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From: Sandra Ylinen, EDS Facilities Program Manager
Subject: NMCI Facilities Field Handbook

The Navy Marine Corps Intranet (NMCI) Facilities Field Handbook is an unclassified document for use by EDS and program partners and providers in planning and executing the design and construction of facilities dedicated to this program. It provides guidance, information and standard operating procedures for construction of NMCI facilities as well as hyperlinks to Information Technology (IT) industry resources and other pertinent information.

This revision is applicable upon receipt and supercedes all previous versions.



Facilities Field Handbook

Version 3.4

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Preface

Throughout this Facilities Field Handbook, references to publications imply the effective edition.

Order a new publication, or report any page shortage to: Rick Tompkins via e-mail at rick.tompkins@eds.com

Recommended Changes

Recommended changes to this document may be submitted at any time and should include the following information:

1. NMCI –EDS Facilities Field Handbook version number
2. Location of recommended change: page, paragraph, line, figure number
3. Type of change: add/delete/modify, text/figure
4. Exact change recommendation. Give verbatim text changes. If a figure is to be added, supply a rough sketch, or identify the source of the new figure. If a figure is to be changed, include a marked up copy of the existing figure.
5. Rationale/justification for the proposed change.

All recommendations should be submitted to: Rick Tompkins via e-mail at rick.tompkins@eds.com



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Executive Summary

Purpose

The purpose of this handbook is to document approved procedures and forms used during the coordination and construction of Information Strike Force (ISF) Facilities in support of the Navy and Marine Corps Intranet (NMCI) Program. The NMCI Facilities Field Handbook (Field Handbook) is not a contractual document and is presented as a stand-alone guide to describe the major NMCI Facilities processes from program start-up, through system transition, to full operational capability.

How the Field Handbook is Organized

The Field Handbook is organized into two discrete parts, Part A. and Part B.

Part A., or Sections 1-3, provides a broad summary of the NMCI Program in relationship to the Department of the Navy contract with EDS and includes an Overview, outline of Roles and Responsibilities, and synopsis of Specifications and Requirements.

Part B., or Section 4, provides a detailed description of the NMCI Major Facilities Construction and Delivery Program.

How to Use the Field Handbook

The Field Handbook is a “hyperlinked” document; selecting on any underlined text directs the user to additional information as indicated (e.g. documents, websites, etc.). Internet access is required for connection to website hyperlinks. This document is also part of a secure website knowledge-base known as the “[NMCI Website](#).” Access to the website to view the Field Handbook may be requested by following the directions on the site’s welcome page.

Objectives

The overall objective of the EDS Facilities Team is “delivering quality facility infrastructure in a timely, cost effective manner in support of the entire NMCI Information Strike Force.” The key to success is the development and effective use of the best possible communication techniques to ensure that all reasonable operational requirements are professionally met with sound engineering solutions. Standardization in the name of driving costs down, while simultaneously keeping quality and reliability high, is paramount. We hope that this Field Handbook is of assistance in meeting these objectives, and we ask project members to share their ideas about accomplishing “just in time” quality delivery of all future facilities at the most cost effective price.

A. The NMCI Program

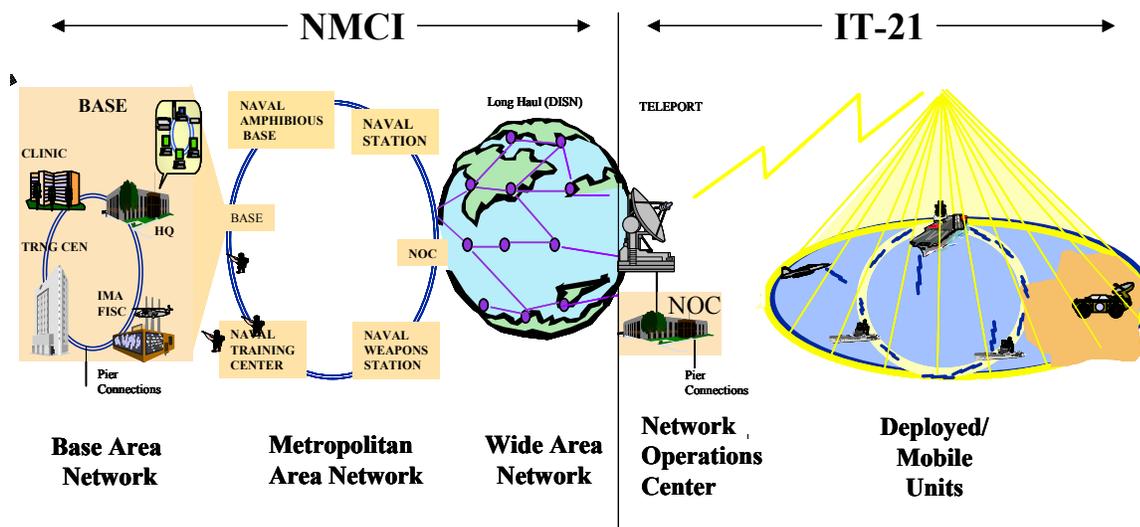
Part A., or Sections 1-3, provides a broad summary of the NMCI Program in relationship to the Department of the Navy contract with EDS and includes an Overview, outline of Roles and Responsibilities, and synopsis of Specifications and Requirements.

1. Overview

This section briefly describes the NMCI Program Background, Legal Terms and Conditions, Security, and Terms and Terminology with an emphasis on items related to facilities.

1.1 Background

The Navy and Marine Corps Intranet is a Department of Navy (DoN) information technology (IT) initiative to deliver comprehensive, end-to-end information services through a common, secure computing and communications environment.



Department of the Navy global, secure, end-to-end capability

The capability and performance of NMCI will extend to all United States Navy (USN) and U.S. Marine Corps (USMC) installations, bases, posts, camps, stations, activities and locations. This includes the Continental United States (CONUS), Alaska, Hawaii, Guantanamo Bay (Cuba), and Puerto Rico for an estimated 400,000 Navy and Marine Corps uniformed and civilian workforce member seats (which includes 6,000 USMC reservists) in addition to approximately 80,000 Navy and Marine Corps selected Reserve force members. The NMCI service area may also be expanded to outside CONUS (OCONUS) sites.



The infrastructure required to support the scope of this enterprise is determined by the location and number of seats requested. Current planning envisions a concept infrastructure with two Regional Help Desks, one global and three regional Network Operation Centers (NOCs), 8 Regional Server Farms, 25 Distributed Full Size Server Farms, 74 Micro Server Farms, and an as yet to be determined number of Points of Presence (POP), and Intermediate Cross-connects and Main Distribution Frames Cross-connects (IDF/MDFs/IC/MCs). The initial planning concept is subject to change based upon technology solutions and seats ordered.

Under the contract, the Government is to provide space in Government owned or leased buildings (i.e. Government Furnished Facilities [GFF]) for the contractor to establish these facilities. In addition, administrative and warehouse space (temporary and permanent), also known as "base level support" GFF will be provided on an as-available basis. It is desirable to have the location of base level support facilities in close proximity to the Server Farm with which they are associated.

