The Auditor-General Audit Report No.40 2004–05 Performance Audit

The Edge Project

Department of Family and Community Services
Centrelink

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Canberra ACT 14 April 2005

Dear Mr President Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Family and Community Services and Centrelink in accordance with the authority contained in the *Auditor-General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit and the accompanying brochure. The report is titled *The Edge Project*.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's Homepage—http://www.anao.gov.au.

Yours sincerely

Ian McPhee

Auditor-General

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The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office. The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits and financial statement audits of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

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Abbreviations

ANAO Australian National Audit Office

BARAC Business Planning and Resource Allocation Committee

(FaCS)

BIC Business Improvement Committee (Centrelink)

BPA Business Partnership Agreement

CCC Change Control Committee

CEO Chief Executive Officer

COLFrame Centrelink Online Framework

CPG Commonwealth Procurement Guidelines

CPM Commonwealth Project Manager

CSC Customer Service Centre (Centrelink)
CSO Customer Service Officer (Centrelink)

EIC Edge Implementation Committee

FaCS Commonwealth Department of Family and Community

Services

FAO Family Assistance Office

FAO01 Family Tax Benefit claim form FDSS Family Decision Support System

FMA Financial Management and Accountability Act

FTB Family Tax Benefit

I&T Information and Technology [Committee (Centrelink)]

ICC Incident Coordination Committee

ICTC Information and Communications Technology Committee

(FaCS)

ISIS Income Security Integrated System

IT Information TechnologyJPA Joint Project AgreementKPI Key Performance IndicatorLEES Life Events Expert System

MCFF More Choice for Families

MOU Memorandum of Understanding

NPV Net Present Value

PDA Policy Development Application

PYR Planning Your Retirement

R&I Risk and Issues

RFI Request for Information

RFT Request for Tender

STAIRS Structured Testing and Incident Reporting System

TEWG Tender Evaluation Working Group

UAF User Acceptance Facility

Glossary

Customer Account Customer Account is a web screen interface to customer data stored on the Centrelink central computer. By using a series of 'views' that group customer data in a logical way, it makes information easier to access and understand. Customer Account is a government funded initiative due for completion in June 2006.

Edge

The original contract for Edge was for a Life Events Expert System (LEES). The project was renamed Edge in 2001.

Getting it Right

In late 1999, Centrelink's Guiding Coalition examined issues of correctness and accuracy, focusing on barriers preventing staff from 'getting it right'. A December 1999 report identified 10 key barriers, and identified actions in train or planned to address them. In April 2000, the Centrelink Board of Management endorsed the 'Getting it Right' strategy. The strategy identified four pillars of correctness: right person, right rate, right date and right program.

Guiding Coalition

The Guiding Coalition consists of all Centrelink Senior Executive staff. The role of the Guiding Coalition is to guide the organisation, set direction and lead change, establish a culture for the future, be an educative forum, and communicate decisions.

ISIS

Income Security Integrated System. ISIS is a suite of systems for recording customer claims, and processing Centrelink payments. It operates on the Centrelink central computer (generally called the mainframe). In this report ISIS is sometimes referred to as the mainframe system.

Life Events Approach

This approach delivers services based on a customer's 'life events'. 'Life events' are experiences such as having a baby, looking for a job, planning for retirement or arriving to settle in Australia. The approach supports Centrelink's mission to provide opportunities for individuals during transitional periods in their lives. Steps have been taken to focus on customer needs at particular points in their lives to progress the implementation of Centrelink's service delivery model.1

M204

Model 204: Centrelink's main database management system. Model 204 is a powerful database management system for IBM-compatible mainframe systems, designed to handle large volumes of data with thousands of simultaneous users.

Families

More Choice for More Choice for Families is a policy package that was announced on 17 September 2002. It provides families who have been overpaid for part of the year, because of a change in income or circumstances, the opportunity to choose to be paid for the rest of the year at a rate that reduces the potential for any overpayment. Families can also choose to receive part of their entitlement to Family Tax Benefit and Child Care Benefit during the year and the rest as a lump sum after the end of the year.²

Centrelink, Annual Report: 1999-2000, Chapter 5, pp. 61, 63.

FaCS, Annual Report: 2002-03, Volume 2, p. 19.

Summary and Recommendations

Summary

Background

- 1. Edge was a joint project between the Australian Government Department of Family and Community Services (FaCS) and Centrelink to develop an expert system for the Family Assistance Office (FAO). Edge was a processing application, for the administration of claims and payments for people applying for entitlement to family-related payments. SoftLaw, a private sector company, was the successful tenderer that supplied software and expertise for the development.
- 2. Development of Edge (then called the Life Events Expert System, LEES) commenced in March 2000. In June 2002, pilots of the system were assessed as successful, and progressive roll out of the system started in July 2002.
- **3.** However, in August 2003, FaCS and Centrelink jointly commissioned a review of the project to assess whether there was a viable business case for further development of the Edge system. In November 2003, the report of that review recommended discontinuing development of the project. FaCS and Centrelink accepted the recommendation.
- 4. The development, from an initial trial in 1997 to the end of 2003, had taken some six years and come at significant cost—for example contractual payments to SoftLaw of around \$30 million, and involving up to 150 staff from three organisations; FaCS, Centrelink, and SoftLaw. Information provided by FaCS and Centrelink, confirmed to the extent possible by the ANAO, estimated the total expenditure on the Edge project to be around \$64.4 million, for the almost four years from contract signing to termination.

FaCS and Centrelink

- 5. During the period of the Edge project, the Family and Community Services Portfolio was responsible for providing advice on a broad range of social policy issues affecting Australian society and the living standards of Australian families, communities and individuals. FaCS was the principal policy formulating and advising body in the portfolio. Centrelink was the service delivery agency in the portfolio, delivering a range of Commonwealth services, such as pensions, benefits and allowances to the Australian community.
- 6. Since the termination of Edge, in October 2004, as part of machinery of government changes affecting several departments and agencies, FaCS' responsibilities have changed. In addition, Centrelink now resides within the Human Services Portfolio.

7. The fieldwork for this audit was completed before the agencies were restructured. The relationship between FaCS and Centrelink was a significant issue during the project, and is discussed in some detail in this report. In particular they were unable to resolve disagreements in funding Edge. While the two agencies will still have a business relationship under the new administrative arrangements, the nature of the ongoing relationship is not yet clear. The ANAO has, therefore, made no specific recommendations on that relationship. However, we have suggested that both agencies consider their processes for resolving disputes with other agencies.

