion of additional elements to utilize Active Directory. This capability will only be provided for NMCI users.
71	The enterprise portal shall record for each audit event the following information: date and time of the event, the unique subject identifier (user-id) on whose behalf the subject program generating the event was operating, type of event, success or failure of the event, origin of the request (e.g., terminal ID) for identification and authentication events, name of program or file introduced, accessed, or deleted from a user's address space.	(O)	Y	Y	Y	P	Y1	TFW change in scope to include servers and users outside the scope of NMCI requires inclusion of additional elements to utilize Active Directory. This capability will only be provided for NMCI users.
72	The enterprise portal shall provide end-to-end system and user accountability for all relevant events so that the system administrator will be able to reconstruct the cause of an event and identify the user or system component responsible for the event.	(O)	Y	Y	Y	P	Y1	TFW change in scope to include servers and users outside the scope of NMCI requires inclusion of additional elements to utilize Active Directory. This capability will only be provided for NMCI users.
73	The enterprise portal shall provide access and transmission audit logs strictly controlled to maintain integrity.	(T)	Y	Y	Y	P	Y1	TFW change in scope to include servers and users outside the scope of NMCI requires inclusion of additional elements to utilize Active Directory. This capability will only be provided for NMCI users.
74	The enterprise portal shall maintain session information.	(T)	Y	Y	Y	Y	Y	
75	The enterprise portal shall support predictive caching, where predictive caching involves employing dynamic data caching or other appropriate data managing schemes.	(O)	Y	Y	Y	Y	Y	
76	The enterprise portal shall support persistence of data, where persistence is the universal mechanism for saving the state of the system to continue the data transmission, after the actual communication has ceased or the metadata has been received.	(O)	Y	Y	Y	Y	Y	The NMCI IF provides data persistence through a message queuing mechanism. Messages published to the integration broker are guaranteed to be delivered to the subscribing application, in the proper sequence and without duplication even in the case of hardware or network failure. The message queuing mechanism also maintains state information such that messages are received in the proper sequence and without duplication.
77	The enterprise portal shall provide the ability to integrate an on-line training tool kit.	(O)	Y	Y	Y	Y	Y	
78	The enterprise portal shall provide the ability to collect statistics for integrated computer-based training.	(O)	Y	Y	Y	Y	Y	
79	The enterprise portal shall provide context-sensitive help for portal components.	(O)	P	P	P	P	Y1	
80	The enterprise portal shall support the capturing, viewing, and searching of services/components metadata in XML format.	(T)	P	P	P	P	Y1	For I.J, manually maintained registry; for 2.0 UDDI and WSDL will be part of technology refresh.
81	The enterprise portal shall support the integration of POP 3/SMTP and IMAP e-mail protocols.	(T)	Y	Y	Y	P	Y1	Will be provided only for NMCI-seated users.
82	The enterprise portal shall support the integration of a search engine product.	(T)	Y	Y	Y	Y	Y	

Portal Requirements Matrix

	The enterprise portal shall support the following search types:													
83	<input type="checkbox"/> Key word (e.g., technical terms)	(T)												
84	<input type="checkbox"/> Boolean	(T)												
85	<input type="checkbox"/> Fielded Searching (e.g., Date, Author, Organization)	(T)												
86	<input type="checkbox"/> Full text	(T)												
87	<input type="checkbox"/> Hierarchical Searching	(O)												
88	<input type="checkbox"/> Natural Language	(O)												
89	<input type="checkbox"/> Wild Cards	(O)												
90	<input type="checkbox"/> Context/Pattern	(O)												
91	<input type="checkbox"/> Query by Example	(O)												
92	<input type="checkbox"/> Thesaurus	(O)												
93	The enterprise portal shall provide the ability to construct, modify, and store custom search queries.													
94	The enterprise portal shall provide a search engine available to all users.	(T)												
95	The enterprise portal shall provide the ability to search within all identified domains (e.g., .mil, .gov, org, .edu).	(O)												
96	The enterprise portal shall provide the ability to index and search the contents of structured and unstructured file formats to include: <ul style="list-style-type: none"> - Audio Formats (.aiff / .mid / .wav / .mp3/4) - State Graphic Formats (.gif / .jpeg / .nif / .bmp / .tiff) - Video/Animation Formats (.mpg / .mpeg / .ram / .avi / .ra / .flsh / .mov) - Text/Document Formats (ASCII / .pdf / MS Office product formats as natively supported by MSIE/office object inheritance) - Markup Languages (HTML / XHTML / XML / XSL / PDML / SGML) - Compression Types (.zip / .gz / .gnu / .tar / BinHex / MIME / Unicode) 	(T)												
97	The enterprise portal shall limit the ability to search the contents based on user's access privileges.	(O)												
98	The enterprise portal shall provide the ability to view, print, or export the results of a search query.	(O)												
99	The enterprise portal shall support relevance ranking for displaying search results.	(T)												
100	The enterprise portal shall support the selection of different display options for search results including summary, no summary, and number of results per page.	(T)												
101	The enterprise portal shall provide the ability to display the identification of the source material for a search query response.	(O)												
102	The enterprise portal shall provide the ability to add, delete, and save information source selections for search.	(O)												
103	The enterprise portal shall support searching on multiple information sources.	(O)												
104	The enterprise portal shall support both internal and external search.	(O)												
105	The enterprise portal shall support user-defined search agent (e.g., Spider/Crawler).	(O)												
106	The enterprise portal shall support search agent with multiple notification mechanisms.	(O)												
107	The enterprise portal shall support scheduling of search agents.	(O)												

