U.S. DEPARTMENT OF EDUCATION
OFFICE OF THE INSPECTOR GENERAL

REVIEW OF YEAR 2000 RELATED RISK TO PROGRAMS ADMINISTERED UNDER TITLE IV OF THE HIGHER EDUCATION ACT

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REVIEW OF YEAR 2000 RELATED RISK TO PROGRAMS ADMINISTERED UNDER TITLE IV OF THE HIGHER EDUCATION ACT

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Executive Summary

We have assessed the risk of the U.S. Department of Education's (ED's) systems and hardware not being able to process Student Financial Assistance (SFA) in the year 2000 (Y2K). Our assessment addressed the state of readiness of ED's 13 mission-critical systems involved in the delivery of SFA as reported on by ED's Independent Verification and Validation (IV&V) contractors.

ED has Made Significant Progress

Based on the progress made in recent months, the risk of ED's systems and hardware not being ready for Y2K has been significantly diminished. Presently, 10 of the 13 mission-critical systems instrumental in the delivery of SFA have been reported by ED as renovated, validated and implemented. IV&V supports this conclusion with the exception of some minor issues which should not impact Y2K implementation. We concur with IV&V that all systems should, by ED's definition, be implemented by March 31, 1999.

Four Crosscutting Areas of Risk Remain

It is important to note that ED has not included end-to-end testing, trading partner testing or contingency planning as prerequisites for implementation. These three areas of risk, along with planned system enhancements will warrant continued monitoring.

- *End-to-End Testing* – ED's end-to-end test plan appears complete and is in the process of being implemented, but is not expected to be completed until Summer 1999.
- *External Trading Partners* – ED has greatly increased the SFA community's Y2K awareness, and has invited all institutions to test their data exchanges during "windows" of opportunity. Despite this effort, ED should anticipate that some trading partners may not achieve Y2K compliance. The number and nature of trading partner problems will determine the impact.
- *Contingency Planning* - ED expects to have its contingency plans established by March 31, 1999 and tested by July 1, 1999. The diminishing time available to address any problems arising from the end-to-end or trading partner testing magnifies the importance of a thorough contingency planning process.
- *New Systems/Functionality* - ED has several development initiatives and systems enhancements planned for 1999 that must be monitored to ensure that they do not have a negative impact on its Y2K readiness.

ED Is on Track to Achieve Y2K Readiness

Each of the areas of risk identified above has been discussed with ED management, and is being addressed through the Department's Y2K Steering Committee. In our opinion, ED is presently on track to achieve Y2K readiness for its SFA-related mission-critical systems prior to January 1, 2000, contingent upon the Department's ability to adequately address the areas of risk mentioned above. Our conclusion is based on the current status of ED's Y2K effort, the resources available and the rate of progress demonstrated in recent months, as confirmed by the IV&V process.

Background

HEA Requirements Concerning Y2K

This risk assessment is the first of two Office of Inspector General reports concerning the Year 2000 issue required by the Higher Education Act (HEA) of 1965, as amended. The 1998 amendments to the HEA require the OIG to perform and publish a risk assessment of the systems and hardware under the Department's management. Additionally, the amendments require OIG to report on the results of our review of the Department's Year 2000 compliance for processing, delivery, and administration of grant, loan, and work assistance programs by June 30, 1999.

The HEA requires the Secretary of Education to "take such actions as necessary to ensure that all internal and external systems, hardware, and data exchange infrastructure administered by the Department that are necessary for the processing, delivery, and administration of the grant, loan and work assistance are Year-2000 compliant by March 31, 1999, such that there will be no business interruption after December 31, 1999." This deadline for the systems supporting higher education programs is consistent with the Office of Management and Budget's requirement that Federal Agencies complete their Y2K compliance for all Federal systems by March 31, 1999.

The Y2K issue arises from the inability of computer systems to store or process dates beyond December 31, 1999. Computer systems that use a two-digit date field (i.e., "99" for the year 1999) may not be able to recognize "00" as the year 2000. Without renovation, these systems may fail or produce erroneous results. The Department is currently taking steps to mitigate the risk of the Year 2000 (Y2K) issue impacting its computer systems and programs.