The environment

- 8. Payments made by Centrelink are subject to increasingly complex, and frequently changing, rules. These changes follow from revised government policies and from new and revised legislation. At the start of the Edge project it was estimated there were 8000 such rules for Family Assistance payments. It was, therefore, appropriate that Centrelink, and its partner agencies, explore and research more sophisticated solutions to delivering the required services, with a view to reducing the administrative costs of delivery, while increasing the accuracy of advice and payments to recipients of the services. Expert systems promised both cost reductions, and greater accuracy of advice and payments.
- **9.** Therefore, the ANAO considers the question for the Edge project is not whether it should have been attempted, but whether management of the project, and decisions made during the project, were in accordance with better practice.
- 10. There were tensions between FaCS and Centrelink at all levels during the project. It would have been surprising if there were not, as the two agencies had somewhat differing needs from the project. Generally, work on the project progressed despite the tensions. The tensions were greater at more senior levels, where funding could not be agreed, and effective high-level governance of the project was not evident.

Audit objectives

- **11.** The objectives of the audit were to determine whether FaCS and Centrelink had:
- a valid Business Case for the Edge project, as revised from time to time, including estimated costs, actual costs, and expected benefits;
- effective governance of the project, including reviews at critical points in the project and subsequent decisions to continue or, in the final analysis, to discontinue;

- an appropriate contract with SoftLaw, which was adequately managed;
- delivered appropriate advice on progress, project viability, and acceptable solutions to technical issues to Executive of FaCS and Centrelink during the project; and
- valid reasons for discontinuing the project.
- 12. The ANAO began this audit in March 2004, four months after the Edge project was terminated, following the Auditor-General's agreement to a suggestion by the Joint Committee of Public Accounts and Audit that the project was a suitable subject for audit.

Key audit findings

The Business Case for the project (Chapter 2)

- 13. The ANAO found that the original 1999 Business Case for the project, approved by the FaCS Executive Board and the Centrelink Board of Management, addressed most of the basic elements expected of a Business Case. These basic elements include costs, benefits, a risk analysis, a timeline, as well as a number of other items.
- 14. This 1999 Business Case estimated the total cost of the project over seven years to be \$59.26 million (using a 6.33 per cent discount rate, the project team estimated the Net Present Value [NPV] of the cost to be \$52.03 million). The Business Case estimated a cumulative return of \$76.99³ million (NPV \$54.69 million⁴) over seven years from the investment in the Edge project.
- **15.** However, that Business Case did not include a methodology for measuring whether the project was a success or not, and did not identify measures to assess the achievement of objectives.
- 16. The ANAO also found that a significant risk identified in the Business Case, that is, the risk of delays in connecting Edge with the mainframe system and ISIS⁵, had inappropriate and ineffective mitigation strategies. In the event, this risk proved to be a significant factor in the delay to the project.

The figure of \$76.99 million was not used in the Business Case. It is the sum of the cumulative return from the Business Case before accounting for inflation, and is used here for consistent comparison with the estimated total cost.

This figure arises from a negative return on investment for the early years, and the inherent nature of an NPV calculation that results in a greater discount the further the calculation goes into the future.

⁵ ISIS (Income Security Information System) is a suite of systems for recording customer claims, and processing Centrelink payments. It operates on the Centrelink central computer (generally called the mainframe).

- 17. The ANAO found that an internal review of the Business Case in late 2002, while making some reductions to the expected benefits, did not re-examine the basic assumptions on which the benefits were based. Instead, the review team deferred that assessment until such time that the Edge system was fully implemented and 'bedded down', and benefits could be assessed in actual operation. The review revised estimated savings downwards from a 'conservative' annual figure of \$27.78 million to \$23.18 million.
- 18. This 2002 review considered the original business aims still relevant and achievable. There was no suggestion, in that review, of Edge not meeting the requirements of the Families program, unlike the review conducted 12 months later.
- 19. The ANAO noted that the 2002 review stated that expenditure for the first three years of the project had increased from the original business case estimate of \$35.62 million to \$43.76 million, and the five-year estimate increased from \$47.28 million to \$64.94 million.
- 20. The 2002 review also showed the project to be 19 months behind the target date at one point, before being rolled out 10 months behind target.
- 21. The ANAO considers that it would have been appropriate to conduct a major independent review of the project, in July 2002, before roll out began, as this was a critical point in the project.

The procurement process (Chapter 3)

- **22.** FaCS and Centrelink were unable to provide the ANAO with a copy of a procurement risk assessment, or any evidence of identifying and implementing any risk mitigation strategies. This does not meet better practice in procurement planning as outlined in relevant Department of Finance and Administration guidance on competitive tendering and contracting⁷.
- 23. In examining the Request for Tender (RFT), the ANAO found that the information provided for bidders in the RFT was adequate. However, the short timeframe imposed for comments on the draft contract issued with the tender document was not in accordance with the specifications of the relevant CPGs. FaCS and Centrelink did mitigate this situation by extending the RFT closure date by two weeks, as well as by holding an open forum to assist bidders with questions about the final document.

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The project team originally estimated that the benefits likely to be realised from the project ranged between \$27.78 million (conservative) and \$40.62 million (optimistic) each year from 2002–03 onwards.

Department of Finance and Administration, Competitive Tendering and Contracting, Guidance for Managers, March 1998, p.14.

- 24. FaCS and Centrelink developed a Tender Evaluation Plan. However, this was finalised 16 days after the evaluation process had begun, which is inconsistent with better practice, and did not comply with advice from the probity advisor. However, the ANAO found no evidence to indicate that this impacted adversely on the RFT outcome.
- 25. A standard template was not used when scoring the RFT requirements. The ANAO conducted a random crosscheck of scores transcribed from the raw evaluation forms to the tender evaluation report, and found errors. Centrelink staff were unable to explain the discrepancies.
- **26.** FaCS and Centrelink records indicate that privacy requirements were met and sensitive information was secured appropriately. The ANAO found that potential conflict of interest issues were dealt with adequately.
- 27. The ANAO noted that several important documents, decisions and associated reasons relating to the project were not filed or otherwise captured as a matter of record.
- 28. The ANAO concluded that the Edge project procurement process was generally conducted in accordance with the relevant CPGs. The ANAO considered that there was adequate evidence to show that the preferred tenderer offered best value for money.
- **29.** However, in the ANAO's view, the procurement process was not as transparent as it could have been, in that:
- a probity plan was not developed nor, despite a variety of probity advice being provided, was a probity audit undertaken to ensure the tender evaluation process was conducted to the appropriate standards of probity and confidentiality;
- the Tender Evaluation Plan was approved 16 days after tenders closed, and after the tender evaluation had begun;
- the project's procurement records did not consistently contain reasons for decisions and information such as dates, author, and addressee, and comments indicating the status of a document were frequently omitted from records; and
- a standard template was not used when scoring the RFT requirements, and there were transcription errors in transferring scores from the raw forms to the tender evaluation report, albeit it did not affect the outcome in terms of the selection of the tenderer.
- **30.** The ANAO concluded that the agencies had an appropriate contract with SoftLaw, and that the contract was managed adequately.

