MINISTRIES OF THE ATTORNEY GENERAL, CORRECTIONAL SERVICES, AND THE SOLICITOR GENERAL

3.03—Integrated Justice Project

BACKGROUND

The Integrated Justice Project, a joint initiative between the ministries of the Attorney General, Correctional Services, and the Solicitor General (the Ministries) was instituted in 1996 with the intention of facilitating more modern, effective, and accessible administration of justice. The Project will affect approximately 22,000 employees in the Ministries at 825 different locations across Ontario, as well as municipal police forces, judges, private lawyers, and the general public.

The Project was instituted to provide financial and qualitative benefits to users of the justice system. The need for improvement in the administration of justice in Ontario has been pointed out by a number of judicial inquiries, studies, and coroners' juries, which have recommended faster and better information sharing within the justice system. Better information sharing is expected to:

- increase public and police safety;
- make the justice system more accessible and responsive; and
- reduce or eliminate inefficiencies and delays in the system.

The objective of the Project was to improve information flow by streamlining existing processes and replacing older computer systems and paper-based information exchanges with new, compatible systems and technologies. Information was to be moved electronically between users, reducing the time, effort, and cost that now go into producing and retrieving documents. The main new computer systems are outlined in the following table:

Main New Computer Systems of the Integrated Justice Project

| Justice Area | System |
|-----------------|---|
| police | Computer-aided Dispatch Records Management |
| Crown attorneys | Case Management |
| courts | Case Management, Court Scheduling, and Electronic Document Filing Digital Audio Recording of official court records |
| corrections | Offender Tracking and Information |

Source of data: Integrated Justice Project, Project Management Office

In addition, a Common Inquiry system was to be created to allow authorized persons in one justice area to access and thus link to files held in other areas on cases, victims, witnesses, suspects, the accused, and convicted offenders.

The Project was implemented using Common Purpose Procurement. Under this procurement approach, the government and private-sector partners jointly provide necessary human and financial resources and share in resulting risks and rewards. In September 1997, the Ministries selected SHL Systemhouse Co. (SHL) as the prime vendor. SHL led a consortium of private-sector partners (the consortium) to work jointly with the Ministries to decide on and implement the new computer systems. In 1998, EDS Canada Incorporated (EDS) acquired SHL and assumed its contractual obligations.

The contractual arrangements of the Project were first set out in September 1997 in a Master Agreement that was revised in March 1998. Under the Agreement, EDS was to provide approximately 75% of the funding and resources required to implement the Project, while the Ministries were to provide the remaining investment required. Under the risk-sharing provisions of the Agreement, remuneration and financial incentives to EDS were to be contingent on the achievement of specific benefits to the Ministries, such as staff reductions and increased revenues.

A Project Management Office was established in 1997 to co-ordinate the work of the Project. It was to be responsible for preparing and updating the business case and accounting for the investment and benefits pools. Two directors—one chosen jointly by the Ministries and the second from EDS—headed the Office. A joint operations team, made up of a mix of staff from the consortium and the Ministries, had been handling most of the work of the Project.

The Project had been accountable to a deputy ministers committee, made up of the Corporate Chief Information Officer, representing the Management Board of Cabinet, and representatives from the Ministries. In addition, an executive steering committee, with representatives from the Ontario justice system and key stakeholders, had been created to provide advice on the Project.

In March 1998, total project costs were estimated to be \$180 million, which were to be recovered through estimated benefits of \$326 million. The Agreement required that the new systems be completed by August 2002.

At the time our audit was completed, total project costs incurred were approximately \$159 million, and about 200 staff from the Ministries and the consortium were working full-time on the Project. However, due to cost increases and delays, the Ministries were in the process of negotiating with EDS to determine if, when, and how the Project would be completed and at what cost.

AUDIT OBJECTIVES AND SCOPE

The objectives of our audit of the Integrated Justice Project were to assess the extent to which:

- adequate systems and procedures were in place to ensure compliance with corporate policies governing the use of Common Purpose Procurement; and
- the Project was administered with due regard for economy.

Our audit was performed in accordance with the standards for assurance engagements, encompassing value for money and compliance, established by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

Prior to the commencement of our audit, we identified the audit criteria that would be used to conclude on our audit objectives. These were reviewed and accepted by senior Integrated Justice Project management.

The scope of our audit included interviews with appropriate staff and review and analysis of policies and procedures, management reports, samples of files, and financial and management systems. We also researched practices in other jurisdictions.

Our audit covered the period to March 31, 2001. We did not rely on the Ministries' internal auditors to reduce the extent of our audit work because they had not recently conducted any substantial work on the Integrated Justice Project.

OVERALL AUDIT CONCLUSIONS

The Integrated Justice Project has experienced significant cost increases and delays. While the March 1998 cost estimate to complete the Project was \$180 million, the March 2001 estimate had risen to \$359 million. Over the same period, expected benefits were reduced from \$326 million to \$238 million. In addition, not all systems are expected to be fully implemented by the contractual deadline of August 2002. We had several concerns with respect to these costs increases and delays.

We concluded that the requirement in the Common Purpose Procurement policy that due diligence be performed to support the projections of costs and benefits in a business case was not adequately followed in the Integrated Justice Project. Although we found that the Project had a sufficiently demonstrated need for the use of Common Purpose Procurement and project management conducted a fair and open vendor-selection process, we found the following weaknesses in the original business case, on which project approval was based, and in subsequent business cases used to monitor project progress:

- The schedule in the original business case was aggressive and based on a best-case scenario. It did not adequately take into account the magnitude of change introduced by the Project, the complexity of justice administration—particularly that of the courts—or the ability of vendors to deliver the Project's computer systems in the required time frames.
- Inadequate research in the preparation of the March 1998 business case resulted in projected benefits that were overestimated by over \$30 million. In addition, we noted that the estimate of benefits, already reduced to \$238 million in the most recent business case, was still overstated by approximately \$57 million.

