

ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 09/23/2013		2. CONTRACT NO. (If any) GS06F0257Z		6. SHIP TO:	
3. ORDER NO. C-OPC-23782OPC-T0001		4. REQUISITION/REFERENCE NO. HUD-Q		a. NAME OF CONSIGNEE	
5. ISSUING OFFICE (Address correspondence to) US Department of HUD Office of the Chief Procurement Officer 451 Seventh Street, SW Room 5256 Washington DC 20410-1000				b. STREET ADDRESS 451 7TH STREET, SW	
7. TO: TBD				f. SHIP VIA	
a. NAME OF CONTRACTOR PYRAMID SYSTEMS INC.		b. COMPANY NAME		8. TYPE OF ORDER	
c. STREET ADDRESS 2677 PROSPERITY AVE STE 700		d. CITY FAIRFAX		e. ZIP CODE 22031-4928	
e. STATE VA		f. ZIP CODE 22031-4928		<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	

9. ACCOUNTING AND APPROPRIATION DATA See Schedule			10. REQUISITIONING OFFICE OFFICE OF CHIEF INFORMATION OFFICER		
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					12. F.O.B. POINT Destination
<input type="checkbox"/> a. SMALL	<input type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input type="checkbox"/> d. WOMEN-OWNED	<input type="checkbox"/> e. HUBZone	
<input type="checkbox"/> f. SERVICE-DISABLED	<input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM	<input type="checkbox"/> h. EDWOSB			
13. PLACE OF		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS NET 30 PROMPT PAY
a. INSPECTION Destination	b. ACCEPTANCE Destination				

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Tax ID Number: 54-1768412 DUNS Number: Not Available FHA Subsidiary Ledger and Support - Information Technology Services to continue operation, planning, maintenance, and enhancement Continued ...					

18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
21. MAIL INVOICE TO:						
a. NAME HUD-FTW ACCOUNTING				\$5,616,528.99		▲
b. STREET ADDRESS (or P.O. Box) 6AF, 801 CHERRY STREET UNIT #45 STE 2500				\$5,616,528.99		▲
c. CITY FORT WORTH		d. STATE TX	e. ZIP CODE 76102			

22. UNITED STATES OF AMERICA BY (Signature) 			23. NAME (Typed) ESSECK A. MARTIN TITLE: CONTRACTING/ORDERING OFFICER		
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Section C Performance Work Statement

Operations and Maintenance Support for the FHA Subsidiary ledger (FHASL)

1.0 BACKGROUND

1.1 Introduction to HUD and FHA

The mission of the Secretary of the Department of Housing and Urban Development (HUD) is to increase homeownership, support community development, and increase access to affordable housing free from discrimination. The Assistant Secretary for Housing-Federal Housing Commissioner helps the Secretary of HUD in accomplishing this mission by overseeing the programs of the Office of Housing and the Federal Housing Administration (FHA).

FHA was established under the National Housing Act of 1934 to improve housing standards and conditions, to provide an adequate home financing system by insuring mortgages on homes and rental projects, and to stabilize the mortgage market. FHA was consolidated into HUD when Congress established this cabinet-level department in 1965.

Seven offices support the Office of Housing-Federal Housing Administration in performing its mission:

- The Office of the Deputy Assistant Secretary for Single Family Housing supports single family programs, including FHA single family mortgage insurance;
- The Office of the Deputy Assistant Secretary for Multifamily Housing Programs supports multifamily programs, including FHA multifamily mortgage insurance;
- The Office of the Deputy Assistant Secretary for Regulatory Affairs and Manufactured Housing supports rulemaking and manufactured housing programs, including FHA manufactured housing insurance;
- The Office of Affordable Housing Preservation supports the restructuring of project-based rental assistance agreements and related FHA insurance of project financing;
- The Office of Insured Health Facilities supports FHA mortgage insurance for hospitals, assisted living facilities, and other health-related facilities;

- The Office of the Deputy Assistant Secretary for Operations supports FHA administrative functions;
- The Office of the Deputy Assistant Secretary for Finance and Budget supports budgeting and financial operations, including all financial operations affecting FHA's mortgage insurance funds.

These seven offices manage FHA programs and policies from a headquarters organization located in Washington, DC, under the direction of the Assistant Secretary for Housing-Federal Housing Commissioner. A field organization executes FHA programs from locations throughout the country, consisting of four Single Family Home Ownership Centers, 18 Multifamily HUB offices, and 33 multifamily field offices. Administratively, both the regional offices and the headquarters organization report directly to the Deputy Secretary for HUD.

1.2 Programs of the Office of Housing-Federal Housing Administration

FHA provides mortgage insurance to private lenders that finance single family homes, multifamily projects, healthcare facilities, loans for property improvements and manufactured homes. FHA has provided mortgage insurance to 37.6 million single family homes and to 51,527 multifamily projects containing 5.9 million units of housing since its inception 75 years ago. FHA currently has 5.5 million insured single family mortgages and 11,971 insured multifamily projects in its portfolio.

FHA operates its programs through five insurance funds supported by premium and fee income, interest income, Congressional appropriations, borrowings from the U.S. Treasury and other miscellaneous sources. The five funds are:

- *The Mutual Mortgage Insurance (MMI) Fund.* The MMI Fund supports FHA's basic single family homeownership program: this fund is self-sustaining;
- *The General Insurance (GI) Fund.* The GI Fund supports a wide variety of housing programs including rental apartments, cooperatives, condominiums, nursing homes, hospitals, property improvements, manufactured housing (Title I), and disaster assistance;
- *The Special Risk Insurance (SRI) Fund.* The SRI Fund supports higher-risk single family and multifamily insured mortgages;

- *The Cooperative Management Housing Insurance (CMHI) Fund.* The CMHI Fund supports insured loans on market-rate cooperatives: historically this fund has been self-sustaining;
- *The Hope for Homeowners Fund (H4H) Fund.* The H4H Fund supports a special mortgage insurance program enacted in 2008 to encourage lenders to adjust terms for homeowners adversely affected by the mortgage crisis of 2008 and 2009.

1.3 The FHA financial management organization

FHA's financial operations are the responsibility of the FIIA Comptroller, under the Deputy Assistant Secretary for Finance and Budget. Financial operations include the control, execution, recording and reporting of all financial transactions relating to FIIA's mortgage insurance programs and insurance funds, the actuarial analysis and management of FHA insurance reserves, the maintenance of the FIIA funds, and the control of budgetary resources. Control of budgetary resources entails enforcement of Congressional limitations on total annual liabilities for new insurance, estimates of receipts from insurance operations, limitations on expenditures from the insurance funds, and direct appropriations for subsidies and administrative expenses. To perform these operations, FHA relies extensively upon automated systems managed by the FIIA Comptroller's organization.

Although now part of HUD, FIIA was originally an independent agency subject to the Government Corporation Control Act. Since 1948 the Government Corporation Control Act has required FHA to produce independently audited financial statements of its insurance funds. The Government Corporation Control Act was amended to confirm that the requirements for independently audited financial statements continued after FHA was consolidated into HUD. The HUD Reform Act of 1989 made FHA's independent financial statement audits an annual requirement and created the office of FIIA Comptroller to manage FIIA's financial operations. FHA's audited financial statements are incorporated in HUD's department-wide financial reporting¹, and the audit results for FIIA become part of the audit results for HUD as a whole. In order to support HUD's department-wide financial reporting to the Department of Treasury and the Office of

¹ Recent financial statements and audit results can be found in *FHA Annual Management Report FY2008* at <http://www.hud.gov/offices/hqs/010107/annualmanagementreport.pdf>.

Management and Budget, as well as for management of its own financial operations, FHA produces a complete set of financial statements each quarter.

1.4 The FHA Subsidiary Ledger

The FHA Comptroller's Office relies on a core financial management system, called the FHA Subsidiary Ledger, to produce its audited financial statements. The FHA Subsidiary Ledger uses commercial-off-the-shelf software certified by the Office of Management and Budget, Office of Federal Financial Management² to meet federal requirements and standards. This commercial software was originally developed and marketed by PeopleSoft USA, Inc.

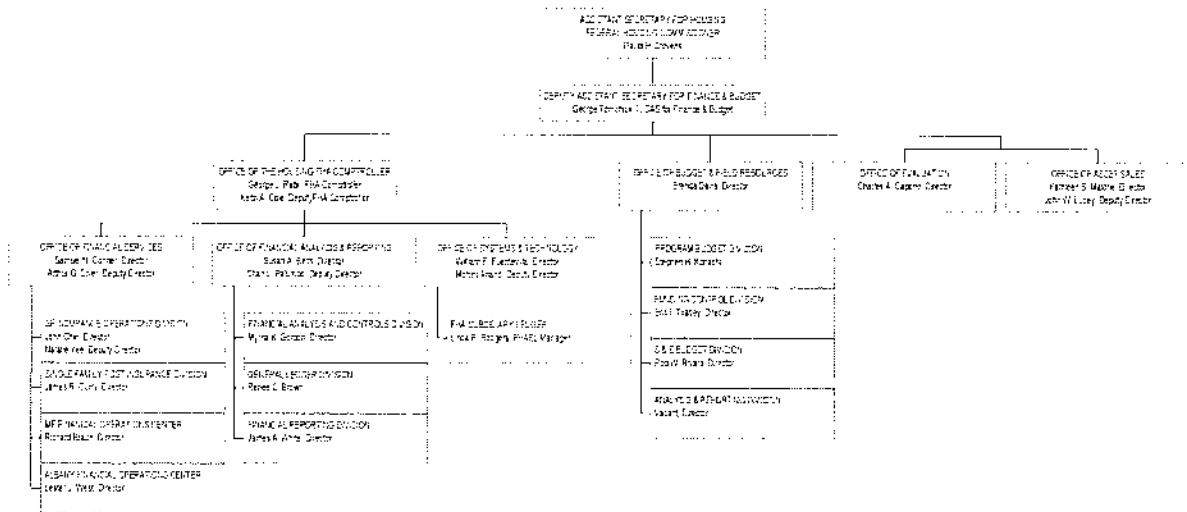
The FHA Subsidiary Ledger currently supports FHA's general ledger operations, a separate cash ledger, federal budgetary accounting and funds control, accounting for contracts and grants, and selected FHA insurance servicing or post-insurance financial operations. Federal budgetary accounting and funds control functions include controls required under the Credit Reform Act of 1990 and under FHA's annual appropriations.

Approximately 20 other mixed financial and program systems have been integrated with the FHA Subsidiary Ledger to support all of FHA's insurance servicing and post-insurance financial operations. The FHA Subsidiary Ledger has integrated with these financial and program systems by three strategies. First, some systems interface with the FHA Subsidiary Ledger on a daily or monthly basis. The interfaces have in many cases been improved to incorporate budgetary and other controls not previously available from the interfacing system. Second, some systems have been integrated into the FHA Subsidiary Ledger in their entirety, making the legacy software eligible for retirement. Third, some systems have been re-engineered in accordance with HUD's Enterprise Architecture plan, under which the FHA Subsidiary Ledger system provides support for core financial operations, while other application software is implemented for program functions. Together these systems constitute a major IT investment project called 'FHA Financial Operations Modernization' for purposes of OMB reporting and budget planning.

FHA Subsidiary Ledger is maintained by a dedicated staff within the Office of Systems and Technology under the direction of the Office of the FHA Comptroller and the Deputy

² The interagency Joint Financial Improvement Program (formerly known as JFMIP) has been absorbed into the Office of Federal Financial Management (OFFM) within the Office of Management and Budget (OMB).

