



**NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION**

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**FINANCIAL MANAGEMENT REQUIREMENTS**

**VOLUME 2**

**FINANCIAL INFORMATION SYSTEMS**

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**FINANCIAL INFORMATION SYSTEMS**

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**CHAPTER 1**

**GENERAL OVERVIEW**

0101 **PURPOSE**

010101. This volume establishes policy for the development, operation, evaluation, and reporting of all agency financial systems. The National Aeronautics and Space Administration (NASA) programmatic and institutional communities rely on financial systems for support with budgeting, financial accounting, cash and cost management, and financial reporting activities. This volume consists of the following chapters.

CHAPTER 1 GENERAL OVERVIEW

CHAPTER 2 INTEGRATED FINANCIAL MANAGEMENT SYSTEMS

CHAPTER 3 FINANCIAL INFORMATION

CHAPTER 4 SYSTEM DEVELOPMENT AND CHANGE MANAGEMENT

0102 **FINANCIAL MANAGEMENT SYSTEM GOALS**

The primary goal for NASA financial systems are to support the OCFO goals specified in the Financial Leadership Plan by providing for:

010201. Complete, reliable, consistent, and timely information that is prepared uniformly and responsive to the financial information needs of NASA management.

010202. Development and reporting of financial information.

010203. Integration of accounting and budgeting data.

010204. Systematic measurement of performance.

0103 **INTEGRATED FINANCIAL MANAGEMENT SYSTEM**

010301. NASA financial systems should integrate different systems into a common information technology architecture. This means that financial systems will:

A. Share common data through NASA Structure Management (NSM).

B. Perform financial functions and automatically exchange data with other systems.

C. Promote control of resources, information quality, and performance review through uniformity of features and internal system controls providing validation of data throughout the system components.

010302. The objectives for NASA financial systems are to support the objectives of the OCFO Financial Leadership Plan by providing for:

- A. Effective financial management tools to support NASA’s mission.
- B. Accurate transaction processing and reporting.
- C. System controls to prevent overspending.
- D. Increased financial integrity, risk mitigation, and cost control.
- E. Operations reports against financial standards.

010303. In support of the goals described herein, and NASA’s FY 2002 initiative to establish a single, integrated suite of financial, project, contract, and human capital tools to support Agency programs, and financial reporting consistent with OMB guidance, all new financial management system implementations, and changes to existing financial systems must be coordinated through the NASA Integrated Enterprise Management Program (IEMP) as described in sub-section 010304.

010304. The Integrated Enterprise Management Program (IEMP) was established to manage the Agency-wide transformation of NASA’s business systems and processes from standalone/stovepipe operations to a single Agency-wide integrated solution comprising multiple components that all share a common data infrastructure, thereby providing seamless integration, improved Agency-wide fiscal management capabilities, and more readily available data and information.

0104 AUTHORITY AND REFERENCES

010401. Public Law 101-576, Chief Financial Officers (CFO) Act of 1990 (31 U.S.C. 902). Mandates agency CFO responsibilities for financial management systems.

<http://www.gao.gov/new.items/d06242t.pdf>.

010402. Public Law 97-255, Federal Managers’ Financial Integrity Act (FMFIA) of 1982 (31 U.S.C. 3512). Amends the Accounting and Auditing Act of 1950

requiring ongoing evaluations and reports of the adequacy of the systems of internal accounting and administrative controls for Federal agencies to safeguard against waste, misuse of Agency funds and property.

<http://www.whitehouse.gov/omb/financial/fmfia1982.html>

010403. Public Law 104-208, Federal Financial Management Improvement Act of 1996 (31 U.S.C. 3512). Section 803 of the Act requires that agencies substantially comply with Federal financial systems requirements, applicable Federal accounting standards, and the United States Government Standard General Ledger at the transaction level.

[http://www.whitehouse.gov/omb/financial/ffs\\_ffmia.html](http://www.whitehouse.gov/omb/financial/ffs_ffmia.html)

010404. The Budget and Accounting Procedures Act of 1950 (31 U.S.C. 1112, 1531, 3511-3512, 3524). Requires all agencies to report and maintain standard accounting systems on fiscal, budget, and program information. The Act also provided the groundwork for establishing the Joint Financial Management Improvement Program (JFMIP). JFMIP, now known as the Financial Systems Integration Office (FSIO), publishes requirements for financial systems.

<http://64.233.187.104/search?q=cache:sL99lhY73VkJ:www.osec.doc.gov/ofm/acctg/chptr3.pdf+Budget+and+Accounting+Procedures+Act+of+1950&hl=en&gl=us&ct=clnk&cd=1>

010405. Office of Federal Financial Management Core Financial System Requirements (OFFM-NO-0106) January 2006. Part of the Federal Financial Management Systems Requirements document series. This document addresses the joint goals of the Chief Financial Officers Council, and the Office of Management and Budget to improve the efficiency and quality of financial management in the Federal Government.

[http://www.fsio.gov/fsio/download/systemrequirements/012306\\_Core\\_Requirements.pdf](http://www.fsio.gov/fsio/download/systemrequirements/012306_Core_Requirements.pdf)

010406. Office of Management and Budget (OMB) Circular A-11, Preparation, Submission and Execution of the Budget. Prescribes the reporting requirements for the management of information resource systems.

<http://www.whitehouse.gov/omb/circulars/index.html>

010407. OMB Circular A-123, Management's Responsibility for Internal Control. In conjunction with OMB Circulars A-127 and A-130, Circular A-123 prescribes management responsibility for internal controls including those for information systems.

<http://www.whitehouse.gov/omb/circulars/index.html>

010408. OMB Circular A-127, Financial Management Systems. Prescribes policies and standards for executive departments and agencies to follow in developing, operating, evaluating, and reporting on financial systems.

<http://www.whitehouse.gov/omb/circulars/index.html>

010409. OMB Circular A-130, Management of Federal Information Resources. Prescribes policies for the management of information resources systems.  
<http://www.whitehouse.gov/omb/circulars/index.html>

010410. NASA Financial Management Requirements (FMR), Volume 9 Internal Management Controls. Contains high level NASA requirements for financial systems internal controls.  
[http://www.nasa.gov/offices/ocfo/references/ocfo\\_fmr\\_detail.html](http://www.nasa.gov/offices/ocfo/references/ocfo_fmr_detail.html)

010411. NASA Policy Directive (NPD) 2830.1, NASA Enterprise Architecture. Establishes the policy and responsibilities for NASA's Enterprise Architecture (EA).  
<http://nodis3.gsfc.nasa.gov/>

#### 0105 DEFINITIONS

010501. Business Function. A business function is the purpose which the business or a component of an organization is created to perform.

010502. Business Process. A business process is a collection of activities that takes one or more types of input and creates an output that is of value to the customer.

010503. Business Process Owner. The business process owner is responsible for conducting the business that a financial management system supports. A key business process owner understands, in detail, activities, stakeholder requirements, performance needs, work requirements, and other business processes related to a business function for which they are responsible. A business process owner is a decision maker for the use and management of a system, which supports a business function for which they are responsible.

010504. Business Warehouse. The Business Warehouse is a web-based reporting tool that enables Agency-wide data analysis from the Agency core financial system and other business applications.

010505. Core Financial System. The Core Financial System consists of the processes necessary to maintain the financial system in a manner that is consistent with established financial management laws, regulations, and policy. This function sets the framework for all other core financial system functions. The core financial systems shall comprise the integral component of NASA systems architecture for the business processes of the CFO. Development of the core financial system shall be along the lines of functions as specified below:

A. General Ledger Management is the central function of the core financial system. The general ledger is the highest level of summarization and must maintain account balances by the accounting classification elements established in the core financial system management function. It systematizes the accounting business function for the CFO.

B. Funds Management is the function to ensure that NASA does not obligate or disburse funds in excess of those apportioned or allotted. It systematizes the budget execution business function for the CFO.

C. Payment Management is the function that provides appropriate control over all payments made by or on behalf of the Agency for the Payment Business process.

D. Receivable Management is the function that supports activities for recognizing and recording debts due to the government, performing follow-up actions to collect on these debts, and recording Agency cash receipts.

E. Cost Management is the function that measures the total cost and revenue of NASA programs and their various elements, activities, and outputs.

F. Reporting provides financial information for many uses. NASA uses financial reports to help manage programs, prepare and monitor budgets, provide a basis for decision making, and meet requirements for internal and external reporting requirements.

G. NASA financial systems architecture must comply with the FFMSR. Refer to Appendix A for these requirements. Financial business needs are the prime consideration for including modules in NASA's financial system architecture. Modules are not limited to those in Appendix A.

010506. Feeder System. A feeder system is an independent information system that transmits data to another system via an interface.

010507. Financial Management System. Financial Systems and the financial portions of mixed systems necessary to support financial management, including manual or automated processes, procedures, controls, hardware, software and support personnel. Financial systems include an information system, consisting of one or more applications, that is used for (A) collecting, processing, maintaining, transmitting or reporting data about financial events; (B) supporting financial or budgeting activities; (C) accumulating and reporting cost information, or (D) supporting the preparation of financial statements.

010508. Financial System. A system that supports the financial functions required to track financial events, provide financial information significant to the financial management of the Agency, or is utilized for the preparation of financial statements.

010509. Information System. As defined by OMB A-127, the organized collection, processing, transmission, and dissemination of information in accordance with defined procedures, whether automated or manual. Information systems include non-financial, financial, and mixed systems.

010510. Integrated System. A system in which separate programs perform separate functions with communication and data-passing between functional programs performing standardized I/O routines and a common data-base. Such systems allow flexibility in addition/revision/deletion of various processing functions without disrupting the entire system.

010511. Mixed System. A system that contain both non-financial and financial data.

0106 ROLES AND RESONSIBILITIES

010601. Chief Financial Officer (CFO). OMB and Congress chartered the CFO with broad responsibilities for financial systems, making the CFO the key decision maker for managing and implementing changes to these systems. The NASA CFO is responsible to:

A. Ensure the planning, design, implementation, operation, evaluation, and reporting of financial systems are performed in accordance with FMFIA requirements, the Chief Financial Officers Act of 1990, OMB Circular A-127, and other associated OMB directives and legislative pronouncements.

B. Define requirements for, and maintain an integrated financial management system that complies with the requirements of 31 U.S.C. 902 (a) (3).

C. Serve as the senior Agency official responsible for coordinating the overall NASA effort for assessing, improving, and reporting of financial systems in accordance with OMB Circular A-127, Section 4 of the FMFIA (31 U.S.C. 3512(d)), and other associated OMB directives.

D. Review and approve the design requirements for the development and enhancement of NASA financial systems; monitor and evaluate the implementation of these systems; and determine the degree of conformance with the principles, standards, and related requirements prescribed by the Comptroller General of the United States, and OMB Circular A-34, Financial Accounting Principles and Standards.

E. Function as the business process owner and decision maker for NASA financial systems.

F. Work collaboratively with the Chief Information Officer and the Integrated Enterprise Management Program Director to manage NASA financial system implementation, changes and use.

