

3 Implementation of CJEP

At a glance

Background

In October 1998 the Department of Justice (the department) was given approval to implement the Criminal Justice Enhancement Program (CJEP). Funding approved for the project was \$14.5 million and its target completion date was November 2000.

Key findings

- CJEP is not complete and has not been implemented on time or on budget.
- Four of the five CJEP projects have been delivered but the electronic brief/disclosure project (E*Brief) may not be fully implemented until 2009.
- There have been substantial cost overruns on CJEP. The department spent \$39.9 million on CJEP's development and implementation to May 2008. Victoria Police estimates that a further \$4 million will be required to complete the E*Brief project.
- The initial budget for CJEP of \$14.5 million was increased by \$15.4 million to reflect approved scope changes to the program between 2000 and the end of 2002. In addition to funding approved for scope changes to CJEP since 1998, the department has supplemented CJEP's funding from its own budget on an ongoing basis.
- The original budget for CJEP included \$1.4 million per year for expenditure on the maintenance and support of CJEP systems. This amount has subsequently been revised upwards to \$6.4 million per year.
- The department spent \$18 million on maintenance, support and enhancements to the implemented CJEP systems to April 2008.
- The department has not recorded or monitored expenditure by CJEP partner agencies on its development and ongoing support. Advice from these agencies indicates that they have incurred around \$10.4 million for costs associated with CJEP, over and above what has been spent by the department.

At a glance – *continued*

Key findings – *continued*

- Delays in completing CJEP and associated cost overruns are mainly due to:
 - underestimation of its complexity, magnitude, and the levels of cross-agency involvement required
 - an inadequately developed business case that contributed to poor scoping of the project and a failure to identify realistic funding requirements
 - inadequate specification of system requirements
 - development and implementation issues and related delays associated with contractor performance
 - fluctuating levels of commitment to and ownership of CJEP by partner agencies.

Recommendations

- Victoria Police should commit to the completion of E*Brief and ensure it is delivered in line with the CJEP vision and rolled out across the police force. **(Recommendation 3.1)**
- The CJEP Governance Board should resume governance responsibility for the completion of the E*Brief project to better assure the integrity of the complete CJEP. **(Recommendation 3.2)**

3.1 Achievement against planned timeframes

As at May 2008, the implementation of CJEP was not complete. While four of the five projects comprising CJEP have been delivered, E*Brief, a major module of the Electronic Brief/Disclosure project, is not operating and may not be fully implemented until 2009. E*Brief is a critical component of the CJEP project. The objectives, anticipated functionality and benefits of CJEP cannot be fully realised until E*Brief is operational.

The department considers CJEP to be complete because in its view CJEP's core IT systems were delivered by December 2005. The department advised audit that it regards the finalisation and implementation of E*Brief to be the responsibility of Victoria Police, in line with a decision by the CJEP Steering Committee in mid-2007.

Regardless of who is now responsible for completing E*Brief, it is clear that E*Brief was part of the approved and funded scope of CJEP. On that basis, the approved and funded scope of the CJEP program had not been fully implemented at the time of the finalisation of this report.

Of the four core CJEP projects completed and implemented, none were completed on time. The target completion date for the overall CJEP project has been revised, at a number of key stages of the project, from November 2000 to December 2002, to March 2004 and then to February 2005, partly as a result of approved scope changes to the project. The revised target completion dates of March 2004 and February 2005 were set based on the final scope of the project but could not be met by the department.

Figure 3A illustrates the original, revised and actual completion dates for each of the CJEP projects.

Figure 3A
CJEP target completion dates and actual completion dates by project

CJEP project	Original target completion date	Revised target completion dates	Actual completion date
Electronic Brief/Disclosure	November 2000	December 2002 March 2004 February 2005	Incomplete as at May 2008 (a)
Accused Management	November 2000	December 2002 March 2004 February 2005	Progressive completion between June 2004 and December 2005
Case Improvement (Magistrates Court)	November 2000	May 2002	June 2002
Case and List Management (County Court)	November 2000	January 2002 June 2004	Progressive completion between January 2002 and December 2005
Justice Knowledge Exchange	November 2000	December 2002	May 2002

Note: (a): E*Brief is not operational. The department advised that the database and messaging capability of E*Brief have been developed and that Victoria Police is redeveloping the E*Brief user interface. The module of the Electronic Brief/Disclosure system developed for Victoria Legal Aid is not operational because of its dependency on the completion of E*Brief by Victoria Police.
Source: Department of Justice.

