

U.S. Department of Education
Federal Student Aid (FSA)
Modernization Partner Program

Debt Management and Collection System (DMCS)
Reengineering
Task Order #91

Solution Description

October 3, 2002
Version 3.0

Table of Contents

1.0	HIGH LEVEL SOLUTION DESCRIPTION	1
1.1	BUSINESS PROCESS REENGINEERING	1
1.2	TECHNOLOGY SOLUTION	1
1.2.1	<i>Quester System</i>	2
1.2.2	<i>Enterprise Application Integration (EAI)</i>	2
1.2.3	<i>Siebel Application</i>	2
1.3	ORGANIZATION TRANSFORMATION	3
2.0	DETAILED DELIVERY SCOPE	4
2.1	BUSINESS PROCESSES RE-ENGINEERING AND IMPACT	4
2.2	QUESTER CUSTOMIZATION	5
2.3	INTERFACES VIA EAI	7
2.4	SIEBEL APPLICATION	9
2.5	ORGANIZATION TRANSFORMATION	10
2.6	EXISTING INFRASTRUCTURE	10
3.0	IMPLEMENTATION APPROACH	11
3.1	OVERALL APPROACH	11
3.2	BUSINESS PROCESS REENGINEERING APPROACH	11
3.3	DATA CONVERSION APPROACH	11
3.4	TRAINING APPROACH	12
3.5	DEPLOYMENT APPROACH	13
3.6	IMPLEMENTATION SCHEDULE	14
4.0	POST IMPLEMENTATION SUPPORT	15
4.1	STABILIZATION PERIOD	15
4.2	TRANSITION TO LONG TERM OPERATIONS	16
5.0	FUTURE ENHANCEMENTS	17
6.0	INTEGRATION FACTORS	18
6.1	CRM4FSA	18
6.1.1	<i>Scenario One: CRM4FSA Deployed Prior to DMCS reengineering</i>	18
6.1.2	<i>Scenario Two: DMCS Replaced Prior to the CRM4FSA</i>	18
6.1.3	<i>Scenario Three: DMCS Replaced in Parallel with the CRM4FSA</i>	18
6.1.4	<i>Scenario Four: CRM4FSA not implemented</i>	19
6.2	COMMON SERVICES FOR BORROWERS	19
6.3	ENTERPRISE INITIATIVES	19
7.0	ASSUMPTIONS	20
7.1	QUESTER CUSTOMIZATION	20
7.2	INTERFACES VIA EAI	20
7.3	CRM4FSA	20



7.4	USER COMMUNITY (HEADQUARTERS, REGIONAL OFFICES, PIC, PCAS AND ECMC)	21
7.5	DATA CONVERSION	21
7.6	COMMON SERVICES FOR BORROWERS (CSB)	21
7.7	SECURITY AND USABILITY COMPLIANCE	21
8.0	ALTERNATIVES	22
8.1	RE-COMPETE THE DMCS CONTRACT MAINTAINING THE CURRENT FUNCTIONALITY	22
8.2	RE-COMPETE THE DMCS CONTRACT USING THE NEW REQUIREMENTS	22
9.0	RISKS	23
Attachment A – High Level Functional Requirements Matrix		A-1
Attachment B – To-Be Summary Information for Collections Interfaces		B-1

1.0 High Level Solution Description

The solution for the DMCS Reengineering initiative includes the reengineering of core Collections processes to align more closely with industry practices and the replacement of the DMCS with state-of-the-art technology to enhance FSA's ability to manage the defaulted loan portfolio.

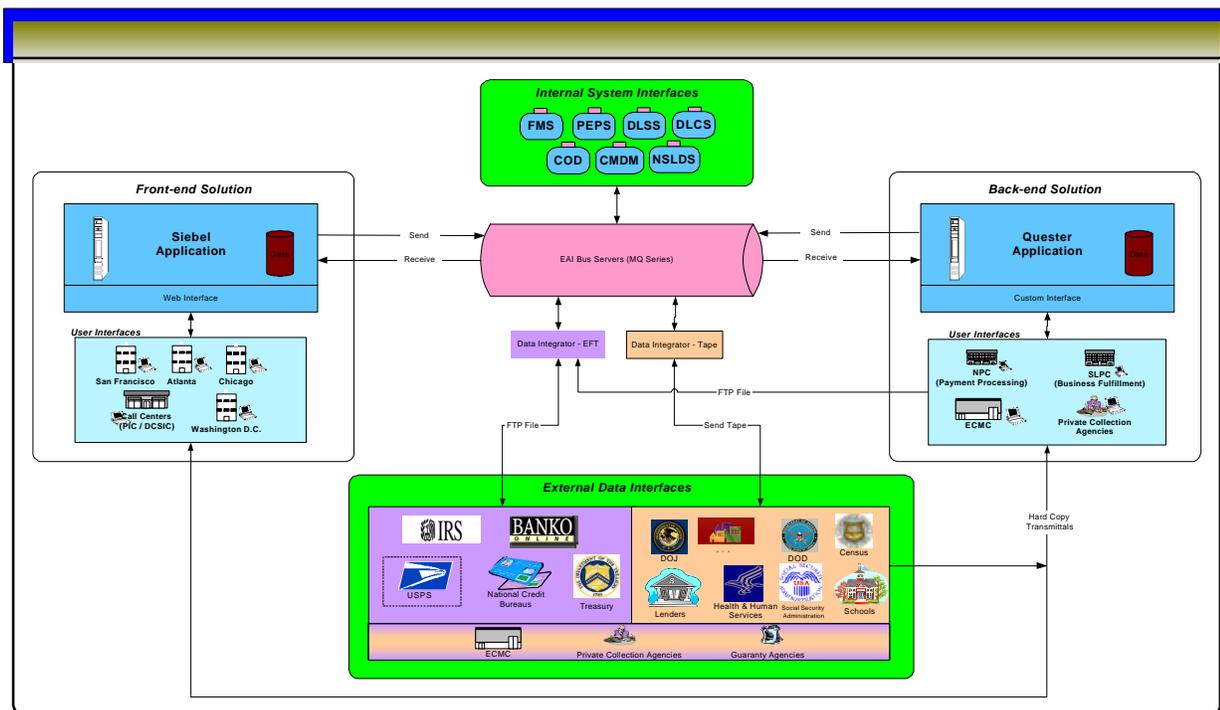
The reengineering of the Collections business is one of the major steps to achieving FSA's strategic vision of Common Services for Borrowers.