010602. Chief Information Officer (CIO). The CIO's focus is primarily with the technical aspects of NASA financial systems. OMB and Congress chartered the CIO to provide the leadership, vision, communication, coordination, and innovation necessary to maximize government effectiveness in using information technology. The NASA CIO is the key decision maker for technical judgments concerning financial systems and is responsible to:

A. Ensure the Agency's information resource management strategy for financial information systems is in alignment with the Agency CFO's mission, vision, and strategic goals.

- B. Provide sound standards and policies, such as, enterprise architecture and security for financial systems.
- C. Ensure strategies align with management practices for developing and operating financial systems.
- D. Maintain information security for financial systems.
- E. Construct and enforce sound enterprise architecture standards for financial systems.
- F. Employ effective financial information system management practices.
- G. Ensure effective Agency financial information system investment management practices.
- H. Work collaboratively with the CFO, and IEMP to manage NASA financial system implementation, changes and use.
- I. Maintain and publish an Agency-wide system inventory and a description of each system including its purpose and points of contact.

010603 . Integrated Enterprise Management Program Director.

- A. Design, implement, and operate financial systems in compliance with the Agency's financial management policies, as defined in the NASA FMR.
- B. Ensure Agency requirements for financial system designs have been approved through the CFO governance process before proceeding with the development and modification of a financial system (See Chapter 4, 0401 Governance).
- C. Ensure timely corrective action is taken regarding instances of nonconformance to IEMP policy.
- D. The recommended assignments and functions are found in the Service Level Agreement between IEMP Competency Center and the OCFO, see attachment Appendix C.

010604. IEMP Competency Center (IEMPCC). The IEMPCC is responsible for managing operations that support business systems and processes to improve NASA's fiscal and management accountability. The IEMPCC supports the technology and business process needs of the Agency through the integration of information technology and business process support professionals.

010605. Office of Policy and Business Integration Director. The OPBI Director is responsible to:

- A. Develop and issue NASA financial management system policy to provide guidance to headquarters and center personnel.
- B. Recommend assignments and functions for OCFO and IEMPCC, which are defined in a Service Level Agreement between the two entities (see Appendix C).

010606. Agency Business Process Lead. The Agency Business Process Lead is responsible to:

- A. Develop Agency standards for Financial Business Processes by coordinating the development of associated policies and procedures.
- B. Act as an application functional support expert for business process improvements and serve as a primary interface to the IEMPCC Functional Support Lead and the IEMPCC, see attachment Appendix C
- C. Assist management officials to ensure all defined roles are staffed.
- D. Represent the OCFO and Center Business Process Leads(s) concerning input to changes to Agency business processes.
- E. Evaluate and submit Agency-initiated Change Requests.
- F. Coordinate maintenance of Agency-level master data.
- G. Engage multiple user constituencies (e.g., finance, budget, funds distribution, procurement, and Project Offices) to ensure issues with a business process are identified and resolved.
- H. Coordinate testing and acceptance of specified system changes.
- I. Coordinate complex business process changes. Refer change management considerations as indicated in the next chapter of this volume, FMR Volume 2, chapter 4.

010607. Agency Reporting Lead. The Agency Reporting Lead is responsible to:

- A. Develop agency standards for financial reporting by coordinating the development of associated policies and procedures.

B. Work with the Center Reporting Leads, Business Warehouse Reporting Leads, and IEMPCC as the focal point for Agency-level reporting.

C. Work to develop specific report requirements to meet agency internal and external reporting requirements. Translate requirements and ensure timely delivery of reports.

010608. Center Chief Financial Officer. The Center Chief Financial Officer is responsible to:

A. Ensure Center user controls over financial systems are implemented.

B. Monitor organizations outside of the Agency that process transactions on behalf of the Center to ensure accuracy and completeness of financial data.

C. Make assignments for center operation support for financial systems. The recommended assignments and functions are found in the Service Level Agreement between IEMP Competency Center and the OCFO, see attachment Appendix C.

010609. NASA Shared Services Center (NSSC) Director

The NSSC Director has the same responsibilities as the Center CFO as defined in the previous section (010608).

## CHAPTER 2

### INTEGRATED FINANCIAL MANAGEMENT SYSTEMS

#### 0201 GENERAL

020101. Financial systems management requires a joint effort of the NASA Chief Financial Officer (CFO), Chief Information Officer (CIO), and the Integrated Enterprise Management Program (IEMP). The CIO's focus is on managing the technology aspects of financial systems to meet the needs of end users. The CFO is focused on assuring financial systems perform as a useful tool to conduct financial business processes, report financial information, and maintain data integrity. The Chief Financial Officer Act (see Authority and References) extends Agency CFO's responsibility to all financial management aspects for operating Agency programs. For this reason, the NASA CFO is the key decision maker in "Agency-wide and Agency component accounting, financial and asset management systems." This chapter defines the roles and responsibilities of key individuals within NASA, who are responsible for implementing the concepts outlined in the Federal Financial Management System Requirements (FFMSR). The FFMSR describes the basic elements of a model for integrated financial systems in the Federal government, how these elements should relate to each other, and specific considerations in developing and implementing integrated financial systems. The FFMSR was developed by the General Services Administration (GSA) Financial Systems Integration Office (FSIO).

#### 0202 FINANCIAL MANAGEMENT SYSTEMS CONCEPTS

020201. Linking Program Delivery with Financial Management. Congress authorizes programs and funding for agencies to carry out specific purposes. Program delivery results in financial events such as acquisitions, grants, loans, payment of benefits, and payroll, which become the basis for financial transactions that must be captured and recorded through standard business processes. Government program financial events must be in accordance with their intended purposes and align with recording standards. Financial transaction processing provides accounting and control and is the basis for collecting and organizing financial data. The data collected from financial events is the basis for ensuring accountability and provides information in financial report format for decision makers. Evaluation of data processing reports checks recorded results against program purposes.

020202. Automated systems - NASA's main financial business processing tools. These systems supply the business links between NASA and other government and commercial organizations through electronic data exchange, reporting, collections and disbursements. Automated systems control activity and use data to form understandable information and reports. Use of common financial data from disparate programs,

processes, and systems occurs for different purposes by different systems through system processing. Financial systems must ensure data in systems and system processing accurately maintains the financial transactions of NASA. The NASA financial business system of record is the SAP Core Financial System.

### 0203 FEDERAL FINANCIAL MANAGEMENT SYSTEM REQUIREMENTS

020301. Quality performance of financial business processes, financial information integrity, and data integrity are the ultimate goals of NASA financial systems. This section provides the policies for ensuring NASA systems perform at an effective and efficient level.

020302. Framework for Financial Information Systems Integrity. To achieve the Agency's goals for financial systems (see section 010302), NASA shall adhere to the guidance as set forth in the FFMSR (see section 010405) through its OCFO Governance Process, and IEMP.

020303. Basic Financial System Requirements. NASA management must establish and maintain financial systems that are compatible with all NASA systems and government-wide financial systems. This requires NASA's systems to incorporate standard financial and standard data exchange formats. This section contains requirements for internal and external systems to help ensure adequate program delivery. NASA systems shall:

- A. Collect accurate, timely, complete, reliable, and consistent information.
- B. Provide for adequate Agency management reporting.
- C. Support government-wide and Agency level policy decisions.
- D. Support the preparation and execution of Agency budgets.
- E. Facilitate the preparation of financial statements, and other financial reports in accordance with Federal accounting and reporting standards.
- F. Provide information to central agencies for budgeting, analysis, and government-wide reporting, including consolidated financial statements.
- G. Provide a complete audit trail to facilitate audits.
- H. Use integrated standard data classifications (definitions and formats) established for recording financial events.

- I. Provide common processes used for processing similar kinds of transactions.
- J. Abide by internal controls over data entry, transaction processing, and reporting.
- K. Be designed to eliminate unnecessary duplication of transaction entry.
- L. Provide for ad hoc inquiries.
- M. Provide on-line instructions which are consistent with NASA policies and Federal regulations and authorities.
- N. Provide for business warehousing of data and transactions.
- O. Integrate common data from multiple services across the enterprise.
- P. Maintain functions needed for NASA business purposes.
- Q. Satisfy requirements of GAO check list GAO-05-225G – Core Financial System Requirements Checklist. [www.gao.gov/new.items/d05225g.pdf](http://www.gao.gov/new.items/d05225g.pdf)

This check list reflects FFMSR requirements for Core Financial Systems compliance review of Agency core systems and is designed to determine if the systems substantially comply with FFMSR.

020304. Performance Goals of Financial Management Systems. NASA financial systems shall comply with the FFMSR identified performance goals applicable for all financial management systems as listed below:

- A. Demonstrate compliance with accounting standards and requirements.
- B. Provide timely, reliable, and complete financial management information for decision making at all levels of government.
- C. Meet future information and reporting requirements with transaction processing data linked to transaction engines.
- D. Accept and provide standard financial information electronically from and to other internal, government-wide, or private-sector processing environments.
- E. Provide for “one-time” data entry and reuse of transaction data to support downstream integration, interfacing, or business and reporting requirements.

F. Build security, internal controls, and accountability into processes and provide an audit trail.

G. Be modular in design and built with reusability as an objective.

H. Meet the needs for greater transparency and the ability to share information in a timely manner.

I. Meet internal and external operational, reporting, and information requirements for NASA.

J. Incorporate internal controls in accordance with NASA Financial Management Requirements (FMR), Volume 9 Internal Management Controls. [http://www.nasa.gov/offices/ocfo/references/ocfo\\_fmr\\_detail.html](http://www.nasa.gov/offices/ocfo/references/ocfo_fmr_detail.html)

0204 FINANCIAL MANAGEMENT BUSINESS PROCESSES

020401. NASA's policy is to maintain one centralized integrated financial management system that aligns with Agency financial business processes for which the CFO is the key business process owner. NASA's financial business processes are defined by the OCFO in accordance with the FFMSR, and are approved through the CFO Governance Process (See FMR 020302 below). If gaps are identified in the functionality provided by the central financial system, the OCFO may choose to establish additional systems to address these specific process needs. To reduce the risk that these subsystems may lead to inconsistent views of financial information, they must be designed so as not to house redundant financial data or call into question the authoritative source of any financial data. This section identifies the criteria for determining financial systems for which the NASA CFO is the business process owner.

020402. CFO as Business Process Owner. The CFO is the key business process owner for any system, subsystem, feeder system, or system routine that supports a NASA financial business process. Such systems include any that:

A. Support the direct business processes of the CFO.

B. Perform ancillary calculations, functions, tracking or other activities primarily for or related to the business processes of the CFO.

C. Perform functions to process data from other systems into financial systems performing the business processes of the CFO. This includes:

1. Interfaces that extract data from an existing system.

2. Processing within mixed system interfaces that pertain to the CFO business process.

D. Provide information or data for the use of systems performing CFO business processes, such as, an edit table look up. The CFO is the key business owner and decision maker for mixed system processing that pertains to a CFO business process.