In addition, we noted that no agreement had yet been reached between project management and senior management of the courts on the details for determining expected courts benefits in the amount of \$172 million—representing over 70% of the Project's total benefits. This delay in agreeing to these benefits exposed the Project to the risk that not all the benefits identified would be realizable.

Notwithstanding the fact that project management had negotiated prudent contractual arrangements that set a cap of \$220 million on total payments to EDS and allowed payments to be made only if and when benefits were realized, we concluded that other aspects of the contractual arrangements with the vendor resulted in the Project not being administered with due regard for economy. Specifically:

- The initially negotiated terms of the Agreement envisioned incentives to the vendor of \$51 million, an amount representing more than 40% of the vendor's originally expected investment. The incentives were in addition to allowing the vendor other compensation that was already included in its charges to the Project, such as a significant premium on staff rates, investment interest, and a markup on purchases.
- Negotiated rates for consortium staff were at a premium compared to rates charged by the same vendor to other ministries for similar work. We estimated that the rate difference would, over the life of the Project, increase total costs by up to \$25 million.
- The billing rates of consortium staff working on the Project were approximately three times higher than those of the Ministries' staff for similar work. In addition, we noted that an error in calculating the rates of the Ministries' staff would result in the Ministries undercharging the Project by approximately \$3 million over the life of the Project. As a result, the consortium would share in project savings at a disproportionately high rate as compared with the Ministries.

We also noted that project management needed to ensure that satisfactory internal controls exist over investment charges to the Project, as well as over the use of consultants. Our audit resulted in the elimination and recovery of over \$300,000 in duplicate charges and excessive rent payments.

As well, we had serious concerns that security measures were inadequate over the systems already in use by police and the system to be established for corrections. Until new controls for password protection and data transmission are in place, the confidential information contained in these systems—including data on suspects, victims, witnesses, the accused, and convicted offenders—is vulnerable to unauthorized access and manipulation.

Overall Ministries' Response

The Ministries involved in the Integrated Justice Project appreciate the Ontario Provincial Auditor's comments highlighting areas for improvement. The Ministries are acting on the Auditor's recommendations, and they look forward to participating in the Management Board Secretariat's review of Common Purpose Procurement guidelines.

The Integrated Justice Project is a technological and business transformation initiative unprecedented in its complexity and multiple stakeholder involvement. The Common Purpose Procurement model provides an effective way to achieve the Project's goals because it allows the government to access essential expertise in the private sector and transfer a measure of financial risk from the government to the private sector. To balance the risk, the private sector requires incentives, including suitable rates for staff assigned to the Project. In renegotiating the Master Agreement with EDS, the Ministries will continue to seek an appropriate balance between risk and incentive, and will address the issues raised by the Auditor.

DETAILED AUDIT OBSERVATIONS

COMMON PURPOSE PROCUREMENT

The Management Board of Cabinet's Directive and the Management Board Secretariat's guidelines for Common Purpose Procurement require that an open, competitive process be followed when selecting a private-sector partner. The partner is to work closely with ministries on appropriately qualified projects to jointly identify, design, develop, and implement new ways of delivering services. Ministries and their private-sector partners are required to share the risks, investment, and rewards of a project.

The original guidelines for Common Purpose Procurement issued in November 1995 were revised in October 1998. The revised guidelines provide directions on when the use of Common Purpose Procurement is appropriate, as well as on organizational readiness, competitive vendor selection, negotiation, contracting, project implementation, and management. The guidelines also specify requirements for Management Board of Cabinet approval and annual reporting.

We recognize the existence of significant risks and uncertainties inherent in the Common Purpose Procurement approach. For example:

- Unlike traditional procurement processes, Common Purpose Procurement selects a vendor
 on the basis of its expertise and experience but not on the basis of a competitively tendered
 price. Only after the vendor is selected does the government negotiate the vendor staffbilling rates to be charged to the project. In addition, charges to the project are made on a
 cost-plus basis until all work is completed. The absence of both an initial price competition
 and a firm price commitment often makes it difficult to assess whether the rates charged to
 the project are reasonable and value for money has been obtained.
- The ministries and the private-sector partner jointly identify, design, and implement the systems that are to achieve the desired business results. However, the specific nature and

- extent of work to be performed is not known during the early phases of a project, and decisions made are based only on the limited information available at the time. This can result in substantial uncertainties and fluctuations in expected costs and benefits and a greater risk of a project not being completed on time.
- The guidelines require the preparation of a business case to justify the project by quantifying its financial benefits. In addition, they state that "the extent to which the vendor anticipates sharing the risks, investment, and benefits will determine the rigour the vendor and ministry apply in reviewing the project business case and performing due diligence to support the projections of costs and benefits." However, there is pressure on project management, in preparing the business case, to minimize costs and achieve benefits as early as possible in order to obtain Management Board of Cabinet approval for the project. As a result, the implementation schedule may be overly optimistic and aggressive. This may subsequently conflict with the expectations of ministries for high-quality systems and minimal program disruptions.

We concluded that, in the case of the Project, management had recognized and taken steps to mitigate many of the risks and uncertainties and generally complied with certain key corporate policies governing the use of Common Purpose Procurement. Specifically, there was a sufficiently demonstrated need for private-sector partnership, and management fairly and openly selected a private-sector partner and negotiated a cap on vendor remuneration. However, as described later in the report, one critical requirement that was not adequately addressed related to the projections used in preparing the business plan. In addition, we identified a number of areas where project management's implementation of Common Purpose Procurement would have had to be improved to ensure the Project was administered with due regard for economy.

