CHIEF INFORMATION OFFICER

Honorable Bob Stump
Chairman, Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515-6035

Dear Mr. Chairman:

The purpose of this letter is to provide the congressional defense committees notification of the certification of the Navy Standard Integrated Personnel System (NSIPS), which is seeking a Milestone III for the NSIPS Release 0.2, under section 8102(b) of the DoD Appropriations Act, 2001. I hereby certify that the NSIPS Release 0.2, with respect to Milestone III, is being developed in accordance with the Clinger-Cohen Act of 1996 (40 U.S.C. 1401 et seq.). I confirm that, as described in the enclosed report, the following steps have been taken with respect to that system:

- Business Process Reengineering
- Analysis of Alternatives
- Economic Analysis – Including a calculation of the return on investment
- Performance measures
- Information assurance consistent with the Department's Global Information Grid.

In addition, the report appendix contains the funding baseline and milestone schedule as required.

We appreciate the opportunity to provide the Committee with the required information. A similar letter is being sent to the Senate and House Appropriations Defense Subcommittees and the Senate Armed Services Committee.

Sincerely,

John P. Stenbit

Enclosure
As Stated

cc:
Honorable Ike Skelton
Ranking Member

NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)

CERTIFICATION AS TO COMPLIANCE WITH CLINGER-COHEN ACT

INTRODUCTION

This report responds to the requirements established in Section 8102 (b) of the FY 2001 DoD Appropriation Act and Section 811 (c) of the FY 2001 DoD Authorization Act for the Department of Defense (DoD) Chief Information Officer (CIO) to certify that each major automated information system is being developed in accordance with the Clinger-Cohen Act of 1996 (40 U.S.C. 1401 et seq.) prior to Milestone I, II or III approval, or their equivalent. Those major automated information systems (ACAT IAM and ACAT IAC, as defined in DoD Directive 5000.1) that are scheduled for Milestone I, II or III approval in FY 2001 are subject to the certification. The statutes also stipulate that certification must include, at a minimum, the funding baseline and milestone schedule and specific confirmation that the following requirements have been satisfied with respect to the system:

- a. Business Process Reengineering (BPR)
- b. Analysis of alternatives
     Economic analysis - Calculation of the return on investment
- d. Performance measures
- e. Information assurance consistent with the Department's Global Information Grid
     Registered as described in Section 811(b)(2)(B)

The Navy Standard Integrated Personnel System (NSIPS) Program has been assessed for compliance with each of the lettered areas and the results of the certification review is reported in the following pages. The appendix to this report contains the NSIPS funding baseline and milestone schedule, and related exhibits.

This report supports the certification of the DoD CIO that the NSIPS program is compliant with the provisions of the Clinger-Cohen Act of 1996. NSIPS is intended to correct major deficiencies in military personnel management processes that were identified during the Gulf War. The Navy encountered problems in providing accurate and timely payment to mobilized reservists. These problems were exacerbated by the inability of the Navy's Active and Reserve Component personnel systems to exchange information expeditiously and reliably. The goal of NSIPS is to field an integrated active and reserve personnel and pay system in order to improve mobilization, tracking, and demobilization procedures. The system would also satisfy expanded corporate level requirements by providing more complete and timely data for decision making, while improving the quality of service to military personnel.

Through the involvement of senior functional stakeholders in prioritizing functional requirements, workflows have been redesigned to improve performance of core mission processes. Reliance has been placed on the maximum use of Commercial-Off-The-Shelf

(COTS) Information Technology (IT) in support of those mission-related and administrative processes. An incremental acquisition strategy has been implemented to reduce risk by delivering specific mission functionality in phased segments that deliver measurable net benefits independent of future segments. Through the use of results-based and performance-based management of IT, specific qualitative and quantitative measures have been derived for determining the net benefits and risks of the investment. Information Assurance (IA) has been determined adequate to support the mission.

NSIPS OVERVIEW

When fully deployed, NSIPS will support the personnel and pay requirements of all Navy military members: active, reserves, ashore, afloat, and retired personnel. NSIPS will operate on shore and afloat servers, client workstations, stand-alone workstations, portable stand-alone workstations, Local Area Networks (LANs), and miscellaneous hardware. The user interface will follow industry standards for graphical user interfaces (GUIs). NSIPS will maintain an all-Navy archival data warehouse. It will capture personnel and pay-related information at entry level workstations (the client in a client/server architecture). It will also incorporate the functionality of four legacy systems into a single worldwide-automated pay and personnel system and will incorporate joint core requirements as they are developed (Figure 1).

NSIPS will use COTS operating systems, interprocess communication systems, and software applications to the greatest extent possible to satisfy operational requirement. NSIPS is using an incremental acquisition strategy to reduce risk and total acquisition cycle time. It is also implementing an incremental fielding approach to realize an earlier return on investment.

Milestone III approval is being granted to authorize the fielding of Release 0.2 and preparation for the deployment of Release 1.