Assistant Secretary for Finance and Budget. Figure 1-1 shows the relationship of the FHA Subsidiary ledger project staff to other offices under the Deputy Assistant Secretary for Budget and Finance:



1.5 Past, present, and future FHA Subsidiary Ledger requirements

The FHA Subsidiary Ledger began operation as FHA’s official core financial system in October, 2002 with the implementation of a general ledger and budget execution and funds control functions.

Since 2002, FHA and its contractors have continued to expand the scope of the core financial system functions to integrate and improve financial operations. Major past and current milestones include:

- 2004 – Contract and grant accounting, daily and real-time funds control over all Treasury disbursements
- 2004 – Comprehensive controls over all FHA loan commitments.
- 2006 – Daily and real-time integration with Multifamily asset management operations
- 2007 – An interface with HUD’s procurement data warehouse
- 2009 – Integration of Multifamily premium billings, collections, and claims and replacement of legacy systems

The completion of these milestones marks the completion of the original project to implement PeopleSoft as FHA's core financial system.

With the completion of the FHA Subsidiary Ledger implementation project, FHA now seeks to replace the project organization with a service management organization. The service management organization will be responsible for:

- Sustain FHA Subsidiary Ledger operations in conjunction with HUD's HITS III operations contractors³ and FHA's accounting operations contractor⁴;
- Support FHA in responding to, and complying with, regulatory, oversight, and audit requirements relating to the FHA Subsidiary Ledger;
- Prepare recommendations for the development and implementation of necessary system modifications that FHA requires to meet new regulatory requirements or other high-priority operational needs; and
- Support FHA in planning and executing future system or hosting changes.

The FHA Subsidiary Ledger service management organization needs to acquire Information Technology service management, maintenance, and development support to accomplish these functions. All materials developed under the task order shall be the property of HUD.

1.6 Other HUD and FHA coordinating organizations and functions

Operations and maintenance of the FHA Subsidiary Ledger system requires extensive coordination with other HUD and FHA activities and organizations, and the project's contractors must support these coordination requirements. The FHA Subsidiary Project and its contractors shall:

- Comply with HUD's System Development Methodology (SDM), which is maintained by the Office of the Chief Information Officer (OCIO);

³ Lockheed Martin Corporation and Hewlett Packard Corporation (formerly Electronic Data Systems) together support all of HUD's IT infrastructure and production operations under HUD Information Technology Service (HITS) III contracts.

⁴ IBM Corporation provides accounting and financial statement reporting support to FHA.

- Participate in regular technical reviews, which are administered by OCIO on behalf of HUD's Technology Investment Board through monthly and quarterly reviews of updated project information in OCIO's eCPIC's system and the Inventory of Automated Systems and through regularly scheduled technical reviews, typically once each fiscal year;
- Participate in HUD management reviews, such as the annual review by HUD's Portfolio Management Review Board, typically once each fiscal year;
- Prepare information for HUD budget reviews, which require monthly updates to costs in the project plan and periodic reporting, typically within 30-60 days of the close of each quarter;
- Participate in HUD's Enterprise Architecture, a standards-setting program for hardware, software, applications, and methodologies administered by OCIO: the project team must maintain current information about the FHA Subsidiary Ledger within HUD's Enterprise Architecture Management System (EAMS) and contribute to the development and maintenance of enterprise architecture plans for the Office of Housing;
- Support system reviews under FFMIA⁵, FISMA⁶, OMB⁷ Circular A-123, OMB Circular A-127, and OMB Circular A-130, both by the Office of Housing and by the Office of the Chief Financial Officer and its contractors;
- Respond to requests for information and for comment from the Office of the Inspector General (OIG) and its contractors for audits of FHA and HUD financial statements or subjects of special interest to the Inspector General and from the GAO for audits and studies of subjects of interest to the Congress;
- Coordinate infrastructure requirements, including hardware and software planning, with other contractors and HUD organizations.

⁵ Federal Financial Management Improvement Act of 1996

⁶ Federal Information Security Management Act (2002)

⁷ Office of Management and Budget

- Coordinate application planning, including software acquisition and integration, with other core financial management functions within HUD, such as HUD's departmental accounting system;
- Participate in the single family and multifamily system integration projects that the Office of Housing has initiated under HUD's Enterprise Architecture program;
- Operate within HUD's data processing environment in compliance with the standards and procedures defined by OCIO, including standards for such functions as security, configuration management, operations, contingency planning and business resumption: the project team must comply with all requirements of the HUD Automated Release Tracking System (HARTS) release process to promote controlled items from development to production status, including submission of production software changes to the HUD Test Center;
- Support essential review and qualification procedures for federal systems in accordance with mandatory standards of the National Institute for Standards and Technology (NIST) including quarterly Certification and Accreditation reviews and remedial activities necessary to achieve and maintain Authority to Operate;
- Demonstrate satisfactory project management controls mandated by OCIO and OMB, such as Earned Value Management;
- Comply with Section 508 of the Rehabilitation Act and the related U.S. Access Board standards;
- Interface accounting system software with other insurance and financial systems within FHA and HUD: these systems are maintained and operated separately from the FHA Subsidiary Ledger project by other contractors and HUD organizations.

FHA has contracted with IBM Corporation for professional accounting services to support accounting operations, other financial operations, financial modeling to calculate liabilities for loan guarantees and loan loss reserves, financial statement preparation, and support for the annual financial statement audit.

The contractor will be responsible for supporting the integrated multifamily premium billing, collection and claims function as well as financial and accounting functions integrated earlier within the FHA Subsidiary Ledger.

HUD has also contracted with a variety of companies to support the approximately 20 other mixed financial and program systems that perform financial operations for FHA's insurance programs and that produce financial transactions for FHA's core financial system.

The contractor supporting FHA under this work statement must effectively interact with all of the other offices, functions, and contractors on which the FHA Subsidiary Ledger depends⁸.

In addition, for a vendor to be considered a responsible vendor, it must certify that it is CMMI Level 3 certified at time vendor is notified they are the apparent awardee. Contractors must enclose a copy of its certification and a link to its listing on the CMMI site (<http://www.sei.cmu.edu/cmmi/>).

2.0 OBJECTIVES

The objectives of this task order are to:

- Sustain the FHA Subsidiary Ledger in support of FHA's financial operations;
- Maintain the capability of the FHA Subsidiary Ledger to produce timely audited financial statements in conformity with generally accepted accounting principles,
- Maintain the capability of the FHA Subsidiary Ledger to operate with adequate internal controls,

⁸ These roles and responsibilities are defined in detail in *Roles and Responsibilities V5-1 – FHA Contractors* at http://hudsharepoint.hud.gov/sites/home_team/FHA-SL/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fsites%2fhome%5fteam%2fFHA%2dSL%2fShared%20Documents%2fRoles%20and%20Responsibilities&FolderCTID=%7bCC6DDA10%2d9F8D%2d46C4%2d9390%2dA18471ADCEB6%7d

- Maintain compliance with laws and regulations applicable to federal financial management systems,
- Support FHA in responding to oversight, and audit activities involving the FHA Subsidiary Ledger,
- Adapt the FIIA Subsidiary Ledger to meet new regulatory and other high-priority requirements affecting FHA's financial operations in the future,
- Support FHA's Office of Systems and Technology in information technology investment management and planning for the Housing portfolio of applications of which the FHA Subsidiary Ledger is a part, including FIIA's Financial Operations Modernization (13 applications), Single Family Integration (20 applications), Multifamily (9 applications) and the Housing transformation program.

3.0 SCOPE

This task order acquires Information Technology (IT) services to continue operation, maintenance, and enhancement of the FIIA Subsidiary Ledger and to support investment management and planning for the Housing IT portfolio of which the FIIA Subsidiary Ledger is a part. The services FHA is acquiring span the following categories of activity: IT service management, IT infrastructure management, IT application maintenance and development, and project management.

Under each category of activity, other contractors and oversight organizations will also be acting on HUD's and FHA's behalf along with the contractor. The scope of this task order therefore includes significant coordination with the work of other contractors and HUD organizations. However, although such coordination is an essential requirement, this task order requires the contractor to provide overall comprehensive system engineering and technical services for maintenance, development, integration, and operations of the FHA Subsidiary Ledger.

The scope of this task order includes professional and technical support for activities for which the Government ultimately has sole responsibility, including planning, scheduling, requirements definition, testing and acceptance, configuration control, security control and access, compliance, and regulatory and investment management reporting. The contractor recommends, documents, and executes approved actions in such cases but the Government reviews, approves, and directs all activity.

The following examples illustrate how functions the contractor will perform under this task order will require coordination with functions performed by other contractors and HUD organizations:

- Under IT service management, the contractor shall provide third tier support for operational incidents and problems routed through the HUD help desk that require expert knowledge of the FHA Subsidiary Ledger software. Another contractor operates the HUD help desk, and other contractors and HUD organizations provide second and third tier support for incident and problem management requiring different kinds of expertise.
- Under IT service management, the contractor will be responsible for managing the migration and release of contractor patches and software changes to production. Another contractor may help to identify contractor patches for release, and another HUD organization will operate the HUD Test Center, which is the final migration activity prior to release to production status.
- Under IT service management, the contractor shall be responsible for helping FHA to define and update requirements for service levels, continuity of operation, and operating capacity. Other contractors and HUD organizations are primarily responsible for maintaining service levels, assuring continuity of operations, and providing capacity for production operations.
- Under IT security management, the contractor shall provide comprehensive support to FHA to fulfill responsibilities under federal regulations for security and privacy and for validating backup and recovery and disaster recovery tests. Other contractors and HUD organizations will execute security functions for operating systems, networks, and databases in production.
- Under IT infrastructure management, the contractor shall be responsible for providing direction for the proper production configuration of application software, databases and other components of the FHA Subsidiary Ledger. Other contractors and HUD organizations or services will be primarily responsible for maintaining networks, operating systems, and databases, and hardware capacity and performing production operations.
- Under IT application maintenance and development, other contractors may also act on FHA's behalf to update user controlled configurations, to create or modify reports, and to develop or modify application software for new functions.

While other contractors and HUD organizations will perform tasks in each of the service areas covered by this task order, FIIA intends that this task order identifies the roles for each service area to provide a comprehensive and coordinated set of services that will help ensure FHA is able to meet the objectives of Section 2.0. No other contractor is responsible for comprehensive support to FHA for IT service management, maintenance, and development for the FHA Subsidiary Ledger.

4.0 TASKS

This section describes each of the tasks FHA requires the contractor to perform within the scope of Section 3.0. The task descriptions identify tasks that will be performed entirely by the contractor, tasks in which other contractors and HUD organizations may provide supporting services, and tasks in which the contractor will provide supporting services to other functions.

IT service management tasks are organized according to a standard framework of tasks and services developed by the Information Technology Infrastructure Library (ITIL)⁹. The comprehensive scope of ITIL framework helps FHA to identify not only the tasks for which the contractor has direct and primary responsibility, but also tasks for which coordination with other contractors and HUD organizations is required. The tasks are organized using standard frameworks for best practices in each service area.

The IT security management task is organized according to a framework of standards established within the federal government for system security, including FISMA, NIST¹⁰ security standards, HSPD-12¹¹, and various OMB bulletins and circulars.

The application maintenance and development task is organized according to HUD's standard system life-cycle methodology, the SDM.

4.0.1 Transition period – start (SDM Code I – Systems Operations) (CLIN 1000.1)

⁹ ITIL documents best practices and standards for IT service management. Originally sponsored by the British government, ITIL standards are now published and maintained by a non-profit industry organization called the IT Service Management Forum. The ITIL standards have been proposed for adoption as an international standard (ISO20000).

