



The following *draft* Minutes of the special public meeting of the Toronto Police Services Board held on April 14, 2011 are subject to adoption at its next regularly scheduled meeting.

MINUTES OF THE SPECIAL PUBLIC MEETING of the Toronto Police Services Board held on **APRIL 14, 2011** at 1:00 PM in the Auditorium, 40 College Street, Toronto, Ontario.

PRESENT:

Dr. Alok Mukherjee, Chair
Mr. Michael Thompson, Councillor & Vice-Chair
Mr. Chin Lee, Councillor & Member
Dr. Dhun Noria, Member
Ms. Frances Nunziata, Councillor & Member

ABSENT:

Ms. Judi Cohen, Member

ALSO PRESENT:

Mr. William Blair, Chief of Police
Mr. Albert Cohen, City of Toronto – Legal Services Division
Ms. Deirdre Williams, Board Administrator

**THIS IS AN EXTRACT FROM THE MINUTES OF THE SPECIAL PUBLIC MEETING
OF THE TORONTO POLICE SERVICES BOARD HELD ON APRIL 14, 2011**

**#P106. ACQUISITION AND IMPLEMENTATION OF NEW RECORDS
MANAGEMENT SYSTEM**

The Board was in receipt of the following report April 13, 2011 from William Blair, Chief of Police:

Subject: ACQUISITION AND IMPLEMENTATION OF NEW RECORDS
MANAGEMENT SYSTEM

Recommendations:

It is recommended that:

- (1) the Board approve the contract for the supply and delivery of software, maintenance, and professional services in relation to the acquisition and implementation of a new records management system to Versaterm Inc. at a cost not to exceed \$10.5 million (inclusive of applicable taxes) in accordance with the Statement of Work and terms and conditions which are acceptable to the Service; and
- (2) the Board authorize the Chair to execute all required agreements and related documents on behalf of the Board, subject to approval as to form by the City Solicitor.

Financial Implications:

There are significant financial, technical, project, and operational implications with not proceeding with the recommendations as reported to the Board on April 7, 2011 regarding the contract award for a new records management system (Min. No. P73/11 refers). If the decision is made not to proceed with the contract award, the resulting implications will depend upon whether the project is deferred or cancelled. The deferral of the contract award creates significant dilemma around the project and results in impacts to project planning, project schedule, information technology (IT) planning and implementation, and organizational uncertainty.

Funding in the amount of \$24.6 Million (M) for the acquisition and implementation of a new records management system project is included in the Toronto Police Service's (TPS) approved Capital Program.

The TPS recommended the contract award for a new records management system to the Board at its April 7, 2011 meeting. That report provided information on the statement of work process that was acceptable to the TPS, as well as key terms and conditions that would be incorporated into the agreement with Versaterm Inc. A copy of that report is attached.

The portion of the project's capital funding of \$24.6M that is attributable to Versaterm Inc. is not expected to exceed \$10.5M. Should a requirement arise that would result in an increase to the \$10.5M, the Board will be advised in accordance with the requirements of the Board's Financial Control By-law. The operating impact for maintenance and support in 2014 will be in the amount of \$1.65M and fully annualize to \$1.8M in 2015.

All costs relating to the Integrated Records and Information System (IRIS) capital project are being captured to ensure that operating impacts are monitored on an ongoing basis and will remain within the revised estimated amount. Capital budget expenditures have also been reforecasted from 2011 through to project completion and at the same time remain at or below the capital project budget approved by the Board in September 2008 (Min. No. P273/08 refers).

Benefits of Commercial Off the Shelf (COTS) Systems:

In April 2005, the City of Toronto Auditor General submitted a report to the Board entitled, *Review of the Enterprise Case and Occurrence Processing System (eCOPS) Project – Toronto Police Service* (Min. No. P186/05 refers). In this report, Auditor General Jeffrey Griffiths states:

"We have discussed the issue of internally developed information technology projects with the Executive Director of Information Technology at the City. For a number of years the City has had an informal policy of, wherever possible, purchasing commercial-off-the-shelf software. The development of major projects in-house is an avenue which the City has avoided, mainly because of the significant financial and potential longer-term risks inherent in such an endeavour."

The strategy within the IRIS project in terms of the acquisition of a new records management system is consistent with the City Auditor General's comments. A comparison between a COTS and a TPS in-house development as it relates to the new records management system is provided in the table below.

	COMMERCIAL OFF THE SHELF (COTS)	TPS IN-HOUSE DEVELOPMENT
Cost	Total project cost not to exceed \$24.6M Ongoing costs are contained to an annual maintenance fee of \$1.8M	Estimated in the range of \$25M to \$35M (including Windows 7) Ongoing costs are unknown but expected to increase to develop ongoing mandatory and functional enhancements
Cost Containment	Contained within a fixed price agreement Beginning in 2009, the IRIS project remains on budget	Significant risks exist with containing costs within the estimated amount This is clearly demonstrated in the 15 year history of eCOPS development

Time to Implement	Beginning in Q3 2012 through to Q3 2013	Windows 7 upgrade work will complete by Q1 2014 eCOPS and other application development timeframe are unknown
Effort	TPS effort, while extensive, is limited to product integration, configuration, testing, training, and implementation	In addition to what is stated for the COTS system, the TPS will be required to undertake lengthy requirements, design, and development phases
Sustainability	Managed through annual vendor upgrades including mandatory/regulatory and service enhancements	An increase in internal ITS capacity will be required to manage the technology lifecycle of an in-house developed product
Match Against Service Requirements	Meets not only TPS requirements, but also those of the broader policing community	All TPS requirements will need to be developed in-house on a perpetual basis

Impacts of Deferring the IRIS Project:

- an approximate monthly cost of \$100,000 capital and \$167,000 operating funds
- an additional estimated \$5M IT cost to begin the Windows 7 Upgrade (for which there is no approved capital funding)
- potential loss of carry forward capital funds
- potential impact and uncertainty on the TPS' 10 year capital program
- project schedule delays and potential increased costs

Impacts of Cancelling the IRIS Project:

- a sunk cost of \$1M capital and \$4.5M operating funds for internal staff assigned to the project
- a requirement for an additional \$5M in excess of the existing \$1.65M for the Windows 7 Upgrade capital project
- an estimated \$25M to \$35M, including the additional \$5M for the Windows 7 Upgrade, for in-house development costs based on preliminary estimates to meet the requirements as set out in the Records Management System Request for Proposal (RFP)
- the TPS will not benefit from the collective efforts and costs of other major police services across North America relating to policing systems
- introduction of a compressed schedule for Information Technology Services (ITS) to accommodate this unplanned work, which is accompanied by a corresponding increase in costs
- inability for the TPS to provide efficient policing as it relates to technology supporting the administration of police operations

Background/Purpose:

This report is provided in response to the Board's request at its April 7, 2011 meeting pertaining to the implications of not moving forward with the Versaterm Inc. contract award.