Governance of the project (Chapter 4)

- 31. The ANAO found that regular advice on the progress of the Edge project was provided to the FaCS Executive Board and the Centrelink Board of Management. However, the ANAO could find no evidence that the Boards were appropriately informed of the lack of progress on agreeing a Memorandum of Understanding (MOU) between the two agencies.
- **32.** The ANAO found that the appropriate governance bodies at Centrelink, the Business Improvement Committee (BIC) (responsible for funding decisions), the Information and Technology (I&T) Committee, and the Guiding Coalition (comprising all Senior Executives in Centrelink), were appropriately informed of progress on the project. However, Centrelink advised the ANAO that advice to the Centrelink BIC of the expenditure on the Edge project was overstated by an amount of \$3 million (of \$58.95 million reported to BIC).
- 33. The ANAO found that the two FaCS committees that the ANAO expected to be involved in the project, the Business Planning and Resource Allocation Committee (BARAC) (responsible for funding decisions) and the Information and Communications Technology Committee (ICTC) (responsible for IT projects), were not involved in managing the Edge project. FaCS advised the ANAO that 'there was no requirement for FaCS areas to report to the BARAC as this was an allocation committee only'. 8
- 34. The ANAO found that the Audit Committees of both agencies, and the internal audit function of both agencies had appropriately reviewed the project. The relevant agency audit committee reviewed the findings of the audits and a timeline was set for implementation of audit recommendations.
- 35. The ANAO found that the joint FaCS–Centrelink Steering Committee for the project met regularly, at intervals of one to two months, in 1998 and 1999, once in 2000, and four times in 2001, but never as a full committee after November 2001, although the Edge project continued until November 2003. The Committee did not meet even though the Centrelink BIC referred Edge funding submissions to BIC, on to the Steering Committee for advice. Papers were circulated to members of the joint FaCS–Centrelink Steering Committee. No response was taken as no objection, and therefore as approval.
- **36.** The ANAO found that, with the exception of the joint FaCS–Centrelink Steering Committee, day-to-day management of the project was in accordance with the Development Contract. ⁹

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⁸ FaCS response to ANAO issues papers, 22 December 2004.

Over the course of the Edge project there were three contracts with SoftLaw. The Development Contract was the contract for developing the Life Events Expert System, later renamed Edge.

- 37. The ANAO concluded, from findings in this and other chapters, that governance of the project was not as effective as it should have been, in that:
- predictions given to the agencies' Executives of the number of customers that could be processed through the system were optimistic, and never met (paragraph 2.53);
- advice that 70 per cent of claims processed through ISIS (the mainframe system) had errors of which 74 per cent could have been avoided using Edge, was optimistic and potentially misleading (paragraphs 6.55 to 6.63);
- the FaCS governance committee with responsibility for IT was not involved in the project (paragraph 4.15);
- it was not clear that the FaCS Executive Board and Centrelink Board of Management were informed of the lack of progress on agreeing the MOU (paragraphs 4.11 and 4.21);
- the joint FaCS–Centrelink Steering Committee did not meet during the latter two years of the project (paragraph 4.45);
- responsibility for the project was split between the two agencies, with no Senior Responsible Owner identified (paragraph 4.56);
- an MOU between FaCS and Centrelink was never agreed, and hence funding and savings were never agreed (paragraph 5.16 onwards);
- advice given to the Centrelink committee with responsibility for funding, regarding expenditure on Edge, was overstated by \$3 million (paragraph 5.56); and
- the project plan was not maintained, and there was no formal development methodology (paragraph 6.1).

38. In March 2005, Centrelink provided the following comment on the second point above:

Since July 2002, Centrelink uses random sample surveys to assure the correctness and accuracy of social security outlays. The target for correctness is 95 per cent and Centrelink's payment correctness figures have always exceeded this figure.

Financial management of the project (Chapter 5)

- **39.** The ANAO found that the financial aspects of the Development Contract were managed appropriately. Changes made to the contract were approved by the three parties involved, and at the appropriate level. The procedure for accepting deliverables was in accordance with the contract, and payments were made accurately against the contract.
- 40. An MOU was intended to formalise funding arrangements for the project between FaCS and Centrelink. Disagreements over the responsibility for costs, and the calculation of savings, occurred throughout the life of the project, and the MOU was never signed. Centrelink considered that FaCS owed it \$2.79 million at the conclusion of the project. FaCS declined to pay this amount due to cancellation of the project, and as savings were not generated by the project.
- 41. There was no internal reporting of finances by the FaCS Edge team to FaCS' BARAC. As mentioned in paragraph 33, FaCS advised the ANAO that 'there was no requirement for FaCS areas to report to the BARAC as this was an allocation committee only'.
- 42. The Centrelink Edge team kept Centrelink's BIC informed of the financial status of the project, via expenditure updates provided in quarterly reports. However, as mentioned in paragraph 32, Centrelink advised the ANAO that the expenditure figure, reported to BIC in these reports, was overstated by \$3 million over the four-year period of the project. Centrelink advised the ANAO that the overstated figure was due to a misunderstanding, by the Edge project team, of the role of accrual accounting on finances.
- 43. Information provided by FaCS and Centrelink, confirmed to the extent possible by the ANAO, estimated that the total expenditure on the project was \$64.4 million. Centrelink capitalised \$25 million of the costs as internally developed software. Centrelink wrote off \$15.15 million of this in 2003–04 for the Edge project. This consisted of \$12.36 million for software unable to be used by other projects, and \$2.79 million for costs that Centrelink considered FaCS owed to it.