¹⁰ National Institute of Standards and Technology

¹¹ Homeland Security Presidential Directive 12

The contractor shall transition to full IT service management support during the first month following award of this task order. The contractor shall prepare a transition plan covering staffing, applications for security access, review of project materials, and other subjects necessary to assume full responsibility for IT service management services at the end of the transition period.

If the incumbent contractor is selected to continue IT operation, maintenance, and enhancement support services for the FHA Subsidiary Ledger, then transition services will not be required and the monthly pricing for eleven months of the base period shall be applied to the transition period.

4.0.2 Transition period – end (SDM Code I – Systems Operations) (CLIN 1000.2)

The contractor shall support transition to a new contractor at the end of the period of performance of this task order. Upon FHA's request, the contractor shall compile from the FHA Subsidiary Ledger library all materials necessary to assume and execute the responsibilities of this task order. The contractor shall attend and support briefings that will be required to fully transition all materials developed to a new contractor.

If the incumbent contractor is selected to continue IT operation, maintenance, and enhancement support services for the FHA Subsidiary Ledger, then transition services will not be required and the monthly pricing for eleven months of the base period shall be applied to the transition period.

4.1 IT service management (SDM Code I – Systems Operations) (CLIN: 1001, 2001, 3001, 4001 and 5001)

FHA requires IT service management support to sustain the FHA Subsidiary Ledger in continuing operation. IT service management includes IT service support, IT service delivery, and IT security management. The purpose of the IT service management task is to provide FHA with comprehensive support for all of the activities, not supported by other contractors or HUD organizations, necessary to sustain the FHA Subsidiary Ledger System.

The contractor shall provide support for all of the technical components of the FHA Subsidiary Ledger in performing this task. Some technical components, such as the FHA's mainframe (MVS-based) programs, will require only occasional support. Other components, such as Oracle databases and PeopleSoft COTS Financials and Revenue Management application software will require full time support. The contractor shall

coordinate with FHA Subsidiary Ledger manager to balance activities and priorities to achieve a consistent level of service throughout the period of performance.

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.1 IT Service Support function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

4.1.1 IT service support

~~IT service support covers all of the activities necessary for FHA to maintain the integrity of the system software in production. IT service support includes help desk support, incident management, problem management, configuration management, change management, and release management.~~

~~IT service support functions are performed at HUD by a hierarchy of organizations according to specialization and skill. The hierarchy of organizations corresponds to commonly accepted levels or tiers of technical support, as follows:~~

~~Tier 1—Helpdesk operation and first line user assistance~~

~~Tier 2—Analysis of the business and operation environment of incidents that cannot be resolved immediately at Tier 1.~~

~~Tier 3—Specialized support for problems involving technical domains such as network, operating system, database, or FHA Subsidiary Ledger applications software operations.~~

~~Tier 4—Support from contractors of hardware and COTS software used by the FHA Subsidiary Ledger, such as Oracle's support for the PeopleSoft Financials and PeopleSoft Revenue Management products, SUN and IBM support for their processors, and Oracle's support for its database management products.~~

~~The IT service support functions required to maintain the FHA Subsidiary Ledger in operation involve all four tiers in HUD's hierarchy of technical support organizations. These organizational tiers cut across the functions defined by the Information Technology Infrastructure Library (ITIL) framework. The definitions of the ITIL framework provide useful distinctions between such functions as resolving an incident to return to operation versus resolving the problem that caused the incident, or between recording a users' report of an incident versus providing the user with information to~~

~~return to operation. The HUD tiers involved in the FHL functions described below are identified to help specify the scope of services FHA seeks under this task order and the requirements for coordination with other contractors and HUD organizations.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.1.1 Help Desk Support function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.1.1.1 Help desk support~~

~~Help desk support is the primary responsibility of other contractors and HUD organizations, which provide the customary tier 1 facilities and services to:~~

- ~~• Receive and record requests for help by telephone and through an automated application available through HUD's intranet~~
- ~~• Route and re-reroute requests that cannot be resolved upon first contact through tier 2 and tier 3 service organizations~~
- ~~• Report on requests, both currently opened and previously resolved.~~

~~The contractor shall:~~

- ~~• For the FHA Subsidiary Ledger system, cooperate with HUD's tier 1, tier 2 and tier 3 support organizations in correctly documenting and routing incidents and problems through HUD's help desk facilities.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.1.2 Incident Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.1.1.2 Incident management~~

~~FHA requires incident management services to restore production operations as soon as possible. Other contractors and HUD organizations will also provide most incident management services. The incident management services provided by other contractors and HUD organizations may involve all four tiers of help desk support, including:~~

- ~~Tier 1 responses that resolve user problems on the first call, by reference to Frequently Asked Questions and routine administrative and remedial procedures (e.g. password reset, workstation cache clearing)~~
- ~~Tier 2 analyses and remedial actions that involve user assistance, alternative business processes and uses of the existing production software, configuration changes and data correction.~~
- ~~Tier 3 analyses and remedial actions that involve normal and routine management of operational facilities such as operating systems software, databases, process and job schedulers, networks, workstations, file transfer facilities, etc.~~
- ~~Tier 4 corrective actions and modifications provided by hardware and software contractors.~~

~~FHA requires that the contractor continue to make available appropriate personnel during all hours of FHA's operation in performing incident management support. Section 4.1.2.3, Availability Management identifies the hours of operation. The contractor shall continue to provide support for incident management.~~

~~The contractor shall:~~

- ~~Analyze incidents referred for assistance concerning the proper configuration of the databases and application software in production, along with related process and job schedules, and file transfer functions, and other aspects of the application operations that may be necessary or helpful to restore production operations quickly.~~
- ~~Provide assistance in executing remedial actions relating to the FHA Subsidiary Ledger application in order to restore production operations quickly.~~
- ~~Cooperate with other tier 2 and tier 3 support organizations in analyzing and identifying the actions necessary to resolve incidents and restore operations.~~
- ~~Coordinate with FHA's tier 2 and tier 3 support organizations to facilitate routing and reassignment of incident reports and remedial actions.~~
- ~~Refer questions as necessary to the tier 4 contractors supporting FHA Subsidiary Ledger COTS software products, report contractor progress on~~

~~inquiries, and implement contractor recommendations for solutions and work-arounds.~~

- ~~• Update help desk records with the contractor's progress and with information about inquiries referred to tier 4 contractors.~~
- ~~• Report on service requests, both currently opened and previously resolved.~~
- ~~• Document incident resolution so that successful remediation solutions can become part of routine incident management responses.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.1.3 Problem Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.1.1.3 Problem management~~

~~FHA requires problem management services to develop and implement long term corrections and modifications to prevent future operating incidents. The contractor shall provide primary support to develop recommendations to identify and plan corrective modifications of the FHA Subsidiary Ledger application in response to incidents that compromise production operations. The contractor shall provide such support for all components of the FHA Subsidiary Ledger, including COTS and custom application software and interfaces operating in all of the FHA Subsidiary Ledger environments (UNIX, MVS, and Windows) identified in the System Support and Acquisition Plan. For these components the contractor shall serve as FHA's source of tier-3 support relating to the FHA Subsidiary Ledger application.~~

~~Under the problem management function of IT service management, the contractor's responsibilities primarily concern problem analysis, identification of possible remedial actions, and justification and planning for long term resolution. When problem analysis indicates that long term resolution requires modifications to the FHA Subsidiary Ledger software, the contractor shall propose modifications for the approval of FHA Subsidiary Ledger project manager¹² or designee, which will be prioritized, and planned along with~~

¹² The FHA Subsidiary Ledger IT service manager is the Government Technical Monitor.

~~other pending software change requests. Actual software design, build, and evaluate activities will be tasked under sections 4.3 and 4.4.~~

~~Under this section the contractor shall:~~

- ~~• Analyze, identify, document, and report on the causes of incidents;~~
- ~~• Plan, test, and migrate to production long term actions involving configuration and schedule changes or other changes short of application software modification;~~
- ~~• Define and recommend software modifications that may be appropriate for FHA to pursue, along with a consideration of feasibility, risk, costs, priorities, and operational impact.~~
- ~~• Update help desk service records to reflect the contractor's progress on problem resolution.~~
- ~~• Cooperate with other tier 2 and tier 3 support contractors and HUD organizations in analyzing, identifying, re-mediating, and resolving problems~~
- ~~• Refer problems as necessary to the tier 4 vendor's supporting COTS software products used in the FHA Subsidiary Ledger (e.g. Oracle), track vendor progress on inquiries, and implement vendor recommendations.~~
- ~~• Update help desk records on the contractor's progress on problem resolution and on the status of inquiries referred to tier 4 vendors.~~
- ~~• Report on the status of FHA Subsidiary Ledger problems, both currently opened and previously resolved, including information relevant to identifying long term remedial actions.~~
- ~~• Document problem resolution so that successful solutions become part of the FHA Subsidiary Ledger operations and SDM documentation.~~

~~Other contractors and HUD organizations will:~~

- ~~• Provide long term problem resolution through changes in FHA financial operations and business processes~~
- ~~• Provide long term problem resolution through changes in production operating systems, production database software, production process and job~~

~~schedules, computing infrastructure, networks, workstations, and interfacing application systems.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.1.4 Configuration Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (IIFMIP) implementation.

~~4.1.1.4 Configuration management~~

~~FHA requires services to identify, document, and report on the status of all components (configuration items) of the FHA Subsidiary Ledger, including hardware, software and documentation.~~

~~Under this subtask the contractor shall manage changes to the FHA Subsidiary Ledger application software, manage the project library, and maintain a complete description (itemized lists of components, diagrams, and narrative descriptions) of all configuration items making up and supporting the FHA Subsidiary Ledger. The FHA Subsidiary Ledger manager will exercise oversight, authority and final approval of all tasks.~~

The contractor shall:

- ~~• Assist the FHA Subsidiary Ledger manager to maintain configuration management processes, including documenting the scope of controlled items, identifying available configuration management information, tools, resources, and sustaining reporting and coordination procedures.~~
- ~~• Using available tools, including HUD configuration management utilities such as STAT and PCVS and desktop applications such as MS Access, assist the FHA Subsidiary Ledger manager to define, implement, maintain and execute procedures for recording, tracking, and reporting on all configuration items.~~
- ~~• Assist the FHA Subsidiary Ledger GTM in controlling changes to configuration items by instituting and executing control procedures based upon government approved Customer Service Requests (for application and configuration changes), Request for Technical Change (for database, operating system, hardware, scheduler, and other production configuration changes), or equivalent 'Request for Change' approval processes.~~
- ~~• Maintain accurate information about the status of configuration items~~

- ~~Verify configuration records and items through audits~~
- ~~Report configuration items in production, in development, or in the project library, in support of financial audits, system reviews, incident and problem management, capacity planning, archiving, and other functions necessary for management of the FHA Subsidiary Ledger.~~

~~Other contractors support and operate the HUD Test Center and production control functions supporting HUD's configuration management policies.~~

4.1.1.4.1 FHA Subsidiary Ledger application software

The contractor shall monitor configuration items migrated to production by developing, executing, and helping to enforce procedures for auditing configuration items through the migration steps in order to assure the integrity of the migration process.

The contractor shall coordinate with other contractors and HUD organizations to support audits of configuration items in production and to identify discrepancies between items in production and planned, migrated, and recommended configurations.

The contractor shall recommend to the FHA Subsidiary Ledger manager changes to develop, execute and assist FHA in enforcing policies and procedures to control the configuration of FHA's development resources, including instance and migration planning and coordination of changes to objects in development and test environments. FHA Subsidiary Ledger manager will exercise oversight, authority and final approval of all tasks.