One of CJEP's core projects, the Case and List Management System (CLMS), which was budgeted to cost \$2.9 million and has been in use since early 2002, is to be replaced during 2009 as part of the new Integrated Courts Management System (ICMS) at an estimated cost of \$45 million over a four year period. This was communicated in the Attorney-General's Justice Statement *New Directions for the Victorian Justice System 2004–2014*, released in May 2004.

The development of the ICMS commenced in 2005–06. It is anticipated the ICMS will complement CJEP by providing a single cross jurisdictional case management system, and implementing a single, integrated technology platform and set of computer applications for all Victorian Courts and Tribunals.

Status of the E*Brief project

E*Brief is shorthand for electronic brief and its development was part of the original CJEP scope. The CJEP Electronic Brief/Progressive Disclosure project was designed to streamline the production and dissemination of brief documents, to facilitate pre-court communication between parties, and to encourage accused persons to seek legal advice and representation earlier in the process. The E*Brief module has several functions but is primarily intended to be a mechanism by which brief documents can be electronically prepared, authorised and disclosed to other agencies and parties in the criminal justice system.

As at May 2008, E*Brief was not operating. The department informed us that in July 2007 the CJEP Steering Committee was advised by representatives on the steering committee from Victoria Police that they did not believe it was viable to persevere with the E*Brief module because the system's user interface did not meet current Victoria Police standards. Victoria Police proposed to the committee that they would develop their own front-end or user interface for the electronic brief system and that this system would interface fully with the E-Justice database within CJEP.

The department advised that, based on this advice from Victoria Police, the CJEP Steering Committee determined that it would no longer be responsible as the governance body to deliver the Victoria Police E*Brief module. Rather, it would be a stakeholder in this exercise to ensure that the system developed by Victoria Police would effectively interface with the CJEP systems (primarily the E-Justice database) to provide electronic brief information to the other criminal justice agencies.

In effect, the CJEP Steering Committee decided to transfer responsibility for the governance and funding of the E*Brief re-development works to Victoria Police. E*Brief is central to the achievement of CJEP's objectives and the realisation of its benefits. There is risk associated with the CJEP Steering Committee's decision to step aside from its governance responsibility to complete E*Brief because, to date, Victoria Police have not delivered the E*Brief project.

The department advised that the CJEP Steering Committee is satisfied that the governance and project management arrangements in place in Victoria Police are appropriate for the delivery of the E*Brief user interface.

There have been three attempts to complete the development and implementation of E*Brief.

The first version of E*Brief was developed by the department's primary IT contractor for CJEP by around mid-2002. The system was consistent with the original system requirements that were accepted by Victoria Police in December 2000. It was piloted at three suburban police stations over 2002–2003. This version of E*Brief was not adopted by Victoria Police because:

- the system was not user friendly and there were substantial delays in printing briefs
- significant performance related issues associated with the supporting ICT infrastructure were revealed that decreased the confidence of users in the system
- there were interface difficulties with legacy systems.

As a consequence of these issues and their impact on the users' confidence in the system, Victoria Police proposed to the CJEP Steering Committee in early 2004 that the E*Brief module be redesigned to better meet the requirements of Victoria Police. This was agreed and the re-design of the E*Brief module remained part of the CJEP program with governance provided by the CJEP Steering Committee.

The second version of E*Brief was developed over the period October 2004 to March 2005 by the primary IT contractor under the stewardship of a senior project officer employed by Victoria Police and consistent with Victoria Police's revised system requirements. The revised E*Brief went into user acceptance and usability testing in Victoria Police in November 2005 and a proof of concept (POC) of the module was commenced at one police station in December 2005. This POC was followed by an extension into a second police station and was monitored by Victoria Police's central IT group.

Victoria Police advised that user testing of the second version of E*Brief revealed:

- that a large number of defects identified in version one of E*Brief were still present
- the need to review current work practices within Victoria Police to better align them with E*Brief
- presentation issues that contributed to a lack of acceptance of the system by police members.

E*Brief was further developed in October 2006 after the department's Integrated Justice Systems (IJS) unit acted on a number of change requests to rectify outstanding defects in the software and address functionality issues that emerged during the trial of the second version. However, user testing of the revised E*Brief by Victoria Police between October 2006 and March 2007 revealed:

- numerous software issues, a number of which were considered critical
- problems with the accuracy of crime statistics within Victoria Police's Law Enforcement Assistance Program (LEAP) database associated with briefs entered during the user testing due to a misalignment of then current work practices and E*Brief
- usability issues relating to the presentation layer, or front end, of E*Brief continued to undermine acceptance of the system by police members.