Oversight Entities Have Been Critical of Past Y2K Efforts

The OIG, OMB and the General Accounting Office (GAO) have been critical of the Department's past efforts to prepare for the Year 2000. In our March 1998 audit report *The Status of the U.S. Department of Education's Readiness for Year 2000,"* we reported that the Department was behind schedule in establishing its Year 2000 readiness and needed to accelerate its efforts. We reported that ED needed to:

- Complete its systems inventory;
- Develop an accurate and supported cost estimate;
- Complete a Year 2000 management plan;
- Improve coordination and communication with data providers;
- Enhance its oversight of contractor Year 2000 compliance; and
- Initiate contingency plans for mission-critical systems.

Although ED has made significant progress since our March 1998 report, the diminishing time remaining to address the problem remains a concern. In its September 17, 1998, testimony *Year 2000 Computing Crisis: Significant Risks Remain to Department of Education's Student Financial Aid Systems* before the Subcommittee on Oversight and Investigations, House Committee on Education and the Workforce, GAO reported that Y2K failures could severely disrupt the Department's student financial aid delivery process, potentially delaying disbursements and application processing. GAO stated that the Department was accelerating its Year 2000 program, but with the slow start, it is still playing catch up. GAO also expressed concern that because of system interdependencies, repercussions from Year 2000-related problems could be felt throughout the student financial aid community.

OMB Recently Upgraded Education to Tier Two

Until recently, OMB classified the Department in its listing of Tier One agencies not evidencing adequate process in preparing for the Year 2000. In December 1998, OMB upgraded the Department to Tier Two based on ED's most recent progress report. Tier Two includes agencies where OMB sees evidence of progress, but also has concerns. OMB concerns include 1) the Pell system renovation schedule slipping to December 1998 and 2) the Department's numerous data exchanges which may be at risk and will require additional oversight and end-to-end testing.

Failure of the Y2K Effort Could Significantly Disrupt Student Aid

Success of the Department's Year 2000 process is critical. Failure to adequately prepare for the Year 2000 could result in significant disruptions in the delivery of student aid, such as the inability to originate new student loans, pay guaranty agency and lender claims, and administer education grants. These negative outcomes can be avoided by the Department's implementation of Year 2000 compliant systems and by the development of strong contingency plans to ensure uninterrupted service.

ED Has Made Significant Progress In Preparing SFA Systems For Y2K Compliance

The Department has made significant progress in renovating its systems and expects to be in compliance with OMB's and HEA's requirement to implement compliant SFA related systems by March 31, 1999. In fact, the Department currently reports that ten of thirteen mission-critical systems impacting student financial aid delivery have been renovated, validated and implemented. These systems include:

1. Direct Loan Central Database (DLCD)
2. Direct Loan Origination System (DLOS)
3. Direct Loan Servicing System (DLSS)
4. Postsecondary Education Participants System (PEPS)
5. Education's Central Automated Processing System (EDCAPS)
6. Campus Based System (CBS)
7. National Student Loan Data System (NSLDS)
8. Pell Grant Recipients Financial Management System (PELL)
9. Title IV Wide Area Network (TIVWAN)
10. Multiple Data Entry System(MDE)

Our review of IV&V documentation supports the assertion that nine of these systems completed renovation and validation except for minor issues that remain outstanding for EDCAPS, DLSS, DLOS, CBS and TIVWAN that should not affect implementation. While the Department reports the PELL system as implemented, we found that the IV&V contractor has not yet completed its independent validation of the final test documents. However, the IV&V contractor informed OIG that they are nearing completion of their work and are not aware of any issues affecting validation and implementation.