The incremental acquisition and deployment approach includes:

> Release 0, fielded February 2000, replaced the functionality of the Reserve Standard Training Administration and Readiness Support – Manpower and Personnel (RSTARS(MP));
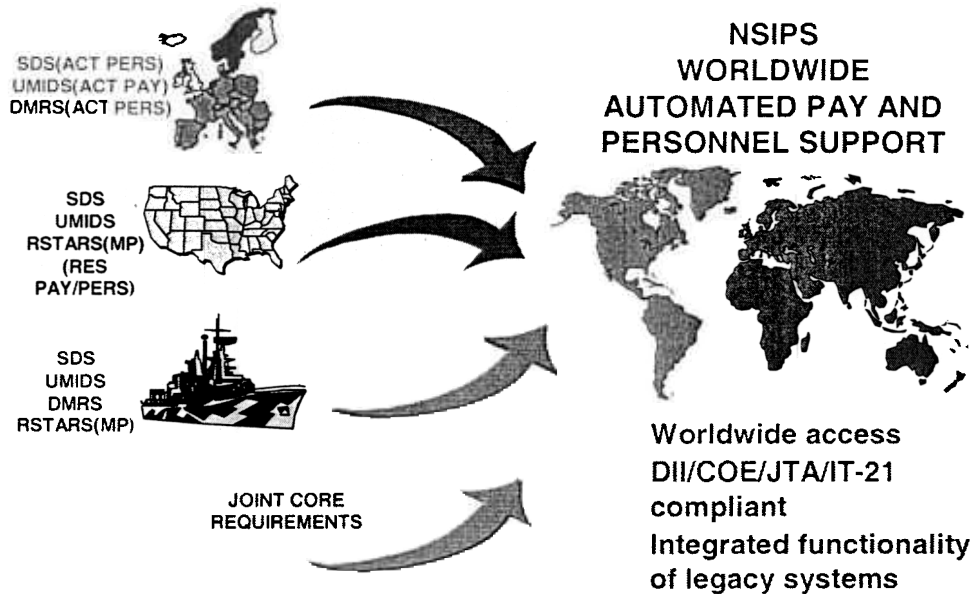
> Release 0.1 corrected Release 0 deficiencies (maintenance release);

> Release 0.2 includes active Navy personnel functionality thereby enabling the phase out of the Source Data System (SDS) and the field section of the Diary Message Reporting System (DMRS). Release 0.2 also includes an interface with either Uniform Microcomputer Disbursing System (UMIDS) or the Defense MilPay Office (DMO) module;

> Release 1 replaces the four legacy systems including pay functionality

Release 2 integrates NSIPS and the Electronic Field Service Record (EFSR) into a paperless environment, includes Web capabilities, and will also be Public Key Infrastructure (PKI) and Smart Card capable.

NSIPS Operational Requirement:
Replace 4 Navy Legacy Systems First and Incorporate
Joint Core Requirements As They Are Defined

SDS(ACT PERS)
UMIDS(ACT PAY)
DMRS(ACT PERS)

SDS
UMIDS
RSTARS(MP)
(RES
PAY/PERS)

SDS
UMIDS
DMRS
RSTARS(MP)

JOINT CORE
REQUIREMENTS

NSIPS
WORLDWIDE
AUTOMATED PAY AND
PERSONNEL SUPPORT

Worldwide access
DII/COE/JTA/IT-21
compliant
Integrated functionality
of legacy systems

<u>Legacy Systems</u>

Uniform Microcomputer Disbursing System (UMIDS):	System to collect pay information for active duty personnel serving aboard ships and overseas
Reserve Standard Training, Administration, and Readiness Support (RSTARS):	System to support local commanders in the administration of manpower, personnel, and training management and mobilization readiness tracking for Naval Reserve personnel
Source Data System (SDS):	System to support active duty personnel data collection
Diary Message Reporting System (DMRS):	System to support personnel event processing to active sites not supported by SDS, and for events not yet supported by SDS.

Figure 1: NSIPS Operational Requirement

(A) Business Process Reengineering

Combining the functionality of the four Navy personnel field level legacy systems into a single system required a fundamental change in the Navy's business processes. Systems that supported the active force did not support the reserve force and vice versa. Systems supporting Continental United States (CONUS) active duty personnel were different from those supporting Outside the CONUS (OCONUS) or afloat personnel. In contrast, NSIPS will provide a standard single point of entry system for personnel and pay data collection at the field level ashore and afloat. This system will collect, edit, store, pass and report personnel and pay data for all Navy active duty, reserve, and retired personnel. The system will have the capacity and flexibility to satisfy customer and user needs and to support current and future business processes. In addition, NSIPS is an integral part of the Navy and OSD near-and long-term migration strategies for an integrated DoD military personnel pay system.

Governance

The Program Manager (PM) has overall responsibility for coordination and oversight of the activities of the Program Management Office, the Integrated Product Teams (IPTs), and the contractors supporting the project. The PM is responsible for technical management of the NSIPS design and provides technical direction to the prime software development contractor and oversees technical progress of the design. All deliverables are reviewed and maintained in configuration management and are not accepted until government personnel have conducted a complete review. The PM holds weekly meetings with the contractors where performance, cost, and schedule are discussed at length, including any appropriate risk assessments. In addition, the PM conducts monthly In-progress Reviews (IPRs) and financial reviews of each contract. The PM contributes to the Navy capital planning process by providing budget and Program Objective Memorandum (POM) submissions supporting the program.

The Space and Naval Warfare Systems Command (SPAWAR) Information Technology Center (SITC) in New Orleans provides technical support. The NSIPS PM reports through the Navy's Program Executive Office for Information Technology (PEO-IT) to the Milestone Decision Authority, ASD (C3I). The Chief of Naval Operations (Manpower and Personnel) (N1) is the NSIPS functional and resource sponsor.

A Flag Level Oversight group is chaired by the Deputy Chief of Staff for Navy Personnel and has representation from all functional areas. Office of Under Secretary of Defense (Personnel & Readiness) OUSD(P&R) and the Defense Finance and Accounting Service (DFAS) are also represented. The group meets at least quarterly to receive program status briefings and to provide overall program direction. The Flag Level Oversight group monitors the program execution, capital planning, trade-offs on operational requirements proposed by the IPTs, including changes to the NSIPS business processes, and the transition strategy for implementing NSIPS.