1.2 Legal Terms and Conditions

1.2.1 Contract Changes

EDS Facilities shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer. The Contracting Officer is the only person authorized to approve changes to any of the requirements of the contract. In the event an EDS Facilities employee effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in the charges incurred. The employee effecting the change may be held liable for incurred charges.

1.2.2 Insurance

The minimum insurance coverage required by the NMCI contract by contractors, sub-contractors, and vendors for worker's compensation, employer's liability, general liability, and automobile liability may be a pre-requisite between contractors and subcontractors.

1.3 Security

EDS Facilities shall comply with the [Security Agreement \(DD Form 441\)](#) and the [National Industrial Security Program Operating Manual \(DoD 5220.22-M\)](#); and any revisions to that manual. The NMCI contract further states, "The equipment being installed or reconfigured under this contract will be used to process classified information". SECNAVINST 5510.30A, "Department of the Navy Personnel Security Program" of 10 Mar 99 and SECNAVINST 5510.36 Department of the Navy Information Security Program Regulation" of 17 Mar 99, provide regulations and



guidance for classifying and safeguarding information. Communications Security (COMSEC) information is handled and controlled in accordance with national and departmental directives. It is the responsibility of the contractor to ensure compliance with all pertinent Navy regulations, including the National Industrial Security Program Manual (NISPOM) and COMSEC supplements 5220.22S". COMSEC facilities are required to comply with CMS-21A Annex O.

The NMCI Industrial Security Office (ISO) is responsible for administering personnel, facility, information and program security and their related oversight processes for the Information Strike Force. The office provides security guidance, coordination, tools and assistance to the Strike Force team, its subcontractors, and to Navy and Marine Corps clients. The NMCI ISO Website provides useful guidelines, downloadable security forms and contact information to help all NMCI Information Strike Force Members and subcontractor personnel who support NMCI program members.

To provide connectivity to other Department of Defense (DoD) and government agency networks, the NMCI shall utilize and interface with the Defense Information System Network (DISN), which is administered by the Defense Information Systems Agency (DISA). Specifically, interfaces between NMCI and DISN shall allow for the transport of voice, video, and data on the Non-classified (but sensitive) Internet Protocol Router Network (NIPRnet) and the Secret Internet Protocol Router Network (SIPRnet). The DISN Security Accreditation Working Group (DSAWG) evaluates security standards for the components of the DISN. DISA's Office of DISN Data Services promulgates and integrates these standards. For access to the DISN, the NMCI shall follow DSAWG approved security standards and comply with the DISN (NIPRnet, SIPRnet) Connection Approval Process (CAP). The installation of an Electronic Security System (ESS) will be provided for the NMCI facilities because in most cases they are not continuously manned. Navy Site Security Personnel will provide the required response force within the response time limits. All alarms will annunciate at their facilities via their base security system. An Access Control System and Intrusion Detection System (ACS/IDS) have been designated to provide detection of unauthorized entry. It will be installed and the initial database entered by trained EDS Security Installation teams. The installation will include the training and documentation of EDS site personnel on the maintenance of the system access control database.

The Security Plan for each Server Farm will be reviewed with local government personnel that will validate that the area will meet the appropriate requirements and the personnel that will connect the EDS ESS with the base monitoring system. EDS Security will review the designs for compliance and cost effectiveness. All security designs are sensitive information. They are to be marked For Official Use Only.

Requirement for U.S. Citizens. General contractors, sub-contractors, and vendors supporting construction may utilize foreign nationals and naturalized US citizens in most cases. However,

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security clearance, classification, and citizenship requirements are work site specific and must be strictly adhered to by construction contractors and vendors. Contact the [EDS Security Office](#) for specific requirements. It is the responsibility of each contractor, sub-contractor, and vendor to be in compliance. Specific Site [Visit Authorization Letters](#) and [Visit Authorization Letter Cancellations](#) are required.

1.4 Terms and Terminology

The following paragraphs describe terms that are used throughout the Facilities Field Handbook.

Seat. A “seat” is defined as a workstation or personal computer (PC) with supported applications, a help desk, infrastructure, training and accounts required for using NMCI. Seats are associated with a physical environment providing the services on a per-seat basis, where all required service components are bundled. A single seat may have multiple users or accounts.

Government Furnished Facilities (GFF). The Government will furnish storage space, working space, heat, light, ventilation, electric current, and outlets for the use of NMCI personnel. These facilities shall be provided at no charge to EDS; however, fit-up of the facilities to EDS specifications will not be provided by the Government. Type and size of space to be provided will be based on availability and will vary at each site.

Government Furnished Equipment (GFE). The United States Government (USG) will provide basic office furniture. EDS shall be responsible for providing the onsite staff with all of the necessary equipment and services they will need to support NMCI including telephones, PCs, servers, copiers, printers, fax machines, and consumables (e.g., paper and pencils, etc.).

Fail-Over. Fail-over is a backup operational mode in which the functions of a system component (such as a processor, server, network or facility) are assumed by secondary system components when the primary component becomes unavailable through either failure or scheduled down time. Used to make systems more fault-tolerant, fail-over is an integral part of the NMCI mission-critical systems that must be constantly available.



2. Roles and Responsibilities

This section briefly outlines the roles and responsibilities of Electronic Data Systems, the United States Navy, the United States Marine Corps, the Government Contract Representative, the NMCI Enterprise Infrastructure Group, and the NMCI Facilities Team.

2.1 Electronic Data Systems

In response to the Department of the Navy's Request for Proposal for the NMCI initiative, Electronic Data Systems (EDS) assembled a team of industry experts and small businesses and created what was then referred to as the Information Strike Force (ISF). The list below contains the names of the principal contractors.

[EDS](#) for program management

[Raytheon](#) for information assurance

[WorldCom](#) for the Wide Area Network

[WAM!NET](#) for the Base Area Network/LAN/Metropolitan Area Network

[Robbins-Gioia](#) for project scheduling

[Cisco](#) for routers and switches

[Microsoft](#) for software

[Dell](#) for desktops, laptops, servers and enterprise storage systems

[Dolch](#) for desktop and portable embarkables

[Dateline](#) for voice services

Hundreds of small businesses for help desk, network operations center and field services

EDS was awarded the NMCI contract on October 6, 2000. EDS has responsibility for providing all assets and services needed to ensure the transmission of voice, video and data across the Department of the Navy. As the Department's partner, EDS has committed to meeting 197 metrics, ranging from help desk support to network response time.

2.2 United States Navy

The following is a brief overview of the facilities network within the United States Navy NMCI Program Manager (Facilities) structure and general guidance. Specific DoN NMCI facilities information is available on the [Naval Facilities Engineering Command Southwestern Division website](#).

2.2.1 Director, NMCI

The Director is responsible for successful implementation of NMCI throughout the DoN. The Procuring Contracting Officer (PCO) serves as the primary contractual interface with EDS (i.e.

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negotiates and awards any changes to the NMCI contract between the Department of the Navy and EDS) and has approval authority for any GFF provision issues that may affect contract price or time.

2.2.2 Space and Naval Warfare Systems Command

The Space and Naval Warfare Systems Command (SPAWAR) NMCI Program Management Office (PMO) serves as an interface between components. The Project (Administrative) Contracts Office (PCO) serves as the primary contractual interface with EDS (i.e. negotiates and awards any changes to the NMCI contract between the Department of the Navy and EDS) and has approval authority for any GFF provision issues that may affect contract price or time.