The contractor shall maintain documentation of FHA's approved and recommended configurations, schedules, and best practices.

4.1.1.4.2 FHA Subsidiary Ledger project library

The contractor shall organize and maintain the library and its catalogue to provide ready access to the products of the FHA Subsidiary Ledger project reflecting both current status and history. The library must be capable of responding to inquiries from oversight organizations (such as the Office of Inspector General or Government Accountability Office) and provide project staff with material to explain current designs of the FHA Subsidiary Ledger system and past decisions about functions and operations. The library itself should include:

- All SDM documents

- Business impact analysis
- Contingency plan
- Security records, including all records of authorizations for system access and artifacts of FHA's execution of security reviews and other security functions described in the System Security Plan
- Submissions to oversight offices and agencies, including, for example, security assessments and reviews and investment reporting
- Audit responses and 'Provided By Customer' materials
- The posting model database
- Project work papers
- References
- Status reports
- Meeting minutes
- Briefing and communication materials
- Test plans, test reports, and test results
- Project metrics and project reviews
- Other pertinent materials
- A catalogue of project library materials

As part of managing the project library, the contractor shall review all submissions of the following SDM lifecycle components so that one set of documents and products supports all activities of the FHA Subsidiary Ledger project and so that these documents and products meet the purposes, objectives, and standards of the SDM:

- Configuration management plan
- System support and acquisition plan
- System security plan

- Computer programs
- Installation and conversion plan
- Operation Manual

The contractor shall coordinate with project team members to ensure that document guidelines can be used effectively. The FHA Subsidiary Ledger GTM manager or designee will exercise oversight, authority and final approval of all activities.

4.1.1.4.3 FHA Subsidiary Ledger system description

The contractor shall maintain a complete and comprehensive description (lists of configuration items, diagrams, narratives) of all of the components making up and supporting the FHA Subsidiary Ledger. The contractor shall maintain the FHA Subsidiary Ledger system support and acquisition plan (required by HUD's SDM) as a comprehensive description of all components of the FHA Subsidiary Ledger, including references and attachments for other documents as appropriate.

The contractor shall maintain documentation that comprehensively describes procedures for reinstalling the application, either by rebuilding the application from vendor supplied disks and remigration of custom objects, or by restoring valid and approved copies of the application. The contractor shall update the installation and conversion plan (required by HUD's SDM) with essential information necessary to enable FHA to exercise this capability.

The contractor shall maintain and update the description of the FHA Subsidiary Ledger in HUD's Inventory of Automated Systems.

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.1.5 Change Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.1.1.5 Change management~~

~~The contractor shall assist FHA to plan and control changes in FHA Subsidiary Ledger configurations items.~~

~~Other contractors and HUD organizations plan and control changes to FHA Subsidiary Ledger hardware, operating systems, databases, networks, process and job schedules, and interfacing applications. The contractor shall assist FHA in providing timely recommendations and acquiring the necessary approvals of the FHA Subsidiary Ledger manager through the change management processes controlling these items on matters affecting FHA Subsidiary Ledger operations.~~

~~The contractor shall develop recommendations for the FHA Subsidiary Ledger manager to define, implement, maintain, and execute procedures for FHA to manage changes in the FHA Subsidiary Ledger application software through the following activities:~~

- ~~• Recording requests for changes from all sources~~
- ~~• Qualifying requests for further review based on the availability of information~~
- ~~• Classifying requests by category and priority~~
- ~~• Disposing of requests through an FHA Change Control Board or equivalent FHA approval function~~
- ~~• Planning work on approved requests including preliminary assessments of scope, scale, and feasibility, and sequencing and consolidating changes for release.~~
- ~~• Coordinating change plans and schedules with other contractors and HUD organizations~~
- ~~• Maintaining regression test suites and procedures~~
- ~~• Evaluating the success of changes introduced into production from the point of view of change control and release procedures, conformance to design, impact on FHA financial operations.~~

~~The contractor shall draft, update, and assist FHA in maintaining the certification and accreditation of the system in accordance with NIST standards¹³, including:~~

¹³ For example, see NIST Special Publication 800-53.

- ~~Completion of the annual self-assessment and quarterly update of the resulting plans of action and milestones (POA&M) with HUD staff exercising final approval and authority.~~
- ~~Support for independent assessment at prescribed renewal intervals under federal guidelines (currently three years), and~~
- ~~For major changes in the FHA Subsidiary Ledger application or its host environment.~~

4.1.1.6 Release management

The contractor shall assist the FHA Subsidiary Ledger manager to execute procedures for releasing all changes to FHA Subsidiary Ledger application software into production. The contractor shall define, implement, maintain, and assist in executing policies and procedures for:

- Emergency releases.
- Minor software releases of limited scope and impact that can be implemented quickly without incurring significant risk to FHA's objectives, such as minor report changes.
- Major releases.

As part of release management, the contractor shall assure that FHA has the capability to reverse changes and to revert the FHA Subsidiary Ledger software to its pre-release status.

The contractor shall also coordinate with other contractors and HUD organizations that will:

- Perform the final testing in the HUD Test Center¹⁴ as the last step prior to release of FHA Subsidiary Ledger software changes into production.

¹⁴ The HUD Test Center is the final gateway for production releases of the FHA Subsidiary Ledger to HUD's UNIX and Windows environments. See <http://www.hud.gov/po/it/security/cmp/cacmbtocr.htm>. The HUD Test Center is managed by HUD's OCIO and operated by OCIO contractors.

- Manage the release of new hardware, operating system software, database software, network facilities, and desktop facilities into the production environment.
- Manage the release of configuration changes, changes in automated schedules, database and UNIX scripts, and other processes and controls normally associated with management of hardware, operating system software, database software, network facilities, and desktop facilities.

In coordinating with other HUD organizations the contractor shall follow the release management procedures adopted by those organizations.

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.2 IT Service Delivery function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

4.1.2 IT service delivery

~~IT service delivery includes all of the activities necessary to define and satisfy user expectations for FHA Subsidiary Ledger services in production. IT service delivery functions include service level management, continuity management, availability management, capacity management, and investment management. In the event FHA implements its contingency plan, the contractor will be required to support FHA's activities in returning to normal operations. In addition to providing support during HUD's established hours of operation, the contractor may also be required to provide support at other times to meet FHA's requirements for system availability.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.2.1 Service Level Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

4.1.2.1 Service level management

~~FHA requires assistance in establishing and maintaining service expectations for users and for the owners of interfacing systems. Service levels agreements for users have not been formally documented. Service level agreements with interfacing systems have been defined in interface control documents. In all cases, FHA requires assistance in measuring, maintaining and managing service level expectations:~~

In managing the FHA Subsidiary Ledger, the contractor shall:

- ~~Review existing services and identify baseline service levels from available reports, tools, and history;~~
- ~~Recommend establishment of baseline service levels in a service level plan reflecting FHA's current experience;~~
- ~~Conduct periodic reviews of FHA's current processing experience and propose areas in which FHA's objectives would be better served by changes in service levels;~~
- ~~Propose service priorities;~~
- ~~Plan for service growth;~~
- ~~Maintain and update service level agreements, including interface control documents;~~
- ~~Report on performance relative to the service level plan through the contractor's quality surveillance plan (section 4.5.3.1).~~

~~The service level plan shall identify metrics for all activities that may affect the availability, reliability, integrity and economy of the FHA Subsidiary Ledger system whether or not the activities are services of the contractor. Service level metrics shall rely upon information available to the contractor within the scope of its services under this task order.~~

~~The contractor shall assist FHA in reaching agreement with other HUD organizations and implementing and updating formal service level agreements (such as interface control documents) necessary to meet FHA's objectives for the FHA Subsidiary Ledger (Section 2.0.).~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.2.2 Continuity Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.1.2.2 Continuity management~~

~~The contractor shall make recommendations for, and provide technical assistance in, the drafting, updating, and maintenance of documents and plans essential to managing the~~

~~continuity of FHA Subsidiary Ledger operations in accordance with all applicable federal statutes, regulations, and guidelines including FISMA, NIST, and OMB memoranda and circulars. The plans shall encompass procedures for assuring continuity of operations commensurate with FHA's objectives (Section 2.0) over the entire range of risks faced by FHA, including for example daily and other periodic backups of transaction data and balances, restoration of the entire FHA Subsidiary Ledger application or major components, and operation from alternative data center facilities.~~

~~As part of its responsibilities under this task, the contractor shall maintain and update the documents required under federal guidelines for continuity of operations with federal oversight and approval:~~

- ~~• Business impact analysis~~
- ~~• Contingency plan~~

~~The contractor shall advise FHA of new statutes, regulations, and guidelines affecting continuity management and propose and execute steps to maintain compliance.~~

~~The contractor shall:~~

- ~~• Provide assistance to FHA to evaluate options for recovery upon request~~
- ~~• Collaboratively schedule, assist in planning, facilitate execution, and validate the results of periodic testing, evaluation, and audits and oversight reviews of FHA's continuity plans, procedures, and recovery readiness.~~

~~Currently FHA plans annual tests of its database backup and recovery procedures using FHA Subsidiary Ledger development and test environments. The contractor must:~~

- ~~• Coordinate the scheduling of these tests with other contractors and HUD organizations;~~
- ~~• Provide assistance in planning and executing recovery operations consistent with current instances and configurations in the development and test environments;~~
- ~~• Support FHA in validating the results.~~

~~Currently, FHA plans bi-annual tests for data center recovery. Other contractors and HUD organizations will schedule and execute the data center recovery tests. The contractor will support FHA in validating the data center recovery test results.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.2.3 Availability Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (IIFMIP) implementation.

~~4.1.2.3 Availability management~~

~~The contractor shall make recommendations to the FHA Subsidiary Ledger manager for, and provide technical assistance in, maintaining plans and procedures for managing the availability of the FHA Subsidiary Ledger to support FHA financial operations. The FHA Subsidiary Ledger must be operational from 7:00 a.m. (ET) to 5:00 p.m. (ET) Monday through Friday. In addition, there are periods in which additional support is needed. HUD estimates that an additional 80 hours of support will be required annually. FHA staff and their accounting support contractors work outside these normal hours of operation to support FHA's quarterly and annual accounting activities or to support infrastructure and system upgrades affecting the FHA Subsidiary Ledger system. These work periods are well established and arrangements are made weeks/months ahead. The contractor will be required to provide systems support during these additional periods, compensating for hours over the estimated 80 additional hours annually through time off during normal working hours.~~

~~The contractor shall:~~

- ~~• Identify key functions and process and job schedules, including regularly scheduled processes that must complete to enable users to begin work in the morning, and routine file transfers that are necessary for daily cash operations and monthly, quarterly, and annual accounting cycles.~~
- ~~• Monitor availability through evaluation of user incident and problem reports.~~
- ~~• Monitor availability through periodic independent observation of key functions and process and job schedules and review of available performance reports.~~

- ~~Make recommendations for, and provide technical assistance in, planning, defining, implementing, testing, and migration to production procedures and reports that may be necessary to monitor system availability in keeping with the objectives of Section 2.0.~~
- ~~Coordinate with other contractors and HUD organizations to define, implement, maintain, and execute automated monitoring procedures with HUD authority and oversight.~~
- ~~Assist FHA in communicating availability issues to users and to FHA management.~~
- ~~Report all ABENDS and other system errors by the following business day.~~

~~The contractor shall recommend changes to schedules and service levels when changes in system availability are desirable to meet FHA's objectives (per Section 2.0).~~

~~Should FHA enact its contingency plan in the event of a disaster, the contractor may be required to work outside of FHA's posted hours of operations.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.2.2 Capacity Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

4.1.2.4 ~~Capacity management~~

~~The contractor shall assist the FHA Subsidiary Ledger manager in performing his or her responsibility to identify requirements for, and to manage, infrastructure capacity for the FHA Subsidiary Ledger. Other contractors and HUD organizations are primarily responsible for infrastructure planning, design, installation, acquisition, and operation. However, FHA is responsible for establishing the hardware and software requirements of the FHA Subsidiary Ledger in terms of business needs, optimizing schedules and utilization to take best advantage of available capacity, and forecasting future requirements (all from the perspective of the objectives identified in Section 2.0) so that other contractors and HUD organizations have the information necessary to acquire the required capacity in a timely and efficient manner to properly support FHA operations.~~

~~The contractor shall:~~

- Make recommendations for, and provide technical assistance in, the definition, implementation, maintenance, and execution for regular performance measurement procedures for the FHA Subsidiary Ledger in operation, identifying key processes for which performance is sensitive or critical, HUD staff maintaining final approval
- Recommend FHA Subsidiary Ledger processes that other contractors and HUD organizations should measure for performance within their separate areas of responsibility
- Document size and performance characteristics of the infrastructure necessary for the FHA Subsidiary Ledger to meet the objectives of Section 2.0.
- Forecast growth in capacity requirements
- Recommend changes in schedules and utilization (subject to the objectives of Section 2.0) that would enable FHA to take best advantage of available capacity, including for example job and process schedules, timing and scope of backups, tuning options, and procedures for archiving records.