A status report provided by Victoria Police to the CJEP Steering Committee on 4 July 2007 advised that agreement had been reached with the department that the E*Brief front-end or 'presentation layer' will not to be used for the preparation, authorisation or disclosure of police briefs and that, in its place, a new electronic brief project had commenced. Victoria Police advised the steering committee that the re-development of the front end of E*Brief was to include:

- the alignment of brief work practices within Victoria Police to support an accelerated justice process to reduce the duration between the time of arrest and the availability of a brief of evidence
- changes to the external justice environment made in collaboration with stakeholders, including changes to legislation and policies, to support a more efficient resolution of court cases
- implementation of an electronic brief system that meets the usability requirements of operational police members and the data sharing requirements of the justice community. The back end of the E*Justice brief module would still be used to store and distribute briefs electronically.

In July 2007 we were advised by Victoria Police that the outcomes of a review of work practices associated with the development of briefs would be integral to the development of a business case for E*Brief and that the re-development of E*Brief's front end would cost around \$4 million and would be funded by Victoria Police with an anticipated completion date of late 2008.

The latest advice from Victoria Police indicates that the business case will be submitted to Victoria Police command for funding consideration in the second half of 2008. On this basis, E*Brief is unlikely to be fully operational across Victoria Police until 2009. The current work by Victoria Police constitutes a third attempt to complete the development and implementation of E*Brief.

In audit's view, the following factors have contributed to the delayed implementation of E*Brief in Victoria Police:

- inadequate identification of system requirements at the outset of the project
- inadequate IT infrastructure supporting the initial version of E*Brief
- inconsistencies between existing work practices and E*Brief and a failure to identify and address this as a critical issue early in the development process
- poor performance by the primary IT contractor in the development, testing and support of E*Brief
- ineffective quality management processes exercised by Victoria Police and the department over the development and revisions of E*Brief.

These factors have both contributed to and been exacerbated by the failure of senior management of Victoria Police to achieve successful completion of the E*Brief project over the lifecycle of its development since 2001. This lack of achievement is evidenced by ongoing changes in internal responsibility for supervising and delivering the project and the fact that, at a critical stage in E*Brief's development, changes in senior command at Victoria Police left CJEP without an operational executive for over one year. This inevitably led to fluctuating momentum on the E*Brief project. At various stages the CJEP Steering Committee raised questions about the commitment of Victoria Police to the project but the committee seemed incapable of resolving this issue.

In short, while Victoria Police have maintained representation on the CJEP Steering Committee, this 'high level' commitment has not always been backed up by effective action. Notwithstanding this, it is acknowledged that the early and ongoing problems with the stability, reliability and user friendliness of E*Brief must have damaged the confidence of both police members and senior management in the system and its ability to deliver claimed benefits.

If E*Brief is not delivered in line with the CJEP vision then CJEP will have failed to achieve its objectives and many of its claimed benefits will not be realised. On this basis the CJEP Governance Board should retain accountability for oversighting the successful completion of E*Brief.

Recommendations

- 3.1 Victoria Police should commit to the completion of E*Brief and ensure it is delivered in line with the CJEP vision and rolled out across the police force.
- 3.2 The CJEP Governance Board should resume governance responsibility for the completion of the E*Brief project to better assure the integrity of the complete CJEP.

3.2 Achievement against budget

In October 1998 funding of \$14.5 million was approved by government for the development, implementation and ongoing operation of CJEP over a period of 2.5 years.

Between 2000 and the end of 2002 further funding of \$15.4 million was approved for scope changes to CJEP. In addition to funding approved by government for scope changes to CJEP since 1998, the department has supplemented CJEP's funding from its own budget on an ongoing basis.

Up until May 2008 the department had expended \$39.9 million in CJEP development costs. As previously indicated, Victoria Police advised that further costs of around \$4 million will be incurred for the re-development of E*Brief's front-end user interface. If this eventuates, the total CJEP development costs would be at least \$44 million.

The CJEP partner agencies advised audit that they have incurred around \$10.4 million for CJEP's development and ongoing support costs. These costs are not included in expenditure reported by the department because it has not recorded or monitored expenditure by CJEP partner agencies on CJEP's development and ongoing support.

The department spent \$18 million on maintenance, support and enhancements to the implemented CJEP systems to April 2008.

The primary area where costs have exceeded the original budget is development costs. The additional development costs largely reflect approved scope changes to CJEP and an initial underestimation of the costs of developing and acquiring software and hardware associated with the CJEP systems and projects. Other development cost increases relate to extensions to the IT contract due to CJEP's expanded scope and delayed implementation.