2.2.3 Naval Facilities Engineering Command

The Naval Facilities Engineering Command (NAVFACENGCOM) is the United States Navy's government furnished facilities (GFF) coordinator.

- NAVFACENGCOM facilitates the NMCI process and coordination among the NMCI GFF team members.
- This team includes representatives from the Regional Commander Staffs, Major Claimants, NMCI PMO and PEO-IT, NAVFACENGCOM, Customer Technical Representatives (CTR), Local Commands, Public Works Officers/Departments/Facilities Management Departments (PWO/PWD/FMD), Engineering Field Divisions/Activities (EFD/EFA) including Resident Officer in Charge of Construction (ROICC) Offices, Public Works Centers, and the NMCI EDS Facilities.

For the USMC, NAVFACENGCOM will only provide ROICC support during EDS build-out construction of Marine Corps facilities.

The responsibilities of NAVFACENGCOM are distributed through the following components:

1. Southwest Division NAVFACENGCOM is the lead for enterprise coordination of the USN NMCI GFF process.
2. Respective NAVFAC Engineering Field Divisions/Activities (EFDS/EFAS) will assist in the GFF process and provide:
 - Review of EDS build-out design, focusing on fire protection, life safety, and environment.
 - Construction oversight by the ROICC, including conducting regular production meetings.
 - Final acceptance of newly installed or modified fire suppression systems.
 - Review of special site-specific engineering reports provided by EDS.
 - Regional Engineers coordinate completing natural and cultural resource studies, state historical preservation coordination, etc.
 - Assist in the USG provision of GFF to include utilities upgrades (mechanical and electrical) to the point of connection.



2.3 United States Marine Corps

ISF-Facilities efforts for the United States Marine Corps (USMC) installations are being coordinated through the C4ISR-NMC/IT office. The following is a brief overview of those efforts. Specific protocols and program management procedures are being developed and will be included in future updates to this Field Handbook.

Installation & Logistics

- Provides funding for the refurbishment of Government buildings that require repairs prior to turning over to the NMCI contractor.

2.3.1.2 Headquarters Marine Corps Code (C4)

- Serves as the USMC authority for NMCI requirements, policy, and guidance issues.
- Communicates USMC NMCI policy, requirements and execution guidance to Marine Forces.
- Approval authority for the USMC NMCI transition schedule.
- Approval authority for NMCI seat, service, and resource requirements.
- Provide appointment letter for positions of the Major Command Transition Officer-in-Charge (MCTOIC) and Site Transition Officer-in-Charge (STOIC)

2.3.1 The Marine Corps System Command (MARCORSYSCOM)

2.3.2.1 Program Management Office (MCSC/PMO) (C4ISR)

- Serves as the program focal point for the USMC. The Administrative Contracts Officer (ACO) for the USMC resides in this office.
- Sustains the USMC Information Technology (IT) infrastructure during transition.
- Oversees contract, technical, financial, schedule and logistics matters associated with acquiring and using NMCI services
- Prepares and distributes transition operational plans and reporting requirements.
- Elevates unresolved transition policy issues to HQMC C4



2.4 United States Government Contract Representative

The Contracting Officer Representative's (COR) primary role is to provide a Government technical interface with EDS Facilities and monitor compliance with contract requirements. The COR serves as the eyes and ears of the Contracting Officer, acting as the technical liaison between EDS Facilities and the Contracting Officer. The COR is not an administrative contracting officer and does not have authority to direct the accomplishment of effort which is beyond the scope of the contract or delivery order. The COR may be changed at any time by the Government without prior notice to EDS Facilities, but notification of the change, including the name and address of the successor COR, will be promptly provided to EDS Facilities by the contracting officer in writing.

The COR's primary responsibilities are as follows:

- Government acceptance of the delivered services/certification of invoices.
- Approves appropriate inspected/acceptance documents for the EDS Facilities performance as measured in the Service Level Agreements (SLAs).
- Represents PMO/PCO in all Government matters.
- Liaison between CTR, ACO, PCO and EDS Facilities.
- Monitors areas of evaluation delegated by PCO.
- Investigate complaints for the PCO and ACO.
- Mediate minor disputes between the EDS Facilities and customer.
- Monitor and validate intranet performance (enterprise perspective).
- Monitor and validate help desk and customer service performance (electronically).

2.5 NMCI Enterprise Infrastructure Group

The EDS Facilities Team principal client is the NMCI Enterprise Infrastructure Group. This group determines Server Farm specifications enterprise-wide. The responsibilities of the NMCI Enterprise Infrastructure Group include:

- Server Farm Implementation – policy, specifications, standards, and change.
- Server Farm Maintenance – policy, specifications, standards, and change.
- Telecom Infrastructure Implementation and Maintenance – coordination with Architecture and Engineering, Transition, LAN/BAN and WAN partners to ensure connectivity at best means possible.
- Server Farm Implementation Coordinator (SFIC) Direction and Coordination - The SFIC Team is responsible for end-to-end coordination of Server Farm delivery. Throughout the Server Farm facilities build-out, the EDS Site Facility Manager is solely responsible for all facilities construction matters and only provides the SFIC with information necessary to effect coordination with activities following the Server Farm commissioning test.



2.6 EDS Facilities Team

2.6.1 EDS Facilities Program Manager – Sandra Ylinen

Responsible for enterprise-wide policies and guidance for site acceptance, funding, construction, equipment procurement, and service maintenance support programs.

2.6.2 EDS Construction Manager – Steve Scott

Responsible for overall management of enterprise-wide EDS Facilities construction contracts, supplier relationships, schedules, and quality assurance. Other duties include:

- Coordinate and conduct Site Assessments, as directed.
- Establish liaison with the Site Transition Manager (STM), Site Delivery Manager (SDM), and local installation Facilities Department representative (PWO, ROICC, and FMD in coordination with the Facilities team.
- Support assigned program members with quality facilities within budget and resources available.
- Assist SDM in developing the [Site Concurrence Memorandum](#) (SCM) for facilities-related issues.
- Manage General Contractor on-site compliance requirements.
- Propose policy and guidance recommendations.
- Develop and manage the Integrated Process Team build-out schedule.
- Develop and coordinate procurement requisitions for facilities requirements. Approve requisitions within authorized amount. Forward requisitions above authorized amount.
- Maintain Site Records and comply with company reporting procedures.
- Implement and monitor the Safety Program.
- Effect coordination with Enterprise Operations (Server Farm Implementation Coordinator) hand off for commencement of racking, stacking and burn-in of Enterprise Operations (EO) equipment.
- Coordinate EDS acceptance of facilities.
- Complete site retrograde and closeout.

2.6.3 EDS Facilities Maintenance Manager – Ted Martin

Responsible for NOC, Server Farm, Administration, Warehouse and POP/MDF/IDF facilities service maintenance contracts, operations and maintenance, and monitoring programs.

2.6.4 EDS Design Manager – Rick Tompkins

Responsible for enterprise-wide coordination of EDS Facilities design for NOC and Server Farms, including necessary EDS and USG approvals.



