Common Student Information System for Schools and School Boards

Project Summary

May 2007

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1. Executive Summary

The purpose of this report is to provide the public and interested stakeholders with a summary of outcomes and benefits to be achieved from the Common Student Information System project. The project is a school district led and Ministry of Education supported project to develop and implement a common student information system for use by public school boards and independent school authorities.

The Common Student Information System replaces the many existing student information systems that are growing obsolete and unable to keep pace with school and school board management needs.

Student information systems are the primary systems for operating schools. The systems include student registration, enrolment, scheduling, recording of marks and outcomes, and reporting. These systems are used by educators and school boards to collect the information they need to manage student achievement. The new common system provides the underlying systems infrastructure needed to improve education management and ultimately drive student achievement.

The common student information system initiative is supported by the Ministry of Education. This support is provided by contracting the services required to build, host and support implementation of the system. Responsibility and funding for the project is shared. To assist planning for schools and school boards, cost sharing is based on a per student cost basis. School boards are responsible for implementing and supporting use of the system in their schools. The Ministry of Education is responsible for contracting the centrally hosted system and delivery of support services to school boards. The ministry shares in the cost of school board implementations with a one-time (per student) grant and school boards pay a portion of the annual system operating cost to the ministry. Independent school authorities will participate in the same way with the same benefits.

Background

In March 2004, the Ministry of Education purchased student information system software from Administrative Assistants Ltd. (AAL) of Burlington, Ontario. The software was selected by a group of B.C. school districts through a competitive procurement process. The system was customized to meet the needs of B.C. school districts and schools.

On June 30, 2005, the Ministry of Education entered into a contract with Fujitsu Consulting (Canada) Inc. (Fujitsu) to deliver central application hosting and integrated support services to meet the initial and future needs of schools, school boards, and the ministry. Fujitsu provides: a secure facility and systems to operate the system; support infrastructure for school boards in the form of an integrated services website; level-two application support and help desk services for school boards; and security and service delivery management services.

For the common student information system, Fujitsu assumes responsibility for the computer processing capacity and service levels required by school boards to use the system effectively to support management of schools. Financial consequences may be applied for not meeting contracted service levels consistently over time.

The protection of personal information is of critical importance to government. Pursuant to the *Freedom of Information and Protection of Privacy Act* (FOIPPA), the ministry has ensured that privacy will be protected.

The common system will improve control over access and sharing of personal information by permitting access only to those persons within a school who have a need to know. Maintaining privacy standards and processes to protect personal information is an integral part of the project for schools, school boards, and the Ministry of Education. Personal information will not be transmitted or accessed outside of Canada. Further details are included in Section 5.

The term of the Fujitsu contract is five years and is renewable by the ministry for an additional five-year term. The total value for the initial scope of services is $15 million over the initial five-year term.

2. Project Background, Rationale, Benefits and Scope

Business Context and Rationale

Education in British Columbia focuses on student achievement, accountability, flexibility, choice, and autonomy. Improving student achievement is the overarching goal in all parts of the education system. To support this goal, the ministry uses a funding model that allows school boards flexibility in determining how funds/resources are allocated. Strong accountability measures are established for achieving results; and the ministry supports the building of infrastructure needed to enable schools and districts to focus on student achievement.

Timely access to data about student and school performance has become critical to achieving the goals of the education sector. As a result, school boards require improved information management systems.

Many existing information systems used in schools are unable to keep pace with school board management needs, ministry funding and reporting requirements, and pressure for information from parents and the public. Without a common student information system, new investments by individual school boards would be required to improve the systems in use today. The common system avoids future individual expenditures by schools and no longer requires school boards to replace or improve old systems.

It is in this business context that the rationale and three key drivers for a common student information system are expressed:

1. Provide the information needed by all schools, school planning councils, school boards and the ministry to manage education effectively, improve student achievement, and ensure accountability;
2. Improve reporting capacity for schools and school boards and avoid future reporting costs for individual school districts; and
3. Enable and support business and policy change and new education delivery methods to achieve the targeted outcomes.