Private-Sector Partnership

According to Common Purpose Procurement guidelines, a ministry may seek out private-sector expertise, experience, and resources for large, complex, multi-stage design-build-and-operate projects for which it is unlikely to have the right mix of time, skills, and money to identify, design, and develop its own solutions. Both the ministry and the potential partner must be capable of financing their investment costs in the project. Their costs are to be recovered when cost savings and new revenues are achieved as a result of the project, and recovered costs are to be paid out to each party in the same proportion as the party's investment. Incentive payments for achieving project milestones may also be made to private-sector partners.

We concluded that the Ministries had a sufficiently demonstrated need for private-sector partnership for the Project. No other jurisdictions had an integrated justice system in place that was as extensive as that envisioned in the Project. Given the scope and complexity of the Project, extensive financial and human resources, expertise, and experience would be required to complete the Project, none of which would have been available from within existing Ministries' resources.

Selection Process

We were also satisfied that, overall, the vendor-selection process was fair and open. The Ministries jointly selected the successful vendor through a two-stage process set out in the Common Purpose Procurement guidelines issued by the Management Board Secretariat. In

August 1996, the first stage of the competition was launched, resulting in submissions from three consortiums of vendors. A committee consisting of the Ministries' management evaluated the written proposals on the basis of:

- the financial stability of the primary vendors constituting the consortium team;
- the demonstrated relevant experience and expertise of the vendors;
- the overall proposed approach to meeting the Project's functional requirements; and
- the business arrangements offered, including the extent to which the vendors would finance
 the project and the vendors' remuneration would be recovered through savings achieved or
 other innovative means.

In November 1996, the two vendors with the highest scores from the first stage of evaluation proceeded to the second stage, which required that respondents make oral presentations.

In September 1997, at the conclusion of negotiations, the successful vendor, SHL Systemhouse Co., signed a Master Agreement with the Ministries as the prime vendor. The Agreement was revised in March 1998 following the Project's first phase, which comprised a feasibility study and planning. Before signing the revised Agreement, the Ministries and the consortium had an opportunity to further review the business case and agree that the projected costs and benefits were realistic. The Agreement detailed the Project's scope, joint project-management arrangements, conditions and provisions for terminating the Agreement, and procedures for calculating project investment costs, savings, new revenues, and remuneration to be paid to the consortium.

BUSINESS CASE

The business case of the Project sets out projected costs and benefits—according to Common Purpose Procurement guidelines, a ministry and its private sector partner share in the investment costs of a project and divide the remuneration generated from it based on the allocation of risks and attribution of benefits.

The original business case underwent constant review as project work was completed and new information was gathered. It was officially updated at the end of each project phase, at which time project management also reported on the Project's progress to the Management Board of Cabinet.

Due to the risk-reward philosophy of the Common Purpose Procurement approach, as well as the lack of a guaranteed recovery of investment, both parties were required to agree on the business case. In addition, the following two financial conditions had to be met on an ongoing basis throughout the work term in order for the Project to continue:

- the benefit to investment ratio must exceed 1.1:1; and
- the consortium investment must not exceed \$200 million, excluding taxes.

If either of these conditions was not met, either party could terminate the contract and receive payments from benefits enabled by the Project to date.

As of March 31, 2001, when investment in the Project had totalled \$159 million, the Project was experiencing significant cost increases. Anticipated financial benefits had been reduced and

completion dates for new systems had been delayed. The table below shows the differences between the business case as of March 31, 1998 and that as of March 31, 2001.

Estimated Investment Costs and Benefits as of 1998 and 2001

| Date of Business Case | Investment Costs (\$ millions) | Benefits (\$ millions) | Benefit–Investment Ratio |
|--------------------------|--------------------------------------|---------------------------|-----------------------------|
| March 31, 1998 | 180 | 326 | 1.81:1 |
| March 31, 2001 | 312 | 238 | 0.76:1 |

Source of data: Integrated Justice Project, Project Management Office

The business case of March 31, 2001 indicated that neither of the Project's two continuance criteria were being met: the benefit-investment ratio was below 1.1:1, and the consortium investment required—approximately 75% of \$312 million—exceeded the \$200 million limit. Furthermore, the investment cost amount of \$312 million in this business case was understated. Project management estimated that the costs of completing the Project would be \$359 million and that project work would extend past the stipulated work-term end date of August 2002. However, since \$47 million in costs would be incurred after the work-term end date, and the Agreement did not allow any investment costs to be charged after that date, the business case did not include all of the estimated costs in its March 31, 2001 cost projection.

In March 2001, the Ministries received approval from the Management Board of Cabinet to renegotiate the terms of the Master Agreement with EDS. The negotiations were ongoing at the completion of our audit and were expected to result in a revised business case and new timetable for completion. Management Board approval will be required for any new contract terms.

Should negotiations result in the Ministries deciding to continue with the Project, the successful completion of new systems is dependent on managing a variety of significant risks and pressures. So far, project management has had limited success in doing so, particularly with respect to costs and completion dates. In future, management would have to:

- effectively control project costs, as well as more accurately estimate and achieve benefits;
- deliver, in accordance with revised implementation timelines, final versions of applications software that satisfy the requirements of justice stakeholders; and
- obtain timely approval of required judicial rules-and-regulation changes to enable the implementation of new systems in courts.

Recommendation

Should negotiations result in the Ministries deciding on continuing the Integrated Justice Project, the Ministries should take the appropriate measures that will result in completing the Project in a timely and cost-effective manner. Controls on project management should be reviewed to identify ways to:

- minimize the risk that the Project will not be completed within the revised timelines and the revised costs will not be exceeded; and
- ensure that estimated benefits are, in fact, realizable and ultimately achieved.