2.6.5 Construction Contractor Program Manager – Steve Penson

The EDS Construction Contractor of record is Austin Commercial L.P., of Dallas Texas. They are responsible for completing architect and engineering designs adapted to each site, and building the facilities per plan. Austin will operate the safety program and will be responsible for the activities of their trades subcontractors.

2.6.6 Construction Contractor Regional Managers

Austin Commercial will divide the CONUS into geographic regions and assign a design/build manager for each. They will direct the specific base construction activities for overall logistics, quality control and schedule compliance.

2.6.7 Construction Contractor Project Managers

Austin Commercial will assign project managers for each construction site, responsibilities include:

- Site supervision that is accountable for each project.
- Site schedule compliance.
- Construction health and safety plan.
- Project close-out to include site commissioning, as-built submission, billing reconciliation and other deliverables
- Comply with:
 - [Commercial Best Practices](#)
 - US Government Base security, badge, and site access requirements.
 - Conditions of site-specific pre-construction terms and requirements.
 - [Fire Protection MIL handbook 1008C \(Fire Protection for Facilities Engineering and Design and Construction dated 10 June 1997\)](#)
 - Responsibilities listed in paragraph 4.2.11
- Be familiar with and consider:
 - [NAVFAC Safety criteria](#)
 - Regional directives (where applicable)
 - San Diego, CA - [Energy Management System/Direct Digital Controls Design and Procurement Standardization](#)
- Where feasible and economical conform to existing mechanical systems on Base for consistency in repair and part stocking.
- Where feasible, conform to Base Exterior Architectural Plan (BEAP)
- Participate in the ROICC Production Meetings.

3. Specifications and Requirements

This section provides an overview of how EDS Facilities are constructed, with a synopsis of: Network Operation Centers, Help Desks; Server Farms; Administrative Spaces; Warehouse



Spaces, Points of Presence; Intermediate/Main Distribution Frames Cross-connects; and Baseline Specifications for Physical Security and Contractor Test and Evaluation.

3.1 Overview

EDS Facilities are constructed to commercial “best practices” and EDS Facilities approved specifications. Construction is not subject to military specification standards. (e.g. MILSPEC) with the exception of those identified in Department of the Navy. However, EDS will comply with the applicable federal regulations for a federal installation, including [Uniform Federal Accessibility Standards](#) (UFAS), and life, fire, and safety regulations and appropriate building codes. Approved EDS Facilities specifications and standards are detailed in the following documents. The construction [Facilities Specifications](#) is an approximately 800-page manual covering approved commercial best practice general architectural and engineering baselines and building guidelines. The Information Technology (IT) [Server Farm Infrastructure Design Standards](#) is an approximately 90-page guide focusing specifically on approved Server Farm requirements and design standards. These two documents are posted on the [NMCI ISFEDS Website](#) and updated routinely. Approved Configuration Change Control Board specification changes will be posted and included in these documents.

A Unified Facilities Criteria (UFC) has been published to establish NMCI criteria to be designed into military construction projects to facilitate compliance with NMCI cabling/voice/data standards. Base activities need to provide a list of new building projects being planned or under construction when requested by the local EDS (SDM) representative. The EDS representative will coordinate an EDS review in order to provide guidance on recommended design changes.

The Government is contractually bound to provide government furnished equipment (GFE) and government furnished facilities (GFF) to EDS Facilities to support the build-out of the NMCI EDS infrastructure.

The Government provides:

- Space as required by the contract. See tables below for the approved guidelines.
- Space that is free of hazards from materials such as asbestos, lead-based paint, etc.
- Adequate floor loading capacity, as available. Admin space 75 psf; warehouses and server farm mechanical room 150 psf (450 psf desirable).
- Heating and ventilation, (air conditioning if available).
- Adequate electrical power at the main building panel or the secondary side of the transformer.
- Available information on building and utility drawings of record; current loads on all utilities such as electric panels, transformers, central utility plants, water, sewer, etc; information on utility maintenance schedules, utility reliability and back-up systems; decisions on modifying central utility plants, where and when utility tie-ins occur.
- Trash disposal, utilities, safety, emergency services.



- Fire protection engineering review and certifications.
- Limited code compliance review.
- Initiating EM safety surveys for rooftop NMCI antenna installations.
- Base security.
- Security badges for contractor personnel constructing facilities – Security escorts into areas where contractor personnel are not normally cleared for access.
- Office furniture

The Contractor provides:

- Facility build-outs including raised flooring where needed, interior walls, drop ceilings, additional lighting, conduit wiring, network equipment, telephone equipment and service.
- Back-up power (generators, UPS as applicable) and HVAC in cases where it doesn't exist or doesn't meet NMCI requirements.

A description of the GFF requirements for each of the following is listed below:

- Network Operation Centers and Help Desks
- Server Farms of all sizes
- Administrative Spaces (Permanent and Temporary)
- Warehouse Spaces (Permanent and Temporary)
- Points of Presence (POP)
- Intermediate/Main Distribution Frames Cross-connects

3.2 Network Operation Centers and Help Desks

A total of one global NOC, two three regional NOCs and two help desks are conceptually envisioned.

- **Global NOC**
- **NOC** – Requires 40,000 sq. ft. consisting of 10,000 sq. ft. data center raised computer floor space, Network Operations Center 10,000 sq. ft., and 20,000 sq. ft. administrative space. A 40' x 80' space with 20' ceilings will be required within the NOC to support the control center.
- **HELP DESK** – Requires 55,000 sq. ft. of contiguous space consisting of administrative spaces, conference rooms and training facilities.

3.3 Space Requirements Tables

The government furnished facilities space requirements tables below are to be used as guidelines. Configuration and availability of space may dictate variations from these tables. The specific space assignments will be determined on a site-by-site basis.



NOC and Regional Server Farm Space Requirements Table

Facility	Facility Space Requirements (Sq. Ft.)	Permanent Admin (Sq. Ft.)	Temporary Admin*** (Sq. Ft.)	Permanent Warehouse (Sq. Ft.)	Temporary Warehouse (Sq. Ft.)	Temporary Imaging (Sq. Ft.)
Global NOC						
Hardware	65,000	Included in Facility Space	Included in Facility Space	Included Below	Included Below	Not Applicable
Help Desk	55,000	Included in Facility Space	Included in Facility Space	Not Applicable	Not Applicable	Not Applicable
Regional NOC	40,000	Included in Facility Space	Included Below	Included Below	Included Below	Included Below
Server Farms						
Very Large	7250	3000	2500	3600	5000	2000
Large	4850	2200	1800	3000	3000	1000
Medium	3000	1100	1300	1700	2500	800
Small	1850	700	400	1600	2000	800



**Space Requirements Table
(Micro Server Farm/POP Locations)**

Server Farm Size	Number of Seats	Facility Space Requirements (Sq. Ft.)	Permanent Admin (Work-stations)	Temporary Admin*** (Work-stations)	Permanent Warehouse (Sq. Ft.)	Temporary Warehouse (Sq. Ft.)	Temporary Imaging (Sq. Ft.)
POP	0-20	40	0	2	100	0	50
POP	21-50	40	2	2	200	200	100
POP	51-100	40	2	4	400	400	200
POP	101-200	60	4	4	800	800	400
POP**	201-450	60	6	8	1,000	1,200	600
Micro	451-700	715*	10	8	1,200	1,600	800
Micro	701-1,000	715*	14	8	1,400	2,000	800
Micro	1,001 - 5,000	715*	20	22	1,700	2,500	1000
Micro	5,001 +	715*	30	25	3,000	3,000	2000