The new system was designed based on the following guiding principles:

- Delivery of a competitively priced and cost effective centralized system by a service provider for use province-wide;
- Voluntary participation by school boards;
- Sharing of implementation, on-going operating costs and investments between participating school boards and the ministry;
- Shared governance by participating school boards and the ministry;
- Flexibility to respond to changing administrative requirements and new services;
- Linking of school board operating costs to current and future student enrolment (e.g. per student pricing for services); and
- Future expansion of services as the requirements of school boards and the Province evolve.

Project Objectives

The common student information system provides a cost effective tool to improve the capacity of schools to measure and report on student achievement. The overall objective is to improve student performance through the information provided by the system. Other objectives of the common system include:

- Allowing schools to use the same software and through a centrally hosted system reduce the number of systems deployed;
- Allowing school boards to share administrative services and focus more resources on the delivery of education;
- Reducing administrative burden on schools, improving flexibility and choice for students and parents and creating an integrated network to manage student information for schools and school districts;
- Providing school principals, school planning councils, school boards, and educational leaders with the tools to capture student performance information, report on overall results, and make appropriate strategic decisions; and
- Improving current systems and enabling all schools to operate as part of an integrated flexible education system.

Benefits

The advantages of a common system include:

- Improved management of student achievement by schools and school boards by providing them with timely and accurate access to student performance data, enabling data based planning;
- Improved economies of scale, especially for smaller school boards;
- Increased control and access to information to manage schools and improved quality and standardization of data for accurate reporting;
- Shared responsibility between the ministry and school boards in the systems that support changes to education policy; and
- Reduced costs and improved benefits of system customization, operation, and maintenance.

If a common system had not been pursued, school boards would have had to make individual and more costly purchasing decisions over time and the opportunity for integration and standardization would have been lost.

Areas where cost savings are anticipated to school boards within various support areas are identified in the following table.

Support Area	Without a Common System	With a Common System
Conversion and Implementation	No savings from common conversion processes or plans across school districts.	Common and reusable plans for conversion are coordinated for each current software product and all districts share in benefit of common approaches.
Software License	Per unit license costs are projected to be 50 percent higher for individual districts.	Districts share cost benefits from provincial procurement.
System Operations	Sharing of operations costs is limited to districts that choose the same software platform and desire cost sharing approaches.	All districts may share operations costs. Common services may be used to meet district requirements.
Reporting	Districts individually increase investments in information resources to meet reporting requirements.	Investments in new information resources to meet reporting requirements are shared between districts and the ministry.
User Training	No savings from staff movement across districts	User training costs reduced.

Support Area	Without a Common System	With a Common System
Ministry Data Collection Processes	Districts assume cost and risk for implementing and supporting new processes.	Ministry shares in cost and risk for implementing and supporting new processes.
Software Improvements	Districts continue to pay individually for changes to software to meet new requirements.	Ministry and districts share in software change costs to meet new requirements.

Participation

All 60 school districts and 114 independent schools have committed to implement the common student information system.

Through an operational agreement between the ministry, and participating school boards, participating schools and districts have committed to:

- Implement the common system in their schools and assume local implementation and training effort and cost;
- Provide a first level support capability with service desk, problem determination, and support capacity to minimize overall support requirements or subscribe to an optional service alternative;
- Provide source data in a standard format according to plans for data conversion and loading;
- Develop, implement and support external system interfaces for the purpose of accomplishing integration with the common system;
- Pay an annual service subscription charge (for operating cost recovery) of approximately $10 per student per year; and
- Participate in the governance of the system.

The ministry committed to school boards to provide the contracted services and support the project to enable implementation and use by schools and school boards.