Progress of the project (Chapter 6)

- 44. The ANAO found that the Edge project had no project plan current during development of Edge, and had no formal development methodology.
- 45. During the development, there were 129 formal changes to the contract with SoftLaw, 34 versions of the contract, and the number of 'deliverables' specified in the contract increased from 205 to 365.
- 46. The ANAO found that predictions of available functionality were optimistic. The 2002 review, mentioned in paragraph 17, stated the expectation that the March 2003 release would be capable of processing 90 per cent of customer claims. However, an exercise in that month showed less than 50 per cent of customer claims could be processed.
- 47. The ANAO found that development of the system included testing at a user acceptance facility before each release, testing of pilots, and a progressive roll out. This accorded with better practice, and allowed development to be paused at any time with minimum disruption to Centrelink as a whole.
- 48. In November 2001, comparison by Centrelink of accuracy between claims processed through ISIS and claims processed using Edge claimed that the former had an error rate of 70 per cent, of which 74 per cent could have been avoided using Edge. This result was used to support the continued development of Edge. Centrelink advised the ANAO of significant work being undertaken during the latter part of 2001 to define and improve payment correctness and accuracy for all systems. Centrelink further advised the ANAO that 'the definitions and methodology used in the November 2001 Edge accuracy check do not, and could not, have reflected the definitions and methodologies finally agreed between FaCS and Centrelink, and which are now being used in Centrelink and ANAO audits'. A further comparison, in early 2003, found little difference in accuracy between Edge and ISIS.
- 49. During the Edge development, a number of differences between Edge and ISIS were found, raising questions about the processing of ISIS. As a result, corrections were made to ISIS in a small number of cases.

Termination of the project (Chapter 7)

50. In August 2003, FaCS and Centrelink jointly commissioned a review of the Edge project, led by an independent consultant, to assess whether there was a viable business case for further development of the Edge system. The review recommended that the project be terminated. The agencies accepted the recommendation of the review and terminated the Edge project in November 2003.

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Centrelink response to ANAO issues papers, 24 December 2004.

- 51. The 2003 review gave four reasons for recommending termination, as follows: Edge in its planned form was no longer properly aligned with the business needs of the Families program; the operation of Edge in parallel with the ISIS was unsustainable; changes to the Families program meant Edge could have only limited effect on a key driver—improvement in accuracy; and the level of anticipated benefits were unlikely to be realised, leading to a negative return on investment.
- **52.** The review recommended a feasibility study be conducted, to explore an option for the targeted use of expert systems to leverage the work undertaken on the Edge project. That feasibility study was not finalised at the time of completing this report.
- 53. An independent consultant from the private sector led the review team. That consultant's organisation provided the methodology for the review. The ANAO found that the FaCS and Centrelink officers included in the review team had, for the most part, little to do with the Edge project, and could, therefore, be considered independent. The ANAO expected there would be no pressure placed on the review team to make a particular finding, and found this to be the case.
- 54. The ANAO found that the Edge project was terminated in November 2003, when it appeared that it would have been completed, according to the contract, in December 2003. However, there was no guarantee that Edge would be able to replace the equivalent part of ISIS at that time, or into the foreseeable future.
- 55. In addition to the four reasons stated in the 2003 review report, a number of other issues affected the project, as follows.

FaCS-Centrelink relationship

56. The funding and savings for the project were to be defined in an MOU between the two agencies. The MOU was never agreed, and the relative responsibilities for the cost of the project were in dispute. Progress in a project where the owners are in dispute over costs is difficult. There was also a difference of views between FaCS and Centrelink as to what constituted work on Edge, as opposed to work that was needed for Edge, but which was also more generally applicable across a number of Centrelink projects.

Funding

- 57. As funding could not be agreed between the two agencies, it fell to Centrelink to provide the bulk of funds until such time as savings occurred. This meant repeated requests for additional internal funding within Centrelink, and the eventual reluctance of Centrelink to continue funding a project that had no clear finalisation.
- 58. Centrelink would have to continue funding both Edge and ISIS until such time as Edge was able to duplicate all equivalent ISIS functions. It was unclear when this might be achieved.
- **59.** The 2003 Business Case Review stated that one of the reasons for recommending termination was that the level of benefits anticipated was unlikely to be realised, leading to a negative return on investment.
- 60. The business arrangement with FaCS meant any savings were to be shared between the two agencies. There was little incentive for Centrelink to conclude the project, at which point they would have to give up savings to FaCS, potentially upwards of \$11 million annually, unless they could clearly obtain those savings. Assessment of the actual savings had been deferred until the Edge system was implemented.

Technical issues

61. The ANAO is of the view that one of the reasons the Edge project was unsuccessful, was not due to any inherent defects in expert systems, but because Centrelink had difficulties in successfully integrating the expert system into its current IT environment. This was due both to the constraints of that environment, and the complexities of the solution developed for integrating Edge with the mainframe. The solution was being developed concurrently with Edge. Connectivity with the mainframe was a major source of delays to the project. Edge had more functionality (that is: ability to process customer claims) than it was able to process through to Centrelink's mainframe. The communications and data matching needs of interfacing Edge with the mainframe had been identified as a high risk in the original Edge Business Case. However, the mitigation strategies were inappropriate and proved to be ineffective.

Changing business requirements

62. When the Family Tax Benefit application was selected for development as an expert system it was reasonably stable. Legislation in 1999, including formation of the Family Assistance Office, meant that legislative and other changes were frequent, requiring changes to Edge. In addition, while the 1999 Edge Business Case recognised the requirement for annual reconciliation of Family Tax Benefits, the agencies did not fully appreciate the implications of fewer client interviews and more posted forms and call centre work, for which

Edge was not originally designed. The introduction of the More Choice for Families initiative in 2002 resulted in a requirement for the ability to continuously adjust the Edge rulebase. This was not envisaged in the original design and would require some redesign. These issues led the 2003 Business Case Review team to conclude that the system no longer met the requirements of the business.

Accuracy

63. A key aim of the project was to optimise the accuracy, consistency, and completeness of assessment decisions. A comparison with ISIS in 2001 indicated significant improvements were potentially achievable by using Edge. However, the annual reconciliation process reduced the potential benefits of Edge, and a further comparison with ISIS in 2003 indicated little, if any, difference between the two systems. Hence a key driver for Edge no longer applied.

Functionality

- 64. Predictions of the percentage of customer claims that could be processed through Edge were optimistic. At the time of roll out to the Centrelink network in July 2002 around 38 per cent of claims could be processed. Although this percentage gradually improved over the next 15 months, Customer Service Officers (CSOs) were placed in the position of trying to use a system that may not be able to process the claim, and they would have to resort to using ISIS. Hence, Edge gained a poor reputation. Centrelink staff preferred to use ISIS upon which they could rely. Although documents indicate that Edge would be completed according to contract by December 2003, there was no guarantee that it would be able to fully replace ISIS at that time, or in the foreseeable future.
- 65. The ANAO concluded that the FaCS and Centrelink decision to bring the project to a close, and to explore other ways to use the products and knowledge developed during the Edge project, was appropriate.

Overall audit conclusion

66. In short, the project was over time, over budget, and terminated before completion. Direct financial savings from the project were not realised and the project was unsuccessful when assessed against its aims. There were deficiencies in the project, particularly in the governance of the project, from which lessons for the future can be learnt. While FaCS and Centrelink advised the ANAO that they did gain some benefits from the project, nevertheless it was appropriate for the agencies to terminate the project.