Server Farm Size	Number of Seats	Permanent Admin (Sq. Ft.)	Temporary Admin*** (Sq. Ft.)	Permanent Warehouse (Sq. Ft.)	Temporary Warehouse (Sq. Ft.)	Temporary Imaging (Sq. Ft.)
Regional	10,001 - 15,000	5,000	2,500	3,600	5,000	2000

- * Facility space requirement for Micro Server Farms increases to 880 sq. ft. if the DEMARK equipment is included (this only applies to Micro Server Farm/POP locations chart above).
- ** Large POPs (> 450 seats) require 450 sq. ft. of facility space. For other large POP spaces, refer to appropriate Micro Server Farm size for the associated number of seats above.
- *** LADRA administrative space is not included. It shall be determined on a site-by-site basis by mutual agreement between the Government and the Contractor (this applies to the NOC and Regional Server Farm Space Requirements Table and the Regional Server Farm Table above).

The office furniture will be serviceable and in good condition, whether new or used. The supplier, make, and model of the furniture will be at the Government’s discretion.

3.4 Server Farms

There will be approximately 33 Regional and Full-Size Server Farms and 74 Micro Server Farms (MSF) designated throughout the Continental United States (CONUS) and specific Outside Continental United States (OCONUS) Navy and Marine Corps locations. The Server Farms have been classified by size based on the number of seats each Server Farm is to support. Server Farm sizing also takes into consideration growth, fail-over and possible legacy applications server support requirements. Space square footage is considered to be “net” useable space.



3.5 Administrative Spaces

The Administrative Spaces will consist of temporary and permanent space. The administrative work area should be co-located with the construction site and can be calculated with a formula of 75 gross square feet per workstation.

3.6 Warehouse Spaces

The warehouse spaces will consist of temporary space and permanent space. Where 25-foot high ceilings are not available, the floor space will be increased appropriately.

3.6.1 Imaging Space

The temporary imaging spaces for loading workstation software will be provided by the Government if available and may be located in either the warehouse or other space. The Government will provide tables and other furniture suitable for this purpose.

3.6.2 Construction Laydown Area

If available, the Government will provide suitable outside laydown area for server farm and other associated construction activities as close to the project site as practical. The ROICC office, or Public Works, will coordinate this space assignment with Base Public Works Officer and EDS. The government will provide electrical power to the laydown area, but EDS will be responsible for running the temporary circuits to the area from the nearest available point of delivery. Points of Presence (POP)

3.7 Points of Presence (POP)

Server Farms will not be constructed at each seat location. Some locations will have communications equipment installed to transmit the signals from the seat to the servers located elsewhere. Refer to the BAN/LAN UFC for details on space and criteria for POPs and other BAN/LAN infrastructure.

3.8 Intermediate/Main Distribution Cross-connects (IC/MC, also known as IDF/MDF) Frames

The EDS access and distribution level switches that comprise the Base Area Network (BAN) will require permanent space for infrastructure and equipment. The ideal space for a typical MDF will be near the site building's existing main point of entry (MPOE) for telecommunications infrastructure. The ideal space for a typical IDF will be within 55 – 60 meter radius (no more than 90 linear meters) of the seats/users to be served.



Site Size in Seats No. of Cabinets	Square Footage Footprint Requirements
1	40 sq.ft. <i>Can be wall mounted</i>
2	60 sq.ft.

3.9 Baseline Specifications

3.9.1 Physical Security

Physical security protection of the NMCI assets and the monitoring of the infrastructure are critical to meeting the contract performance requirements. Construction specifications for fixed Communications Security (COMSEC) open storage area facilities and special physical security safeguards for DoD bulk facilities are detailed in the COMSEC Material Control System (CMS21A) and [SECNAVINST 5510.36](#). Abstracts from both these references are outlined in the [General Security Requirements](#).

3.9.2 Contractor Test and Evaluation (CT&E) Phase 1

Industry standards for facility infrastructure development form the basis for facilities infrastructure certification, acceptance, testing and commissioning which is referred to as the Commissioning Process. This is a three-phased process that verifies a consistent physical environment, including Uninterruptible Power Supply (UPS), Heating, Ventilation, Air Conditioning (HVAC), and Power Distribution Unit (PDU) component-systems that support service delivery equipment. The Commissioning Process provides a uniform, integrated, and consistent approach for the functional certification, operational acceptance, and performance testing and commissioning of all major building component-systems. The Commissioning Process ensures:

1. Independent, third party testing, evaluation, and certification.
2. Compliance with OSHA, National Electric Code, National Fire Protection Act, Hazardous Material, and Uniform Building Code standards.
3. Electrical and mechanical equipment is suitable for use, and if design reliability, redundancy, safety, and continuous operation can be expected.
4. Equipment has been provided and installed according to the applicable engineering specifications and accepted commercial best standards.
5. A benchmarking database is established for future maintenance, analysis, and equipment modification.
6. Continued monitoring of reliability throughout the life of the equipment.

The Commissioning Process is divided into three phases: Phase One—Functional Certification and Acceptance, Phase Two—Operational Certification and Acceptance, and Phase Three—Performance Testing and Commissioning. Additional information is provided in the [CT&E Phase 1 Test Report](#).



B. The NMCI EDS Facilities

Part B., or Section 4, provides a detailed description of the NMCI Major Facilities Construction and Delivery Program including an Overview and explanation of the Pre-Mobilization, Mobilization, and Post-Mobilization process.

4. Major Facilities Construction and Delivery Program

4.1 Overview

The construction of NMCI Facilities is a six to twelve month endeavor that encompasses deliberate planning and coordination, construction activities, facilities delivery, and customer-client final approval and acceptance. The EDS-Major Facilities Construction and Delivery Program includes ten primary steps that are divided into three distinct phases: (1) pre-mobilization, (2) mobilization, and (3) post-mobilization. Some of the steps and activities in the EDS Major Facilities Construction and Delivery Program may be accomplished sequentially, concurrently, or in parallel. Below is an overview of the EDS Major Facilities Construction and Delivery Program to include the steps, phases, and activities.

4.1.1 Ten Steps

These ten steps frame the three phases that constitute the EDS Major Facilities Construction and Delivery Program. These steps and related activities are discussed by phase in the following sections, and depicted in notional [Phase Flow Chart](#). Where possible, the [U.S. Government GFF Provisioning Process](#) has been adopted and expanded upon to ensure ISF-Facilities delivery of quality facilities for the best value.

1. Increment Roll-Out Schedule Notification Receipt
2. Facility Planning
3. Site Identification
4. Site Finalization
5. Facility Turn-Over to EDS Facilities by US Government for Construction
6. Construction Management
7. Construction Substantially Complete
8. Facilities Commissioning
9. EDS Facilities hand-off to Enterprise Operations
10. Facilities Close Out Procedures



4.1.2 Pre-Mobilization

Pre-Mobilization consists of the preliminary planning, coordination, and Quick-Look and Architectural and Engineering (A&E) Site Assessment visits. The purpose of the site visits is to determine if the proposed facilities are suitable or unsuitable for construction. A trip report, Architectural and Engineering assessment, and USG letter of space allocation initiate the construction funding, acceptance or rejection of GFF and GFE, and development of the 30-60% basis of design drawings.

