



NMCI Networking Concept of Operations for BAN/LAN (CONOPS/BL)

Final

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Revision History

The Revision History table below lists in chronological order each minor revision of this document. A minor revision is defined as a set of changes affecting fewer than 30 percent of the pages in the document.

Version	Issue Date	Author/Modifier	Section, Page(s) and Text Revised

Entries in the Revision History table are deleted when a document undergoes a major revision, called a document update. A document update is defined as a set of changes affecting more than 30 percent of the pages in the document. Document updates do not need to be listed in the Revision History table.

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Document Storage

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APPENDIX A: OPERATIONS FUNCTIONS AND INTERRELATIONSHIPS BETWEEN VARIOUS PARTS OF WINGS

1. OVERVIEW AND BACKGROUND

WAM!NET Government Services (W!NGS) is a tier one subcontractor to EDS for the NMCI contract and has obligations as outlined in the contract document which exists with the prime in various arenas. These areas include operations in the legacy environment, which exist on various Navy and Marine Corps bases, operations to architecture, design and assist in implementing the designs, cutover to new operations at base, and centralized facilities and operations in both centralized and distributed contexts. In general, the responsibility on bases is characterized by operations in a legacy environment, operations in various transitions and operations after cutover.

1.1 DESCRIPTION OF THE CONCEPT OF OPERATIONS

This concept of operations, in verbal and graphic forms, is a broad outline of the leadership assumptions and intents in regard to the accomplishment of the contractual fulfillment of our W!NGS subcontract with EDS as a partner in the EDS NMCI Team in all major operations and interactions. This is intended to be a high-level document providing an overview of the W!NGS functional and operational concepts and the attendant interfaces and policy statements which lead to successful implementation of the W!NGS responsibilities for NMCI. The details required to carry out this concept of operations are embodied in various plans, procedures, policies, and other associated documents.

1.2 VISION

The W!NGS BAN/LAN integrated participation in the NMCI provides world class enterprise management of the design, integration, transition and operation of the base and local area networks for the Navy and Marine Corps and the interfaces with the other partners, functions, users and elements of the NMCI during the contract period.

1.3 MISSION

The mission of the W!NGS NMCI Team is to work together within the various elements of the W!NGS organization and with all partners and customers to design, deliver, operate, and improve the IT network infrastructure functionality of the NMCI in a quality and cost effective manner. The W!NGS NMCI Team will maintain the existing IT functionality of base and local area networks until such time as the NMCI capability is fully functional.

1.4 FUNDAMENTAL GUIDING PRINCIPLES

- The operating elements of W!NGS are the customers for all other elements of the W!NGS NMCI organization.

- Discussions with the government will be conducted through the prime contractor with the exception of coordination activities with respect to government-provided circuitry.
- Activities outside of the scope of the W!NGS fixed-price contract will be addressed to W!NGS management before work begins on any of those activities.
- Operations with the EDS functional organizations are peered to the EDS organization. These follow functional lines. There is no attempt to peer on a one-to-one relationship.

1.5 GEOGRAPHIC ENVIRONMENT

1.5.1 GEOGRAPHIC RELATIONSHIPS

The WINGS base services delivery organization is geographically organized to align with the eleven Navy regions, the four Marine Corps regions, and the EDS NMCI Team relationships between planned network operating centers (NOCs) and their associated server farms. The six WINGS regions (Exhibit 1) are augmented by an overarching small site services organization which services across the enterprise those bases whose network complexity does not warrant an onsite presence. A view of the 2003 laydown of the NOCs and the associated server farms currently built or planned in 2003 and their relationships is shown in Exhibit 2.