The Occurrence Re-engineering project, subsequently named the Enterprise Case and Occurrence Processing System (eCOPS) project, was first approved by the Board in 1997 (Min. No. P107/97 refers) as a capital budget initiative based on the expectation that a commercial-off-the-shelf (COTS) product would be purchased. However, a decision was subsequently made to develop an application internally rather than purchase a proprietary vendor's application, as there were limited competing records management solutions at the time that could meet the Service's business requirements (Min. No. P211/99 refers).

Spanning a decade since eCOPS was first approved in 1997, numerous Board reports have been submitted that detail the problems with in-house developed software. These problems include significant cost overruns, technical issues, and schedule delays, ultimately resulting in the delivery of a product that falls significantly short of its intended functionality.

The eCOPS application was envisioned to be a 'cruiser to courts' integrated information system; however, a large portion of the anticipated functionality, including geocoding, prisoner management, record of arrest processing, case management, warrant management, contact database, domain codes, enhanced crime analysis, application integration and interoperability has not been achieved (Min. No. P303/07, Min. No. P329/04, Min. No. P186/05 refer). A Toronto Police Service (Service) review in 2007 determined that eCOPS had only delivered 24 percent of its intended functionality.

The Board approved the acquisition and implementation of a new records management system project at its September 2008 meeting as part of the 2009-2013 Capital Program (Min. No. P273/08 refers). This capital program was subsequently approved by Toronto City Council.

Following the issuance of a Request for Proposal and an evaluation of the vendors' responses and proposed solutions, the Board approved Versaterm Inc. as the vendor for the supply and delivery of software, maintenance and professional services in relation to the acquisition and implementation of a new records management system subject to the completion of a statement of work that is acceptable to the Service (Min. No. P144/10 refers).

In February 2011, the Board was requested to approve the award of the contract to Versaterm Inc. in accordance with the statement of work which was acceptable to the Service. The Board deferred consideration of this request (Min. No. P27/11, and Min. No. C59/11 refer).

A revised report was submitted to the Board for consideration at its April 7, 2011 meeting. At that meeting, the Board referred the report to the City Auditor General and City Chief Information Officer for comment. The Board also requested that the Service report on the financial, technical, and operational impacts in the event of not proceeding with the approval of the contract award as recommended by the Service. This report responds to that request.

Discussion:

Problem Definition

The eCOPS effort resulted in only 24 percent of the Service's requirements being met. Consequently, additional information systems have been individually and internally constructed to meet specific needs or demands of a specialized area or in response to a specific issue. The result has been the creation of numerous core silo systems, including: the Enterprise Case and Occurrence Processing System (eCOPS), the Criminal Information Processing System (CIPS), Field Information Reports (FIR), the Repository for Integrated Criminalistic Imaging (RICI), Unified Search, and the Property and Evidence Management System (PEMS).

In addition to these core police systems, upwards of 400 forms, over 100 Microsoft Access databases, internally built applications and Microsoft Excel workbooks have been created to manage police operations and information requirements.

To compensate for the lack of information technology integration, Service members are required to re-enter tombstone information across these multiple systems and numerous forms. The effort the Service expends on compensating for system shortcomings, while not easily quantifiable, is widespread and significant. These systems cannot support enhancements without significant investments that far exceed those incurred by the acquisition of a COTS solution as presented.

The process of obtaining data from the current Service's information systems is inefficient. The inability in some areas to obtain current data restricts the Service's ability to predict and deploy resources as effectively as it could.

As police operations become increasingly complex, additional forms and systems are expected with the design and development efforts to be borne solely by the Service.

Since the Auditor General's findings were presented in 2005, significant financial and longer term risks have materialized within the Toronto Police Service relating to eCOPS. The Service and the Board have realized costs to date in excess of \$20M (\$18.5M in 2005 per the Auditor General's report) and in 2007 it was recognized that ongoing costs could not be contained. Continued investment in eCOPS was therefore reduced to minimal maintenance and a working group was established to conduct a records management business process analysis (Min. No. P121/07 refers). This resulted in the deferral of a number of internal and external audit recommendations to eCOPS, CIPS and other systems, while the Service awaited a COTS product.

Impacts of Deferring Approval of the Award of Contract for Product and Services

i. Project Implications

Any further delay of the approval of the Versaterm Inc. contract will impact the schedule and resources assigned to the project, as the project would effectively be placed on hold.

Schedule delays resulting from deferral will impact upon the Service's ability to contain the project costs within the capital program timeframe, and therefore, will create a risk to the capital budget carry forward ability. This will also impact the capital program as a whole and other capital projects that are both planned and underway.

Any deferral will result in continued monthly costs of approximately \$100,000 from the capital budget and approximately \$167,000 from the operating budget for staff assigned to the project.

In the 2005 review of the inherent problems in the eCOPS project, the Auditor General made reference to the need for consistency in project management, as follows:

“...there was limited consulting continuity at the project management level during the development of eCOPS. Three different consultants were responsible for the management of the project during its implementation.”

Accordingly, as a result of delaying the project, the Service is very concerned about its ability to maintain the knowledge, expertise, and continuity that exists within the current project team. Complex knowledge about police processes, vendor applications, and project delivery cannot be lost or diminished.

ii. Technical Implications

Planning for migration to Windows 7 commenced in 2009 with the identification of internal applications that would form part of the COTS product, which is Windows 7 compliant.

