

Project EASI/ED  
Business Area Requirements Document

**Table of Contents**

|                                     | <u>Page</u> |
|-------------------------------------|-------------|
| <b>1. GENERAL INFORMATION</b>       |             |
| 1.1 Summary                         | 1           |
| 1.2 Background                      | 1           |
| 1.3 Environment                     | 6           |
| 1.4 Document Overview               | 7           |
| 1.5 Relationship to Other Documents | 7           |
| <b>2. OVERVIEW</b>                  |             |
| 2.1 Objectives                      | 9           |
| 2.2 Existing Methods and Procedures | 10          |
| 2.3 Project EASI/ED Functionality   | 11          |
| 2.4 Summary of Improvements         | 28          |
| 2.5 Summary of Impacts              | 31          |
| 2.5.1 Equipment Impacts             | 31          |
| 2.5.2 Software Impacts              | 32          |
| 2.5.3 Operational Impacts           | 32          |
| 2.5.4 Development Impacts           | 33          |
| 2.6 Cost Considerations             | 34          |
| <b>3. REQUIREMENTS</b>              |             |
| 3.1 System Assumptions              | 35          |
| 3.2 Functions                       | 35          |
| 3.3 Performance                     | 92          |
| 3.4 Inputs-Outputs                  | 92          |
| <b>4. OPERATING ENVIRONMENT</b>     |             |
| 4.1 Technical Operating Environment | 94          |
| 4.2 Security and Privacy            | 94          |
| 4.3 Controls                        | 94          |
| <b>5. DEVELOPMENT PLAN</b>          | 95          |

## **Table of Contents (Cont'd)**

|                   |   |
|-------------------|---|
| <b>Appendix A</b> | <b>Acronyms and Definitions</b>                                     |
| <b>Appendix B</b> | <b>References</b>   |
| <b>Appendix C</b> | <b>Open Issues</b>  |
| <b>Appendix D</b> | <b>Project EASI/ED Requirements Summary</b>                         |
| <b>Appendix E</b> | <b>Project EASI/ED BARD Version 2.0 Requirements Change Summary</b> |

Project EASI/ED  
Business Area Requirements Document

**Table of Exhibits**

|             |   | <u><i>Page</i></u> |
|-------------|---|--------------------|
| Exhibit 3-1 | Accounting Requirements                       | 37                 |
| Exhibit 3-2 | Application Requirements                      | 46                 |
| Exhibit 3-3 | Disbursement Requirements                     | 56                 |
| Exhibit 3-4 | Program Management and Oversight Requirements | 72                 |
| Exhibit 3-5 | Repayment Requirements                        | 85                 |

# 1. GENERAL INFORMATION

## 1.1 Summary

Project EASI (Easy Access for Students and Institutions) is an effort by members of the postsecondary education community to define and to implement a customer-focused "system" to support postsecondary education. Within Project EASI, Project EASI/ED represents the US Department of Education's (ED's) initial effort to implement the Project EASI vision within the scope of its own business processes and systems.

This *Project EASI/ED Business Area Requirements Document (BARD)* documents the initial requirements baseline for the Project EASI/ED system. These requirements will be used as the basis for follow-on software design and development activities, and as input to related technical architecture, cost/benefit analysis, management planning, and organizational change activities. The *BARD* expresses Project EASI/ED requirements through requirements statements that narratively express functional and data requirements for Project EASI/ED.

The *Project EASI/ED BARD* presents requirements at a consistent level of detail that was determined to be most effective for:

- Initially representing the Project EASI vision specifically within ED's areas of responsibility;
- Rapidly analyzing and representing the processes and data of the 16 systems ED currently uses to support management and delivery of Title IV student financial aid; and
- Facilitating meaningful comparison of the vision models and the current systems models to derive a full list of functional and high-level data requirements for the Project EASI/ED system.

This document is version 2.0 of the *Project EASI/ED BARD*. It replaces the *BARD Version 1.0* published in July 1997. This document defines the Project EASI/ED requirements in narrative form. The *Project EASI/ED Application Services Definition Document (ASDD): Subsystem and Interface Definition (SID)* defines the Project EASI/ED processes and maps those processes to the requirements defined in the *BARD*. The *Project EASI/ED Logical Data Model Document (LDMD)* contains the Logical Data Model (LDM) that represents the subject areas, entities, and attributes necessary to support the EASI/ED processes.

Section 1 of the *Project EASI/ED BARD* briefly summarizes the project background (subsection 1.2), identifies those organizations involved in Project EASI/ED and their responsibilities (subsection 1.3), provides an overview of the *BARD* organization and content (subsection 1.4), and describes the relationship of the document to other Project EASI/ED documents (subsection 1.5).

## 1.2 Background

This subsection briefly describes Project EASI/ED objectives, history, system purpose and scope, and the methodology used to define the requirements. The purpose of this discussion is to provide readers a basis for better understanding the requirements presented in the *BARD*.

**Objectives.** Project EASI and Project EASI/ED share the following objectives, which were defined by community and ED representatives:

- Create a customer-focused "system" to support postsecondary education.
- Provide the customer a single point of interface with the postsecondary education community.
- Streamline, simplify, and improve the accessibility of processes associated with postsecondary education.
- Reduce costs associated with the management and delivery of services associated with postsecondary education.

The *Project EASI Concept Document* and the *Project EASI/ED Program Management Plan* provide further information regarding these objectives.

The Project EASI vision encompasses the entire postsecondary education community, its customers, and its potential customers. This includes children, families, students, borrowers, schools, lenders, secondary markets, servicers, guarantors, state agencies, ED, professional organizations, and external organizations that may wish to share appropriate information (e.g., employers, financial counselors). Similarly, Project EASI/ED encompasses ED's internal areas of responsibility as they relate to the overall vision, as well as ED's interactions with the postsecondary education community, as defined above.

**History.** Beginning in January 1995, a group of ED and external postsecondary education community representatives (the Project EASI Core Team) began working to define a vision that would support realization of the Project EASI objectives. Through the latter half of 1996, Project EASI Core Team members worked closely with many representatives of the postsecondary education community and of ED to develop an Information Strategy Plan (ISP) that would document at the highest level the overall Project EASI vision. Late in 1996, Price Waterhouse, the Project EASI/ED integrator, developed the *Project EASI Concept Document*, which was intended to establish a shared understanding of the Project EASI concept, and of its application to ED's planned implementation effort, among the organizations and individuals involved in Project EASI. Together, the ISP (as documented in the Composer by IEF computer-aided software engineering [CASE] tool) and the *Project EASI Concept Document* formed the baseline documentation necessary to complete the concept phase of the Project EASI/ED system development life cycle.

Beginning in late December 1996, Project EASI/ED entered the definition phase of the system development life cycle. This phase encompasses identification of detailed functional and data requirements for the application software, definition of the technical architecture (i.e., hardware, system software, communications), and initial assessment of organizational and support services change requirements. Definition of Project EASI/ED functional requirements is the first task during this phase.

**Purpose and Scope of Project EASI/ED System.** The Project EASI/ED system (as represented through the functional and data requirements) encompasses the following principal functional areas:

- Information Sharing
- Applying for Aid

- Disbursing Funds
- Repayment
- Enrollment Tracking and Reporting
- Program Management and Oversight

Refer to the *Project EASI Concept Document*, Section 5, for further information regarding the definition of each of these areas and regarding their associated goals and requirements.

Requirements presented in the *Project EASI/ED BARD* encompass functionality and data needed for ED to satisfy existing responsibilities within the context of the Project EASI vision. Project EASI is expected to be a joint effort by ED and by the external postsecondary education community. Given this, some functionality represented within this *BARD* may actually be selected for development by an external organization. For example, a third party organization may be formed to develop and maintain personal identification numbers (PIN's) for individual participants with Project EASI/ED. However, to ensure that the *BARD* presents a full understanding of software requirements associated with Project EASI/ED, it encompasses requirements that are ED's responsibility and requirements that may be candidates for external implementation, but that are integral to successful operation of software and systems within ED's responsibility.

Described below are the two methodologies used to create and update the *Project EASI/ED BARD*. The Requirements Definition Methodology identifies steps performed to create the *BARD Version 1.0*. These activities occurred between January and July 1997. To produce the *BARD Version 2.0*, the team followed the steps outlined in the Requirements Update Methodology. These activities occurred between May and July 1998.

**Requirements Definition Methodology.** Project EASI/ED requirements defined in this document were developed in conjunction with representatives of the Project EASI Core Team, ED, and the external postsecondary education community. Briefly, the requirements definition process used the following steps.

**Step 1: Establish Initial Project EASI/ED Requirements Baseline.** Using the *Project EASI ISP* and the *Project EASI Concept Document* as input, the team extracted an initial set of requirements for Project EASI/ED and documented these in a requirements traceability matrix (RTM). This RTM will be used throughout the system development life cycle to provide traceability from current or envisioned functionality and data through requirements to specific design components, physical system components (i.e., software, hardware), test plans, etc.

**Step 2: Develop Project EASI/ED Vision Data Flow Diagram (DFD) and Conceptual Data Model (i.e., Entity Relationship Diagram [ERD]).** Building from the requirements documented in Step 1, the team developed a first draft DFD and ERD to represent the Project EASI/ED vision. The team developed and documented these models using the CASE tools BPwin and ERwin, respectively. Working with teams of community and ED representatives, the requirements team then conducted a series of Joint Requirements Planning (JRP) sessions for each of the six major functional areas within Project EASI/ED, iteratively refining the DFD's and ERD after each session. The DFD's and ERD that correspond to the initial set of requirements can be found in the *Project EASI/ED BARD Version 1.0*.

**Step 3: Develop Current Systems DFD's and Conceptual Data Models.** The Project EASI vision, and the Project EASI/ED vision models, are externally focused -- i.e., they are expressed primarily from the point of view of students, prospective students, family members, and schools. The requirements team also analyzed ED's current systems to ensure that no functionality essential for ED's business was overlooked. In parallel with the vision modeling effort, the requirements team created comparable DFD's and ERD's to represent each of the 13 systems ED currently uses to manage and deliver Title IV student financial aid. These are:

1. Campus-Based System (CBS)
2. Central Database System (CDS)
3. Central Processing System (CPS)
4. Direct Loan Consolidation System (LCS)
5. Direct Loan Origination System (LOS)
6. Direct Loan Servicing Systems (LSS)
7. ED Express
8. Federal Family Education Loan Program (FFELP) System
9. Multiple Data Entry (MDE) Systems
10. National Student Loan Data System (NSLDS)
11. Pell Grant Recipient and Financial Management System (PGR/FMS)
12. Postsecondary Education Participants System (PEPS)
13. Title IV Wide Area Network (TIV WAN)

The team conducted JRP's with ED technical and functional experts to develop and validate these models.

**Step 4: Confirm Vision and Current System Model Content.** Once each month, the requirements team reviewed the current systems models with senior ED managers responsible for each system. The team confirmed vision model content with a group of senior community and ED representatives selected to represent to the greatest degree possible the full spectrum of the postsecondary education community. Models were iteratively updated as a result of each of these reviews. In addition, issues raised through the reviews were returned to the working level teams for resolution through subsequent JRP's.