1.1 Business Process Reengineering

The DMCS Reengineering initiative involves redesigning and simplifying Collections processes and procedures to be more closely aligned with the new technology and with industry practices. This effort will impact virtually every business area in Collections. Resources will be trained to operate in the new business model. Adoption of these new processes and procedures will be key to the successful implementation of the proposed solution and the realization of the benefits identified in the business case.

1.2 Technology Solution

The diagram below represents the conceptual design for the reengineered system environment. The core elements of the solution include Raytheon's Quester system, Enterprise Application Integration (EAI), and the Siebel application.



1.2.1 Quester System

During the first phase, the team conducted a software selection process and reviewed a list of Commercial-Off-the-Shelf (COTS) collections systems. Raytheon's Quester Debt Management System was chosen based on the scoring result from a variety of criteria during the Task Order 91.1.4 Conference Room Pilot.

Quester is a client-server based application developed using Java on an Oracle database. Quester was designed based on functional specifications from the Guaranty Agency community. While the solution is designed specifically for student loans, it will require customization to support all loan types and the processes and regulations specific to FSA.

1.2.2 Enterprise Application Integration (EAI)

The Quester system will utilize the Enterprise Application Integration (EAI) middleware standard to interface with 22 distinctive business entities. EAI utilizes Microsoft MQ Series as a means to transform and deliver information to and from various systems through one central bus quickly and securely. The reusable and flexible design of the EAI bus will speed implementation of new interfaces or changes to existing ones.

The analysis during Task Order 91.1.4 indicated that it would not be possible to reduce the number of entities FSA needs to interface with. However, there will be extensive automation and simplification of these interfaces.

Overall, the EAI bus will provide a more robust, consistent, secure, and timely method for exchanging data with the internal and external interfaces.

1.2.3 Siebel Application

As part of the CRM4FSA effort, FSA intends to modernize all of the contact centers for all customer interactions. The CRM4FSA team plans to implement a Siebel solution at all contact centers including the Debt Collections Services Information Center (DCSIC is part of the Public Inquiry Contract), as well as deploying the tool in the regional offices and the Headquarters. The Siebel application will provide a complete and integrated view of a customer. It will also capture customer interaction information recorded by all contact centers to provide better and more consistent service.

The DMCS Reengineering initiative will integrate with the CRM4FSA solution by leveraging the Siebel application as the user front-end tool at PIC and Regional Offices. The CRM4FSA project will be responsible for building interfaces to and from Quester, synchronizing data between the two systems, supplying workstations and deploying the Siebel application to the users' desktops.

Section 6.1 below addresses the implications of timing delays – where one project is implemented prior to the other – and the consequences if CRM4FSA is not pursued.

Note, the CRM4FSA project is responsible for the work efforts and costs of developing interfaces to the reengineered collections system and deploying the Siebel solution as defined in its technical proposal in support of the Customer Service Representatives within the DCSIC. The DMCS project team will coordinate with the CRM4FSA project team to accomplish these goals.

1.3 Organization Transformation

Business process changes will significantly impact the current working practices. This will require an effort to plan and re-design the Collections organization, and extensive training of the new procedures and tools.

2.0 Detailed Delivery Scope

During the first phase of the project, the team conducted a high-level gap analysis (deliverable 91.1.3) to determine the Quester customization scope and effort. The team also identified a number of business process re-engineering opportunities.

2.1 Business Processes Re-engineering and Impact

The reengineered business processes and the replacement system for DMCS will provide a new foundation for how collections are managed at FSA. The key to managing the implementation and realizing the benefits will be to reengineer the current business processes around those supported by the core COTS solution. The business processes of collection and default management that are impacted by this initiative are described in detail below:

Business Process	Impact
Collections Processing	<ul style="list-style-type: none"> ▪ Simplify the Administrative Wage Garnishment (AWG) process to reduce the number of steps and variations ▪ Streamline the Treasury Offset Program (TOP) process ▪ Reduce the number of location and status codes ▪ Provide enterprise-wide customer view with integration to CRM4FSA solution
Letter Generation and Distribution	<ul style="list-style-type: none"> ▪ Reduce the number of letters produced and distributed according to reengineered business processes
Direct Debit	<ul style="list-style-type: none"> ▪ Align with the industry standard for direct debit processing ▪ Increase the rate of adoption for the direct debit program by simplifying the process and integrating current PCA activities ▪ Reduce the cycle time for processing direct debit payments
Discharge and Hearings	<ul style="list-style-type: none"> ▪ Enable automated workflow for discharges and hearings ▪ Electronically route preliminary decisions for review and approval ▪ Provide supporting documents online to support case management of hearings and discharges
SLPC and NPC Operations	<ul style="list-style-type: none"> ▪ Simplify the current operational procedures ▪ Review policies for potential changes ▪ Implement Treasury Lock Box
Loan Rehabilitation and Consolidation	<ul style="list-style-type: none"> ▪ Automate the rehabilitation process from identification through rehabilitation ▪ Incorporate the consolidation process into the Quester application
Student Refund Process	<ul style="list-style-type: none"> ▪ Automate the process from identification of potential refund through Treasury cutting the check for the student

Business Process	Impact
PCA Management	<ul style="list-style-type: none"> ▪ Increase frequency of assignment to PCAs in order to align with industry best practices and increase recoveries on collections ▪ Automate accounts payable to calculate PCA commissions without having to manually reconcile the PCA invoices to transaction posting summaries ▪ Improve the accuracy and integrity of the assignment process, reducing the amount of time spent researching and reconciling exceptions.
Portfolio Management	<ul style="list-style-type: none"> ▪ Deploy Actuate, the Quester ad-hoc reporting tool, to allow FSA management to quickly create reports. ▪ Load defaulted loan data to the Credit Management Data Mart.