The deferral of the IRIS project will require a redirection of the current IT and Board strategy, as detailed in the Service's 2009-2011 Business Plan. The Service must take action and move forward with its planning as it must ensure systems that are critical to the investigative capacity and governance of the Service remain operating and supported. The Service will have to secure unanticipated financial and human resources (without the budget) to undertake this effort. The estimated Windows 7 IT cost will be some portion of the \$5M estimate as work gets underway. Upon resolution of a deferral, and if the recommendation is to move forward with the COTS solution, the expense and effort incurred during that time will be lost.

iii. Vendor Implications

As part of the project requirements, various vendors have been engaged to provide project management, business process analysis and other services. Delaying the project will require the Service to review these arrangements to assess how best to handle them as a result of the delay, without actually knowing how long the delay might be.

It is also important to note that almost a year has elapsed since Versaterm Inc. was recommended to the Board as the successful vendor to provide the product and services to equip the Service with a modern policing records management system. This is a lengthy period of time for a

vendor to remain on hold after a procurement is completed. The implications on the procurement process resulting from a further delay are unknown at the time of this report.

Impacts of Cancelling the IRIS Project

i. Project Financial Implications

There has been a 4 year investment with over \$4.5M in internal effort and in excess of \$1M in capital funds expended to date to prepare the Toronto Police Service for the implementation of a modern policing system. With any decision to cancel the project, these investments will largely become a sunk/lost cost including the expertise, time, and formal procurement, as well as participation of over 800 Service members in the evaluation process.

ii. Technical Implications

The Service has estimated the completion of eCOPS development to be in the range of \$25M to \$35M including requirements, design, development, testing, implementation, and governance. The estimating method used was Function Point Analysis (FPA) based on the Service's 460 requirements outlined in the RMS Request for Proposal (RFP) of 2009. The estimates developed are order of magnitude (for planning purposes) and conservative. The 460 requirements are suitable for procurement and product selection. Requirements for product development would be well in excess of 10,000 functional requirements and it is assumed estimates would increase after detailed planning.

At the time the approvals were provided to implement a COTS product, technology lifecycle costs for existing systems were not incorporated into the current Windows 7 Upgrade capital project. The COTS product is Windows 7 compliant; therefore, there was no need to consider modifications to internal policing systems.

Effective January 2014, all Windows XP support, including security updates and security-related hotfixes, will be terminated. The resulting mandatory and unanticipated Windows 7 compliance work will increase the current \$1.65M Windows 7 Upgrade capital project by an additional, and approximate, \$5M. The affected systems written, to varying extents, in obsolete technologies encompass Collision and Reporting System (CARS), Criminal Information Processing System (CIPS), Property and Evidence Management System (PEMS), Enterprise Case and Occurrence Processing System (eCOPS), Bail and Parole Attendance Tracking System (BPATS), record of service of summons, subpoenas, and other court documents (SUMMONS), Fugitive And Extradition System (FES), Homicide Investigation Tracking System (HITS), and Victim Services.

It is important to note that an investment in Windows 7 compatibility represents a sunk cost. Further, this additional lifecycle investment in eCOPS and related policing systems is solely to ensure that the applications remain operational and do not contribute in any way to improved policing.

Following implementation of the COTS solution, the ongoing licensing and maintenance costs will be contained within an annual fee. Inversely, cost avoidance will be achieved as the Service will no longer have to invest effort and capital into enhancements, upgrades, and software lifecycle to continually build, invest, and maintain internally built systems for police operations.

The schedule and costs for internal development cannot be contained as evidenced by the 15 years of history since eCOPS' inception. Versaterm Inc. costs are verified and contained within a fixed price contract.

iii. Lost Opportunity to Share in Technology Advancements and Costs

In the 2005 review of the eCOPS project, the Auditor General made the following reference to the lack of system and information coordination with other police services:

“In addition, there has been little coordination or integration with other police services, even though a number of Ontario police services, such as London and Ottawa have, in fact, purchased off-the-shelf eCOPS-type technology (which was Versadex).”

If the Service does not move forward as recommended, as new legislative/mandatory changes are required, the investment compounds, new 'systems' are introduced, and the problem is exacerbated. The Toronto Police Service will continue to solely bear the costs of these technology projects and their associated operational, human resource, risk, and cost impacts.

Versaterm Inc. has decades of experience in the policing field, including prominent roles in the creation of the Canadian Police Information Centre (CPIC) and the Police Information Portal (PIP). Versaterm Inc. provides their software to police services across Ontario such as London, Niagara, Ottawa, Durham, York, and Kingston, as well as major regions of Canada including the provinces of British Columbia, New Brunswick, Newfoundland and Labrador.

If the Service does not move forward with this COTS solution, it will not benefit from the on-going consultative efforts of the aforementioned police agencies or not have the ability to participate in user groups for annual product enhancements as specified in the maintenance agreement. Consequently, the cost of any new changes that occur in legislation and standards for national data reporting, as well as mandatory upgrades to the Canadian Police Information Centre (CPIC), will be borne solely by the Service.

iv. Schedule Implications

The appropriate lead time for ITS to have begun planning for Windows 7, eCOPS, and other application development would have been in 2008 at the time when the Board and Service agreed to move from in-house development to a COTS product.

With a decision to cancel the project, ITS will now have to undertake an unforeseen redirection of the Service's and the Board's IT strategy. Based on a strategy that is in line with the Auditor General's recommendations, the Service is already significantly committed to the COTS

solution, and as a result, would be two and half years behind in planning for such a major shift. This change in course will represent a highly compressed schedule. It is important to note that with the compressed schedule, the Service will experience a proportionate increase in costs.

Whether the Service can manage another set of complex software development projects within a compressed timeframe is debatable, and past Board and Auditor General reports indicate this approach represents remarkably high cost, schedule, and delivery risks.

v. Operational Implications

The rate of requirements for managing police business has drastically outpaced the expansion of eCOPS.

The inherent inefficiencies and risks introduced by excessive repetitive data entry and silo policing systems are a significant drain on internal police resources and detract from core community support, intelligence gathering, investigative, and prosecution policing mandates. These issues will extend well into the future.

As an example, with our current systems, a routine daily occurrence for an event similar to an arrest for assault where evidence or property is seized can result in entering tombstone information upwards of 30 times. This example encompasses the time of the event call through to the arrest, booking, preliminary investigation, and release of an adult and does not include system interactions relating to court appearances, court disclosures, information filing, or criminal dispositions, nor does it include youth, drugs, or any other specific case requirements that add to the complexity of an occurrence. This excessive data re-entry occurs for approximately 85,000 arrests annually.