A significant component of the development costs associated with CJEP relate to payments made to a primary IT contractor who was appointed in November 2000, following a tender process, for a term of three years with a contract value of \$17 million to:

- conduct a systems scoping and requirements analysis
- design, build and install a suite of four new business applications and associated technology infrastructure to facilitate information exchange and best practice work processes throughout the Criminal Justice System

- provide 'best of breed' software including E*Justice and ACS Courts, and develop the JKE
- provide ongoing maintenance and support of the new applications up until 30 June 2003.

This contract was described as a 'fixed price' contract when the Attorney-General's approval was sought for its execution. Once the contract was signed, the contractor could not make claims for additional payments based on increases in its labour costs, materials costs or inflation and exchange rate impacts. However, there was risk of legitimate claims for additional payment under the contract if there were department or partner agency caused delays and scope changes or changes to agreed system requirements.

Ultimately, the primary IT contractor was paid around \$27.9 million under the contract which was extended to November 2005. The contract extensions and associated contract cost increases were appropriately authorised and primarily related to approved scope changes for CJEP and the need to extend the period for contractor support of the developed systems.

3.3 Causes of delays and cost overruns

It is clear that CJEP has not been implemented in line with its original project budget and timelines. While many factors have contributed to this outcome, audit's analysis indicates that the department underestimated the complexity and magnitude of the project, including the extent of cross-agency involvement and cooperation required to deliver CJEP.

Factors contributing to the delays and cost overruns associated with the implementation of CJEP include:

- an inadequately developed business case
- inadequate specification of system requirements
- failure to act early to upgrade IT infrastructure
- incremental funding of CJEP's development costs
- development and implementation issues associated with contractor performance
- fluctuating commitment to and ownership of CJEP by partner agencies, principally Victoria Police
- staff turnover and changes to the operating environment due to CJEP's prolonged implementation
- underestimation of CJEP's ongoing costs.

3.3.1 Inadequately developed business case

A critical component in the development of any project requiring a significant commitment of government funds is a comprehensive business case to support informed decision making on the project.

A business case should typically include the following:

- an explanation of the project objectives and how they align with the government's strategic aims
- the scope and cost of options to achieve the objectives
- an analysis of the options, including assessment of impacts and benefits
- the identification and analysis of risks for each option
- a comparative appraisal of the options in terms of their costs, benefits and risks to provide the basis for deciding which, if any, option to pursue.

CJEP originated with the Pathfinder project in 1995 which was a review of the administrative processes supporting the Victorian criminal justice system. This project was undertaken by the department to address the need for service improvement in the criminal justice system and the following specific issues:

- incompatibility of support systems which required costly, and in some cases manual, interfaces and resulted in unnecessary duplication of data and effort
- inconsistent definitions which made it difficult and costly to share data between systems and to provide operational, management and executive information in a timely manner
- a high level of inaccuracy within the data that necessitated operational staff performing unnecessary additional work
- redundant and dated procedures which prevented services being provided in a timely and cost effective manner
- potentially unnecessary legislative constraints.

The final report on the Pathfinder project was completed in July 1998 and was adopted by the Attorney-General and the Minister for Police & Corrections in September 1998. The report recommended 16 enhancements to Victoria's criminal justice system administrative processes and procedures at an estimated cost of \$27 million over 3.5 years. The estimated costs and benefits identified in the report were not based on detailed functional or technical designs.

The key principle that emerged from the Pathfinder project was that Victoria's criminal justice system should be supported by an information environment in which information is captured once and then made accessible to authorised participants when and where needed.

Due to budget constraints, the department reviewed the recommendations made in the Pathfinder report and the scope of Pathfinder's implementation was then limited to a discrete set of high priority/high impact projects that could be funded on a dollar for dollar basis between the Department of Treasury and Finance (DTF) and the Department of Justice, for a total cost of \$14.5 million. This set of projects was later re-badged as CJEP.

The agreement between the department and DTF was reached on the basis of a business case completed in September 1998 by the department. Audit reviewed the original business case and concluded that it:

- was prepared prior to the conduct of any detailed functional or technical designs and as such was not based on a comprehensive specification and costing of project requirements
- did not include detailed justification for proposing a project scope that failed to address a number of key Pathfinder recommendations
- lacked some of the key elements of an effective business case including:
 - a detailed cost benefit analysis, including whole of life costs and benefits
 - identification and analysis of options and recommendation of a preferred option
 - key performance measures for both project milestones and outputs
 - evidence of a commitment to re-examine and reaffirm the project objectives and the scope at each significant milestone throughout the project development process
 - identification of key risks to project delivery and a proposal for the management of these risks
 - detailed discussion of 'key related processes' to be undertaken in parallel to project implementation to facilitate effective service output delivery such as change, quality and risk management.