2.2 Quester Customization

Raytheon's Quester was designed to meet the needs of the Guaranty Agency (GA) community to manage their defaulted FFEL loans. Currently, the Quester core product provides the following major functionalities:

- New FFEL Debt load
- Credit Bureau Interface in Metro 2 Format
- Collection Agency Input and Output Interfaces
- TOP Interfaces
- Lender/School Profiles
- Rehabilitation/Consolidation
- Administrative Wage Garnishment
- Account Posting
- Sub-ledger (daily, monthly and yearly close)
- Suspense Transaction Identification and Resolution Worklist
- PCA Commissions
- Automated Write-Off
- Payment Plan Options/Payoff Quotes
- Credit Card Payment Processing
- Litigation

Although much of the core product was modeled after DMCS functionality, the rules and logic within the business processes are not identical to the DMCS system. The gap analysis results highlighted that a significant effort was still required to customize the Quester application to support all loan types and to support the processes and regulations specific to FSA.

The following table summarizes the gaps and the requirements that will be included in the customization of Quester. For further details refer to Attachment A.



Business Area	Functional Description	# Of Functional Gaps	
		Business Function	Interface Requirement
Archive and Restore	Removal/restoration of accounts from the Collections database	2	0
AWG	Garnishment of defaulted borrower wages	22	6
Bankruptcy/ Litigation	Creates/transmits electronic Bankruptcy/Litigation Packages among PCA, FSA, DOJ, and ECMC	7	7
Billing	Set/stop billing cycles for each account, produce bills, edit text of the bill template, and track payment	3	0
Compromise	Allows CSRs to negotiate a repayment amount/terms with borrowers	2	0
Consolidation/ Rehabilitation	Repayment options that aid borrowers in paying off their defaulted loans	10	2
Credit Bureau Reporting	Ability to identify eligible accounts and report them to the four national credit bureaus	0	1
Direct Debit	Offers eligible borrowers the option to grant their bank the authority to deduct loan repayments from a personal checking or savings account on a set schedule	12	3
Discharge	Ability to process various discharges: Ability-to-benefit, Closed school, False signature, Death, Disability, Bankruptcy, Litigation	9	1
Fin. Mgmt & Accounting	Payment posting and financial accounting as well as integration with FMS	17	6
General	General business functions	3	2
IRS Skip Tracing	Borrower address matching with IRS	15	10
Letters	Automatic generation of letter correspondence to borrowers	1	1
New Debts	Edit, format, and load various loan types	15	14
NPC	Payment processing including posting and suspense resolution	9	0
NSLDS Interface	Transmission of defaulted collections portfolio to NSLDS	3	2
PCA Assignment	Identification of accounts eligible for Account Transfer and extraction of accounts from the database that meet selection criteria for transfer to collection agencies	21	14
Pre-claims	Ability to provide pre-claims assistance to GAs and Lenders	10	5
Reports	System generated and ad hoc reports	1	0
TOP/FDP	Ability to identify accounts for the TOP from pre-cert, through cert, with weekly updates, through actual offset, including reversals, and considering TOP fees. Merge FDP program with the new TOP by Treasury	45	18
Total		207	92