Recommendations

67. The ANAO made two recommendations aimed at improving FaCS' and Centrelink's project Business Cases, and governance of projects. Both agencies responded positively to the recommendations.

Agencies' responses

FaCS

68. The Secretary of FaCS advised the ANAO in March 2005 that he agreed with the report's two recommendations. FaCS' specific comments in relation to the two recommendations are included following the recommendations in paragraphs 2.24 and 4.63. No additional comments were provided for attachment to the report.

Centrelink

69. The Chief Executive Officer of Centrelink also advised the ANAO that he welcomed the report and agreed with the recommendations. Centrelink's specific comments in relation to the two recommendations also follow the recommendations in paragraphs 2.24 and 4.63. No additional comments were provided for attachment to the report.

SoftLaw

70. In addition, given SoftLaw's role in the Edge project, the Auditor-General invited the company to provide comments on relevant extracts of the proposed report. SoftLaw's comments were considered in the finalisation of the audit report.

Recommendations

Recommendation

No.1 Para. 2.24. The ANAO recommends that FaCS and Centrelink include in future Business Cases, metrics for measuring the ongoing success or otherwise of the project.

FaCS response: Agreed.

Centrelink response: Agreed.

Recommendation No.2 Para.4.63.

The ANAO recommends that FaCS and Centrelink ensure that all project steering committees accord with the project policy and framework developed by the agencies, including regular meetings. The ANAO also recommends that, in future projects, FaCS and Centrelink identify and allocate responsibility to a Senior Responsible Owner.

FaCS response: Agreed.

Centrelink response: Agreed.

Audit Findings and Conclusions

1. Introduction

This chapter provides background on the three organisations responsible for the Edge project. Also outlined are the audit objectives, scope, focus, and methodology.

The organisations

- 1.1 The Edge project was a joint undertaking between the Australian Government Department of Family and Community Services (FaCS) and Centrelink to develop an expert system for the Family Assistance Office (FAO). Edge was a processing application, for administration of claims and payments for people applying for entitlement to family-related payments. SoftLaw, a private sector company, was the successful tenderer that supplied software and expertise for the development.
- 1.2 Those three organisations were stakeholders in the success of the Edge project and all had somewhat different needs from the project. FaCS had responsibility for ensuring that the rulebase accurately reflected the legislation, and the intentions of the government. Centrelink needed to ensure efficient and effective administrative processes. SoftLaw needed to ensure the project was a successful implementation of its flagship software package, with a view to expanding its sales to governments both in Australia and overseas.
- **1.3** While these needs did not necessarily conflict, they did result in differing priorities for those organisations. It was essential that governance of the project ensured a smooth working relationship between the organisations. While SoftLaw had a major stake in the success of the project, prime responsibility for governance and success of the project lay with FaCS and Centrelink.
- 1.4 Since the termination of Edge, in October 2004, as part of machinery of government changes affecting several departments and agencies, FaCS' responsibilities have changed. In addition, Centrelink now resides within the Human Services Portfolio.
- **1.5** The ANAO fieldwork for this audit was completed before the restructuring of the agencies. The responsibilities stated below are those applicable during the Edge project. Both agencies were, and continue to be, subject to the *Financial Management and Accountability Act* 1997.

Department of Family and Community Services (FaCS)

- 1.6 During the period of the Edge project, the Family and Community Services Portfolio was responsible for providing advice on a broad range of social policy issues affecting Australian society and the living standards of Australian families, communities and individuals. FaCS was the principal policy formulating and advising body in the portfolio and was responsible for around one-third of total government outlays. FaCS was responsible for:
- putting to work the government's social support policies for families, working-age people and retirees; and
- managing delivery of a wide range of support services through thousands of provider organisations located across Australia. 11

Centrelink

1.7 Centrelink is an Australian government agency delivering a range of Commonwealth services, including pensions, benefits and allowances, to the Australian community. Centrelink is a statutory authority, operating under the *Commonwealth Services Delivery Agency Act 1997*, which came into effect on 1 July 1997. Centrelink delivered some 140 products and services on behalf of 25 Australian Government and State Government agencies. In 2003–04, Centrelink's annual administrative budget (mainly staff, accommodation and equipment) was around \$2.2 billion, and it paid some \$60 billion to around 6.5 million customers each year. Centrelink has over 25 000 staff and delivers its services through a network of 15 Area Support Offices, 321 Customer Service Centres (CSCs) (320 during the Edge implementation phase), and 26 call centres located across Australia.

1.8 Centrelink provided the following statement to the ANAO on its role.

Increasingly, Centrelink is pursuing electronic (self service) options to enable customers to view, update or report their details via the telephone or the Internet. Approximately 3000 customers per day update their earnings via the web services and an average of 20 000 customers per day report their earnings using the natural language speech recognition telephone service. Centrelink also provides online services for businesses and has introduced some system-to-system services.¹³

¹¹ FaCS, *Annual Report 2002–03*, Volume 1, p. 20.

Taken from Centrelink website http://www.centrelink.gov.au/

Centrelink response to ANAO issues papers, 24 December 2004.

SoftLaw

- 1.9 SoftLaw Corporation Limited is an Australian-owned global company that provides software solutions for administering complex legislation, policy and procedures. SoftLaw's core business is provision of its rulebase technology, STATUTE Expert, and related methodologies and services to test, capture, execute and maintain the complex legislative and policy rules that are used by government and regulatory agencies to administer government programs. SoftLaw was established in 1989, and listed on the Australian Stock Exchange in late 2001. Its head office is in Canberra.¹⁴
- 1.10 In 2000, SoftLaw reported it had grown to 50 staff. In 2002 it reported growth in staff numbers from 106 in 2001 to 122 in 2002. At that time, SoftLaw had around 50–60 staff working on Edge. After being informed of the termination of the Edge project, SoftLaw issued a notice to the Australian Stock Exchange that it no longer expected to make a profit for the June to December 2003 half year, and that it may incur a loss for 2002–03 as a whole. SoftLaw incurred restructure costs of \$433 000 for June to December 2003. In August 2004, SoftLaw presented its annual results. The results included a 28.1 per cent slump in sales, costs of \$600 000 due to the loss of Edge sales, and a loss of \$1.3 million compared to a profit of \$606 318 the previous year. The Edge project had a major impact on SoftLaw staffing and finances.
- **1.11** Centrelink considers that SoftLaw has benefited from working on the Edge project. Centrelink provided the following comment:
 - ... it is Centrelink's view that SoftLaw benefited from working with Centrelink and FaCS on the EDGE Project. SoftLaw is now building on the EDGE work by providing technology solutions using STATUTE expert system for a number of local governments in the United Kingdom and Ireland.¹⁵
- 1.12 In October 2004, the SoftLaw Board recommended to shareholders that they accept a takeover offer from SLC Capital Limited. On 3 November 2004, SoftLaw announced that SLC held 97.85 per cent of ordinary shares and 40.12 per cent of preference shares. A new Board was appointed on that day. As at March 2005, SoftLaw Corporation is 100 per cent owned by SLC Capital Limited, and has been de-listed from the Australian Stock Exchange. SoftLaw advised the ANAO that it is continuing to expand its business internationally, as well as approaching the Australian market with renewed focus and funding.