Given these weaknesses, the original business case was not sufficiently robust to enable an informed decision to be made on whether to proceed with the project. In addition, the business case did not contain sufficient analysis to confirm that the project scope being recommended was able to deliver the desired outcomes for around \$14.5 million.

Some of the weaknesses in the original business case were addressed in revised business cases and other planning documents developed after the October 1998 decision to fund the project, including the:

- *CJEP Project Definition* (August 1999), which provided an outline of the program's management planning framework and methodology based on best practice elements from various project management methodologies including *ISO 10006: Quality management—Guidelines to quality in project management* and the Project Management Body of Knowledge method, and included the program's:
 - mission, vision, scope and key stakeholders
 - management planning framework and methodology
 - staging and key deliverables
 - governance, project, risk, change, financial and reporting management frameworks.
- *CJEP Project Risk Management Plan* (November 2000) which built on the project's definition document and set out the processes, controls and responsibilities for managing risk over the whole project including technical

development risk, contract and supplier, stakeholder, change, financial and resource management.

- revised business cases developed in May and December 2000 to support decision making on contractual arrangements for CJEP's implementation and the design phase of the program.

These documents provided the necessary framework and methodology to manage the project effectively but were completed after the planning phase of the project. In audit's view, some elements of these planning documents should have formed part of the original business case for CJEP and these documents should have been completed during the planning phase.

3.3.2 Inadequate specification of system requirements

The proper identification of system requirements is imperative to the successful development of any new IT system and requires a combination of both subject matter knowledge and IT skills.

A system requirements study (SRS) for CJEP was completed in September 2000. In December 2000, the department and the CJEP partner agencies accepted the SRS, subject to a number of qualifications that were to be addressed in the later phases of the project.

The following weaknesses in the SRS process were subsequently identified by key project participants and stakeholders:

- the SRS failed to adequately align system requirements with business processes
- partner agency staff used to identify system requirements were nominated by the partner agencies based on their substantial business knowledge or subject matter expertise and not their IT skills. While this led to the identification of functional requirements, the absence of IT skills meant that these requirements were not always successfully translated into technical requirements
- business analysts provided by the primary IT contractor to facilitate the SRS process had IT skills but limited understanding of the relevant businesses
- there was lack of clear communication between agency and IT contractor staff
- there were gaps in the functional requirements specified in the SRS, these gaps were identified by system users in the partner agencies during the user acceptance testing phase
- the SRS failed to anticipate or address critical usability issues which were subsequently raised by the users of built CJEP systems.

In September 2002 weaknesses in the initial SRS were cited by the then CJEP program director as having contributed to the need for the conduct of additional systems requirements specification work that resulted in changes to the scope of CJEP.

Critical functional gaps were identified as users progressed through each phase of detailed design review and user testing for CJEP systems and this led to unplanned development works at an additional estimated cost of at least \$1 million. Had the original SRS been more effective the unplanned development works would have been minimised.

Subsequent to the original SRS being accepted by the department and all partner agencies in December 2000, Corrections Victoria performed a second SRS in late 2001, only one year after the original SRS. In addition, Victoria Police performed a further SRS for the E*Brief system in 2002, and revisited the SRS in late 2004.

3.3.3 Failure to act early on the need to upgrade IT infrastructure critical to CJEP's implementation

While the cost estimates in the 1998 Pathfinder report were based on the assumption that adequate IT infrastructure systems would be in place, the report acknowledged that this was not the case and made an assessment of the future requirements.

The department did not include costs associated with upgrading IT infrastructure in its original budget for CJEP of \$14.5 million, but acknowledged that a later funding bid may be needed for infrastructure upgrade funding.

The SRS undertaken for CJEP in 2000 identified that significant IT infrastructure development would be required in order to implement the CJEP applications.

Despite the early recognition of significant IT infrastructure needs in the Pathfinder report and the obvious technological gap that a project such as CJEP would create, the development and implementation of IT infrastructure was treated as outside CJEP's original scope and was excluded from the initial project plan and budget.

Significant project delays have subsequently eventuated in relation to the necessary infrastructure upgrade not being incorporated in the initial project plan and budget.