**Step 5: Generate Project EASI/ED "Target" Requirements List and Baseline "Target" Model.** The Project EASI/ED "target" requirements and models represent the comprehensive requirements for Project EASI/ED. Using the Project EASI/ED vision model as the driver, the requirements team generated a list of requirements to fully represent the objects in the vision DFD's and ERD. Within the RTM, every object (i.e., activity, entity type) within the vision models was listed and mapped to corresponding requirements. These requirements were, in turn, mapped to "target" model objects, which were then represented in the baseline Project EASI/ED "target" DFD's and ERD (reflecting only the vision model input).

**Step 6: Reconcile Current Systems Requirements to "Target" Requirements.** Within the RTM, each current system model object was represented and mapped to the Project EASI/ED requirements list. If an object could not be mapped to an existing requirement, the requirements team (a) modified an existing requirement or (b) added a new requirement to represent that object. When finished, this list of requirements represented the full complement of Project EASI/ED "target" requirements. The current systems models and vision model to

Project EASI/ED requirements mappings can be found in the *Project EASI/ED BARD Version 1.0*.

**Step 7: Map Project EASI/ED "Target" Requirements to "Target" Models.** During this step, the team mapped each of the "target" requirements in the RTM to a "target" model object, which was then represented within the Project EASI/ED "target" DFD's or ERD. As appropriate, the team modified the DFD's or ERD to accommodate a changed or added requirement. When current systems functionality was not required for Project EASI/ED, the team mapped the underlying model objects to a single "not used" requirement so that traceability for every current system and vision model object is retained. The mapping of Project EASI/ED requirements to Project EASI/ED models can be found in the *Project EASI/ED BARD Version 1.0*.

**Step 8: Conduct Reconciliation Reviews.** Working with the same team of senior ED and community representatives who reviewed the Project EASI/ED vision models, the requirements team reviewed each proposed change to the "target" models. The purpose of these reviews was to ensure that the vision remained intact as additional functionality was added, that each additional or changed increment of functionality was examined to determine whether it should be reengineered to better express the vision, and that the "target" models truly reflected the full complement of Project EASI/ED requirements.

**Step 9: Document Project EASI/ED Requirements.** The final step in this approach was to finish documenting the Project EASI/ED requirements, as expressed through the models and the requirements lists, in the *Project EASI/ED BARD*. The team revised the *BARD* based on comments to the requirements. In addition, in response to an ED request, the team generated an ERD and an Activity Hierarchy Diagram (AHD) in Composer to represent the results of the requirements definition task.

**Requirements Update Methodology.** Since the delivery of the *BARD Version 1.0* in July 1997, the team tracked all proposed changes to requirements. Sources of requirements changes included comments to the *Project EASI/ED ASDD: SID* and *IOA*, requests received during the Joint Information Gathering (JIG) sessions, and issues raised throughout the year. Beyond this, evolving customer expectations and legislative changes also lead to new requirements.

**Step 1: Develop Summary of Changes to Requirements.** Since the release of the *BARD Version 1.0*, the team documented proposed requirements changes. The team then reviewed all recommended changes, assessed the nature of the changes, and categorized the changes by functional area for full review.

**Step 2: Determine Impact of Changes on Documentation.** The team assessed the impact on the *Project EASI/ED BARD* of all requirements changes. Updates to the *BARD* encompass revisions to requirements previously identified, addition of new requirements, and updates to the *BARD* text. The next version of the *ASDD: SID* will contain updates to reflect any new flows resulting from added/changed requirements. In addition, the next version of the *LDMD* will contain an updated LDM that will reflect any new data elements that result from new flows.

**Step 3: Hold Requirements Review Meeting.** Once the full nature of the requirements changes were understood, the team held a requirements technical review with ED management, the Project EASI Core Team, and representative members of the postsecondary education

community. At the review, the team presented each new and/or changed requirement and provided the appropriate history and background to frame the requirement. The group discussed each requirement and accepted the requirement as it was presented, modified the wording of the requirement, or rejected the requirement.

**Step 4: Update Documentation.** Based upon the results of steps 2 and 3, the team updated the *Project EASI/ED BARD*.

### 1.3 Environment

This subsection briefly identifies the key individuals and organizations currently involved in Project EASI/ED. Refer to the *Project EASI/ED Program Management Plan*, Section 2, for further detail regarding their roles and responsibilities.

**Project Sponsor** - Deputy Assistant Secretary for Student Financial Assistance (SFA), within ED's Office of Postsecondary Education (OPE).

**Project EASI/ED Management** - Mr. Jerry Russomano, Director, Program Systems Service (OPE/SFA/PSS), and Ms. Carol Seifert (OPE/SFA/PSS).

**Project EASI Core Team** - Mr. Tom Babel, DeVry Institute and Ms. Molly Hockman (OPE/SFA/AFMS) jointly lead this team, which comprises representatives of schools, lenders, students, ED, and other postsecondary education organizations. The Project EASI Core Team provides continuing input to Project EASI/ED requirements, design, and development activities; acts as the keeper of the Project EASI vision; and performs liaison with other community representatives to ensure that the Project EASI vision represents the broadest possible view of the constituent community.

**Project EASI Steering Committee** - Comprising executive-level representatives of ED, the external postsecondary education community, and other Government organizations, the Project EASI Steering Committee performs a senior-level review and advisory role to ED and community initiatives within the Project EASI vision.

**Users** - Prospective students, families, students, borrowers, schools, lenders, secondary markets, servicers, guarantors, state agencies, ED staff, professional organizations, and external organizations that may wish to share appropriate information (e.g., employers, financial counselors).

**Integrator** - PricewaterhouseCoopers LLP, a contractor retained by ED to serve in this role during this phase of the life cycle.

**Developer** - ED anticipates using the services of multiple organizations (contractor, postsecondary education community, ED) to develop the Project EASI/ED system.

Software implementing the Project EASI/ED functional requirements is expected to operate on ED-owned systems or in contractor-owned and operated data center(s) whose services ED retains. As noted in subsection 1.3, some functionality currently reflected in the *BARD* may be selected for implementation and operation by an external organization, in cooperation with ED. The *Project EASI/ED BARD* does not represent functional requirements for software at schools, lenders, guarantors, or other external organizations.

## 1.4 Document Overview

This subsection briefly describes each section and appendix comprising the remainder of the *Project EASI/ED BARD*. Whenever appropriate, readers are referred to other Project EASI and Project EASI/ED products for relevant information, rather than reproducing previously published information in this *BARD*.

**Section 2 - Overview.** This section presents an overview of the Project EASI/ED requirements as a basis for better understanding the more detailed information presented in Section 3. It addresses performance objectives; existing methods and procedures; proposed methods and procedures (presented as a narrative overview of Project EASI/ED functionality from various user points of view); improvements; and impacts.

**Section 3 - Requirements.** This section provides the detailed Project EASI/ED requirements statements, by functional area; briefly discusses performance requirements as they are currently understood; and summarizes system inputs and outputs.

**Section 4 - Operating Environment.** This section presents a limited discussion of the anticipated operating environment for Project EASI/ED, encompassing consideration of equipment, support software, security and privacy, and controls.

**Section 5 - Development Plan.** This section briefly describes the overall management approach for developing and implementing Project EASI/ED.

Detailed information supplementing the sections noted above is presented in the following appendices:

**Appendix A - Acronyms and Definitions.** This appendix presents a list of acronyms used in the *BARD* and their corresponding definitions.

**Appendix B - References.** This appendix provides a full list of references used as input to this deliverable, including all Government-furnished information and meetings with ED and the postsecondary education community.

**Appendix C - Open Issues.** This appendix contains all open Project EASI/ED issues.

**Appendix D - Project EASI/ED Requirements Summary.** This appendix contains a list of all Project EASI/ED requirements statements in numerical order.

**Appendix E - Project EASI/ED BARD Version 2.0 Requirements Change Summary.** This appendix contains a list of all new, changed, and deleted requirements statements.

## 1.5 Relationship to Other Documents

The relationship of the *Project EASI/ED BARD* to preceding Project EASI/ED documents is listed below.

- *Project EASI/ED Current System Models*, April 1997, presents process and data models for each of ED's current systems. These models were used as input to the functional requirements contained in the *BARD*.

- *Project EASI/ED Vision Model*, April 1997, presents process and data models for the envisioned future EASI/ED system. These models were also used as input to the functional requirements contained in the *BARD*.
- *Project EASI/ED Cost/Benefit Analysis (CBA)*, September 1997, documents the results of an initial analysis of the costs and benefits associated with Project EASI/ED in comparison to the current Title IV systems.
- *Project EASI/ED Configuration Management (CM) Plan*, December 1997, describes the processes and procedures that will be used to implement and execute CM for Project EASI/ED.
- *Project EASI Concept Document*, January 1997, provides the strategic vision for EASI and for EASI/ED.
- *Project EASI/ED Program Management Plan*, December 1996, provides information regarding the strategic direction for EASI/ED.
- *Project EASI/ED BARD Version 1.0*, July 1997, documents the initial functional requirements for Project EASI/ED. The *BARD Version 1.0* is the precursor to this document.
- *Project EASI/ED Technical Vision and Target Architecture (TVTA) Report*, September 1997, initially defines the EASI/ED framework architecture.
- *Project EASI/ED Common Operating Environment (COE) Document*, July 1998, defines the architecture services expected to comprise EASI/ED, and identifies the standards with which any EASI/ED implementation must comply.
- *Project EASI/ED Application Services Definition Document (ASDD): Subsystem and Interface Definition (SID)*, May 1998, documents the EASI/ED subsystems, processes, logical interface requirements, physical access requirements, and processing mode requirements necessary to implement functionality specified in the *BARD*.
- *Project EASI/ED ASDD: Implementation Options Analysis (IOA)*, June 1998, presents the results of the implementation options analysis for the six subsystems defined in the *Project EASI/ED ASDD: SID*.
- *Project EASI/ED Logical Data Model Document (LDMD)*, May 1998, initially defines the data required to implement functionality specified in the *BARD*.

## 2. OVERVIEW

This section presents an overview of the Project EASI/ED requirements and of the objectives those requirements are intended to satisfy.

### 2.1 Objectives

The overall performance objectives for Project EASI/ED software encompass the objectives previously stated for Project EASI overall, as well as the following objectives specific to Project EASI/ED:

- Provide a single, integrated system for ED's management and delivery of student financial aid delivered under Title IV of the Higher Education Act of 1965, as amended.
- Use streamlined, flexible processes that could accommodate other organizations and other financial aid programs.
- Reduce the costs associated with administering, managing, and delivering student financial aid, for all involved parties.
- Provided greater technical flexibility to respond to changing requirements and to accommodate new technology in the future.
- Provide faster, higher quality, and more comprehensive service to all Project EASI/ED system users.
- Achieve data standardization and integration.

Beyond the need to respond to existing Title IV program legislation and to effectively serve the postsecondary education community as it is today, Project EASI/ED software is also expected to respond to the following potential operational changes:

- **Reauthorization of the Higher Education Act of 1965.** Reauthorization legislation is currently in work and may result in substantial changes to Title IV program rules or to ED responsibilities.
- **Changes in Postsecondary Education Delivery System.** Creation of "virtual universities," such as the Western Governors' Association University, heralds movement within the postsecondary education community toward a less centralized approach to delivering education. Innovations like this will challenge the traditional definitions of academic year, full time enrollment, satisfactory academic progress, etc., and will require a more flexible approach to managing and controlling student aid-related activities (e.g., enrollment tracking, aid disbursement). In addition, such approaches increase the complexity of the relationships involved in managing and delivering aid by replacing a traditional one-student-to-one-school approach with one-student-to-multiple-school relationships. Project EASI/ED software will be required to accommodate these changes as they occur, correctly reflecting more complex school-to-school and school-to-student relationships.