¹⁴ Taken from SoftLaw website http://www.softlaw.com.au/ >

Centrelink response to ANAO issues papers, 24 December 2004.

Family assistance payments

1.13 FaCS, through Centrelink, made family assistance payments of around \$16 billion a year. Of this, \$11.5 billion was paid as Family Assistance. The Family Tax Benefit (FTB) was provided to approximately 1.8 million Australians.

The Edge project

- 1.14 Payments Centrelink makes to the Australian community are complex, and subject to frequent legislative change. At the time the decision was made to commence the Edge project, the legislative, policy, and business rules for the Family Assistance Office were estimated to number over 8000. Consequently, it was difficult, if not impossible, for Centrelink staff to know the detail of all benefits, and therefore provide the most appropriate advice to customers. In addition, there was a need to improve Centrelink's accuracy and consistency of decisions. ANAO audits, Ombudsman investigations, and Ministerial enquiries all showed inconsistent results for customers. Nevertheless, there was a view that the onus was on the customer to know which payment to apply for, rather than Centrelink advising the customer of their eligibility.
- 1.15 The concept of a project to provide an expert system to address the 8000 rules, and to operate across an organisation as large as Centrelink, was recognised as involving significant risk for all three organisations. Although perhaps not the largest rulebase system developed by SoftLaw, it was possibly the most complex at that time. Recognising the risk, the agencies conducted a preliminary trial at Caboolture in Queensland. They also asked the organisations successfully responding to a Request for Information (RFI) in early 1998 to demonstrate their expertise by developing a small expert system (Planning Your Retirement [PYR], paid for by FaCS and Centrelink) before finalising the decision on the Request for Tender in late 1999. Despite these trials and tests, there remained an element of research and development in the Edge project.
- **1.16** Edge was just one of a number of projects being undertaken by Centrelink at that time. While a large project, Edge was not the largest of the projects. At an expenditure of around \$64.4 million, including contractual and staffing costs, it was a small percentage of FaCS and Centrelink administrative budgets. However, it was viewed as a critical project for future FaCS and Centrelink directions.

FaCS Portfolio Budget Statements 2003–04, (Budget Paper No.1.8), p. 50.

Edge Business Case as presented to the Centrelink Board, November 1999.

1.17 Centrelink provided the following information:

EDGE was one of a number of projects and new capabilities Centrelink was implementing at the time. These were directed at opening Centrelink services and technologies to external parties, expanding staff tools and systems, increasing customer channel choices and, collectively, they increased the complexity of the technology environment. Significant projects included Centrelink Online, Call Centre Automation and Australians Working Together. Of the overall funds invested in projects with a value of more than \$2 million between July 2000 and June 2004, the EDGE project represented 13 per cent.¹⁸

1.18 The initial view of the project was that the resulting system should be useable by other organisations. In particular, the Health Insurance Commission and the Australian Taxation Office were identified as agencies that could service FAO customers using the system. A further view was that non-government agencies involved in social work could also use certain configurations of the system to advise their clients.

Expert systems

1.19 Expert systems are computing systems that, when provided with basic information and a general set of rules for reasoning and drawing conclusions, can mimic the thought processes of a human expert. Decision support and rulebase systems are forms of expert systems. Various facts are entered into the expert system, and rules are used to arrive at conclusions for a specific set of circumstances. An expert system comprises three main components:

- a knowledge base which models and stores legislative, policy, and procedural facts and rules;
- an inference machine that accesses the knowledge base, and any other supporting data, to manage the required questions in order to make a determination; and
- a data source and/or a user interface that provides additional information necessary for a determination, informs the user of the determination, and the reasoning for the determination. ²⁰

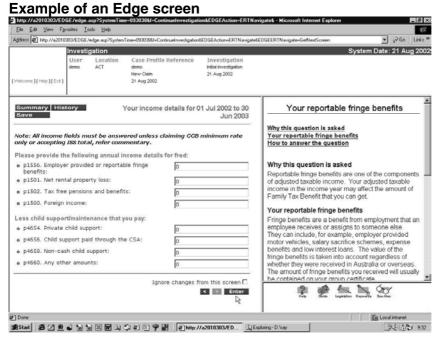
¹⁸ Centrelink response to ANAO issues papers, 24 December 2004.

There are various ways of defining an expert system. This definition is taken from *The Macquarie Dictionary*, 3rd edition, 1998.

Based primarily on a talk by G Masri (SoftLaw) Making Better Determinations, presented to The Business of e-Volution of Government, Canberra, 26–27 May 2004.

- **1.20** In the late 1990s, FaCS and Centrelink investigated the use of expert systems to help staff provide advice, and to address concerns about the accuracy, completeness and consistency of information collected. This investigation resulted in the Edge project. At the time Edge was starting in 1999, Centrelink was developing its Getting it Right strategy. Edge was seen as a significant step in implementing Getting it Right.
- **1.21** The Edge project was a business development, using information technology, designed to apply the policy rules set out in Family Assistance legislation, together with associated policy guides, to people applying for entitlement to family-related payments. It was a processing application, in the form of an expert, decision support, or rulebase system, administering those payments. The system guided staff through the claims process. Staff completed a 'form', using the response to questions, and the response to a question was used by Edge to determine which question to ask next. A commentary alongside each question advised users why the question was asked, identified the appropriate legislation, and helped with responses. Figure 1.1 shows an example of an Edge screen.

Figure 1.1



Source: FaCS PowerPoint presentation.

In late 1999 Centrelink's Guiding Coalition examined issues of correctness and accuracy, focusing on barriers preventing staff from 'getting it right'. A report in December 1999 identified 10 key barriers, and identified actions in train or planned to address them. In April 2000 the Centrelink Board endorsed the Getting it Right strategy.

- **1.22** The Edge application was initially intended to:
- support interview-based processing of customer entitlements;
- use a rulebase, based on legislation and administrative procedures, to determine customer entitlements;
- provide online, context-sensitive access to the relevant parts of the legislation and administrative procedures;
- print at interview a customised claim form and/or a notice informing a customer of a likely entitlement;
- print assessment letters; and
- include a 'what if' capability so customers could test the impact of possible changes in their circumstance.²²
- **1.23** It was intended that the system would be delivered in several configurations, as follows.