The Department reports that the remaining three systems will complete the implementation phase before the March 1999 deadline. Our review of IV&V documentation disclosed no indications that the Department would miss their target dates. These systems include:

1) Central Processing System (CPS): January 1999
2) Education's Local Area Network (EDNET): January 1999
3) Federal Family Education Loan Program (FFEL): March 1999

While systems reported as implemented have been independently validated and put into production, they have not met all the criteria GAO recommends be met before systems are implemented as Year 2000 compliant. In its two guides, *Year 2000 Computer Crisis: An Assessment Guide [GAO/AIMD-10.1.14]* and *Year 2000 Computer Crisis: A Testing Guide [GAO/AIMD-10.1.21],* GAO recommends completion of end-to-end testing and implementation of contingency plans before systems are reported as implemented. ED has not yet completed these tasks, although both are currently in process and on schedule to meet the OMB required dates.

Y2K Risk Assessment

Overall, we have concluded that the risk of ED's systems and hardware not being ready for Y2K has been significantly diminished based on the work achieved in the past few months. Our assessment of Y2K risk of Departmental systems critical to student financial aid delivery is presented in Exhibit 1. We assessed the level of risk outstanding for each of the individual systems based on a review of the following factors:

- Status of Commercial Off the Shelf (COTS) Software Products;
- Status of the Network and Operating Environment;
- Status of External Interfaces;
- Sufficiency of Resources Available;
- Remaining Time to Complete Implementation;
- Status of the Validation Process; and
- Status of the Implementation Process.

We describe our methodology and source of supporting data in the Scope and Methodology section of this report. Appendix A provides a description of the thirteen systems included in our assessment. The Summary Risk column provides our overall evaluation of the level of risk associated with the individual systems. The following descriptions provide a guide for interpreting the level of risk:

BLUE: The system has been implemented, IV&V has been completed, and there are no outstanding IV&V issues. Additionally, end-to-end testing and contingency planning involving this system has been completed.

GREEN: The system has been implemented, IV&V has been

completed, and there are no outstanding IV&V issues.

YELLOW: The system requires monitoring because implementation is not yet complete, IV&V has not been completed, and/or minor issues need to be resolved. The system is expected to complete implementation by March 31, 1999.

RED: The system requires monitoring because major issues indicate that the system may not be implemented by March 31, 1999.

There were no systems meeting our summary risk criteria for BLUE and RED. The following four systems had a summary risk of GREEN: DLCD, NSLDS, PEPS and MDE. The remaining nine systems had a summary risk rating of YELLOW.

In addition to assessing risks at the system level, we identified four crosscutting risk areas that may impact the Department's ability to continue processing student financial aid without disruptions.

- **ED Needs to Complete End-to-End Testing:** End-to-end testing between the ED's systems and its trading partners is critical to ensure that interrelated systems will collectively operate. The Department has developed an end-to-end testing plan for its core business processes, shared it for comment within the financial aid community and incorporated the suggestions received into its final plan. Although testing is underway, it is not expected to be completed until after the March 31, 1999 deadline required by the HEA. In part, the protracted testing process is necessary to accommodate some large institutions and servicers that are not expected to be ready for testing until Summer 1999. Based on our review, the end-to-end testing plan developed by ED includes all critical data exchanges. However, the diminishing time available to complete all essential end-to-end testing and resolve any new issues identified during the process poses additional risk.

- **External Trading Partners:** Due in part to a significant outreach effort from ED, awareness of the Y2K problem is building among the many external parties participating in the student financial aid programs, such as lenders, guaranty agencies and schools. However, despite a concerted effort in recent months to provide advice and disseminate information about how to become Y2K compliant, the status of readiness of

many members of the education community remains unknown. ED's Y2K plans include scheduled time "windows" from April 12, 1999 through October 1, 1999 when external trading partners are invited to test the ability of their systems to exchange data with ED systems. Even with this risk-mitigation strategy, it is expected that some participating institutions will not take advantage of the testing opportunity, and/or fail to achieve timely compliance. Y2K failures at trading partners could disrupt the student financial aid process, unless adequate contingency plans are in place.