4.1.3 Final Design Process

Once the design package reaches the 60% stage, it will be subject to review and/or approval by various EDS elements, subcontractors, and base officials as a basis for proceeding to final drawings. The design and design review process will be in accordance with the [NMCI Operations Manual](#).

4.1.4 Workforce Mobilization

Mobilization consists of the actual facilities construction activities, project management, and Facilities Commissioning Process and Report. This includes the pre-construction meeting, movement to the site lay-down, demolition, construction, weekly project reviews and reports, change order process, and review of health and safety plans. Ongoing coordination with the Public Works Officer, Security Office, CCIDF/MDF Team, Enterprise Logistics, and Server Farm Implementation Coordinator Team is required. Mobilization also includes the coordination of CCIDF/MDF edge/remote site activities.

4.1.5 Post Mobilization

Post Mobilization consists of activities to include EDS Facilities hand-off to EDS Enterprise Operations for rack stacking and burn-in prior to cut-over, walk-through, delivery of manuals, and formal acceptance of the facilities by the customer-client. Follow-up support is provided through Service Maintenance Contracts covering Building Engineering and Facility Support Services. In addition, the employment of an enterprise-wide facilities equipment monitoring system is being developed.

4.2 Pre-Mobilization

1. Increment Roll-Out Schedule Notification Receipt
2. Facility Planning
3. Site Identification
4. Site Finalization



4.2.1 Increment Roll-Out Schedule Notification Receipt

- The EDS Infrastructure Group promulgates the [Increment Roll-Out Schedule](#).
- Using the schedule, EDS-Facilities Quick-Look and A&E Site Assessment visits are planned to minimize travel costs, garner a space allocation commitment from the USG, and meet operational cutover dates for NOCs, Server Farms, and Edge/Remote Sites.
- Deliberate planning, coordination, and formal acceptance of facilities are necessary to ensure quality facilities at the best value possible.

4.2.2 Development of the Master Schedule

- The EDS Construction Manager coordinates with the respective naval service PMO representative to schedule site visits.
- EDS Facilities Team publishes a proposed [Master Schedule](#) for EDS-Facilities Quick-Look and A&E Site Assessment Visits.
- For US Navy installations, visits are coordinated and finalized with the Southwest Division NAVFAC NMCI Manager Office.
- For US Marine Corps installations, visits are coordinated and finalized with the USMC Facilities Team.
- Direct liaison protocols with the local activity (site) are authorized through the respective naval service PMO.

4.2.3 Pre-A&E Site Visit Activities

Using the [GFF Provisioning Process](#) as a reference, the following outlines some activities leading up to an actual A&E Site Assessment Visit.

4.2.4 Quick Look

Quick Look Visit coordination is the responsibility of the respective Facilities Team naval service PMO designee. Some other specific actions are identified in the [GFF Provisioning Process](#). The Quick Look is a precursor to an EDS Facilities A&E Site Assessment Team Visit. A Quick Look visit involves one or two team members visiting the site and providing the local command assistance in the selection and verification of candidate facilities.

- Candidate facilities for all three categories of facilities (Server Farm/NOC, Administration, and Warehouse) are to be offered and looked at with subject matter experts.
- The installation or site should identify a primary and alternative facility for each applicable category when available.
- Candidate facilities must be in close adherence to the contract and other relative Government guidance and policy.
- In addition, any facilities that are to be turned over to EDS by the US Government at the Assumption of Responsibility need to be seen and evaluated.



- Most of the documents of discovery and activities associated with an A&E Site Assessment are provided and accomplished for a Quick Look Visit.

Following an introduction and building walk-through with local command subject matter experts, the Quick Look team will out brief the local command.

- The Quick Look team will provide a formal written one or two page executive summary type report with attachments to the site Commander with info copy to the USG facilities office.
- The information in the report is general in nature and confirms if the proposed spaces are suitable or unsuitable for a formal A&E Site Assessment Visit and Evaluation.
- The report will also identify any known actions that may be required of the US Government to make the spaces suitable.

If the spaces are deemed suitable, then the local command is required to provide a [Space Allocation Letter](#) within five working days of receiving a Quick Look Report. It is advisable to identify and tentatively schedule a formal A&E Site Assessment visit at the completion of a favorable Quick Look. Regarding unsuitable spaces, another Quick Look will be scheduled and a [Rejection Letter](#) shall be initiated by the Regional Director to the EDS Contracting Office via the Director of Facilities.

4.2.5 EDS Facilities A&E Site Assessment Visit

Following receipt of a formal [Space Allocation Letter](#), a Site Assessment Visit date is confirmed and an EDS Facilities [Letter of Introduction](#) is forwarded to the designated NAVFAC (ROICC) representative and/or local Public Works/Facilities Maintenance Department (with a copy *to* the appropriate naval service PMO agent).

The Letter of Introduction provides an overview of the EDS Facilities Site Assessment process, support requirements, and a request to provide specific facilities survey information for proposed facility categories (NOC/Server Farm, Administration Permanent/Temporary and Warehouse Permanent/Temporary).

Installations and sites are encouraged to pre-select candidate facilities in close adherence to the guidance published on the Southwest Division web site. [Letter of Introduction](#) requests specific information and documents regarding the facilities (documents of record, mechanical, electrical, and fiber/copper) support infrastructure details, and environmental report summaries. The [EDS Facilities A&E Site Survey and Questionnaire](#) and Site Checklists ([Server Farm](#), [Administrative](#) and [Warehouse Space](#)) are provided. These documents and the [NAVFAC Website](#) will assist the installation in their selection. These documents should be completed and returned to the EDS Facilities no later than 10 working days before the scheduled A&E Site Assessment Visit.



4.2.6 EDS Facilities A&E Team Pre-Visit Review

Seven working days before visiting the site, the A&E team conducts a “desk top” review of the specific survey information provided by the installation or site. The purpose is to:

- familiarize the team with the facilities,
- establish staff-to-staff communications, and
- determine if each category of facility is suitable for an on-site A&E Assessment. If the facilities are determined to be unsuitable for technical reasons, the respective Facilities Team will be notified and additional candidate facilities will be requested for assessment.

4.2.7 Quick-Look and Site A&E Assessment Visit Security Requests

Site [Visit Authorization Letters](#) and [Team Security Rosters](#) will be coordinated with the EDS Security Office at least 96 hours before the visit.

- The team will be on the premises for approximately two days.
- The Quick Look and EDS Facilities A&E Team will be required to check into Security Pass and Identification before the orientation in-brief. Bring along copies of the Site [Visit Authorization Letters](#) and [Team Security Rosters](#). Plan on one hour to process through the Security Pass and Identification Office. Bring photo identification and vehicle registration documents or rental car contracts. It is advisable to request use of digital cameras and solicit a base map for team members to use during their visit. Both will be helpful tools for pulling the Trip Report together.