Portal Requirements Matrix

Requirement	Thres- hold	Obj- jective	NMCI		IFW		Notes	
			V1.0	V1.1	V2.0	V1.0		V2.0
108 The enterprise portal shall support search agents that highlight incremental change in search query results.		(O)	N	N	N	N	Y2	
109 The enterprise portal shall provide the ability to extract metadata from information sources.		(O)	P	P	P	P	Y2	
2.3.3 Directory Services								
110 The enterprise portal shall support the integration of lightweight directory access protocol (LDAP) V3 or higher version Directory Servers.	(T)		Y	Y	Y	Y	Y	
2.3.4 Document Management								
The enterprise portal shall support the integration of document management products with the following characteristics:								NMCI IF can support integration between the electronic document management system and portal. Type of support is application specific.
□ support content creation and storage in the portal.	(T)		N	N	N	N	Y	Assume 10% use 100 megabytes and 90% use < 10 megabytes.
□ provide typical document management capabilities to include retrieving, sharing, tracking, revising, publishing, and distributing documents.	(T)		N	N	N	N	Y	
□ provide document summarization.	(T)		N	N	N	N	Y	
114 The enterprise portal shall support content creation and storage in the portal.	(T)		N	N	N	N	Y	
115 The enterprise portal shall provide typical document management capabilities to include retrieving, sharing, tracking, revising, publishing, and distributing documents.	(T)		N	N	N	N	Y2	
116 The enterprise portal shall provide document summarization.	(T)		N	N	N	N	Y2	
2.3.5 Workflow								
117 The enterprise portal shall support the integration of workflow management products in compliance with the Workflow Management Coalition Reference Model.	(T)		N	N	N	N	P	Assumes the use of Integration Broker
118 The enterprise portal shall share user roles and privileges information with workflow management product.	(T)		N	N	N	N	Y2	Assumes the use of Integration Broker
119 The enterprise portal shall receive and respond to intermediate "state changes" in a business process (e.g. approvals).		(O)	Y	Y	Y	Y	Y	Assumes the use of Integration Broker
120 The enterprise portal shall provide auditing and management services to monitor process flows.		(O)	N	N	N	N	Y2	Assumes the use of Integration Broker
2.3.6 Collaboration								
121 The enterprise portal shall support the integration of collaboration products.	(T)		Y	Y	Y	Y	Y	
The enterprise portal shall provide users and administrator ability to create communities that are considered:								
□ Mandatory Communities - require for a select groups of users		(O)	Y	Y	Y	Y	Y	Met through public folders and newsgroups.
□ Threaded Discussion		(O)	N	Y	Y	Y	Y	
124 The enterprise portal shall provide collaboration in the context of structured and unstructured information resources, workflow process events, and calendar events.		(O)	N	N	N	N	N	
125 The enterprise portal shall support synchronous and asynchronous collaboration.	(T)		N	N	N	N	N	
126 The enterprise portal shall support the automatic collection and archiving of data and information assets created from collaborative activity.	(T)		N	N	N	N	N	
127 The enterprise portal shall make use of project- or function-based "team rooms," to aggregate resources to support a particular activity at a single on-line location.	(T)		N	N	N	N	N	Access can be provided, dependent upon CLIN
128 The enterprise portal shall allow users to discover whether another user is currently online.	(T)		N	N	N	N	N	
129 The enterprise portal shall allow users to execute collaboration tools within the portal facilitating simultaneous enterprise-wide access, regardless of duty location.	(T)		Y	Y	Y	Y	Y	
2.3.7 Calendar/Schedule								