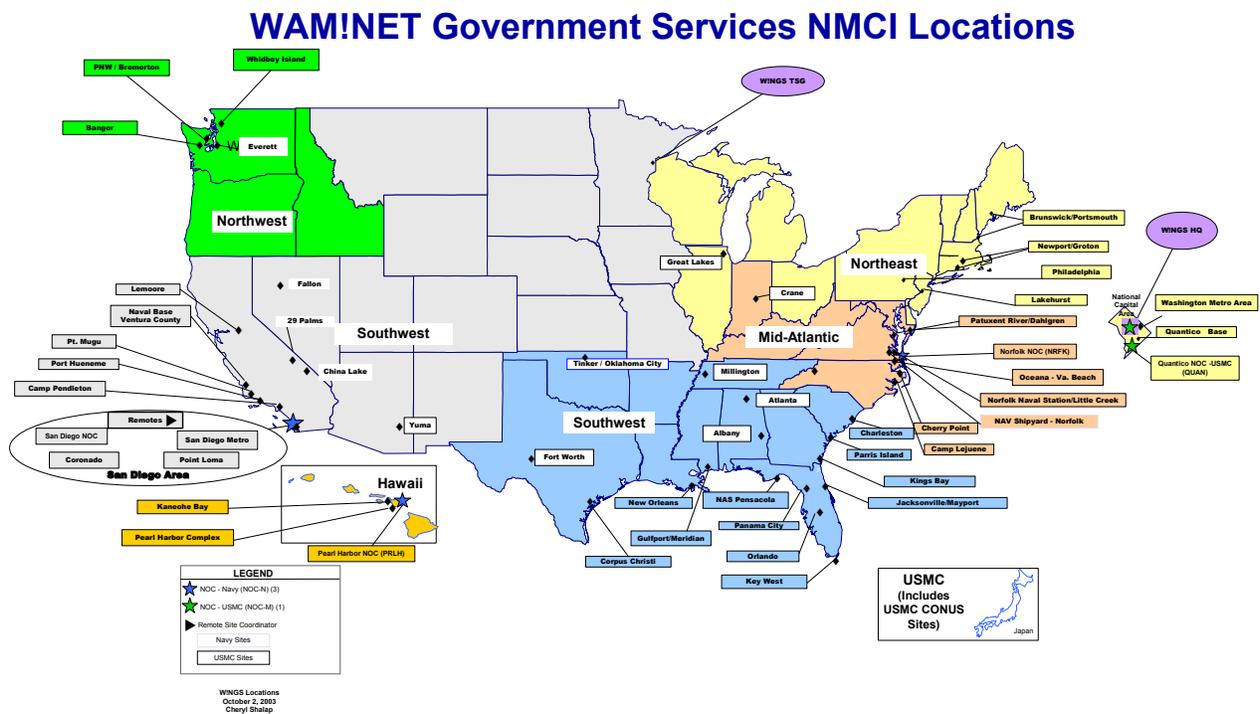


Exhibit 1: WAMINET Government Services NMCI Regions

No.	Site Identifier	Function	Site Name	City	State
Server Farms - Navy					
1	BREM	SF-N	NS Bremerton	Bremerton	WA
2	CHLK	SF-N	NAWS China Lake	China Lake	CA
3	CHRL	SF-N	NWS Charleston	Charleston	SC
4	CRAN	SF-N	NSWC Crane	Crane	IN
5	FALN	SF-N	NAS Fallon	Fallon	NV
6	JAXS	SF-N	NAS Jacksonville	Jacksonville	FL
7	LEMR	SF-N	NAS Lemoore	Lemoore	CA
8	LKHR	SF-N	NAES Lakehurst	Lakehurst	NJ
9	LTLC	SF-N	NAB Little Creek	Norfolk	VA
10	MECH	SF-N	NSA Mechanicsburg	Mechanicsburg	PA
11	MILL	SF-N	NSA Mid South	Millington	TN
12	MUGU	SF-N	NBVC Point Mugu	Point Mugu	CA
13	NRFK	NOC-N	NS Norfolk	Norfolk	VA
14	NWOR	SF-N	NSA New Orleans East Bank	New Orleans	LA
15	OCEN	SF-N	NAS Oceana	Virginia Beach	VA
16	ORLO	SF-N	NAWCTSD Orlando	Orlando	FL
17	PAXR	SF-N	NAS Patuxent River	Patuxent River	MD
18	PHIL	SF-N	NSA Philadelphia	Philadelphia	PA
19	PRLH	NOC-N	NC Pearl Harbor	Pearl Harbor	HI
20	PRTH	SF-N	NBVC Port Hueneme	Port Hueneme	CA
21	SDNI	NOC-N	NAS North Island	San Diego	CA
22	SDNS	SF-N	NS San Diego (32nd Str.)	San Diego	CA
23	SPSC	SF-N	NC Point Loma	San Diego	CA
24	WNYD	SF-N	Washington Navy Yard	Washington	DC
Micro Server Farms - Navy					
1	BANG	MSF-N	NSB Bangor	Silverdale	WA
2	BRUN	MSF-N	NAS Brunswick	Brunswick	ME
3	CHPT	MSF-N	MCAS Cherry Point	Cherry Point	NC
4	COLT	MSF-N	NWS Earle	Colts Neck	NJ
5	CRDR	MSF-N	NSWC Carderock Div	West Bethesda	MD

No.	Site Identifier	Function	Site Name	City	State
6	CRNA	MSF-N	NSWC Corona Div	Corona	CA
7	CRND	MSF-N	NAB Coronado	San Diego	CA
8	CRRY	MSF-N	NTTC Corry Station	Pensacola	FL
9	DLGR	MSF-N	NSWC Dahlgren Div	Dahlgren	VA
10	DMNK	MSF-N	FCTC LANT Dam Neck	Virginia Beach	VA
11	EVRT	MSF-N	NS Everett	Everett	WA
12	FTWO	MSF-N	NAS JRB Fort Worth	Fort Worth	TX
13	GLFP	MSF-N	NCBC Gulfport	Gulfport	MS
14	GRLK	MSF-N	NTC Great Lakes	Great Lakes	IL
15	INGL	MSF-N	NS Ingleside	Ingleside	TX
16	INHD	MSF-N	NSWC Indian Head Div	Indian Head	MD
17	KEYW	MSF-N	NAF Key West	Key West	FL
18	KNGS	MSF-N	NSB Kings Bay	Kings Bay	GA
19	LRNX	MSF-N	Lafayette River Annex	Norfolk	VA
20	MRDN	MSF-N	NAS Meridian	Meridian	MS
21	MYPT	MSF-N	NS Mayport	Mayport	FL
22	NACC	MSF-N	NAS Corpus Christi	Corpus Christi	TX
23	NFSH	MSF-N	NSY Norfolk	Portsmouth	VA
24	NWLN	MSF-N	NSB New London	Groton	CT
25	NWPT	MSF-N	NS Newport	Newport	RI
26	PGLA	MSF-N	NS Pascagoula	Pascagoula	MS
27	PNBC	MSF-N	Philadelphia Naval Bus Ctr	Philadelphia	PA
28	PNDL	MSF-N	MCB Camp Pendleton	Camp Pendleton	CA
29	PNMA	MSF-N	NSWC Coastal Systems Station	Panama City	FL
30	PNSC	MSF-N	NAS Pensacola	Pensacola	FL
31	PTNH	MSF-N	NSY Portsmouth NH	Portsmouth	NH
32	SDAS	MSF-N	ASWTC San Diego	San Diego	CA
33	SEAL	MSF-N	NWS Seal Beach	Seal Beach	CA
34	SFLY	MSF-N	NOLF Saufley Field	Pensacola	FL
35	STNS	MSF-N	Stennis Space Center	Stennis Space Center	MS
36	TNKR	MSF-N	Tinker AFB	Tinker AFB	OK
37	WHDB	MSF-N	NAS Whidbey Island	Oak Harbor	WA
38	WHTG	MSF-N	NAS Whiting Field	Milton	FL

No.	Site Identifier	Function	Site Name	City	State
39	WLLW	MSF-N	NAS JRB Willow Grove	Willow Grove	PA
Server Farms - USMC					
1	CLJN	SF-M	MCB Camp Lejeune	Camp Lejeune	NC
2	FSTR	SF-M	MCB Camp Foster	Camp Foster	JA
3	IWKN	SF-M	MCAS Iwakuni	Iwakuni	JA
4	KBAY	SF-M	MCBH Kaneohe Bay	Kaneohe Bay	HI
5	PNDL	SF-M	MCB Camp Pendleton	Camp Pendleton	CA
6	QUAN	NOC-M	MCB Quantico	Quantico	VA
Micro Server Farms - USMC					
1	ALBY	MSF-M	MCLB Albany	Albany	GA
2	BFRT	MSF-M	MCAS Beaufort	Beaufort	SC
3	BSTW	MSF-M	MCLB Barstow	Barstow	CA
4	CHPT	MSF-M	MCAS Cherry Point	Cherry Point	NC
5	FTWO	MSF-M	NAS JRB Fort Worth	Fort Worth	TX
6	KCMO	MSF-M	MCA Richards-Gebaur Airport	Belton	MO
7	MRMR	MSF-M	MCAS Miramar	San Diego	CA
8	NWOR	MSF-M	NSA New Orleans East Bank	New Orleans	LA
9	NXAG	MSF-M	Navy Annex	Arlington	VA
10	PARR	MSF-M	MCRD Parris Island	Parris Island	SC
11	PLMS	MSF-M	MCAGTFTC Twentynine Palms	Twentynine Palms	CA
12	RDSD	MSF-M	MCRD San Diego	San Diego	CA
13	YUMA	MSF-M	MCAS Yuma	Yuma	AZ