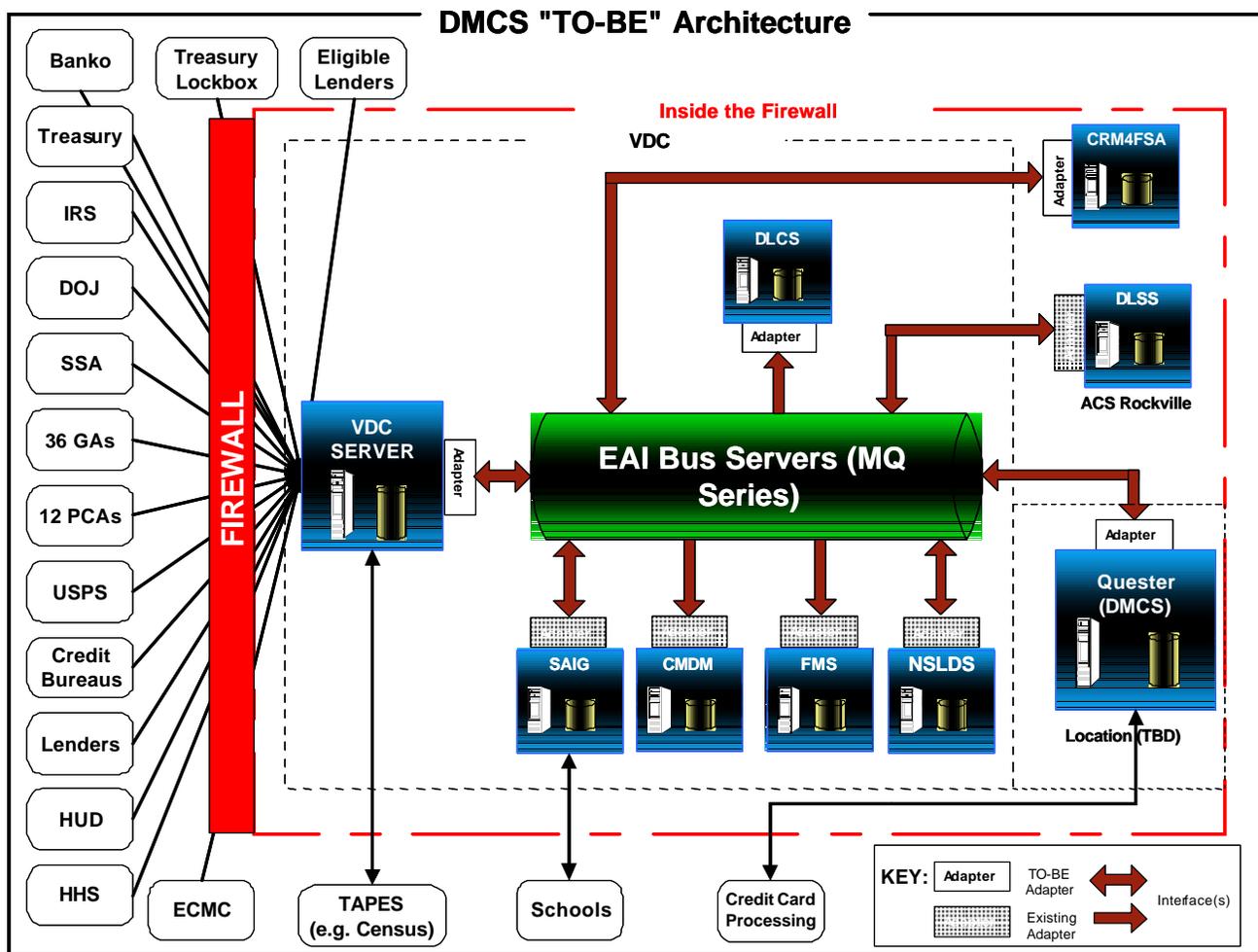
2.3 Interfaces Via EAI

Quester will use FSA's Enterprise Application Integrator (EAI) bus as one integrated solution to manage the interfaces.

The EAI architecture addresses the FSA channels' need to access common data and business processes across the disparate systems. The technical services provided by the EAI architecture support Students, Schools, and Financial Partners by enabling the FSA systems to exchange information via common, reusable methods.

The EAI architecture enables FSA to convert and format data and message content from many different systems and data sources. In addition, the EAI architecture provides an infrastructure for application teams to quickly and efficiently integrate with back-end systems through a queuing mechanism that guarantees delivery.

The picture below illustrates the data exchange via the EAI bus.





In addition to the conceptual picture above, the following table lists the detailed interfaces that will be built into Quester and the data that will be delivered via the EAI bus. See Attachment B for the detailed list of interfaces.

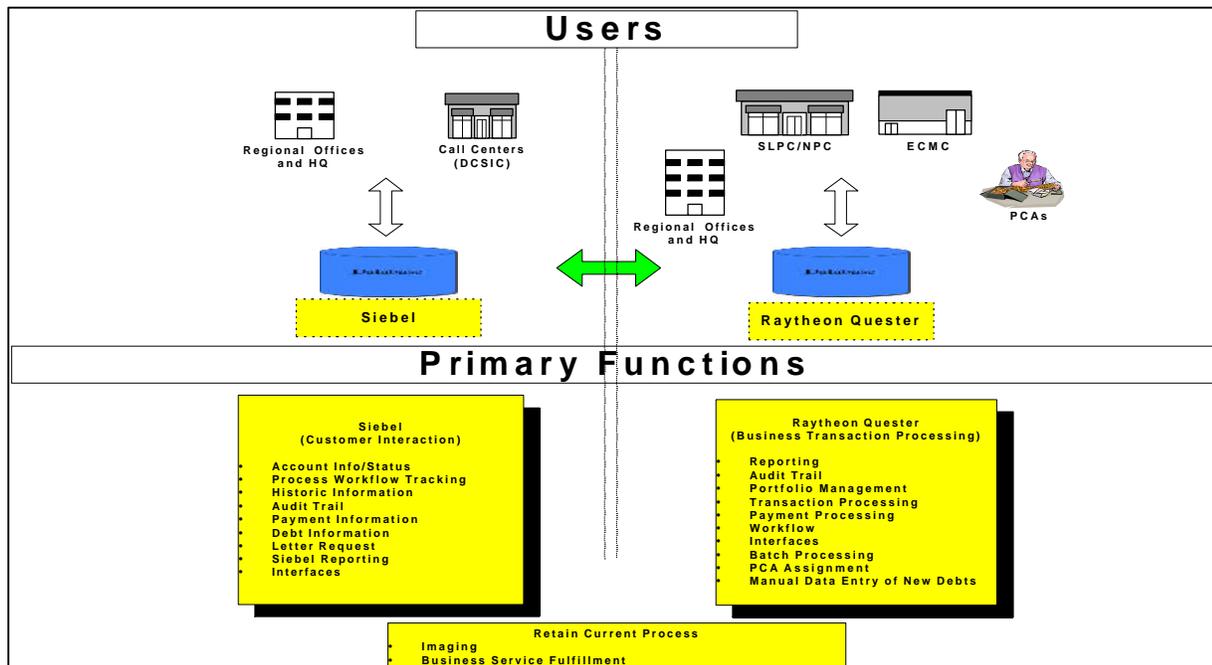
Entity/ System	Business Function	# Of Entities	# Of Logical Data Groups
Private Collection Agencies	PCA Account Assignment, Account Recall, Account Updates, and Skip Trace Requests	12	15
Guaranty Agencies	TOP/FDP, loading of new debts, IRS skip tracing, and NDNH data matching	36	20
DLSS	Loading of new debts, Direct Loan rehabilitation, and Consolidation	1	4
NSLDS	NSLDS reporting of defaulted loan portfolio information	1	2
FMS	Accounting and payment files	1	4
CMDM	Transfer of detailed loan portfolio to Credit Management Data Mart to support FSA ad-hoc reporting needs	1	1
CRM4FSA (Siebel)	Real-time data synchronization, service request and reply (user front-end for PIC and FSA Regional Offices)	1	TBD
HUD	Reporting of defaulted borrower information to HUD for mortgage application process	1	1
HHS/NDNH	Data matching with the National Direct New Hires database	1	3
Treasury	TOP/FDP certification and address matches, TOP/FDP offset information, and Direct Debit Payments/Reversals	1	11
DOJ	Borrower information for Litigation, Litigation payments	2	3
IRS	IRS skip tracing and 1098/1099 tax information	1	4
USPS	Pre-Claims skip tracing and borrower address changes	1	2
SSA	Monthly Death Matching process	1	1
Banko	Bankruptcy data matching	1	2
Schools (active)	Loading of new debts (Pell grant overpayments and Closed School assignments) and IRS skip tracing	20	7
Lenders (active)	Loading of new debts and Pre-claims assistance requests	5	3
Credit Bureaus	Reporting of defaulted borrower information to credit bureaus	4	1
ECMC	Assignment and return of bankruptcy accounts	1	2
Sallie Mae	Sale of rehabbed FFEL loans and input of re-defaulted rehabbed FFEL loans	1	2

Entity/ System	Business Function	# Of Entities	# Of Logical Data Groups
Source info for lenders (TBD)	Lender information	1	1
Credit Card Processing Center	Credit card processing requests and confirmations	1	2
TOTAL:		95	92

2.4 Siebel Application

The DMCS Reengineering initiative will integrate with the CRM4FSA solution by leveraging the Siebel application as the user front-end tool at the PIC and Regional Offices. The CRM4FSA project team will be responsible for building interfaces to and from Quester, synchronizing data between the two systems, supplying workstations, deploying the Siebel application to the users' desktops.