Portal Requirements Matrix

130	The enterprise portal shall support the integration of calendar products.	(T)		Y	Y	Y	Y	Y	Y	Y	This functionality provided for NMCI seat users only
131	The enterprise portal shall support an integrated calendar/schedule facility to facilitate the sharing comparing and analyzing of events.	(O)		Y	Y	Y	Y	Y	Y	Y	This functionality provided for NMCI seat users only
132	The enterprise portal shall support flexible contact mechanisms.	(T)		Y	Y	Y	Y	Y	Y	Y	
133	The enterprise portal shall support the integration of business intelligence products with the following characteristics: the ability to view standardized reports and report formats, the ability to view information through multi-axis drill down and charting, and the ability to perform data mining on multiple authorized information sources.	(T)		Y	Y	Y	Y	Y	Y	Y	Support provided, but no tools provided
134	The enterprise portal shall provide the ability to view standardized reports and report formats.	(O)		N	N	N	N	N	N	Y2	
135	The enterprise portal shall provide the ability to view information through multi-axis drill down and charting.	(O)		N	N	N	N	N	N	Y2	
136	The enterprise portal shall provide the ability to perform data mining on multiple authorized information sources.	(O)		N	N	N	N	N	N	Y2	
137	The enterprise portal shall allow for integration of navigable database reports into graphical and textual displays.	(O)		N	N	N	N	N	N	Y2	
138	The enterprise portal shall deliver output of structured data requests in HTML as well as transferable and native formats.	(O)		N	N	N	N	N	N	Y2	
139	The enterprise portal shall support online analytical processing (OLAP) to perform analysis without having to write complicated structured query language (SQL) statements.	(O)		N	N	N	N	N	N	Y2	
140	The enterprise portal shall allow users to "drill down" (Allow users to access data sources through pre-defined or ad hoc query tools)	(O)		N	N	N	N	N	N	Y2	
141	The enterprise portal shall provide reports created by a variety of native and third party business-intelligence tools.	(O)		N	N	N	N	N	N	Y2	
142	The enterprise portal shall provide a full range of query, report, and analysis capabilities in a highly integrated fashion.	(O)		N	N	N	N	N	N	Y2	
143	The enterprise portal includes native query, reporting, spreadsheet, graphs, and OLAP analysis capability.	(O)		N	N	N	N	N	N	Y2	
144	The enterprise portal shall provide data access via industry standard file transfer protocols.	(T)		Y	Y	Y	Y	Y	Y	Y	NMCI IF Version 1.0 supports web-based FTP. Also, through the Integration Broker capabilities are provided for publish/subscribe, guaranteed delivery, rules based routing. NMCI users also have access to the Reflections FTP tool. Access to data is limited only by government IA boundary policies.
145	The enterprise portal shall provide automated file conversion.	(O)		P	P	P	P	P	P	P2	Assumes use of Integration Broker
2.3.1											
146	The enterprise portal shall provide mechanisms for publishing new data and services (e.g., publish/subscribe model).	(T)		N	N	N	N	N	N	Y1	
147	The enterprise portal shall provide mechanisms for notification of changes to data.	(O)		N	N	N	N	N	N	Y2	Depends upon technology refresh.
2.3.1 Content Management Requirements											
148	The enterprise portal shall provide users the ability to subscribe to individual content and service objects or pre-defined channels of content and services.	(T)		Y	Y	Y	Y	Y	Y	Y	