4.1.2.5 Financial management for IT systems

FHA requires assistance in maintaining the financial reporting and regulatory compliance functions associated with major financial systems in the federal government.

Support for Investment planning and reporting on FHA's financial management and other program management systems, including assistance to meet federal and HUD oversight and reporting requirements.

4.1.2.5.1 Investment reporting (cross reference task 4.5.4)

The task order support requirements for financial management associated with IT investment selection, control and evaluation are assigned under this task order to task 4.5.4 for purposes of organizing the administration of this task order. A reference is included here for consistency with the ITIL framework.

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.5.2 Regulatory Oversight and Audit Support function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.1.2.5.2 Regulatory oversight and audit support~~

~~The contractor shall support the FHA Subsidiary Ledger manager in responding to regulatory oversight and standard-setting functions relating to the FHA Subsidiary Ledger, including:~~

- ~~• Support for FHA's annual financial statement audit, including briefings, preparation of presentations and overviews, providing qualified and approved system access for auditor reviews and testing, providing documents from the project library and artifacts demonstrating the FHA Subsidiary Ledger's control and management processes, and supporting FHA in providing reports from the system on subjects of interest to the auditors and reviewers.~~
- ~~• Support for OMB Circular A-123, A-127, and A-130 compliance self-assessments relating to the FHA Subsidiary Ledger~~
- ~~• Support for independent reviews of the FHA Subsidiary Ledger in connection with A-123, A-127, A-130 compliance and audits and inquiries on subjects of special interest to the Office of the Inspector General, the Government Accountability Office, and other federal oversight offices. FHA may require assistance in preparing briefings, making presentations, providing documents from the project library, providing qualified and approved system access for reviews, audits and tests, answering questionnaires, and the like, with the FHASL project manager providing final approval~~
- ~~• Assistance to the FHASL project manager in developing comments for federal standard setting activities relating to financial systems, typically requiring reviews of draft standards and identification of issues affecting the FHA Subsidiary Ledger system with FHASL project manager oversight authority and approval~~

~~The contractor shall support regulatory and oversight compliance for the FHA Subsidiary Ledger as an individual system, rather than as a consolidated group of systems.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.1.3 IT Security Management function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

4.1.3 IT security management

~~FHA bears ultimate responsibility for the security of its financial management systems. System security continues to be the subject of active attention from the Congress, OMB, and standard setting bodies such as NIST. However, FHA requires technical assistance under this task order to maintaining compliance with both current and newly developed security requirements for FHA Subsidiary Ledger components under its direct control.~~

~~While FHA has ultimate responsibility for system security, FHA must depend upon other HUD organizations to provide security for significant components of the security environment, including IT infrastructure (hardware, networks, operating systems, and production databases), facility access, and personnel access. FHA requires the contractor to cooperate and help FHA monitor and participate in the security procedures HUD has established for components of the FHA Subsidiary Ledger not under FHA's direct control.~~

4.1.3.1 Application security management and administration

The contractor shall assist FHA in executing the security functions of the FHA Subsidiary Ledger application software under FHA's control. The security functions under FHA's control consist primarily of application level security within COTS PeopleSoft software and custom software developed within the PeopleSoft environment. FHA also controls security for certain interface operations in mainframe environments shared with source systems. The contractor shall make recommendations to the GTM and, upon approval of the FHASL project manager, assist FHA in defining, implementing, maintaining, and executing procedures to:

- Grant, modify and discontinue users access
- Routinely validate access for current users in the system through automated reports to FHA (i.e. FIIA supervisors, managers, and contracting officer's representatives - Government Technical Monitors or Government Technical Representatives)
- Routinely verify documented management approvals for current users in the system
- Routinely meet with FHA in person to review the access of current users with greater than read system privileges

- Update security documents required under federal statutes and regulations periodically to maintain compliance with standards and to maintain accurate documentation for standard operating procedures for security functions, including documentation regarding the protection of personally identifiable information and documentation required under NIST security guidelines
- Perform scans and other procedures for security controls as documented in the System Security Plan.

The contractor shall maintain and update the structure of roles and privileges defined at the application level in the FHA Subsidiary Ledger, advise GTM on possible improvements, and execute approved improvements.

The contractor shall maintain and update reporting capabilities to support FIIA Subsidiary Ledger application security functions, audits, and reviews.

4.1.3.2 Operating system and database security management

The contractor shall propose and, upon FHA's approval, execute and maintain procedures to request and review security access and ownership of FHA Subsidiary Ledger components under the operating systems (e.g., UNIX, Windows, and MVS) and within their databases. When the contractor or FIIA notes possible or actual exceptions to applicable security procedures, the contractor shall assist FIIA in requesting remedial actions.

Other contractors and HUD organizations are responsible for operating and maintaining the financial management operating systems and databases, including executing the remedial actions FIIA may request.

The contractor shall assist FIIA to:

- Request new, modified, or discontinued user access to HUD operating systems and database management systems supporting the FHA Subsidiary Ledger
- Routinely review current user access to HUD operating systems and database management systems supporting the FHA Subsidiary Ledger
- Routinely review ownership and access properties of files and directories maintained for the FHA Subsidiary Ledger

- Recommend and assist FHA in requesting remedial actions when security exceptions are noted
- Quarterly execute comprehensive changes to accounts used in production and development operations (in other words, accounts associated with operating systems, databases, and application processes) in accordance with the FHA Subsidiary Ledger¹⁵.

4.1.3.3 Security audits, oversight, and new procedures

The contractor shall make recommendations to FHA and, upon approval, assist FHA in responding to security audits, independent oversight reviews, and self-assessments required by federal regulations and guidelines, including for example certification and accreditation assessments pursuant to NIST SP800-53. FHA may require the contractor's assistance in conducting briefings, preparing presentations and overviews, answering questionnaires, providing qualified and approved system access for auditor reviews and testing, providing documents from the project library and artifacts demonstrating the systems' control and management processes, and supporting FHA in providing reports from the system on subjects of interest to the auditors.

The contractor shall assist FHA in defining, implementing, maintaining, and executing plans and procedures to assure continuity of operations and security for the FHA Subsidiary Ledger, in compliance with federal statutes, regulations, directives, and guidelines. FHA may require the contractor's assistance in reviewing and evaluating existing and new federal statutes, regulations, directives, and guidelines. The contractor shall propose, and upon GTM approval, execute and maintain procedures to sustain FHA's compliance. The contractor's proposals shall include steps to demonstrate and document compliance with reports, meeting minutes, and other artifacts for presentation during audits and other security reviews and federal oversight proceedings.

¹⁵ See *FHA Subsidiary Ledger Administrative Password Change Procedures* at http://hudsharepoint.hud.gov/sites/home_team/FHA-SL/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fsites%2fhome%5fteam%2fFHA%2dSL%2fShared%20Documents%2fBatch%20Password%20Change&FolderCTID=&View=%7bCC6DDA10%2d9F8D%2d46C4%2d9390%2dA18471ADCEB6%7d

As part of its responsibilities under this task, the contractor shall maintain and update the documents required for security under federal guidelines, authority and approval, including:

- Security risk assessment
- System security plan

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.2 IT Infrastructure Services function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.2 IT infrastructure services (CLIN: 1002, 2002, 3002, 4002 and 5002) (SDM Code I Systems Operations)~~

~~FHA requires database administration and application administration services to carry out certain infrastructure management responsibilities it retains as owner of the FHA Subsidiary Ledger. These responsibilities include limited support for the production environments and more comprehensive support for development and test environments.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.2.1 Support for Production Operations function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.2.1 Support for production operations~~

~~Other contractors and HUD organizations are primarily responsible for the operation of the FHA financial management systems in production and for providing and managing the hardware, operating system software (e.g., UNIX, MVS, Windows), database management software (e.g., Oracle), network connectivity, and workstations.~~

~~FHA retains residual responsibility as system owner for certain decisions and actions that affect the operation of the system in production. FHA's responsibilities and the responsibilities of other FHA contractors, OCIO and OCIO's HITS III contractors, are specified in the document FHASL Roles and Responsibilities (see footnote 10)~~

~~The contractor shall support FHA in its responsibilities towards production operations by collaborating in scheduling and other coordination of infrastructure actions; validating~~

remedial actions affecting FHA financial management operating systems, database, and application software environments; and providing application-specific and business process-specific information necessary for effective management of the production infrastructure:

- Collaboration in scheduling and coordination of infrastructure actions
- Collaborative scheduling of hardware maintenance consistent with FHA's operations and development priorities and the availability of supporting resources
- Collaborative scheduling of upgrades and changes to Software infrastructure management (operating system software—Unix, Windows, MVS—and utilities) consistent with FHA's operations and development priorities and the availability of supporting resources
- Collaborative planning and scheduling of periodic backup and recovery tests and disaster recovery tests

Validation of upgrades, backup and recovery and disaster recovery tests, incident management procedures to restore essential operations, and remedial problem management actions

- Validation from the system owner's perspective that performance tuning actions for the infrastructure have been effective
- Validation from the system owner's perspective that upgrades and changes to the infrastructure have been effective and have not compromised FHA financial operations
- Validation of the results of periodic backup and recovery tests and disaster recovery tests

Recommendation, direction, and support relating to application-specific and business process specific requirements

- Advice on application capacity requirements that would affect hardware planning
- Specification of requirements for recoverability
- Assistance in identifying application-specific constraints affecting startup and shutdown schedules for software infrastructure components

- ~~Assistance in identifying performance problems that from the system owner's perspective are affecting required service levels~~
- ~~Assistance in notifying users of problem events~~
- ~~Recommendations for actions required to complete corrective infrastructure software actions identified through self assessments or independent certification and accreditation reviews~~
- ~~Assistance in planning, scheduling, executing, and verifying the results of periodic backup and recovery tests and disaster recovery tests~~
- ~~Specification of application specific requirements for production schedules, start up and shutdown scripts and procedures for all application components; database configuration and table structures, database maintenance procedures, and production infrastructure in connection with incident management (section 4.1.1.2) to restore essential operations and on problem management (section 4.1.1.3) to implement remedial changes~~
- ~~Reinstallation or restoration of the FHA Subsidiary Ledger in connection with upgrades of hardware, operating system software, database software or other infrastructure components.~~
- ~~Recommendations for changes to the production infrastructure identified by tier 4 application software vendors in connection with incident and problem management (sections 4.1.1.2 and 4.1.1.3)~~
- ~~Updates to FHA Subsidiary Ledger operations and maintenance manuals, including updates to run books, restart procedures, and error recovery~~

~~The Contractor shall perform system development support in accordance with Sections 4 through 6 of the SDM and in accordance with the performance requirements and parameters specified in the Government's orders.~~

~~The Contractor shall provide to HUD as part of this task order agreement data that support the design conclusions as each phase is completed for approval by HUD's GTM. HUD's GTM will submit to HUD's Test Center for testing and evaluation each phase and process. Upon successful completion of testing the GTM will review all data for final acceptance after testing in HUD's Test Center. This effort shall be done as the initial part of the task order performance period to provide a baseline for current year responses."~~

4.2.2 Support for development and test environments

FHA requires support to maintain development and test environments for system development work (corrective, perfective, and adaptive) to be performed by the contractor as well as other contractors.