Additional operating impacts include:

- No integrated system of record to manage all police information from the initial call for service to the courts
- Inability to find efficiencies through business process re-engineering and realignment of workflow would not translate into redeployment of police officers from administrative tasks to front-line policing
- Limited integrated information sharing with other police services
- No ability for one-time data entry
- No reduction in error rates
- No reduction in the Service's reliance on using staff as compensating controls for lack of systems integration
- Limited electronic disclosure capabilities and in-car case preparation

- Costly development for compliance with industry standards such as National Information Exchange Model (NEIM)
- Costly mandatory, legislated, audit, and evolutionary enhancements (e.g., Uniform Crime Reporting version upgrades, Canadian Police Information Centre mandatory requirements, and other essential enhancements as they arise)

vi. Organizational Implications

The IRIS project team recognized from the commencement of the project that the strategic goal of the initiative was the achievement of transformational change in how core services are delivered. To accomplish this goal, an aggressive marketing and change-management campaign was undertaken, including extensive stakeholder involvement and Service-wide marketing. This included the engagement of over 800 Service members in the evaluation and product selection phase of the project alone.

The IRIS project team has purposefully positioned Service members to support and participate in the large scale organizational transformation proposed by IRIS. A cancellation of the project would not only negate these efforts but would diminish confidence of Service members to effect change in the future.

Conclusion:

The IRIS project is in the Service's approved capital program. It represents the Service's ability to align with the City's Service Efficiency Study; specifically, "identify opportunities for improved efficiency and cost effectiveness through the use of technology and automation, shared services models, service innovation, business process re-engineering and outsourcing."

Every study completed after a major criminal event, such as the Bernardo/Campbell Inquiry, directs police services to improve information sharing.

Any decision to defer or cancel the project moves the Service in a direction away from the strategy of an integrated policing system, improved electronic information sharing, and the efficiencies that can be gained from a COTS solution that meets the functional requirements of the Service.

In order to effectively manage this project, the Service has implemented a formal project management/governance structure, including a steering committee comprised of members across the Service to provide effective advice, guidance, and oversight of the project.

The selection of a vendor to provide a COTS solution was made following a formal and extensive procurement process.

Delaying the project at this time would result in significant financial, operational, technical, schedule, and project implications, and creates an uncertainty around the project that will be difficult to manage.

Based on these implications, the Service is respectfully requesting that the Board approve the Service's recommendation to award the contract for the acquisition and implementation of a new records management system to Versaterm Inc.

Deputy Chief Kim Derry, Divisional Policing Command, and Mr. Tony Veneziano, Chief Administrative Officer, Administrative Command, will be in attendance to make a presentation and to answer any questions that the Board may have regarding this report.

A copy of the Auditor General's April 2005 report entitled *Review of the Enterprise Case and Occurrence Processing System (eCOPS) Project – Toronto Police Service* was also provided to the Board for information; copy on file in the Board office.

The Board approved the following Motion:

THAT the Board receive the foregoing report from Chief Blair and forward it, along with a copy of the presentation slides and the Auditor General's eCops Project report referenced above, to the Auditor General and the Chief Information Officer for consideration as part of the review that they will conduct pursuant to the Board's April 07, 2011 request (Min. No. P73/11 rerfers).



TORONTO POLICE SERVICES BOARD REPORT



To: Chair and Members
Toronto Police Services Board

From: William Blair
Chief of Police

Subject: INTEGRATED RECORDS AND INFORMATION SYSTEM (IRIS) – AWARD
OF CONTRACT FOR PRODUCT AND SERVICES

Recommendations:

It is recommended that:

- (1) the Board award the supply and delivery of software, maintenance, and professional services in relation to the acquisition and implementation of a new records management system to Versaterm Inc. at a cost not to exceed \$10.5 million (inclusive of applicable taxes) in accordance with the Statement of Work and terms and conditions which are acceptable to the Service; and
- (2) the Board authorize the Chair and Vice-Chair to execute all required agreements and related documents on behalf of the Board, subject to approval as to form by the City Solicitor.

Financial Implications:

Funding in the amount of \$24.6M is approved in the Service's Capital Program for the implementation of a new Police Operations Management System.

The portion of the project's capital funding of \$24.6M that is attributable to Versaterm Inc. is not expected to exceed \$10.5M. Should a requirement arise that would result in an increase to the \$10.5M, the Board will be advised in accordance with the requirements of the Board's Financial Control By-law.

At its September 18, 2008 meeting, the Board was informed that the annualized operating impact of the project included an additional 50 clerical staff in Records Management Services for data coding and input purposes, 5 additional staff in Information Technology Services to support the new application (Min. No. P273/08 refers) and ongoing maintenance/lifecycle costs for a total annualized operating impact of \$5.1M.

Subsequently, at its September 23, 2010 meeting, the Board was advised that the additional staffing estimates were developed when the project was first identified for inclusion in the Capital Program, and as a result, the estimates were very preliminary. At that time, the vendor for the new system was not yet known and analysis of existing work and data flow processes was underway (Min. No. P259/10 refers).

Since the September 2010 meeting, extensive business process mapping has been completed. Based on this analysis, a determination has been made that resources will be reallocated internally as incremental work introduced by the Police Operations Management System will be offset by efficiency gains. Therefore, there will be no requirement for an increase in the overall staffing complement, which will reduce the ongoing annual operating costs currently identified in the project by \$3.25M to \$1.8M. The remaining estimated operating impact is required for application/server maintenance and server lifecycle replacement costs. The operating impact will commence in 2014 at an amount of \$1.65M and fully annualize to \$1.8M in 2015.

All costs relating to the Integrated Records and Information System (IRIS) Capital project are being captured to ensure that operating impacts are monitored on an ongoing basis and will remain within the revised estimated amount. Capital budget expenditures have also been reforecasted from 2011 through to project completion and at the same time remain at or below the Capital project budget approved by the Board in September 2008 (Min. No. P273/08 refers).