149	The enterprise portal shall provide the ability to automatically extract metadata from various information sources, enabling users to identify relationships in the information.	(O)	N	N	N	N	N	Y2		
150	The enterprise portal shall provide the ability to establish event-driven connections to static and dynamic information resources.	(O)	P	P	P	P	P	P	Supports polling of MSMQ, additional capability provided through integration broker	
151	The enterprise portal shall provide synchronization mechanisms for sharing user IDs, user roles, content components (e.g., portlets, gadgets) and content access privileges between different vendors' portal products.	(O)	P	P	P	P	P	P	Available through integration with SSO product.	
152	The enterprise portal shall support delta change replication and synchronization of portal-maintained data to distributed portals with minimal bandwidth.	(T)	(O)	P	P	P	P	Y1		
153	The enterprise portal shall support compression methods for streamlining bandwidth utilization.	(O)	Y	Y	Y	Y	Y2	Y2	Assumes the use of additional technologies	
154	The enterprise portal shall provide online backup capability for all portal-maintained data.	(T)	Y	Y	Y	Y	Y1	Y1	TFW change in scope to include servers and users outside the scope of NMCI requires inclusion of additional elements to utilize NMCI EMS process and integration with IT-21 EMS	
155	The enterprise portal shall provide archiving for all portal-maintained data.	(T)	Y	Y	Y	Y	Y1	Y1	TFW change in scope to include servers and users outside the scope of NMCI requires inclusion of additional elements to utilize NMCI EMS process and integration with IT-21 EMS	
2.3.1.2 Metadata Management Requirements										
156	The enterprise portal shall either provide or allow integration with a back-end "service registry" maintaining information on data sources, services, business logic components, and other building blocks such as may be used by developers of applications for the portal panes.	(T)	N	N	P	N	P	Y	Y	
157	The service registry shall store metadata on and access information for structured and unstructured data sources in the repository.	(T)	N	N	N	N	P	Y		
158	The service registry shall store metadata on and access information for services and business logic components in the repository.	(T)	P	P	P	P	P	Y		
159	The metadata stored by the service registry shall support indexing and allow a search engine to be plugged in or for search applications to be built on it, so that application developers may discover the existence and method of utilization of data sources and or services at development time.	(T)	N	N	N	N	P	Y		
160	The metadata stored by the service registry shall support the creation of a wrapper service that allows applications to query the registry at runtime for service access information that they can use to find a service dynamically.	(O)	N	N	N	N	N	Y1		
161	The enterprise portal shall provide dynamic unstructured metadata tagging of information and data assets at the time of publishing and as a function of data use and manipulation (i.e., metadata generation tools).	(O)	N	N	N	N	N	Y1		
162	Content publishers should be able to manage developer access to metadata associated with published content. Content publishers should be given the option to restrict developer access to metadata data elements (file name, file type, title, description, author, etc.) by user, user role, user group, or organization.	(O)	P	P	P	P	P	Y1		
163	The enterprise portal shall support automatic updating of the registry from the repository.	(T)	N	N	N	N	P	Y1	Need to enhance so automatic updates of the registry are done with new additions.	