4.2.8 EDS Facilities A&E Site Assessment

The EDS Facilities Program Manager or EDS Construction Manager will designate a Team leader. The EDS Facilities team leader is responsible for coordinating the EDS Facilities deliverables. These include:

- [Visit Authorization Letters](#),
- proposed [visit agenda](#),
- [orientation in brief](#),
- [Executive Summary](#) at the out brief,
- submission and [distribution](#) of the [A&E Site Assessment Trip Report](#), and
- initiating a formal letter of acceptance or [rejection](#).

Each of these deliverables is discussed above and in the following paragraphs.

An orientation meeting is conducted with Facilities, IT, and Environmental representatives, to include facilities subject matter experts. The purpose is to familiarize everyone with:

- the EDS Facilities Program,
- site visit and trip report deliverables,
- construction commercial best practices specifications,
- United States Government (USG) requirements, and
- NMCI Facilities requirements.



An overview [orientation in brief](#) sample is provided for team leaders. It is imperative the Facilities Team leader collect an accurate [attendee roster](#).

Following the orientation, the team and their subject matter expert counter-parts tour and assess the facilities. The team desires access into mechanical, electrical and data fiber/copper closets and spaces. If necessary, a close space certified team member would accompany or be on-call during the visit. The EDS Facilities team members will require approval to take digital photographs. Provide the command an opportunity to review the photographs if there are any security concerns. This requirement should be addressed in the [Visit Authorization Letters](#).

4.2.9 EDS Site Selection Approval/Rejection Process

The formal letter of acceptance or proposed rejection letter will be initiated by the EDS NMC Facilities Program Manager Contracting Officer.

If the spaces are deemed acceptable, a formal letter of acceptance may be included in the [EDS Facilities Trip Report](#). If the spaces are deemed unsuitable then a [proposed letter of rejection](#) is initiated and forwarded to EDS Contracting Office via the EDS Facilities Program Manager along with the Trip Report.

The basis of the rejection letters must be substantiated in the Trip Report and supported by the Preliminary Architectural and Basis of Design Development (architectural, mechanical, electrical, voice/data, and safety, fire, life service) findings contained in the [EDS Facilities Trip Report](#). Do not use the word rejected when characterizing findings in a Trip Report. Unsuitable or a similar phase is best. In addition, the appropriate Site Checklist ([Server Farm](#), [Administrative](#) and/or [Warehouse Space](#)) must support the decision to accept or reject a facility.

4.2.10 EDS Facilities Request for Funding, Site Approval, and Notice to Proceed

The EDS Construction Manager will submit to the EDS Facilities Program Manager a formal request for funding, site approval, and notice to proceed. Upon notice to proceed, the respective Facilities Team will be responsible for:

- Commencement of 30% construction drawings.
- Notify Enterprise Operations of EDS Facilities notice to proceed in order to:
 - Initiate Network/Cabling and Security Design process coordination.
 - Initiate Bill of Material coordination with Logistics and Engineering and Architecture Group.
- Identify and initiate procurement of Facilities Long Lead Items.
- Deliver 30% Architectural (A&E) drawings to local ROICC and EDS Security.



4.2.11 Pre-Construction Conference

The purpose of the pre-construction conference is to identify roles and responsibilities, establish administrative procedures for the Facilities Team while on the project, and to promote an understanding between the government and contractor regarding roles and responsibilities for each party. The following paragraphs provide some roles and responsibilities and a general overview of the pre-construction conference scope, purpose, and content. Some example topics are contained in these [Pre-construction Minutes](#).

Resident Officer in Charge (ROICC).

- Provide limited initial construction start-up assistance similar to what is provided to new construction projects (i.e., pre-construction conference, etc.).
- Conduct visits to the job site, as appropriate; to gain a perspective for the jobsite safety and reasonable assurance that applicable commercial codes are being followed.
- Ensure coordination and interface with other construction contractors in the vicinity of the NMCI construction.
- Provide coordination with the NMCI GFF Managers Office at SOUTHWEST-NAVFACENGCOM.
- Assist in establishing liaison and assistance with other installation or site departments (i.e., Public Works, Security, Environmental, Fire Department, etc.)
- Suspend work when life threatening safety violations or practices is observed.
- For non-Department of the Navy installations, the Navy Facilities Manager will coordinate with the host command or landlord and determine who will provide the ROICC functions.

Public Works Centers (PWC) and Facilities Maintenance Department (FMD). Provide (for US Navy installations when site is covered by PWC area of responsibility or and when funded by regional commanders/IMCS) support including:

- Utility connection and interface design review and coordination, and
- Support on utility outages and connections.
- Coordinate other support as required.
- Develop input for [Site Concurrence Memorandums](#) regarding utilities, equipment maintenance, and coordination requirements with ISFEDS-Facilities and NMCI tenants.

Local Activity/Base Facilities or Public Works Offices. Provide support to include:

- Assistance with the space selection process,
- Provide formal notice to proceed for proposed facilities accepted by the Facilities A&E Site Assessment Team,
- Determine time to fund and complete GFF and GFE deficiencies,
- Identify space for contractor lay down areas and temporary parking,
- Coordinate site approval process including NEPA, HAZMAT, Emergency Response (Environmental, Life-Safety, etc.), and
- Coordinate with other FMD/PWC projects.



- In addition, provide cursory design review (See Review and Acceptance of Contractor's Design paragraph below).
- Since the facilities build-out is the responsibility of the EDS Facilities, most design decisions are up to EDS Site Facilities Manager or his designated representative.
- For US Navy installations without a Public Works Center, perform all functions delineated for the PWC).
- In addition, provide the SOUTHWEST NAVFACENCOM GFF Manager Office or US Marine Corps PMO designee with a list of primary and alternate facility candidates by facility category (NOC/Server Farm, Administration Permanent/Temporary and Warehouse Permanent/Temporary) prior to the EDS Facilities A&E Site Assessment Visit, including:
 - Documents of record (as-builts) of the proposed facility
 - Building asbestos and hazardous materials reports
 - Building AIS report
 - Other items requested (See Pre-Visit Activities paragraph above)

Review and Acceptance of Contractor's Designs. Because of the fast pace of NCMI contractual construction and abbreviated reviews, generally a five (5) working day turnaround will be required for reviews. (This will require some sites to use FEDEX for design reviews). In accordance with the NCMI contract, design reviews will only include:

- Basic Life Safety and Fire Code compliance.
- Compatibility with existing facilities.
- [Uniform Federal Accessibility Standards](#) (UFAS) compliance.
- Confirm drawings are signed by appropriate discipline registered engineers.
- COMSEC and other Security criteria in accordance with the contract.

Acceptance letters should clearly state that a technical review has not been accomplished and that the government takes no responsibility for the technical adequacy of the design.

Contractor Responsibilities, Procedures and Practices.

- Comply with local installation administrative regulations (security, parking, etc.).
- Design and construct in accordance with commercial best practice standards.
- Provide and manage a [Safety and Health Plan Program](#).
- Adhere to OSHA and NEPA regulations.
- Report on the job injuries in accordance with Federal, State, and USG procedures.
- Request site approvals and inspections in accordance with the local authority of jurisdiction procedures.
- Submit for and reimburse the USG for [Electromagnetic Compatibility Study](#) evaluations and visits when required.
- Acquire and pay for emergency generator air permits.
- Request for Equitable Adjustment (REA) when deemed appropriate.
- Provide copies of Commissioning Reports and other pre-determined close out documents (See Post-Mobilization paragraph below).



