

FY15 to FY16 Compa	arison (\$M)		Program		FY15PB/FY16PB Comparis	son (\$M)		
	FY2015	Inflation	Change	FY2016		FY2015	FY2016	Delta
PB FY2016:	9.183	0.156	0.670	10.009	PB FY2015:	13.487	13.706	0.219
See Significant Changes section for explanation of Progam Change				PB FY2016:	9.183	10.009		
					Delta:	-4.304	-3.697	
					See Significant Changes sect	ion for explanation		

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Executive Summary

The Information Technology Directorate (ITD) staff performs research projects, conducts policy analysis, and information assurance program for the Joint Staff, Secretary of Defense, and National Command Authorities. The Chief Information Officer (CIO) manages a Performance Work Statement (PWS) for the National Defense University Information Technology (IT) Support and directs the initialization, execution and management of all IT activities within the University. The PWS describes, in general terms, outlines the types of contracted Information Technology (IT) support required at the National Defense University (NDU). Among the key elements provided include support for: on-site network, database, web applications, help desk, IT training, the performance of initial operational; testing and evaluation, design, development, transitional hand-off/acceptance of pertinent documentation and implementation of IT changes.

The mission of the Information Technology Directorate is to provide a suite of integrated Information Technology tools that enable: Effective Collaboration; Access to the Right Information; In a Secure Environment; To the Correct People; In the Correct Form; In a Timely Fashion. The goal of the CIO is to foster a learning organization Connected to a suite of Cloud services that enable Collaborative educational and business processes in an Assured information environment

The mission of the IT Operations Division is to provide adaptable, responsive, customer focused IT services and support to the National Defense University while maintaining and supporting the NDU Executive software baselines, Databases, Backup/Recovery, Storage administration, Information Assurance Compliance and Customer Support activities.

Significant Changes (Explanations of Change by Appropriation Group. Dollars are in thousands unless otherwise noted.)

OPERATIONS

Horizontal Change (Delta 670)

Both NDU & JFSC campuses are continuing to work to maintain Certification and Accreditation (C&A) of the networks, by implementation and development of policies, procedures to safeguard the network against external & internal intruders and security incidents. Training certifications, purchasing of equipment; and upgrades to ensure the confidentiality, integrity and availability of NDU/JFSC Enterprise Information Systems.

Vertical Change (Delta -3,697)

National Defense University & Joint Forces Staff College has intergraded as "One University" therefore, the delta is due to gaining encounter of scale; consolidation of IT Support; Computers and related services. Example: Merge central management of visual infrastructure and cyber defense programs.

Major Accomplishments

NDU - Operations Department

- Deployed enhanced infrastructure management tools (e.g., Identity Services Engine) to further refine the security posture and endpoint manageability of the NDU IT environment.
- Completed the lifecycle replacement / upgrade of the Enterprise Storage Area Network
- Completed the upgrade of the Enterprise Backup solution (AVAMAR) that has significantly decreased the Recovery Point Objective (RPO) for on premise data. In addition, implemented the site to site replication capability that has ensured the Continuity of the NDU's mission in the event of a site related catastrophic event.
- Deployed an upgraded, more "user friendly" wireless device registration system.
- Deployed Phase I of the NDU MPLS/VRF solution to enable a more flexible and manageable network infrastructure,
- Completed site to site and site to external bandwidth upgrades. These upgrades have further increased the ability to further the "one University" concept.

- NDU-McNair Passed Command Cyber Readiness Inspection (CCRI) Above average score
- Implement Advanced Infrastructure Engineering solutions
- Implement annual switch, server, and end user equipment life cycle replacement
- Enterprise-Wide Email Upgrade (Exchange 2010)
- Enterprise-Wide System Configuration Manager (SCCM 2012)
- Maintain high degree of Information Operations trained personnel (CISSP, CASP, ITIL, and Project Management Professional).
- Completed the fielding of the NDU Student Management System (SMS) Phase I
- Enterprise-wide Deployment of Microsoft Office 2013 Office Upgrade
- Implementation of Desktop Video Teleconferencing (MS Lync) Capability
- Continued refinement of Configuration Management, Project Management, Enterprise Architecture, and Strategic Planning Processes
- Strategic Planning and POM for FY16 FY18
- Designed and implemented a print capability on the wireless network.

