



F E D E R A L
S T U D E N T A I D

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FSA Modernization Partner

NSLDS II Reengineering
System Interface Detail Design:
Financial Management System
FFEL Lender Demographics Interface
I-FMS-2

DRAFT

Version 1.0

September 30, 2002

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Document Control

| Version Number | Description | Release Date | Author |
|-----------------------|--------------------|---------------------|---------------|
| 1.0 | Initial Issue | 09/30/2002 | Troy Edwards |
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1 Financial Management System (FMS)

NSLDS II will support five interfaces with FMS. FMS will send FFEL Interest Rate and Special Allowance data to NSLDS II on a quarterly basis. FMS will also send Lender Demographic information to NSLDS II daily. NSLDS II will send summary GA Loan Processing and Issuance Fees (LPIF) data to FMS quarterly, and Account Maintenance Fees (AMF) data to FMS annually. All interfaces will utilize the EAI BUS for data transmission.

The FMS interfaces include:

- AMF Summary (**See I-FMS-1 Document**)
- LPIF Summary (**See I-FMS-1 Document**)
- FFEL Lender Demographics (**Section 1.2**)
- Lender Special Allowance (**See I-FMS-3**)
- Lender Interest Rate (**See I-FMS-4**)

1.1 System Specifics

1.1.1 NSLDS II

| Item | Description |
|---|--|
| Production Platform <i>(Vendor/Product Name/Version)</i> | IBM/ Cluster 1600 Server/ 4 p-Series 660 Model 6M1 4 FastT500 Arrays |
| Operating System <i>(Vendor/Product Name/Version)</i> | Unix/AIX/V 5.1 Parallel Systems Support Program (PSSP) |
| DBMS <i>(Vendor/Product Name/Version)</i> | IBM/DB2 Universal Database (UDB)/Enterprise Extended v. 7.2 |
| Transmission Protocol | TCP/IP |
| Production System IP Address | TBD |
| Production System Location | Meriden, CT |
| Contracting Organization | Accenture – Modernization Partner |
| Developer Location | Modernization Partner Offices – Washington DC |

1.1.2 FMS

| Item | Description |
|---|-------------|
| Production Platform <i>(Vendor/Product Name/Version)</i> | HP / HP9000 |
| Operating | Unix |