CJEP's success is highly dependent on the adequacy of the supporting infrastructure. Considerably more effort should have been put into early planning for infrastructure development including:

- obtaining sponsor agencies' agreement on infrastructure gaps and requirements associated with the implementation of CJEP systems
- developing an overall funding strategy and budget estimation
- developing timelines for the upgrade and replacement of IT infrastructure and integrating this into the broader CJEP program implementation plans.

A consequence of the failure to act early on the need to upgrade IT infrastructure critical to CJEP's implementation was that when modules of CJEP systems were rolled out into agencies for piloting and user acceptance testing, infrastructure related problems caused stability and reliability issues that ultimately undermined the confidence of users in the systems. This was not ideal for a multi-agency ICT project that was meant to be accompanied by changes in work practices and culture.

3.3.4 Incremental funding of CJEP development costs

Determining and securing adequate funding at the outset is crucial to the success of any project. The level of funding is usually an indication of the size and complexity of the project and should inform the organisational, governance and project management structures, frameworks, and processes required to manage the project's implementation effectively.

The CJEP project experience clearly demonstrates that there was a failure to identify and secure sufficient funding to deliver the project at the outset.

Funding of \$14.5 million was approved in October 1998 for the development, implementation and ongoing operation of CJEP to 30 June 2003. This funding was sourced from the Department of Treasury and Finance (\$7 million) and the Department of Justice (\$7.5 million). The approved original budget included \$11 million for the identification of systems requirements and development and project management of CJEP. The remaining \$3.5 million in the approved budget was allocated to recurrent support and maintenance costs.

Between 2000 and the end of 2002 further funding of \$15.4 million was approved for scope changes to CJEP. In addition to funding approved by government for CJEP since 1998, the Department of Justice has supplemented CJEP's funding from its own budget on an ongoing basis.

As at May 2008, approved funding for CJEP's development costs totalled \$39.9 million. Figure 3B shows the funding sources for these development costs.

Figure 3B
Funding sources for CJEP development costs
(\$ million)

	Total
Initial funding by Department of Justice (November 1998)	7.50
Initial funding by DTF (November 1998)	7.00
Funding provided subsequent to initial budget approval	
Transfer of funds from County Court Project for civil module of CLMS (April 2000)	2.90
ERC funding for IT infrastructure development (March 2001)	8.00
ERC funding for replacement of OASIS system in Corrections (September 2002)	1.10
ERC funding for replacement of PIMS system in Corrections (September 2002)	3.40
Agency contributions from existing budgets	0.25
Department supplementation since November 1998	9.74
Total	39.89

Source: Department of Justice.

Some of the additional funding decisions set out in Figure 3B relate to matters that were either known, or should have been known, when the original budget for CJEP was established in October 1998.

Specifically, additional funding of \$8 million for a major IT infrastructure upgrade, mainly affecting Victoria Police, was required when testing of the E*Brief module in 2001 identified significant development and infrastructure performance issues. Although some infrastructure upgrades were allowed for and undertaken as part of CJEP's original scope and budget, a state-wide justice sector IT infrastructure upgrade, as recommended in the Pathfinder report in July 1998, was omitted from CJEP's original scope and budget, despite the Pathfinder report stating that such an upgrade was considered critical to the whole project.

The department was unable to provide any documented justification for this omission. However, in a document reconciling CJEP's original scope to the recommendations made in the Pathfinder report the department acknowledged that a later bid may be needed for infrastructure upgrade funding.

The omission of this significant item from the original CJEP budget indicates a lack of proper and realistic project planning. In addition, it is clear that the department should have recognised at the time the original budget for CJEP was established that it would not be sufficient to enable successful delivery of the project.

Audit considers that the funding of \$4.5 million approved by ERC in September 2002 for the replacement of legacy systems in Corrections Victoria related to matters that reasonably, should have been foreseen had the CJEP project been adequately planned.

In October 2001, around one year after accepting the original SRS for CJEP, Corrections Victoria identified the need to replace certain legacy systems that either interfaced with or were parallel to CJEP systems. While the case to replace the legacy systems was linked to changes in Corrections Victoria's business environment, including changes to legislation, in our view these changes, together with the need for CJEP systems to interact with existing Corrections Victoria IT systems, could have been anticipated and included in the original SRS for CJEP.

The addition of the civil module to the CLMS for the County Court at a cost of \$2.9 million was a legitimate scope variation that could not have been included in the original project budget. Originally, the scope of CJEP was to include criminal matters only. However, in April 2000, when the County Court re-assessed its business requirements and identified a need for a new case list system for civil cases, it was agreed with the department that the best option would be to add a civil cases module to the existing CLMS within CJEP's scope.