- **Continuing Budgetary Pressures.** ED must continue seeking more cost-effective ways to deliver the services for which it is responsible. In addition, postsecondary education institutions and other members of the postsecondary education community are under comparable pressure to decrease costs.
- **Increasing Technical Sophistication of Users.** Each year, the technical sophistication of users throughout the postsecondary education community increases as additional individuals become familiar with increasingly user-friendly technology. This maturation process in turn leads to greater demands for comparably friendly technology within Project EASI/ED.
- **Rapidly Evolving Technology.** The rapid evolution of technology to simpler, more user-friendly forms, and the proliferation of technology in everyday activities (e.g., banking, grocery shopping), is expected to be reflected in the solutions implemented under Project EASI/ED. In addition, as technology continues to evolve in the future, Project EASI/ED software will be expected to mirror these improvements.

## 2.2 Existing Methods and Procedures

This section is intended to describe current systems and procedures that the Project EASI/ED system will replace or improve upon. Readers are referred to the following previously delivered documents for this information:

- ***Project EASI Concept Document*** - describes the current methods and operational procedures used to deliver student financial aid (section 3), identifies organizational and personnel responsibilities in relation to the current systems and processes (section 3), introduces the systems that ED uses to support the Title IV programs (section 3), and identifies deficiencies and limitations of these systems and processes (section 4).
- ***Project EASI/ED Current Systems Models, Volumes I and II*** - present the DFD's and ERD's, and the related reports, that document the current data flows through ED's Title IV systems.

## 2.3 Project EASI/ED Functionality

Project EASI/ED functionality encompasses the Project EASI vision, as it applies to ED's business areas, and the functionality represented by the 16 systems ED currently uses to support financial aid management and delivery. In addition, Project EASI/ED requirements include the functionality of some smaller microcomputer-based systems that ED uses to administer the existing programs (e.g., Campus-Based Programs systems).

The Project EASI vision identified six principal functional areas (see section 1.2). Within the scope of ED's business, Project EASI/ED reflects these six principal areas as: aid application and packaging, aid origination and disbursement, repayment, enrollment tracking and reporting, program management and oversight, and accounting management. In addition, information sharing appears throughout the Project EASI/ED requirements.

The principal external entities expected to interact with the Project EASI/ED system are participants (students, parents, prospective students), schools, FFELP lenders, guarantors, and ED staff. Representatives from other Federal, state, and private organizations are also expected to interface with the system on a more limited basis, at least initially.

The following subsections represent the process flow within the system from the points of view of the major external entities. In each subsection, the participant's interaction is presented in the sequence of the student aid life cycle, i.e., information sharing, application, disbursement, enrollment tracking, and repayment, as applicable. These scenarios do not address specific technology, as the requirements definition task focused strictly on identifying *what* the system needs to do, not *how* it will be done. While the Project EASI vision is clearly oriented toward the most extensive possible use of current technology, the need to serve a variety of populations with widely differing access to and understanding of current technology is also understood.

### 2.3.1 Participant Viewpoint

**Information Sharing.** A participant's first contact with the Project EASI/ED system (Project EASI/ED) might occur before an individual decides to attend a postsecondary institution. A participant could access Project EASI/ED to:

- Obtain consumer information regarding performance of various schools, lenders, guarantors, or other organizations involved in postsecondary education.
- Obtain information regarding financial aid.
- Perform financial aid simulation modeling to determine his or her likely eligibility for Federal financial aid, to estimate the costs to attend a specific school and a specific academic program, and to see what the long-term debt and repayment obligations might be in association with a specific amount of aid and a specific school.
- Receive counseling regarding the Federal financial aid application process.

Any calls to or correspondence with Project EASI/ED will be through a contact center providing a single point of interface for the participant. The contact center will handle multiple channels for customer contact that may include phone calls, interactive voice response, videoconferencing, web-based communication, fax, email, and postal mail.

**Aid Application and Packaging.** Once a participant decides to apply for aid, Project EASI/ED is the single point of contact for submitting an application, for checking on application status, and for obtaining application results. At this stage, participants fall into two categories: first-time applicants and renewal applicants.

First-time applicants for Federal financial aid, or schools operating on the applicants' behalf, submit an aid application via Project EASI/ED. The multi-year promissory note is contained as part of the application, and the signature supplied by the applicant authorizes both the application and the promissory note. Project EASI/ED notifies the applicant of any errors in the application, which the applicant corrects and then resubmits via Project EASI/ED. In contrast, renewal applicants receive a financial aid application already completed using data already residing in Project EASI/ED. The renewal applicant makes any changes necessary to bring the application current and returns it via Project EASI/ED.

After receiving correctly completed applications, Project EASI/ED sends applicants an eligibility determination and the data used to make the determination. Based upon this determination, each applicant works with his or her school to define a financial aid package. A renewal applicant may not be required to sign a new promissory note at this point, depending upon previous aid received and the aid for the new academic period.

At any point during the application period, participants may access Project EASI/ED to review their Federal financial aid history (e.g., loans and grants received, expected disbursements, repayment requirements) or to check the status of their application.

**Aid Origination and Disbursement.** Once a participant enrolls in school, and after applying for aid through Project EASI/ED, the participant accesses Project EASI/ED to receive debt management counseling regarding the consequences of receiving each loan disbursement. Through Project EASI/ED, the participant then authorizes disbursement of loan funds from the fund source (e.g., lender, ED) to the school. Project EASI/ED does not require the participant to authorize disbursement of a Pell grant. The participant may also direct that the disbursement amount be reduced from the amount authorized, or notify the system of an intention to change their enrollment status (e.g. transfer or drop out of school). If a participant has not authorized disbursement through Project EASI/ED within 30 days of the expected disbursement date, Project EASI/ED prompts the participant to authorize the disbursement or indicate that the funds are not wanted. Subsequent to authorizing disbursement, the participant receives credit at his or her school or may receive a direct disbursement of whatever portion of the financial aid disbursement was not used to pay tuition fees. Through Project EASI/ED, the participant authorizes each Federal Title IV loan disbursement made to him or her throughout the participant's enrollment.

Participants may, at any time, use Project EASI/ED to facilitate consolidation or refinancing of eligible loans. To do this, the participant accesses Project EASI/ED to request information on loan consolidation, including a list of authorized consolidation agents. Given this information, the participant may request consolidation of his or her loans and may request a specific consolidation agent. Project EASI/ED subsequently notifies the participant whether the request is accepted. If accepted, Project EASI/ED generates a multi-year promissory note for the Consolidation Loan and sends this to the participant. The participant signs and returns this promissory note to Project EASI/ED.

**Repayment.** Participants access Project EASI/ED to receive repayment counseling prior to entering repayment. Project EASI/ED prompts participants to seek this counseling, during which the

participant receives information regarding current indebtedness and regarding repayment terms and conditions for each loan. The participant may use Project EASI/ED to model various repayment options as a basis for choosing a specific repayment plan. The participant indicates his or her choice of repayment plans via Project EASI/ED, which establishes income contingent repayment terms or facilitates loan consolidation if appropriate. The participant also receives Automated Clearinghouse (ACH) payment information to assist him or her in establishing direct deposit or automatic payroll deduction arrangements for loan repayment.

Once a participant enters repayment status, he or she may interact with Project EASI/ED to:

- Receive notification of eligibility for a deferment or forbearance based upon the participant's enrollment status (i.e., if in school) or service on active duty in the military.
- Request deferments or forbearance for other reasons.
- Request loan discharge, change in servicer (Direct Loans), or a different repayment plan.
- Request a loan de-obligation and notify the school of intent to change enrollment status (e.g. leave school).
- Receive bills and submit payments (via ACH, credit card, or check) for Direct Loans.

Participants who default on a Direct Loan or Perkins Loan, who owe an overpayment on a Federal grant, or whose defaulted FFELP loan(s) are assigned to ED for collection, may request a new repayment plan through Project EASI/ED. Additionally, for defaulted loans, Project EASI/ED establishes offsets on Federal or state payments (e.g., tax refunds) and/or initiates wage garnishment to repay the outstanding balance.

### **2.3.2 School Viewpoint**

**Information Sharing.** Throughout the student aid life cycle, schools will have access to pertinent Project EASI/ED data regarding certain authorized participants and to factual data held in Project EASI/ED regarding their own institutions.

**Aid Application and Packaging.** Schools may opt to assist participants in applying for Federal financial aid. To do so, a school submits a participant's application (either first time or renewal) via Project EASI/ED, receives the system's notification of any errors in the application, corrects the errors, and resubmits the application via Project EASI/ED.

Project EASI/ED sends each school the eligibility determinations and the data on which each determination was based for every participant who named the school on their aid application or who subsequently authorizes release of this data to the school. Schools may access Project EASI/ED to view participants' Federal financial aid history (i.e., financial aid transcript information) for use in developing financial aid packages. Schools may use Project EASI/ED software to assist in the packaging process. Schools have the option of submitting packaging information to Project EASI/ED so that participants may access information on all their packages from one source during this stage of the financial aid life cycle.

Schools that opt to process participants' (borrowers') multi-year promissory notes on their behalf, receive the promissory notes generated by Project EASI/ED, obtain the participant's signature, and

return the notes to ED. Schools can subsequently query Project EASI/ED regarding the status of these promissory notes.

**Aid Origination and Disbursement.** Once packaging is complete for a given participant, a school uses a standard format to create origination records for the participant's Direct Loans, FFELP Loans, Pell Grants, and Perkins Loans. Project EASI/ED subsequently sends the school the results of edits performed on the origination records and the loan authorization decision by the prospective lender (for Direct Loans and for FFELP loans). The school is also notified if other schools have generated Pell Grant origination records or disbursement records for the same participant for the same academic period. The school will also have the option to receive notification if other schools generate origination records or disbursement records for other aid programs for the same participant for the same academic period. If there are any problems with the participant's aid package, the school corrects these problems and resubmits the origination records to Project EASI/ED.

Schools may use three disbursement methods to receive funds: invoice (for Direct Loans, FFELP, Pell Grants, and Federal Supplemental Educational Opportunity Grants [FSEOG]), scheduled disbursement (for Direct Loans, FFELP, and Pell Grants), and draw down (for Direct Loans, Pell Grants, all Campus-Based Programs). Use of these methods will be permitted or restricted based upon each school's performance.

**Invoice (Just-In-Time) Disbursement Method.** Under this method, schools may elect to receive all of a participant's authorized Federal financial aid funds or may request a split disbursement in which part of the authorized funds go to the school and the remainder go directly to the student. A school that chooses to receive all authorized funds for a participant generates a disbursement record and submits it to Project EASI/ED up to 3 days before the funds must be at the school. The school then receives these funds from the fund source (i.e., ED, FFELP lender), providing that the participant authorized the loan disbursement(s).

A school that chooses a split disbursement for a participant generates two disbursement records and submits these to Project EASI/ED up to 3 days before the funds are required. One disbursement record requests the funds required by the school and directs payment by the fund source to the school. The other disbursement record requests the balance of available funds and directs payment by the fund source directly to the participant. The school then receives its share of the authorized funds from the fund source, providing the participant authorized the loan disbursement(s). The school is responsible for arranging to transfer funds from or to the student if the amount needed by the school changes.