Ministries' Response

The Ministries have initiated improved processes to mitigate and minimize risks and to ensure that benefits can be achieved. With respect to the recommendation:

- The Ministries have implemented more effective project controls to minimize the risks concerning timelines and costs identified by the Auditor. These include establishing project-specific and cross-sectoral steering committees and defining clearer lines of accountability.
- In renegotiating the Master Agreement with EDS, documents describing benefits are being reviewed, with the intention of having them renewed and re-signed to demonstrate a common commitment to realizing the benefits. Tough new acceptance criteria are being implemented.

PROJECT TIMETABLE

The Project has five phases. At the time of our audit, phases 4 and 5 had been reached, as can be seen in the following table.

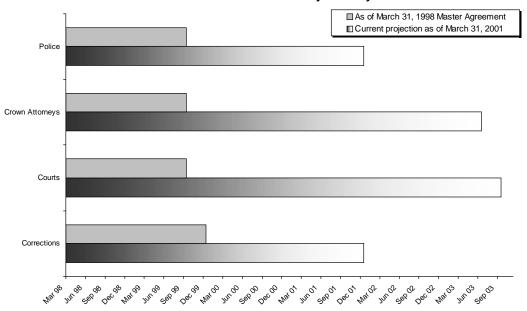
Actual Project Timetables by Phase

| Phase | Description | Actual Beginning and End Dates |
|-------|----------------------------|--------------------------------|
| 1 | Feasibility Study/Planning | September 1997–March 1998 |
| 2 | Requirements Definition | April 1998–October 1998 |
| 3 | Design | November 1998–April 1999 |
| 4 | Development/Acquisition | May 1999-Ongoing |
| 5 | Implementation | November 2000–Ongoing |

Source of data: Integrated Justice Project, Project Management Office

When project management set the original timetable for the Project, its projections of beginning and end dates were more aggressive than the actual dates shown above. In order to implement systems as quickly as possible, management had planned for most new systems to be in use by September 1999 and for all systems to be in final release and fully implemented by August 2001. The following bar chart shows the differences between the Project's originally forecast timetable for the initial releases of the systems and current projections.

Original and Revised Timetables for Initial Releases of New Systems by Area



Source of data: Integrated Justice Project, Project Management Office

Several factors did not receive due consideration when management set the original timetable. As a result, both the work involved in the Project and the Project's true cost were significantly underestimated. These factors were acknowledged by project management in its recent report to the Management Board of Cabinet:

• Magnitude of change—Project management underestimated the time and work needed for the acceptance and realization of the great degree of change introduced by the Project. For example, the courts system, which was expected to ultimately generate over 70% of the Project's benefits, had been operating with largely paper-based information- and documentmanagement systems. The original plan to implement almost all of the new systems and procedures in the 18-month period between March 1998 and September 1999 incurred a measure of resistance from court staff and the Judiciary.

Project management also underestimated the time needed for extensive consultations with the justice system's many users, including not only government staff but also federally and provincially appointed judges and other staff who operate independently of the administrative and legislative arms of the government. For example, in the development of the courts' Digital Audio Recording system that was underway at the time of our audit, consultations would need to be held with court staff, members of the Judiciary, members of the private bar, and Crown attorneys.

As a result of these factors, the implementation plan had to be revised such that all new systems were to be installed independently of each other and their implementation was to be managed through multiple releases.

• Systems development—Project management underestimated the time and work needed to customize, develop, and test systems software before and during implementation. Most of the software for the new systems consisted of "off-the-shelf" applications purchased from

six vendors that were competitively selected. These vendors were required to develop or customize their existing applications to meet project functional requirements and to ensure compatibility of the new systems; at the same time, EDS began developing new applications that would enable future integration of the various individual systems.

All six applications chosen required longer than the six months allotted for the modifications needed to meet Ontario's requirements and for integration with other systems. In the case of courts systems in particular, the changes needed were extensive and not easily effected. The customization problems were intensified by the fact that the application vendors were generally smaller companies in niche markets with limited resources to do the work required within the allotted time frames.

Many of the limitations and inadequacies in the chosen applications may have been identified earlier. For example, at the time the Master Agreement was signed, four Ontario courts were already using earlier versions of an application that was later selected. However, these earlier versions were not assessed as to their effectiveness in the courts where they were used.

While project management advised us that these earlier versions of the application were known to be inadequate for Ontario courts, in our view this further supports the need to assess the strengths and weaknesses of all applications, including areas that courts management would consider require improvement.

Even though risks associated with the above factors were identified in early submissions regarding the Project made to the Management Board of Cabinet between 1996 and 2000, aggressive timelines and favourable cost scenarios were nonetheless used in the business case. In our view, Common Purpose Procurement guidelines would be improved by requiring that the business case be more realistic and based on validated information. Where significant assumptions and risks are involved, best- and worst-case scenarios would need to be prepared.

Recommendation

To improve controls over timelines and associated costs for this and future Common Purpose Procurement projects, the Ministries should work with the Management Board of Cabinet to revise Common Purpose Procurement guidelines to require that:

- reliable information that is validated at the earliest opportunity be used in the preparation of the business case; and
- where significant assumptions must be made, multiple business-case scenarios be prepared to help ensure that the financial risks relating to each of the various scenarios are clearly presented.

Ministries' Response

The Ministries have undertaken to develop processes to continuously improve project planning and monitoring of timelines and associated costs. For example, the Ministries have expanded the existing governance structure, adding new controls that improve project accountability and provide for more effective decision-making.

The Ministries understand that the Management Board Secretariat is reviewing the Common Purpose Procurement guidelines, seeking to identify, develop, and implement additional guidelines that may be required to assure the effective planning and management of future Common Purpose Procurement initiatives. The Ministries look forward to sharing their experience from the Integrated Justice Project with the Management Board Secretariat as part of this review. The Auditor's recommendation, that proposals include multiple business-case scenarios to help ensure that the financial risks relating to each of the various scenarios is clearly presented, will be considered as part of this review.

