MARSHALL POLICY
DIRECTIVE

IS01

MANAGEMENT OF
INFORMATION
TECHNOLOGY AND
SERVICES AT MSFC
# Marshall Policy Directive

## IS01

Management of Information Technology and Services at MSFC  
MPD 2800.1  
Revision: F  
Date: July 7, 2015  
Page 2 of 12

## DOCUMENT HISTORY LOG

<table>
<thead>
<tr>
<th>Status (Baseline/Revision/Change/Revalidation/Canceled)</th>
<th>Document Revision/Change</th>
<th>Effective Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td>3/7/00</td>
<td>Defines policy for how information technology systems and services are managed at Marshall Space Flight Center.</td>
</tr>
<tr>
<td>Revision</td>
<td>A</td>
<td>10/23/2004</td>
<td>Updated pursuant to NASA Headquarters Action 04DA010387 to ensure only requirements are covered in the body of the document with any guidance appended to the MPD; revised MPD to ensure compliance with MPG1410.2, “Marshall Management Directives System,” updated MPD to reflect new UNITeS contract which replaced previous PRiSMS contract; updated MPD to reflect the Office of the CIO, which is no longer a part of the Center Operations Directorate; updated Appendix showing services provided by the Office of the CIO and the Appendix showing the Document Hierarchy.</td>
</tr>
<tr>
<td>Revision</td>
<td>B</td>
<td>1/29/2007</td>
<td>Revised to reflect organizational changes.</td>
</tr>
<tr>
<td>Revision</td>
<td>C</td>
<td>4/28/2008</td>
<td>Revised 2. Applicability statement to address the applicability of this directive to the Michoud Assembly Facility. [On 5/19/08, an administrative correction made to the Document History Log changing the Revision from B to C and adding back the footer to the cover page.]</td>
</tr>
<tr>
<td>Revision</td>
<td>D</td>
<td>2/19/2010</td>
<td>Major rewrite of this document to bring into alignment with Agency IT Management Policy. Updated Authority and Applicable Documents. Clarified policy requirements and responsibilities. Added definitions.</td>
</tr>
<tr>
<td>Revision</td>
<td>E</td>
<td>6/28/2012</td>
<td>Major rewrite. Revised title from “Management of Information Technology Systems and Services at MSFC.” Clarified policy, roles and responsibilities due to changes in Center governance structure model and organizational realignments. Revised document structure per MWI 1410.1 Rev. F.</td>
</tr>
<tr>
<td>Change</td>
<td>1</td>
<td>5/1/2014</td>
<td>On 5/1/14, at the request of the OPRD, administrative changes were made to clean up formatting and structure of Applicable/Reference document and form lists and to correct references to document titles.</td>
</tr>
<tr>
<td>Change</td>
<td>2</td>
<td>5/8/2014</td>
<td>On 5/8/14, at the request of the OPRD, an administrative change was made to move the title before the citation number at P.4. as dictated by NPR 1441.1 and NRRS 1441.1.</td>
</tr>
<tr>
<td>Revision</td>
<td>F</td>
<td>7/7/2015</td>
<td>Updated Authority and Applicable Documents per recent changes to NPR 1441.1 and NRRS 1441.1. Reviewed against NPD 2800.1 and NPR 2800.1; documented increased emphasis on using Agency IT services contracts and strategic management of IT portfolio.</td>
</tr>
<tr>
<td>Revalidation</td>
<td>F</td>
<td>6/17/2020</td>
<td>Review was conducted and directive is current as written. Admin Change made to add “Revalidation” as a category under Status of Document History Log.</td>
</tr>
</tbody>
</table>

DIRECTIVE IS UNCONTROLLED WHEN PRINTED  
Verify current version before use at https://dml.msfc.nasa.gov/directives
1. POLICY

MSFC policy is to ensure that IT and electronic information resources (as defined by the Information Technology Management, 40 U.S.C. §11101 et seq, Clinger-Cohen Act of 1996) are acquired and managed in a manner that implements the policies, procedures, and priorities of the Federal Government, Agency, and Center as required by NPD 2800.1, NPR 2800.1, NPR 7120.5, and NPR 7120.7/NID 7120.99 through:


(1) Comply with applicable Federal and Agency IT policies, procedures, standards, and guidelines related to IT investments throughout the life cycle process.

(2) Promote the use of IT to improve the productivity, efficiency, and effectiveness of Center programs in alignment to Center mission, goals, and objectives.

(3) Select, control, and evaluate IT investments through effective IT governance, capital planning and investment control, portfolio management, and program/project management processes.

(4) Ensure that Electronic and Information Technology (EIT) resources comply with the applicable provisions of Electronic and Information Technology, 29 U.S.C. § 794 (d), Section 508 of the Rehabilitation Act of 1973, as amended and 36 CFR 1194 – Electronic and Information Technology Accessibility Standards.

b. IT Governance.