- **Contingency Plans Need to be Completed:** The Department needs to complete its ongoing contingency planning process to ensure the continuity of the student financial aid process. ED reports that its current effort is progressing in accordance with its established timetable and OMB reported milestones. Sixteen process teams with membership from across the Department, including OIG representation, are developing contingency plans for ED's core business processes. The planning process also includes consultation and coordination with ED's business partners. While the Department is presently a few weeks behind schedule, the SFA Contingency Planning Coordinator has expressed confidence that ED is still on target to have all plans established prior to March 31, 1999 and tested before July 1, 1999. In addition to addressing potential Y2K failures of Department managed systems, the contingency plans will need to address failures affecting SFA that could occur at trading partners or with the public infrastructure. ED has recognized that further work will be required to test and update contingency plans as needed until December 31, 1999. To complete its planning effort, the Department will also need to address funding to cover the costs of implementing contingency options. These costs have not yet been estimated.

- **Continuous Monitoring for New Systems/Function:** ED has several development initiatives and system enhancements that are ongoing or planned for 1999 that must be monitored to ensure that they do not have a negative impact on its Y2K readiness. They include: conversion of TIVWAN from dial-up to an Internet-based infrastructure, ongoing consolidation of critical systems at a single physical site and transition to the new Pell system. Other activities that are targeted at maintenance or resolving previously identified problems also present a risk. Included in this category are remediation of network security concerns, resolution of virus protection software issues, and continued activity to improve EDCAPS functionality. The

risks in this category are also impacted by organizational and key personnel changes that have recently occurred or are expected in the near future.

ED Is Committed to Mitigate Risk

We have discussed each of the four risk areas with ED's Y2K Steering Committee. They have presented status reports of their plans to address end-to-end testing, trading partner testing and contingency planning. They have also committed to monitor planned system enhancements to ensure that they do not have a negative impact on the Department's Y2K readiness.

ED Is on Track for Y2K Readiness

We are of the opinion that ED is on track to achieve Y2K compliance prior to January 1, 2000, contingent upon the Department's ability to adequately address each of the four risk areas presented above. We base this conclusion on our analysis of the data presented in Exhibit 1 and the significant rate of progress in recent months as confirmed by the IV&V process.

Scope and Methodology

Report Addresses Risk of Non-Compliant Systems

We assessed the risk that the Department's systems and hardware for the processing, delivery, and administration of the grant, loan and work assistance programs would not be Year 2000 compliant such that there will be no business interruption after December 31, 1999. The focus of our assessment is the Department's implementation of its Year 2000 Project and the status of systems supporting student financial aid programs. The scope of our risk assessment did not include sufficient steps to independently verify management's assertions concerning systems reported as successfully implemented. Also, our report does not include an assessment of the severity of disruptions that may occur should the Department ultimately not be successful in implementing Year 2000 compliant systems.

OIG Identified Thirteen Critical Systems Affecting SFA

We included thirteen of the Department's mission-critical systems in our assessment. These systems include eleven SFA program specific systems operated by the Office of Student Financial Aid. The remaining two systems are the Department's financial system and its Departmentwide network. These two systems, managed by the Office of Chief Financial and Chief Information Officer, also provide critical functions for student financial aid. Appendix A provides a listing of the thirteen systems and their related functions.

MITRE Corporation's Y2K Scorecard

Our assessment included identifying general risks affecting the entire student financial aid delivery process under the Department's control and specific risks affecting individual systems. In reviewing the Y2K risks for individual systems, we used a modified version of theY2K Scorecard approach developed by the MITRE Corporation, and included on its website as public information. MITRE developed the Y2K Scorecard as a management tool for providing standard, periodic high level reporting on the risk that the Year 2000 problems will impact the missions of an organization's systems. The Scorecard identifies the level of risk for a number of risk drivers and it gives a snapshot of the progress each system has made in resolving its Y2K problems. The Scorecard uses four color codes to indicate the level of risk. The color codes, from lower to higher risk include: BLUE, GREEN, YELLOW and RED.