PROJECT BENEFITS

The Phase 1 business case was prepared with the input of staff from the Ministries, consortium members, and stakeholders. This business case became the basis for the March 31, 1998 revised Master Agreement and was used to obtain approval from the Management Board of Cabinet to proceed based on the financial merits of the Project.

The following table shows how the benefits that were anticipated at the start of the Project compare with those currently expected.

Original and Current Project Benefits by Area

| Benefit Area | Cost Savings (\$ millions) | New Revenues (\$ millions) | Total (\$ millions) |
|-----------------|----------------------------------|----------------------------------|------------------------|
| Police | | | |
| March 31, 1998 | 12.5 | 22.0 | 34.5 |
| March 31, 2001 | 14.3 | 0 | 14.3 |
| Change | +14% | -100% | <i>–59%</i> |
| Crown Attorneys | | | |
| March 31, 1998 | 6.4 | 3.9 | 10.3 |
| March 31, 2001 | 5.5 | 0 | 5.5 |
| Change | -14% | -100% | <i>–</i> 47% |
| Courts | | | |
| March 31, 1998 | 84.4 | 139.8 | 224.2 |
| March 31, 2001 | 51.2 | 121.2 | 172.3 |
| Change | <i>–39%</i> | -13% | <i>–23%</i> |
| Corrections | | | |
| March 31, 1998 | 46.9 | 0 | 46.9 |
| March 31, 2001 | 39.4 | 0 | 39.4 |
| Change | -16% | 0 | -16% |
| Other | | | |
| March 31, 1998 | 9.2 | 1.1 | 10.3 |
| March 31, 2001 | 6.5 | 0 | 6.5 |
| Change | <i>–29%</i> | -100% | <i>–37%</i> |
| TOTAL | | | |
| March 31, 1998 | 159.4 | 166.8 | 326.2 |
| March 31, 2001 | 116.9 | 121.2 | 238.0 |
| Change | <i>–27%</i> | <i>–27%</i> | <i>–27%</i> |

Source of data: Integrated Justice Project, Project Management Office

We noted that specific details on cost savings and new revenues were maintained by the Project Management Office but not included in the business case. In our view, the Management Board of Cabinet should have been provided with more detailed information on project benefits in the business case in order for it to be as informed as possible in making its decision to approve the Project and in monitoring project progress.

Estimation of Benefits

A large portion of the approximately \$88 million reduction in total anticipated benefits between 1998 and 2001, as outlined in the previous table, was attributable to delays in introducing new systems, particularly in the case of courts. Since the benefits period was to end in August 2005, project delays would result in a shorter contractual period for achieving benefits.

Not all of the reduction in total benefits was due to delays, however. We had two specific concerns after reviewing information on cost savings and new revenues maintained by the Project Management Office. First, benefits totalling over \$30 million could have been better researched and were subsequently removed from the business case. For example:

- The original \$22 million in new revenues for police included \$10.5 million to be collected from the municipal police services community as payment for improved information on individuals and cases. However, after further discussion it was agreed that, since the municipal police community itself would be contributing such information to the system, it should not be paying for the sharing of it. The remaining \$11.5 million constituted cost savings that were incorrectly recorded as revenues.
- Cost savings of \$5.8 million were expected in the police system as a result of eliminating the need for staff to schedule and manage officers' court appearances. However, no permanent staff were actually dedicated to this activity—it was carried out by officers assuming light duties or on short-term assignments. In addition, \$1.1 million in savings from reduced overtime payments to officers attending court was removed when it was determined that additional officers would be needed to replace officers that attend court during regular hours.
- Over \$15 million was removed from court cost savings when more conservative staff-reduction targets were used for the business case prepared after November 1999.

Our second concern was that benefits in both the current and the past business case were overstated in that they were not directly attributable to the Project. The Master Agreement stipulated that only those cost savings and new revenues that were directly enabled by the Project could be considered benefits. The overstatement in the most recent business case amounted to approximately \$57 million as follows:

- The costs savings over the course of the benefits period resulting from the elimination of existing systems at police and corrections were estimated to be almost \$20 million. However, this figure did not take into consideration the operating costs of the new replacement systems, which were expected to be over \$30 million during this period. In our view, only the net costs of \$10 million should have been identified in the business case, rather than savings of \$20 million.
- Project schedules indicated that implementation of new court systems would not begin until late 2001 and would not be completed until after mid-2003. However, from April 2000 onwards, the business case indicated new court revenues of \$27 million for the years 2000 to 2002 resulting from statutory court fee increases. We noted that these revenues had been attributed to the Project in anticipation of the improvements to courts once new systems were implemented. However, until new systems can be shown to increase efficiencies and service levels, the Project should not be entitled to claim any such revenues as a benefit.

Acceptance of Benefits

The Project Management Office required that documentation on cost savings and new revenues include a Benefits Enabling and Acceptance Document (BEAD) for each benefit. Each BEAD was to state the expected annual savings or revenues of the benefit and indicate how these were calculated in order to provide the basis for the transfer of the benefit, when realized, from the Ministries' budgets to the Project's benefits pool. Each BEAD required the approval and

acceptance of the two directors of the Project Management Office as well as senior management at the Ministries.

Between December 1999 and June 2000, BEADs were finalized for police, the Crown attorney, and corrections. However, as of March 31, 2001, senior court management at the Ministry of the Attorney General had not approved the BEADs for expected courts benefits of \$172.3 million. Since courts benefits were to represent over 70% of total project benefits, this delay in formalizing the BEADs exposed the Project to a risk that certain benefits would not be approved by courts management and/or would not be realized.