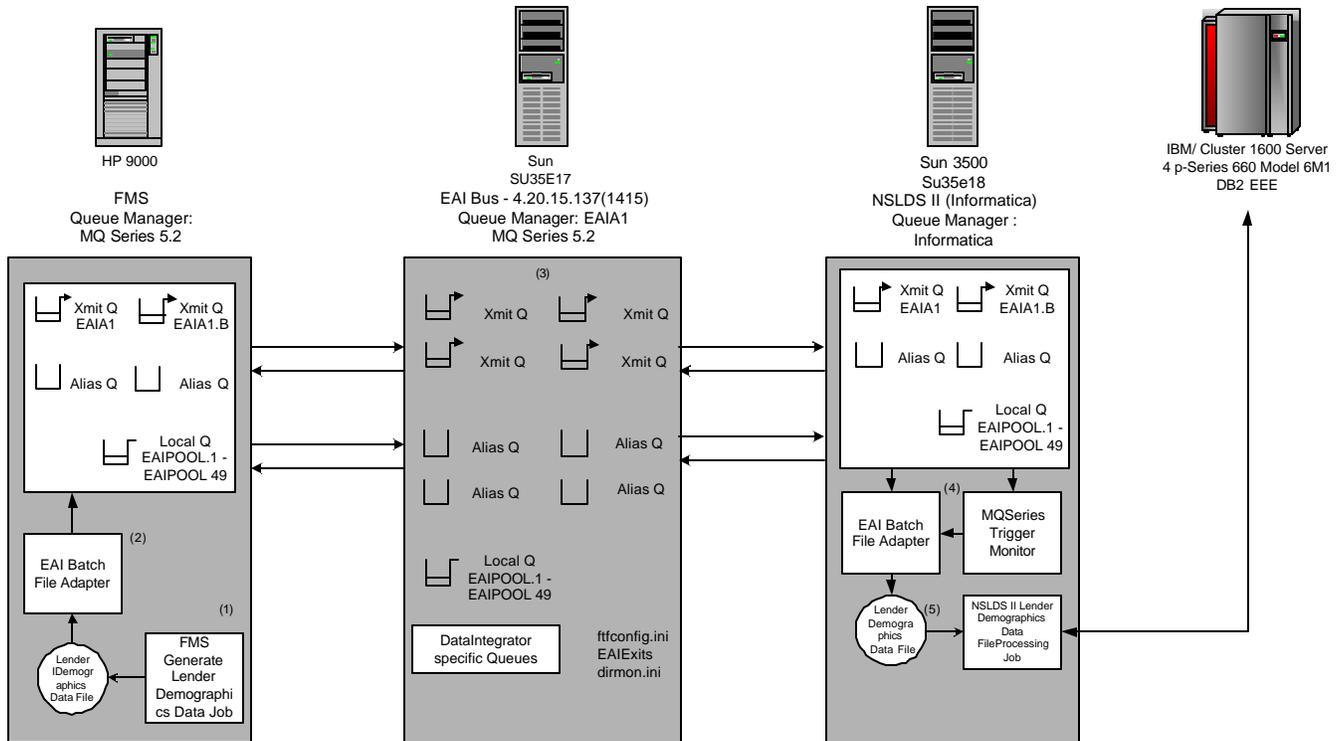
| | |
|--|---------------------------------------|
| System <i>(Vendor/Product Name/Version)</i> | |
| DBMS <i>(Vendor/Product Name/Version)</i> | Oracle 8.i/8.1.7 |
| Transmission Protocol | TCP/IP |
| Production System IP Address | TBD |
| Production System Location | Meriden, CT |
| Contracting Organization | Accenture – Modernization Partner |
| Developer Location | Modernization Partner – Washington DC |

1.2 FFEL Lender Demographics Interface

1.2.1 Interface Control Specifications

| | |
|--|---|
| Interface Name: | Lender Demographics Interface |
| Interface Type/Direction: | Unidirectional, Batch Type |
| Interface Short Description: | <p>This document defines the processes utilized by FMS and NSLDS II to transport Lender Demographics data via the EAI BUS.</p> <p>FMS will send NSLDS II a Lender Demographics file daily. An NSLDS II Informatica job will perform necessary edits and validations, and the appropriate NSLDS II tables will be updated.</p> <p>This file will be used to maintain the Lender and Lender Servicer Tables used by the NSLDS II to verify information from other data providers.</p> |
| Requesting Application: or Source Application: | FMS is the source of the Lender Demographics file |
| Responding Application: or Destination Application: | NSLDS II receives the Lender Demographics file |
| Detailed Technical Requirement References: | 5.064 |
| Interface Usage Frequency: | Daily |
| Interface Usage Volume: | 32,000 Average Records, Average file size of 7.9mb |
| Output Media: | Flat File |
| Transmission Mechanism: | EAI BUS |

1.2.2 Interface Flow



1.2.3 Interface Flow Description

1. The FMS system will initiate a process to create the Lender Demographics data file.
2. The EAI Batch File Adapter will move the file to the EAI BUS.
3. The EAI BUS will route the file to the NSLDS II server
4. The EAI Batch File Adapter will move the file to NSLDS II.
5. The NSLDS II Lender Demographics Data File Processing job (Informatica) will process the Lender Demographics data file and load the appropriate NSLDS II tables.

Invocation of EAI Batch File (receive) adapter may invoke the NSLDS II Lender Demographics Data File Processing job.