In addition, the PM receives joint functional requirements from OUSD (P&R) to ensure NSIPS will satisfy common requirements of the Defense Integrated Human Resources System (DIMHRS). The Joint Chiefs of Staff (JCS) Joint Requirements Oversight Council (JROC) also identify joint requirements that NSIPS must satisfy. DFAS provides pay requirements.

CNO (N1) and PEO-IT have formed a partnership to define, resource, produce, and support information systems for Manpower and Personnel (M&P). The partnership will ensure that capital planning is consistent with functional requirements and is technically feasible. The key to the success of this partnership is the development of sound, weighted criteria for each business base that is fully supported by the DoN CIO IT Capital Planning Process. In addition, functional leadership will strive to achieve savings through process improvements and related policy changes. NSIPS is one of a number of M&P programs that are directed and guided by this partnership.

N1 is the process owner and functional business manager for DoN M&P. As such, N1 is responsible for: setting the overall M&P vision and business management architecture; identifying strategies for achieving the success of the business vision; and establishing goals that measure and evaluate the success of the strategies in achieving the M&P vision.

PEO-IT is the Enterprise Acquisition Manager for IT and is responsible for providing lifecycle IT solutions that support the business goals of the functional community. PEO-IT is responsible for ensuring that these functional business solutions are integrated across all functional areas within the DoN, including integration with the DoN Infrastructure Initiative -- Navy Marine Corp Intranet (NMCI).

The NSIPS Program has structured Integrated Product Teams (IPTs) for formulating, structuring, coordinating and executing the development of NSIPS. The PM works closely with the legacy systems functional managers to ensure that NSIPS will meet the users' operational and functional requirements. IPTs also include representatives from the OSD and the Joint Staff.

Two levels of IPTs are in place to provide strategic leadership and coordination within the NSIPS Program. They are the Overarching IPT (OIPT), comprised of senior DoD officials and the various Working Level Integrated Product Teams (WIPT).

When required, the OIPT will provide an assessment of the program based on inputs from the WIPT representatives. The OIPT will also resolve issues originating from the WIPTs and raise them to the Milestone Decision Authority (MDA) if required. As part of the WIPT Process, an Integrating IPT (IIPT) is responsible for developing and/or coordinating development of strategies for acquisition and contracts (when required), cost estimates, evaluation of alternatives, logistics management, cost-performance trade-offs, and other program information/strategies as required. The IIPT also assists the PM in refining the WIPT structure. The IIPT will coordinate the activities of the remaining WIPTs and ensure that issues not addressed by the other WIPTs are reviewed. The IIPT is composed of action officers representing the OIPT organizations and the leaders of each of the WIPTs.

Figure 2 depicts the organizations and functions that provide Acquisition and Functional Management and Oversight of the NSIPS Program.
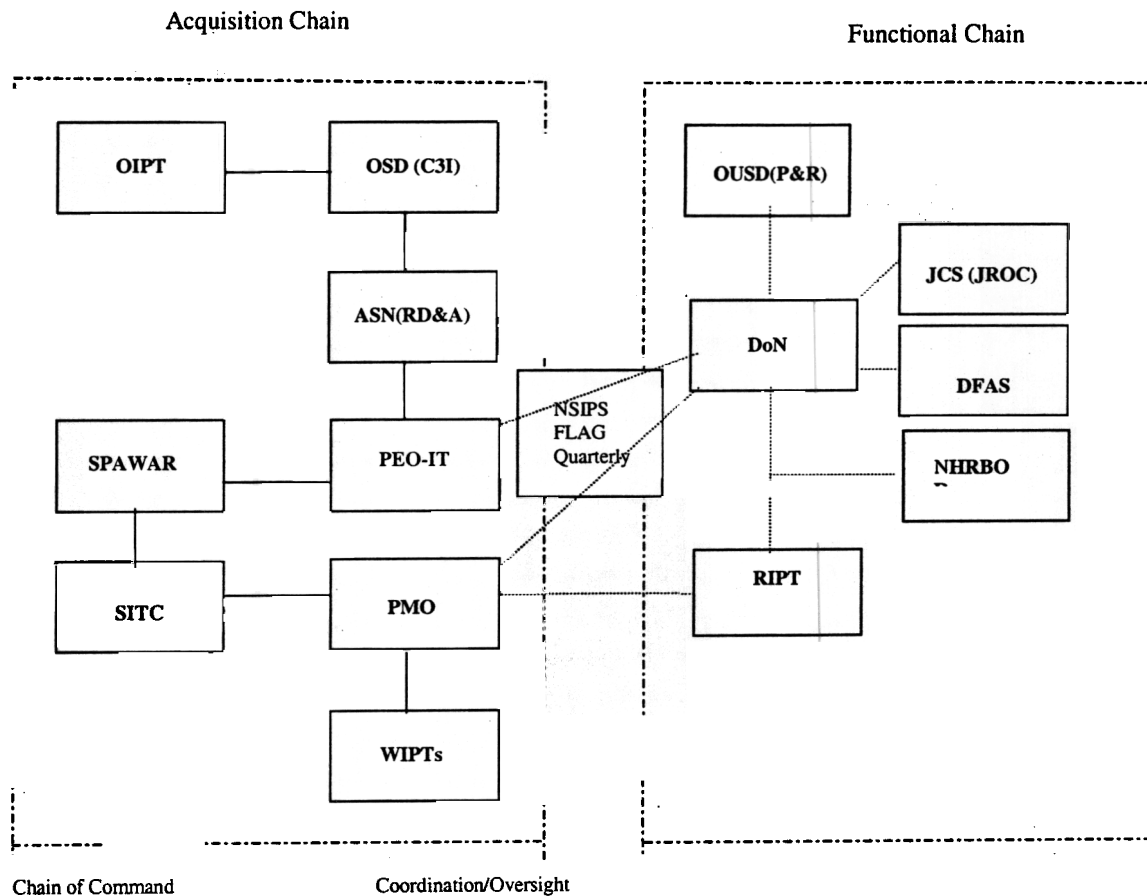
Acquisition Chain