The contractor shall define, install, and maintain database and application environments for maintenance and testing functions in accordance with an instance strategy and migration procedures identified in the configuration management plan. The FHA Subsidiary Ledger runs primarily under a UNIX operating system with Oracle database management software, but also has components operating under MVS and Windows. The contractor shall:

- Create, maintain, back up, and restore all development and test environments (including environments under UNIX, Windows, and MVS as necessary).
- Migrate configuration items from one development and test environment to the next in accordance with migration procedures and with the instance strategy of the configuration plan.
- Provide assistance in building scripts and defining procedures to migrate test and development data and application configurations from one development or test environment to the next.
- Define, implement, and help enforce procedures to control changes to items in the development and test environments and to prevent conflicts affecting work-in-progress.
- Install, update, and maintain development facilities and utility software required for development and testing activities including PeopleTools, SQR, AutoSys, STMP.
- Implement and administer utility software (such as STAT) to track and report problems and Customer Service Requests in development and test;
- Install, back up, restore, and maintain application software required in the maintenance and test environments including the PeopleSoft Financials and PeopleSoft Revenue Management COTS products and FHA's custom developed application programs.

Other contractors and HUD organizations will provide and maintain the hardware, operating system software (UNIX, MVS, and Windows), database management software (Oracle), network connectivity, and workstations required for the FHA Subsidiary Ledger development and testing environments.

The Contractor shall provide to HUD as part of this task order agreement data that support the design conclusions as each phase is completed for approval by HUD's GTM. HUD's GTM will submit to HUD's Test Center for testing and evaluation each phase and process. Upon successful completion of testing the GTM will review all data for final acceptance after testing in HUD's Test Center. This effort shall be done as the initial part of the task order performance period to provide a baseline for current year responses. The FHA Subsidiary Ledger manager will exercise oversight, authority and final approval of all tasks.

4.3 IT System Maintenance (SDM Code J – Maintenance) (CLIN 1003, 2003, 3003, 4003 and 5003)

All changes to the FHA Subsidiary Ledger application software (maintenance and new development must conform to the requirements of HUD's System Development Methodology (SDM). Maintenance involving corrections to conform the software to current specifications does not require updates or changes to the documents defined in the SDM. Maintenance involving changes to respond to new business conditions or program requirements typically require updates to existing documents pursuant to the SDM. Development (major changes adding entirely new functions to the FHA Subsidiary Ledger) will require complete documentation as defined in the SDM.

4.3.1 HUD software development standards

The SDM represents HUD's implementation of professional system engineering methods as a standard for all business system maintenance and development. The contractor shall always reference and apply the latest version of the SDM standard available at <http://hudatwork.hud.gov/po/i/it/sd/devlife/devlife.cfm>

The principle components of the SDM summarized here:

4.3.1.1 Define phase activities

In the Define phase, the contractor shall document the functional, data and performance requirements of all of the end-to-end business processes required for FHA Subsidiary

Ledger changes. Define phase activities will provide the foundation for configuring in the COTS software and for designing and building custom software during subsequent lifecycle phases.

The contractor shall include within HUD's define phase SDM documents: 'as-is' business processes, 'to be' business processes, the beginning of the requirements traceability matrix, fit-gap analysis, preliminary allocation of required functions to COTS and custom software, and preliminary demonstration of the 'fit' COTS functions. The Functional Requirements Document will completely describe all of the business processes necessary to support FHA's insurance programs under each task, including transaction processes, business cases and conditions for exception processing, processes for internal controls and reconciliations, and reporting for internal operations as well as for FHA financial management needs. The Data Requirements Document will describe the required business inputs and outputs for each process, and characterize the source and target entities (e.g. other FHA source systems, organizations responsible for data entry, organizations responsible for certification or acceptance decisions, internal and external reports or queries, etc). Identification of specific tables and data elements, input panel elements, and report layouts and the like will be completed in the design phase and included in the design and specification documents produced for that phase.

The contractor shall recommend strategies for conversion of historical data and identify the scope of conversion activities within the Functional Requirements Document and the Data Requirements Document.

In the Define phase, the contractor will participate in meetings and discussions of end-to-end business process requirements. The contractor will be responsible for understanding the business processes for which custom software is required and for identifying requirements information that must be documented to adequately support the design of custom software. The contractor will provide assistance in identifying systems engineering questions that must be resolved to support subsequent COTS configuration or custom software design work.

The main deliverables of this phase are: System Support and Acquisition Plan, Functional Requirements Document, Data Requirements Document, System Security and Privacy Plan, and Internal Audit Plan. Reference HUD's SDM Templates and Checklists at <http://www.hud.gov/offices/cio/sdm/devlife/tempcheck.cfm>.

The contractor shall prepare and conduct a requirements readiness review to confirm that the end-to-end business processes are supported by the proposed designs and COTS software configurations. An important measure of successful participation in the define

phase is a small number of exceptions identified during the requirements readiness review.

4.3.1.2 Design phase activities

In the Design phase, the contractor shall first prepare system and subsystem design specifications and then prepare detailed program and technical specifications.

The system and subsystem specifications will allocate required functions, data, and processing characteristics or qualities to COTS and custom software components and elaborate on the process and data requirements for all components. For COTS components the system and subsystem specifications will identify high-level configurations and provide prototype or summary descriptions of lower level configurations. For custom components the system and subsystem specifications will identify detailed process components and their qualities. For all data requirements, the system and subsystem specifications will identify the COTS and custom database components on which the system will depend and will provide high-level system descriptions of the data structures. The system and subsystem specifications will further elaborate the requirements traceability matrix so that all required functions, data, and processing characteristics are accounted for in the design.

The system and subsystem specifications must include custom processes required to support conversion of historic data.

The detailed program and technical specifications will completely identify the COTS and custom software and database components that must be built to realize the design. Program specifications will elaborate on the subsystem specifications to provide:

- Detailed COTS configurations
- Detailed technical specifications for custom software 'work packages', incorporating any consolidation or integration of subsystem process specifications that may afford FHA savings in development and maintenance
- Detailed database specifications.

The detailed program and technical specifications will provide sufficient information to support build phase activities (coding, configuration) without further elaboration.

In the design phase, the contractor shall also identify strategies for testing and training for the proposed design:

- The testing strategy shall include identification and analysis of risks and describe testing and testing alternatives appropriate to mitigating risk. The testing strategy shall cover Verification and Validation Testing, Performance Testing Regression Testing, and User Acceptance Testing. In the design phase the testing strategy shall include the contractor's proposals for the scope, participants, and criteria for FHA's final acceptance. Although User Acceptance Testing documented in the testing strategy, FIIA is entirely responsible for the design and conduct of User Acceptance Testing and for the final acceptance decision.
- The training strategy shall propose the scope, participants, methods, and media for end user and technical training.

The main deliverables of this phase are: System/Subsystem Specifications, Database Specifications, Program Specifications, Validation, Verification, and Testing Plan, and the Training Plan. Reference HUD's SDM Templates and Checklists at <http://www.hud.gov/offices/cio/sdm/devlife/tempcheck.cfm>. The contractor shall update previous SDM documents to accurately reflect the results of any changes or remedial actions taken during this phase.

The contractor shall prepare and conduct a design readiness review to confirm that the end-to-end business processes are supported by the proposed designs and COTS software configurations.

4.3.1.3 Build phase activities

In the Build phase, the contractor shall configure the COTS components and construct the new custom software required to support the 'to be' business processes. During the Build phase, developers will rely upon the requirements and design information produced in prior lifecycle phases to write the code and create the databases and other software products that will comprise the system. Developers will also 'unit-test' their products to assure that each software component executes in accordance with design specifications. The system and subsystem specifications will further elaborate the requirements traceability matrix so that all required functions, data, and processing characteristics can be related to the system components actually configured and built.

Also in the build phase the contractor shall prepare:

- Detailed test plans, test scripts, test data, test configurations, and test data management processes including data mover scripts or equivalent processes for repeated migrations to support testing activities for Verification and Validation Testing, Performance Testing, and Regression Testing.
- Supplementary support products for FHA's User Acceptance Testing,
- Strategies for installation and cutover,
- Plans for data conversion, including validation and acceptance of conversion procedures,
- Draft operations documentation, including preliminary process and job schedules, interface procedures, backup and recovery procedures, restart procedures, database management procedures, and other information to transition responsibility to HUD operating organizations.

In addition to the 'unit-test' of individual software components, the build phase includes string testing of COTS and custom software together. String testing is 'unit-testing' of the end-to-end functions that the COTS and custom components are intended to support. String testing assures that operational dependencies between custom software and COTS products will execute.

The contractor shall update and complete the Test Plan to provide comprehensive support for all evaluation requirements including validation and verification of business processes, performance requirements, regression testing, and user acceptance procedures.

The main SDM deliverables of this phase are: Installation and Conversion Plan, Test Plan (Verification and Validation, and User Acceptance), User's Manual, Operations Manual, and Maintenance Manual. Reference HUD's SDM Templates and Checklists at <http://www.hud.gov/offices/cio/sdm/devlife/tempcheck.cfm> . The contractor shall update previous SDM documents to accurately reflect the results of any changes or remedial actions taken during this phase.

The contractor shall prepare and conduct a test readiness review to confirm that the end-to-end business processes are supported by the COTS product configurations and custom software. Although there are not separate, project-level documents required to support the adequacy of the unit and string testing that is integral to build phase activities, the adequacy of the COTS configuration and custom build work will be measured by the number of defects revealed during subsequent VV&T testing.

4.3.1.4 Evaluate phase activities

The contractor shall validate and verify the readiness of the new COTS configurations, custom software and conversion processes by executing the VV&T, Performance, and Regression test plans during the Evaluate phase and shall coordinate and execute timely remedial actions. The contractor shall execute regression and performance test in accordance with the Test Plan. Errors and omissions during this phase often impact the program areas and users directly, and can result in costly maintenance efforts while in production. Revisions during the evaluate phase are therefore an important measure of the successful performance of all of the preceding phases. The main activities are verification and validation testing, performance testing, regression testing or analysis, and user acceptance testing.