Reliance on the IV&V Process

Data supporting our assessments was primarily gathered from our monitoring of the Independent Verification and Validation (IV&V) process used by the Department to ensure that systems were properly renovated and validated. Intermetrics provides the IV&V services for the eleven SFA program specific systems, while Booz-Allen & Hamilton provides the IV&V for EDCAPS and the EDNET. Based on our work, we determined that these contractors were adequately performing the IV&V process and that we could rely on their work in conducting our risk assessment. To gain this reliance and gather risk data, we:

- Gained an understanding of the IV&V services being provided by reviewing the contracts and planning documentation and discussing the process with Department and contractor personnel;

- Observed the IV&V process by attending meetings, participating in IV&V test visits, and interviewing contractor staff; and

- Reviewed monthly status reports, system closure plans, draft and final IV&V reports, and other appropriate documentation.

Other OIG Procedures

Additionally, we gathered risk information from other OIG monitoring efforts including:

- Review of Monthly and Quarterly Status reports submitted by the Department to OMB;

- Review of Y2K Project documentation, including the Department's Y2K management plan, draft end-to-end testing plans, draft contingency plans, and documents disseminated to trading partners as part of the Department's outreach efforts;

- Review of Department and GAO testimony concerning the Department's Y2K progress;

- OIG attendance at weekly Y2K steering committee meetings conducted by the Deputy Secretary;

- OIG participation in Department contingency planning teams;

- OIG audit reports including: *The Status of the U.S. Department of Education's Readiness for Year 2000* [Report Number 11-70011, March 1998] and *Funding the Year 2000 Conversion, A Report on ED's Y2K Cost Estimates* [Report Number 11-80011, December 1998];

- OIG reviews of Y2K readiness at five guarantee agencies.

Exhibit 1

Y2K Status Report for Systems Critical to OSFAP Program Delivery

System Name	Principal Office	Summary Risk	COTS Software	Network& Operating Environ-ment	External Interfaces	Resources	Time	Validation	Implemen-tation
EDCAPS	OCFO								
EDNET	OCIO								
CBS	OSFAP								
CPS	OSFAP								
DLCD	OSFAP								
DLSS	OSFAP								
DLOS	OSFAP								
FFEL	OSFAP								
MDE	OSFAP								
NSLDS	OSFAP								
PEPS	OSFAP								
PELL	OSFAP								
TIVWAN	OSFAP								

BLUE GREEN YELLOW

Exhibit 1

Summary Risk: This is an indicator of the "highest" level (color) of risk associated with the system, determined by the highest severity Risk in the other columns. [Modified from "Solution Risk" in the MITRE scorecard by including Validation and Implementation risk directly in the risk drivers summarized, rather than only including them indirectly through the Time risk driver.]

COTS Software: This indicator is based on risks associated with COTS application software is by the system. [Modified from MITRE model by only including applications software.]

- Blue: IV&V has reported that all COTS products were found compliant.
- Green: All COTS application software used by the system has been certified by the manufacturer as compliant, and the POC responsible has documented this certification.
- Yellow: Some COTS products have not yet been certified by the manufacturer as compliant, but certification or replacement with a compliant version is expected; or the certification documentation has not been maintained by the Program Office.
- Red: At least one COTS manufacturer will not certify a product as compliant, and certification or replacement with a compliant version isn't expected, requiring replacement.

Network and Operating Environment: This is an indicator of risks related to the system's hardware, operating system(s), and networking components. [Modified from MITRE model by adding COTS hardware and systems software, and deleting infrastructure components outside the control of the Department (i.e. power systems, water supply, public safety, airports, etc.).

- Blue: The system's infrastructure components have been validated by IV&V.
- Green: No specific issues related to hardware, operating system(s), and networking components required for successful operation of system have been identified by IV&V.
- Yellow: IV&V has identified the system's Hardware, Operating Systems, or a Networking components as requiring upgrade and/or additional testing.
- Red: At least one component was found to be non-compliant, and replacement with a compliant version isn't expected, requiring replacement and possible system modification.

External Interfaces: This is an indicator of risks related to data exchanges with the system's internal and external trading partners.