Functional Chain

Chain of Command

Coordination/Oversight

Figure 2 Management and Oversight

Specific Examples of BPR

The NSIPS charter required the incorporation of the functionality of four field legacy systems into one personnel pay input system. The Business Process Reengineering that was conducted did not employ standard practice in which each process was decomposed and then reconstructed to a more efficient/streamlined procedure. A more limited form of process modeling was conducted to ascertain the degree of fit between the Human Resource (HR) database and the legacy systems process elements to determine the amount of required software development and the resulting number of function points to be developed to ascertain the program scope. During the process modeling, an analysis was completed to identify where the COTS software product could fit and the degree of that fit to the legacy system process requirement and to identify additional functionality required to be modified/added during development.

However, the merging of active, reserve, and retired system functionality did require that the essential elements of a BPR be performed during the system design process. Adapting the active, reserve, and retired system functionality to the COTS software package required detailed review, analysis, and changes to a number of business processes. Two teams of Subject Matter Experts (SMEs) examined each of the major legacy system personnel processes to affirm the basic need for a process and/or the need for a change in the business process. A total of seven Process Model Workshops were conducted. The SMEs generated prioritized functional requirements lists that are being considered for future NSIPS releases. The SMEs also identified the need for policy changes that would streamline personnel processing. This information was passed to the active and reserve personnel management for further review and action. Policy changes made by senior active duty and reserve personnel management should streamline the NSIPS business processes and will be incorporated into NSIPS as they are approved for implementation.

Specifically, the CNO has established a Framework for Action that has as its first priority Manpower. The desired outcome is to improve for DoN military and civilian personnel their Quality of Service by ensuring workload requirements are tied directly to combat readiness and professional development. In response to the CNO direction, the following goals were derived:

- Quality of Life: Sailors no longer in personnel offices waiting in lines
- Quality of Customer Service: Sailor will no longer do "business by mail" with headquarters

Quality of Service: Personnelman (PN)/Disbursing Clerks (DK)/civilian clerks have data accuracy, error reconciliation, automatic supervisor approval, security, and system update cycle reduced to minutes vice days

NSIPS will provide the IT support necessary to implement the above quality improvements.

Finally, the Single Integrated Human Resource Strategy (SIHRS) Vision was one of six major recommendations of the Recruiting, Retention, Training, and Assignment (RRTA) working group of the Revolution in Business Affairs. The Navy Human Resources Board of Directors (NHRBOD) adopted SIHRS as the "Way Ahead" for employing information technology to support the Navy's human resource management functions. NSIPS lays the necessary data input foundation for SIHRS by providing higher quality data - timely, reliable, accurate - enabling better decision making with querying of personnel data and records. With NSIPS, Navy will have one training system for HR pipeline ("A" schools) vice four systems to train today.

(B) An Analysis of Alternatives

Two major analyses of the alternatives available for implementing an integrated personnel pay system were prepared. The initial study, supplemented by numerous trade-off studies, supported the decision to consolidate the four-legacy systems into a modern system supporting all active duty, reserve, and retired Navy members. The second effort analyzed the economic benefit of developing and deploying NSIPS Release 0.2 that will provide personnel support to active duty Navy members.

Initial Analysis

The initial analysis was the result of several Navy studies that performed detailed analysis of requirements and alternatives that culminated into a Functional Economic Analysis (FEA).

The Final FEA, dated 21 December 1995, (Department of the Navy, Military Personnel Management Source Data Collection Functional Economic Analysis), summarized an eight month effort by OUSD (P&R), Navy and DFAS personnel to document the costs, benefits, and savings associated with a single Navy military personnel pay system.

The FEA was performed before DoD developed the requirements for an AoA that are now specified in the DoD 5000 Acquisition Regulations. Nonetheless, the FEA did analyze alternatives for addressing identified defense needs. Further, the FEA was funded and directed, and its results were endorsed, by OUSD (P&R), the Principal Staff Assistance (PSA) for Personnel

There were two distinct options considered in the FEA. The first option is the status quo. The second option was for the consolidation of the Navy Active and Reserve Personnel

8

systems and for the interface of the Navy Military Personnel system with the Defense Joint Military Pay System (DJMS). The second option had two different technical approaches and each option had a 32-month and a 60-month deployment timeline. There were no differences in functionality among the variations of the Modernization and Consolidation option.

A third option, interfacing existing systems, was considered unsatisfactory because it perpetuated the inefficiencies of maintaining multiple personnel and pay systems. This option was not costed in the FEA.

Outsourcing was not considered because the DoN determined that field level pay and personnel processes cannot be managed by another federal organization or the commercial sector. These processes must be managed by the DoN.

The second option, Modernization and Consolidation, was broken into four alternatives. These alternatives were designated as:

⇒ Alternative 2A: Navy Application Software Development (32 months);

Alternative 2B: Navy Application Software Development (60 months);

⇒ Alternative 3A: Human Resources Software Application Integration (32 months); and

⇒ Alternative 3B: Human Resources Software Applications Integration (60 months).