Exhibit 2: 2003 NOCs, Server Farms, and Base Ops Regions

1.6 ORGANIZATIONAL ENVIRONMENT WITH PARTNERS

1.6.1 INTERRELATIONSHIPS BETWEEN THE GOVERNMENT, EDS NMCI TEAM, AND WAM!NET

The EDS NMCI Team partners have the general areas of functional responsibility shown in Exhibit 3 through Exhibit 7

Responsibilities for Design and Engineering	EDS	WAM!NET	General Dynamics	Raytheon	Facilities Design Company
Coordinate all design and engineering	<input checked="" type="checkbox"/>				
All applications-related items	<input checked="" type="checkbox"/>				
Architect and design BAN/LAN active devices on bases and NOCs		<input checked="" type="checkbox"/>			
Design inside and outside cable plant where required			<input checked="" type="checkbox"/>		
Provide Information Assurance design input				<input checked="" type="checkbox"/>	
Facilities design					<input checked="" type="checkbox"/>

Exhibit 3: EDS NMCI Team Partners' Responsibilities for Design and Engineering

Responsibilities For Installations	EDS	WAM!NET	General Dynamics	Raytheon	Facilities Installation Companies	Dell
Coordinate installations		<input checked="" type="checkbox"/>				
Install inside and outside cable plant where required			<input checked="" type="checkbox"/>			
Build facilities to house server farms					<input checked="" type="checkbox"/>	
Install active IA equipment at all sites				<input checked="" type="checkbox"/>		
Install active network devices on bases and server farms		<input checked="" type="checkbox"/>				
Install desktops	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>

Exhibit 4: EDS NMCI Team Partners' Responsibilities for Installations

Responsibilities for Logistics	EDS	WAM!NET	General Dynamics	Raytheon	Dell	Cisco
Logistics coordination	<input checked="" type="checkbox"/>					
Define facilities requirements	<input checked="" type="checkbox"/>					
Order all ISP/OSP and associated elements			<input checked="" type="checkbox"/>			
Provide desktops					<input checked="" type="checkbox"/>	
Provide network devices						<input checked="" type="checkbox"/>
Provide servers					<input checked="" type="checkbox"/>	
Purchase IA equipments				<input checked="" type="checkbox"/>		
Define active device requirements		<input checked="" type="checkbox"/>				

Exhibit 5: EDS NMCI Team Partners' Responsibilities for Logistics

Responsibilities in Transition	EDS	WAM!NET
Transition Coordination	<input checked="" type="checkbox"/>	
Transition Active Network Devices to NOCs		<input checked="" type="checkbox"/>
Transition Customers to NMCI Services	<input checked="" type="checkbox"/>	
Transition To NMS Management		<input checked="" type="checkbox"/>
Transition Applications	<input checked="" type="checkbox"/>	
Transition to Enterprise Operations and Help Desk	<input checked="" type="checkbox"/>	

Exhibit 6: EDS NMCI Team Partners' Responsibilities in NMCI Production Network Transition

Responsibilities To Operate	EDS	WAM!NET	General Dynamics	MCI (Commercial Circuits)	DISA (Gov't Circuits)	Raytheon
Applications Related items	<input checked="" type="checkbox"/>					
Facilities Management	<input checked="" type="checkbox"/>					
Manage Enterprise Level NOCs	<input checked="" type="checkbox"/>					
Manage facilities on Bases	<input checked="" type="checkbox"/>					
Manage Server Farms	<input checked="" type="checkbox"/>					
Meet BAN/LAN SLAs		<input checked="" type="checkbox"/>				
Meet IA SLAs						<input checked="" type="checkbox"/>
Meet WAN SLAs				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Responsibilities To Operate	EDS	WAM!NET	General Dynamics	MCI (Commercial Circuits)	DISA (Gov't Circuits)	Raytheon
Monitor and Manage BAN/LAN at bases and NOCs		<input checked="" type="checkbox"/>				
Provide WAN Connectivity				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
WAN Networks				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Exhibit 7: EDS NMCI Team Partners' Responsibilities to Operate

1.6.2 WINGS PROCESS RELATIONSHIPS

WINGS has several overall processes which involve interrelationships within its primary areas of responsibilities with partners and within various departments of WINGS. Exhibit 8 shows the various major processes with the WINGS process owner indicated as the lead and the various relationships that are routinely exercised and interfaced during the course of the functions associated to these processes. These diagrams do not attempt to define the processes, which are maintained by the process owners, but do show the responsibility to maintain and continually improve the relationships that make these processes viable.

	BAN/LAN Implementation	IP Assignments and Management	Circuits	BAN/LAN Config. Mgmt (after cutover)	Meeting WINGS SLAs	Network Device Cutover	Attached Networks (B2, B3, CLIN 29s, etc.)
WINGS Base Ops	Lead	Support	Support	Support	Support	Support	Support
WINGS TSG	Support	Lead	Lead	Support			Support
WINGS ENOS	Support	Support	Support	Lead	Lead	Lead	Support
WINGS Proposal Lead							Lead
EDS Contracts							Support
WINGS Contracts							Support
WINGS Business Management							Support
Cable Vendors	Support						Support
EDS Technical Infrastructure	Support	Support	Support				Support
EDS Site Manager	Support				Support	Support	Support
EDS Logistics	Support						
EDS Production Support	Support						
EDS Enterprise NOCs				Support	Support	Support	
WAN Vendors and Partners	Support		Support				
Network Vendors					Support		
IA Partner	Support	Support	Support			Support	Support
Facilities Vendors	Support						

Exhibit 8: WINGS Process Relationships

1.7 W!NGS ORGANIZATION

1.7.1 TOP LEVEL AND PROGRAM OFFICE ORGANIZATION

Exhibit 9 shows the top level W!NGS organization dedicated to NMCI. Specific departmental organizations descriptions and charts follow later in this section.