Background/Purpose:

At its meeting of March 3, 2011, the Board was in receipt of a report on the New Records Management System – Award of Contract for Product and Services (Min. No. P53/11 refers). The report was withdrawn and has been replaced by this report,

Beginning in 2006, internal service reviews were commissioned by four teams. The four teams were the Divisional Review Team, the Intelligence Services Review, the Information Management Processes Assessment and Review Team (IMPART), and the Operational Systems Support Group (OSSG). These reviews examined current service delivery models, as well as service delivery models in other police agencies, and identified opportunities for improved efficiencies and cost effectiveness through the use of technology and automation, service innovation and business process re-engineering. All four reviews set ambitious goals for organizational change and re-alignment that will result in reduced risk to our organization.

The first major step forward in the organizational transformations proposed by these reviews is the implementation of a Police Operations Management System which includes a records management system. The IRIS project represents the culmination of a multi-year investment in research and has reached its apex as the Service prepares for the purchase and implementation of the Police Operations Management System.

In May 2010 (Min. No. P144/10 refers), the Board approved the following motions:

1. THAT, subject to the completion of a Statement of Work that is acceptable to the Service, the Board approve Versaterm Inc. as the vendor for the supply and delivery of software, maintenance, and professional services in relation to the acquisition and implementation of a new records management system at an estimated cost of \$10.5 million (inclusive of applicable taxes);
2. THAT the Board authorize the Service to engage in a Statement of Work process with Versaterm Inc.;
3. THAT the Chief of Police submit a further report to the Board setting out the terms and conditions of the proposed agreement with Versaterm Inc. for its approval; and
4. THAT the Board receive the foregoing report (dated April 28, 2010) from the Chief of Police.

The purpose of this report is to respond to the Board's request, specifically identifying the results of the Statement of Work process with Versaterm and the key terms and conditions of the proposed Agreement with Versaterm.

Discussion:

1. Records Management System (RMS) Product Classification

RMS products, in the context of industry terms, are not equivalent to RMS products used in a policing environment. By industry terms, an RMS is an electronic method to manage records, including document creation, workflow, approvals, descriptions, and classifications.

In a policing context, an RMS provides broader functionality than typical RMS products. A police RMS manages dispatched officers, occurrence entries, prisoner management, property and evidence management, case preparations, and arrests through to disclosure and prosecution. In effect, an RMS in a policing context is the system of record to manage all police information from the initial call for service to the courts.

The Versaterm software product (commercially known as Versadex) will integrate the functionality available through numerous silo applications beyond the Enterprise Case and Occurrence Processing System (eCOPS), including the Criminal Information Processing System (CIPS), Field Information Reports (FIR), the Repository for Integrated Criminalistic Imaging (RICI), Unified Search, and the Property and Evidence Management System (PEMS).

As classified by Versaterm, the Versadex suite of products is a Police Operations Management System. The Versadex suite of products includes a Mobile Data Terminal (in-car dispatch), a Mobile Report Entry system (field reporting), a Crime Analysis Package (statistical reporting), a Records Management System, a Courts module, a Property module and a Case Preparation module.

2. Problem Definition

The Service's requirements for a Police Operations Management System that were articulated in 1996 are in large part the same requirements identified through the Request for Proposal process undertaken in 2010 (Min. No. P144/10 refers). In 1999, a determination was made to pursue internal development to meet the needs of the Service as opposed to purchasing a proprietary vendor's application (Min. No. P211/99 refers). Over the decade that followed, the Service's landscape of information systems has been individually and internally constructed to meet specific needs or demands of a specialized area or in response to a specific issue. The result has been the creation of 6 core silo systems: eCOPS, CIPS, FIR, RICI, Unified Search, and PEMS.

In addition to those 6 core police systems, upwards of 400 forms, over 100 Microsoft Access databases, internally built applications, and Microsoft Excel workbooks have been created to manage police operations and information requirements. As police operations become increasingly complex, additional forms and systems are expected with the design and development efforts to be solely borne by the Service. To compensate for the lack of information technology integration, Service members are required to re-enter tombstone information across these multiple systems and numerous forms. The effort the Service expends on compensating for system shortcomings, while not easily quantifiable, is widespread and significant.

The current fragmentation of the Service's information does not provide the Service with the flexibility required to support the organizational transformation that the Service and the Board are seeking.

The objective of the IRIS project extends far beyond a technology replacement and proposes transformational change following the lead of the Board to find efficiencies in how goals are achieved and in ensuring the effectiveness of the Service. This new Police Operations Management System touches on all areas of police operations from the work of the front line officer, investigators, crime analysts, specialized investigators, court officers, civilian support staff, supervisors, unit commanders and police leaders across the Service.

3. City of Toronto and City of Toronto Auditor Alignment

(i) Alignment With the City of Toronto Service Review Strategy

Along with the City, the Service has embarked on dramatic change through service review. Specifically the City's report titled *Service Review Program, 2012 Budget Process and Multi-Year Financial Planning Process March 8, 2011* states that:

“Service Efficiency Studies will examine the current delivery of a particular service or function and identify opportunities for improved efficiency and cost effectiveness through the use of technology and automation, shared service models, service innovation, business process re-engineering....”

The Service embraces this strategy and in fact, began implementing such a strategy in 2006. The culmination of this extensive examination of service delivery is the identification of significant improvements in efficiency and cost effectiveness through the implementation of the Versadex technology. Furthermore, the Service follows the City's leadership for transformational change in the way that the Service manages business and by recognizing the need to invest in information systems today in order to meet the financial challenges of tomorrow.

(ii) Alignment With City of Toronto Auditor Findings

In order to ensure the greatest transparency and accountability for this transformational project, the Service is fully committed to the City's IT governance practices and the recommendations of the Auditor General in terms of project structure and accountability in order to contain costs and mitigate risks. The Auditor's report of April 2005 entitled, *Review of the Enterprise Case and Occurrence Processing System (eCOPS) Project – Toronto Police Service* is incorporated into the project controls throughout the project as evident in the Project Management Framework section of this document (Min. No. P186/05 refers).

4. Service Alignment

(i) Industry Precedence

The selected vendor has decades of experience in the policing field including prominent roles in the creation of the Canadian Police Information Centre (CPIC) and the Police Information Portal (PIP). In total, they have 80 installations across North America including London, Niagara, Ottawa, Durham, York, and Kingston, as well as major regions of Canada including the provinces of British Columbia, Newfoundland and Labrador, and New Brunswick.