The fundamental difference between Alternatives 2 and 3 is that Alternative 2 uses application software developed by Navy personnel, while Alternative 3 uses a commercial-off-the-shelf (COTS) HR application as the foundation for the application software development. The A and B variants are 32 and 60-month development schedules. The 60-month schedule was included to accommodate potential funding constraints. Alternative 2A was selected.

In Table 1, the alternatives are compared.

Alternative	Meets Functional Requirements	Functionality Delivered in Timely Manner	Cost Effective for the Navy	Acceptable to DFAS
Alternative 1				
Alternative 2A	X	X	X	X
Alternative 2B	X		X	
Alternative 3A	X	X		X
Alternative 3B	X			

Table 1: Alternative Comparison

The analysis and recommendations of the FEA were subsequently reviewed by Defense Science Board (DSB) Task Force on Military Personnel Information Management. The DSB was convened at the request of OUSD (P&R) and the Assistant Secretary of

Defense, Command, Control, Communications, and Intelligence (C^{3}I) to advise the Secretary of Defense on the best automation strategy to support the military personnel and pay functions of all active and reserve components throughout the Department.

Specifically, the Task Force was asked to address five items.

1. Assess the Department's military personnel information management requirements and determine the most desirable, feasible, and cost-effective automation solution: for instance, one integrated active/reserve military personnel/pay system or multiple interoperable systems sharing a common database.

2. Assess the cost-effectiveness of adopting and reengineering one of the Services' existing systems as the standard rather than initiating new development that may take advantage of more modern technologies, including COTS applications.

3. Evaluate the strategy being pursued by the military personnel community (OSD and Services) which includes defining detailed requirements for data, interfaces, and functional processes for joint military personnel information management and designating the Navy and Air Force, respectively, as Executive Agents for the design and development of field and database level applications which would support core requirements.

4. Assess the strategy for dealing with Service specific systems while joint military personnel information management core requirements are in development.

5. Determine how to ensure that current military personnel operations are not interrupted or compromised in any way that would interfere with DoD's ability to mobilize or provide appropriate support to military personnel and veterans.

The Task Force concluded, "the Department should move to a single all-Service and all-component, fully integrated personnel and pay system. The system should use a common core software built on a COTS human resources software application....". The Task Force recommended that "The Navy ... continue its role as Executive Agent for the field level component of the objective system." and "current NSIPS efforts should be broadened to encompass the objective system requirements". The Task Force recognized the need to replace the four Navy legacy systems and added that the Navy efforts to include the objective system requirements should be done "Without materially delaying its accelerated deployment schedule for critically needed NSIPS capabilities".

In addition to the above studies, the Air Force had completed an analysis of the ORACLE Human Resources (HR) application software and was committed to using it in their personnel modernization program. The Air Force was designated Executive Agent for the development of a prototype corporate-level personnel system supporting the OUSD (P&R) Military Personnel Modernization 21 (MPM 21) initiative (name subsequently changed to Defense Integrated Military Human Resource System -- DIMHRS). The

Navy was designated Executive Agent for the development of the prototype field-level personnel system supporting the OUSD (P&R) initiative. NSIPS will be the foundation for the prototype field level personnel system since the Navy was directed in the Milestone 0 decision to ensure NSIPS contained all of the "core capabilities required supporting joint requirements for the objective DoD field level data collection personnel system."

The Department of the Navy recognized the critical need to replace the legacy systems, therefore in response to the draft DSB Report, in a Memorandum dated 27 August 1996, the Deputy Chief of Naval Personnel stated:

> "The Navy must continue with the accelerated NSIPS development. Our legacy systems are characterized by obsolescence and unmaintainable hardware and do not meet our operational requirements. Furthermore, current funding levels make their continued operation for three and one half years (between the planned NSIPS IOC date of March 1998, and the Objective System IOC date of 2001) inexecutable. The House Appropriations Committee recognized the Navy's urgent requirement and added funding for the NSIPS program in FY97."

Based upon the DSB recommendations, Navy's needs, and the above initiatives, the NSIPS program decided to use a COTS HR software package to accelerate the development effort (Alternative 3A). That decision (to use COTS HR) and change from the previously approved Alternative 2A to Alternative 3A was approved by the Milestone Decision Authority (MDA).

During Phase I, Demonstration and Validation, software and hardware functional requirements were translated into design requirements using a structured system engineering approach with required design reviews. The Phase I prototype was used to verify estimates on cost and schedule. In addition, the prototype was used to provide feedback on the level of detail required in design documents needed to efficiently use the software tools that were used to develop the software in Phase II, Development. Also during Phase I, modeling and testing were done to finalize design requirements for the system architecture.

AoA Supporting NSIPS Release 0.2

Subsequent to the initial NSIPS AoA, another program modification was analyzed, presented to, and approved by the MDA during a post Milestone II Acquisition Program Baseline (APB) update. The NSIPS PM recommended that another release be inserted into the deployment timeline. This release, designated Release 0.2, would permit the phase out of the SDS legacy system and realize a cost avoidance to the program. In August 2000 the NSIPS Program Manager proposed the development of a Release 0.2.

Alternatives Considered:

Alternative 1: This alternative proposed the currently approved development of Releases 0, 0.1 (a maintenance upgrade), and 1. This alternative fulfills the Operational Requirements Document (ORD) requirements.

Alternative 2: This alternative adds Release 0.2 before Release 1 in order to achieve the saving for shutting down SDS. This alternative also fulfills the ORD requirements.

Alternative 3: This alternative stops the NSIPS software development after Release 0.1 (Reserves only). It requires that SDS, DMRS, and PASS manpower be reinstated as well as requiring that the UMIDS functionality be retained for the Active Navy. This alternative would not fulfill the ORD requirements.

