OVERVIEW

Study of the Development of the Department of Education's Financial Management System and Student Information and Program Management System

Summary

The Legislature asked the auditor to examine two major computer projects of the Department of Education--a financial management system (FMS) and a student information and program management system (SIPMS). It also requested guidelines for its use in evaluting funding requests for future projects of this kind. To conduct our review, we retained the services of the Advanced Information Technology Group of Price Waterhouse.

The FMS project is scheduled to become operational in July 1991, one year behind its planned implementation date. This delay and other problems have resulted in training facilities not being fully used, hundreds of personal computers being purchased for a system that is not yet operational, additional costs for consulting services, and an inability to reasonably estimate the costs of completion.

These problems, we believe, were caused by major shortcomings in the development process. The DOE selected unproven system software that was not compatible with systems now operating within state government. The requirements definition, which forms the basis for system development, was not complete. The project bypassed critical checkpoints in the development process and did not involve department personnel in essential stages of programming and testing. The department also engaged in improper procurement practices--it circumvented competitive bid requirements by making purchases through one of its consultants, acquired consultant services without soliciting competitive proposals, and did not comply with administrative directives in purchasing hardware and software.

Still in the early planning phase, the SIPMS project has completed a preliminary plan and a requirements definition. The plan proposes a "staged" approach and concentrates on the student information portion. The department estimates that this first stage will take six years and $23.8 million to complete. We believe that the estimated $3.3 million for the first two years is realistic, considering the tasks outlined. We cannot comment on the remaining $20.5 million because this estimate

covers construction and implementation costs that will depend heavily on the software and modifications.

Recommendations and Response

For the FMS project we recommend that the department follow three steps: (1) agree on what capabilities exist in the delivered software, what critical requirements must be in the system, and, therefore, what capabilities still need to be added or modified before full implementation; (2) develop a workplan defining the time, effort, and costs necessary to complete the remaining tasks; and (3) define project responsibilities and agree on the assigning of remaining tasks. For the SIPMS project, we recommend that it continue the "phased implementation approach" and that it use existing hardware and software as much as possible.

We recommend that the Legislature require initial requests for funding such systems to be accompanied by a report written in language a lay person can understand, justifying the need for the system and, if funding is granted, to require status reports during system development.

The department concurs generally with our recommendations and acknowledges that certain areas could be improved. However, the department feels that the report did not present a complete picture and therefore fosters incorrect impressions of project management. It says that problems are not uncommon with large and complex projects like FMS and that the problems do not automatically infer project mismanagement.

Background

The FMS project dates back to 1987 when a department study characterizing the 20-year-old financial system as cumbersome and recommended a new "integrated" computerized financial management system. For this new system, the Legislature has appropriated $12.3 million over the past three sessions.

The SIPMS project was the result of the department's desire to make information on students and instructional programs more accessible to schools, districts, and the state office. A department study recommended a seven-phase project to be installed in ten years at a cost of over $100 million. The Legislature turned down requests for $3.26 million in 1989 and $361,000 in 1990.

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