1.2.4 Source System Functional Specifications

| # | Responsibility |
|---|--|
| 1 | FMS will extract the Lender Demographics data and save it as a flat file |
| 2 | The data extracted will be laid out as in section 1.2.8 Each record will consist of: One Header Record One or more Detail Records One Trailer Record |
| 3 | Data elements are defined as character, numeric, or date fields, where: <ul style="list-style-type: none"> • Character fields may contain letters, numbers, or blanks • Numeric fields must only contain numbers • Date fields must contain eight digits, be valid dates, and appear in the format CCYYMMDD (e.g., 19990131), where: <ul style="list-style-type: none"> - CC = 2 digits for century - YY = 2 digits for year - MM = 2 digits for month - DD = 2 digits for day <p>The following default values are used in the following types of fields:</p> <ul style="list-style-type: none"> • Character fields—must be filled with spaces • Numeric fields—must be filled with zeroes • Date fields—must be filled with zeroes |
| 4 | An EAI batch file adapter will be supplied to initiate the file transfer from FMS to NSLDS II |
| 5 | FMS will provide the EAI adaptor file transfer utility with the following input parameters: Input File Name - TBD |

1.2.5 Destination System Functional Specifications

| # | Responsibility |
|---|--|
| 1 | The EAI BUS will deliver the Lender Demographics data file to the NSLDS II server |
| 2 | The EAI Adaptor takes the following information as input: Queue manager name - TBD Queue name - TBD Sync point counter -TBD Output file name - TBD |
| 3 | The MQSeries Trigger Monitor may trigger the NSLDS II Lender Demographics data file processing job (Informatica) |

1.2.6 Interface Assumptions

| # | Assumption |
|---|--|
| 1 | MQSeries Queue Manager is installed / configured for the NSLDS II / FMS environment |
| 2 | The EAI architecture will be configured to support the transfer of data from FMS to NSLDS II |

1.2.7 Error Messages

(See Appendix B for Error Codes and Messages)

1.2.8 File Layout

Header Record Layout

| Data Element | Field Position | Length | Type | Description | Edits | Mapping |
|-----------------------------|----------------|--------|---------|--|--------------------------------------|---------|
| Sort Social Security Number | 1 – 8 | 8 | Char | Positional sort field used for sorting the Header Record to the top of the file. | See Appendix A for Field Level Edits | NA |
| Code for FFEL/DCS | 9 – 11 | 3 | Numeric | Identification code for provider. | See Appendix A for Field Level Edits | NA |
| Data Provider Indicator | 12 – 12 | 1 | Char | Indicator identifying the type of data provider submitting this file | See Appendix A for Field Level Edits | NA |
| Submittal Date | 13 – 20 | 8 | Date | Date when the data feed was created | See Appendix A for Field Level Edits | NA |
| Filler | 21 – 245 | 225 | Char | Blank field to complete record length. | See Appendix A for Field Level Edits | NA |

Detail Record Layout

| Data Element | Field Position | Length | Type | Description | Edits | Mapping |
|-----------------|----------------|--------|---------|---|--------------------------------------|----------|
| Code for Lender | 1 – 6 | 6 | Numeric | The ED assigned code for a lender or lender servicer participating in the FFEL program. | See Appendix A for Field Level Edits | LEN/CODE |

| Data Element | Field Position | Length | Type | Description | Edits | Mapping |
|------------------------|-----------------------|---------------|-------------|---|--------------------------------------|----------------------|
| Code for Lender Branch | 7 - 10 | 4 | Numeric | The ED assigned code for uniquely identifying a branch of a lender participating in the FFEL program. | See Appendix A for Field Level Edits | LEN_BR/CODE |
| Lender Name | 11 - 50 | 40 | Char | The name of the lender or servicer participating in the FFEL program | See Appendix A for Field Level Edits | LEN/NM, LEN_BR/NM |
| Lender Address | 51 - 100 | 50 | Char | The mailing address of the lender or servicer participating in the FFEL program | See Appendix A for Field Level Edits | LEN/STR_ADD |
| Lender City | 101 - 120 | 20 | Char | The city of the lender or servicer participating in the FFEL program. | See Appendix A for Field Level Edits | LEN/CITY |
| Lender State | 121 - 122 | 2 | Char | The state of the lender or servicer participating in the FFEL program | See Appendix A for Field Level Edits | LEN/ST |
| Lender Zip Code | 123 - 131 | 9 | Char | The zip code of the lender or servicer participating in the FFEL program | See Appendix A for Field Level Edits | LEN/ZIPCODE |
| Lender Phone Number | 132 - 141 | 10 | Char | The phone number of the lender or servicer participating in the FFEL program | See Appendix A for Field Level Edits | LEN/PH_NO |
| Lender Type Code | 142 - 142 | 1 | Char | The code indicating the organization type of an institution issuing an FFEL Program loan | See Appendix A for Field Level Edits | LEN/TYPE |