The Service will be able to capitalize on the collective efforts of these police agencies and participate in user groups for future product enhancements. As changes occur in Canadian legislation and standards for national data reporting, as well as mandatory upgrades to CPIC, the Service will now share enhancement costs and benefits with the Versaterm client base.

The trend within North American policing has overwhelmingly been to adopt a commercial-off-the-shelf (COTS) system to share in the ongoing evolution of information technology through a community of practice.

88 major police services in Canada have implemented a COTS RMS application within the last 7 years. No major police services in Canada have implemented an internally designed RMS application in that same period.

(ii) Benefits Realization

Inherent in a COTS procurement is cost containment. Following implementation, the ongoing licensing and maintenance costs will be contained within an annual fee. Inversely, cost avoidance will be achieved as the Service will no longer have to invest effort and capital into enhancements, upgrades, and software lifecycle to continually build, invest, and maintain internally built systems for police operations.

As the project progresses, redeployment opportunities will materialize as existing manual processes are automated and repetitive data entry requirements are streamlined allowing the reassignment of personnel to job functions under the new configurations. With business process re-engineering and Service innovation, coupled with an investment in technology, the Service will be in a position to realize efficiencies in the future.

In Q4 2013, following implementation, the IRIS project will undertake a review of the efficiencies gained in terms of human resources, process, and technology and translate those efficiencies into areas where operational and capital savings may exist. The Service will report to the Board on the efficiencies gained.

(iii) Shared Information and Innovation

The project team is working with municipal, provincial, and federal departments to improve the way in which information is collected, analyzed, and disseminated. As a result, compliance with the National Information Exchange Model (NIEM) becomes vital to the Service's success in relation to national information sharing practices.

Citizen internet crime reporting through CopLogic, which integrates with Versadex, has the potential to increase services offered to the public and reduce calls for service. As well, Versadex will offer shared functionality with other agencies that employ special constables and Provincial Offences officers (By-law enforcement) to enter occurrences directly into the system for action by the Service removing manual reporting and re-entry.

Furthermore, as initiatives such as electronic ticketing capabilities are explored, in the absence of this COTS solution, the Service is required to continuously revisit the buy/build decision to either procure new stand alone systems or continue to reinvest into internally built systems. For the Service and the City to move to an electronic ticketing solution for traffic tickets, early business case discussions indicate that the project cost for a stand-alone electronic ticketing initiative would be in the range of \$4M of which \$2.5M would be the one-time cost to build eTicketing into the Service's current architecture and \$1.5M for hardware. The Versadex system provides the eTicketing capabilities envisioned by the project thus avoiding approximately \$2.5M in one time costs.

In many areas, the Service is breaking new ground to create opportunities while reducing time, costs, and resource demands. The opportunities for electronic criminal and provincial case disclosure, electronic accident report submission to the province and city departments, and electronic filing of provincial offence notices in e-ticketing initiatives are only a few of the areas in which the Service envisions achieving significant efficiencies.

(iv) Reducing Duplication and Compensating Controls

During the review of business processes, the significant level of duplication that existing systems demand on staff was better understood. Further, it was recognized that repetitive data entry inevitably results in elevated levels of error, and combined with the lack of interoperability and information sharing, inevitably leads to reduced public safety as was identified during the Campbell Inquiry following the conviction of Paul Bernardo. As a result, the Service has assigned people as compensating controls for the lack of integration of information systems. This lack of integration has compelled the Service to use people to act as information conduits, filling in forms or re-entering data into other systems in circumstances where such activities should be automated.

As an example, with our current systems, a routine daily occurrence for an event similar to an arrest for assault where evidence or property is seized can result in entering tombstone information upwards of 30 times. This example encompasses the time of the event call through to the arrest, booking, preliminary investigation, and release of an adult and does not include system interactions relating to court appearances, court disclosures, information filing, or criminal dispositions, nor does it include youth, drugs, or any other specific case requirements that add to the complexity of an occurrence. This excessive data re-entry occurs for approximately 85,000 arrests annually.

For this standard arrest scenario, the systems, processes, and forms that tombstone information is entered into, along with the Service role responsible for the data entry is as follows:

System/Form	Role
I/CAD system	Communications Operator
Officer's memo book	Responding Officer
Unified Search	Responding Officer
CIPS	Booking Officer
Prisoner Property Bag	Booking Officer
Prisoner Search Template	Booking Officer
Booking Hall DVD log	Booking Officer
Prisoner Transportation Log	Booking Officer
Unit Commanders Morning report	Station Operator
eCOPS	RMS Clerk
eCOPS	Property Officer
Property Tag	Property Officer

Property Seal	Property Officer
Property Report	Property Officer
Property Evidence Bag	Property Officer
DLMS	Property Officer
PEMS	Property Clerk
5.2 Report for Justice	Property Officer
Form 441 Application for Court Documents	Investigator
Form 436 Canada Evidence Act Notice	Investigator
Form 10 Promise to Appear	Investigator
Form 11 Recognizance Entered into before the OIC	Investigator
Form 422 Primary Disclosure List	Investigator
Form 423 Secondary disclosure check list	Investigator
Form 466 Officers notes cover page	Responding/Investigator
Form 493 Notice to accused persons	Investigator
RICI (Mugshot)	Investigator
CASC (Court Scheduling)	Investigating Officer
Crown Witness Leave Dates calendar	Investigator
Form 492 McNeil Check List	Investigator
Form 438 Court notification and statement request	Investigator
Form 439 Subpoena Request	Investigator

One time data entry for tombstone information across the systems and forms listed above is possible. The Versadex system has the capacity to dramatically reduce duplication of effort, reduce the opportunity for errors, and reduce the demand for compensating controls. This will enable the Service to apply this effort to our core service of ensuring community safety and security.

The IRIS project proposes significant changes in the way that front line officers manage police information; the investigative work that is undertaken in by divisional detective offices; the manner in which accident information is collected and disseminated; the filing of Provincial Offence notices; disclosure to the Ministry of the Attorney General; and how offenders are processed and booked into custody. Because of the restrictions and fragmentation inherent in our current systems these efficiencies can only be achieved by moving forward with the COTS purchase.

