

1. INTRODUCTION

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. The specific focus of Project EASI is on those processes and systems with which students, prospective students, and their families most directly interact. Within Project EASI, Project EASI/ED represents ED's initial effort to implement the Project EASI vision within the scope of its business processes and systems. ED's focus is on reengineering the 16 financial aid delivery systems and associated processes used to manage and deliver postsecondary student financial aid authorized under Title IV of the Higher Education Act of 1965, as amended.

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* (June 1997), the *Project EASI/ED Program Management Plan* (December 1996), and the *Project EASI/ED Business Area Requirements Document (BARD)* (July 1997) 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.

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

- Applying for Aid
- Disbursing Funds
- Repayment
- Program Management and Oversight
- Accounting

Refer to the *Project EASI/ED BARD*, Sections 2 and 3, for further information regarding the definition of each of these areas and regarding their associated requirements.

The *Project EASI/ED Cost/Benefit Analysis (C/BA) Report* describes the initial analysis of estimated relative costs and benefits of the Project EASI/ED requirements, as documented in the *Project EASI/ED BARD*, in comparison to the current Title IV systems. This analysis is intended to provide ED and Project EASI managers information they can use as part of their continuing evaluation of Project EASI/ED, and to provide a basis for making decisions regarding which Project EASI/ED requirements to move forward and which requirements to re-examine.

The bulk of the analysis in the *Project EASI/ED C/BA Report* occurs at the level of 22 “functions” that are defined by aggregating the Project EASI/ED requirements presented in the *Project EASI/ED BARD*. Together, these functions represent all Project EASI/ED functionality. Where a higher level summary is required, the functions are themselves aggregated into the following 6 “subject areas”:

1. Information Sharing
2. Application
3. Disbursement
4. Repayment
5. Program Management and Oversight
6. Accounting

These subject areas correspond to the functional areas described in the *Project EASI/ED BARD*, with the addition of an “Information Sharing” subject area to explicitly represent the many Project EASI/ED requirements that support the concept of providing access to timely, accurate, and comprehensive information.

The remainder of Section 1 of the *Project EASI/ED C/BA Report* states the scope of the cost/benefit analysis (subsection 1.1), describes the relationship of this report to other Project EASI/ED deliverables (subsection 1.2), describes the contents of this report (subsection 1.3), and lists the information sources that were used during the analysis and development of the *Project EASI/ED C/BA Report* (subsection 1.4).

1.1 Scope of Analysis

The *Project EASI/ED C/BA Report*:

- Presents the costs associated with the current Title IV systems
- Estimates the costs associated with the Project EASI/ED requirements
- Provides an analysis of the quantitative and qualitative benefits of implementing specific Project EASI/ED functionality
- Recommends those areas of Project EASI/ED functionality that provide the greatest benefit in comparison with the current Title IV systems.

1.2 Relationship to Other Deliverables

The *Project EASI/ED C/BA Report* uses several other Project EASI/ED deliverables as input to the analysis carried out in the report. The Project EASI/ED requirements used as a basis for the analysis are presented in the *Project EASI/ED BARD*. The *Project EASI/ED Current Systems Models* (April 1997), were used to provide information on current Title IV system functionality. Part of the cost/benefit analysis requires that figures for Project EASI/ED hardware and software costs are known. The figures used are taken from the estimated Project EASI/ED Commercial-Off-The-Shelf (COTS) procurement costs detailed in the *Project EASI/ED Technical Vision and Target Architecture (TVTA) Report* (September 1997).

Later in the system development cycle, as ED prepares to undertake implementation of specific functionality, the Project EASI/ED cost/benefit analysis will be updated to reflect an assessment of specific options being considered. For example, at the time that the disbursement functionality of Project EASI/ED is to be implemented, a cost/benefit analysis for this specific area will be performed that focuses on physical implementation options for this functionality. This might include outsourcing the function to a credit card provider, using a commercial-off-the-shelf (COTS) software solution, developing new software to serve this purpose, and so on. The anticipated costs and benefits of each of these alternatives will be evaluated in relation to the current system and to each other as a basis for deciding which acquisition path to follow for this functionality.

1.3 Document Organization

The remainder of the *Project EASI/ED C/BA Report* is organized into the following sections:

Section 2 - Methodology and Decision Criteria. This section presents the methodology used to perform the Project EASI/ED cost/benefit analysis. This section also describes how the Project EASI/ED functionality is decomposed into 6 subject areas and 22 functions, and describes how this functional breakdown is used in the analysis. It also defines the criteria that were used to evaluate Project EASI/ED functionality.

Section 3 - Assumptions and Constraints. This section presents the assumptions and constraints that affected this analysis.