Schools using the invoice method submit adjustment or cancellation transactions to Project EASI/ED as appropriate. They also receive from Project EASI/ED a disbursement roster that lists at the student level all disbursements made by fund sources to the school and, if applicable, to participants, within a specified period.

**Scheduled Disbursement Method.** Schools using this disbursement method initially notify Project EASI/ED of the desired disbursement dates via the aid origination records that they submit. If the actual enrollment, award amount, or desired disbursement dates reflected on the origination record changes, the school updates this information by submitting an adjustment to Project EASI/ED. When the participant authorizes the loan disbursement(s), Project EASI/ED authorizes disbursement of Federal funds to the school or the FFELP lender disburses funds to the school, as applicable, on the scheduled disbursement date. The school is responsible for posting the funds and for transferring any unused balances to the participant. Schools then

receive from Project EASI/ED a disbursement roster that lists at the student level all disbursements made by fund sources to the school within a specified period.

**Draw Down Disbursement Method.** Using this method, schools are authorized to draw down specified amounts of Federal funds for each applicable Title IV program.

- **Direct Loans, Pell Grants** - Schools are authorized to draw down the sum of the disbursement amounts reflected in origination records, grouped by date, that are submitted by the school and authorized by the participant.
- **Campus-Based Programs** - Schools are authorized to draw down the amount calculated based upon a program-specific funding formula.

After Project EASI/ED authorizes funds to be drawn down (by notifying the ED Grant Administration and Payment System [GAPS]), these schools draw down the funds and distribute them appropriately.

Schools submit a disbursement roster to Project EASI/ED showing the disbursements made to each participant. If unused funds are returned to ED, schools report these refunds to Project EASI/ED. Finally, Project EASI/ED sends participating schools reconciliation information; if necessary, schools submit adjustment or cancellation transactions to Project EASI/ED so that funds can be reconciled at the student level.

**Enrollment Tracking and Reporting.** Schools will periodically report the enrollment status of all enrolled students (not just Title IV aid recipients).

Using the enrollment information maintained by Project EASI/ED, schools will be able to track the transfers of their prior students. This will allow them to calculate accurate figures for their completion rates.

The all-enrollment information held by Project EASI/ED will also be used, in conjunction with other school-reported data, to allow Project EASI/ED to perform Hope Scholarship and Lifetime Learning Credit reporting on behalf of schools. Project EASI/ED will report the information directly to Treasury and to participants, relieving schools of this burden.

**Repayment.** Schools will interact with Project EASI/ED during the repayment period to:

- Receive notification that a participant received exit counseling from Project EASI/ED or notify Project EASI/ED that a participant has received exit counseling from the school.
- Notify Project EASI/ED of updated outstanding balance information for Perkins Loans and for grant overpayments.
- Receive notification from Project EASI/ED that an associated participant is 90 days delinquent on repayment of any Federal student loan.
- Request skip trace assistance via Project EASI/ED.
- Receive updated participant address information from Project EASI/ED whenever the system receives updates, regardless whether the school requests skip trace.

- Submit to Project EASI/ED a participant's name and address in cases where a participant defaults on a Perkins Loan so that Project EASI/ED can generate a letter to the participant (on ED letterhead) requiring immediate payment.
- Assign uncollectable Perkins Loans to ED via Project EASI/ED.
- For Perkins Loan recipients who choose to consolidate their loans, receive loan verification requests from Project EASI/ED, submit loan verification information to Project EASI/ED, and receive payoff of Perkins loan balance from the consolidating agent.

**Program Management and Oversight.** This area encompasses several aspects of school interaction with ED and with Project EASI/ED, which are summarized below.

**Campus-Based Programs.** Schools participating in these programs are required to submit a Fiscal Operations Report and Application to Participate (FISAP) annually. Project EASI/ED generates this data, using information residing in the system, and sends the required data to the schools to verify the information and make corrections as required. Campus-Based Program schools will interact with Project EASI/ED to:

- Receive Campus-Based award notices (tentative and final).
- Request underutilization or community service Federal Work-Study (FWS) expenditure waivers.
- Receive notification of FWS and FSEOG waiver request results, underutilization waiver request results, and community service FWS waiver request results.
- Receive Perkins Loan cancellation reimbursements.

**Institutional Eligibility and Certification.** Schools may interact directly with Project EASI/ED to perform a variety of actions related to their eligibility and certification to participate in the Title IV programs.

- Update business information (e.g., school name, address, branches) at any time.
- Submit certification applications to Project EASI/ED.
- Receive preliminarily populated certification applications from Project EASI/ED for verification and correction, as applicable, and for subsequent resubmission to Project EASI/ED.
- Submit appeals of eligibility decisions to Project EASI/ED.
- Receive Participating Program Agreements (PPA's) from Project EASI/ED, and return signed PPA's to Project EASI/ED.
- Receive requests for letters of credit from Project EASI/ED, and return letters of credit via Project EASI/ED.

- Notify Project EASI/ED if school ownership changes and of school closures.
- Provide Project EASI/ED with information on financial statements and on third-party audits.
- Receive Limitation, Suspension, and Termination (LS&T) notices from Project EASI/ED.
- Submit LS&T appeals via Project EASI/ED.
- Receive cohort default rates, and backup data used to calculate the rates, from Project EASI/ED.
- Submit cohort default rate appeals via Project EASI/ED, and receive appeal results from Project EASI/ED.
- Receive audit and program review results from Project EASI/ED.
- Submit appeals to audit or program review findings via Project EASI/ED, and receive appeal results from Project EASI/ED.
- Access selected performance measurement information held by Project EASI/ED.

### 2.3.3 Lender Viewpoint

**Information Sharing.** Throughout the student aid life cycle, lenders (i.e., FFELP fund sources and loan holders) will have access to pertinent Project EASI/ED data regarding participants and to factual data held in Project EASI/ED regarding their own lending organization(s). (Readers should refer to Section 2.3.2.5 to understand the data flows for ED as the Direct Loan lender.)

**Application.** After aid applications are processed by Project EASI/ED, the system sends updated applicant eligibility information to lenders regarding applicants who previously borrowed from them.

**Aid Origination and Disbursement.** After Project EASI/ED edits origination records from schools, it transmits to lenders the loan origination records for borrowers with whom the lender is associated and the results of edits Project EASI/ED performs on the origination record. Lenders, in turn, notify Project EASI/ED of their acceptance or rejection of each origination record and identify to Project EASI/ED the guarantor for those records that are accepted. FFELP lenders may also submit origination records to Project EASI/ED.

During the disbursement period, lenders receive disbursement records, adjustment transactions, and cancellation requests from Project EASI/ED. Lenders then notify Project EASI/ED of their acceptance or rejection of each of these transactions. Once a disbursement record (submitted by the school to Project EASI/ED) successfully passes all edits and the participant authorizes the disbursement, Project EASI/ED transmits to the lenders authorization to disburse a loan. FFELP lenders disburse funds directly to the school or student, but also inform Project EASI/ED of each disbursement that is made.

Subsequent to initial disbursement of a loan, lenders submit interest and special allowance payment requests via Project EASI/ED, and are notified by the system that the payment request is accepted or rejected. Project EASI/ED authorizes payment (via the ED GAPS).

While a participant is still in school, or during the repayment period, lenders interact with Project EASI/ED to implement loan consolidations. If an FFELP lender is the consolidation agent, the lender may:

- Request consolidation on behalf of a participant by submitting a request for consolidation to Project EASI/ED.
- Receive loan verifications from Project EASI/ED for other loans held by the participant and receive ACH routing information for the other loan holders that are involved in the consolidation.

If an FFELP lender is not the consolidation agent, but holds loan(s) involved in a consolidation, the lender:

- Receives notification from Project EASI/ED that a participant has requested loan consolidation.
- Receives a loan verification request from Project EASI/ED, and submits to Project EASI/ED the verification and the lender's ACH routing information.
- Notifies Project EASI/ED if the payoff amount (authorized by Project EASI/ED for payment via ED GAPS) was incorrect (overpayment, underpayment).
- Receives from Project EASI/ED an appropriate payoff adjustment from the consolidation agent (ED) when FFELP loans are consolidated into Direct Consolidation Loans.

**Repayment.** Lenders will interact with Project EASI/ED throughout the repayment period to:

- Receive notification from Project EASI/ED of the participant's preferred repayment plan.
- Receive notification from Project EASI/ED when a participant is eligible for deferment or forbearance due to an in-school enrollment status or service on active duty in the military.
- Receive notification from Project EASI/ED that a participant requests a deferment or forbearance for other reasons and notification when any of the lenders associated with that participant grants a deferment or forbearance.
- Submit via Project EASI/ED a deferment or forbearance request on behalf of a participant.
- Notify Project EASI/ED of any change in a participant's loan status (e.g., discharge, default).
- Receive notification from Project EASI/ED of changes in a participant's status that might affect the status of their loan(s) (e.g., death, unemployment, eligibility change).

- Notify Project EASI/ED of loan modifications (e.g., changes in interest rate).
- Submit updated outstanding balance information to Project EASI/ED.
- Request skip trace support via Project EASI/ED.
- Receive updated participant address information from Project EASI/ED whenever the system receives updates, regardless whether the lender requests skip trace.
- Assign defaulted Federally Insured Student Loans (FISL's) to ED for collection.

**Enrollment Tracking and Reporting.** Project EASI/ED notifies lenders of any change in a participant's enrollment status that would affect the status of the participant's loan(s).

**Program Management and Oversight.** Lenders submit updated lender profile information to Project EASI/ED. They also receive Lender Participation Questionnaires (LPQ's) from Project EASI/ED, and submit the completed LPQ's via the system.

### 2.3.4 Guarantor Viewpoint

**Information Sharing.** Throughout the student aid life cycle, guarantors will have access to pertinent Project EASI/ED data regarding participants and to factual data held within Project EASI/ED regarding their own organization.

**Aid Origination and Disbursement.** Most guaranty agency activities associated with making and disbursing FFELP loans occur outside the range of Project EASI/ED. During this period of the life cycle, however, guarantors submit Administrative Expense Allowance (AEA) and reinsurance fee information to Project EASI/ED. The system calculates the AEA and reinsurance fees due to the guarantor based on the data held in the system, and confirms that the information received from the guarantor is accurate. The system subsequently notifies guarantors whether their AEA requests and the reinsurance fee information are accepted or rejected. Project EASI/ED authorizes payment (through ED GAPS) of approved guarantor AEA and reinsurance fees.

Project EASI/ED notifies guarantors of loan status changes (e.g., deferment or forbearance) for loans that they guaranty.

**Repayment.** During this period, guarantors will interact with Project EASI/ED for loans that they guaranty or that they hold. Guarantors will:

- Submit reinsurance claims via Project EASI/ED, and receive notification of claim acceptance or rejection from Project EASI/ED.
- Submit updated outstanding balance information to Project EASI/ED on loans that the guarantor holds.
- Request skip trace support from Project EASI/ED.