Alternative 4: This alternative stops the NSIPS software development after Release 0.2. The Reserves get integrated personnel and pay capability and Active duty gets personnel functionality only, with a UMIDS/DMO interface used for pay. It also requires the reinstatement of PASS manpower. This alternative would not fulfill the ORD requirements

Alternative 5: This alternative proposed that the NSIPS software development go directly from Release 0.1 (Reserves only) to a web enabled NSIPS (Release 2). This alternative was not considered technically feasible.

Alternative 6: This alternative cancels NSIPS development completely. It requires the reinstatement of the legacy systems, except RSTARS (MP), and the retention of the PASS manpower. This alternative does not fulfill the ORD requirements.

In Table 2, the alternatives are compared. Alternative 2 was selected as the preferred alternative. It meets the Operation Requirements Document (ORD) requirements, is the least costly alternative, and phases out SDS and DMRS (Field) in FY01 and UMIDS in FY02. The AoA recommendation was to develop, test, and deploy Release 0.2.

Alternatives Considered	Meets	Risks			Shortfall ($M)	
		Cost	Sched	Perform	FY01	FY02
Alternative 1: Current Plan	Yes	Medium	Medium	Low	$17.1	$0.0
Alternative 2: Adds Release 0.2	Yes	Medium	Medium	Low	$12.0	$0.0
Alternative 3: Stops NSIPS w/Rel 0.1	No	High	Low	Low	$16.3	$23.6
Alternative 4: Stops NSIPS w/Rel 0.2	No	High	Low	Medium	$15.0	$4.6
Alternative 5: Goes fm Rel 0.2 to Rel 2	Not Feasible					
Alternative 6: Cancels NSIPS program and wait for DIMHRS	No	High	Low/high	Medium	$8.3	$15.3

Table 2: Release 0.2 Alternatives

Table 3 below summarizes the alternatives analyzed by the DoN. In addition, the table briefly identifies alternatives that were addressed and implemented. No AoA documents, as currently described in the DoD 5000 Acquisition regulations, were prepared to support these analyses.

Milestone	FY	STATUS QUO	ALTERNATIVES	SELECTION
0	95	Retain Legacy Systems SDS (Active) RSTARS (MP) (Reserves) UMIDS (Pay) DMRS (message)	1. Status Quo 2A. Navy Development (32 Months) 2B. Navy Development (60 Months) 3A. COTS Development (32 Months) 3B. COTS Development (60 Months)	• Alternative 2A was initially selected, however • Alternative 3A was later selected following DSB deliberations
I	97	Alternative 3A	1. Status Quo (Full NSIPS development using COTS) 2. Deployable Segments of NSIPS	• Alternative 1
II	98	Alternative 1	Same as above	Alternative 1
Post II	99	Alternative 1	1. Status Quo (Full NSIPS development using COTS) 2. Develop two useable segments: a. Reserve personnel and pay as the first usable segment, Release 0 b. To be followed by continued development to full functionality, Release 1.	• Alternative 2 was selected
Post II	00	Alternative 2	Six alternatives were considered: 1. Status Quo (Reserve personnel and pay as the first usable segment, Release 0, to be followed by full functionality, Release 1) 2. Add Release 0.2 3. Stop NSIPS at Rel 0.1 4. Stop NSIPS at Rel 0.2 5. Proceed from Rel 0.2 to Rel 2 6. Cnx NSIPS, await DIMHRS	• Alternative 2 was selected

Table 3: NSIPS AoA Summary

(C) An Economic Analysis (EA) that includes a calculation of the Return on Investment (ROI)

Economic Analysis documents were prepared for both Milestone I and II in accordance with OD/PA&E Economic Analysis Guidance. The documents were reviewed by both the Navy Center for Cost Analysis (NCCA) and OD/PA&E and were judged to be adequate representations of the cost of the NSIPS Program at those milestones. The next EA update is planned to satisfy Release 1 Milestone III requirements. A separate EA for Release 0.2 has not been prepared since it is considered an incremental part of the total NSIPS Program.

However, for the current milestone review, NCCA provided an independent sufficiency review of both the Life Cycle Cost Estimate (LCCE) and the Benefit Analysis (BA) portions of the EA for Releases 0, 0.1, 0.2 and 1 (Active and Reserve Navy pay functionality). NCCA concludes that the NSIPS LCCE is reasonable. See Table 4 for the LCCE comparisons. The BA is based on projections of mission cost savings that need to be evaluated at the Milestone III review based on on-going performance measurement activities. The ROIs for the total program and for Release 0.2 only, at the current projected cost savings, are shown in Table 5. NCCA also reviewed the CCA Certification Document and Acquisition Program Baseline (APB) and determined that they both documents contain LCCE and ROI calculations that fairly represent the total program costs. Release 2, the Electronic Field Service Record (EFSR) capability and web enablement, was not reflected in this EA, but will be assessed as part of the full Milestone III decision scheduled for May 2002. OD/PA&E accepted the results of the NCCA analysis.

	NCCA	PMO	Delta	Delta %
Sunk Costs	$237.6	$237.6		
	$ 17.0	$ 17.3	($ 0.3)	(2%)
	$189.9	$204.1	($14.2)	(7%)
Total Status Quo	$ 5.0	$ 5.0		
Total NSIPS	$449.5	$464.0	($14.5)	(3%)

Table 4: LCCE Comparison (FY95-FY12) FY96$M

	ROI
Total Program (FY95-FY12)	3.6
Release 0.2 only (FY95-FY12)	3.3[1]

Table 5: ROI Computations: Total Program and Release 0.2

[1] Release 0.2 savings consists of headquarters and field office workload savings taken as civilian and military end strength cuts, and IT budget savings for shutting down of legacy systems RSTARS (MP), SDS, and DMRS. The calculations do not include any savings attributed to UMIDS.