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164	The enterprise portal shall be able to have the repository, registry and enterprise portal engine residing on the same system without conflict.	(O)	Y	Y	Y	Y	Y	Y	Y	Y
165	The enterprise portal shall support multiple taxonomies automatically generated and manually developed.	(O)	N	N	N	N	N	N	N	Y2
166	The enterprise portal shall provide access to an intuitive cataloging system for classifying objects.	(O)	P	P	P	P	P	P	P	Y2
167	The enterprise portal shall provide readily accessible metadata descriptions of object properties.	(T)	P	P	P	P	P	P	P	Y2
168	The enterprise portal shall support Navy-defined metadata standards (SECNAV INST 5000.x approval signature).	(O)	N	N	N	N	N	N	N	N
169	The enterprise portal shall support XML 1.0.	(T)	Y	Y	Y	Y	Y	Y	Y	Y
170	The enterprise portal shall support XML 2.0.	(O)	N	N	N	N	N	N	N	Pending W3C approval.
171	The enterprise portal shall provide the ability to import services such that information from an external service can be passed to the enterprise portal and presented to the enterprise portal user through a web browser.	(T)	Y	Y	Y	Y	Y	Y	Y	Y
172	The enterprise portal shall provide a modular approach to application integration that allows for new data adaptors to be registered into the enterprise portal without modifying the core functions of the enterprise portal.	(T)	Y	Y	Y	Y	Y	Y	Y	Y
173	The enterprise portal shall facilitate this integration using Navy and industry-recognized standards wherever possible to maximize the openness of the enterprise portal architecture.	(T)	Y	Y	Y	Y	Y	Y	Y	Y
174	The enterprise portal shall provide a general set of capabilities or services to each data adaptor to provide consistency and eliminate the need for the data adaptor to recreate those capabilities in each adaptor (e.g., extend or inherit).	(T)	P	P	P	P	P	P	P	Y1
175	The enterprise portal shall provide the ability to pass user personalization information from the enterprise portal to the services and applications through the data adaptor in order to influence the output of the data adaptor.	(T)	N	N	N	N	N	N	N	Y
176	The enterprise portal shall secure access to each data adaptor using the same security controls that apply to every other object in the enterprise portal.	(T)	Y	Y	Y	Y	Y	Y	Y	Y
177	The enterprise portal shall support XML or XHTML as output formats from the data adaptor that will be delivered as XHTML to the user's web browser without any additional enterprise portal requirements for client software or browser plug-ins.	(T)	Y	Y	Y	Y	Y	Y	Y	Y
178	The enterprise portal shall provide access to tools to connect multiple, heterogeneous data stores and apply business logic to web-enabled legacy applications or build new applications.	(T)	N	N	N	N	N	N	N	Y2 Can be accomplished using Integration Broker.
179	The enterprise portal shall export an application programming interface (API) such that data adaptors can interact with enterprise portal objects.	(T)	P	P	P	P	P	P	P	Y1
180	The enterprise portal shall provide sufficient flexibility such that it is possible to develop data adaptors in different programming environments to accommodate both applications with different programming interfaces, and implementers with different skills.	(T)	N	N	N	N	N	N	N	Y1
181	The enterprise portal shall provide an XML API for integration of services.	(T)	P	P	P	P	P	P	P	Y1

182	The enterprise portal shall provide an XML-based development environment to aid in the development of data adapters to be integrated into the enterprise portal.	(T)		N	N	N	N	N	N	
183	The enterprise portal must support the following technologies: Java 2 Enterprise Edition (J2EE), Enterprise Java Beans (EJB), Java Server Pages (JSP), Active Server Pages (ASP), servlet standards and Common Gateway Interface (CGI).	(T)		N	N	P	P	P	P	Y1
184	Shall support web-based creation of panes. The creation of content for panes does not have to be web-based; only the selection of content for panes is required to be web-based.	(T)		P	P	P	P	P	P	P1
185	The enterprise portal shall enable end-users to create panes consisting of multiple content items (services).	(O)		N	N	N	N	N	N	P1
186	The enterprise portal shall support multiple programming languages to include PERL, C, C#, C++, Java, and Visual Basic.	(T)		P	P	P	P	P	P	Y
187	The enterprise portal must support programming/development languages that conform to industry standards.	(T)		P	P	P	P	P	P	Y
188	The enterprise portal shall include an Adaptor Development Kit (ADK) that shall include, but not be limited to: documentation, technical support, code samples, helper functions, wizard-like tools, and third party resources for creating new services.	(T)		N	N	N	N	N	N	Y
189	The enterprise portal shall provide a visual development environment and supporting tools.	(T)		Y	Y	Y	Y	Y	Y	Y
190	The enterprise portal shall include debugger tools that are comprehensive and consistent with the operational environment.	(T)		P	P	P	P	P	P	P
191	The enterprise portal shall contain a consistent set of tools that are available in all operational environments.	(T)		Y	Y	Y	Y	Y	Y	Y
192	The enterprise portal shall provide a direct database interface to commercially available relational databases such that database queries can be constructed and executed directly on the external application databases.	(T)		N	N	N	N	N	N	Y2
193	The enterprise portal shall provide the ability to access application databases utilizing Open Database Connectivity (ODBC) and Java Database Connectivity (JDBC).	(T)		Y	Y	Y	Y	Y	Y	P2
194	The enterprise portal shall provide interfaces to support specific relational database systems to include but not limited to Lotus Notes, Microsoft Access, Microsoft SQL Server, Sybase, SAP R/3, and Oracle.	(T)		Y	Y	Y	Y	Y	Y	Y
195	The enterprise portal shall provide the ability to store user database login and preference information, so that the user can obtain the results of a database query without logging in to the database system separately.	(T)		N	N	N	N	N	N	Y1
196	The enterprise portal shall provide the ability to cache complex database queries so that multiple users can share the same query.	(T)		N	N	N	N	N	N	Y2
197	The enterprise portal shall support the Structured Query Language (SQL) - FIPS 127-2 standard for interaction with existing and future relational databases.	(T)		Y	Y	Y	Y	Y	Y	Y
198	The enterprise portal must be able to integrate with applications or services that do not reside on the same platform; and therefore, must communicate over a network or the Internet.	(T)		Y	Y	Y	Y	Y	Y	Y
199	The enterprise portal must allow data adapters to access its components (e.g., repository, authentication server) over a network or the Internet.	(T)		Y	Y	Y	Y	Y	Y	Y