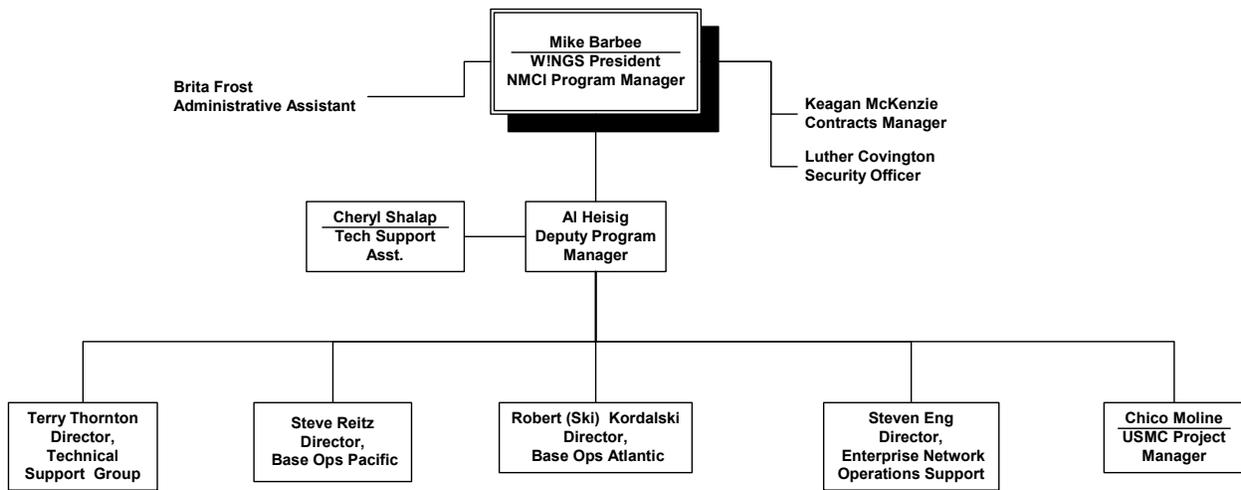


Exhibit 9: Top Level W!NGS Organization Dedicated to NMCI

1.7.2 ENTERPRISE NETWORK OPERATIONS SUPPORT DIVISION (ENOS)

The Enterprise Network Operations Support division (See Exhibit 10) is responsible for leadership, management, and administration of the network-centric operations of the BAN/LAN portion of NMCI. This includes the support provided at each Network Operating Center (NOC) and the BAN/LAN Network Management System. The W!NGS Network Operating Center BAN/LAN Managers are responsible to the EDS NMCI Team (EDS) NOC Manager for managing, monitoring, and operating the centralized BAN/LAN network functions of the NMCI including activities related to SLA data gathering and reporting. In addition, the division is responsible for the development, implementation, improvement, performance, operation, and support of the NMS toolset.

The Enterprise Network Operations Support Director and each W!NGS NOC BAN/LAN Manager are cost account managers for their respective organizations.

1.7.2.1 Guiding Principles for ENOS

- Operational network management is handled through the EDS NMCI Team Remedy trouble ticketing system and is mandatory and authoritative in accordance with the guidelines set forth by the EDS NMCI Team. Changes of any sort to operational (production) network environment are coordinated and documented through the trouble ticketing and change management system.
- Schedule coordination in the operational environment is a responsibility of the appropriate NOC with the appropriate base. Both parties must agree to a schedule before it is operable. Disagreements as to schedule should be handled at a peer-to-peer relationship if possible, but the EDS NMCI Team leadership organization (peer-to-peer or peer-to-subordinate) will govern in case of disagreement.
- All NMS systems are installed at each of the NOCs and used to remotely manage BAN/LAN network devices and to maintain active up-to-date status of the BAN/LAN portion of the Enterprise.
- NMS will be integrated as much as possible with EMS.
- Configuration management of NMS will be integrated with the configuration management of all other design deliverables.
- ENOS deliverables are contractual documents and will be processed through the Technical Support Group.

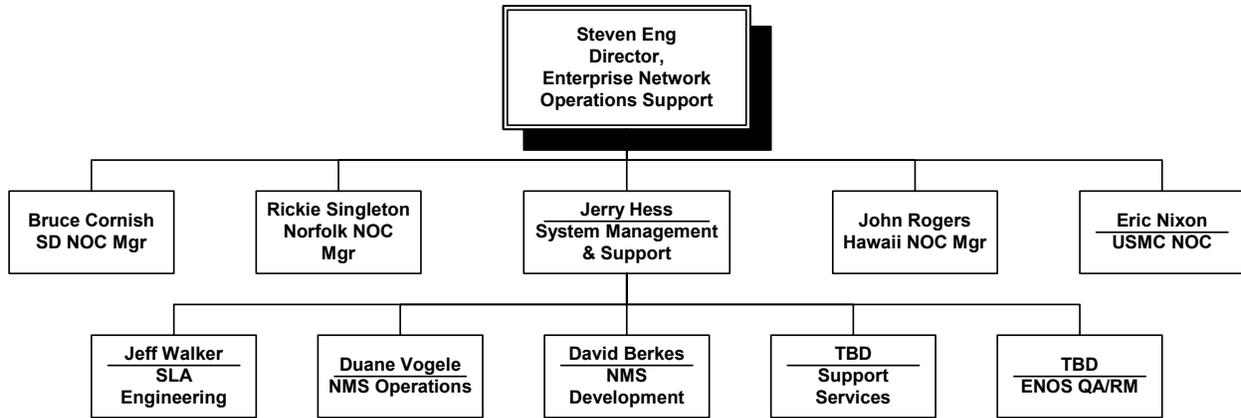


Exhibit 10: Enterprise Network Operations Support Organization

1.7.3 TECHNICAL SUPPORT GROUP

The Technical Support Group division and subdivisions (See Exhibit 11) are responsible for the leadership, management, and administration of technical support services (technology-centric support) for the BAN/LAN portion of the NMCI. This support is primarily matrixed using Technical Services Requests (TSR) from customer organizations, which allow for the allocation and prioritization of resources as well as assigning cost accounting to the appropriate customer organization. In addition to the support of architecting, designing, implementing BAN/LAN designs, additional duties include responsibility for server farm standup, logistics tracking and support, WAN circuitry support and liaison, and quality assurance in design, delivery, and document deliverables to the prime contractor.

The Technical Support Group division director and subdivisions managers for Architecture, Design & Engineering, and Installation Engineering/Quality Assurance are cost account managers for their respective organizations.

1.7.3.1 Guiding Principles for the Technical Support Group

- Matrixed support will be provided under the direction of the requesting organization and documented to the appropriate supported organizational cost code.
- Server farms implementations and transitions are primarily managed through the IEQA group. A server farm is turned over to the Base Operations Group after build out and acceptance by the appropriate NOC.
- Coordinating architectural and design standards, requirements, and processes is the responsibility of the Technical Support Group. This includes coordination with the various EDS NMCI Team organizational entities.
- Documents delivered to EDS will be passed through the Documentation Services organization.

- Engineering documentation and configuration maintenance and maintenance of an engineering library is the responsibility of Documentation Services.