The contractor shall also provide supplementary technical support that may be needed, at the direction of the GTM, to enable FHA to complete User Acceptance Testing. Supplementary technical support may include special test reports, queries, operating assistance, updates to operating instructions, or expedited error correction. However, FHA is entirely responsible for the User Acceptance Test. FHA may unilaterally modify the original User Acceptance Test Plan to fully explore risks that become apparent during testing. FHA management will make the final decision about the overall readiness of the software and any risks associated with its production release.

The main deliverable for this phase is the Test Results and Evaluation Report. Reference HUD's SDM Templates and Checklists at:

<http://www.hud.gov/offices/cio/sdm/devlife/tempcheck.cfm> . HUD's SDM documents for this phase shall include supporting information such as: verification and validation test data, test scripts, and test results, and UAT scripts and results (i.e. Executive Summary report). The contractor shall update previous SDM documents to accurately reflect the results of any changes or remedial actions taken during this phase.

The contractor shall prepare and conduct an operational readiness review to confirm whether end-to-end business processes are supported by the proposed designs and COTS software configurations.

4.3.1.5 Initial Operate Phase Activities

The purpose of the Operate phase is to manage the system's production release and operation in its intended production environment, and to establish a framework for maintaining the system through its operational lifecycle. The contractor shall support FHA fulfilling its primary responsibility for scheduling and staging products for

migration to production. The contractor shall support FHA during initial operation in coordinating, remediating, and executing: training, installation and conversion, the retirement of predecessor systems, and initial operations problems. These issues are described and guidance in managing these activities is provided in HUD's SDM Templates and Checklists at <http://www.hud.gov/offices/cio/sdm/devlife/tempcheck.cfm> .

The period of initial operation in a new program area requires an enhanced level of support for incident and problem management, and a continuation of system engineering activities to resolve problems. Business processes require adjustment for actual workloads and for unanticipated conditions. Experience suggests system improvements that were not previously apparent. Users also benefit from more extensive or more detailed training as they acquire operational experience with the new system.

During the period of initial operations, the contractor will assist in transition of operations for custom FHA Subsidiary Ledger software, troubleshoot and resolve operating problems, and provide updates to the appropriate SDM and other control documents to reflect changes necessary to complete migration to production.

4.3.1.6 Initiate phase activities

Substantial application changes (new development) may require complete revisions of the documents that HUD's SDM requires to initiate a new application development project. If HUD determines that a perfective maintenance task or adaptive maintenance task requires an entirely new investment justification, the contractor may be assigned responsibility to prepare new initiate phase documents including:

- Needs statement
- Project plan
- Configuration management plan
- Quality assurance plan
- Feasibility study
- Cost/benefit analysis
- Risk analysis
- System decision paper

Reference HUD's SDM Templates and Checklists at:
<http://www.hud.gov/offices/cio/sdm/devlife/tempcheck.cfm> .

4.3.2 Maintenance of the FHA Subsidiary Ledger System

FHA requires a continuing capability to implement changes to all components of the FHA Subsidiary Ledger application software to meet the current needs of its financial operations. These changes provide FHA with a continuing capability to sustain steady state operation of its core financial functions as defined by the Office of Management and Budget Circular A-11, Section 300.¹⁶ The contractor shall maintain the capability to implement such changes on an ongoing basis at the direction of the GTM.

The contractor must organize its activities for maintenance according to the framework provided by HUD's SDM. At any one time, FHA typically has a backlog of application software change requirements. New maintenance requirements are added through the problem management process (task 4.1.1.3), and priorities will change. The backlog is therefore dynamic. FHA will identify, prioritize, and approve requests for maintenance through change management process (task 4.1.1.5). The contractor shall maintain development and test environments for maintenance as provided under Task 4.2.2.

Maintenance may require changes to custom software or the installation of vendor-supplied patches (sections 4.1.1.2 and 4.1.1.3). In either case, the contractor shall follow HUD standards for software development and implementation, applied to each maintenance task as appropriate to its scale and to the need to update existing system documentation. The contractor will assist FHA under Task 4.1.2.5.1, Investment Reporting, in identifying and planning whether a proposed maintenance task may require comprehensive updates to the FHA Subsidiary Ledger initiate phase documents.

Maintenance actions, through customer service requests (CSRs), fall under the following levels of effort:

- 1) large (160 to 320 hours of staff effort);
- 2) medium (80 to 160 hours of staff effort); and
- 3) small (less than 80 hours of staff effort).

¹⁶ http://www.whitehouse.gov/OMB/circulars/a11/current_year/s300.pdf

On average, maintenance actions require as much time for testing as for requirements definition, design and building. However, individual modifications will vary greatly, so that some may require a small effort for requirements definition, design and building (8-40 hours), but may also require a large effort for testing (80 to 160 hours) because of extensive dependencies with other functions of the FHA Subsidiary Ledger.

Example: A representative backlog of maintenance would have the classifications for size and effort as follows:

Size and Effort for 12 months of Maintenance:

Order of Magnitude	Define, Design and Build Effort (Hrs)	Test Effort (Hrs)	Estimated Distribution of CSRs (Number)
High	220	100	10
Medium	80	80	18
Low	20	60	36

In order to meet FHA's evolving operational needs, the contractor shall provide the capability during any 12 month period to complete modifications equivalent to this representative backlog of maintenance. The contractor shall coordinate with FHA to schedule work on the backlog, to make adjustments in priorities within the backlog, to substitute modifications of equivalent effort in response to changing priorities, and to coordinate work on backlogged changes with release management procedures (section 4.1.1.6).¹⁷

HUD distinguishes two type of maintenance, corrective and adaptive, both within the scope of OMB's definition of steady state operation.

4.3.2.1 Corrective maintenance services (SDM Code J, Maintenance)

4.3.2.2 Adaptive maintenance services (SDM Code C: System Design/Development)

¹⁷ A sample release schedule and CSR list will be provided.

When authorized and funded through a task order modification, approved by the contracting officer, the contractor shall perform adaptive maintenance in accordance with the priorities and schedules approved by the Change Control Board. As of the beginning of FY2010, adaptive maintenance is funded separately from corrective maintenance within HUD's information technology investment management process in a category with development. Adaptive maintenance services are within the scope of services FIIA may require under this task order, but will be added to the maintenance deliverables when funding is available.

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.4 System Development and Other Services for FHA Subsidiary Ledger System TBD function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.4 System Development and Other Services for the FHA Subsidiary Ledger System TBD (SDM Code C System Design/Development) and (SDM Code J Corrective Maintenance) (CLIN 1004, 2004, 3004, 4004 and 5004)~~

~~FHA may require system development or other additional support services within the scope of the Office of Management and Budget Circular A-11 definition of either system development and modernization or steady state operation¹⁸. Development services will add new functions to the FHA Subsidiary Ledger in response to changes in FHA's mission or programs, to modernize the FHA Subsidiary Ledger application, or to respond to major changes in HUD's IT environment. Substantial system development services will be negotiated with the contractor at the time the new requirements are identified. The required support may include all phases of HUD's SDM. Substantial new system development services are within the scope of services FHA may require under this task order, but will be subject to separately defined and negotiated tasks. Examples are:~~

- ~~• Support for migration to a new host environment, including capacity planning, review and evaluation of proposed host solutions, regression testing, technical support to FHA during User Acceptance Testing, and support for Certification and Accreditation. The support may include work with systems interfacing with the FHA Subsidiary Ledger to assure continued operation of existing or replacement interfaces.~~
- ~~• Support for interface modifications and regression testing for FHA Subsidiary Ledger interfaces and other interfacing systems necessary to implement new systems or outsourced services that are replacing existing FHA systems. The support may include work with systems interfacing with the FHA Subsidiary Ledger to assure continued operation of existing or replacement interfaces.~~

¹⁸ http://www.whitehouse.gov/OMB/circulars/a11/current_year/s53.pdf

- ~~Modifications and extensions to the FHA Subsidiary Ledger to incorporate new business processes, such as the integration of financial operations for Single Family property management or Single Family upfront premiums within the FHA Subsidiary Ledger.~~
- ~~Modifications and extension to the FHA Subsidiary Ledger to support major revisions in business processes necessary to implement changes to FHA insurance programs, such as those required by the Housing and Economic Recovery Act of 2008 or to implement reengineering efforts under Housing transformation program that may eventually address FHA's servicing systems.~~
- ~~Planning and initiation phase activities necessary to establish the foundation for new risk management functions in response to the national mortgage crisis.¹⁹~~

~~All system development work must be planned and documented within the framework of HUD's SDM as implemented by the FHA Subsidiary Ledger project to integrate COTS and custom application software.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.5 Project Management for FHA Subsidiary Ledger function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.5 Project management for the FHA Subsidiary Ledger (SDM Code I, Systems Operations) (CLIN 1005, 2005, 3005, 4005 and 5005)~~

~~FHA requires assistance from the contractor to support project management functions for the FHA Subsidiary Ledger project as a whole, including the planning and reporting that is required for effective coordination with other HUD activities and projects.~~

¹⁹ For example, planning and requirements affecting FHA financial operations may result from the FHA Information Technology Strategy and Improvement Plan, August 13, 2009.

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.5.1 Maintain an Integrated Project Work Plan function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.5.1 Maintain an integrated project work plan~~

~~The contractor shall maintain an integrated project work plan that includes a summarized representation of all tasks and activities, an integrated time line, and planned and actual costs to HUD. The integrated project work plan must include activities and deliverables for all contractors and government personnel supporting the project. The integrated project work plan must identify principal interdependencies among contractors, and between contractors and the government. The integrated project work plan must provide classifications of activities sufficiently comprehensive and detailed to support reporting for HUD's information technology investment procedures. Details within the plan must therefore identify draft, review, and acceptance steps for deliverables, cost to HUD by month, classification of all activities by SDM life-cycle stages, and classification of all activities by HUD ITIPS cost reporting categories. The contractor shall update the integrated project work plan monthly (including costs). HUD staff monitors and maintains approval authority.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.5.2 Plan and Schedule Project Management Meeting function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.5.2 Plan and schedule project management meetings~~

~~The contractor shall plan management meetings for the FHA Subsidiary Ledger project team to coordinate work, to assess progress, and to recommend to the FHA Subsidiary Ledger manager issues to be discussed with a potential impact on schedule or cost. The plan must include a schedule of meetings, identify chairpersons and participants, and define the subjects for meetings of different types.~~

~~In addition, the contractor shall maintain the schedule for all meetings in the common meeting room(s) customarily dedicated to the FHA Subsidiary Ledger project.~~

~~The schedule and scope of meetings will vary with need as the project moves from planning, to operation. Accordingly, the contractor shall review meeting activities and~~

~~needs and recommend formats and schedules for meetings to meet the overall needs of the project. The meeting plan must be updated each month to identify current requirements for different series of meetings, which may include, for example, monthly management briefings, weekly coordination meetings for the project as a whole, weekly meetings on hardware and software infrastructure issues or other subtasks such as funds control or cash management, meetings to review and approve configuration changes, or daily operational status meetings. The FHA Subsidiary Ledger manager will exercise oversight, authority and final approval of all tasks.~~

~~The contractor shall recommend to the FHA Subsidiary Ledger manager plans, schedules, and facilitation of management meetings for the project as whole, record meeting participants, subjects of discussion, issues, and actions, and publish meeting notes to the project team.~~

~~The contractor shall update the meeting plan each week and publish the plan to all members of the FHA Subsidiary Ledger project.~~

~~The contractor shall assist the FHA Subsidiary Ledger manager in reporting meetings involving government personnel, whether the government personnel represent the project itself or other offices or functions of the government. In addition, the contractor shall report meetings that use the common meeting rooms customarily dedicated to the FHA Subsidiary Ledger project. The contractor shall report meetings using the meeting planning and tracking procedures developed under activity 4.1.3.1. The contractor shall report meetings of an emergency or ad hoc nature, as well as meetings planned in advance. Emergency or ad hoc meetings may be reported after the fact.~~

~~The contractor shall coordinate the FHA Comptroller's Quarterly Divisional all hands staff meetings. The FHA Subsidiary Ledger manager will exercise oversight, authority and final approval of all tasks.~~

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.5.3 Manage and Administer Quality Assurance Procedures function shall be discontinued due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

~~4.5.3 Manage and administer quality assurance procedures~~

~~The contractor shall manage and administer quality assurance processes for all aspects of the performance of the FHA Subsidiary Ledger in support of the objectives identified in 2.0, including production operations and infrastructure performance. Quality assurance processes include a quality assurance plan executed by the contractor and a performance monitoring plan executed by the government.~~

4.5.3.1 Quality surveillance plan

The contractor shall establish, execute, and maintain a quality surveillance plan to monitor and report on performance metrics for all elements of IT service management and IT infrastructure management covered by the service level plan required under section 4.1.2.1. The scope of the surveillance plan shall cover all activities that may affect the availability, reliability, integrity and economy of the FHA Subsidiary Ledger system whether or not the activities are services of the contractor. The performance metrics shall be based upon information available to the contractor within the scope of its services.