3. The Agreement

With the exception of modifications to project milestone dates and other final updates following Board approval, the negotiations with Versaterm are complete and the Statement of Work, along with the terms and conditions, are acceptable to the Service.

There is a Master Agreement addressing the overarching terms and conditions for the provision of Versaterm's services, as well as a series of Schedules that deal with specific aspects of the arrangements and the provision of services in more detail.

Representatives from the IRIS project team, in consultation with the Service's Purchasing Support Services and the City Legal Division, have been actively involved in the preparation of the Master Agreement and the supporting documentation. The key aspects of these documents are as follows:

(i) Master Agreement

The Master Agreement sets out the general principles governing the contractual relationship between the Board and Versaterm.

Key provisions of the Master Agreement are:

- Definitions of the standard of care and skill to be used by Versaterm in performing the services,
- Identification of the responsibility of Versaterm for its personnel and subcontractors, if any,
- Establishment of both parties' confidentiality and security obligations,
- Identification of Versaterm's insurance requirements,
- Establishment of the high level structure for payments and invoicing,
- Identification of the right to use of the software source code in specified circumstances,
- Requirements for acceptance testing of the system,
- Change control process to ensure documentation of any changes to the scope of the project,
- Establishment of a process to resolve disputes, including escalation of disputed matters from the project managers to the executive level,
- Establishment of warranties on the standards of services and the meeting of the Service's requirements,
- Provisions of indemnity obligations for Versaterm for harm to the Service in carrying out the project (subject to limitations of liability) and violation of a third party's intellectual property rights,
- Identifying termination rights in the event of breach of the Agreement, and
- Establishment of a right for the Service to audit Versaterm's records associated with the project.

(ii) The Schedules to the Master Agreement

The Master Agreement with Versaterm includes the following Schedules, which form part of the Agreement but deal with its various aspects in a more detailed way than the Master Agreement:

- Price List and Payment Schedule

In consideration of Versaterm installing and supplying the system and services in accordance with the terms and conditions of the Master Agreement, Versaterm will be compensated at specific project milestones for parts of the total Agreement price.

- Vendor's Statement of Work

A Statement of Work has been developed with Versaterm to define the scope of work, vendor resource requirements, functional, operational, and technical business requirements, equipment needs and associated costs. As reported to the Board in May 2010, the vendor has completed the Statement of Work at no additional cost to the Service (Min. No. P144/10 refers).

The Statement of Work outlines the roles and responsibilities of all parties during and post implementation of the Versadex solution. The Statement of Work also addresses implications of the Police Operations Management System installation, including software and hardware acquisition, integration testing, production system installation, functional acceptance testing, training course outlines, production rollout plan, and Police Operations Management System response and reliability testing.

- Project Implementation Schedule

This Schedule sets out a detailed timetable for the entire project to guide the timing and completion of the project.

- Interface Control Document

This document identifies all required and potential interfaces that will be developed in order to ensure that the Versaterm software will effectively interact with relevant existing Service systems and databases.

- Customization and Enhancements Control Document

This Schedule identifies the requirements for customization and enhancement of the standard Versaterm software to address the additional specific needs of the Service.

- Conversion Control Document

This document identifies the requirements of the Service with respect to the conversion of existing Service records into records under the new Police Operations Management System. Given the significance of the Police Operations Management System, this is an important part of the Agreement to ensure continuity in records management.

- Change Control Log

This Schedule establishes a form for recording all changes in the project that are commonly required in a project of this magnitude. Given the scope of the project, modification of the project by agreement between the parties is important, and maintaining an accurate record of such changes is the purpose for the log.

- Acceptance Testing

The Schedule sets out the parameters for acceptance testing of the system at various stages of the project and upon completion. The acceptance tests are the basis for the Service's acceptance of the system and making milestone payments. Therefore, the test plan is designed to ensure that no aspect of the system is accepted without thorough testing to ensure that it performs in accordance with the Service's requirements.

- Training

The type and range of training that Versaterm will provide as part of the services are described under this section of the Agreement. Given that the new Police Operations Management System will necessitate training for members of the Service in order for the system to work effectively, the training component is an important part of the overall services.

- Application Software Licence Agreement

This Schedule contains the form of the Application Software Licence Agreement. This is the agreement between Versaterm and the Board for the perpetual licence to use Versaterm's proprietary software programs and manuals.

- Application Software Support Agreement

This Schedule contains the form of the Application Software Support Agreement. This Agreement identifies the maintenance and support services that will be provided by Versaterm, including assistance with data manipulation, periodic reviews of all products to identify and resolve issues on a preventive basis, responding to outstanding inquiries and usage issues and, in a timely manner, providing all product updates and upgrades.

Following execution of the Master Agreement with Versaterm, the Versaterm suite of products, along with ancillary hardware and third party software, will be configured, tested, and implemented Service-wide.

4. The Project Management Framework

The Service's project management framework is being used to manage the new Police Operations Management System project. It consists of the following:

- Project Charter

The Project Charter provides a high level framework and roadmap for the remaining phases of the project and will serve as a term of reference for ongoing project management. The document addresses areas such as project objectives, measurements of success, overall approach and timelines, deliverable descriptions, resources and governance, and project procedures.

The scope of the deliverables addressed in the Project Charter includes:

- Requirements Management Plan
 - Functional and Technical Requirements Documents
 - Configuration Design Document (including workflow, access control, audit component)
 - Conversion/Archiving/Decommissioning Strategy (legacy systems and data)
 - Quality Assurance/Testing Strategy
 - Business and Technology Target Operating Models
 - Organizational and Business Change Management Strategy (marketing and communications)
 - Policy and Procedure Change Management Plan
 - Training and Support Strategy
 - Implementation and Deployment Strategy
 - Business Intelligence Strategy
- Project Phases

The major activities and estimated timelines for the Versadex implementation are outlined below.

i. Design and Planning – Q1 - 2010 to 2011

During the design and planning phase, the target operating model will be developed with input from key stakeholders and subject matter experts across the Service. The technical infrastructure and system integration topology required to support the business architecture will be examined, along with the Versadex and third party application configurations to achieve the Service's vision of an integrated Police Operations Management System solution. Procurement of hardware and third party software will be initiated.

ii. Configuration and Information Technology Build - 2011

This phase will encompass the configuration and testing of Versadex and third party applications to determine optimal configuration, the building of system interfaces and conversion capabilities to migrate specified data to Versadex, and the configuration and building of operational and analytical reporting capabilities. User roles and access rights will be configured in accordance with information security requirements.

iii. Testing, Pilot Staff Training, and Pilot Rollout - Q1- 2011 to Q3 - 2012

This phase of the project will involve system performance testing with production volumes; functional and work flow testing to ensure acceptance by stakeholders and end users; system, operability, and integration testing with respect to interfaces; infrastructure, failover, and security aspects of the implementation; and model office testing of the system in its final configured form. At this time, final defect or configuration corrections will be made.