E. Process data from financial systems to use in other systems, reports, or to support other CFO business functions/business processes, including processes A through D above. NASA is committed to maintaining and using standard financial data that is reconcilable to the official system of record. Ensuring the integrity of data critical to management decision making—such as detailed and summary level financial management data—requires an Agency commitment to maintain one centralized data source. Replication of centrally managed data to other systems will be strictly limited to curtail manipulation of the data and the propagation of multiple, conflicting versions of the information. All requests for extracting financial data from the Core Financial System or the Business Warehouse for the purpose of loading the data into another system must be approved by the OCFO.

The CFO is the key business owner and decision maker for any extraction interface used to obtain data from CFO business process systems, including:

1. Interfaces that extract data.
2. Processing routines within mixed systems or interfaces that extract data.

020403. CFO Financial Management Business Processes. Whether the system performs a CFO business process determines if the CFO is the key decision maker for a system. The list below is the FFMSR identified financial business processes the NASA CFO is responsible for:

A. Budget and Finance. The President and Congress require CFOs to manage the Federal budget process. The FFMSR uses the term “budget” to refer to planning and budget formulation, and “finance” to refer to budget execution. The NASA CFO responsibilities include managing activities that involve formulating and executing the Agency budget as prescribed by legislation and Presidential policies.

B. Accounting. Accounting requires complex data classification and systems processing to keep the books, prepare financial statements and reports, and perform business functions. Accounting is fundamental to public fund stewardship and forms the basis for program performance measurement and information reporting. Accounting requires a complex system process involving many systems.

C. Collections and Receivables. Managing collections is a CFO accounting and control function to ensure standard transaction processing for collecting funds into the Treasury and NASA accounts in accordance with laws and applicable

accounting standards. It encompasses the stewardship, governance, and infrastructure to support the constitutionally mandated function for collecting money to finance government into the Treasury through taxes, fines, fees, forfeitures, and donations. Funds are also collected through the sale of property, user fees, leases, royalties, etc., that result from government operations.

D. Payments. Payments are the disbursement of NASA funds through a variety of means to many different individuals and organizations to pay for goods and services or to distribute entitlements, benefits, grants, subsidies, loans, or claims. The NASA CFO is responsible to ensure control over NASA funds through standard transaction processing required by Treasury for disbursing funds.

E. Assets and liabilities. The CFO, in coordination with the Institutions and Management Mission Support Office, is responsible to ensure proper accounting and stewardship for assets and liabilities through accurate reporting.

F. Reporting and Information. The CFO is responsible for the integrity of financial reporting and information. Business processes, information flows, and data architecture must be brought together to meet information processing goals. This requires a collaborative effort between the OCFO, financial managers, program managers, and OCIO.

## 0205 INTEGRATED FINANCIAL MANAGEMENT SYSTEM ARCHITECTURE

020501. NASA's policy is to develop and maintain a form of enterprise architecture for financial systems using the modular approach composed of an integral central core financial system and integration of subsystems, feeder systems, and related system processing necessary to satisfy FFMSR and FSIO requirements. This section identifies the form NASA financial systems must take.

020502. Single Integration of Financial Management systems. NASA systems shall uphold the requirements for integration cited in the FFMSR, including:

A. Abiding by a financial systems architecture design with modules that work together and with government-wide systems so transactions are recorded consistently when and where needed. The following are effective design characteristics:

1. Common Data Elements. NASA systems require use of standard data classification which requires:

a. Developing standard definitions and formats for data recordation.

b. Capturing, sharing and storing common data elements recorded through financial system processing events among systems for meeting reporting requirements and use in subsequent processing.

c. Abiding by government-wide information standards including the US Government Standard General Ledger and Treasury reporting requirements.

2. Common Transaction Processing. NASA systems shall use common processing techniques among systems for similar transactions. Such consistency streamlines subsequent processing efforts.

3. Consistent Internal Controls. NASA systems shall use internal controls for data entry, transaction processing, and reporting to ensure the integrity of data, information, and the protection of NASA resources.

4. Efficient Transaction Entry. The design of financial management systems shall accommodate single entry points across systems to eliminate duplicate data entry.

5. Integration. Integration refers to a system design which permits multiple points for users and other systems to access information. However, it does not mean that all information is physically located in the same database. Interfaces provide integration by allowing one system to share data with another system. NASA shall incorporate provisions to integrate systems during data processing as long as it does not disrupt normal business processes and is cost effective. Any decision concerning the integration of data into or out of the NASA financial systems will follow the governance process established by the OCFO and the IEMP Program Office. This governance process ensures the use of:

- A common integration framework
- Standard integration patterns to protect data integrity
- Established decision trees to ascertain the most efficient and reliable means of integration.

6. The NASA CIO is the key decision maker for the technical aspects for financial systems within the framework of government-wide and NASA CFO requirements, which includes decisions about system configuration, processing data through one centralized system or many systems, processing routines, and data organization.

7. The FFMSR integration criterion applies to all NASA systems, which includes in-house financial systems, outsourced financial business functions that are processed through a service provider system, and for the acceptance of new or changes to existing systems in the NASA architecture.

**CHAPTER 3**

**FINANCIAL INFORMATION**

0301 POLICY

030101. NASA's policy is to abide by the FFMSR's guidance for the five financial system management functions of:

- A. Accounting Classification Management.
- B. Document and Transaction Control.
- C. Document Referencing and Modification.
- D. System-Generated Transactions.
- E. Audit Trails.

030102. Formulation of the Financial Classification Structure is of great concern to the NASA CFO because it determines the basic accounting codes of the Agency. This chapter documents policies and procedures for NASA formulation of a Financial Classification Structure (FCS). The NASA FCS includes all financial related codes used in NASA financial systems.

0302 GENERAL POLICIES FOR ESTABLISHING THE FCS

030201. NASA shall have one uniform FCS for recording transactions into systems supporting the CFO business processes.

030202. All FCS codes require written formal approval by the OCFO prior to use.

030203. Any NASA system with the need to conduct business processing using data elements common to the FCS shall use the same coding as the FCS.

030204. The OCFO shall issue notification of and publish on the OCFO website a record of the FCS including updates and changes to inform Centers and others in the financial community of permissible and current financial codes.

030205. NASA codes shall be formulated to abide by the FFMSR policies and direction.

**0303 ELEMENTS THAT MUST BE SUPPORTED BY THE FCS**

030301. The FCS must support the following accounting classification elements.

- A. Treasury Account Symbol (TAS).
- B. Budget fiscal year.
- C. Internal fund code.
- D. NASA Organization Code.
- E. NASA Program Code.
- F. NASA Project Code.
- G. Activity.
- H. Cost center.
- I. Object class.
- J. Revenue source.
- K. Budget function.
- L. Budget sub-function code.
- M. Accounting period.

N. Any additional accounting classifications or other financial classification codes necessary for NASA's transactions.

030302. The FCS shall be sufficient in detail to support the following functions and requirements:

- A. Core financial system activities and components:
  - 1. Accounting activity query.
  - 2. Revenue source code structure.
  - 3. Fund structure.

- include:
4. Treasury Account Symbol (TAS). The TAS characteristics include:
    - a. Fund type.
    - b. Budget status.
    - c. Funding source.
    - d. Period of availability.
  5. Internal fund code structure. The FCS shall maintain an accounting classification structure that can associate programs, projects, and activities with multiple internal fund codes.
  6. Mission, Theme, Program and Project code structure. FCS shall maintain a structure that can associate Mission, Theme, Programs, and Projects with financial and technical work breakdown structures. The FCS shall maintain a program code structure with the level of detail sufficient to report multiple categories for budget formulation and execution decisions. For all codes used in support of Program Year 2005 (PY05) or prior, please refer to archived FMM 9100 (<http://www.hq.nasa.gov/fmm>). For PY06 and beyond, refer to the NASA Structure Management (NSM) guidance contained in Appendix B. Current codes for execution and formulation can be found at <https://nsminfo.nasa.gov/nsminfo/home/home.aspx>. These are located behind a firewall and can only be accessed inside the NASA network.
  7. Object class code structure. FCS shall maintain an object class structure consistent with the standard object class codes defined in OMB Circular A-11. FCS shall accommodate additional (lower) levels in the object class structure, e.g., by establishing parent/child relationships.
  8. Function Codes. Function Codes. This 6-digit code is used in the Core Financial system to identify those infrastructure activities that support NASA's programs and projects.

- B. Coding for any other process consistent with the needs of NASA.

#### 0304 CHANGE MANAGEMENT OF FCS CODES

030401. NASA shall use a systemic, organized, and formal process to manage changes, additions, and deletions to the FCS through a collaborative effort of the OCFO, IEMP, and Office of the Chief Engineer (OCE).

A. The OCFO shall recommend changes based on the need for revisions, additions, and deletions due to the financial business process needs of NASA. The FCS must support OCFO business needs.

B. The OCIO decisions govern the technological structure of the changes. OCIO shall:

1. Approve changes recommended by the OCFO considering the feasibility of the change for incorporation into the system.

2. Work collaboratively with the OCFO to consider approval of changes brought about by technological considerations such as; new technology, new requirements, and the need to improve performance.

030402. Responsive updates. NASA management must be responsive to new scientific breakthroughs and fresh approaches to complex problems. Actions by OMB, Congress, Treasury, and others require change, additions, elimination or merger of NASA programs, projects, or activities. Therefore, NASA's FCS is vulnerable to frequent and unusual changes. NASA FCS must be sufficiently flexible in design to accommodate these changes by:

A. Providing a structure permitting the addition of new codes easily without redesign.

B. Meeting the need for changing, adding, deleting, eliminating or merging codes by:

1. Minimizing the need for transaction recoding.

2. Preserving the audit trail for FCS changes.

3. Incorporating financial data from obsolete codes into new codes.

4. Accommodating changes, additions, eliminations or merger of data in areas most vulnerable to change with ease.

5. Identifying electronic mechanisms and analytical techniques that can be used to accomplish FCS maintenance.

030403. FCS Change Management.

A. Routine change management aligns closely with the annual operating cycle of NASA. A less formal process than for more complex changes is necessary to provide quick implementation for on-going operations.

**CHAPTER 4****SYSTEM DEVELOPMENT AND CHANGE MANAGEMENT**0401 GENERAL

040101. This chapter sets forth NASA policy to jointly manage system development and changes through a formal collaborative effort of the CFO, CIO, and IEMP. Business processes change and need improvement requiring new development and changes to existing system architecture, technology, and processes. Communication and partnership between the CFO, CIO, and IEMP in planning for new systems, upgrades, and changes is critical to assure business goals are met by software and technology performance. The CFO and IEMP must bring changing business requirements into the planning process so the CIO will know to integrate financial management requirements into overall enterprise architecture planning.

0402 GOVERNANCE

040201. The addition of new or proposed changes to existing NASA CFO policies, processes, operations, and systems should be approved in accordance with CFO Governance. The CFO Governance Structure is defined as follows:

- A. Financial Executive Round Table
- B. Financial Steering Group
- C. Financial Process Teams

040202. The Financial Executive Round Table is responsible to review and approve the addition of new or proposed changes to existing CFO policy, processes, and systems/requirements.