This was seen as having the advantages of avoiding additional costs associated with developing a new and separate or stand-alone system and eliminating the need for County Court users and staff having to deal with two separate case listing systems. Funding was transferred to the CJEP budget by the County Court because the responsibility for delivering the civil module of a case and list management system for the County Court was added to the CJEP scope.

The matters outlined above indicate an incremental approach to the funding of CJEP rather than the provision of a total funding package to match the real and known requirements of the program. This incremental approach resulted in fundamental requirements being omitted from CJEP's scope which, in turn, led to the selection of interim solutions until further funding became available to the department or the partner agencies.

Consequently, system requirements specification exercises were needed to be performed more than once. Scope changes were made to address these revised requirements and for matters that were known to be issues at the commencement of the CJEP program—for example, the need to upgrade IT infrastructure at Victoria Police to facilitate the implementation of CJEP projects, and the need to increase CJEP's functionality to replace existing legacy systems in partner agencies such as Corrections Victoria.

Ultimately, this piecemeal approach to the funding of CJEP has contributed to the delayed implementation of CJEP and its cost overruns.

3.3.5 Development and implementation issues associated with contractor performance

The primary responsibility for developing, testing and implementing CJEP systems rested with the primary IT contractor appointed by the department in November 2000 under a fixed price contract for \$17 million, that was due to expire at the end of June 2003.

Our review of CJEP Steering Committee minutes revealed that from 2003 onwards there were concerns and issues raised by partner agencies and the department regarding the performance of the primary IT contractor. These concerns primarily related to the quality of work performed by the contractor and the quality, quantity and continuity of human resources assigned to the project tasks. The IT contractor attended steering committee meetings periodically and did acknowledge many of the issues and concerns raised.

The department commissioned a consultant to review the operation of the contract arrangements between the department and the primary IT contractor. The results of the initial review and a follow-up review were reported to the CJEP Steering Committee in February 2004 and June 2005 respectively.

These reviews focused on: assessing the level of compliance with the terms of the principal IT contract established in November 2000; evaluating the quality of products and service standards of the contractor; developing strategies for the acquisition of support services for CJEP at the expiry of the IT contract; and identifying transitioning issues from the IT contractor to the department's Integrated Justice System (IJS) unit.

The consultant's February 2004 report concluded that:

- the IT contractor had substantially complied with the terms and conditions of the contract, including the parts relating to the development, installation and integration of hardware and software
- stakeholder acceptances for all contract deliverables had been evidenced, with the exception of E*Brief and Court Order modules, where significant performance-related issues were apparent. The contractor was providing remediation or development works for these two modules to the satisfaction of the stakeholders and was therefore complying with its warranty obligations
- the quality of products and standard of services supplied by the IT contractor had not been acceptable to the stakeholders with specific deficiencies identified by stakeholders and acknowledged by the IT contractor, which recognised weaknesses within its approach to software development and systems integration, and to project management. Specific deficiencies included:
 - design documents that represented functional requirements, but possessed insufficient technical requirements
 - an inexperienced development team, relative to the nature of the task
 - project managers were too distant from day to day concerns of the project team and maintained insufficient contact with stakeholders
 - quality procedures for software development and testing were neither followed nor enforced with sufficient rigour
 - inadequate response to stakeholder feedback at the agency practitioner level.

The consultant also identified a range of factors relating to the department's management of CJEP that had contributed to difficulties and delays faced by the contractor. For example, the consultant concluded that the complexity of the consultation, specification and approvals process of the department, given its extensive number of stakeholders, contributed to delays to the progress of the project.

Ultimately, problems with the primary IT contractor's performance contributed to the cost and time overruns on CJEP's implementation. The CJEP Steering Committee periodically raised concerns with the senior management of the contractor and discussed escalating action against the contractor at various points.

3.3.6 Fluctuating commitment to and ownership of CJEP by partner agencies

Successful implementation of a complex ICT project across multiple agencies requires real commitment and ownership by the leaders of the agencies involved and that commitment needs to be backed up by the allocation of sufficient and appropriate resources and management attention to project delivery.

The maintenance of support over long periods for major projects such as CJEP is always a challenge for participating agencies. Agencies need to balance the demands of the project with their responsibility to ensure the delivery of service obligations using available resources.

As noted already, there were successive failures of senior management of Victoria Police to achieve successful completion of the E*Brief project over the lifecycle of its development since 2001.