4.5.3.2 Performance monitoring

The contractor shall assist the FHA Subsidiary Ledger manager in planning, developing, and helping implement measures to track the performance of the project team and to support FHA managers in measuring their implementation and operation of the FIIA Subsidiary Ledger. The contractor shall provide technical assistance to the FIIA Subsidiary Ledger manager in monitoring the quality assurance plan, including assistance for sampling of metrics and supporting data and measurement processes.

4.5.3.3 Oversight support

The contractor shall assist the FHA Subsidiary Ledger manager in planning, scheduling, facilitating, and documenting reviews for the OIG and other independent oversight organizations. The contractor shall also assist the FHA Subsidiary Ledger manager in developing, maintaining and administering problem tracking and reporting procedures for the FHA Subsidiary Ledger project. These procedures will document the status of the work of the project team to resolve problems of both operational users and development staff on the project team itself. The FHA Subsidiary Ledger manager will monitor and have oversight authority over these tasks.

4.5.3.4 Readiness reviews

The contractor shall assist the FHA Subsidiary Ledger manager in planning, scheduling, facilitating, and documenting readiness reviews at the end of each phase of the SDM

lifecycle for their assigned tasks. The reviews will provide an objective survey of the work accomplished during the phase, and the readiness of the team to carry out succeeding steps. Validation memoranda will document the results of the reviews.

4.5.4 Investment management

FHA requires assistance in planning and reporting on FHA's financial management and other program management systems, including assistance to meet federal and HUD oversight and reporting requirements.

The contractor shall provide consolidated planning and reporting services for the systems covered under FHA Financial Operations and Modernization²⁰ and Single Family Integration²¹. Some of the systems are categorized under OMB guidelines as major systems and others as non-major. The contractor shall support the planning and reporting at the consolidated level and not at the level of the individual component systems.

FHA's financial management systems are federal investments subject to extensive federal and HUD oversight and reporting. The contractor provides support for these activities.

The contractor shall draft, update, and maintain documents subject to approval of the FHA Subsidiary Ledger manager to support HUD's capital planning and investment processes for the applicable systems. These documents shall include:

²⁰ P013 FHA Subsidiary Ledger (major); A43 Single Family Insurance System (major); A43C Single Family Claims System (major); A80B Single Family Premiums Collection Subsystem-Periodic (major); A80D Distributive Shares and Refund Subsystem (major); A80N Single Family Notes System (major); A80Q Public Inquiry Communication System (non-major); A80R Single Family Premiums Collection Subsystem-Upfront (major); F71/71A Debt Collection Asset Management System (major); F72 Title I Insurance and Claims Systems (major); U26A Electronic Data Interchange (non-major)

²¹ F12 Home Equity Conversion Mortgage; F42 Consolidated Single Family Statistics; F42D Single Family Default Monitoring; Single Family Acquired Asset Management; Single Family Neighborhood Watch; D64A Single Family Enterprise Data Warehouse; F11 Housing Counseling; F17 Computerized Homes Underwriting Management; F51 Institution Master File; F51A Approval, Recertification and Review Tracking; F57 Credit Alert Interactive Voice Response; F17C FHA Connection; F51Q Quality Assurance Document Library; P096 Lender Assessment; P233 Single Family Communications Management; P233A Single Family Case Binder Management; A80H Single Family Mortgage Recovery Technology; P260 Asset Disposition and Management, and P177 Disposition Program Compliance.

- Monthly financial updates of cost and progress for development and maintenance in the OMB-provided reporting system (eCPIC);
- Draft and final updates during each annual budget cycle for internal and OMB review of proposed investments in accordance with the instructions of OMB Circular A-11, Section 300, typically including updates to systems justifications and analyses that HUD's SDM first requires in the initiate phase and that are then updated each year; and
- Periodic reviews of the system in accordance with HUD's capital planning and investment process, typically requirement preparation of an annual presentation and briefing for HUD's investment control and evaluation processes. This review includes a consolidated presentation covering FHA's financial management systems listed in section 4.1.2.5.

The contractor shall assist the FHA Subsidiary Ledger manager in planning investments necessary to sustain the objectives of Section 2.0, including but not limited to assistance in preparing briefings, describing future investment options and updates to the FHA Blueprint for Financial Management Systems.

As part of planning for new investments, the contractor shall assist the FHA Subsidiary Ledger manager in identifying and planning whether a proposed task may require comprehensive updates of the FHA Subsidiary Ledger initiate phase documents.

4.5.5 Administer project support functions

The contractor shall support administration and reporting of office functions for the FHA Subsidiary Ledger project staff, as follows:

- Administration and reporting of project telephone lists and calendars.
- Maintain an FHA Subsidiary Ledger document management database
- Maintain an FHA Subsidiary Ledger project staffing database and organization chart
- Keep phone lists and seating charts up to date and distribute monthly or as requested

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.6 Pay.gov function shall be **discontinued on March 31, 2012** due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (IIFMIP) implementation.

4.6 Pay.gov CLIN 1006

4.6.1 Background

FHA is in the process of implementing a collections on-line electronic financial services suite called Pay.gov. FHA has successfully implemented this process and has a model for direction going forward. In order to facilitate this transition all HUD software related to collection services must be replaced and/or upgraded, if needed. This modification of the existing process is being made in response to the Department of the Treasury's mandate for all agencies to switch from their current lockbox services to Treasury's Pay.gov collection service.

The Pay.gov process shall replace the current lockbox process via the Internet using HUD's website, FHA Connection or HUD's secure server. The software shall perform Federal accounting functionality as identified in Treasury & HUD guidelines to insure compliance with OMB.

4.6.2 Objective

The purpose of this effort is to obtain software development services for the replacement of HUD's current lockbox collection system. The contractor shall:

- 1) Adapt existing screens from FHA's model Pay.gov solution for use by Multifamily Premiums and Claims;
- 2) Integrate screens into existing subsidiary ledger processes;
- 3) Conduct system regression and performance testing and support FHA performance testing;
- 4) Provide control and audit reports in a format acceptable to Multifamily Premiums and Claims; and
- 5) Provide support to introduce new FHA Multifamily lenders to established processes.

4.6.3 Tasks and Responsibilities

Tasks and responsibilities needed for implementing Pay.gov to support the current business processes. Tasks will include, but are not limited to:

- Automating the collection, recording, reconciliation, and reporting of mortgage insurance premium payments using secure Internet technologies.
- Modify the link to cash activity and accounting transactions for payment processing.
- Modify the data structures, user interface, batch programs, job control language, reports and accounting entries to establish and reference keys when retrieving and processing accounting activity.
- Modifying security procedures to provide for secure data collection and transmission.
- Other activities include preparation of test plans and system documentation (the contractor will be responsible for preparing the Test Plan) (String, Verification and Validation, and User Acceptance), User's Manual, and Operations Manual (Job Aids).

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.7 PeopleTools 8.4 to PeopleTools 8.5 function shall be **discontinued on March 31, 2012** due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

4.7 PeopleTools 8.4 to PeopleTools 8.5 CLIN 1007

4.7.1 Background

HUD Information Technology Service ("HITS") is planning an enterprise-wide upgrade to Oracle 11gR2. In order to facilitate this change all underlying software must be upgraded, if necessary, to insure compatibility with Oracle.

As part of the migration the FHA Subsidiary Ledger ("FHASL") will be moved to the new Oracle platform. Currently FHA SL utilizes PeopleSoft and PeopleTools, a related component, which is not compatible with Oracle 11gR2. Prior to the system enterprise-

wide upgrades PeopleTools 8.4, currently being used by FHA SL, must be replaced with PeopleTools 8.5 to insure that it can receive certification with Oracle 11gR2.

4.7.2 Objective

The Contractor's primary objective will be to provide Project Management and Support Services in upgrading the FIIA SL from PeopleTools 8.4 to PeopleTools 8.5.

4.7.3 Tasks and Responsibilities

Tasks and responsibilities, to support incorporating PeopleTools 8.5 upgrade to support the current business processes. The Contractor shall:

- Provide unit testing of Commercial Off the Shelf ("COTS") processes to demonstrate that they adequately perform the end-to-end functions that have been allocated to them;
- Plan and execute for the initial setup of COTS control tables, conversion, COTS exception handling, reports, COTS test scripts, setup of test data for all COTS dependent operations;
- Insure end user security in the COTS software in addition to the primary transaction processing functions and;
- Prepare test plans and system documentation (the contractor will be responsible for preparing the Test Plan (String, Verification and Validation, and User Acceptance), User's Manual, and Operations Manual (Job Aids).

In accordance with the FAR 49.502 Termination for convenience of the Government, the Section 4.8 Regression Testing and Interface Support function shall be **discontinued on March 31, 2012** due to the migration of the FHAS system to the IBM Federal Data Center as part of the HUD Integrated Financial Management Improvement Project (HIFMIP) implementation.

4.8 Regression Testing and Interface Support CLIN 1008

4.8.1 Background

HUD is in the process of upgrading, replacing and implementing some of its core financial systems. As part of this process HUD will need 100% assurance of the accuracy and completeness of the tasks performed at every stage in the software

development cycle. Additionally, HUD will require support for the adaptation of the existing interface requirements during the transmission to the new environment.

4.8.2 Objective

The Contractor's objective will be to facilitate the transmission of files thru an interface & debug any and all failures.

4.8.3 Tasks and Responsibilities

Tasks and responsibilities needed for the Regression testing and Interface support to support the current business processes with a zero tolerance level for errors. The Contractor shall be responsible for the following:

- 1) Performance Testing
- 2) Data Migration Testing
- 3) Interface Testing
- 4) Security Roles Testing
- 5) Acceptance Testing
- 6) Accounting Reports (including Trial Balance, Disbursement Schedule Summary, Collections Report, Billing Summary, Waived Delinquent Charges Report and various Module to Module Reconciliations)

The Contractor shall provide to HUD as part of this task order agreement data that support the design conclusions as each phase is completed for approval by HUD's GTM. HUD's GTM will submit to the HUD's Test Center for testing and evaluation each phase and process. Upon successful completion of testing the GTM will review all data for final acceptance after testing in HUD's Test Center. This effort shall be done as the initial part of the task order performance period to provide a baseline for current year responses. The FHA Subsidiary Ledger manager will exercise oversight, authority and final approval of all tasks.