The following diagram illustrates the functional conceptual design for the integration of Collections into the CRM4FSA enterprise vision. The Primary Functions section describes where the major system functions will be performed.



2.5 Organization Transformation

In addition to development of the new procedures and user training of the new solution, there will be a need to perform workforce transformation analysis and development of a transition plan. It is then assumed that FSA would then take responsibility for the actual execution of the transition plan. For further details on the workforce transformation refer to the Collections Workforce Transformation paper.

2.6 Existing Infrastructure

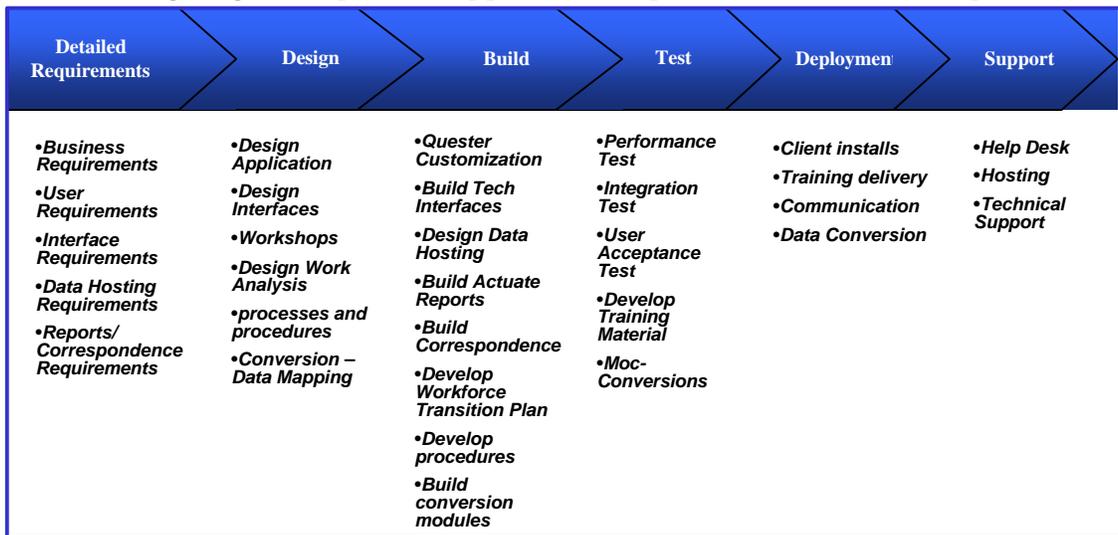
The current imaging system is a stand-alone application that is accessible from headquarters, regional offices and PCA's. The application is used to retrieve documents that arrive at SLPC from Guaranty Agencies, lenders, schools and borrowers. The proposed solution recommends maintaining this as a stand-alone application until the enterprise wide FSA approach to document imaging and retrieval is established.

3.0 Implementation Approach

The DMCS Reengineering effort will be conducted in a phased approach. Quester Customization will be conducted in parallel to database conversion, CRM4FSA integration and Business process re-engineering.

3.1 Overall Approach

The following diagram depicts the approach to implement the various components:



3.2 Business Process Reengineering Approach

During the design stage, there will be a need to design the new procedures to enable the changes in business practices and the tools that will be used. In addition to having FSA business users involved in the design of the processes and procedures, workshops will be held to validate how these will work with the new solution. The procedures will then feed into User Acceptance testing and training for final validation before the new solution is deployed.

3.3 Data Conversion Approach

The DMCS System currently has 1.2 billion records stored in an IDMS database. As part of implementing the new solution, these records will be converted from the hierarchical IDMS structure to an Oracle relational database.

In addition to the conversion process, a data archiving strategy will also be developed. Some strategies that will be considered are: archiving zero balance accounts; archiving accounts with no activity for a long period of time; archiving accounts with a low balance (e.g., \$25 or less). The accounts not meeting these requirements would not be deleted, but simply archived so they can be retrieved in the future if necessary. The parameters and technology for archiving will be established and agreed upon

during the detail design phase. By minimizing the amount of data converted, and ensuring that the data is accurate, overall performance of the system will improve, and allow FSA to focus on the more collectable accounts.

Database conversion effort will include the following activities:

- Conversion Plan - this involves creating conversion schedules, contingency plans and a 'go-live' plan. Also involved is certification of the conversion and post-implementation activities. This include backups and archival of the source database and backups of the target database.
- Data Analysis - this includes all determining data sources, analysis of the data, determination of historical data conversion needs, identification of target data business rules and a conversion COTS tool.
- Data Mapping - this involves the development of conversion mapping including data cross-walking, special processing and implementing target business rules.
- Data Cleaning – this effort is designed to correct inaccurate or inconsistent data. An example would be removing personal 'notes' from the second address line of the mailing address before storing it. Another example would address the 'bogus' SSNs in Account records.
- Testing - this includes creating a testing methodology, performing data conversion validation through methods such as hash count reports, both detailed and summary, random data checking and verification through the GUI.
- Data Conversion - this effort will incorporate the COTS tool to perform the conversion. Activities include extracting IDMS data, conversion and loading Oracle. Due to the amount of data involved, the conversion will likely be done in two steps. The first step would begin before the target go-live date and convert the bulk of the data. The second step, which would occur during the system deployment, would convert the data that was created or changed after the start of the first step.