(D) Performance measures

Results-Based

On October 31, 1994, a Navy study group was formed to develop a strategic plan that would reflect the vision of future personnel and pay processing in the Navy. The vision of the Chief of Naval Operations (CNO) encompassed the following:

> Providing improved capability to the Naval units through standardized business processes;

- Providing quality customer service to the entire customer base through automation and consolidation of functions, including improved quality of life for field personnel; and

  Positioning the Navy to be the leader in the joint area by working toward initiatives of the Secretary of Defense (SecDef) on consolidation and integration of pay and personnel systems, which is driving toward a Department of Defense (DoD) personnel/pay system, and adhering to Congressional legislation, which is driving integrated Active/Reserve source data collection systems.

The group concluded that modernization and consolidation of field source data collection systems are needed to improve/streamline business processes and improve customer service. This could occur because technological improvements in data automation would allow better distribution and dissemination of personnel/pay information.

In support of the above, the NSIPS FEA identified three functional processes improvements and 15 Automated Information System (AIS) performance goals/ measures. If these goals could be achieved with the fielding of the NSIPS programs, the result would be improved efficiency and effectiveness in field level pay and personnel support to Navy military personnel

Functional Process Measures Improvements

The three functional process improvements identified in the FEA were: improved business process performance time, reduction of duplicate data entry, and reduced mobilization/recall-processing time.

- Business Process Improvement Time: Functional process improvement has already been demonstrated by the NSIPS Program and is a continuing process. Release 0 allowed the phase out of RSTARS (MP). Release 0.2 will allow the phase out of SDS and the field portion of DMRS. Release 1 will allow the phase out of the remaining legacy system, UMIDS.

  Duplicate Data Entry Reduction: The duplicate data entry caused by the stove pipe legacy systems will virtually be eliminated with Release 1. The duplicate data entry of personnel data will be considerably reduced with the deployment of Release 0.2.

15

Mobilization/Recall Processing Time Reduction: The mobilization/recall processing time will be measured during Release 1 testing and is expected to be significantly reduced because active and reserve systems will have been merged into a single system.

AIS Performance Measures Improvements

A total of 15 AIS performance measure improvements were identified in the NSIPS FEA

Of the 15, the following six performance measures deal with Key Performance Parameters (KPPs) identified in the NSIPS ORD. These KPPs were measured during technical and operation evaluation testing. Additional measurement is planned during the Release 0.2 Beta Testing. If performance should not meet KPP threshold value then the program would be in breach. This would constitute a Clinger-Cohen Act significant deviation (40 USC 1427).

- Hours of availability
- MTBF
- System Error Rate
- Keyboard access
  DMRS to EPMAC Error Rate
  Shipboard to DFAS Error Rate

For the remaining measures,

Four AIS performance measure improvements deal with cost and will be finalized in the Performance Measurement Improvement Plan.

Two AIS performance measures deal with data standardization. NSIPS data is standardized with Navy corporate systems and between active and reserve components.

One AIS performance measure deals with training time. The legacy systems initial training time was 50-73 hours. The NSIPS factory training time is only 40 hours.

One AIS performance measure deals with error correction time This was measured during the Release 0.2 beta testing.

The last AIS performance measure deals with mobilization processing improvements directly attributed to NSIPS. This will be measured during Release 1 testing.

Post Implementation Reviews (PIR)

The three primary process improvements identified in the FEA document will be the basis for the NSIPS PIR. The PIR will be scheduled following the fielding of Release 1

To date, a preliminary process improvement analysis was conducted in April 2000 at three sites: a PSD, a ship, and a deployable unit. The current "As-Is" process steps and process times for the major field-level pay and personnel process were identified and projected "To-Be" process steps and process times for NSIPS Release 1 were estimated. All processes reflected an improvement with the introduction of NSIPS. A total end strength reduction of 160 military and 20 Government Service are planned for ashore-based activities based upon the projected improvements of NSIPS Release 1 in FY02. This equates to an annual manpower savings of $7.585M. No manpower reductions are planned for the ships at this time, however the time saved aboard ship by the NSIPS efficiencies can be used for training and other shipboard duties.

Performance-Based

The Program Manager, through the IPT process and monitoring of the system performance, exercises program control and risk management. Technical Evaluation of the Releases is conducted by the PM in concert with the developer and then Commander, Operational Test and Evaluation Force (COMOPTEVFOR) conducts an Operational Evaluation (OPEVAL) of the releases. The OPEVAL evaluates the NSIPS operational and technical performance against the KPPs delineated in the system ORD.

Program execution is monitored against the cost, schedule and performance goals established in the Acquisition Program Baseline. When program execution breaches a parameter value this constitutes a significant deviation and will require an analysis to determine the appropriate course of action. This comports with the significant deviation provision of the Clinger-Cohen Act (40 USC 1427).

(E) **Information Assurance**

NSIPS will comply with DoDI 5200.28 Security Requirements for Automated Information Systems and other appropriate requirements that deal with information outlined within the Privacy Act of 1974. NSIPS will have discretionary access control through various built in security measures. The system will use Public Key Infrastructure (PKI) certificates to provide high authentication with encryption against unauthorized access. The details of the security procedures are contained in the Systems Security Authorization Agreement (SSAA).