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Requirement	Thres- hold	Ob- jective	NMCI			IFAW			Notes
			s1.0	s1.1	s2.0	s3.1	s2.0	s3.0	
200	The enterprise portal must provide the ability to interface with applications that support the OMG (CORBA, RMI, DCOM, SOAP, ebXML) and other messaging protocols to support distributed processing.	(T)	P	P	P	P	P	Y	
2.4 Quality Requirements									
2.4.1 Performance									
201	The enterprise portal shall support a maximum of 3 million users.	(T)	(O)	Y	Y	Y	Y	Y	The NMCI IF is scalable.
202	The enterprise portal shall support a maximum of 20,000 services.	(T)	(O)	Y	Y	Y	Y	Y	The NMCI IF is scalable.
2.4.2 Scalability									
203	The enterprise portal shall be able to scale up to a maximum of 500,000 concurrent users.	(T)	(O)	Y	Y	Y	Y	Y	The NMCI IF is scalable.
2.4.3 Availability									
204	The enterprise portal shall be available in A0.9999999999	(T)		P	P	P	P	P	Requirement permits only .0032 seconds of down-time per year. Will support fail-over and redundancy in accordance with NMCI minimum requirements.
2.4.4 Reliability									
205	The enterprise portal shall support the integration or configuration of high-availability capabilities that include fault-tolerance.	(T)		Y	Y	Y	Y	Y	
206	The enterprise portal shall support the integration or configuration of high-availability capabilities that include automatic failover.	(T)		P	P	Y	P	Y	
207	The enterprise portal shall support the integration or configuration of high-availability capabilities that include load-balancing.	(T)		Y	Y	Y	Y	Y	
2.4.5 Usability									
208	The enterprise portal vendor shall provide installation, maintenance, training, support, and documentation for the portal products.	(T)		Y	Y	Y	Y	Y	
209	The enterprise portal shall provide ease of installation and sufficiency of documentation.	(T)		Y	Y	Y	Y	Y	
210	The enterprise portal shall provide ease of use of administrative functions and tools for managing users, managing services, use of web interface or windows interface.	(T)		Y	Y	Y	Y	Y	
Section 3 Vendor-Product Life Cycle Requirements									
3.1 Vendor									
3.1.1 Vendor Responsiveness									
213	The enterprise portal vendor shall have 24 x 7 worldwide technical support via telephone and e-mail.	(T)		Y	Y	Y	Y	Y	
3.1.2 Cost Negotiation potential									
214	The enterprise portal vendor shall support an enterprise license for the enterprise portal and all associated infrastructure.	(T)		Y	Y	Y	Y	Y	
3.1.3 Client list									
215	The enterprise portal vendor shall provide a list of client references to include at least three representatives from government and at least three from industry featured on the Fortune Global 500.	(T)		Y	Y	Y	Y	Y	
3.1.4 Business Plan/Value Proposition									
216	The enterprise portal vendor shall demonstrate that the enterprise portal product is an integral part of their strategic vision.	(T)		Y	Y	Y	Y	Y	
3.2 Products									