- Receive updated participant address information from Project EASI/ED whenever the system receives updates, regardless whether the guarantor requests skip trace.
- Receive information regarding deferment or forbearance requests from any participant whose loan the guarantor holds.
- Request Federal offset information, and receive the results of these requests, from Project EASI/ED.
- Assign uncollectable defaulted loans to ED via Project EASI/ED, and receive notification of ED's approval or rejection of the assignment from Project EASI/ED.

**Enrollment Tracking and Reporting.** Guarantors receive updated information regarding participant enrollment status that would affect the status of any loan that the guarantor holds.

**Program Management and Oversight.** Guarantors interact with Project EASI/ED for the following activities related to their participation in the Title IV programs:

- Send updated guaranty agency profile information to Project EASI/ED.
- Submit the results of guaranty agency, lender, servicer, and secondary market audits and program reviews that the guarantor performs to Project EASI/ED.
- Access Project EASI/ED to obtain program and financial oversight information, including the results of ED/OPE/GLOS reviews.
- Appeal the results of a GLOS review through Project EASI/ED, and receive the results of the appeal from Project EASI/ED.
- Notify Project EASI/ED of approved lender applications for participation in the FFELP.

### 2.3.5 ED Viewpoint

**Information Sharing.** As with other users, ED staff will access Project EASI/ED at any time during the financial aid life cycle to obtain current information regarding participants, schools, lenders, guarantors, other organizations involved in postsecondary education, Title IV financial aid programs, etc.

**Aid Application and Packaging.** During this stage of the financial aid life cycle, Project EASI/ED generates and distributes populated Federal financial aid applications for participants currently receiving aid and for those who previously applied but did not qualify for Federal financial aid. Renewal applications will be populated using the most current data residing in Project EASI/ED or using current data obtained from third parties (i.e., other Federal, state, or private data sources). Use of third party data for this purpose is expected to require prior authorization by the participant. Project EASI/ED receives the confirmed and updated renewal applications, as well as applications from first-time applicants and applications from schools acting on behalf of applicants. Project EASI/ED also

receives signed multi-year promissory notes from applicants, and acts as the central warehousing facility for these notes.

Project EASI/ED edits the aid applications as they are received, notifies applicants (or schools) of any corrections that are necessary, and receives the corrected applications. Once an application passes these edits, Project EASI/ED verifies applicant data against data from third party repositories -- e.g., state agencies, Selective Service, Immigration and Naturalization Service (INS), Social Security Administration (SSA), Department of Justice (DOJ), Health and Human Services (HHS), Veterans Administration (VA). Project EASI/ED will obtain income information for applicants from the Internal Revenue Service (IRS) for use in eligibility determination.

After the necessary checks are performed and income information is provided, Project EASI/ED calculates the applicant's Estimated Family Contribution (EFC) and determines the applicant's eligibility for Federal financial aid. For applicants applying for Direct PLUS Loans, Project EASI/ED requests credit worthiness checks from credit bureaus. After this processing is complete, Project EASI/ED notifies each applicant and the schools listed on the applicant's aid application of the results of the eligibility determination. With this notification, Project EASI/ED also provides the data used to determine the participant's eligibility.

With the applicant's permission, Project EASI/ED notifies authorized scholarship agencies, state grant agencies, and lenders (i.e., lenders from whom an applicant has previously borrowed) of the applicant's eligibility determination.

Schools may access Project EASI/ED to draw down data needed to support packaging. Project EASI/ED transmits appropriate data to schools using the system to perform packaging, and provides a repository for documenting an applicant's financial aid package (including packaging simulations run prior to creating the actual package). Project EASI/ED receives packaging information from schools that do not use the system to perform packaging (and that choose to submit this information) so that applicants can access one source to review all of the aid packages being offered.

**Aid Origination and Disbursement.** During this stage, Project EASI/ED receives origination records from schools for all Title IV programs. The system edits the origination records to:

- Verify that the participant does not have any defaulted loans.
- Verify that the participant does not owe any Federal grant overpayments.
- Verify that the amount of the award cited in the origination record will not cause the participant to exceed the allowable threshold amount for an aid program for the award year or to exceed lifetime maximum limits.

Project EASI/ED notifies the participant and the school of the origination record edit results. If multiple schools submit Pell Grant origination records for a single participant for a single academic period, Project EASI/ED notifies the participant and the involved schools of this condition.

Based upon the edits, the system accepts or rejects origination records for Direct Loans and Pell Grants. It transmits edited FFELP origination records to the lenders and notifies them of the edit results. After the lender makes a determination regarding whether to accept an origination record,

Project EASI/ED receives a notification of the lender's decision, receives the guarantor's name for accepted origination records, and transmits the results of the lender's determination to the school.

Project EASI/ED supports the three forms of disbursement previously noted: invoice (Direct Loans, FFELP, Pell Grants, and FSEOG), scheduled (Direct Loans, FFELP, and Pell Grants), and draw down (Direct Loans, Pell Grants, and Campus-Based Programs). The method(s) of disbursement that a school uses may be established through school choice or through performance requirements specified by ED.

**Invoice Disbursement Method.** In support of invoice disbursements, Project EASI/ED receives disbursement, adjustment, and cancellation records from schools. The system edits these records using the same edits that were applied to the corresponding origination records, and confirms that the disbursement date is no more than 10 days prior to the beginning of the school's academic period. Results of these edits are returned to the participant and to the school. The system forwards edited FFELP disbursement, adjustment, and cancellation records to the appropriate lender, along with the results of the edits. Direct Loan, Pell Grant, and FSEOG records that pass the edits are recorded as accepted in Project EASI/ED.

Project EASI/ED receives from participants their authorization for disbursements to be made. If a participant has not authorized the disbursement within 30 days of the requested disbursement date, Project EASI/ED prompts the participant for the authorization.

Once a disbursement record passes all the edits and the participant's authorization to disburse is received, Project EASI/ED:

- Requests disbursement of Pell Grant and FSEOG funds to the school, and possibly also to the participant, via ED GAPS.
- Requests disbursement of Direct Loan funds to the school, and possibly also to the participant, via ED GAPS, and assigns a Direct Loan servicer to the participant.
- Notifies FFELP lenders that they may disburse funds to the school, and possibly also to the student, and receives notification from the FFELP lenders of the disbursements they make to schools and to participants.

For schools that are working under ED's reimbursement program or cash monitoring program, Project EASI/ED sends disbursement, adjustment, and cancellation records to the appropriate ED Regional Office. The ED Regional Office notifies Project EASI/ED regarding their acceptance or rejection of these records, and Project EASI/ED requests disbursement of funds to schools for the approved disbursement and adjustment records.

Finally, Project EASI/ED generates and transmits to the schools student-level rosters showing the amount of funds disbursed to the school and to the student (when a split disbursement is used to send funds directly from ED or the FFELP lender to the student).

**Scheduled Disbursement Method.** The schedule for this disbursement method is established in Project EASI/ED when origination records are received from the schools. Project EASI/ED either receives a participant's authorization for funds to be disbursed based upon that schedule

or, if no authorization is received within 30 days of the planned disbursement date, prompts the participant to authorize the disbursement.

Project EASI/ED also re-edits the aid origination records associated with a specific disbursement date, applying the same edits as were originally used plus a check that the scheduled disbursement date on the origination record is no more than 10 days before the start of the school's academic period.

Following receipt of the participant's authorization and successful completion of the edits, Project EASI/ED:

- Requests disbursement of Pell Grant funds to the school (via ED GAPS) based upon the disbursement date in the origination record.
- Requests disbursement of funds to the school (via ED GAPS) based upon the disbursement date in the origination record, and assigns a Direct Loan servicer to the participant (for first-time Direct Loan borrowers).
- Notifies FFELP lenders that they may disburse funds to the school, and in return receives notification from the FFELP lenders of the disbursements they make to schools.

Finally, Project EASI/ED generates and transmits to the schools student-level rosters showing the amount of funds disbursed to the school and to the student (when a split disbursement is used to send funds directly from ED or the FFELP lender to the student).

**Draw Down Disbursement Method.** Project EASI/ED authorizes schools to draw down Direct Loan and Pell Grant funds based upon the sum of requested disbursements reflected in the school's origination records, grouped by date, that successfully pass all the applicable edits and for which a participant's authorization to disburse is received.

Project EASI/ED authorizes schools to draw down funds for Campus-Based Programs based upon an amount calculated using specific funding formulas that are applied at least annually.

For State Student Incentive Grants (SSIG's), Project EASI/ED authorizes states to draw down funds based upon a funding formula that is applied to data from Project EASI/ED and from state-supplied information.

For all of these programs, Project EASI/ED notifies schools of the amount they are authorized to draw down (by program and date). The system receives student-level disbursement information by aid program from schools and reconciles this information against the amounts drawn down by the schools. Project EASI/ED receives information from schools and from ED GAPS regarding funds that the schools return.

During this phase of the aid life cycle, Project EASI/ED processes administrative fees for lenders participating in the FFELP. The system:

- Receives interest and special allowance invoices from lenders.

- Notifies lenders whether these invoices are accepted or rejected, based upon calculations and edits performed by Project EASI/ED.
- Requests that ED GAPS make interest and special allowance payments to lenders.

Project EASI/ED also processes AEA and reinsurance fee invoices from guarantors, using similar data flows. Project EASI/ED receives AEA invoices and reinsurance fee invoices from guarantors. The system notifies guarantors whether these are accepted based upon calculations and edits that the system performs. For approved invoices, Project EASI/ED requests payment via ED GAPS.

Additionally, Project EASI/ED calculates the administrative cost allowance (ACA) owed to Pell Grant schools, notifies these schools of the amount of ACA they are to receive, if any, and requests payment via ED GAPS.

**Consolidation.** While a participant is still enrolled in school or after the participant enters repayment, Project EASI/ED facilitates loan consolidation. The system provides loan consolidation information to participants, at their request, including a list of authorized consolidation agents. Project EASI/ED receives loan consolidation requests directly from participants or from lenders acting on a participant's behalf.

When ED is the consolidation agent (i.e., for Direct Consolidation Loans), Project EASI/ED notifies the participant regarding ED's acceptance or rejection of their consolidation request. For accepted requests, Project EASI/ED requests verification information from the loan holder for each involved loan, and receives this information from the loan holders. Project EASI/ED then calculates the payoff amount for a specific date, if necessary, and requests payment of the outstanding balances on each of the involved loans to each loan holder (via ED GAPS). The system originates the new Direct Consolidation Loan with an opening balance equal to the sum of the payoff amounts for each of the underlying loans. Project EASI/ED receives underpayment and overpayment information from loan holders involved in a consolidation, receives information from the Direct Loan lockbox regarding overpayment reimbursements made by loan holders, and requests payment of underpayments to loan holders via ED GAPS.

For FFELP consolidations, Project EASI/ED notifies the requested consolidation agent of a participant's request for loan consolidation. The lender notifies Project EASI/ED whether they accept the participant's request for them to consolidate their loans, and Project EASI/ED notifies the participant of this decision. For accepted consolidation requests, Project EASI/ED requests loan verification information from the loan holders involved in the consolidation. After receiving the loan verification information, Project EASI/ED sends the data on to the consolidation agent. In turn, the consolidation agent notifies Project EASI/ED of the new FFELP Consolidation Loan. The loan holders for the underlying loans notify Project EASI/ED when the underlying loans are paid off.