Recommendation

To help ensure that benefits identified in the business case for the Integrated Justice Project and any future projects are objectively and realistically presented, the Ministries should:

- include in the business case specific details on cost savings and new revenues; and
- ensure that only well-researched and project-specific cost savings and new revenues are stated in the business case.

Ministries' Response

The Ministries agree with the Provincial Auditor that, at each stage of the Common Purpose Procurement process, the financial data presented must be based on the best available information. As the Project progresses, the Ministries are committed to developing more accurate and timely estimates of costs and benefits and to improving planning and estimating processes. This constantly updated information will be supplied to the Management Board of Cabinet in the Ministries' annual report-backs on the Project.

In the future, the Ministries will impose appropriate controls over businesscase development to ensure the accuracy and validity of information.

In renegotiating the Master Agreement with EDS, documents describing project benefits will be reviewed, with the intention of having them updated and appropriately approved. By approving these benefits, the Ministries and EDS will demonstrate their common commitment to achieving them.

The issues raised by the Auditor regarding business cases for future Common Purpose Procurement projects will be examined as part of the Common Purpose Procurement review that the Management Board Secretariat is undertaking; the Ministries will participate in this review.

CONTRACTUAL ARRANGEMENTS

According to Common Purpose Procurement guidelines, the investment costs of a project and the remuneration from it are to be divided up between a ministry and its private-sector partner

based on the allocation of risks and attribution of benefits. The project's financial arrangements should also recognize the private-sector parter's expectation that it be able to recover its investment and make a profit.

The September 1997 business case, which was used as the basis for establishing the terms of the Master Agreement, called for total project costs of \$137 million during a specified work term and benefits totalling \$343 million by the end of a specified benefits period. The work term was to end when all new systems were completed, which was not to be later than five years after the agreement date of September 1997. The benefits period was to begin at the end of the work term and continue for a period of three years.

Negotiated Payment Cap

Consortium members and the government were to be remunerated in proportion to their original investment until a break-even point was reached. After that point, EDS could receive incentive payments ranging from 10% to 25% of the additional benefits until the end of the benefits period. However, the Ministries negotiated a requirement that the total payments to EDS were to be capped at \$220 million, excluding taxes. This payment cap was to function as a ceiling should project costs increase, as well as a means to limit payments to EDS should benefits be substantially more than anticipated. Remuneration to EDS was to be payable only when project benefits were realized.

We noted that, by negotiating the payment cap and holding back vendor remuneration to the time when benefits become realized, project management took an important step in mitigating the risk of the Ministries having to pay for uncontrolled large increases in both project costs and benefit payments to EDS. By the end of our audit, EDS had been able to recover a total of only \$2 million of its incurred investment costs.

Incentives to Vendors

According to the September 1997 business case and the agreement, if the Project had progressed as planned, remuneration to EDS and its consortium members would have been as follows:

Expected Consortium Remuneration as of 1997

| Expected Remuneration as of September 1997 | (\$ millions) |
|--|---------------|
| recovery of investment | 124 |
| interest | 1 |
| incentives | 51 |
| Total | 176 |

Source of data: Integrated Justice Project, Project Management Office

The \$51 million in incentives, if paid, would have represented a payment of over 40% on EDS's expected investment. The incentives were in addition to other compensation and profit-margin allowances provided for in the Master Agreement to EDS and included in the investment costs, such as premium rates on staff costs (discussed in the next section), interest on investment until investment was recovered, and a 7% markup on purchases. Since total payments to EDS were

capped at a maximum of \$220 million and provided that sufficient increased savings to the Project were achieved, EDS could have potentially received an additional \$44 million in incentives. Total incentives of \$95 million would have represented 75% of EDS's expected investment costs.

Incentives are commonly used to reward good performance; however, in traditional procurement processes, incentive payments are much less than those offered in the Project. We were informed that, without large incentives, private-sector companies would be unlikely to accept projects having the risk associated with Common Purpose Procurement. We recognize further that incentive and other remuneration arrangements were reached only after extensive negotiations between the government and its private-sector partner. However, if offering vendors large incentives as a reward for assuming risk continues as normal Common Purpose Procurement practice, there is a risk that Common Purpose Procurement projects will necessarily be more expensive than projects using other procurement approaches. Minimizing the risk associated with Common Purpose Procurement, through, for example, more research and better planning up front, may help reduce the need for large incentives.

Recommendation

To help ensure that future remuneration to vendors participating in Common Purpose Procurement projects is reasonable and fair, the Ministries should work with the Management Board of Cabinet to develop appropriate guidelines for the contract negotiation process. These guidelines should require that ministries examine ways of reducing the need for large incentives.

Ministries' Response

The Ministries agree with the Auditor that incentives offered to secure the private sector's participation in Common Purpose Procurement projects must be reasonable and fair. The level of incentives offered should accurately reflect the balance of financial risks between the partners.

The Ministries will assist the Management Board Secretariat in its review of Common Purpose Procurement guidelines. The issues raised by the Auditor regarding contract negotiation guidelines for future Common Purpose Procurement projects will be examined as part of this review.

Chargeable Rates

The Master Agreement between the Ministries and EDS stipulated the manner in which chargeable rates were to be calculated by each party and charged to the Project's investment pool. Prior to any rates being charged by either party, approvals had to be obtained from both project directors to ensure that rates were reasonable and in accordance with pre-authorized tasks. This approval was particularly important given that staffing costs made up the largest component of the investment pool. In addition, since benefits were to be allocated according to

the proportion of investments contributed by each party, high rates charged by one party would result in that party obtaining a disproportionately higher share of benefits.

As of March 31, 2001, staff costs charged to the Project by the consortium and the Ministries were approximately \$77 million and \$19 million respectively.