3.4 Training Approach

Training preparation includes curriculum development, training materials development, and class preparation. A “train-the-trainers” approach will be used to ensure that users from various locations are trained locally. This will involve training key resources from the regional offices, headquarters and the collection agencies, who will then run training for each of the resources within their location. Training will be a combination of stand-up lecture and interactive use of the application software in a classroom environment. A training environment in addition to all the training material will be made available for the local training.

3.5 Deployment Approach

The Quester system will be used for business services fulfillment at SLPC and NPC, program oversight at Headquarters, and collections reference by the PCA collectors and ECMC bankruptcy specialists. Headquarters may require limited access to the Siebel system.

The Siebel system will be used for borrower-facing activities at PIC and regional offices. Regional offices may require limited access to the Quester system.

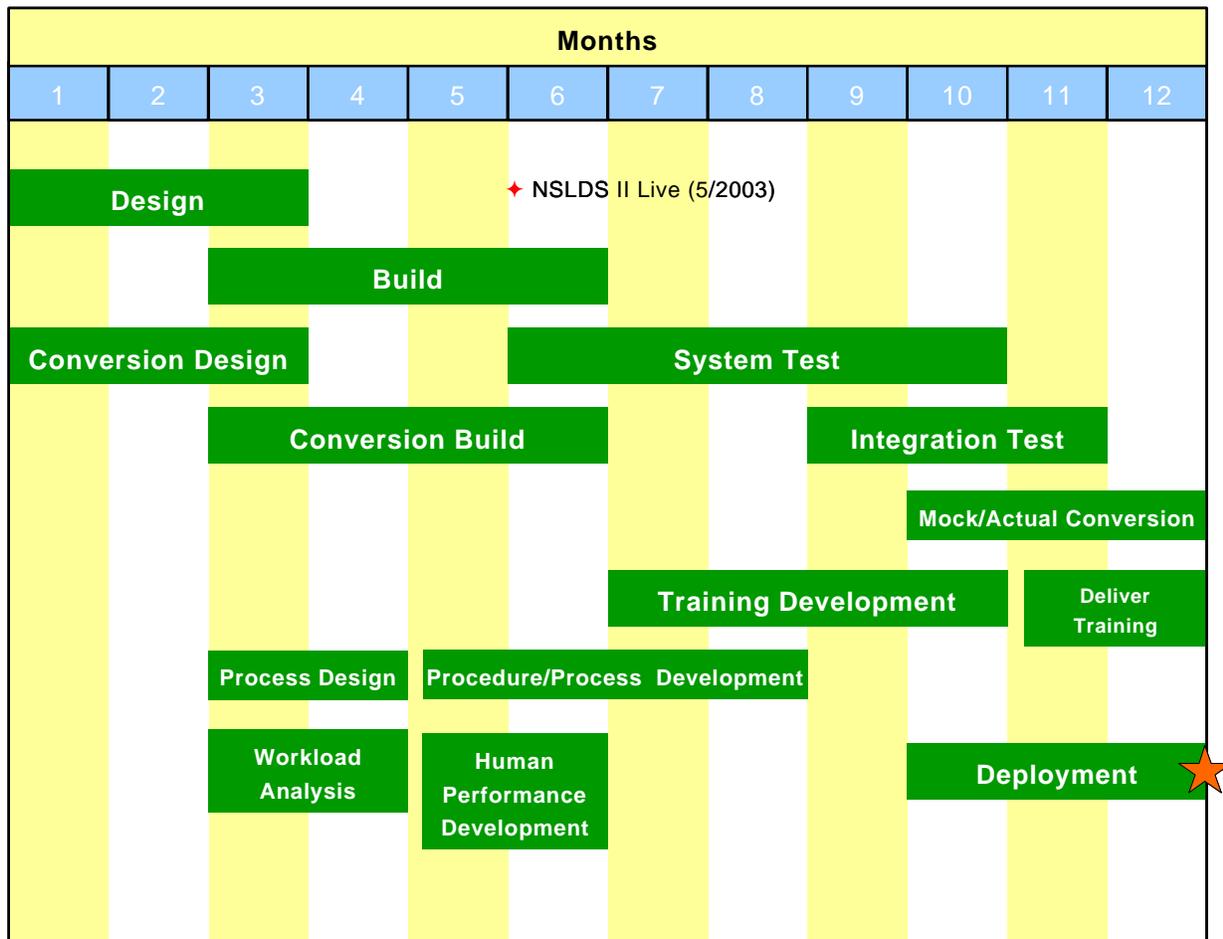
The table below summarizes the user communities and the system that will be rolled out to them.

Users	# Of locations/ of users*	#	Implementation Solution	Remote Access to Imaging system
DCSIC (PIC)	1/200		Siebel	Yes
PCAs	12/1500		Quester	Yes
HQ	1/20		Siebel/Quester	Yes
Regional Offices	3/180		Siebel/Quester	Yes
Business Service Fulfillment & Application Maintenance	3/170		Quester	Yes
VDC	1/15		Quester	Yes
ECMC	1/150		Quester	No

Note: estimated number of active users

3.6 Implementation Schedule

The DMCS Reengineering project is estimated to be completed 12 months from the contract sign-off date. The following map illustrates the planned implementation schedule along with schedules for other related modernization projects.



4.0 Post Implementation Support

4.1 Stabilization Period

The business case assumes a stabilization period of one year between system deployment and long-term operations and maintenance of the Quester application. The following activities will be required during the stabilization period:

Data Center Operations

- Physical Site Management
- Site Security
- System Management
- Procurement
- Hardware Installation and Maintenance
- Production Scheduling
- Event Detection and Notification
- Performance Management
- System Start-up and Shutdown
- Backup and Restore
- Storage Management
- File Transfer and Control
- Disaster Recovery

Application Management

- Operating System Administration
- Operating Performance and Tuning
- Development Environment Maintenance
- Operating System Security Administration
- Database Management
- Application Installs and Monitoring into the production environment
- Applications Performance and Tuning in the production environment
- Application Maintenance

Service Support

- Program Management
- Help Desk Support for users
- Change Control
- Configuration Management

EAI Services

- FTP Server Maintenance
- EAI problem identification and resolution

Network Services

- Wide Area Network
- Local Area Network
- Network Security

4.2 Transition to Long Term Operations

Modernization Partner will work with FSA to create a Turnover Plan and Approach. This will insure a smooth transition and orderly transfer of the solution to long-term operations. Further discussion with FSA will be needed to finalize the plan and approach.