The ministry's responsibilities include the following:

- Hosting the application and assuming responsibility for the contracts and fees for contracted services;
- Providing resources and tools to minimize the duplication of effort across participating school boards and providing a common approach for implementation;
- Providing a flexible training program and materials;
- Providing second level support including help desk services for problem resolution; and

- Providing a one-time implementation grant to participating school boards that make an early commitment to implement. This grant is paid per student on successful implementation at a school and is intended to partly fund the implementation costs of participating school boards.

The commitments described above enable shared funding of the project, assign responsibilities for implementation and provide an incentive for participating school boards to implement the system successfully.

Solution Scope

The initial scope of services to be provided by Fujitsu includes the application hosting and support services for the common student information system. Fujitsu will provide a secure facility and systems to operate the system and support infrastructure for school boards in the form of an integrated services website; level-two application support and help desk services for school boards; and security and service delivery management services.

Beyond the implementation of common student information system, other application systems or services may, at the option of the ministry, be added to the scope of integrated service delivery. Services may include related or supporting services to meet the needs of schools, school boards, and the ministry.

The Ministry will work with business representatives of several school boards, at their request, defining service business requirements for several common systems initiatives.

Prior to exercising this option, the ministry will follow the "In Scope Optional Services" process defined in the contract with Fujitsu. The process describes the school district and ministry common service business requirements and levels. Fujitsu will submit a proposal to the ministry identifying a solution and service that will meet all service requirements and levels. The ministry may accept or reject this proposal based on value to the education sector.

3. Procurement Process

In 2001, the Ministry of Education asked school boards to defer purchases of new student information systems until emerging business requirements were identified and the cost effectiveness of a single supplier that could meet school boards' needs was ascertained.

At the time, there were approximately 25 different systems operating in almost 2,000 public and independent schools in B.C. The ministry, along with seven school boards, set out to examine the potential for a common system that would reduce the investment required by individual school boards and improve the quality of the

information available to schools, school boards, and the ministry. The conclusion: a common system was viable, cost effective and school boards were willing to work together to develop it.

The ministry then worked with school districts to identify a software application for the common system. In the procurement of software, a school board evaluation committee used detailed evaluation criteria to select the eSIS™ software from Administrative Assistants Ltd. (AAL) as the best solution to meet their Request for Proposal requirements.

AAL focuses on the design and development of information management systems for school districts and education agencies across North America. The eSIS™ software application is used in more than 7,000 schools and serves more than 5.8 million students throughout the US and Canada. The eSIS™ software has been customized for use in B.C. schools, and is known to B.C. school districts as "BCeSIS".

Following the purchase of the software, participating school boards and the ministry set out to acquire outsourced services to host and support BCeSIS. A Request for Qualifications (RFQ) was issued by the ministry in April 2004 to establish a list of qualified respondents.

On October 28, 2004 the ministry then issued a Request for Proposals (RFP) to the qualified respondents. Respondents were evaluated in a procurement process compliant with government standards and against criteria to evaluate their capacity, capability, and demonstrated experience to undertake similar work.

Proposals were received from the following respondents:

- EDS Canada Inc.
- Fujitsu Consulting (Canada) Inc.
- Hewlett- Packard (Canada) Co.
- IBM Canada Ltd.

All four proposals were then evaluated in a procurement process compliant with government standards for Requests for Proposals. The evaluation committee consisted of ministry and school board representatives as well as representatives from the Ministry of Labour and Citizens' Services.

Proposals were evaluated against the following categories:

- Service Delivery Management;
- Application Hosting;
- Integrated Support Service Delivery;
- Data Conversion and Loading Services;
- Security Management Services;
- Transition Services;

- Optional and Supplementary Services;
- Future Vision; and
- Economic Model (overall value of the solution to government).

Government standard privacy protection obligations were a mandatory requirement of the Request for Proposals and the resulting contract with the service provider. The Request for Proposals included the specific business and technical measures required to meet the stringent privacy requirements set out by the Province for outsourced service agreements.