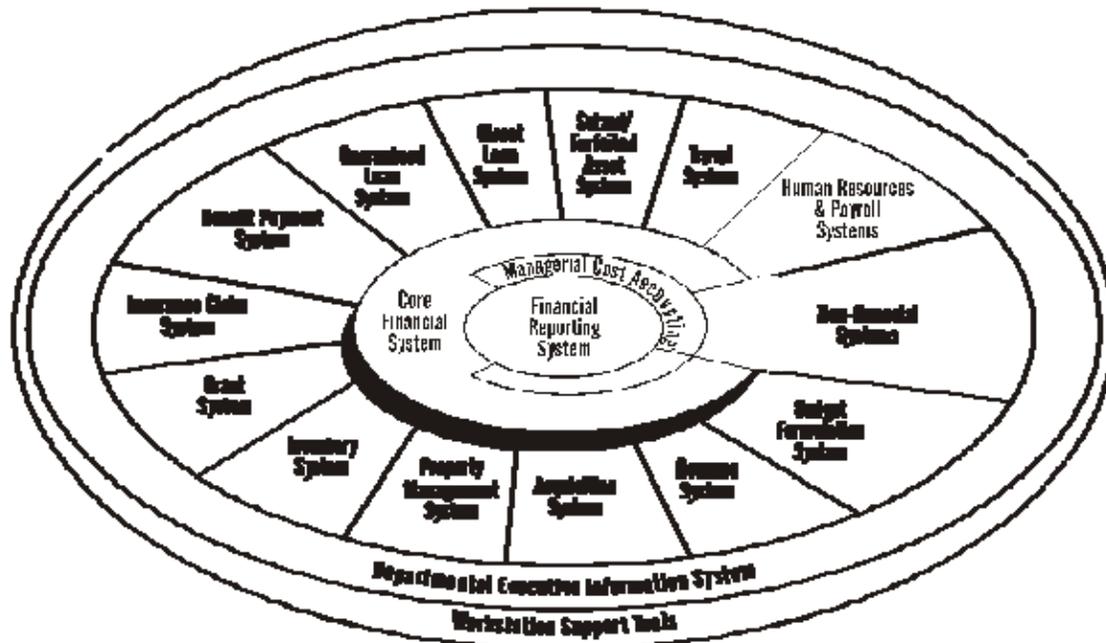
040203. The Financial Steering Group is responsible to develop/concur on recommendations to be presented to the Financial Executive Round Table for approval, and to support the CFO with the implementation of approved actions/decisions made by the Financial Executive Round Table. If the course of action has systems implications, then the Financial Steering Group should coordinate with IEMP to ensure the development of requirements are consistent with CIO standards.

040204. Financial Process Teams are responsible to coordinate with the Financial Steering Group for the development of new or proposed changes to CFO policy, processes, and systems/requirements efforts. The Financial Process Teams consists of financial subject matter experts (SMEs) from across the Agency.

040205. All IEMP system change requests, which impact financial systems will be reviewed by appropriate OCFO governing bodies prior to implementation.

APPENDIX ASINGLE INTEGRATED FINANCIAL MANAGEMENT SYSTEM COMPONENTS

The below illustration is followed by an immediate description of the illustration, both taken from the FFMSR.



The following financial management system types are depicted in the above illustration. The FFMSR identifies them as components of a *single, integrated financial management system*. Some types are not currently applicable to NASA because their missions and programs do not require system support of that type.

- **Core Financial System** - Forms the backbone for the Agency's integrated financial management system. It provides common processing routines, supports common data for critical financial management functions affecting the entire Agency, and maintains the required financial data integrity control over financial transactions, resource balances, and other financial systems. The core financial system supports general ledger management, funds management, payment management, receipt management, and cost management. The system receives data from other financial systems and from direct user input and it provides data for financial performance measurement and analysis and for financial statement preparation.
- **Personnel/Payroll System** - Supports the agency's management of human resources. It maintains data on employees and positions, supports personnel actions and decisions, captures time and attendance information, and performs leave and payroll computations (including retirement contributions).
- **Travel System** - Supports the agency's management of travel and transportation activities and expenses. It prepares and tracks the status of travel orders, advances, and vouchers as they go through the various stages of preparation, approval, and processing.

- **Seized/Forfeited Asset System** - Supports the management of property or other assets seized and/or forfeited to the Federal government by Federal law enforcement agencies. It tracks the status of a seized asset from the time of seizure, through various processing steps, which may include forfeiture, until final disposition of the asset.
- **Direct Loan System** - Supports the management of direct loan programs in which direct disbursements are made to an approved borrower and the agency services and collects the loan. It supports the functions of loan extension, account servicing, portfolio management, and delinquent debt collection.
- **Guaranteed Loan System** - Supports the management of guaranteed loan programs, which use private sector lenders to originate and service loans, with all or a portion of the interest and loan repayment guaranteed by the Federal government in case of borrower default. It supports the functions of lender management, guarantee extension and maintenance, portfolio management, acquired loan servicing, and delinquent debt collection.
- **Benefit Payment System** - Supports payments of social insurance benefits and other transfer payments.
- **Insurance Claim System** - Supports payments of insurance claims under deposit insurance, pension benefit guarantees, crop insurance, and other programs in which the government provides protection against specified risks.
- **Grant System** - Supports providing grants and subsidies made to state and local governments, other organizations, or individuals.
- **Inventory System** - Supports the management of inventory held for sale or used in the production of goods and services for sale. It supports the functions of needs determination, inventory in storage, inventory in production, inventory disposition, and program planning and monitoring.
- **Property Management System** - Supports physical and accounting control over fixed and movable assets of the Federal government.
- **Acquisition System** - Supports the acquisition process of obtaining goods and services. It prepares and tracks the status of requisitions, small purchase orders, and contracts; records and validates the receipt of goods and services; and provides information to the core financial system for matching invoices and issuing payments.
- **Revenue System** - Supports the billing, collection, and detailed reporting of taxes, fees, and other revenues of the Federal government.
- **Budget Formulation System** - Supports the agency's preparation of budget information during the budget formulation process. It supports the establishment of a baseline from which to build the budget, tracks initial submissions and modifications to the budget, provides budget data for inclusion in the President's Budget, and tracks the status of the budget request as it moves through the process until enactment of appropriations.
- **Managerial Cost Accounting System** - Supports the appropriate collection, measurement, accumulation, analysis, interpretation, and communication of cost information. This information should be provided in such a way that it helps the user determine the cost of providing specific programs and activities and the composition of, and changes in, these costs.

- **Financial Reporting System** - Supports the accumulation and reporting of financial and related information in accordance with requirements of OMB's Bulletin on "Form and Content of Financial Statements." The system provides information for the annual and other periodic reporting of summary financial and related information including audit trails to systems of original entry and adjustments.
- **Departmental Executive Information System (EIS)** - Supports the collection and retrieval of current and historical financial, program, and related performance data for analysis, decision-making, and performance reporting by managers at all levels.
- **Non-Financial Systems** - Support processes and data necessary to carry out programs not involving financial events.
- **Workstation Support Tools** - Provide general purpose support of employees' activities such as word processing, spreadsheets, and electronic mail.

**NASA Structure Management (NSM)**

NASA Structure Management (NSM) is a single, integrated Programmatic and Institutional data management structure that:

- Supports the financial cycle from budget formulation through execution
- Supports performance tracking
- Enables better decision-making
- Improves management effectiveness
- One Structure and One System

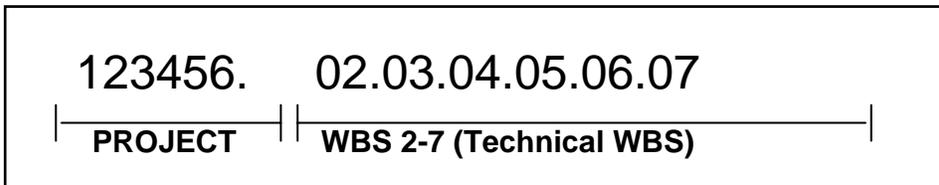
**NSM Function:**

- NSM is the data Management Structure used to manage all NASA resources, both Programmatic and Institutional, and to better facilitate Full Cost management and operations.
- NSM’s single integrated structure and metadata attributes linked with other technical and budget execution elements, is designed to improve the Agency’s ability to conduct financial analysis, cost-estimating and execute financial transactions such as funds distribution and cost collection.
- The NSM and its metadata attributes also assists the Office of the Chief Engineer in determining the appropriate management requirements for programs and projects.
- Moreover, the NSM enhances project management in constructing a Work Breakdown Structure matching the Financial and Technical structures.

**NSM Coding:**

The new NSM Structure consists of the following:

- A level one, randomly generated, six-digit Project number created by MdM
- Up to six additional levels of two-digit numbers reflecting a Project’s technical WBS



PY05 and Prior AWCS structure	62-376-10-10
PY06 and Forward NSM structure	524238.08.01.01

- Difference between a Project coded using the PY05 and prior AWCS structure and the PY06 and forward NSM structure

- Note: In the example above, the PY06 and forward NSM structure represents WBS Level 4 as the lowest level.

**NSM Hierarchies and Levels:**

- The NSM is broken out into the following hierarchies:
  - Programmatic Hierarchy -representing projects managed by the Mission Directorates
  - Institutional Hierarchy -representing projects under Working Capital, Institutional Investments, Service Pools, and Corporate Management and Operations (CM&O)
- The table below displays the breakdown of Programmatic and Institutional Hierarchy element levels

<b>Programmatic Hierarchy Element Levels</b>	<b>Institutional Hierarchy Element Levels</b>
Mission	Mission Equivalent
Theme	Theme Equivalent
Program	Program Equivalent
Project/Activity/Work Breakdown Structure (WBS) level 1	Project/Activity/WBS level 1 Equivalent
WBS level 2	WBS level 2 Equivalent
WBS level 3	WBS level 3 Equivalent
WBS level 4	WBS level 4 Equivalent
WBS level 5	WBS level 5 Equivalent
WBS level 6	WBS level 6 Equivalent
WBS level 7	WBS level 7 Equivalent

NSM	Hierarchy	Detailed
<u>NSM Code</u>	<u>NSM Specifications</u>	<u>NSM Example</u>
Mission Code	4 alpha's, smart Code	ESMD
Theme Code	2 – 4 alpha's	PROM
Program Code	4 alpha numeric (at least one alpha)	384A
Project Code	6 digits, not smart coded	564815
WBS 2 Code	2 digits starting period delimiter	564815.11
WBS 3 Code	2 digits starting period delimiter	564815.11.01
WBS 4 Code	2 digits starting period delimiter	564815.11.01.13
WBS 5 Code	2 digits starting period delimiter	564815.11.01.13.21
WBS 6 Code	2 digits starting period delimiter	564815.11.01.13.21.09
WBS 7 Code	2 digits starting period delimiter	564815.11.01.13.21.09.02