- Blue: IV&V has validated all data exchanges with the system's internal and external trading partners as having been sufficiently tested, including all end-to-end test cycles that include this system.
- Green: IV&V has made no specific comments relating to the reliability of data exchanges, or has recommended testing but identified specific known issues.
- Yellow: IV&V has identified specific issues relating to data exchanges that must be addressed or tested.
- Red: There are date exchanges known to be non-compliant (or that cannot be tested) and which therefor still must be renovated for the system to exchange data in a compliant manner.

Exhibit 1

Resources: This is an indicator of risks related to the Department having sufficient resources (staff, funds, management support) to complete the Y2K project successfully.

- Blue: There are no unresolved issues related to resource risk.
- Green: There are only minor, resolvable issues related resource risk.
- Yellow: There are significant issues requiring management attention to ensure adequate resources are provided for timely and successful completion of the project.
- Red: Management has not committed to providing adequate resources, or there are external limitations that would prevent adequate resources from being made available.

Time: This is an indicator of risks related to the Department's ability to meet statutory or administration imposed deadlines for achieving Y2K milestones.

- Blue: The renovated, or newly developed system has been successfully put into service prior to the OMB deadline of 3/31/1999, and IV&V has issued its final report with no significant issues identified regarding the system's compliance.
- Green: There are no known issues that should delay the renovated, or newly developed system from being successfully put into service prior to the OMB deadline of 3/31/1999.
- Yellow: There is a risk that the system won't be implemented, or that IV&V may not be able to issue its final report on the system, prior to 3/31/1999.
- Red: There are known issues to which would prevent one or more system components from being put into service prior to the OMB deadline of 3/31/1999 if not given prompt and continuous attention from Department management.

Validation: This indicates risks related to the timeliness and completeness of the IV&V process.

- Blue: Final report issued with no additional testing of core system outstanding.
- Green: Report issued with minor testing or monitoring of some system components still recommended; or, report to be issued by OMB validation deadline of 1/31/1999 and no significant areas still untested.
- Yellow: Report is not due until after OMB deadline, but will be issued with adequate time for system to be implemented with OMB deadline.
- Red: Final report may not be issued until after OMB 3/31/1999 deadline for implementation allowing possibility that concerns identified by IV&V will have to addressed after that deadline, or no independent IV&V contractor report is expected.

Implementation: This is an indicator of risks related to the timeliness and completeness of the system implementation.

- Blue: System has met the GAO definition of implementation.
- Green: System has been reported as implemented, however, there may be steps remaining to meet GAO definition of implementation such as end-to-end testing with data partners, or completion and testing of contingency plans..
- Yellow: Planned implementation date is prior to OMB deadline, and there are no known issues to prevent achieving that date.
- Red: Planned implementation date is after OMB deadline, or there are known issues which may prevent achieving a planned date earlier than the OMB deadline.

Appendix

System Name	System Function
ED Central Automated Processing System (EDCAPS)	The Grant Administration and Payment System (GAPS) module of EDCAPS supports the grant planning, pre-award and award management of ED programs. It interfaces with other program office systems, referred to as feeder systems, to process their obligation and payment data. GAPS controls payments for ED's programs. GAPS services as a subsidiary the FMSS general ledger for program-related obligations, payments and expenditures. GAPS interfaces with FMSS at the summary level for purposes of funds control and general ledger postings. GAPS also supports the ED's regulatory development and clearance process and maintains its regulatory library. The Financial Management System Support (FMSS) module provides the functionality for general ledger and funds management. FMSS also includes receipt management; payments management for administrative funds; funds availability checks for FFEL; and cost management that includes performance measures. The Recipient System (RS) module serves as a recipient database for ED. Functionally, the RS serves to validate whether an entity is eligible to receive funds. It also maintains various indicative data regarding contacts, mailing addresses, bank account information, tax identification information, and whether an entity is currently under suspension or debarment.
Dept. of Education Infrastructure (EDNET)	All of the hardware/software supports the EDNET by developing, maintaining and facilitating the implementation of a sound and integrated information technology architecture, and promotes the effective and efficient design and operation of all major information resources management processes.
Campus-Based System (CBS)	CBS supports all database maintenance and operations for the Federal Perkins Loan (Perkins), Federal College Work-Study (FWS), Supplemental Educational Opportunity Grant (SEOG), Income Contingent Loan, National Science Scholars, and Default Reduction Assistance programs. In addition, stand-alone PC programs are created to enable ED and its customers to more efficiently administer and manage the various aspects of these programs. The primary mission of CBS is to gather data from 4300 institutions of postsecondary education who wish to participate in Perkins, FWS, and SEOG, to calculate each award according to legislatively-prescribed formulae, and to enter financial transaction information into ED's accounting system.