Audit's review of CJEP Steering Committee minutes indicated that the commitment to and ownership of CJEP by Victoria Police and other partner agencies fluctuated at various stages of CJEP's development. This is evidenced by:

- questions raised by the steering committee about the level of agency executive involvement in CJEP delivery
- lack of availability of agency staff for system piloting and acceptance testing at various stages
- changes to agency staff assigned to CJEP implementation and supervision
- questions raised by partner agencies regarding quality and implementation problems and delays with CJEP systems and the impact this was having on the confidence of their staff in the project as a whole.

While all partner agencies remained represented on the committee and did allocate internal resources to assist delivery of the project, it was apparent that the commitment and ownership levels within agencies fluctuated over time and this contributed to delays in CJEP's implementation.

3.3.7 Prolonged implementation of CJEP

As indicated previously, the target project completion date for CJEP has been revised, at a number of key stages of the project, partly as a result of approved scope changes, from November 2000 to December 2002, to March 2004 and then to February 2005. These target dates were not met by the department.

While four of the five projects comprising CJEP have been delivered, E*Brief, a major module of the Electronic Brief/Disclosure project, is not operating.

CJEP was conducted as a five stage project as shown in Figure 3C below.

Figure 3C
CJEP project stages

Stage	Stage description	Proposed completion date	Actual completion date
Stage 1	Concept planning and set-up	June 1999	May 1999
Stage 2	Concept analysis and design	December 1999	December 2000
Stage 3	Development, integration and installation	June 2000	Incomplete with E*Brief not expected to be operational until 2009
Stage 4	Implementation and handover	November 2000	Incomplete with an expected completion date of 2009
Stage 5	Ongoing support	Ongoing from August 2001	N/A

Source: Victorian Auditor-General's Office.

The project remains incomplete, as the Victoria Police Electronic Brief (E*Brief) module is not expected to be fully implemented and operational until 2009. If Victoria Police achieves that timeline, the project will have taken nine years to complete.

The prolonged implementation of CJEP has, of itself, resulted in other problems and challenges which have caused further delays and cost pressures. These problems and challenges have included:

- considerable changes in technology and business processes
- changes to the criminal justice environment, including the Long-term Prisons Management Strategy and the Community Correctional Services Redevelopment Plan impacting on the way prisoners are being managed
- legislative changes relating to privacy, drug court and sentencing
- significant turnover of staff involved in CJEP's implementation, both at the department level and the partner agency level, resulting in loss of knowledge and changed perspectives regarding its implementation.

These factors have contributed to considerable unplanned but necessary modifications to the original products selected and consequential cost and time overruns on the CJEP program.

3.3.8 Underestimation of CJEP's ongoing costs

Another area where the original budget for CJEP was evidently deficient was its estimation of the annual costs required for maintenance and support of the systems once they were operating. The original budget of \$14.5 million included \$1.42 million per year for the maintenance and operation of the CJEP systems for a period up to 30 June 2003.

The amount required for annual maintenance and support of CJEP systems was revisited in 2003–04 by consultants appointed by the department and revised upwards to \$5.6 million per annum. This amount was revised upwards again in 2005 to \$6.4 million per annum, and was endorsed by the CJEP Steering Committee in May 2005.

The revised annual budget of \$6.4 million covers the department's costs in providing ongoing maintenance and operation of CJEP and includes the provision of support to all partner agencies. Notwithstanding this, additional costs will be incurred at the agency level.

The costs of ongoing maintenance and support were originally covered as part of the November 2000 contract with the primary IT contractor and \$3.5 million was allowed for ongoing maintenance and support in the contract price. Around \$4.8 million of the \$27.9 million paid to the primary IT contractor between November 2000 and December 2005 related to ongoing maintenance and support of CJEP systems.

By April 2008, \$18 million had been expended on the maintenance, support and enhancement of CJEP systems. The department was not able to provide a break-up of what costs have been incurred for enhancements which may need to be capitalised.

Of the \$18 million, around \$11.8 million relates to the department's IJS unit, which is responsible for the ongoing maintenance, support and enhancement of CJEP. The balance of \$6.1 million represents payments to the primary IT contractor and temporary contractors that performed the maintenance and support function prior to the formation of the IJS unit for a short period after the expiry of the primary IT contractor's contract in November 2005.

3.4 Overall conclusion

The delays and cost overruns experienced by the CJEP project can be attributed to the following root causes:

- inadequate planning at its inception
- failure to identify and secure funding for whole of life cycle costs (capital and recurrent) required to deliver the program at its inception
- contractor performance
- fluctuating commitment to and ownership of CJEP by partner agencies.