CONSORTIUM STAFF

The Agreement required EDS to certify that rates charged for consortium staff were equal to or better than those charged to other customers for "similar work of similar volume, quality, complexity, and circumstances." This requirement applied to all consortium members. However, the Agreement did not define what constituted "similar work of similar volume, quality, complexity, and circumstances," nor did it establish any benchmarks allowing comparison of rates. The Agreement also allowed an annual rate increase provided the increase did not exceed the industry average.

Although EDS and its consortium members had not increased staff rates charged to the Project since 1998, these rates had been at a premium compared to the best rates available to Ontario government ministries. Specifically, vendor-of-record rates were available to all ministries for any projects on a fee-for-services basis and were obtained by the Management Board Secretariat through a competitive process. EDS's vendor-of-record rates were approximately 30% lower than the rates EDS had charged to the Project. Projecting from the data that was current at the time of our audit, we estimated that the rate premium would ultimately add an extra \$20 million to \$25 million to total project costs.

We requested that project management provide us with records from EDS that would verify that the rates charged to the Project were in accordance with the terms of the Agreement. However, we were advised that the Agreement required only that EDS provide its own written certification of rates, and therefore no independent verification was possible. Audit provisions in the Agreement limited access to records to only those maintained by the Project Management Office.

Recommendation

To ensure that vendor rates charged to the Integrated Justice Project are comparable to the rates available to other ministries of the Ontario government and comply with the contractual arrangements, the Ministries should renegotiate the vendor's rates.

In future Common Purpose Procurement projects, to help ensure that the rates being charged can be substantiated, adequate provisions for their verification should be included in any contractual arrangements.

Ministries' Response

The Ministries appreciate the Auditor's recommendations. The issue of vendor rates is one of several being discussed during renegotiations of the Master Agreement with EDS. Furthermore, the Ministries will work with the Management Board Secretariat in its review of the Common Purpose

Procurement guidelines. The issues raised by the Auditor regarding future Common Purpose Procurement projects will be examined as part of this review.

MINISTRY STAFF

The guidelines for Common Purpose Procurement state that:

In order to obtain the best value possible, when negotiating payment options it is important to recognize the need to establish equitable rates for similar work completed by ministry and private sector staff. At the same time, it should be noted that the private sector staff resources utilized in a Common Purpose Procurement project will likely be bringing extensive experience and expertise that will not be found in the Ontario Public Service, and will therefore require appropriate remuneration.

According to the Master Agreement, the Ministries' staff rates for each classification were to be calculated as the sum of: the maximum salary for the classification; employee benefits ranging from 11% to 38% depending on the classification; 20% overhead; and 20% profit.

Even with the markup included in the Ministries' staff rates, we noted that the rates charged to the Project for EDS and its consortium members' staff time were approximately three times higher than the rates for ministries staff for comparable work. For example, the Agreement required EDS to assume responsibility for the operations and maintenance of existing police, courts, and corrections information systems effective October 1, 1998 and continuing until new systems were to be in use. About seven of the Ministries' staff were being used to maintain the systems prior to the transfer to EDS. The rates chargeable by the Ministries under the Agreement for these staff members would have been \$340 per day. However, EDS was allowed to charge \$1,200 per day for these same staff, whom it hired when it took over this responsibility. In our view, such instances of a large rate differential between the Ministries' and the consortium's staff rates should be justified and documented.

In addition to our concern with the rate differential, we determined that the Project Management Office incorrectly calculated the per diem rates of the Ministries' staff. As a result, the rates charged were about 10% below what they should have been. Unless corrective action is taken, over the life of the Project the Ministries will have undercharged their staffing costs by a total of approximately \$3 million, resulting in a proportionate decrease in the Ministries' share of eventual project benefits. However, the Project Management Office advised us that, since the incorrect rates were agreed to with EDS, it can no longer charge the almost \$2 million of Ministries' staff costs that would have been chargeable had the correct per diem rates been used.

Furthermore, chargeable rates for the Ministries' staff had also not been adjusted to reflect annual salary increases, and, in some cases, promotions to higher management positions, since April 1998.

Recommendation

To help ensure that the savings achieved in future Common Purpose Procurement projects are fairly distributed, the Ministries should ensure that rates set for their staff are comparable to rates used by vendors whenever possible. When rates are not comparable, the Ministries should document the justification for the rate differential.

The Ministries should also take corrective action to ensure that the future staffing costs they charge to the Integrated Justice Project are accurately calculated.

Ministries' Response

The Ministries will consider the Auditor's concerns at the next opportunity for updating rates. Any rate differentials will be adequately explained.

The Ministries will work with the Management Board Secretariat in its review of Common Purpose Procurement guidelines, and the issues raised by the Auditor regarding future Common Purpose Procurement projects will be examined as part of this review.

PROJECT ADMINISTRATION

We noted that review teams of the consortium and the Ministries had conducted periodic assessments of the Project and had recommended improvements to service-delivery processes. However, notwithstanding the co-operative relationship between the Ministries and the consortium, we noted that further improvements were needed to ensure that the Project would be administered with satisfactory internal controls and due regard for economy.

Internal Controls

The Project Management Office is responsible for day-to-day internal controls over administrative areas, including staffing, moveable assets, accommodations, and employee expenses. We found the following:

- In several cases, supporting documentation and/or approvals for such items as businessrelated meals, employee and consortium expenses, and equipment purchases were
 inadequate or lacking. There were also instances of duplicate charges to the investment pool
 by EDS.
- For the 20-month period from June 1999 to January 2001, rent paid to EDS by the Ministry of the Attorney General for project management office accommodations was in excess of the agreed-upon amount by approximately \$220,000.
- Inventory controls over new computer equipment purchased or leased for the Project since 1997 were weak. For example, equipment inventory lists were inaccurate and staff were not formally assigned responsibility for their computers.

As a result of our audit work, the Project Management Office eliminated approximately \$95,000 in duplicate charges from the investment pool and recovered approximately \$220,000 from EDS.