Section 4 - Estimated Costs. This section presents the results of the cost analysis for the current systems and for Project EASI/ED summarized by the 6 subject areas and 22 functions defined in section 2.

Section 5 - Estimated Benefits. This section presents the results of the analysis of estimated Project EASI/ED quantitative and qualitative benefits summarized by the 6 subject areas and twenty-two functions defined in section 2.

Section 6 - Sensitivity Analysis. This section presents the results of the sensitivity analyses performed by modifying the relative weights (expressed as percentages) assigned to the five evaluation criteria defined in section 2.

Section 7 - Recommendations. This section summarizes the overall results of the Project EASI/ED cost/benefit analysis. It recommends those areas of Project EASI/ED functionality that provide the greatest benefit in comparison with the current Title IV systems.

Detailed information supplementing the sections listed above is presented in the following appendices.

Appendix A - Acronyms and Definitions. This appendix presents a list of acronyms used in the *Project EASI/ED C/BA Report* and their corresponding definitions.

Appendix B - Subject Area 1: Information Sharing. This appendix provides detailed cost and quantitative benefit build-ups for the Information Sharing subject area. Cost and quantitative benefit build ups are included for both the current systems and for Project EASI/ED.

Appendix C - Subject Area 2: Application. This appendix provides detailed cost and quantitative benefit build-ups for the Application subject area. Cost and quantitative benefit build ups are included for both the current systems and for Project EASI/ED.

Appendix D - Subject Area 3: Disbursement, including Enrollment Tracking and Reporting. This appendix provides detailed cost and quantitative benefit build-ups for the Disbursement subject area. Cost and quantitative benefit build ups are included for both the current systems and for Project EASI/ED.

Appendix E - Subject Area 4: Repayment. This appendix provides detailed cost and quantitative benefit build-ups for the Repayment subject area. Cost and quantitative benefit build ups are included for both the current systems and for Project EASI/ED.

Appendix F - Subject Area 5: Program Management and Oversight. This appendix provides detailed cost and quantitative benefit build-ups for the Program Management and Oversight subject area. Cost and quantitative benefit build ups are included for both the current systems and for Project EASI/ED.

Appendix G - Subject Area 6: Accounting. This appendix provides detailed cost and quantitative benefit build-ups for the Accounting subject area. Cost and quantitative benefit build ups are included for both the current systems and for Project EASI/ED.

Appendix H - Current Systems Cost Breakdown. This appendix provides a summary of the costs (recurring and non-recurring) for each current system, and the allocation of these costs to each Project EASI/ED function.

Appendix I - Project EASI/ED Overall Cost Breakdown. This appendix provides a summary of the overall costs for Project EASI/ED, allocated to recurring and non-recurring cost categories.

1.4 References

This subsection cites the information sources used for this analysis.

Documentation:

- Department of Commerce, *Federal Information Processing Standards Publication (FIPS) 64: Guidelines for Documentation of Computer Programs and Automated Data Systems for the Initiation Phase*. Springfield, Virginia: National Bureau of Standards. August 1979.
- Dreger, J. Brian, *Function Point Analysis*. New Jersey: Prentice Hall, 1989.
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- Office of Management and Budget (OMB). "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs" (Circular No. A-94, Revised Transmittal Memorandum No. 64). Washington, D.C.: OMB, October 1992.
- Performance Engineering Corporation, "An Analysis of NSLDS Architecture Alternatives," February 1997.
- Price Waterhouse, *Estimating Guidelines*, White Paper, February 1996.
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- Saaty, Thomas, *A Scaling Method for Priorities in Hierarchical Structures*, *A Journal of Mathematical Psychology* 15 (June 1977), pp. 234-281.
- US Department of Education, Common Origination and Payment Process Team, *Project EASI - Common Origination and Payment Process, Discussion Draft Version 2*. Washington, D.C. August 1996.
- US Department of Education, *Project EASI/ED Business Area Requirements Document, Volumes I and II*, Price Waterhouse LLP, July 1, 1997.
- ----, *Project EASI/ED Concept Document, Revised Final*, Price Waterhouse LLP, June 1997.
- ----, *Project EASI/ED Current Systems Models, Volumes I and II*, Price Waterhouse LLP, April 16, 1997.
- ----, *Project EASI/ED Program Management Plan*, Price Waterhouse LLP, December 1996.
- ----, *Project EASI/ED Technical Vision and Target Architecture (TVTA) Report, Volumes I and II*, Price Waterhouse LLP, September 15, 1997.

Interviews:

The following list identifies by service the individuals that participated in cost gathering or criteria ranking sessions.

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