The result of the evaluation of proposals was the selection of Fujitsu as the successful proponent. A contract negotiation period of 90 days followed selection and a contract was signed with Fujitsu on June 30, 2005.

4. The Final Agreement

The final agreement is with Fujitsu Consulting (Canada) Inc., a wholly owned subsidiary of Fujitsu Limited.

Fujitsu Consulting Profile

A provider of management and technology consulting to business and government, Fujitsu Consulting is the North American consulting services arm of the US $44.5-billion Fujitsu group. Fujitsu Consulting integrates the core expertise of the Fujitsu companies and its partners to deliver complete business solutions in the areas of Information Technology governance, information management, legacy systems modernization and application outsourcing.

As an established force in the consulting industry, Fujitsu Consulting has been a leading provider of consulting services and technology-based business solutions for more than 30 years.

Within North America, Fujitsu Consulting acts as an integrator and delivers Managed Services, Enterprise Value Management, Information Management and Legacy Migration solutions.

In Canada, Fujitsu Consulting (Canada) Inc. employs approximately 2,000 professionals with over 430 of these in Western Canadian offices in Victoria, Vancouver, Edmonton and Calgary.

Key Terms of the Agreement

Legal and Commercial Structure	• Fujitsu Consulting (Canada) Inc. is incorporated in Canada, registered to do business in B.C., and is a wholly-owned subsidiary of Fujitsu Limited of Japan.
Term	• Initial term of five years with an option to renew for an additional five years.
Pricing and Deal Structure	• Fixed fee per student for standard recurring services. • Fee changes based on student volume bands. • Average fee per student is reduced with increasing student volumes. • Fujitsu assumes risk for variable rate of implementation. • Estimated five-year contract value for initial scope: $15 million. • Initial transition costs are included. • Additional fees occur for optional services, such as development of non-standard reports (when required).
Service Levels	• Fujitsu assumes responsibility for contracted service levels related to capacity, performance, availability, and response times. • Problem resolution processes and remedy provisions. • Financial consequences may result for service levels not met • Performance based service contract. • Monthly invoices will report major cost categories and reconcile service levels.
Privacy and Security	• See Section 5 for details. • Compliant with new FOIPPA legislation. • Termination rights in the event of material breach. • Wilful disclosure constitutes a material breach.
Termination	• Termination at expiry – Province pays no termination costs. • Termination for convenience – Province pays declining fee based on remaining term. • Termination for Fujitsu material breach – All Province's losses paid by Fujitsu up to a limit. • No fault termination – Each party pays its own costs. • Termination Services – Upon termination Fujitsu is obligated to provide services required to transition services back to the Province or an alternate service provider.

Governance and Contract Management	• School board governance body with ministry participation. • Ministry establishes service delivery management team responsible for daily oversight. • Joint contract management committee will manage contract performance, change and initial dispute resolution monthly or as required. • Joint executive management committee will manage the long-term development of contracted services quarterly.
Audit and Records	• Province records remain the property of the Province. • Province may audit records with reasonable notice. • Security and privacy audit provisions.
Dispute Resolution	• Governance structure is designed to facilitate internal dispute resolution as early as possible at the lowest possible level. • Formal dispute resolution processes culminate with binding arbitration under the B.C. *Commercial Arbitration Act*. • Province may bypass arbitration and proceed directly to court if it suffers irreparable harm due to a breach by Fujitsu.

Financial Summary

The cost of operating the common student information system is determined by the total number of students registered in the system. Software licence costs from AAL and application hosting and support services from Fujitsu will be billed on a cost per student basis. It is anticipated that a maximum of 200,000 students will be added to the system each year and that the total number of students on the system is estimated at 600,000 when fully implemented.

Costs are shared between the ministry and school boards. As enrolments increase schools and school boards will fund an increasing part of the operating costs.