Stand-alone configuration

1.24 The stand-alone configuration (more accurately called the nonconnected configuration) would enable users to use the system without being connected to the Income Security Integrated System (ISIS).²³ The intention was that this configuration would be used by FAO and Centrelink staff, and be made available for use by the social policy community and third parties that provide entitlement advice.²⁴ It would allow users to investigate possible entitlements, to model and save scenarios, to prepare claims, and to print provisional assessments.

Connected configuration

1.25 The connected configuration was to be online, operated by FAO and Centrelink staff, using a version that interacted directly with ISIS. This mode of operation would support processing where the customer is present and able to participate in an interview. This mode was also intended to support the processing of paper-based claims.

Internet configuration

1.26 Based on the stand-alone configuration, the Internet configuration was to be used by customers and the wider community. It was to be accessed over

Taken from the SoftLaw Internet site. Note: Since termination of the project most references to Edge have been removed from the SoftLaw site.

Income Security Integrated System. Centrelink's existing computer system operating on its mainframe and delivering welfare benefits.

²⁴ Such as the Salvation Army, and the St Vincent de Paul Society.

the Internet. It would allow for scenarios to be run, personalised claim forms to be prepared and printed, and provisional assessments to be produced. However, it would not store data for the longer term and for upload to ISIS.

Policy Development Application expert system

1.27 The Policy Development Application (PDA) was to be used by FaCS staff to model potential, or proposed, legislative and policy amendments, and to quantify, assess and analyse the likely impact of these amendments on customer groups and on expenditure.

Project history

- **1.28** Centrelink, and its predecessor the Department of Social Security, had been aware of, and considering, expert systems since the late 1980s. In 1997, the then Department of Social Security contracted SoftLaw to develop a prototype of an expert system which could lead to greater consistency in decision making in family assistance payments, and to record reasons decisions were taken. This prototype was tested, as a proof of concept, at the Caboolture Family Service Centre for a month in 1997.
- **1.29** In 1999, the Australian Government approved changes to family assistance payments, and creation of the FAO. Evidence obtained by the ANAO, from a number of documents, indicates that \$18 million was included in the funds for the FAO for development of an expert system to support the Office. These documents include various drafts of the proposed MOU between the agencies on Edge, correspondence between a FaCS Deputy Secretary and a Centrelink Deputy Chief Executive Officer (CEO) in late 2000 and early 2001, and a running cost spreadsheet FaCS advised was from the relevant Government Expenditure Review Committee papers. However, Centrelink provided the following comment:

the decision to fund an 'expert' system was an interagency agreement between FaCS and Centrelink. The development of the 'expert' system was to support the administration of the family assistance payment system. In this context the two agencies agreed to use \$18 million from the Family Assistance Office funding. The ANAO's suggestion that Edge was a project that was directly funded by the government is not substantiated.²⁵

- **1.30** Notwithstanding Centrelink's comment above, ANAO considers that the available evidence, as set out in paragraph 1.29, indicates that Government funding was utilised to fund the project which became Edge.
- **1.31** In 1999, a tender process resulted in SoftLaw being selected to develop an expert system to assist with family-related payments.

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Centrelink response to ANAO issues papers, 24 December 2004.

- 1.32 Development of Edge (then called the Life Events Expert System) began in March 2000. In June 2002, pilots of the system were assessed as successful, and progressive roll out of the system started in July 2002, in seven Centrelink offices. In May 2003, Edge was in use in 28 Centrelink Offices (of some 320 such offices).
- 1.33 The development, from the Caboolture trial to the end of 2003, had taken some six years and come at significant cost—for example contractual payments to SoftLaw of around \$30 million, and involving up to 150 staff from three organisations—FaCS, Centrelink and SoftLaw. Information provided by FaCS and Centrelink, confirmed to the extent possible by the ANAO, estimated the total expenditure on the Edge project to be around \$64.4 million, for the almost four years from contract signing to termination.
- **1.34** Figure 1.2 illustrates the timeline for the project, together with the some 70 legislative changes made during the project. A detailed list of the legislative changes made to the relevant legislation during the course of the project is included at Appendix 1.

Figure 1.2

Timeline for development of an expert system for the Families program

Edge Development Stage		Timeline		Legislative Change (Implementation date)	
Aug 97	Caboolture Trial.	1997	1		
May 98	RFI issued & closes. In-principle approval of expert system by agency boards.	1998			Tax Reform announced, includes creation of FAO.
Dec 98	Revised direction of Edge to support FAO.				
Jun 99	RFT closes. Planning Your Retirement tenderer's challenge completed.	1999		Jul 99	FA ^(a) and FAA ^(b) assent.
Nov 99	Edge Business Case to Centrelink Board of Management.				
Feb 00 Mar 00	Contract Signed with SoftLaw. Edge project begins.	2000		Jul 00	FA and FAA commence. 7 FA amendments; 4 FAA amendments; 12 FA determinations; 6 FAA determinations.
				Sep 00	1 FA amendment.
Nov 00 Dec 00	Detailed business requirements. First standalone pilot.		<u> </u>	Dec 00	1 FA amendment.
		2001		Jan 01	1 FA amendment; 1 FAA amendment; 3 FA determinations; 3 FAA determinations
Apr 01	Second stand-alone pilot. Edge rulebase complete.			Mar 01	1 FA amendment.
	Stand-alone application complete.			Jun 01 Jul 01	1 FAA amendment. 1 FAA amendment; 1 FAA amendment; 2 FAA determinations.
No. of	-			Aug 01 Oct 01	2 FAA determinations.2 FAA amendments;2 FAA determinations
Nov 01	First connected pilot		<u> </u>	Dec 01	1 FA amendment.

May 02 Jul 02 Oct 02	PDA complete. Progressive roll out begins. First Business Case review.	2002		Feb 02 Mar 02 Jul 02 Oct 02	1 FA determination.1 FAA amendment.
		2003	1		
Feb 03	Roll out of Edge suspended. Survey of Edge users.				2 FAA determinations.
				Apr 03	2 FA amendments; 3 FAA amendments.
Jul 03	Useability exercises.			Jul 03	1 FAA amendment; 2 FAA determinations.
Aug 03	Review of Edge Business Case.			Aug 03 Sep 03	1 FA determination. 4 FA amendments.
Sep 03	Last release of Edge.				
Nov 03	Development of Edge terminated.				

(a) FA: A New Tax System (Family Assistance) Act 1999

(b) FAA: A New Tax System (Family Assistance) (Administration Act) 1999

An amendment is a change to the Act passed by Parliament.