System Name	System Function
Central Processing System (CPS)	The primary role of the CPS is to process aid applications (FAFSAs) through a series of data checks, formula calculations and verification checks with other Federal agencies. CPS then prints the information and eligibility results on the Student Aid Report (SAR) for mailing to the student or institution. CPS interacts with numerous other Federal systems, thousands of institutions, and millions of students. In order to perform these functions, the CPS performs data matches with: 1) Federal agencies 2) NSLDS; and 3) a Hold File, which includes Federal Pell Grant Overpayments and other problem cases. CPS is also responsible for the development, testing, and distribution of the EDExpress Software, FAFSA Express Software, EDE Express Tutorial Software, and the Pell Payment Software.
Direct Loan Servicing System (DLSS) and Direct Loan Central Database (DLCD)	These two systems jointly are responsible for the servicing of all 5.8 million Direct Loans and maintains the ledger accounts for all financial transactions associated with the program. The servicing system is built on top of Digital VAX hardware and the Central Database Router System /Financial Accounting System is built on IBM mainframe hardware
Direct Loan Origination/ Consolidation System (DLOS)	This system supports the delivery of the Direct Loan Program by providing the front end processing of direct student loans with the participating institutions of higher education. The system enables the making of direct student loans to eligible borrowers and then transmits the appropriate booked loan data to the Central Database and Loan Servicing systems. This system also provides for the consolidation of multiple student loans into a single direct consolidation loan.
Federal Family Education Loan System (FFEL)	FFEL services defaulted loans and grants, FFEL Program lenders, FFEL Program State Agencies, and closed school loans.FFELP System is used to pay interest and special allowances to lenders and to pay default claims to guarantors. The FFEL Debt Collection Subsystem, is used to support ED collection of defaulted loans from all Title IV loan programs and to collect Federal Pell Grant overpayments.
Multiple Data Entry System (MDE)	MDE provides all computer applications requisite to the image-based processing of original FAFSAs, Renewal Applications, Student Aid Reports (SARs), Correspondence, FAFSA Express and FAFSA/ Renewal WEB signature documents, and return mail. MDE collects the data from ED's paper-based forms; performs document analysis and data entry services, transmits the collected data to the ED Central Processing System; and performs other related services.

System Name	System Function
National Student Loan Data System (NSLDS)	NSLDS prescreens Title IV aid applications to ensure no ineligible students receive aid. NSLDS collects student enrollment data from schools and distributes it to the guaranty agencies and the Direct Loan servicer for further distribution, to ensure all loans are repaid in a timely manner. NSLDS calculates cohort default rates for schools, guaranty agencies and lenders to ensure that only quality institutions are participating in Title IV programs. NSLDS allows schools and guaranty agencies access to online functions that assist them in tracking students' Title IV aid history. NSLDS supports policy and budget research conducted by various offices within ED, as well as the Congressional Budget Office.
Postsecondary Education Participants System (PEPS)	PEPS maintains the institution's level of participation in the TITLE IV programs of administering student financial aid. It is used primarily by oversight authorities to certify, and audit postsecondary institutions participation within the program. PEPS feeds data to NSLDS, to maintain current participation levels and for calculating default rates; and, to OCFO for maintenance of audits.
Pell Grant Recipient Financial Management System (PELL)	PELL stores program information on post-secondary, institutions and on recipients. It provides fund accountability and control information, and source data for program budgeting and evaluation.
Title IV Wide Area Network (TIVWAN)	TIV WAN provides the network link from institutions to the Department's systems, i.e., CPS, NSLDS, Pell, and DLOS, for delivery of student financial information.

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