**Repayment.** As a participant nears graduation, Project EASI/ED notifies the participant (based upon expected graduation date) of the requirement to receive repayment counseling. (Project EASI/ED may also receive requests for repayment counseling from participants at any point while they are in school.) For participants who request repayment counseling through the system, Project EASI/ED informs them of their rights and responsibilities regarding repaying their loans. When counseling is complete, Project

EASI/ED notifies the participant's school. If a school performs the repayment counseling, Project EASI/ED receives notification of this from the school.

Project EASI/ED also provides participants the ability to model standard repayment options (e.g., income contingent repayment) and to notify their lender of their preferences for a specific option. The system refers them to their lenders for additional repayment options. The system provides participants the information necessary to establish electronic funds transfer (EFT) between their banks and ED for Direct Loan repayment.

Other functions that Project EASI/ED performs during repayment are:

- Verifies participant income with the IRS when a participant selects income contingent repayment.
- Notifies participants if they are eligible for deferment or forbearance due to an in-school enrollment status or active duty service in the military.
- Automatically places a participant in deferment for the above reasons unless the participant specifically declines.
- Receives requests for deferment or forbearance for other reasons and forwards these to FFELP loan holders or approves/disapproves them for Direct Loans.
- Notifies all of a participant's loan holders when a participant requests a deferment or forbearance.
- Receives deferment or forbearance decisions from loan holders, and notifies all loan holders of any one loan holder's decision to grant a deferment or forbearance.
- Notifies participants of the results of their deferment or forbearance requests.
- Establishes the start date and length of grace period for Direct Loans.
- Allows participants to forfeit their grace period if they wish.
- Accrues interest on certain Direct Loans during the grace period, and receives payment on that interest.
- Receives requests for loan discharges, servicer transfers, loan cancellations, and changes in repayment plans for Direct Loans.
- Enables students to notify their schools of an intent to change enrollment status in conjunction with submitting a request for a loan cancellation.
- Receives loan status change information from loan holders.
- Notifies a participant's loan holders of any one loan holder's decision to discharge a loan.

- Sends bills and receives payments (via ACH, credit card, or check) for Direct Loans.
- Receives updated loan balance information for Perkins and FFELP loans.
- Modifies loan repayment terms annually for variable interest rate loans that ED holds or at the request of a Direct Loan participant and notifies the participant.
- Provides customer service to participants, schools, lenders, guarantors, servicers, and other organizations involved in Title IV aid delivery.
- Transmits information to credit bureaus for Direct Loans.
- Periodically sends statements of accounts to Direct Loan borrowers.

To support collection of loans and of outstanding grant overpayments, Project EASI/ED:

- Receives defaulted debts assigned from guarantors (FFELP), lenders (FISL), and schools (Perkins Loans, grant overpayments) and, for FISL, pays the lender the balance due on the loan.
- Accepts or rejects the assigned debt and notifies the organization involved of the determination.
- Transmits defaulted loan alerts to the Department of Housing and Urban Development (HUD) and to state agencies.
- Transmits information to credit bureaus on debtors for which ED is the loan holder.
- Supports skip tracing for schools, lenders, guarantors, and state agencies.
- Notifies guarantors, lenders, schools, and state agencies of new participant address information, regardless of whether the organization requested skip trace.
- Requests skip trace assistance from the IRS and from the US Postal Service.
- Initiates garnishment of Federal, state, and private employer wages to repay a defaulted participant's loan balance for loans that ED holds.
- Refers debts (i.e., defaulted loans assigned to ED, grant overpayments assigned to ED, defaulted Direct Loans) to collection agencies and Treasury FMS for collection.
- Receives collection service invoices from collection agencies and requests payment via ED GAPS for loans that ED holds.
- Receives updated collection information from collection agencies for loans that ED holds.
- Receives litigation recommendations from collection agencies for loans that ED holds.

- Provides Claims Collection Litigation Reports to DOJ and, in turn, receives litigation judgment information for loans that ED holds.

**Enrollment Tracking and Reporting.** Project EASI/ED receives enrollment status information from all schools participating in the Title IV programs on their total enrolled student body. The system transmits updated enrollment status information to schools, lenders and guarantors, and automatically generates deferment requests based upon this information. For Direct Loans, Project EASI/ED will determine when the borrower should enter repayment based on this enrollment status information.

**Program Management and Oversight.** Project EASI/ED supports improved program management and oversight by ED staff by providing a more current, more comprehensive source of data and information relating to the Title IV programs. Project EASI/ED incorporates modeling capabilities and statistical sampling necessary to support sophisticated analysis of program trends and key indicators.

Project EASI/ED also supports continuous improvement of Title IV systems and processes by soliciting feedback from system users regarding the system's performance (e.g., user friendliness, response time, data quality) and regarding the organizations involved in delivery of student financial assistance. Project EASI/ED receives this feedback and makes it available for public access. Furthermore, the system maintains performance measures agreed upon by organizations involved in delivering student financial assistance, and uses the data received from system users to monitor progress against these measures. The detailed information on school performance available to the system allows a more performance-based approach to program oversight, with schools being measured against set targets.

### 2.3.6 State Grant Agency Viewpoint

**Information Sharing.** Throughout the student aid life cycle, state grant agencies will have access to pertinent Project EASI/ED data regarding participants and to factual data held in Project EASI/ED regarding their own state grant program and organization.

**Application.** Project EASI/ED sends each state grant agency the eligibility determinations, and the data upon which each determination was based for every participant listing the state as the state of residence on the aid application. Project EASI/ED sends with each eligibility determination the specific state grant data collected in the federal application process.

**Aid Origination and Disbursement.** After Project EASI/ED edits origination records from schools, it transmits to state grant agencies the records for residents of the state receiving Pell Grants.

**Enrollment Tracking and Reporting.** State grant agencies have access to information regarding participant enrollment status for participants listing the state as state of residence on the aid application.

**Program Management and Oversight.** State grant agencies interact with Project EASI/ED for the purpose of determining data collection to assist state grant agencies in administering state grant programs. State grant agencies submit profile information such as application deadlines to Project EASI/ED. State grant agencies receive SSIG allocations and send to Project EASI/ED performance reports on disbursement of funds.

## 2.4 Summary of Improvements

Project EASI/ED software is envisioned to incorporate new functionality, beyond that currently reflected in ED's Title IV systems, to enhance some of the current capabilities, and to eliminate deficiencies associated with the current systems. This section itemizes the changes and enhancements expected from Project EASI/ED.

1. **Retrieval and/or verification of student data (e.g., income data, employment data) from databases belonging to other government agencies.** This capability will permit students to supply less data to apply for aid or for deferments and is expected to provide ED with more reliable data for use in eligibility calculations. Use of IRS, Department of Defense (DoD), state departments of labor, and other government databases is proposed for this purpose.
2. **Implementation of a multi-year promissory note (comparable to a line of credit) to cover multiple loans from one or more fund sources under multiple financial aid programs with comparable terms.** A multi-year promissory note is intended to relieve aid recipients (students and parents) and schools from the burden of creating and signing individual promissory notes for each loan for each year. A multi-year promissory note is also envisioned as promoting borrower refinancing of all loans under a promissory note into a single loan, thus simplifying the repayment requirements (i.e., number of loan holders, number of monthly payments) for the borrower.
3. **Release of aid eligibility information, with applicant consent, to state and private scholarship organizations that are seeking recipients for their funds.** This capability will enhance the delivery of available funds to qualified students that these fund sources may otherwise not know about.
4. **Enrollment tracking based upon total enrollment rather than on enrolled students who are receiving Title IV aid.** This capability will decrease the burden on schools to provide enrollment data, since they will be able to "dump" their entire enrollment database from the registrar's office instead of having to identify financial aid recipients (often requiring coordination between the financial aid office, registrar, and ED). In addition, this will help prevent technical defaults for students who are eligible for in-school deferments by providing more complete visibility to current enrollment status when students transfer schools and do not continue receiving Title IV aid.
5. **Automatic initiation of in-school deferments based upon current enrollment data.** A corollary benefit to more comprehensive enrollment tracking is that Project EASI/ED will be able to notify a borrower and all of the associated loan holders of the borrower's eligibility for an in-school deferment.
6. **Borrower access to a record of their entire Title IV aid portfolio from a single source.** This capability will give Title IV borrowers the ability to assess their indebtedness and repayment status, and to identify all of their loan holders. This is expected to decrease defaults that occur when borrowers are unable to determine who holds their loans, and to increase the borrowers' ability to effectively manage debt.

7. **Collection of student-level information on Campus-Based Program aid recipients.** Comprehensive information regarding Perkins Loans, FWS, and FSEOG would be available, improving recipient visibility into their entire aid portfolio (encompassing these and other programs) and increasing ED's ability to effectively manage these programs.
8. **Confirmation of student eligibility for financial aid at origination and at disbursement.** In cases where there is a delay between aid origination (i.e., packaging) and aid disbursement, Project EASI/ED software will reconfirm student eligibility. The software will check for defaults, grant overpayments, and eligibility in relation to aid threshold amounts. (The aggregate loan limit information held by the system should be much improved.) This is expected to decrease the number of repeat defaults on loans and to enable ED to more efficiently ensure that the correct amount of aid is reaching the correct, qualified recipient.
9. **Calculation of guaranty agency AEA payments.** Project EASI/ED software will enable ED to calculate AEA amounts based upon detailed data instead of based upon summary information provided by guarantors on Forms 1130 or 1189. Data on these forms (if they are retained) then could be used to reconcile ED and guarantor records.
10. **Split disbursements of Title IV aid funds between students and schools, at each school's discretion.** This capability would enable schools to direct Project EASI/ED to direct Federal payments in part to the school (to cover tuition or other costs) and in part to students (when there are remaining funds). Schools exercising this option would be relieved of cutting checks or otherwise distributing remaining funds to students.
11. **Provision of aid application, disbursement, and repayment counseling support for students.** Project EASI/ED software would make counseling information available to supplement counseling currently provided by schools. Counseling support regarding repayment is expected to remove much of the burden for exit counseling from schools.
12. **Financial modeling capabilities for students, prospective students, and family members to enable them to estimate amounts of financial aid required for specific schools, to estimate eligibility, and to project repayment responsibilities associated with various levels of debt.** This is expected to facilitate better long-term planning for postsecondary education and to support better debt management.
13. **Implementation of invoice (i.e., just-in-time) disbursement of funds to schools.** Under the invoice method of disbursement, schools would request funds from ED based upon student-level records submitted much closer to the planned disbursement date than is currently required for all programs. This is expected to improve cash management for both the schools and for ED, and to minimize reconciliation requirements and issues associated with excess cash residing at schools.
14. **Modification of draw down disbursements of funds to schools to require origination records to be submitted by a school before any funds are disbursed to it.** Again, this will improve cash management by providing a tighter link between funds being disbursed using this method and individual recipients.