Portal Requirements Matrix

		(T)	Y	Y	Y	Y	Y	Y	Y
218	The enterprise portal product shall support backward compatibility for at least one version.								
219	The enterprise portal shall support the following operating systems: Solaris, Window NT, Window 2000, XP, HP-UX, and Linux.	(O)	P	P	P	P	P	P	Y1
220	The enterprise portal vendor must demonstrate an understanding of technology trends and their plan to support emerging standards.	(T)	Y	Y	Y	Y	Y	Y	Y
221	Besides those standards mentioned elsewhere in this requirements document, the enterprise portal shall also support the following standards: XML Schema, XHTML, HDML, WAP, VoiceXML, and i-Mode.	(O)	P	P	P	P	P	P	Y1
222	The enterprise portal shall support the following web servers: iPlanet, Web Logic, Apache, and Microsoft IIS.	(T) w/o iPlanet	P	P	P	P	P	P	Y1
223	Layers 1-3 infrastructure shall be in place to accommodate a Navy-wide deployment independent of the Navy Marine Corps Intranet (NMCi), IT-21, or deployed IP infrastructure within the context of a coordinated security model.								
224	Facilities shall be identified (i.e., heating, ventilation, and air conditioning (HVAC), electricity, footprint, and security mechanisms, both physical and logical).								
225	Application servers/repositories shall be distributed throughout the network or centralized as determined by the service provider/implementing agency, and as coordinated through the Task Force Web Information Technology (IT) Governance Board.								
226	Data engines shall be accessed by major claimants and replicated within the context of a coordinated/approved data/information flow model.								
227	Specific issues of bandwidth management/limitations shall be the purview of the layer 1-3 service provider and shall be addressed in the replication concept of operations (ConOps) by those providers.								
228	The enterprise portal shall have a repository and registry of all available ashore and afloat services as approved by the Task Force Web IT Governance Board.								
229	The Task Force Web IT Governance Board shall establish appropriate performance metrics to (Note, no additional text is provided, so unsure of meaning)								
5. Vendor Deployment Requirements									
230	The vendor shall provide worldwide customer support.	(T)	N	N	N	N	N	N	Y1
231	The vendor shall not be required to coordinate schedule for implementation with any US Navy facility, whether ashore or afloat.	(T)	Y	Y	Y	Y	Y	Y	Y
5.2 Program Management Requirements									
232	The implementation agent shall be responsible for submitting a deployment checklist to the Task Force Web IT Governance Board for review, approval, and selection.								
233	The implementation agent shall provide a single point of contact (POC) for engineering support and coordination.								
234	The implementation agent shall provide an engineering site plan for deployment.								
235	The implementation agent shall ensure that user registration within the directory is complete.								

236	The implementation agent shall construct both a master plan of action and milestones (POA&M) and site specific POA&Ms for portal implementation.																		
237	The implementation agent shall coordinate schedules with the applicable Task Force Web schedule coordinator and apply for access as per NMC1 guidelines.																		
238	The implementation agent shall adhere to all applicable WEN security requirements, including the following: <ul style="list-style-type: none"> - All personnel shall possess required security clearances - Submission of visit requests shall be in consonance with US Navy requirements to each ashore activity - All personnel shall observe all local security policies when performing their duties 																		
239	The implementation agent shall coordinate schedules with the IT-21 block schedule coordinator for installation and system operational verification test (SOVT).																		
240	The implementation agent shall adhere to all applicable Web Enabled Navy security requirements including the following: <ul style="list-style-type: none"> - All personnel shall possess required security clearances - Submission of visit requests shall be in consonance with US Navy requirements to each afloat activity - All personnel shall observe all local security policies when performing their duties 																		
241	The implementation agent shall coordinate afloat implementation activities (portal, registry, and repository) with identified responsible Naval computer and telecommunications area master station (NCTAMS) facilities.																		

Total Threshold Requirements		139	Total Threshold Requirements		125	90%
<u>Total Objective Requirements</u>		<u>82</u>	<u>Total Objective Requirements</u>		<u>44</u>	<u>54%</u>
Total Requirements		221	Grand Total		169	76%
Requirements fully met in TFW v1.1 Release:						
Threshold	77	55%	Threshold	48	35%	
<u>Objective</u>	<u>21</u>	<u>26%</u>	<u>Objective</u>	<u>23</u>	<u>28%</u>	
Total	98	44%	Total	71	32%	
Partially met in TFW v1.1 Release:						
Total Threshold Requirements		125	Total Threshold Requirements		125	90%
<u>Total Objective Requirements</u>		<u>44</u>	<u>Total Objective Requirements</u>		<u>44</u>	<u>54%</u>
Total Requirements		169	Grand Total		169	76%