The Turnover approach will include the following items, as appropriate:

- Training the Operating Partner's organization
- Transferring the Collections solution such as procedures, training guides and operating guidelines
- Supporting cutover to Operating Partner's operations
- Co-operating the solution until transition is complete
- Execution to the agreed acquisition strategy as developed as part of this project
- Assistance in implementing the organizational framework to manage/interact with the new contract

5.0 Future Enhancements

The following functionality is considered to be out-of-scope for the initial deployment of the new DMCS Reengineering solution but may be included as future enhancements in subsequent releases:

- Web-based user front-end to Quester (or Citrix/Marimba style alternatives)
- Web-based application for the borrowers
- Reengineered imaging and document management system. This initial release of the solution will not allow users to view image files via Quester or Siebel. PCAs, PIC, regional offices and Headquarters will continue to have access to the current imaging system via stand-alone terminals.
- Third party analytical application for developing more complex assignment strategies and performing collectability analysis.

Siebel front-end development & deployment, which are required as part of this solution, are part of the CRM4FSA cost effort and are not included in this project's scope.

6.0 Integration Factors

The scope of the solution delivery will include coordination with the CRM4FSA project, Common Services for Borrowers project and other enterprise wide initiatives to ensure the solution is integrated with the customer interaction layer and the other transaction processing solutions within Student Credit Management.

6.1 CRM4FSA

Based on the timing and sequencing of the CRM4FSA project, various scenarios may occur. Below are four possible scenarios and what their impact would be on the DMCS reengineering effort if that scenario were to be true.

6.1.1 Scenario One: DMCS Replaced in Parallel with the CRM4FSA

This is the approach assumed as part of this solution. In this scenario, the implementation of the Quester solution and the deployment of CRM4FSA at the DCSIC are synchronized. This is the most cost effective solution as it does not require additional effort to either re-work the interfaces between the customer interaction layer and the back end transaction processing engine, nor does it require extensions to the back-end transaction processing solution to temporarily support the customer interaction needs of the contact center.

6.1.2 Scenario Two: CRM4FSA Deployed Prior to DMCS reengineering

In this scenario the CRM4FSA team would have to integrate with the legacy DMCS system. Once DMCS is retired that integration would need to switch to Quester. Based on the conceptual design, the area that would be most affected would be the interfaces that are passing through the EAI Bus from the Siebel application to the DMCS system. The messages that are being sent by Siebel and transformed to integrate with DMCS would need to be modified to integrate with the new system, and the associated costs would need to be included within the DMCS Reengineering initiative, increasing the estimate in the business case.

In addition, if any business process is redesigned during the replacement of DMCS, it may have impacts on the front-end functionality of the Siebel system. This would also lead to additional development, training and deployment costs.

6.1.3 Scenario Three: DMCS Replaced Prior to the CRM4FSA

In this scenario, Quester is rolled out prior to CRM4FSA implementation at the DCSIC/PIC. The Quester solution would need to support the requirements of the customer service representatives at the PIC contact center. Any extensions to the customer interaction screens, in addition to the existing telephony system would need to be included within the DMCS Reengineering initiative. These extensions would be focused on meeting the minimum requirements and would likely include work-arounds. This scenario requires additional development, training and deployment costs beyond the estimate provided in the business case.

6.1.4 Scenario Four: CRM4FSA not implemented

In the event FSA opts not to proceed with an enterprise-wide customer interaction solution, the Quester solution would be rolled out to the DCSIC CSRs, as in scenario three. It would not be replaced afterwards by the CRM application. Any extensions to the Quester customer interaction screens, in addition to the existing telephony system, would need to be included within the DMCS Reengineering initiative. In this scenario the modifications would be of a permanent nature and minimize manual work-arounds. This scenario requires additional development, training and deployment costs beyond the estimate provided in the business case.

6.2 Common Services for Borrowers

While the Collections component of Common Servicing for Borrowers is scheduled to be implemented prior to any reengineering of the Servicing and Consolidation components, it will be important that the direction of DMCS Reengineering is in the context of the overall Common Services for Borrowers initiative. This will be achieved by maintaining this initiative as a component of Common Services for Borrowers and ensuring, as the business architecture for Common Services for Borrowers is developed, that the Collections component is in line with the overall architecture.

6.3 Enterprise Initiatives

There are a number of enterprise wide capabilities that are or will be developed during the implementation stage of this initiative (Single Student Identifier, Common Record, Portals etc.). During the planning and design stage it will be assessed as to the contribution that DMCS Reengineering can make to building out these capabilities. The work will then be coordinated with the other contributing initiatives and will be managed under the overall FSA Modernization Integration approach.

7.0 Assumptions

7.1 *Quarter Customization*

Raytheon's Quarter was built to meet the requirements of a Guaranty Agency's collection processes and procedures. The effort estimation to customize the Quarter core product to meet the FSA's specific requirements are based on the following assumptions:

- All the requirements with "high" and "medium" business priorities are in scope. Requirements with "low" business priorities are considered out of scope for the first release, but may be incorporated into future releases. FSA and Mod Partner jointly agreed upon business priorities.
- FSA will need to re-engineer its business processes to accommodate the Quarter processes. This will help to minimize the customization effort and the future software upgrade challenges. Refer to section 2.1 for a list of business areas to be re-engineered.