(1) Integrate IT strategy, investment, implementation, and operations decisions with organizational planning, budget, financial management, human capital management and programmatic decisions, and processes.

(2) Engage key Center stakeholders and decision makers review, discuss, and make recommendations regarding IT strategy, policy, architecture, portfolio management, and performance measurement.

c. IT Financial Management.

(1) Implement Agency-defined planning, programming, budgeting, and execution (PPBE) processes and project management processes to formulate, implement, and operate IT services and initiatives.

(2) Provide full visibility and transparency into the IT planning, programming, budgeting, and execution processes.
d. **IT Innovation Management.**

Implement a disciplined approach to identify candidate information technologies that will enable the Center to invest in the right IT solutions that provide the greatest benefit to NASA’s missions.

e. **IT Portfolio Management.**

Implement and manage an IT portfolio management process (consistent with the Agency IT portfolio management strategy and process) to drive standardization and efficiency, organize and manage IT investments, and document architecture and integration standards.

f. **IT Infrastructure Management.**

Manage the IT infrastructure as an integrated end-to-end service to improve security, efficiency, and collaboration.

g. **IT Workforce Planning.**

Maintain competencies of the IT workforce through training, mentoring, and professional development ensuring IT skills are identified, developed, recruited, retained, and made available to support Center activities.

h. **IT Service Management and Delivery.**

Engage MSFC Directorates/Offices and utilize Center and Agency IT contracts (managed by the Office of Chief Information Officer (CIO)) to provide IT services to the maximum extent possible.

i. **IT Security.**

Implement and enforce appropriate confidentiality, integrity, and availability of information (residing on or processed by NASA’s automated information systems) through risk-based policies, procedures, standards, guidelines, control techniques, and training mechanisms.

2. **APPLICABILITY**

a. This MPD applies to Center personnel, programs, projects, and activities, including contractors and resident agencies to the extent specified in their respective contracts or agreements. (“Contractors,” for purposes of this paragraph, include contractors, grantees, Cooperative Agreement recipients, Space Act Agreement partners, or other agreement partners.)

b. This MPD applies to the Michoud Assembly Facility.

c. This MPD applies the following: all mandatory actions (i.e., requirements) are denoted by statements containing the term “shall.” The terms: “may” or “can” denote discretionary privilege
or permission; “should” denotes a good practice and is recommended, but not required; “will”
denotes expected outcome; and “are/is” denotes descriptive material.

d. This MPD applies the following: all document citations are assumed to be the latest version
unless otherwise noted.

e. This MPD applies to all IT and information resources, including highly specialized IT.

3. AUTHORITY

a. NPD 2800.1, Managing Information Technology

b. NPR 2800.1, Managing Information Technology

4. APPLICABLE DOCUMENTS AND FORMS

a. Electronic and Information Technology, 29 U.S.C. § 794 (d), Section 508 of the Rehabilitation
Act of 1973, as amended

b. Electronic and Information Technology Accessibility Standards, 36 CFR 1194

c. NRRS 1441.1, NASA Records Retention Schedules

5. RESPONSIBILITIES

a. IT Governance Board, Committee, and Working Group Responsibilities.

(1) The MSFC IT Strategy and Investment Board (ITSIB) responsibilities are listed in Charter
MC-30.

(2) The MSFC IT Project Management Board (ITPMB) responsibilities are listed in Charter
ITSIB-CHRTR-01.

(3) The Marshall Enterprise Architecture Advisory Committee (MEAAC) responsibilities are
listed in Charter ITSIB-CHRTR-02.

(4) The Marshall Applications Working Group (AWG) responsibilities are identified in Charter
ITSIB-CHTR-03.

b. IT Portfolio Management Responsibility.

(1) The Engineering Management Council (EMC) shall have portfolio management responsibility
for the science and engineering applications component of the IT portfolio.
(2) The Business Management Committee (BMC) shall have portfolio management responsibility for the business management applications component of the IT portfolio.

(3) The Office of the CIO shall have portfolio management for IT Infrastructure Applications and IT Infrastructure Services (End-User, Communications, and Data Center) components of the IT portfolio.

(4) The Office of the CIO shall ensure alignment of all IT applications within the Center Enterprise Architecture and for all aspects of the IT Infrastructure in which those applications reside. This includes visibility of and insight into highly specialized applications and infrastructure.

c. Assignment of Representatives to the Marshall Enterprise Architecture Advisory Committee.

The Engineering Management Council, Business Management Committee, and Office of the Chief Information Officer shall appoint representatives to the MEAAC to represent their assigned areas of portfolio management responsibility.

6. DELEGATION OF AUTHORITY

None.