15. **System notification of loan holders when there is a change in a borrower's enrollment status that would change their eligibility for aid.** This capability will provide the loan holders more accurate, up-to-date information to use in managing their portfolios, and will decrease the burden on students to notify multiple loan holders if their enrollment status changes.
16. **Automatic generation of much of the information contained on the FISAP.** Using student-level information reported on the Campus Based Programs, along with improved enrollment status data, schools will be relieved of much of the burden associated with generating the FISAP each year.
17. **Ability for borrowers, or for loan holders acting at borrowers' request, to request consolidation to an FFELP or Direct Loan Consolidation Loan through a single resource.** The Project EASI/ED system would notify all affected parties of the consolidation request, and would facilitate the consolidation process by requesting and transmitting loan verification data.
18. **Ability for borrowers to request deferment or forbearance on loans through a central resource.** The Project EASI/ED system would notify all related loan holders of the borrower's request and would notify all loan holders when any one loan holder approves such a request.
19. **Generation of school certification applications containing information residing in the system.** This capability would reduce the amount of information that schools must provide on certification applications by enabling them to provide only changed information. Additionally, the revised information would be submitted by the school directly to the Project EASI/ED system, eliminating the current requirement for ED/OPE/ IPOS to manually enter the data.
20. **Providing a single point of interface for schools when they submit data to, or request information from, ED.** This would also enable schools to submit data one time for use by multiple ED organizations.
21. **Use of an integrated database to support all ED Title IV applications will eliminate inappropriate redundancy and minimize the potential for conflicting data to be obtained from various sources.** Under Project EASI/ED, it is envisioned that students, schools, lenders, guarantors, and other participants would submit each piece of data required only once, and that all system users would share the resulting set of data.
22. **Elimination of the requirement for schools to generate Financial Aid Transcripts (FAT's).** Once student-level data is maintained on all Title IV aid programs, and assuming that required Title VII aid is also covered, schools will be able to obtain complete financial aid histories from Project EASI/ED. This will eliminate the substantial burden incurred by schools to generate and respond to FAT requests. It will also improve the quality of information available to schools to support decisions regarding financial aid eligibility.

23. **Reduction of data quality problems by gathering more data from its source.** Project EASI/ED is expected to obtain more data from the original source, thus reducing the opportunity for error to be introduced in the data. Additionally, by obtaining some data from external databases (e.g., IRS), the burden of providing accurate and complete data on less reliable providers (e.g., students initially applying for aid) may also be reduced. A byproduct of obtaining more data from its source should be that fraud and abuse will be reduced.
24. **Reduction of delays in awarding Pell Grants to students who transfer schools mid-year and of erroneous disbursement of Pell Grant funds to schools students are no longer attending.** The Project EASI/ED system will check for students with two or more origination records for Pell Grants within a single academic period, and will notify all involved schools when such a conflict occurs. Use of the invoice method of disbursement by schools participating in the Pell Grant program would also minimize this problem, since schools would not request funds until the recipient actually appears at the school.
25. **Provides users -- including participants, schools, lenders, guarantors, ED staff, and other postsecondary education community members -- improved access to more timely, accurate data.** By obtaining data as close as possible to the original source and by using other databases to verify data where possible, the quality of data for Project EASI/ED is expected to be higher than the current systems allow. Additionally, easy and fast access to this data for all users is one of the prime themes underlying many of the Project EASI/ED requirements.
26. **Improved processing of FFELP origination and disbursement records.** Project EASI/ED will edit FFELP origination and disbursement records, using information unavailable to any individual lender, and accurately determine participant eligibility both at the point of origination and of disbursement.

## 2.5 Summary of Impacts

The full impact of Project EASI/ED on ED and on the external postsecondary education community is not yet fully known. This subsection briefly highlights the expected impact in several key areas: equipment, software, operations, and development.

### 2.5.1 Equipment Impacts

The systems that ED currently uses to support its management and delivery of student financial assistance operate on a diverse range of hardware platforms and use a wide range of system software. Because of the program requirements at the time many of these systems were developed and because of the state of technology over the years, these systems were generally developed as standalone systems. While today many of the systems are loosely integrated to support the Title IV programs, the diverse technology that they employ and the age of some of the systems have made it difficult for ED to easily accommodate changing technology.

Under Project EASI/ED, ED is expected to move to a standardized technical environment -- i.e., a common operating environment (COE) -- that comprises a suite of hardware and system software optimized to best support cost-effective delivery of ED's services and to allow ED greater flexibility to respond to future technological advances and programmatic requirements. For more information regarding this topic, refer to the *Project EASI/ED TVTA Report* and the *Project EASI/ED COE*

*Document*. The *TVTA Report* initially defines the EASI/ED framework architecture. The *COE Document* builds upon the architecture defined in the *TVTA Report* and presents information regarding architecture services and standards.

### 2.5.2 Software Impacts

Project EASI/ED application software is envisioned as encompassing much of the functionality in ED's existing Title IV systems, modified as required to support the overall Project EASI vision within ED's business areas. As represented in this *BARD*, Project EASI/ED application software may comprise, as appropriate:

- Commercial-off-the-shelf (COTS) software packages that replace current applications.
- Current ED Title IV system software converted to operate in the target technical environment.
- Custom software developed to satisfy specific new requirements or to implement revised requirements in the new environment and system by capitalizing on business rules defined for existing systems (e.g., reusing complex rules associated with default rates or interest and special allowance calculations).
- Community-based initiatives or outsourced functions that address specific elements of Project EASI/ED functionality (e.g., generation of PINs).

The *Project EASI/ED ASDD: IOA* is the first attempt to identify candidate implementation options for each Project EASI/ED subsystem. Realization of the Project EASI/ED requirements will necessitate careful planning for migration, conversion, and integration of existing Title IV systems, as appropriate, into a single, integrated Project EASI/ED system.

### 2.5.3 Operational Impacts

Operational considerations for Project EASI/ED encompass staff and operational procedures, operating center procedures and relationships, data (sources, volume, medium, timeliness), data retrieval, data input, and other factors. Sufficient detail regarding Project EASI/ED design and implementation is not yet available to fully explore its impact in all of these areas. Briefly, however, Project EASI/ED is expected to cause the following changes:

**Staff and Operational Procedures.** Project EASI/ED represents the results of a reengineering effort that was focused on the systems used to deliver student financial aid. As system design progresses, and as greater detail is understood about specific implementation of the Project EASI/ED requirements once they are approved, detailed requirements for manual procedures will be identified. It is reasonable to expect that manual procedures will change substantially as a result of Project EASI/ED implementation, as optimum use is made of technology and, at the same time, as greater demands are placed on ED to provide extensive customer service and to accommodate a full range of technology skill levels within the community.

**Operating Center Procedures and Relationships.** Currently, ED contracts separately for operating center support to most of its Title IV systems. These contracts generally closely couple system operations with all other required services -- e.g., software development and maintenance, customer service, manual processing. ED already is initiating an effort to re-architect this contract structure to provide centralized data center support for all of its systems, and to separate supporting services from data center operations. Project EASI/ED is expected to capitalize upon this change. As Project

EASI/ED is implemented, specific responsibilities assigned to the data center will be better understood both in the context of Project EASI/ED functionality and in the context of the technical architecture selected for the system.

**Data.** Changes associated with data cover multiple dimensions.

- An inherent feature of the Project EASI/ED functional requirements is that data will be obtained from its original source as much as possible and as soon as possible. For example, participants will be able to enter their aid application data directly into the Project EASI/ED system, and to directly update their own personal information (e.g., address).
- In some respects the volume of data anticipated for the Project EASI/ED system is expected to be higher than is currently used. However, another fundamental requirement for the system is that redundant data entry be minimized. Thorough analysis of sizing will be required to fully understand the impact Project EASI/ED has on data volume.
- To the maximum degree possible, Project EASI/ED is envisioned to obtain data electronically, directly from the source, using standardized data formats and capitalizing on techniques such as electronic commerce (e.g., Electronic Data Interchange [EDI]). Realistically, the system is also required to accommodate other forms of input in recognition of the fact that the postsecondary education community services a participant base that is often without direct access to technology or highly developed system skills.
- Data timeliness is expected to significantly improve with Project EASI/ED. Another feature of the requirements is that data is gathered in the system as events occur. A requirement for "near real time" data, interpreted to mean data that is current within 24 hours, is an important feature. By collecting data directly and in forms that fit with the natural flow of business at schools (i.e., by student), this increased timeliness may be achieved.

**Data Retrieval.** Currently users have relatively limited access to data within the Title IV systems, and the methods available are often not user friendly. Vastly increased on-line read-only access by a wide range of users is a key requirement for Project EASI/ED. This is an area that cannot be fully assessed without knowing the technical architecture and tools that will be used in the system. However, it is reasonable to state that Project EASI/ED is intended to take advantage of the widest possible array of current tools and technology to make data retrieval more user friendly, less costly to users, and yet manageable for ED and for the system.

#### **2.5.4 Development Impacts**

The requirements presented in this document reflect some significant changes not only from current systems and operations, but also from current program rules (e.g., multiyear promissory note). A preliminary development plan for the system is briefly discussed in Section 5.

Successful development of Project EASI/ED capabilities will require extensive participation by committed, skilled ED staff and representatives of the external postsecondary education community. Users will be asked to participate in design sessions intended to work through the details necessary to implement each set of Project EASI/ED requirements. In addition, users will be asked to retain a reengineering mentality as they work through the development effort -- resisting the pull to design new processes based upon old assumptions and constraints, and looking instead at how best to unleash the power of Project EASI/ED.

## 2.6 Cost Considerations

Costs associated with Project EASI/ED depend upon:

- The functionality represented by the set of requirements approved for the system.
- The selection of technical architecture for implementing the system.
- The degree to which ED is required to provide alternative methods of performing functions that could be performed electronically.
- Decisions regarding implementation sequence, schedule, and approach.

The *Project EASI/ED Cost/Benefit Analysis (CBA)* is the first look at the estimated costs for implementing the functionality represented in this *BARD*. The *Project EASI/ED CBA* documents high level costs and benefits. For each implementation plateau within Project EASI/ED, a more detailed and specific cost/benefit analysis will have to be conducted to assess the costs and benefits of each of the possible implementation options.

### 3. REQUIREMENTS

This section includes a detailed listing of the functional requirements for Project EASI/ED. This section also documents the assumptions made in identification of the requirements, and contains subsections that address performance issues and inputs and outputs.

#### 3.1 System Assumptions

In addition to functional requirements, the team identified certain assumptions. These assumptions are underlying statements that apply to the entire system and to all requirements. The system will do the following:

- Comply with the Privacy Act of 1974.
- Act within guidelines developed under the Americans with Disabilities Act (ADA).
- Comply with the Higher Education Act of 1965, as amended.

The following assumptions apply specifically to the EASI/ED accounting functional requirements :

- Support compliance with the Chief Financial Officers Act of 1990.
- Utilize standards established by Joint Financial Management Improvement Program (JFMIP) and Federal Accounting Standards Advisory Board (FASAB).
- Include the Department's initiatives for business process improvement.
- Support compliance with the Government Performance and Results Act of 1993.
- Adhere to reporting standards outlined by Treasury and the Office of Management and Budget (OMB).
- Centralize all accounting functions and use common business processes where possible.
- Assure compliance with OMB A-127 Requirements regarding financial management systems.
- Comply with the Credit Reform Act.

#### 3.2 Functions

Project EASI/ED functional and data requirements are represented in the requirements statements maintained in the Project EASI/ED Requirements Traceability Matrix (RTM). This section presents those requirements statements, separated by functional area, as Exhibits 3-1 through 3-5.

- **Exhibit 3-1: Accounting Requirements.** Requirements specifically associated with financial aid program accounting. These requirements span the Disbursement and Repayment functional areas.