Consulting Services

Adequate procedures to ensure the economic acquisition and proper management of consulting services were not in place. For example:

- The former Ministry of the Solicitor General and Correctional Services acquired and paid for a consultant to provide information-technology architecture services. The consultant's contracted work period was from September 1997 to March 1998 and remuneration was capped at a maximum ceiling of \$120,000. We noted that three one-year contracts, with the same terms and conditions as the first contract and valued at up to \$240,000, followed on the first contract without using a competitive selection process.
- Procurement vendor. The firm's contracted work period began in September 1996 and was to extend for up to six months, at an agreed-upon price of \$250,000. Two amendments were subsequently made to the original contract. A new ceiling price of \$511,000 was established without documentation to explain the need for an increase over the originally agreed-upon price. The final fee paid to the firm was \$584,000, with no further amendment to the contract and no documented explanation for the increase above the revised ceiling price.
- The Ministry of the Attorney General hired a contractor to provide technical and programming support services for its Case Management and Electronic Document Filing systems for courts. The work period was from March 1998 to March 1999 and a ceiling price of \$320,000 was established. No documentation was available to demonstrate whether this contractor, who had already done project-related work prior to this contract, was competitively selected. In addition, the contractor was ultimately paid \$581,000, with no amendment to the contract and no documented explanation for the amount added to the \$320,000 ceiling price.

We also noted that the agreement allowed the contractor to substitute staff assigned to the Project with staff with equivalent qualifications, provided it had obtained the prior written consent of the Ministry of the Attorney General. Invoices from the contractor showed that staff were indeed substituted and/or added. However, there was no evidence on record to indicate that the staff's qualifications, suitability, and charged rates were acceptable to and accepted by the Ministry.

Recommendation

To ensure that in future the Integrated Justice Project is administered with adequate internal controls and due regard for economy, the Ministries should:

- ensure that charges to the investment pool are adequately verified with supporting documents in accordance with contract terms and approvals and take any additional measures considered necessary to eliminate duplicate charges and excessive payments;
- establish proper asset controls over its inventory of computer equipment;
 and

 ensure that consulting and related services can be demonstrated to have been acquired competitively and that payments are made in accordance with contractual terms and conditions.

Ministries' Response

The Ministries have acted on the Auditor's concerns, recovering duplicate and other inappropriate charges and implementing additional controls to ensure that charges are properly documented, expense claims are accurately processed, and controls over computer hardware and software are in place.

The Ministries also conducted their own review of project administration, including that of consulting contracts, to ensure that no other discrepancies exist and that in future the Ministries' and the Management Board Secretariat's guidelines governing the acquisition of consulting and related services are followed.

SYSTEM SECURITY

At the completion of our audit, the new systems were primarily in the development stage and were not operational. Only the new Computer-aided Dispatch (CAD) system and the Records Management System (RMS) for police had begun to be implemented. CAD tracks all emergency calls and the assignments of officers, while RMS maintains information on suspects, victims, witnesses, and the accused. These two systems replaced the existing Ontario Municipal and Provincial Police Automation Co-operative (OMPPAC) system used by the Ontario Provincial Police (OPP) and approximately 40 municipal police forces. In the period from September 2000 to March 2001, four of the OPP's 11 communications centres began using CAD, and over 60% of officers were trained on and began using RMS. On March 7, 2001, the first municipal police service began using the two systems.

The new police systems were an initial release, and the Project Management Office was planning to implement further functional enhancements and improvements to these programs in future. Since, at the same time, significant efforts would be made to roll out both the remaining new systems and the added-functionality releases of programs now in initial release, we concluded that a complete security audit would not be practical at this time. However, we reviewed security measures and procedures in place for the new systems and had the following serious concerns:

• Police information in RMS is transmitted throughout the province using GONET, the Government of Ontario's wide-area network. Adequate security measures to ensure data confidentiality were not in place, in that transmissions were in clear text and not encrypted. As a result, confidential information on victims, suspects, and offenders was vulnerable to unauthorized access and tampering. In addition, we were advised that the same transmission method was used in the previous OMPPAC system. Given that encryption technologies have been available on the market for many years, we would have expected this standard security feature to have been incorporated in the system.

We were advised that the Project Management Office plans to deploy high-technology cryptography to ensure that data transmissions are confidential, cannot be tampered with, and originate from a bona fide, verifiable source. However, until such new security measures are operational, confidential justice information is vulnerable to unauthorized access and manipulation.

• Neither CAD nor RMS had adequate controls to protect user accounts against unauthorized access, thus incurring the risk of data manipulation. In particular, neither system revoked user accounts after a number of unsuccessful log-in attempts, and both applications allowed easily guessed passwords, such as a single letter, to be used. Furthermore, RMS did not require users to change their preset password on first use after the account was created or reset, or periodically thereafter.

In addition, we noted that there were inadequate controls to prevent unauthorized access to the new Offender Tracking and Information system for corrections, which was to maintain records of offenders and be introduced in May 2001 for use throughout the province.

Recommendation

To help ensure that confidential data in the Integrated Justice Project systems are adequately protected against unauthorized access and data tampering, the Ministries should:

- expedite their plans for implementing cryptography and other controls to secure data transmitted over the wide-area network; and
- implement more rigorous password controls over user accounts.

Ministries' Response

The confidentiality and integrity of sensitive data remain matters of highest priority for the Ministries. The Ministries are committed to monitoring project applications, ensuring that security meets, and in many cases exceeds, government requirements. For example:

- Working with police and correctional services stakeholders, project management completed an assessment of threats and risks to security. Appropriate security measures are being implemented to mitigate risks; options include the possible use of cryptography technologies.
- Project management is currently implementing more rigorous password controls for the police applications and will review the password requirements for the correctional services application.