7. MEASUREMENT/VERIFICATION

IT program and investment performance measurement is in accordance with the NASA CIO, and/or MSFC ITSIB.

8. CANCELLATION


Original signed by

Patrick E. Scheuermann
Director
ATTACHMENT A

Definitions

Highly Specialized Information Technology.

Highly Specialized IT is a part of, internal to, or embedded in a mission platform. The platform's function (e.g., avionics, guidance, navigation, flight controls, simulation, or radar) is enabled by IT but not driven by IT itself (e.g., computer hardware and software to automate internal functions of a spacecraft or spacecraft support system such as spacecraft control and status, sensor signal and data processing, and operational tasking). Highly Specialized IT acquisitions may include full development (where the IT is a primary issue) to modification of existing systems (information architecture is firm and demonstrated in an operational environment) where IT is not an issue. Real time is often critical — and few opportunities exist to use Commercial Off-The-Shelf (COTS) or Government Off-The-Shelf (GOTS) beyond microprocessors and operating systems because these systems are largely unprecedented or largely unique applications. Certain IT are considered Mission Critical because the loss of which would cause the stoppage of mission operations supporting real-time on—orbit mission operations is identified as “Highly Specialized” by the Directorate Associate Administrator. Highly Specialized IT is largely custom, as opposed to COTS or commodity IT systems or applications, and includes coding/applications that are integral parts of the research or science requirements; e.g., Avionics Upgrade. Common engineering IT tools such as Product Life-Cycle Management (PLM) systems, Computer-Aided Design (CAD) systems, and collaborative engineering systems and environments are not Highly Specialized IT.

Information Technology.

Information Technology, as defined by the Clinger-Cohen Act of 1996, means any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency. Section 508 of the Rehabilitation Act defines electronic and information technology (EIT) to include “information technology and any equipment or interconnected system or subsystem of equipment, that is used in the creation, conversion, or duplication of data or information. The term electronic and information technology includes, but is not limited to, telecommunications products (such as telephones), information kiosks and transaction machines, World Wide Web sites, multimedia, and office equipment such as copiers and fax machines. The term does not include any equipment that contains embedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not considered information technology.”
ATTACHMENT B

Acronyms

AWG       Applications Working Group
BMC       Business Management Committee
CAD       Computer Aided Design
CFR       Code of Federal Regulations
CIO       Chief Information Officer
COTS      Commercial Off-the-Shelf
EIT       Electronic and Information Technology
EMC       Engineering Management Council
FAR       Federal Acquisition Regulation
GOTS      Government Off-the-Shelf
HQ        Headquarters
HVAC      Heating, Ventilating, and Air Conditioning
IMSC      Integrated Management System Council
IT        Information Technology
ITPMB     IT Project Management Board
ITSIB     IT Strategy and Investment Board
MEAAC     Marshall Enterprise Architecture Advisory Committee
MC        Marshall Center Charter
MPD       Marshall Policy Directive
MSFC      Marshall Space Flight Center
NASA      National Aeronautics and Space Administration
NID       NASA Interim Directive
NRRS      NASA Records Retention Schedules
NPD       NASA Policy Directive
NPR       NASA Procedural Requirements
OMB       Office of Management and Budget
ORD       Office of Primary Responsibility
OPRD      Office of Primary Responsibility Designee
PLM       Product Life-Cycle Management
PPBE      Planning, Programming, Budgeting, and Execution
ATTACHMENT C

Verification Matrix (Reserved)
ATTACHMENT D

Records

D.1 Information regarding identification, maintenance and retention of records related to specific IT processes, products, and services are documented in the directives and/or organizational issuances related to those processes, products, and services.

D.2 Records documenting MSFC compliance to Federal law (including, but not limited to, reports to NASA HQ and OMB) are maintained by the Office of the CIO per NRRS 1441.1 2/26/D; cut off annually; destroy/delete when 5 years old.
ATTACHMENT E

References


Management of Federal Information Resources, OMB CIRCULAR NO. A-130, Revised, (Transmittal Memorandum No. 4), Appendix III.

Federal Acquisition Regulation (FAR) 2.101

NPR 7120.5, NASA Space Flight Program and Project Management Requirements

NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements

NID 7120.99, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements

MC-21, MSFC Integrated Management System Council (IMSC) Charter

MC-30, MSFC Information Technology Strategy and Investment Board (ITSIB) Charter

ITSIB-CHTR-01, MSFC IT Project Management Board (ITPMB) Charter

ITSIB-CHTR-02, MSFC Enterprise Architecture Advisory Committee (MEAAC) Charter

ITSIB-CHTR-03, MSFC Applications Working Group (AWG) Charter
DIRECTIVE IS UNCONTROLLED WHEN PRINTED
Verify current version before use at https://dml.msfc.nasa.gov/directives