**National Aeronautics and Space Administration (NASA)  
Integrated Enterprise Management Program (IEMP)**

***Service Level Agreement  
between  
IEMP Competency Center  
and  
Financial Steering Committee***

September 2005

Version 1.8

NASA IEMP Core Financial Service Level Agreement

<b>ACCEPTED BY:</b>	
<b>FINANCIAL STEERING COMMITTEE</b>	<b>INTEGRATED ENTERPRISE MANAGEMENT PROGRAM COMPETENCY CENTER (IEMP CC)</b>
<b>STEERING COMMITTEE REPRESENTATIVE NAME:</b> Gwendolyn Brown	<b>IEMP CC REPRESENTATIVE NAME:</b> Jonathan Pettus
<b>STEERING COMMITTEE REPRESENTATIVE TITLE:</b> Agency Chief Financial Officer	<b>IEMP CC REPRESENTATIVE TITLE:</b> Manager, IEMP CC
<b>DATE:</b>	<b>DATE:</b>
<b>SIGNATURE:</b>	<b>SIGNATURE:</b>

**DOCUMENT HISTORY LOG**

<b>Status (Baseline / Revision / Canceled)</b>	<b>Document Version</b>	<b>Effective Date</b>	<b>Description of Change</b>
Baseline	1.1		Baseline Release
Revision	1.1a	April 1, 2003	Reflects incorporation of lessons learned to date and minor aesthetic changes.
Revision	1.1b	July 11, 2003	Reflects minor aesthetic changes.
Revision	1.1c	July 25, 2003	Reflects updates to Table 4, Section 4.3.
Revision	1.1d	September, 2003	Reflects disposition of JSC comments
Revision	1.4	February, 2004	Ready for signatures (accepted and verified changes, minor corrections to format and table of contents)
Revision	1.6	July, 2005	Reflects the inclusion of the new CC Services Section and Appendix C – Restore to Service Table
Revision	1.7	July 2005	Reflects program name change from IFMP to IEMP. Appendix B update and elimination of Appendix C
Revision	1.8	August 2005	Incorporates logo change and minor aesthetic changes and changes from PMII. See page 9, App Functional Support, last bullet.

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## 1. INTRODUCTION

### 1.1 Purpose

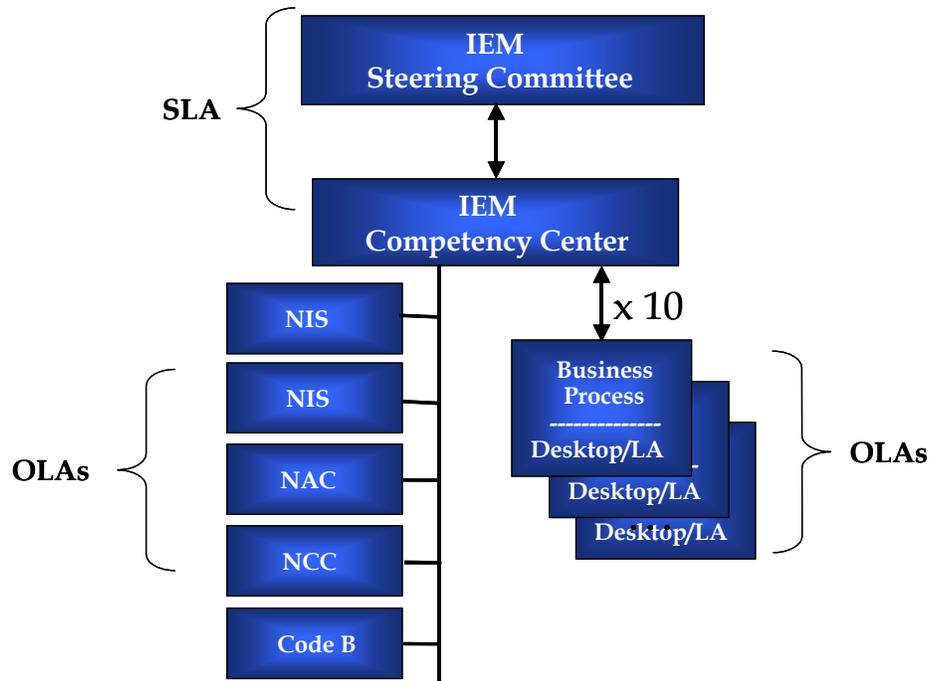
With the implementation of the Core Financial application, operations and sustaining support have become the responsibility of the IEMP Competency Center (CC) located in Huntsville, AL. The IEMP Competency Center exists to deliver an integrated customer support function that consolidates the majority of the application support elements traditionally provided via decentralized, disparate organizations within NASA.

The purpose of this Service Level Agreement (SLA) is to formally quantify consistent performance expectations associated with the use of the delivered Core Financial application. It is an agreement between the IEMP CC and the Financial Steering Committee, acting as a proxy for the NASA user community. It defines the roles and responsibilities performed by the IEMP CC, Center, and Agency organizations as well as service level commitments and associated performance standards and definitions.

### 1.2 IEMP CC Organization

The IEMP CC is the responsibility of the Integration Project Office (IPO) on behalf of the IEM Program and is a centralized support organization that is comprised of both contractors (primarily) and Civil Servant personnel. The IEMP Integration contractor has primary responsibility for executing the functions of the IEMP CC and reports directly to the IPO. The NASA Subject Matter Experts (SME) work in a co-located integrated product team environment with the IEMP CC contractor and the IPO to provide detailed knowledge and support of the standard business processes implemented in the Core Financial SAP configuration.

As described in other sections of this document, there are additional Center and Agency organizations involved in the overall support of the Core Financial application. Examples include the NASA Automated Data Processing (ADP) Consolidation Center (NACC), NASA Information Support Center (NISC), NASA Integrated Services Network (NISN), NASA Consolidated Communication Services (NCCS), Center Business Process Leads, Center Desktop Service Providers, etc., to name a few. However, they are not considered formal elements of the IEMP CC and thus make no direct commitment as part of this document to the Financial Steering Committee. Agreements between the IEMP CC and other service providers or organizations necessary to execute the commitments contained in this document are defined in Operating Level Agreements (OLAs), as illustrated in Figure 1.



**Figure 1. Service Level Agreements and Operational Level Agreements**

**1.3 Periodic Reviews**

The Financial Steering committee and the IEMP CC will review this document twelve months from the date of final approval of this version or at the request of the Steering Committee, whichever comes first.

**2. PROCESS FOR APPROVING AND MAINTAINING THE SLA**

This document will be completed and approved by the IEMP CC Manager and the Financial Steering Committee at prescribed intervals. Additionally, it will be placed under Configuration Management control, and changes will be managed in accordance with the IEMP Configuration Management Plan. Access to the baseline version of this document by the Financial Steering Committee and other interested parties will be enabled via the Integration Project Office website located at <http://ipo.IEMP.nasa.gov>.

The IEMP CC Manager is responsible for:

- Collecting suggestions for updates to this SLA
- Preparing a draft of the revised SLA with significant changes highlighted
- Ensuring that all changes are approved by the Financial Steering Committee and IEMP CC
- Distributing updated copies
- Maintaining an archive with current and past version of this SLA

**3. OPERATIONAL SUPPORT ROLES AND RESPONSIBILITIES**

The IEMP CC is structured to leverage NASA’s transformation to a centralized, single instance of Commercial off the Shelf (COTS) business systems. A key concept on which the IEMP CC is based

## NASA IEMP Core Financial Service Level Agreement

is the integration of business process, application and information technology support into a single organization. Another concept is to centralize as much of the support services as possible in order to gain efficiencies and ensure Agency standardization. Although much of the support is centralized in the IEMP CC, key elements of support must still be provided at the Center level.

Table 1, below, defines Center, Agency and IEMP CC roles and responsibilities required to successfully support Agency use of the Core Financial application. It is recognized that each Center will exercise flexibility implementing the roles due to size and uniqueness of the business process support approach. For instance, the number of Super Users at each Center will vary based on the level required to support business operations staff and the degree to which the Center establishes Super Users outside the primary functional organizations. Centers may also elect to combine roles (at least initially), such as the Business Systems Coordinator with the Business Process Lead or Information Technology Point of Contact (ITPOC). However, it is critical for each Center to clearly account for all roles/responsibilities described in Table 1 and document as required in Appendix A of the Core Financial Operational Level Agreement (OLA).

**Table 1. Center, Agency, and IEMPCC Roles and Responsibilities**

Provider	Role	Responsibilities and Guidelines
Center	Business Process Lead	<p>Serves in a full-time capacity to perform the following responsibilities:</p> <ul style="list-style-type: none"> <li>• Acts as primary interface to IEMP CC Application Functional Support Experts for business process improvements as an active participant in problem resolution</li> <li>• Ensures that all Center roles defined in OLA are staffed</li> <li>• Represents Center Business Process Owner(s) concerning changes to Agency and/or Center business processes</li> <li>• Serves as Center’s Level 3 Change Control Board (CCB) member</li> <li>• Evaluates and submits Center-initiated Change Requests</li> <li>• Coordinates maintenance of Center-level master data</li> <li>• Engages multiple user constituencies at Center (e.g., finance, procurement, Project Offices, logistics, resource managers, etc) to ensure issues with the system or business processes are identified and resolved</li> <li>• Coordinates testing and acceptance of specified system changes</li> <li>• Establishes and maintains a network of Super Users (including Reporting Lead) at the Center, across all sub-process areas, who will assist in the support process</li> </ul>

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Provider	Role	Responsibilities and Guidelines
Center	Super Users	<ul style="list-style-type: none"> <li>• Provides ongoing user instruction and support</li> <li>• Understands the business process and fields “how to” questions</li> <li>• Assists IEMP CC in troubleshooting problems</li> <li>• May submit and assist user, in entering IEMP CC Service Requests</li> <li>• Tests changes and new functionality upon request by IEMP CC</li> <li>• Provides ongoing feedback to IEMP CC concerning improvement of On-Line Quick Reference (OLQR) tool and job aids</li> </ul>
Center	IEMP Business Systems Coordinator	<ul style="list-style-type: none"> <li>• Works with the IEMP CC to ensure execution of end-to-end service level management for Center users</li> <li>• Manages help desk/user support process at the Center, including integration with IEMP CC processes</li> <li>• Responsible for maintenance of Center OLA</li> <li>• Manages IEMP CC charge-back process for Center</li> <li>• Receives and distributes service level report from IEMP CC</li> <li>• Receives problem escalation notifications from IEMP CC and escalates according to Center escalation process</li> <li>• Communicates system activity and outage plans to Center users</li> <li>• Interacts with Information Technology Point of Contact or Integration Project Office concerning IT infrastructure elements and associated service providers required to deploy IEMP applications at Center</li> <li>• Defines and maintains Center user account approval process</li> </ul>
Center	Reporting Lead	<p>Serves in a full-time capacity to perform the following responsibilities:</p> <ul style="list-style-type: none"> <li>• Works with the IEMP CC R/3 and Business Warehouse Reporting Leads as the IEM focal point at the Center for reporting. As such, the Center Reporting Lead supports the Center Business Process Lead as the Center interface for reporting issues, questions and suggestions and functions as the Competency Center focal point back to the Center.</li> <li>• Works with Center project offices to assist them in the understanding of BW query capability, gathering customer query requirements, ensuring that they receive the reports they need, and translation of BW reports and data. Works with the Center Super Users to facilitate process and data understanding on the part of the end users.</li> <li>• Works with Center BW Query Developer as Center specific report requirements are approved, to translate requirements and ensures timely delivery of reports</li> <li>• Communicates BW enhancements and activity notices to local BW user community</li> <li>• Answers general questions about tool function and capabilities</li> <li>• Ensures consistency of queries with Agency standards and that Center development does not duplicate Agency reports</li> </ul>