Training will begin in this phase, followed by a production pilot rollout to a predetermined division and designated centralized units targeted for early 2012.

iv. Staged Implementation - Q3 - 2012 to Q2 - 2013

Staged Service-wide production rollout will continue following the testing phase and will be coordinated in a manner that aims to minimize disruptions to business activities, while ensuring that training delivery and rollout timing are closely aligned.

v. Production Stabilization - Q2 to Q4 - 2013

The production stabilization period will follow the Service-wide application rollout and will continue through 2013 to ensure the stable and efficient operation of the system, maximum benefits realization, and overall stakeholder and end user acceptance.

vi. Decommissioning, Transition to Sustainment Team, and Project Closeout - Q4 - 2013

Decommissioning of existing applications and the transition to the Sustainment Team will take place in 2013, followed by project closeout targeted for completion Q4, 2013.

- Project Governance and Controls

i. Executive Command Project Sponsor

The Deputy Chief – Divisional Policing Command as Command Sponsor will champion the project on behalf of the Service and has ultimate accountability for approving the Project Charter, project plan and deliverables. The Command Sponsor will review major changes in project scope, objectives, and timelines, and will ensure a timely resolution to escalated issues and risks.

ii. IRIS Project Steering Committee

An executive Steering Committee was established in April 2009 as the formal governing body for the IRIS capital project. Issues that may potentially impact project scope, schedule, and budget will be addressed and approved at the Steering Committee level.

iii. Project Sponsor

The Project Sponsor (Staff Superintendent as delegated by the Executive Sponsor) is accountable for the project's financial resource allocation, for reviewing and directing the Project Charter, project plan and deliverables, for monitoring project progress, and for escalating issues and risks, if warranted.

iv. Executive Management Team

The Service's Executive Management Team will serve as the Design Authority for the IRIS Project. In this role, the Executive Management Team will review and approve the business architecture as it relates to defining the target operating models. This group will participate in scope management to support integrated solutions consistent with the project objectives and strategic organizational goals.

v. Business Project Manager

The Business Project Manager is responsible for the delivery of the project, and for managing all aspects of the project work to achieve organizational goals. The Business Project Manager also manages operational resource requirements, relations with internal stakeholders, and the financial components of the project. Issues will be escalated by the Business Project Manager, as appropriate.

vi. IRIS Advisory Board

An Advisory Board comprised of stakeholders from across the Service continues to meet on a monthly basis to discuss the project status, seek clarification from the IRIS project management team, and provide a forum for members to identify issues of concern and opportunities for improvements within their designated units or Command areas.

vii. IRIS Sustainment Committee

The Advisory Board is a precursor to the establishment of a Sustainment Team that will assume responsibility for the maintenance, development, and enhancement of corporate level information systems, including Versadex, post implementation.

viii. Project Manager

A dedicated project manager has been retained by the Toronto Police Service to oversee the IRIS capital project through to target completion Q4, 2013 (Min. No. P145/10 refers). The IRIS Project Manager will liaise with the IRIS project management team, the Service's Project Management Office, and internal stakeholders to successfully administer and govern the execution of the project plan, coordinate and oversee the development of all contracted interfaces and enhancements, and resolve obstacles that may impede the progression of the project. The IRIS Project Manager will prepare project status reports and will ensure that a project artefact library is maintained.

A Risk Management Log will be maintained to ensure that all identified issues are appropriately logged, assessed, prioritized, assigned, tracked, and resolved in a timely manner. Checkpoints will be built into the project schedule to ensure that project scope, timelines, and cost projections are validated at designated milestone target points.

Any changes that affect scope, cost, or key milestone dates identified throughout the course of the project will be documented using a change request form and will be tracked in accordance with the Change Control Procedure, which is outlined in the Project Charter.

Versaterm will also provide project management and technical expertise, and will support the Service through the configuration, testing, implementation, and post-cutover phases of the project to ensure that identified business requirements and deliverables outlined in the Statement of Work are achieved.

The Versaterm Project Manager will assist the IRIS Business and Delivery Project Managers in managing and resolving technology related issues, risks, and change requests in accordance with the project timelines. Versaterm will provide onsite training to designated personnel in preparation for production rollout.

ix. Information Technology Services – Project Management Office

Project status continues to be reviewed on a monthly basis by the Information Technology Steering Committee.

In addition, there is ongoing liaison with representatives from the Service's Project Management Office who provide oversight with respect to roles and responsibilities, contract and change order management, project schedule maintenance, scope and deliverables, identification of risks to be managed, the budget/cost monitoring process, and to ensure that project management best practices are adhered to (Min. No. P35/07 refers).

Conclusion:

The IRIS project will achieve significant improvements Service-wide in terms of records and information management, silo reduction, and interoperability through the implementation of the Versadex suite of products to be supplied by Versaterm and the associated process changes that accompany such a large scale system migration.

The execution of the Master Agreement with Versaterm will initiate the transition towards the future generation Police Operations Management System that will enhance police service delivery and support the strategic goals of the Service.

Deputy Chief Derry, Divisional Policing Command, and Mr. Tony Veneziano, Chief Administrative Officer, Administrative Command, will be in attendance to answer any questions that the Board may have.

Respectfully submitted,

William Blair, O.O.M.

Chief of Police

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**THIS IS AN EXTRACT FROM THE MINUTES OF THE SPECIAL PUBLIC MEETING
OF THE TORONTO POLICE SERVICES BOARD HELD ON APRIL 14, 2011**

#P107. ADJOURNMENT

Alok Mukherjee
Chair