Fujitsu will supply new application hosting and support services on a cost per student basis. The approximate total contract value for the initial scope of services is $15 million over the five year term starting November 28, 2005

Included in the Gross Project Operating Plan are approximately $5 million operating funds, over four years to support school board implementations. This will include a one-time incentive grant for completing implementation according to plan. The grant is currently set at $10 per student, for an approximate total of $6 million to be paid to participating schools and school districts when they implement.

Schools and school boards have agreed to be responsible for all local implementation and training costs estimated at $25 per student. Overall, the net impact of implementation and training costs to school boards with the grant included is estimated at $15 per student.

Schools and school boards will pay a portion of annual operating costs on a cost recovery basis equivalent to approximately $10 per student per year. The remaining costs, approximately an additional $10 per student per year will be paid by the ministry.

5. Privacy Considerations

Protecting personal student information is critical and privacy issues have been a top priority for schools, school boards, and the ministry since the start of the project. The numerous benefits to be gained by involving the private sector in this initiative could not be justified unless the ministry could ensure the security and privacy of the information. Moreover, the ministry obtained assurances that the significantly enhanced privacy and security arrangements required under FOIPPA as well as rigorous contract parameters could be met consistently and reliably by Fujitsu.

Contracted measures for privacy include, technical, business and corporate protection measures.

As part of the implementation process for the common system, users of the system will receive training that includes information on how to ensure student information is secure and protected while using the common system.

For the scope of contracted services, Fujitsu does not manage education delivery or education information for schools and districts.

6. Transition, Implementation, Ongoing Alliance Management

Fujitsu assumed responsibility for the delivery of the scope of contracted services to schools, school boards and the ministry on November 28, 2005. Transition planning and preparation occurred from July through November to make sure the facilities, technology, resources and service processes required to complete transition and commence service delivery were ready.

Alliance Management

The common system is governed by the BCeSIS Service Management Council (SMC) which is composed of school and school district representatives and supported by the ministry. The Service Management Council makes decisions on priorities for improvements to services to ensure that the common system continues to meet school board requirements over time.

Effective management of the relationship between the ministry and Fujitsu will be key to driving maximum value for all parties over the life of the contract. The contract

provides problem resolution processes and a governance framework for effective management of contracted service delivery and response to issues and opportunities as they arise.

A joint ministry and Fujitsu Executive Steering Committee is in place to govern the overall relationship. A dedicated service delivery and contract management unit has been established within the Ministry of Education to manage the Fujitsu contract. The unit will be responsible for ensuring the overall effectiveness of the governance relationship and contract performance throughout the contract term.

Specific responsibilities include:

- Monitoring compliance with government policies, legislation and standards, including specifically those related to privacy and security;
- Managing governance committees and communication between the schools and school boards' Service Management Council, and the ministry and Fujitsu;
- Overseeing all technology-related aspects of the agreement, including systems transition, maintenance of interfaces, development projects and compliance with security standards;
- Reviewing monthly performance reports, annual operating plans and other required reports, and taking necessary action;
- Managing processes for amending the contract and schedules, including major changes in scope and related new procurement processes, if required;
- Ensuring appropriate and effective communications between Fujitsu and the ministry as well as other government ministries and central agencies;
- Initiating and overseeing routine and ad-hoc audits and benchmarking studies; and
- Detailed monitoring and assessment of financial performance and contract payments.

The contract management unit will maintain this best-practices approach to the management of the relationship with Fujitsu, to ensure the Province continues to receive value for money throughout the term of the Agreement.

Appendix A – Risk Allocation

A. Material Risks Addressed through the Master Standing Agreement

Risk Category and Description	Mitigation
Service Level Performance -- System Capacity, Availability, and Performance	• Consequences for missed service levels. • Governance structure and reporting requirements. • Chronic failure triggers breach conditions and termination for cause.
Disaster Recovery	• Fujitsu Disaster Recovery Plan. • Service levels apply.
Privacy or Security Breach	• Commitment to government imposed standards. • Audit provisions.
Failure of Company or Sub-contractors	• Failure of Fujitsu Consulting (Canada) Inc. is considered a material breach of contract leading to termination. • Fujitsu is responsible for all services delivered by sub-contractors.
Cost Overruns (within scope of contracted services)	• Governance structure. • Reporting requirements.
Flexibility and Responsiveness	• Governance structure. • Service levels. • Reporting requirements.
Technical Obsolescence	• Obligation to implement improved technology. • Reporting requirements.