NSIPS has developed a security strategy that is traceable through requirements, development, implementation, and operating procedure documents. This strategy is documented in the NSIPS SSAA. NSIPS is proceeding towards Type Certification in accordance with the Defense Information Technology Security Certification and Accreditation Process (DITSCAP). NSIPS will process unclassified data at the Sensitive

but Unclassified (SBU) level. NSIPS will operate in the systems-high mode and enforce required need-to-know protection for SBU personnel and other sensitive data. Information Technology for the 21st ^{Century} (IT-21) will be used to improve the security posture on workstations and servers. A Virtual Private Network (VPN) will be implemented to comply with the Navy/Marine Corps Fleet Firewall Policy and provide encrypted transmission of data while utilizing current communications infrastructure. NSIPS uses Triple Data Encryption Standard (3DES) VPN encryption algorithm to protect data in transit and at rest. As technology evolves, NSIPS will migrate to use PKI certificates for both VPN and application to enhance web server identification and authentication. As the COTS products obtain a web-based capability using Secure Socket Layer (SSL) data encryption, NSIPS will migrate seamlessly, without using the VPN solution.

(F) Registered as described in Section 811(b)(2)(B)

The system being acquired is registered with the DoD CIO. System Compliance Database (SCD) Registration Number: AV015705.

APPENDIX

SECTION 8102

FUNDING and PROGRAM MILESTONE PROFILES

NAVY STANDARD INTEGRATED PERSONNEL SYSTEM

Funding Baseline

Table A-1 below presents the NSIPS Program's funding levels, as they have existed at the each Program Review.

FY95-07 NSIPS Project Funding (TY$ Millions)

Milestone	Actual Date		FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	TOTAL
0	Jul 95	Req				·										
		Funded														
I	May 97	Req	1.9	7.5	29.6	42.2	31.7	19.6								132.5[a]
		Funded	1.9	18.8	50.0	15.9	13.7	19.6								119.7[a]
II	Jan 98	Req	1.9	7.6	29.5	38.2	50.3	19.6								147.0[b]
		Funded	1.9	18.8	49.5	15.9	15.1	19.8								120.9[b]
IIIA		Req	1.9	7.6	30.0	48.2	48.8	38.9	31.4	20.7						227.8[c]
		Funded	1.9	18.8	50.0	32.3	37.2	37.4	29.2	19.0						226.1[c]
III		Req	1.9	7.6	30.0	48.2	48.8	38.9	31.4	28.0	39.3	28.5		27.4	30.0	386.2[c]
		Funded	1.9	18.8	50.0	32.3	37.2	37.4	29.2	27.3	39.3	28.5			30.0	385.2[c]

Table A-1: Funding Baseline

Notes:

[a] For the Milestone I APB there was a variance of $12.8M dollars that occurred during FY96 through FY98. In the fiscal years of FY96 and 97 OPN funds were provided by Congressional plus up that were not in the program cycle. This caused an out of cycle program funding issue but it could be controlled by carrying over the dollars throughout the three-year life of the funds. During the summer review of FY97, a meeting with FMB was held to address the overall-funding shortfall of $12.8M. This issue was not fully addressed when the APB was originally signed by the Program Office but was later approved by FMB by reprogramming funds from the COMNAVRESFOR claimancy to cover the shortfall. These additional funds were provided during the year of execution.

[b] At Milestone II the program had encountered additional shortfall of $26.1M. These funding issues were addressed by the SEO/MP along with CNO (N12) and FMB. Funds were reprogrammed from the Commander, Naval Reserve Force O&MNR budget and were transferred to the NSIPS budget line. These funding shortfalls were associated with software development delays in February 1999, delays in DFAS Y2K Testing, and delayed testing of NSIPS. After successful completion of OPEVAL, NSIPS development was delayed an additional four months due to a blackout period at the end of 1999 because of the Y2K issues.

c. Funding variance in FY 02 due to $1.7M from other sources (NMCI workstation refresh).

Totals in Table may not add due to rounding.

Table A-2 below presents the cost linkage among the Acquisition Program Baseline (APB), as applicable, IT43/300b Exhibits (as applicable), and Economic Analysis (EA) documents.

APB, IT-43/300b, and EA Cost Linkage (TY $ Millions)

MS	FY	APB			IT43/300b		EA
		Req'd	Funded	LCCE	Funded	LCCE	LCCE
0	95	N/A	N/A	N/A	98.4	309.8	N/A
I	97	132.5	119.7	470.0	119.7	470.0	470.0
II	98	147.0	120.9	456.7	120.9	456.7	456.7[a]
IIIA	01 (est)	227.8	226.1	478.8	219.4	487.4	478.8[a]

Table A-2 Cost Linkage

NOTES:

a. The growth in program cost between Milestone II and IIIA was primarily due to schedule slippage caused by Y2K, architecture changes, testing problems, and changes in the release and implementation strategies. Cost growth also included additional costs associated with software development delays in February 1999, delays in DFAS Y2K Testing and delayed testing of NSIPS. After successful completion of OPEVAL, NSIPS was delayed an additional four months due to a blackout period at the end of 1999 because of the Y2K issues.

Milestone Schedule

Table A-3 below presents the projected and actual dates for NSIPS Program Milestones

EVENT		MS 0	MS I	MS II	MS IIIA	MS III
Milestone	Actual Date					
BASELINE						
0	Jul 95					
I	May 97			Jul 97[a]	N/A	Sep 98
II	Jan 98				N/A	Dec 98
IIIA					Sep 01	May 02
III						May 02

Table A-3: MS Baseline Schedule

a. The Milestone I estimate for completion of Milestone II was hampered by a change in the program management structure. The Milestone I estimate for Milestone III assumed advantages attributed to COTS that did not materialize.