| Data Element | Field Position | Length | Type | Description | Edits | Mapping |
|----------------------------|-----------------------|---------------|-------------|---|--------------------------------------|------------------------------|
| Old Code for Lender | 143 – 148 | 6 | Char | The ED assigned code for a lender or servicer participating in the FFEL Program | See Appendix A for Field Level Edits | LEN_BR_TRAN_HIS/OLD_LEN_CODE |
| Old Code for Lender Branch | 149 – 152 | 4 | Char | The ED assigned code for uniquely identifying a branch of a lender | See Appendix A for Field Level Edits | LEN_BR_TRAN_HIS |
| Filler | 153 – 245 | 93 | Char | Blank field to complete record length | See Appendix A for Field Level Edits | NA |

Trailer Record Layout

| Data Element | Field Position | Length | Type | Description | Edits | Mapping |
|--------------------------------|-----------------------|---------------|-------------|---|--------------------------------------|----------------|
| Sort Social Security Number | 1 – 8 | 7 | Char | Positional sort field used for sorting the Trailer Record to the bottom of the file | See Appendix A for Field Level Edits | NA |
| Code for FFEL/DCS | 9 – 11 | 3 | Numeric | Identification code for provider | See Appendix A for Field Level Edits | NA |
| Data Provider Indicator | 12 – 12 | 1 | Char | Indicator identifying the type of data provider submitting this file | See Appendix A for Field Level Edits | NA |
| Submittal Date | 13 – 20 | 8 | Date | Date when the data feed was created | See Appendix A for Field Level Edits | NA |
| Total Number of Detail Records | 21 – 29 | 9 | Numeric | This number will reflect the number of detailed records contained within the submittal file | See Appendix A for Field Level Edits | NA |
| Filler | 30 – 245 | 216 | Char | Blank field to complete record length | See Appendix A for Field Level Edits | NA |

1.3 Appendix A

Record Specifics:

(See Attached Matrix)

1.4 Appendix B

Error Messages and Codes by Field Name

| Field Name | Error Code No. | Error Message Text |
|--------------------------|----------------|--|
| Trailer Record | 0010 | Detail record count not equal number of rec found |
| Trailer Record | 0020 | Invalid Format |
| Trailer Record | 0030 | Data found after trailer record |
| Lender Code | 0040 | Value must be all numbers |
| Lender Code | 0050 | Value must be between 700000 and 999899 |
| Lender State | 0100 | Invalid Code |
| Old Lender Branch Code | 0110 | Must be zeros if Old Lender Code is zeros |
| Lender ZIP Code | 0120 | Value must be spaces or all numbers |
| Lender Phone Number | 0130 | Value must be spaces or all numbers |
| Lender Branch Code | 0140 | Value must be zeros for Lender Service Record |
| Lender Type | 0150 | Invalid Code |
| Lender Branch Code | 0160 | Value must be all numbers |
| Old Lender Branch Code | 0170 | Value not found in database |
| Old Lender Code | 0180 | Value not found in database |
| Old Lender Code | 0190 | Value must be between 800000 and 999899 |
| Old Lender/Lender Branch | 0200 | Data not applicable for lender branch, already in database |