## NASA IEMP Core Financial Service Level Agreement

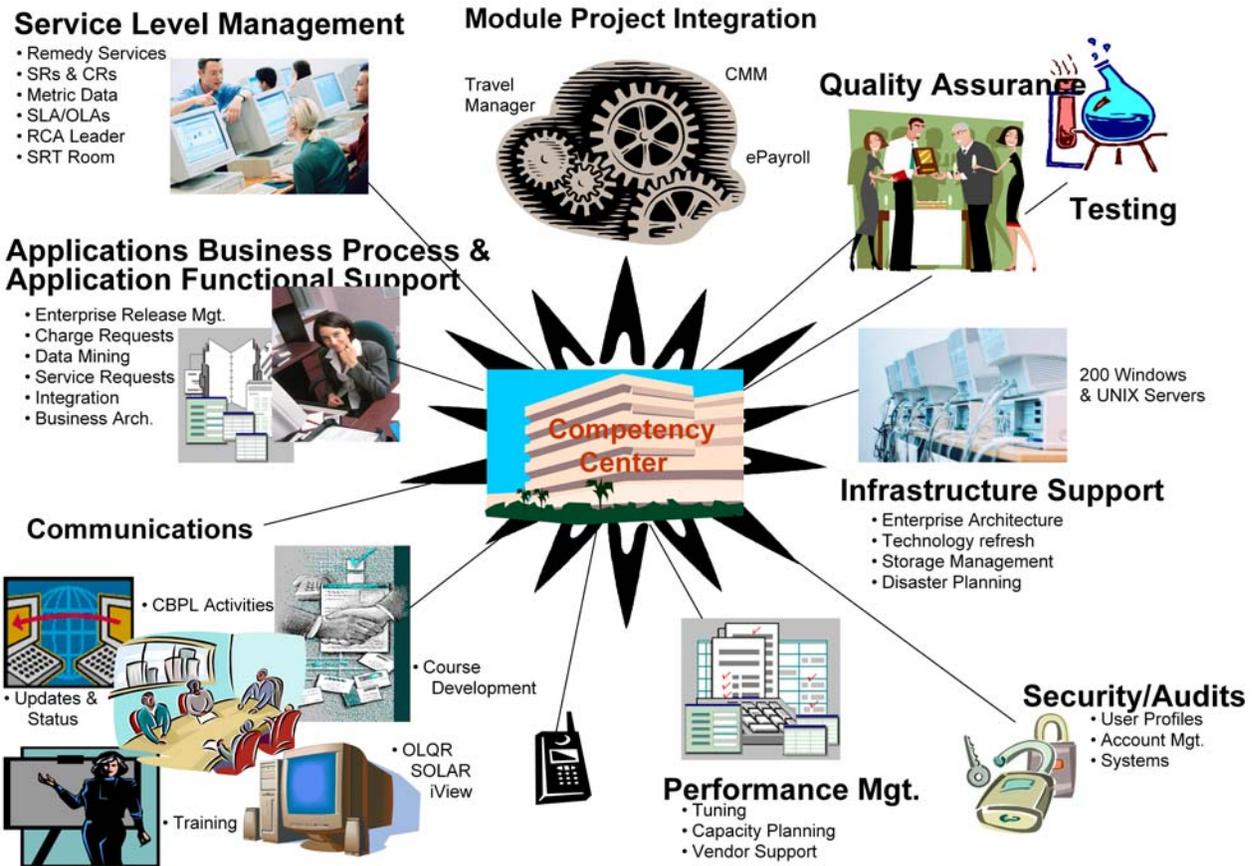
Provider	Role	Responsibilities and Guidelines
Center	Security Administrator(s)	<ul style="list-style-type: none"> <li>• Processes Center User Access Requests and assigns/maintains users within the application to defined roles</li> <li>• Maintains record retention and support security audits in accordance with NASA and Center security policies</li> </ul>
Center	Interface Lead	<ul style="list-style-type: none"> <li>• Ensures maintenance of legacy side Center interfaces</li> <li>• Ensures proper notification to IEMP CC of proposed legacy system changes that may impact Core Financial interfaces</li> </ul>
Center	Information Technology Point of Contact (ITPOC)	<p>Acts as primary interface to the Integration Project Office for IT support in the below areas to ensure end-to-end service delivery.</p> <ul style="list-style-type: none"> <li>• LAN support</li> <li>• Local disaster recovery</li> <li>• Center Infrastructure systems management and monitoring</li> <li>• Local IT Security</li> <li>• Tier 1 Help Desk</li> <li>• Desktop Systems Support</li> <li>• Software Distribution</li> </ul>
Center	Training Coordinator	<ul style="list-style-type: none"> <li>• Coordinates formal instructor-led training as required</li> <li>• Coordinates informal training to address Center-specific knowledge gaps (includes development of supporting instructional material)</li> </ul>
IEMP CC	<ul style="list-style-type: none"> <li>• Application Functional Support</li> <li>• Application Technical Support (ATS)</li> <li>• Business Process Support (BPS)</li> </ul>	<ul style="list-style-type: none"> <li>• Performs software configuration tasks for Agency configuration</li> <li>• Provides Tier 2 Help Desk application support</li> <li>• Maintains Agency-level application configuration and master data</li> <li>• Works closely with Center Business Process Lead and Super User network to coordinate resolution of issues and communicate system changes</li> <li>• Supports and administers the CCB process</li> <li>• Provides training documentation &amp; user procedures maintenance</li> <li>• Performs unit, integration and regression testing in support of quality assurance &amp; system validation</li> <li>• Identifies business process/policy resolution</li> <li>• Performs complex problem troubleshooting</li> <li>• Performs manual error correction of Master Data, as necessary.</li> </ul>
IEMP CC	Functional Support Lead	<ul style="list-style-type: none"> <li>• Coordinates the activities of all functional support resources within the IEMP CC</li> <li>• Ensures that service levels are met in responding to customer service requests</li> <li>• Ensures proper communication flow between Center Business Process Leads and the IEMP CC</li> <li>• Ensures that changes are adequately tested from a functional standpoint</li> <li>• Coordinates the maintenance of Agency level tables and configuration</li> <li>• Works with Agency Business Process Lead and Agency Business Process Owners in interpreting new requirements from CCB</li> <li>• Ensures that training materials and user documentation are maintained</li> </ul>

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Provider	Role	Responsibilities and Guidelines
IEMP CC	Application Development Support	<ul style="list-style-type: none"> <li>• Develops and maintains enhancements, extensions and R/3 reports</li> <li>• Integrates and supports interfaces to other systems (EAI middleware)</li> <li>• Provides technical support for application problem resolution</li> <li>• Develops and maintains Business Information Warehouse (BW) extractors and reports</li> <li>• Performs unit testing</li> </ul>
IEMP CC	Application Operations	<ul style="list-style-type: none"> <li>• Performs system software licensing, installation, configuration, monitoring and maintenance</li> <li>• Applies vendor patches and plan release upgrades</li> <li>• Performs O/S, database and application administration</li> <li>• Performs hardware acquisition, installation, and maintenance</li> <li>• Plans, develops, tests and implements disaster recovery</li> <li>• Performs system backup and recovery</li> <li>• Maintains Agency security roles</li> <li>• Coordinates security audit support process Support Centers in resolving application security problems</li> </ul>
Agency	Infrastructure Support	<ul style="list-style-type: none"> <li>• IEMP data center LAN (NISN)</li> <li>• Performs user ID, password creation and maintenance, including password resets (excluding Bankcard and Citrix which will be performed by the (NISC)</li> <li>• Performs Bankcard and Citrix User ID/Password maintenance</li> <li>• WAN services (NISN)</li> <li>• IT Security (NISN)</li> <li>• Disaster recovery (NACC)</li> <li>• Data Center facilities/off-hours system monitoring (NACC)</li> <li>• Citrix services (NCCS)</li> </ul>
Agency	Agency Business Process Lead	<p>Coordinates and communicates with Headquarters and Center business focal points regarding policies, regulatory requirements and providing policy direction and guidance for Agency Initiatives. Serves as voting member on Level 2 CCB and chairs the Level 3 CCB.</p>

#### 4. COMPETENCY CENTER SERVICES

The Competency Center provides a wide range of technical and business services in support of the Agency’s Integrated Enterprise Management Program (IEMP). The graphic below depicts the key Competency Center Services that are performed in support of the agency-wide business applications used by NASA.



7/27/05 FS

Competency Center Services Graphic

As shown in the graphic above, there are eight major functional areas of support provided by the Competency Center (CC). There are interactive relationships between each functional area shown. Additionally, the table below summarizes the key services and value for each functional/business area.

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<b>Service Area</b>	<b>Service Provided</b>	<b>Value</b>
Communications	<ul style="list-style-type: none"> <li>• Real-time status updates</li> <li>• Coordination of CBPL activities</li> <li>• Customer surveys, focus group and outreach activities</li> <li>• Course development</li> <li>• Training &amp; workshops</li> <li>• OLQR &amp; Solar content – updates</li> <li>• Admin. – Project schedule maint.</li> <li>• Standardized training processes &amp; Policy for course development</li> </ul>	<ul style="list-style-type: none"> <li>• Provide customers and stakeholders with a range of communications and change management activities, training, and course content updates for existing applications as well as the integration of new project modules.</li> </ul>
Service Level Mgt.	<ul style="list-style-type: none"> <li>• Provide Level II Help Desk services via the Remedy System</li> <li>• Track Service Requests (SRs) and Change Requests (CR's) – status reporting</li> <li>• Conduct Daily Service Review (DSR)</li> <li>• Write and maintain SLAs and OLAs</li> <li>• Maintain the CC's document management system</li> <li>• Conduct and document Service Restore Team (SRT) events</li> <li>• Conduct and document Root Cause Analysis (RCA) events</li> <li>• Capture and report on all CC metrics (e.g., backlog, service, quality, etc.)</li> <li>• Provide internal standards and support for the CC ISO 9000 Certifications</li> </ul>	<ul style="list-style-type: none"> <li>• Provide customers with a high quality service tracking and reporting mechanism, standard document management system and review process.</li> <li>• Provides source data for a variety a management reports, and trend analysis leading to innovation and/or process improvements.</li> </ul>
Infrastructure Support	<ul style="list-style-type: none"> <li>• Enterprise architecture &amp; design reviews</li> <li>• Technology refresh and procurement activities</li> <li>• Disaster planning &amp; testing</li> <li>• Storage &amp; database management</li> <li>• Provide support for security audits</li> <li>• Provide 24x7 technical support</li> </ul>	<ul style="list-style-type: none"> <li>• Provides technical support for over 200 UNIX and Windows servers at the NDC on a 24x7 basis.</li> <li>• Ensure architectures meet FEA guidelines and SLAs</li> <li>• Provides multiple database instances for test, development, and production for all IEMP applications.</li> <li>• Provide security patches and configurations that align with best practices.</li> <li>• Provide technical support for hardware &amp; software procurements</li> <li>• Develop technology roadmaps and strategic direction.</li> </ul>