B. Shared Material Risks

Risk Category and Description	Mitigation
Force Majeure	• Fujitsu's Business Continuity Plan • Province may obtain services elsewhere • Full or partial "no fault" termination of services at Province's option.
Volume of Use and Timeframe to Implement	• Province provides school and school district incentives and support for implementation. • Fujitsu costs per student price bands provide flexibility without financial consequences to the Province.
Inflation / Cost of Living Allowance (COLA)	• Fujitsu standard recurring services are fixed price for agreement term.

Risk Category and Description	Mitigation
Termination by Province for Convenience	• Early termination fees apply.
Risks of change in support for project within government or Fujitsu	• Governance structure. • Service levels • Reporting requirements.
Risk that scope changes will increase net cost to Province	• Governance structure • Reporting requirements • Interim implementation of services by Province validates scope of services.
Risk that the ministry will not be able to monitor and measure deliverables	• Governance structure. • Reporting requirements. • Province Service Delivery Management plan.

C. Material Risks Retained by the Province.

Risk Category and Description	Mitigation
Business Continuity (School Boards)	• Standard Business Continuity Plan of schools and school boards.
Implementation and Training (School Boards)	• Province supports school board effort with incentives for successful implementation.
Functionality of Software	• Province manages contract for application software and changes requested by schools and school districts. • Funding and a schedule for improvements are set to meet school district requirements.
Network Services	• Ministry funds and manages service levels for PLNet within constraints for available services. • Schools and school districts are responsible for all required local network infrastructure.
Fujitsu does not achieve service levels in contract	• Service levels. • Governance and reporting requirements. • Chronic failure triggers breach conditions and termination for cause.
Change in education policy requiring changes in scope, systems, or business processes.	• Governance structure and annual business planning cycle with joint planning.

Appendix B – Privacy Protection

The agreement provides for increased privacy protection for student information.

Privacy Provisions	Fujitsu Deal
Technical protection measures	
• Data storage and access, including remote access, will be only in Canada, and can only be changed with the Province's express consent.	✓
• Comprehensive and robust technology security measures including firewalls, encryption and physical security measures.	✓
• Network and secure system configurations will not permit information to be sent out from within the secure facility.	✓
• Hardware that would enable data to be copied and taken off site, such as removable floppy drives, CD burners and USB smart drives will be permitted only as required to perform the contracted services.	✓
Business protection measures:	
• Contract includes termination rights in the event of disclosure breach.	✓
• Fujitsu will develop policies and procedures that outline all privacy and security objectives, methodologies, and disclosure requirements.	✓
• Within Fujitsu, access to information will be strictly limited to only those personnel that have such need to perform or support contracted services.	✓

• Fujitsu is contractually obligated to comply with all government policies related to management and storage of records related to the services they will deliver.	✓
• Privacy Impact Assessments will be required, and signed off by the Ministry prior to any systems change.	✓
• Confidentiality commitments are required annually by all Fujitsu employees involved in service delivery.	✓
• The Province will have unrestricted access for both scheduled and ad-hoc privacy audits either directly, or through the Office of the Information and Privacy Commissioner. Audits may be used by the Province to assess the degree of compliance with privacy requirements in Fujitsu facilities and service delivery processes.	✓
Corporate protection measures	
• Constating (articles of incorporation) documents of Fujitsu will incorporate personal information disclosure restrictions.	✓
• Fujitsu directors will enter into non-disclosure agreements with the Province not to disclose personal information.	✓