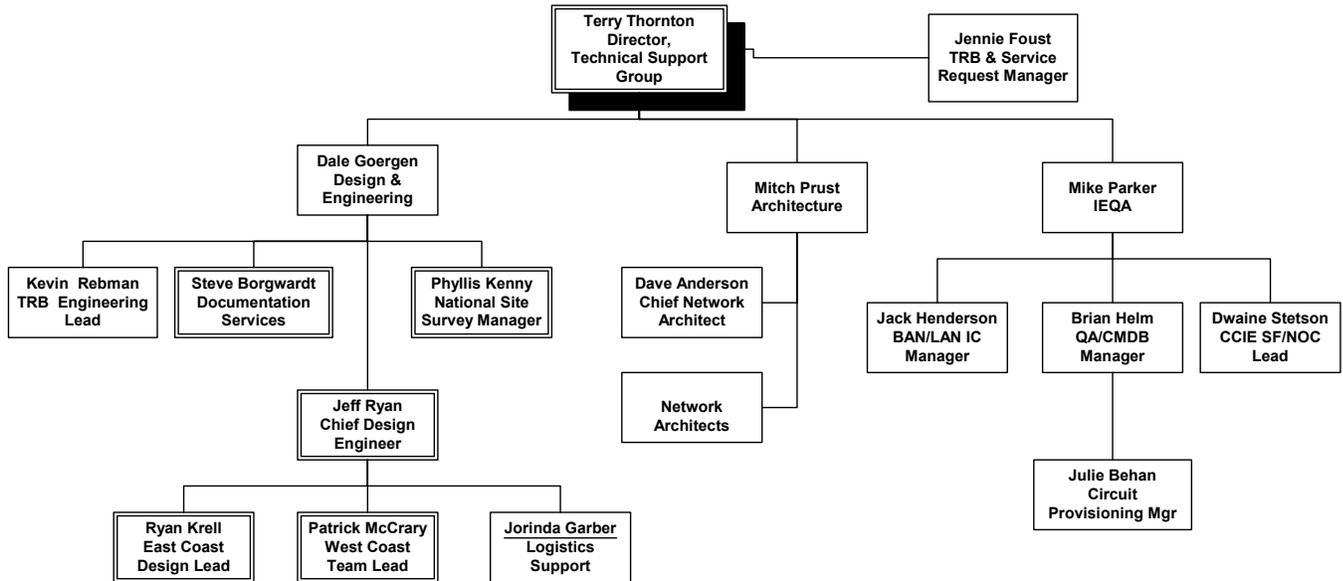


Exhibit 11: Technical Support Group Organization

1.7.4 BASE OPERATIONS

Base Operations areas and their respective organizations (Pacific, Exhibit 12, and Atlantic, Exhibit 13) are responsible for leadership, management, and administration of the base-centric operations of the BAN/LAN portion of NMCI for the EDS NMCI Team and where ordered, responsible for Base Infrastructure Installations (BII) Services to lead and manage an integrated project team to survey, design, implement and commission the BAN/LAN. BII services apply to inside and outside cable plant, physical and logical network implementations, information assurance and network security solutions, policies and equipment, and adaptation of facilities to support NMCI BAN/LAN. (Note: If and to the extent directed by an EDS manager, BII services may require WAM!NET to prioritize or direct other subcontractors where directed to do so by the EDS manager. It is the intent of the BII services that WAM!NET will take a leadership role relative to the performance of such other subcontractors but will not bear the responsibility for the actual performance of such other subcontractors.)

The operations at bases throughout the country and overseas are accomplished using an area and regional breakout of responsibility. For small bases without a permanently assigned cadre, the operational planning and implementation of these sites is the responsibility of the small site manager. The small site manager maintains local operational management and troubleshooting responsibility as a field services organization coordinated with the respective NOC BAN/LAN manager for the NOC with primary monitoring and management responsibility. The Atlantic

and Pacific area directors, their regional managers, and the small site manager are all cost account managers for their respective areas of responsibilities.

1.7.4.1 Guiding Principles for Base Operations

- The EDS NMCI Team (EDS) appointed site manager is the customer of W!NGS Base Network Manager for activities that are base centric.
- Operations at each base are guided by EDS NMCI Team policies and procedures as well as the W!NGS contractual responsibilities at both the base and enterprise levels. Operations on bases are under the overall direction of the EDS site manager.
- The W!NGS Base Network Manager operates as a principal assistant to the site manager or as the BAN/LAN field support arm for the EDS NMCI Team small site management teams.
- The W!NGS Base Network Manager serves as EDS Site Transition Manager's technical liaison to the design management process.
- The W!NGS Base Network Managers, where assigned, are ultimately responsible for the all aspects of activities on their base related to the NMCI BAN/LAN active network devices.
- The W!NGS Base Network Managers support the EDS NMCI Team Network Operating Center Managers for all functions that are network centric.
- Operating the NMCI Production environment is of a higher priority than actions associated with maintaining any legacy network environments on bases.
- The coordination of operating activities prior to entering into the production environment are the responsibilities of the respective area, regional, base, or small site managers as appropriate.
- Support between various operations entities will be matrixed in nature with the lowest cost to support as a key element in decisions on who will support requirements. Once provided, matrix support will be under the task, schedule and resource control of the requesting entity
- Matrixed support will be charged to the appropriate supported organizational cost code.
- Use of the Remedy trouble ticketing system is mandatory in any actions, which affect the operation including any changes of or to the production NMCI network.