7.2 *Interfaces via EAI*

At a minimum, the interfaces that exist today will be replicated in the new environment. Some legacy interfaces via magnetic tapes will be upgraded to EFT via an FTP server. The effort estimates to build all the interfaces are based on the following assumptions:

- Assumed all PCAs have EFT capabilities since FSA currently transmits data to and from PCAs electronically.
- Assumed not all GAs will have EFT capabilities, and therefore FSA will have to accommodate both tape and EFT files for a period of time. A timed approach will be taken to schedule more GAs into electronic file processing as the GAs become ready.
- Assumed only 5 lenders will send EFT files for defaulted FISL loan records based on the limited loan volume currently received at SLPC. The remaining lenders will continue to send paper-based loan records sporadically in the future and will not be set up for automated transmissions.
- Assumed only 20 schools will send EFT files for program overpayments and defaulted Perkins loans based on the loan volume currently received at SLPC. The remaining schools will continue to send paper-based records sporadically in the future and will not be set up for automated transmissions.
- Assumed new data interfaces with CMDM, Reengineered NSLDS and Banko will be built.
- Assumed that the GAs will adopt the Common Claim Initiative (CCI) standards.
- Assumed CRM4FSA project will cover the cost and the effort associated with all of the end-to-end interfaces between Siebel and Quarter and the data synchronization between the systems.

7.3 *CRM4FSA*

- The implementation of the Siebel by CRM4FSA will occur at the same time as the implementation of Quarter. If not, additional costs will be incurred to build interfaces, integrate

with telephony system and conduct trainings and deployment. The implementation schedule will need to be revised.

- The CRM4FSA project will be responsible for building end-to-end interfaces to and from Quester, synchronizing data between the two databases, supplying workstations where needed and deploying the Siebel application to the users' desktops at PIC and regional offices.

7.4 User Community (Headquarters, Regional Offices, PIC, PCAs and ECMC)

The Quester system will be used for business services fulfillment at SLPC and NPC, program oversight at Headquarters, and collections reference by the PCA collectors and ECMC bankruptcy specialists. Headquarters may require limited access to the Siebel system.

The Siebel system will be used for borrower-facing activities at PIC and regional offices. The Regional offices may require limited access to the Quester system.

7.5 Data Conversion

Data conversion will focus on active accounts. Inactive, old and small balance accounts may be archived and not converted to the new system. However, there will be a system tool to allow restoring the archived accounts from the archive database when necessary.

7.6 Common Services for Borrowers (CSB)

The replacement of the DMCS system will align with the Common Services for Borrowers vision with minimal "throw-away" functionality.

7.7 Security and Usability Compliance

- The Quester application will meet section 508 guidelines established by FSA during the Design Phase of the project.
- The Quester application will meet FSA's systems security guidelines as established by the FSA CIO.

8.0 Alternatives

The Business Case recommends the Modernization of the Collections system and processes. The two alternatives to this recommendation are:

8.1 *Re-compete the DMCS contract maintaining the current functionality*

With this alternative, the successful bidder will run the existing DMCS system.

This alternative will produce the lowest initial contract cost to FSA. The trade-off is that FSA will not achieve a variety of benefits, such as increased recoveries, decreased PCA commission percentages, improved fiscal integrity, and a reduction in FSA operations costs. Also, tighter integration with other FSA enterprise applications and databases will not be achieved. Given the age of the existing DMCS system it is likely that the investment in a new solution would still have to be made in the near term.

8.2 *Re-compete the DMCS contract using the new requirements*

Under this scenario, the successful bidder will be responsible for meeting the requirements defined by the DMCS Reengineering effort (see Attachment A). This would entail bringing in a new software package and customizing it to meet FSA's business needs. The successful bidder will incur significant costs to develop a solution to meet all of the FSA's requirements.

The effort invested in defining the requirements will allow FSA to be very prescriptive in the RFP process. This option should allow FSA to achieve nearly all of the benefits defined in the business case. However, one of the key challenges will be to ensure that the new solution is integrated with FSA's other strategic solutions for customer interaction (CRM4FSA) and transaction processing (Servicing and Consolidation components of Common Services for Borrowers).

Whether the proposed solution or one of the above alternatives is chosen, one of the keys to success will be to mine the knowledge capital that the current operating partner has gained over many years of supporting this business function for FSA. The proposed solution achieves this through teaming with the current operating partner for development and implementation, in addition to using the core product they have developed for the Guaranty Agency community. The alternatives above would require a period of transition where a new operating partner could begin this process of knowledge transfer.

9.0 Risks

The following table identifies the risks associated with the DMCS Reengineering initiatives. The table also outlines the key mitigation strategies to address each of the risk areas.

Risk	Description of Risk	Mitigation Strategy
Financial	<ul style="list-style-type: none"> • Underestimation of the implementation cost • Delay in receiving approval of deliverables and resolution of issues • Future operations costs may be higher than projected 	<ul style="list-style-type: none"> • Ensure contingency and work closely with technology vendor to estimate true cost • Maintain close coordination between project team and the project sponsors • Reduce operational costs through implementation of quick-wins
Technology	<ul style="list-style-type: none"> • Glitches in transitioning the current system to the new technology • Challenges to clean and convert the existing IDMS data to a relational database. • A robust hosting facility is required or potential system downtime could occur. • Steep learning curve for some users 	<ul style="list-style-type: none"> • Project management needs to ensure detailed testing procedures and allocate contingency in the project plan • A detailed conversion plan needs to be reviewed and closed monitored. • The VDC is FSA's preferred hosting provider. A review of services, pricing, and performance will be done to validate capabilities. • Develop an extensive and effective training program and rollout strategy.
Scope	<ul style="list-style-type: none"> • Under-estimation of the project scope • Difficulties in finalizing and controlling requirements scope • Business Process Reengineering activities do not occur prior to design preventing the achievement of operational cost savings. 	<ul style="list-style-type: none"> • Involve FSA staff early in the project during the requirement and design phase. • Re-assess priority of requirements based on business case. Manage scope aggressively to meet target delivery dates • Build BPR tasks into the workplan and implement recommendations prior to system design.
Management	<ul style="list-style-type: none"> • The numbers of on-going projects could overextend FSA resources 	<ul style="list-style-type: none"> • Close interaction with the project sponsor and key decision makers
Exposure	<ul style="list-style-type: none"> • High risk exposure during implementation and transition phase due to the business and systems interaction with many outside entities 	<ul style="list-style-type: none"> • Strong project management to ensure quality planning, execution and communication to both internal and external entities involved



Attachment A
Functional Requirements and Gaps



Attachment B
To-Be Interfaces