NDU IA - Department

- Implemented Enterprise HBSS
- Implemented Enterprise ACAS
- Attained NEIS ATO
- Attained Wireless ATO
- Maintained GIG Waiver
- Obtained Risk Acceptance from the DAA for GAFG, Blackboard and EBAS
- Supported various PM projects (TK20, Direct2 treasury etc)
- Not Cat 1/CAT2 root and User intrusions. Zero intrusions.
- Contained and Remediated all spillages
- Tracked for IAVM Compliance across the board
- Updated and added security devices to network Topology
- Saved University 10's of thousands of dollars by reducing unneeded software
- Supported NDU JET 1.0 (Joint Education and Training)

Major Planned Activities

- Upgrade the NDU IT Service Management (ITSM) solution
- Continue the implementation MPLS / VRF Phase II
- Deploy an upgraded enterprise calendaring solution
- Upgrade the existing NDU-TV to an enterprise IPTV solution
- Deploy an enterprise digital signage solution (vBrick)
- Implement Active Directory Management Tools
- Improve Support to for Student Wireless and Cloud Services
- Continued Accreditation of non-Core Network Systems (Google Cloud, Blackboard, etc.)
- Continue Data Center and Server Consolidation

- Implement annual switch, server, and end user life cycle replacement
- Maintain the Information Operations Workforce Certification program
- Continue Improvements in Configuration Management, Project Management, Enterprise Architecture, and Strategic Planning Processes
- Finalize Migration of Legacy Database Systems to DoD Enterprise Systems and internal SharePoint Capabilities
- Finalize Continuity of Operations (COOP) Implementation
- Information Assurance: NDU continues with efforts to implement complete network security infrastructure to include: Public Key Infrastructure (PKI) capability, firewall, DMZ redesign, establishment of domain infrastructure compliant with DISA STIG policies, and client/server protection suites.
- Continue with efforts to implement an updated complete network security infrastructure.
- Continue the maturation of the Enterprise Architecture program through the development of an IT architecture documentation and artifact repository that includes polices and procedure and security forms.
- -Staff IA Roles and training to strengthen IA workforce.
- Implement Enterprise wide Logging capabilities.
- Implement account auditing procedures.
- Expand policies and procedures.
- Authorize and certify various stand Alone systems (Wargaming, KOHA, VBICK Video, VOIP)
- Continue to support Migration of Student Information system
- Start RMF process for NDU information systems
- Maintain and update GIG Waiver
- Maintain the Information Assurance Workforce Certification Program
- Implement NDU COOP program
- Monitor IAVMs, STIGS, IASE and Alerts
- Protect PII with SORN
- Perform Incident response and spillage remediation
- Support NDU JET 1.0 (Joint Education and Training)
- Support ITD/PM efforts
- Continue to deploy and enhance utilization of ACAS continuous monitoring capability in coordination with the CNDSP.
- Continue to track and implement USCYBERCOM CND Directives

Infrastructure Modernization/Joint Information Environment (JIE)

NDU has no immediate or ongoing implementation activities in tins area.

Core Network Infrastructure

NDU has no immediate or ongoing implementation activities in tins area.

Joint Regional Security Stack (JRSS)

NDU has no immediate or ongoing implementation activities in this area.

Data Center and Server Consolidation

NDU has completed the process of migrating externally facing web sites to the Defense Management Agency. This action has increased the overall reliability, availability and security of the NDU environment with the simultaneous effect of gaining economies of scale by leveraging off premise DoD resources. It should be noted that this action has the effect of allowing NDU to decommission several web servers and "flatten" a portion of the network topology.

Completed the deployment of infrastructure tools that have resulted in the creation of a virtual NDU Service Desk which is a departure from the former site specific support model. This has resulted in an overall increase in support services and the resultant increase in customer satisfaction.

Consolidated the Blackberry Enterprise System (BES) to a single instance that now supports all managed devices within the University. Complete the consolidation of the NDU Virtual Server Management Consoles to a single management interface for all supported campuses

Replace End-of-Life server infrastructure devices and upgrade capacity and features to meet constantly increasing performance, security and service requirements. This includes security compliance services mandated by DoD regulations.

Cloud Computing

- Trailblaze CLOUD Saas solutions for the university (NDU)

Defense Business Systems

- All business systems and programs were entered into Defense Information Technology Portfolio Repository (DITPR).

Consolidation of Software Purchases

- NDU purchased Remedy Licensing SLA change Modular - Licensing increase to support the consolidation of a single Incident Management tool.

Consolidation of Hardware Purchases

- Server hardware life cycle replacement (Enterprise) - Replace End-of-Life server infrastructure devices and upgrade capacity and features to meet constantly increasing performance, security and service requirements. This includes security compliance services mandated by DoD regulations.

Information Technology Budget Exhibit Resource Summary by Investment (IT-1)											
			Dollars in Thousands								
			<i>FY2014</i>	FY2015	<i>FY2016</i>						
		RESOURCE SUMMARY:	\$9,183	\$9,183	\$10,009						
007-000000218 - IT Infrastructi			Non-Major								
GIG Category: COMMU	NICATIONS AND COMPUTING INFRA	STRUCTURE									
Operations			Dollars in Thousands								
<u>Appropriation</u>	Budget Activity	Budget Line Item	<u>FY2014</u>	<i>FY2015</i>	<i>FY2016</i>						
O&M, DW	BA 03 TRAINING AND RECRUITING	NATIONAL DEFENSE UNIVERSITY	9,183	9,183	10,009						
		Investment Resource Summary:	9,183	9,183	10,009						