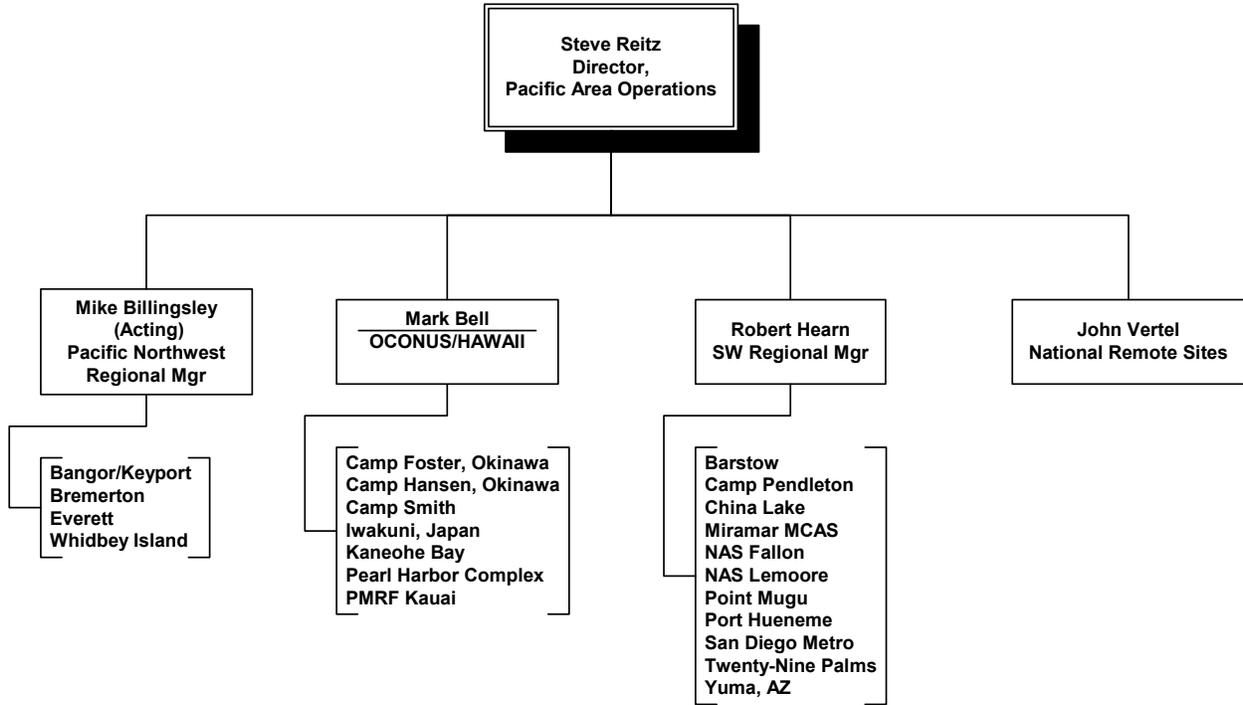


Exhibit 12: Pacific Area Operations Organization

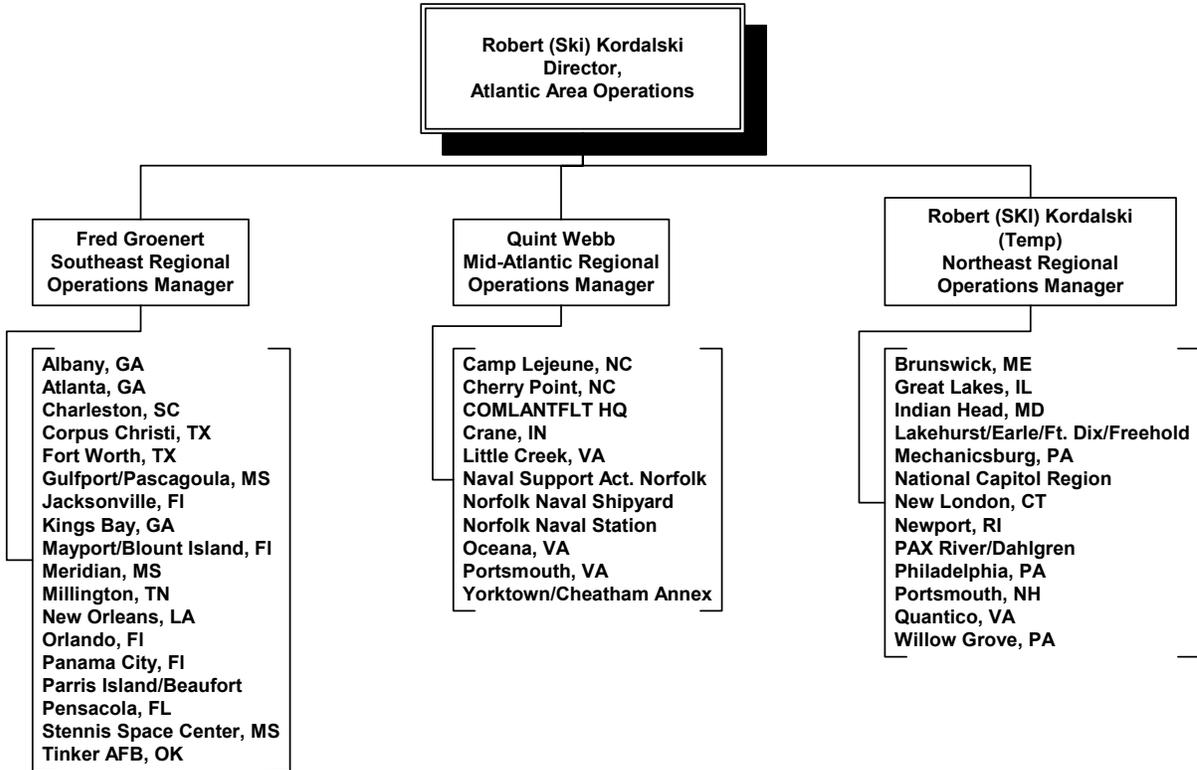


Exhibit 13: Atlantic Area Operations Organization

2. INTERFACES WITHIN WINGS

2.1 CONTRACTUAL RELATIONSHIPS

The WINGS subcontract with the EDS NMCI Team prime is characterized by the various CLINs for which we do work related to ordered services and by service level agreements (SLAs) which govern the acceptable levels of performance. Exhibit 14 summarizes the relationship of the NMCI CLINs to the contractual areas of the WINGS subcontract.

CLIN	Description	Included in Standard CLIN Pricing for WINGS?
1	Fixed Work Station (all Types)	YES
2	Portable Seat (All Types)	YES
3	Embarkable Work Station (all Types)	YES
4	Embarkable Portable Seat (all Types)	YES
6	Additional Standard Wall Plug Services - Unclassified	YES
6AG	Project Wall Plug	Use WINGS NMCI Proposal Process
7	High-End Upgrade Packages	N/A
8	Mission-Critical Seat Upgrade Package	YES
9	Classified Connectivity Upgrade Packages (all types)	YES
10	Voice Seats (all Types)	N/A
11	Secure Voice Seat	N/A
12	Mobile Phone Seat	N/A
13	Personal Paging Service Seat	N/A
14	Fixed Video Teleconference Seat	N/A
15	Moveable Video Teleconference Seat (All Types)	N/A
16	Additional File Share Services	N/A
17	Internet Access for Mobile Phone Seat	N/A
18	Classified Remote Access Service	N/A
19	Reserved	N/A
20	Data Seat Voice Communications Upgrade	N/A
21	Defense Messaging System Data Seat Upgrade	N/A
22	Desktop VTC (all Types)	N/A
23	Optional User Capabilities	N/A
24	Additional Non-Classified Account	N/A