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<p>Quality Assurance</p>	<ul style="list-style-type: none"> <li>• Testing and documentation</li> <li>• Compliance with audit standards and requirements traceability</li> </ul>	<ul style="list-style-type: none"> <li>• Provide a set of standard tools, testing processes and environments for all IEMP applications.</li> <li>• Ensure that all changes are consistent with agency designs and requirements.</li> <li>• Ensure traceability and documentation for audits.</li> <li>• Provide a core group of expertise for application integration and testing.</li> </ul>
<p>Security/Audits</p>	<ul style="list-style-type: none"> <li>• Maintain user profiles</li> <li>• Account management</li> <li>• Develop system security plans</li> <li>• Conduct internal tests &amp; audits</li> <li>• Co-ordinate with external auditors</li> </ul>	<ul style="list-style-type: none"> <li>• The security team provides a consistent focus on system and infrastructure security activities. Those activities include establishing guidelines, enforcing standards, developing audit responses, internal testing, and working with all functional areas within the CC and MSFC.</li> </ul>
<p>Performance Mgt.</p>	<ul style="list-style-type: none"> <li>• Tuning</li> <li>• Capacity planning</li> <li>• Vendor support</li> </ul>	<ul style="list-style-type: none"> <li>• Utilizes a set of system monitoring tools that allow the IEMP systems to perform at their optimal capacity.</li> <li>• Provides pre and post system integration tuning.</li> <li>• Coordinates with level III vendor support teams from Oracle, SAP, and Microsoft to ensure that upgrades and software patches do not adversely effect system or application performance.</li> <li>• Ensure that multiple vendor support teams work together to resolve performance issues.</li> </ul>
<p>Application Business Support including Application Technical Support (ATS) and Audit and Reconciliation</p>	<ul style="list-style-type: none"> <li>• Provide Enterprise Release Management planning &amp; functions</li> <li>• Review and incorporate change requests (CRs) into releases.</li> <li>• Coordinate and facilitate workshops and business application functions.</li> <li>• Support data integrity initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• The primary objective of this group is to provide cross functional SAP and financial business expertise to the OCFO, the Program office, and Center Business Process Leads.</li> </ul>

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teams	<ul style="list-style-type: none"> <li>• and master data corrections.</li> <li>• Provide functional support for “break/fix” service requests.</li> <li>• Provide leadership in cross functional – module project design activities.</li> <li>• Provide interface specifications and code for all IEMP applications.</li> <li>• Provide deep SAP configuration experience to support complex configuration requirements and problem resolution</li> <li>• Support for NASA policy decisions, agency design and user enhancement requests.</li> </ul>	<ul style="list-style-type: none"> <li>• A core team of SAP – financial experts work with functional members from immersing Module Projects to ensure that integration with production systems are well coordinated</li> </ul>
Module Project Integration	<ul style="list-style-type: none"> <li>• Provide interface support for eGov initiatives (e.g., ePayroll, eTravel)</li> <li>• Provide module roll-out support such as data conversions, technical architecture support, Center communication and training coordination.</li> </ul>	<ul style="list-style-type: none"> <li>• CC function/business and technical teams work with Project Module Implementation Contractors to ensure knowledge transfer, testing and documentation standards are followed, and post “go live” activities are coordinated.</li> </ul>

### 5. IEMP CC SERVICE LEVELS

The following table indicates the hours during a regular workweek that Application Support Coverage will be provided by the IEMP CC.

#### 5.1 IEMP Hours of Operation

Service	IEMP CC Support Hours
IEMP CC Help Desk Call Center Support	7 x 24 availability including holidays. Critical issues (Severity 1 & 2) will be escalated during non-business hours as described in Table 4.
Application Functional, Development, and Operations support	Monday – Friday 0800 CST to 1700 CST excluding all Government recognized holidays. Additional support may be scheduled during non-support hours when mutually agreed upon in advance by both parties, such as, year end and month end processing.
Center Business Hours	0800 – 1700 Mon-Fri. Center Local Time Zone

Note: Problems will be resolved in accordance with the prescribed Severity definitions and quality standards in Section 5.1 Table 4. Although the IEMP CC “standard” hours of operation is 8 –5 CST, Severity 1 & 2 problems will be worked on a 24 x 7 basis and Severity 3 & 4 problems will be worked and measured in accordance with the submitting Centers business day. (8 –5 Local Center time)

**5.2 Established Quality Standards**

The IEMP CC will report monthly metrics based upon actual performance as compared to the applicable quality standards or Quality Factors. (Each performance standard is assigned a Quality Factor, which will be tracked, measured and reported monthly).

**Table 2. Quality Standards for Problem Resolution, Change Requests, and Service Requests**

Service	Applicable Definitions	Standards	Calculation
<b>Problem Identification and Resolution</b>	<p><i>Severity 1</i> problems are immediate and total loss of application accessibility. Examples include:</p> <ul style="list-style-type: none"> <li>• All users unable to access SAP</li> </ul> <p>Note: Center Super Users must be available to assist in problem resolution and testing during non-business hours as appropriate.</p>	<p>Q1: In any 1-Year period, 95% of severity 1 problems will have a MTTR of 4 Hours or less.</p>	<p>Q1 = Actual / 95%</p>
<b>Problem Identification and Resolution</b>	<p><i>Severity 2</i> problems are significant loss of critical business functions.</p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>• <b>Period End</b> closing problems. (Period End refers to month end, quarter end and year-end.)</li> <li>• <b>Daily disbursements</b> <ul style="list-style-type: none"> <li>• Treasury Interface</li> <li>• Accounts Payable</li> </ul> </li> </ul> <p>Note: Center Super Users must be available to assist in problem resolution and testing during non-business hours as appropriate.</p>	<p>Q2: In any 1-Year period, 90% of severity 2 problems will have a MTTR of 8 Hours or less</p> <p>Q3: In any 1-Year period, 100% of severity 2 problems will have a MTTR of 16 Hours or less</p>	<p>Q3 = Actual / 90%</p> <p>Q4 = Actual / 100%</p>

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Service	Applicable Definitions	Standards	Calculation
<b>Problem Identification and Resolution</b>	<p><i>Severity 3</i> problems are partial loss of critical business functions. Examples include:</p> <ul style="list-style-type: none"> <li>• Multiple users unable to execute functions within                             <ul style="list-style-type: none"> <li>• Financial Reporting /SGL</li> <li>• Full Cost</li> <li>• Accounts Receivable</li> <li>• PO to Payment Confirmation</li> <li>• Purchasing</li> <li>• Bank Card</li> <li>• Business Warehouse (BW)</li> </ul> </li> <li>• Multiple users unable to print</li> <li>• Multiple users experience errors in accessing SAP tools or submitting products from tools</li> <li>• Total loss of non-critical business functions</li> <li>• Total loss of multiple users productivity</li> </ul>	<p>Q4: In any 1-Year period, 90% of severity 3 problems will be resolved within 24 Center business hours.</p> <p>Q5: In any 1-Year period, 100% of severity 3 problems will be resolved within 48 Center business hours.</p>	<p>Q5 = Actual / 90%</p> <p>Q6 = Actual / 100%</p>
<b>Problem Identification and Resolution</b>	<p><i>Severity 4</i> problems are partial loss of critical business functions for individual users. Examples include:</p> <ul style="list-style-type: none"> <li>• Individuals unable to execute functions within:                             <ul style="list-style-type: none"> <li>• Financial Reporting /SGL</li> <li>• Full Cost</li> <li>• Accounts Receivable</li> <li>• PO to Payment Confirmation</li> <li>• Purchasing</li> <li>• Bank Card</li> <li>• Business Warehouse</li> </ul> </li> <li>• Individual users experience errors in accessing SAP tools or submitting products from tools</li> <li>• Total loss of an individual's productivity</li> </ul>	<p>Q6: In any 1-Year period, 90% of severity 4 problems will be resolved within 5 business days.</p>	<p>Q7 = Actual / 90%</p>
	<p>*** Note - Account Reconciliation Data Integrity issues will be tracked as SR's, but will not be included in service metrics.</p>		

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Service	Applicable Definitions	Standards	Calculation
<p><b>Change Requests</b></p>	<p>Change Requests will be categorized in accordance with the Configuration Management Plan.</p> <p>Changes to “Configurable Items” (CI’s) will be treated as Category 1, 2 or 3 and must obtain approval from corresponding Level Change Control Board (CCB). SGL Accounts and Fund Master Data are classified as Category 3 CI’s.</p> <p>The IEMP CMO will classify all Change Requests (CRs)’s into one of four (4) change categories. Each category of change carries with it a specific level of governance approval. Program Documents will be assigned a Category when they are base lined. The CMO will assign all other change categories as an intrinsic part of the Impact Assessment for the respective change. The four categories are:</p> <ul style="list-style-type: none"> <li>• Category 1: Changes are of potential high risk, may affect policy, require cross-functional or cross-agency analysis, directly affect the user population, and/or have a significant cost/budget impact. This category requires Level 1 CCB approval.</li> <li>• Category 2: Changes are of medium risk, require limited cross-functional or cross-agency analysis, have limited effect on the user population, and/or will generate minimal or no cost/budget impacts. This category requires Level 2 CCB approval.</li> <li>• Category 3: Changes are of small risk, require no cross-functional or cross-agency analysis, have little or no effect on the user population, and will generate no cost /budget impacts. This category requires Level 3 CCB approval.</li> <li>• Category 4: Changes are triggered by routine maintenance or require tracking for documentation purposes. This category requires no advance CCB approval, although the CCB must ratify the change retrospectively.</li> </ul>	<p>Q7: In any 1-Year period, 90% of modifications will be on time. <i>On time</i> means made available for production on the mutually agreed upon release date.</p>	<p>Q8 = Actual / 90%</p>