- **Exhibit 3-2: Application Requirements.** Requirements associated with the Applying for Aid functional area, including packaging.
- **Exhibit 3-3: Disbursement Requirements.** Requirements associated with the Disbursing Funds functional area, including aid origination, and with Enrollment Tracking and Reporting.
- **Exhibit 3-4: Program Management and Oversight Requirements.** Requirements associated the Program Management and Oversight and Information Sharing functional areas.
- **Exhibit 3-5: Repayment Requirements.** Requirements associated with the Repayment functional area.

### 3.3 Performance

This section provides preliminary information regarding performance requirements that are anticipated for Project EASI/ED, based upon the requirements identified in this *BARD*. As work on Project EASI/ED proceeds through the next stage, more detailed information regarding performance requirements will be identified. For example, as the logical data model is developed, specific requirements for data accuracy, validation, and timing will be defined.

**Data Accuracy.** Data accuracy requirements are expected to be comparable to the most stringent standards currently in use, especially for financial and accounting data. Specific standards for mathematical and logical accuracy will be identified as the logical data model is developed. Transmission accuracy standards will be determined as the conceptual architecture (for the application software) is defined.

**Validation.** Project EASI/ED is expected to receive data from as close to its original source as possible. Data submitted to the system will be edited for format and valid values. Data will also be subjected to relational edits against other data within a transmission and against data already within Project EASI/ED whenever possible to further validate its quality and accuracy before it is accepted. Data sources will be responsible for the quality of data that they submit to the system. Specific edits and validations will be defined as the Project EASI/ED development efforts proceeds.

**Timing.** The following performance standards are preliminary and will be refined and revised as development proceeds.

- Response time for user access to read-only data is expected to comply with industry standards (e.g., 2 to 4 second response time). (Note that response time will be affected by the transmission media [e.g., Internet, private network, direct connection] being used.)
- Batch updates to Project EASI/ED are to be processed within a 24-hour window to meet the "near-real-time data" requirement.
- On-line updates will either be processed as they are received or will be batched and processed overnight. Detailed requirements for processing these updates will be established as the development effort progresses through the next step.
- Data transfer and transmission times must be minimized; specific requirements will be established once the conceptual architecture is defined and the technical environment for transmitting data is identified. Transmission time must take into consideration usability, cost, volume and usage patterns, and technology.
- Throughput requirements for specific functions will be defined as the conceptual architecture is defined. The turnaround time required for Project EASI/ED processing of invoice disbursements is 24 hours.

### 3.4 Inputs-Outputs

The system is expected to use both on-line and batch inputs and outputs. Specific formats for receiving or transmitting data, for reports, and for screens will be defined as the effort moves into the design

phase of the life cycle. As mentioned previously, electronic exchange of data will be used to the maximum degree possible. Acceptable media are defined further in the *Project EASI/ED ASDD: SID*.

**Batch Input/Output.** The bulk of data submitted to Project EASI/ED is expected to come from schools and, secondarily, from lenders, guarantors, and servicers. Given the demands on these organizations and the available technology, most of this data is expected in batch form (e.g., EDI transaction batches for disbursements or origination). Examples of batch submissions expected via Project EASI/ED are:

- Batch transmissions are expected from schools for aid applications submitted on behalf of participants; enrollment status reporting; for submission of origination records, disbursement records, adjustments, and cancellations; and for submission of outstanding balance information on Perkins Loans.
- Batch transmissions are expected from lenders to communicate decisions regarding origination records, to submit data regarding actual disbursements, and to submit outstanding balance information.
- Project EASI/ED is expected to use batch transmission to return eligibility assessment results to schools, to apprise lenders of eligibility results, to apprise potential fund sources of eligible applicants, to provide lenders edited origination and disbursement records, to provide schools the results of editing of origination and disbursement records, to disseminate enrollment status changes to loan holders, to assign defaulted loans to collection agencies.

In some cases, batch transmissions may be used daily, with peak volumes occurring in conjunction with key events in the academic year -- e.g., semester start dates, graduation dates, aid application. In other cases, such as enrollment tracking and reporting or renewal application processing, batch transmissions may be done only at periodic intervals (e.g., monthly, quarterly, annually).

**On-line Input/Output.** Users are expected to interact with Project EASI/ED on-line for two primary reasons. First, users may access read-only data on-line. Examples of this include participant access to their student aid history, and reviewing consumer information regarding postsecondary education organization performance. Second, users may make small volume or time-sensitive data updates on-line. Examples of this include participant updates to their personal information; school, lender, or guarantor updates of organizational information; participant submission of aid applications; school updates of an individual student's enrollment status; and participant authorization for fund sources to disburse aid.

As with batch transmission, on-line usage of the system is expected to occur daily for many functions, with peak processing times associated with key events during the academic year for some functions.

Anticipated volumes and patterns will be analyzed in a full sizing and capacity planning analysis to be performed later in the development life cycle.

## **4. OPERATING ENVIRONMENT**

### **4.1 Technical Operating Environment**

This section is intended to address the operating environment required for the software described in the preceding requirements. As stated elsewhere in the document, the Project EASI/ED operating environment is defined through a separate, but related, analysis. This analysis initially resulted in the *Project EASI/ED TVTA Report*, which identifies the framework architecture for Project EASI/ED in terms of the recommended process and data distribution strategy. The *COE Document* builds upon this architecture and presents architecture services expected to comprise EASI/ED, and identifies the standards with which any EASI/ED implementation must comply. In addition, as design of specific subsystems is undertaken, COTS products will be evaluated for their suitability to provide specified functionality, and for their compatibility with the selected architecture and target environment. Design decisions will be considered in relation to the COE standards. The goal of this approach is for the Project EASI/ED operating environment to remain cohesive, flexible, and cost effective, while accommodating new insight gained through detailed system development activities and the advent of new technology.

### **4.2 Security and Privacy**

Project EASI/ED is primarily subject to constraints defined by the Privacy Act of 1974. ED is required to protect the privacy of individual participant information that forms the core data in Project EASI/ED. To comply with this guidance, Project EASI/ED must comply with Government security requirements for transmission of data over public networks (including the Internet and value-added networks).

In addition to data protected by the Privacy Act, Project EASI/ED must protect the security of financial transactions and data that are stored in the system or transmitted over telecommunications network. Furthermore, Project EASI/ED security must encompass protection of business-sensitive data relating to the various organizations participating in the postsecondary education community (e.g., schools, lenders, guarantors, secondary markets, servicers).

Project EASI/ED must adequately secure data and transmissions, while maximizing data access by a large and diverse user community and concurrently expediting development time. To achieve this, Project EASI/ED requires development of detailed guidelines regarding rights to access data by each user group by application area. These access rules will be defined as the Project EASI/ED conceptual architecture is developed. In addition, as part of the analysis leading to definition of the target Project EASI/ED technical environment, careful consideration is being given to the degree of security support afforded by various technologies.

### **4.3 Controls**

Project EASI/ED is required to comply with Federal standards governing financial and accounting systems. Control requirements will be defined in detail as the system or subsystem development proceeds through the design phase of the life cycle. Please refer to the assumptions outlined in section 3.1 for detailed information regarding the standards to which Project EASI/ED must adhere.

## 5. DEVELOPMENT PLAN

Although Project EASI/ED is conceived of as a single system, Project EASI/ED development really represents the complex development or adaptation of an integrated series of applications to work as a single system. *The Project EASI/ED Program Management Plan* lays out the overall development plan for Project EASI/ED. This plan encompasses the multiple threads that comprise the Project EASI/ED effort: application software, technical operating environment, and organizational evolution.

For the purposes of the *BARD*, this discussion of the development plan focuses only on the application software whose functionality is represented in this document. Project EASI/ED application development is envisioned to comprise both short-term and long-term efforts.

In the near-term, ED managers, the Project EASI/ED Core Team, and the Project EASI/ED integrator are working to identify opportunities to realize the Project EASI/ED vision in specific areas -- e.g., providing greater access to data within ED's current systems. Similarly, ED staff have already undertaken initiatives (e.g., Free Applications for Student Financial Assistance [FAFSA] on the Web) to enact the vision within the current systems world. The team is also working to identify opportunities to pilot contemplated functionality, such as invoice disbursements or multi-year promissory notes. This will provide ED and the community an opportunity to vet candidate technology, a chance to assess and revise the requirements associated with a specific function, and a vehicle for more fully understanding the positive and negative impact on external members of the postsecondary education community.

As an initial step in understanding the relative priorities associated with the Project EASI/ED functional areas, the postsecondary education community representatives who attended the Vision and Target model reconciliation sessions were asked for their views on which aspects of the Project EASI/ED Target model were the highest priority for them. While there were a variety of points of view expressed, a large majority of those who gave their views reported that the application processing functional area was a very high priority. Origination, disbursement, and enrollment status reporting functions were also regarded as high priority by a majority of respondents. There was no significant difference between the responses of ED employees, school representatives, and representatives of other organizations (e.g. lenders, guarantors, and professional organizations).

For the long term, the Project EASI/ED integrator is working closely with ED staff, Project EASI Core Team members, and other representatives of the postsecondary education community to firmly and clearly establish the baselines needed to support Project EASI/ED management, development, and implementation. The first step in this process is to complete the definition phase. This includes identification of approved functional requirements and identification of the framework architecture. More detailed analysis has built on these products to define the overall application, data, and technical architecture baseline for Project EASI/ED. The components of this are:

- **Application Services Definition (ASD)** - defining the systems and subsystems within Project EASI/ED, and internal and external interfaces.
- **Logical Data Model (LDM)** - defining the data required for Project EASI/ED overall down to the attribute level, and identifying the relationships among the required data. The logical data model represents the universe of data to be used in any subsequently designed and developed Project EASI/ED applications.

- **Common Operating Environment (COE)** - establishes the standards for products used in Project EASI/ED (e.g., hardware, system software, development environment, languages and tools, telecommunications) and standards for development (e.g., rules regarding application distribution). The COE builds from the framework architecture to reflect the baseline distribution of applications and data as represented in the ASD and in the LDM.

Once this baseline is established, ED can initiate multiple, parallel, coordinated development efforts to implement specific Project EASI/ED functionality. The Project EASI/ED system integrator will be responsible for working with ED managers and with the Project EASI/ED Core Team to ensure that the integrity of the Project EASI/ED vision and requirements are maintained through this process. Design, development, and implementation of specific systems or subsystems within Project EASI/ED -- using COTS software, outsourced services, etc. -- may involve the services of multiple contractors or providers. To ensure the effort's success, each quasi-independent development effort must always be orchestrated in relationship to the overall plan for Project EASI/ED.

The *Project EASI/ED Transition Plan* (to be published August 1998) will provide the first management-level plan for implementing Project EASI/ED. It will define the initial roll-out of functionality, project duration estimates, and a strategy for the transition from the current Title IV environment to the Project EASI/ED subsystems outlined in the *Project EASI/ED ASDD: SID*. It is important to note that while the *Transition Plan* will provide a framework for transition and definition of projects, it is not intended as a tool for integrating and controlling projects during transition.

Finally, to reiterate a point made earlier in the *BARD*, continued and expanded involvement by representatives from all sectors of the postsecondary education community is essential to Project EASI/ED's success. It is imperative that an ever wider audience learn about, understand, and provide input to Project EASI/ED as early as possible to avoid the need for more costly and time consuming changes as the development life cycle proceeds. In addition, this communication and participation is fundamental for the external postsecondary education community to prepare their own systems and processes to work within the Project EASI vision.