CLIN	Description	Included in Standard CLIN Pricing for WINGS?
25	Additional Classified Account	N/A
26	Additional Moves, Adds, and Changes (all types except 26AP)	N/A
26AP	Project MAC	Use WINGS NMCI Proposal Process
27	Bandwidth Applications (all subCLINS)	YES
28	Data Warehousing	N/A
29	Legacy Systems Support	Use WINGS NMCI Proposal Process
30	Network Operations Display	Yes
31	Military Personnel Core Competency Development	Use WINGS NMCI Proposal Process
32	External Network Interface	Use WINGS NMCI Proposal Process
33	I T/KM Retraining Program	Use WINGS NMCI Proposal Process
34	Satellite Terminal Support	Use WINGS NMCI Proposal Process
35	Incentive	N/A
36	OCONUS Services	YES
37	TFW Partial Capability	Use WINGS NMCI Proposal Process
38AA	Developer Fixed Workstation Upgrade	Use WINGS NMCI Proposal Process
38AB	Developer Portable Workstation Upgrade	Use WINGS NMCI Proposal Process
38AC	S&T Terminal Services	YES
38AD	S&T Fast Ethernet Wall Plug	YES
38AE	S&T Wall Plug Service - Mod GigE N/W Xport-Lots of 4	YES
38AF	S&T Wall Plug Service - Mod GigE N/W Xport-Lots of 8	YES
38AG	S&T Wall Plug Service - Mod GigE N/W Xport-Lots of 16	YES
38AH	S&T Network Transport - Other	Use WINGS NMCI Proposal Process
39	Emergent Requirements	Use WINGS NMCI Proposal Process

Exhibit 14: CLINs, Descriptions, and Pricing

2.1.1 GUIDING PRINCIPLES RELATED TO CLINS

- Items under the NMCI contract which are not covered under a WINGS CLIN seat price are to be generally considered to require a proposal from WINGS to the Prime.
- The Contracts organization is responsible for all interactions with the prime for proposals.

Exhibit 15 shows the SLAs that are primary and secondary responsibilities of WINGS under the contract.

General Area	SLA Title	SLA Number	WINGS Responsibilities
User Upgrades	Desktop Hardware and Operating System	1	N/A
End User Services	Standard Office Automation	2	N/A
	E-Mail Services	3	N/A
	Directory Services	4	N/A
	File Shared Services	5	N/A
	Web Access Services	6	N/A
	Newsgroup Services	7	N/A
	Multimedia Capabilities Services	Deleted	N/A
	Print Services	9	N/A
	NMCI Intranet Performance	10	Secondary
	NIPRNET Access	11	Secondary
	Internet Access	12	Secondary
	Mainframe Access	13	Secondary
	Desktop Access To Government Apps	14	N/A
	Moves, Adds, and Changes	15	Secondary
	Software Distribution and Upgrades	16	N/A
	User Training	17	N/A
	Unclassified Remote Access	18	Secondary
	Classified Remote Access	19	Secondary
	Portable Workstation Wireless Dial-in	20	Secondary
	Organizational Messaging Services	20A	N/A
	Desktop VTC (Hardware & Software)	21	Secondary
	Voice Communications	22	N/A
	Voice Mail	22A	N/A

General Area	SLA Title	SLA Number	WINGS Responsibilities
Maintenance and Help Desk Services	Basic Help Desk Services	23	N/A
Communications Services	Wide Area Network Connectivity	24	N/A
	BAN/LAN Communications Services	25	Primary
	Moveable Video Teleconferencing	26	Secondary
	Proxy and Caching Services	26A	N/A
	External Networks	27	Secondary
Systems Support	Network Management Systems Services	28	Secondary
	Operational Support Services	29	Secondary
	Capacity Planning	30	Secondary
	Domain Name Server	31	N/A
	Application Server Connectivity	32	Secondary
	Network Operations Display	32A	Primary
Information Assurance Services	NMCI Security Operational Services General	33	N/A
	NMCI Security Operational Services PKI	34	N/A
	NMCI Security Operational Services SIPRNET	35	N/A
	NMCI Security Planning Services	36	N/A
Advanced Application and IM Support	Deleted	Deleted	N/A
Other Requirements	Integrated Configuration Management	36A	Secondary
	Integration and Testing	36B	Secondary
	Technology Refreshment	36C	N/A
	Technology Insertion	36D	N/A
Sea-Shore Rotation Support	Sea-Shore Rotation Support Training	37	Secondary

Exhibit 15: SLAs that are WINGS' Responsibility

2.1.2 GUIDING PRINCIPLES FOR SLAS

- SLAs are contractual measurement criteria; they do not define work scope or interface requirements or limitations.
- All members of the WINGS team are responsible for SLA compliance and improvement where relevant.

2.1.3 GUIDING PRINCIPLES IN GENERAL FOR CONTRACTS RELATIONSHIPS

- The W!NGS contracts manager will conduct all contracts discussions with the prime.
- The W!NGS subcontracts managers will conduct all contractual discussions with subcontractors or potential subcontractors. This includes all references to pricing, contract terms and conditions, and contractual relationships and administration.
- Management of subcontractors is a line management responsibility, which is coordinated through the subcontracts managers.
- Validation of subcontractor timekeeping, deliverables, and performances is a line management responsibility.
- New W!NGS business, whether in the form of new CLINS, or proposals outside of the NMCI contract with a relationship to the NMCI, will be coordinated with the Contracts organization throughout the life of the issue.

2.2 BUSINESS MANAGEMENT RELATIONSHIPS

Business Management is responsible for leadership, management and administration of the programmatic of running the NMCI project, including budgeting, program directives, centralized services to the operational managers including the status and changes to seat counts, metrics provision and interactions with the prime contractor in the contractual and business arenas. In addition, the business management personnel provide analysis and reporting on project performance to WAM!NET corporate.

2.2.1 GUIDING PRINCIPLES FOR BUSINESS MANAGEMENT RELATIONSHIPS

- Business Management is a service-oriented organization with the operations of the program as customers.
- The business of the NMCI program is managed by Cost Account Managers (CAMs) who have been given operational budgetary responsibility and authority and generally comprise the major cost elements of the NMCI program. These include: Operations leadership from the regions, areas and network operations centers, Technical Support Group leadership including the Server Farm group, Business Management leadership, and Contracts leadership. The CAMs have the authority and responsibility for managing costs and budgets for their area of operations.
- Interactions between CAMs and various elements of the Business Management office are encouraged on an ongoing basis to facilitate smooth service and information flows in both directions.

2.3 OPERATIONAL INTERFACES

The ongoing operational interfaces are facilitated by several sets of ground rules, which should be in everyone's cognizance in dealing with a geographically and functionally diverse organization.

2.3.1 GUIDING PRINCIPLES FOR OPERATIONS INTERFACES

- Schedule and visit coordination will be done with the applicable base network manager, if assigned, to ensure efficient collaboration.
- Base network transitions are primarily managed through the base network manager.
- Change management of transitioned networks, network equipments and services is managed through the W!NGS NOC BAN/LAN manager. The W!NGS NOC BAN/LAN manager utilizes the W!NGS Service Request Management (SRM) Maintenance Process, which details the process and information required for the execution of any changes in the network.