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Service	Applicable Definitions	Standards	Calculation
<p><b>Change Requests</b></p>	<p>Changes to “Non Configurable Items” will be treated as Category 4 and will not require CCB approval.</p> <p>Category 4 examples are, but not limited to:</p> <ul style="list-style-type: none"> <li>• Priority 1– Examples include:                             <ul style="list-style-type: none"> <li>• KRED (Purchasing Vendor Information)– Additions or changes to KRED Master Data</li> <li>• FACS and Labor Interface Job Requests</li> <li>• All other types of Master Data maintenance requires justification to be considered a priority 1</li> </ul> </li> <li>• Priority 2– Examples include:                             <ul style="list-style-type: none"> <li>• All Master Data maintenance with the exception of KRED and Priority 3 changes</li> <li>• Any Master Data maintenance can be escalated to a Priority 1 with a written justification (included with description in CR)</li> </ul> </li> <li>• Priority 3 – Examples include:                             <ul style="list-style-type: none"> <li>• Master Data designated as CI, and Procurement Release Strategy Master Data and workflow changes</li> </ul> </li> </ul> <p>Note: At Period close, CRs may need to be escalated depending on the criticality of the change.</p>	<p>Q8: In any 1-Year period, 90% of all Priority 1 changes will be resolved within 8 Center business hours.</p> <p>Q9: In any 1-Year period, 90% of all Priority 2 changes will be resolved within 16 Center business hours.</p> <p>Q10: In any 1-Year period, 90% of all Priority 3 changes will be resolved within 8 business days.</p>	<p>Q9 = Actual / 90%</p> <p>Q10 = Actual / 90%</p>
<p><b>Change Requests</b></p>	<p>A modification is right the first time if it does not have to be changed or pulled out of production within 5 days of its initial use.</p>	<p>Q11: In any 1-Year period 95% of modifications will be right the first time.</p>	<p>Q12 = Actual / 95%</p>

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In the examples provided below, for each quality standard if actual quality is equal to the target, the corresponding Q will be 100%. If quality is better than target, Q will be greater than 100%. If quality is worse than target, Q will be less than 100%. For example:

Target: 90% of Severity 2 problems should be resolved within 8 hours.  
 Actual: 92% of Severity 2 problems are resolved within 8 hours  
 Quality factor Q1 =  $92 / 90 = 102.2\%$

Or, as another example:

Target: 80% of Severity 2 problems should be resolved within 8 hours  
 Actual: 72% of Severity 2 problems are resolved within 8 hours  
 Quality factor Q2 =  $72 / 80 = 90.0\%$

**(Note that these are only examples to illustrate the calculations and do not represent actual or expected targets.)**

The total quality score, QT, is then computed on any given month as:

$$QT = (Q1 + Q2 + \dots) / (\text{number of Q standards}).$$

**Table 3. Quality Standards for Availability, Recoverability, and Performance**

The below table provides a breakdown of the available times (i.e. production hours, back up hours and maintenance windows) and the availability requirements of the applications in scope.

Service	Applicable Definitions	Standards
Availability Schedules	<b>Primary Business Hours</b> requirements: 0600 – 1900 (CST) Mon – Fri	<ul style="list-style-type: none"> <li>• Time during which users are able to access the IEMP systems and perform work.</li> </ul>
Availability Schedules	<b>Secondary Business Hours</b> requirements: 1900 – 2400 (CST) Mon – Sun	<ul style="list-style-type: none"> <li>• Time during which users are able to access the IEMP systems and perform work.</li> <li>• User accessing the system during the batch-processing window may experience less than optimal response times.</li> </ul>
Availability Schedules	Prescribed hours for <b>Backup Hours</b> : <b>Incremental:</b> 2400 – 0400 (CST) Mon – Sun	<ul style="list-style-type: none"> <li>• The application will be available during this time for online users, albeit in lower performance levels.</li> </ul>

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Service	Applicable Definitions	Standards
<b>Availability Schedules</b> (continued)	System Maintenance windows: 0400 – 0600 (CST) Wed 1900 – 2100 (CST) Thu (migration window) 0400 – 1200 (CST) Sat 0400 – 1400 (CST) Sun	<ul style="list-style-type: none"> <li>• Times that have been designated as the window during which the application might be unavailable on prior notice (3 business days) for weekly backups, ongoing preventive maintenance, application updates or other such activities.</li> </ul>
<b>Availability Requirements</b>	Availability = Hours system is available	<ul style="list-style-type: none"> <li>• SAP R/3 System Availability Objective = 99.8%</li> <li>• SAP BW System Availability Objective = 95%</li> <li>• ITS Availability Objective = 99.8%</li> <li>• Defined as the % of time the production respective system and database server is available for processing versus the scheduled time of availability. Scheduled time of availability is defined as 168 hours per week (24 X 7) less system maintenance windows less outages approved with 2 days advanced notice</li> </ul>
<b>Recoverability Requirements</b>	<p><b>Disaster Recovery:</b> Should a catastrophic event occur that prevents the IEMP systems from running at the MSFC data center, a disaster recovery plan will be invoked. This plan calls for the movement of critical IEM systems to a Hot Site Disaster Recovery location in New Jersey according to a Disaster Recovery contract with Sunguard.</p> <p>A disaster is the failure, destruction, or loss of data, equipment, facilities, or any resource that causes significant impact to services.</p>	<ul style="list-style-type: none"> <li>• The Hot Site facility will be available for IEMP personnel to build the critical systems within 48 hours following the call of the disaster.</li> </ul>
<b>Performance Requirements</b>	Online – Online response time is server response time from submit to completion (not end-to-end)	<ul style="list-style-type: none"> <li>• 90% of non web-based R/3 transactions complete: &lt; 1 second</li> <li>• 90% of web-based R/3 transactions complete: &lt; 2 seconds</li> </ul>
<b>Performance Requirements</b>	Batch – Batch response time is the execution time of a batch job excluding queue time	<ul style="list-style-type: none"> <li>• 100% of scheduled batch processes will be completed by the end of the secondary business window.</li> </ul>

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Service	Applicable Definitions	Standards
<b>Performance Requirements</b> (continued)	End-to-End Performance (IEMP will consider these goals and will monitor actual results) <ul style="list-style-type: none"> <li>Windows SAP GUI (Identified representative transactions)</li> <li>Macintosh JAVA GUI (Identified representative transactions)</li> <li>Windows HTML GUI (Identified representative transactions)</li> </ul>	<ul style="list-style-type: none"> <li>90% complete: &lt; 3 seconds</li> <li>90% complete: &lt; 3 seconds</li> <li>90% complete: &lt; 6 seconds</li> </ul>

**5.3 Problem Resolution Standards**

Table 4 below illustrates user communication and management escalation standards for each severity. Escalations and communications will be initiated and coordinated by the IEMP CC. These standards will be updated on an annual basis as a result of the actual performance as our applications and systems grow. Detailed escalation procedures are located in Help Desk Procedures document.

**Table 4. Problem Severity Level Communication and Escalation Standards**

PROBLEM SEVERITY LEVEL TABLE			COMMUNICATION FREQUENCY TABLE		MANAGEMENT ESCALATION TABLE		
CODE	SEVERITY CRITERIA	SEVERITY STANDARD	FEEDBACK		When	NASA Center	IEMP CC
			INITIAL	PERIODIC			
1	“Severity 1” problems are immediate and total loss of application accessibility.	Q1: 100% of all severity 1 problems will be resolved within 10 hours.	½ Hour	Upon Completion and/or as major change in problem status occurs.	After work has started	Center IEMP Business Systems Coordinator	IEMP CC Operations Lead
					2 hours	Center Business Process Lead	IEMP CC Manager
2	“Severity 2” problems are significant loss of critical business functions.	Q2: 90% of all severity 2 problems will be resolved within 8 primary business hours.	2 Hours	Upon Completion and/or as major change in problem status occurs.	After work has started	Center IEMP Business Systems Coordinator	IEMP CC Operations Lead
					4 Hours	Center Business Process Lead	IEMP CC Manager

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CODE	SEVERITY CRITERIA	SEVERITY STANDARD	FEEDBACK		When	NASA Center	IEMP CC
			INITIAL	PERIODIC			
3	<p>“Severity 3” problems are partial loss of critical business function.</p> <p>Total loss of non-critical business function.</p> <p>Total loss of individual productivity.</p>	Q4: 90% of all severity 3 problems will be resolved within 24 Center business hours.	Upon Submission	Every Business Day	24 Center business hours	Affected User	IEMP CC Manager
4	<p>“Severity 4” problems are partial loss of critical business functions for individual users.</p>	Q6: 90% of all severity 4 problems will be resolved within 5 business days.	Upon Submission	Every Business Day	NA	NA	NA

\*\*\* Note - Account Reconciliation Data Integrity issues will be tracked as SR’s, but will not be included in service metrics.

**6. SLA PERFORMANCE MONITORING**

The IEMP CC is responsible for the monitoring and reporting of all services identified within the SLA. The IEMP CC will email detailed reports and schedule teleconferences as needed. The IEMP CC will report its annualized performance against this SLA on a monthly basis. This report will be provided to the NASA Center Business Process Leads on the 10<sup>th</sup> business day of the following month. This report will include quantity and quality of services delivered as well as a status of major projects, activities and issues.

## **APPENDIX A: ACRONYMS AND ABBREVIATIONS**

ADP	automated data processing
AP/AR	Accounts Payable/Accounts Receivable
ATS	Application Technical Support
BE	Budget Execution
BW	Business Warehouse
BPS	Business Process Support
CC	Competency Center
CI	Configurable Item
CM	Cost Management
COTS	commercial, off-the-shelf
CR	Change Request
CST	Central Standard Time
EAI	Enterprise Application Integration
GRC	Glenn Research Center
HHS	Health and Human Services
IEMP	Integrated Enterprise Management Program
IPAC	Intergovernmental Payment and Collection System
IPO	Integration Project Office
IT	information technology
LAN	local area network
MSFC	Marshall Space Flight Center
MTTR	mean time to repair
NACC	NASA ADP Consolidation Center
NCCS	NASA Consolidated Communication Services
NISC	NASA Information Support Center
NISN	NASA Integrated Services Network
OLA	Operating Level Agreements
OS	operating system
SGL	Standard General Ledger
SLA	Service Level Agreement
SME	Subject Matter Expert
SR	Service Request
WAN	wide area network

## APPENDIX B: DEFINITIONS

**CCB:** Change Control Board. There are four levels of Change Control Boards within the IEMP support system. These boards review changes at their appropriate level.

**Configurable item:** A configuration item (CI) is any system or selected component of a system (e.g., subsystem, utility program) that is documented, developed, and/or maintained as an entity

**Help Desk support:** There are three tiers of Help Desk support for IEMP users: Tier I, Tier II, and Tier III. For definitions, please see “tier”.

**IEMP CC:** The Competency Center for the IEM Program, under management of the Integration Project Office.

**Non-configurable items:** A non-configurable item is a system component that is not documented, developed, and/or maintained as an entity. An example is table data.

**Q Factor:** Quality Factor. Each performance standard is assigned a Quality Factor. This Quality Factor will be tracked, measured and reported monthly

**Severity:** The criticality of a problem. Problems in the IEMP system range in severity from 1-4, with 1 being the most critical. Severity is assigned by the IEMP CC.

**Single instance:** One occurrence of a system (instead of multiple occurrences).

**Tier I Help Desk support:** Tier I is first level of support, which is intended to field and record all requests for service and/or support. Tier I Help Desk support is provided by each NASA Center’s Local Help Desk.

**Tier II Help Desk support:** The Tier II support team is responsible for problem resolution, root cause analysis and delivery of all support services. In addition, they are responsible for the timely documentation of all activity, resolutions and corrective action against each support request. Tier II Support will be staffed and supported by members of the IEMP Competency Center for application support issues.

**Tier III Help Desk support:** Tier III support will be provided by the appropriate hardware or software vendor. Escalation to Tier III will be the responsibility of the Tier II support team.