4.3 Mobilization

6. Facility Turn-Over to ISFEDS-Facilities by US Government for Construction
7. Construction Management
8. Construction Substantially Complete
9. Facilities Commissioning

4.3.1 Construction Lay Down

The Contractor sets up trailers, connects to utilities, and installs security fences around equipment as needed, and in-briefs subcontractors, vendors and suppliers regarding installation administrative procedures.

4.3.2 Construction (Build-Design using, Fast Track)

This commercial construction technique is not commonly used by the USG. It will require close coordination at every level to familiarize the local Public Works staff with Fast Track practices.

4.3.3 Construction and Project Management

An integral part of the Major Facilities Construction and Delivery Program is the ongoing and continuous project management. Several of the critical elements of this management and integration process are:

- [EDS Weekly Progress Reports](#).
- [Weekly Conference Calls and Reports](#).
- [Site Specific Construction Project Schedule](#), Reviews, Liaison, and Coordination.
 - o Public Works Officer, STM/SDM, Server Farm Implementation Coordinator, and General Contractor coordination.
 - o Weekly Contractor and Sub-Contractor project schedule and cost review meetings.
- Health and Safety Plan Compliance, Ongoing Site Checks.
- Bill of Materials (BOM) Schedule Integration.
- Validate and submit Scope of Work Changes or Job Order Changes, only for project related work. All other requirements must be formally justified and funding provided for by the requesting activity prior to commencement of non-construction project work. Any request for estimate will only be through the EDS Site Facility Manager.
- Submit for [Electromagnetic Compatibility Study](#) and visit if required.
- Notify Enterprise Operations of any construction schedule changes that affect delivery and warehousing of materials. This includes:
 - o EDS-Network/Cabling, and EDS-Security designs, materials and equipment.
 - o Engineering and Architecture Group Bill of Material materials and equipment.
- EDS-Security Coordination. Coordinate the scheduling of the [Security Site Survey](#); provide the EDS Security Team with a copy of the 30% Design Drawings, and assist with

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the security certification of the facility. The physical security design, implementation, policies and procedures, and Government inspection are outlined in the [Physical Security Certification Process](#) and additional information is available from the [Security Certification Inspection Points of Contact](#). Some specific details are noted below:

- Classified information not under the personal control or observation of an appropriately cleared person shall be guarded or stored in a locked GSA-approved secure room (open storage area). To store Secret information in an open storage area (secure room) an Electronic Security System (ESS) will be installed with a response time within 30 minutes of alarm annunciation. Navy Site Security Personnel will provide response force, the alarm will annunciate at their facilities.
- GSA approved security file cabinets, map and plan containers, vault doors, and doors to facilities approved for open storage of classified information must be secured with a lock that has been tested and approved against Federal Specification FF-L-2740, Locks, and Combination. Further information is available from the Department of Defense Lock Program Website.

4.3.4 Construction Substantially Complete

When the Construction Contractor Regional Manager determines that the project is substantially complete, he will coordinate and initiate the Commissioning Process. Construction substantially complete means that construction is approximately 85-95% complete and all infrastructure systems are installed. The remaining work is predominately finish work, minor work external to the server farm floor area, and punch list items.

4.3.5 Facilities Commissioning Process

When the project reaches the substantially complete mark, a formal EDS Facilities Commissioning Process begins. The commissioning test is scheduled for two days in the project schedule. Any decision to allow other EO tasks to begin prior to full commissioning will be coordinated by Server Farm Implementation Coordinator and the EDS Construction Manager. The Commissioning Test verifies the functional certification, operational acceptance, and performance testing and commissioning of all major building component-systems. It is performed by an independent third party and ensures standardization and accomplishes in a written report:

1. Compliance with OSHA, National Electric Code, National Fire Protection Act, Hazardous Material, and Uniform Building Code standards.
2. Suitability of electrical and mechanical equipment for use, and if design reliability, redundancy, safety, and continuous operation can be expected.
3. Provision and installation of equipment according to the applicable engineering specifications and accepted commercial best standards.
4. Establishment of a benchmarking database for future maintenance, analysis, and equipment modification.
5. Continued monitoring of reliability throughout the life of the equipment.



4.3.6 Facilities Hand-Off to Enterprise Operations

Close coordination between construction management and Enterprise Operations will be necessary to ensure that the facility construction is substantially complete in sufficient time for EO to conduct rack stacking and burn-in operations prior to cut-over. The EDS Construction Manager maintains operational control over all aspects of facility construction and support throughout this phase. The EDS Facilities Team will assist the Server Farm Implementation Coordinator with facilities support and minor construction as required provided funding is approved. Without a written waiver, it will be necessary for the third party independent testing and commissioning of the NOC/Server Farm to be completed before EO commencing these pre-cutover operations.

4.4 Post Mobilization

10. Facilities Close-Out Procedures

4.4.1 Facilities Close-Out Procedures

The Close-Out of Facilities is contingent upon EDS (Infrastructure Group) formal acceptance of the EDS Facility and Close-Out Documentation addressing the following areas:

1. Construction Close-out
2. Cable Plant and Racks
3. Site Testing and Commissioning
4. Building Systems – General
5. Building Systems – HVAC
6. Building Systems – Fire Systems
7. Building Systems – Electrical
8. Building Systems – Miscellaneous

Additional information is provided in the [NMCI EDS Server Farm Closeout Documentation Standards and Procedures](#). Five paper copies in binders will be distributed. One to EDS-Infrastructure Group; one to EDS-SDM; one to EDS Facilities Maintenance Manager; and one to EDS Facilities Program Manager. The fifth copy is provided to the general contractor at his expense. Three CD-ROM copies are provided to the respective naval service PMO representative for distribution as deemed appropriate. When justified, additional copies may be requested and provided at a cost to the requestor. The general contractor is responsible for changes to documents of record that are deemed inaccurate during a ninety (90) day review period following acceptance of the facility by the EDS designee. The Infrastructure Group will be responsible for verifying all changes, subsequent change control notifications, and distribution of changes to original recipients of Turnover Documents.

4.4.2 As-Built Drawings

EDS will provide two (2) hard copies and one (1) electronic copy of the final as-built drawings for all major facility improvements and buried utilities to the Public Works Officer or Facilities Manager within 60 days of completion of construction work.



Conclusion

The EDS-Facilities Field Handbook is a process guide to assist in the construction and delivery of quality facility infrastructure in a timely, cost effective manner. Continuous Field user input and adherence to the procedures and activities outlined in the Field Handbook will be the key to meeting this objective. Through the professionalism of every EDS Facilities Team member, we will be able to provide the Department of the Navy with a global, secure, end-to-end computing and communications environment – as the Honorable Gordon R. England, Secretary of the Navy states¹, "an immense achievement, and it outfits the Navy and the Marine Corps for their voyage through the 21st century."

¹ [SECNAV 051506Z OCT 01.pdf](#)