- Deliverables will follow functional lines and cross-organizational boundaries for efficiencies in both functions and organizations. The interfaces are important and require management attention to work.
- Deliverables are contractual documents.
- Interfaces and handoffs between organizations and functions should be documented and clearly understood to avoid duplications and confusions.
- Changes to an operational NMCI network on any base will be coordinated with the base site manager and the coordination will include an appreciation of the level of potential impact and visibility from a customer perspective.

2.4 TRANSITIONS RELATIONSHIPS

Transitions occur throughout the course of the NMCI contract that affect W!NGS. Some of the key transitions are:

- Transition of existing management of base BAN/LAN from government contractors to the EDS NMCI Team
- Transition of legacy network operations to NMCI network operations
- Transition of installations from a preproduction to a production environment
- Transition of responsibilities from one W!NGS organization to another.
- Transition of decentralized management to centralized management of networks.
- Transition of individualized claimants with local operational and funding control to the NMCI environment
- Transition of responsibilities from W!NGS organization to other EDS NMCI Team organizations and vice versa

2.4.1 GUIDING PRINCIPLES THAT APPLY TO TRANSITION INTERFACES

- Configurations of designs are the responsibility of Technical Support Group until turned over to the NOC. Maintenance after turnover is a NOC function.
- The first device to be monitored by the NOC constitutes the start of NOC management of the production environment. Changes and additions to the production environment after the first device cutover must be coordinated with the NOC and requires adherence to the Service Request Management (SRM) process to ensure implementation plans, test plans, and recovery plans have been reviewed and accepted.
- Transitions of desktops at bases are the primary responsibility of the bases for interface with EDS NMCI Team desktop teams.
- Desktop transitions will to the maximum extent possible use remote management techniques from the NOC.

- Maintenance of legacy networks and equipments after the start of the shift to NOC control will be of a lower priority than maintenance of the NMCI Network.
- Elimination of the requirements for maintenance of Legacy networks will be aggressively pursued throughout the transition from legacy to NMCI networks.
- Transitions will rarely occur at a single point in time, but are various processes that occur over time. There will be a signal event, which will mark the accomplishment of a transition. That event will be documented with the appropriate elements of the transition and the resources and information necessary to carry forward with the responsibility of the operations after the transition.
- Configuration management of information does not stop with a transition.
 - The responsibility to maintain various configurations is part of the transition process until the entire site is under the production environment of the NOC.
 - Configuration management of any active devices in the production environment is the responsibility of the respective NOC. The Service Request Management (SRM) process will be followed to ensure accuracy and completeness for change configuration execution, testing, and recovery.
 - Other configurations, which change after full NOC cutover due to changes in design, new orders from bases, etc., are the responsibility of the planning and implementing organizations until they are included in the production environment.
 - Wiring and ISP/OSP configurations are not the responsibility of W!NGS to maintain.
 - Port mappings are the responsibility of the base to maintain and input to the NOC.
- As much as possible, processes involved with transitions should be simple in concept, illustrated for clarity, and able to be adjusted for changing environmental factors without destroying the integrity of the process.
- Process owners must get agreement from all participants of the process as to levels of effort, requirements, and deliverables to various stakeholders in the process.

2.5 MATRIXED SUPPORT RELATIONSHIPS

Efficiency of operations requires that many support elements will be matrixed from one organization to another. The success of matrixed management is fundamentally the success of collaborative management and a firmly established method of observing business rules in the various participating organizations. The ability to plan, budget, correctly charge for work, adequately balance resources and ensure relatively level and efficient workload distribution, and properly charge the budgets for work, make matrix management a challenging environment. The providers of matrixed services can be any group or department but commonly are focused in the Technical Support Group (TSG), the Financial Department, Human Resources, the Contracts Department, and Program Management.

2.5.1 GUIDING PRINCIPLES THAT APPLY TO MATRIXED SUPPORT

- The receivers of matrix support are the budgeted projects of NMCI (Ops) and other projects that may arise.
- When service for a key project function is requested, a specific resource by name will be assigned. Named resources will not be replaced without the mutual consent of the project manager and the service provider manager.
- The project manager is responsible for daily management of the supplied resource.
- The project manager and the service provider will establish a mutually agreeable objective measure (metrics) of services provided (timeliness, quality of deliverable, efficiency of service, etc.). These measures will be discussed with the department manager, and reported at monthly project reviews.
- The service provider is responsible for managing the requisition/hiring process for identified positions under the following ground rules:
 - Where applicable, the project manager will participate in the recruitment process for new employees.
 - Recruitment will be nation-wide, providing local project support as appropriate.
- While the service provider is responsible for managing career growth and advancement of their personnel, the project manager will provide significant input into performance evaluations of named managed resources.
- Both project managers and service providers will participate in periodic staff forecasting and planning activities.
- As a general rule, project managers will not report to service provider departments to avoid conflicts of interest and unfair competition for resources.

**APPENDIX A: OPERATIONS FUNCTIONS AND
INTERRELATIONSHIPS BETWEEN VARIOUS PARTS OF
WINGS**

WINGS Department	Implementation	Configuration Management	Test and Validation	Operations	Legacy Support
Base Ops	Full project management responsibility for installation of site NMCI network including BII services where ordered	Create and deliver all required documentation for turn-over	Plan/conduct site testing. Correct deficiencies as required.	After cutover support to after turn-over network. New projects, updates.	Operate the site legacy network.
ENOS	Schedule tracking, review, and operations planning. Pre SLA and NMS database site preparations	Define documentation standards for turn-over. Manage after turn-over site baseline for all n/w devices. Review turn-over and standards requirements	Accept/reject sites. Create test standards. Evaluate test results. Accept or reject devices.	Management and operations responsibility for turned-over active network devices. SLA data collection and reporting, network maintenance.	
Technical Support Group	Matrix support for design and installation engineering. Stand up server farms in coordination with Base Ops.	Manage design standards. Provide matrix support to Base Ops for turn-over	Matrixed as-built support to Base Ops for correction and validation and to EO for config mgmt as tasked.	Matrixed site engineering support as requested by Base Ops and Config/NOC support as requested by EO	Matrixed engineering support (e.g., B2/COI, etc.)
USMC Program Manager	Leadership of USMC Program Implementation	Define requirements for USMC-specific issues	Coordinate test requirements	Define operational requirements for USMC-specific Operations	
Business Management	Scheduling, seat count management, and budget allocation and tracking			Scheduling, seat count management and budget allocation and tracking	