A determination is a determination by the Minister, generally as a disallowable instrument tabled in Parliament.

Note also that not all changes are implemented by legislation. An example is More Choice for Families, a major change to the program that did not require legislation.

Source: Timeline taken from: Centrelink and FaCS, *Report of the Edge Business Case Review,* November 2003, together with additional research by the ANAO.

1.35 During the course of the Edge development, FaCS and Centrelink were generally pleased with the project. In November 2002, Edge was nominated for an Australian Information Industry Association award.²⁶ In June 2003, the success of Edge was lauded in a paper presented by the Centrelink CEO to the Administrative Review Council.²⁷ The paper included advice of the decision by Centrelink to extend the technology to two other programs.²⁸

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²⁶ Australian Information Industry press release, 7 November 2002.

Administrative Review Council, launch of Administrative Review Council's paper: Automated Assistance in Administrative Decision Making, 19 June 2003.

²⁸ Parenting and unemployment areas.

1.36 However, in August 2003, FaCS and Centrelink commissioned a review of the project. In November 2003, the report of that review recommended discontinuing development of the project. FaCS and Centrelink accepted the recommendation.

Audit objectives

- **1.37** The ANAO began this audit in March 2004, four months after the Edge project was terminated, following the Auditor-General's agreement to a suggestion by the Joint Committee of Public Accounts and Audit that the project was a suitable subject for audit.
- **1.38** The objectives of the audit were to determine whether FaCS and Centrelink had:
- a valid Business Case for the Edge project, as revised from time to time, including estimated costs, actual costs, and expected benefits;
- effective governance of the project, including reviews at critical points in the project and subsequent decisions to continue or, in the final analysis, to discontinue;
- an appropriate contract with SoftLaw, which was adequately managed;
- delivered appropriate advice on progress, project viability, and acceptable solutions to technical issues to Executives of FaCS and Centrelink during the project; and
- valid reasons for discontinuing the project.

Audit scope, focus and methodology

- **1.39** The scope of the audit was limited to management of the Edge project by FaCS and Centrelink.
- **1.40** The audit examined project documents and files and interviewed project team management and other appropriate people, including SoftLaw representatives. Management of the project was compared to better practice identified in:
- reports from other audit offices (for example, Governance and Oversight of Large Information Technology Projects, New Zealand, April 2000);
- better practice identified in the UK Office of Government Commerce, Gateway Review Processes;
- better practice as identified in the Control Objectives for Information and Related Technology (CobiT) Audit Guidelines [P10—Manage Projects and DS2—Manage Third-party Services]; and
- the ANAO Better Practice Guide—Contract Management.²⁹
- **1.41** Despite Edge being terminated, the ANAO was able to see a demonstration of the stand-alone system, courtesy of SoftLaw.
- **1.42** Given SoftLaw's role in the Edge project, the Auditor-General invited the company to provide comments on relevant extracts of the proposed report. SoftLaw's comments were considered in the finalisation of the audit report.
- **1.43** The audit was conducted in accordance with ANAO auditing standards. The cost of the audit to the ANAO was approximately \$370 000.

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²⁹ ANAO Better Practice Guide—Contract Management, February 2001.

2. The Business Case for the Project

This chapter discusses the original Business Case for the project, including events leading up to the tender process. It also discusses a Business Case review conducted by the Edge team in October 2002.

Background

- 2.1 To enable management to make an informed decision about a project, a Business Case needs to include certain basic elements—such as costs, benefits, risks, and timeline. A Business Case for a project should also address the effectiveness of the project—that is measurement of the project meeting its objectives—and the efficiency of the project—that is measuring the return on investment. To address the project's efficiency and effectiveness, the Business Case should include a statement of the projects objectives, and how to measure/assess the achievement of the objectives; and an evaluation methodology to assess the success or otherwise of the project.³⁰
- 2.2 The ANAO reviewed the Business Case for the Edge project, as originally formulated, and as revised from time to time, against these requirements. The ANAO considered whether the Edge Business Case identified costs, benefits, risks, and timeline; whether it included measures to assess the achievement of objectives; and whether it included an evaluation methodology to assess the success or otherwise of the project.

Original Business Case

2.3 The Centrelink Board of Management and the FaCS Executive Board gave in principle agreement to the expert system project in May 1998 and August 1998 respectively. A July 1998 Business Case presented to the FaCS Executive Board identified potential areas of benefit, but did not quantify them. A tender process was undertaken and, with more accurate estimates of the cost of the project available, the final Edge Business Case³¹ was presented to the Centrelink Board of Management on 16 November 1999, and a summarised version to the FaCS Executive Board of 8 May 2000. Both Boards agreed to the project. The FaCS Executive Board decision included a request for quarterly reporting on the project and an independent risk assessment of the project to be undertaken as soon as possible.

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These requirements were distilled as the main items that need to be included in a Business Case. The main sources for these requirements are the UK Office of Government Commerce—*Gateway Reviews* (available at <www.ogc.gov.uk), and a New Zealand Auditor-General Report on *Governance and Oversight of Large Information Technology Projects* (available at <www.oag.govt.nz).

At that time the Business Case was called *The Expert System Project* and the tender was for a *Life Events Expert System*. The retitling of the project to Edge occurred in mid 2000.

Costs and return on investment

- 2.4 In the November 1999 Edge Business Case, and in the May 2000 summary, project costs were estimated to total some \$59.26 million over seven years. Applying a discount rate of 6.33 per cent, the project team calculated the Net Present Value (NPV) of the project costs as \$52.03 million. After also calculating the NPV of the savings the agencies expected to generate from the project over the project term, the costs and expected savings were compared to identify the NPV of the cumulative return on the project investment amounting to \$54.69 million³² (\$76.99 million³³ before calculation of the NPV).
- 2.5 The project team estimated that the benefits likely to be realised from the project ranged between \$27.78 million (conservative) and \$40.62 million (optimistic) each year from 2002–03 onwards. The savings figures referred to above were calculated on the basis of the conservative estimate.
- 2.6 The Business Case presented to the Centrelink Board of Management, and the summary presented to the FaCS Executive Board, did not identify any source of funding for the project. However, before the Business Case had been finalised, the Government had provided an initial amount of \$18 million in the 1999–2000 and 2000–01 Federal Budgets, as part of the funding provided for establishing the Families Assistance Office, for developing an expert system to support the Office. The Business Case and summary identified the need for additional funding, and the minutes of the May 2000 FaCS Executive Board meeting stated that funds would need to be borrowed from the Department of Finance. This option was later discarded, and the additional funds were provided from FaCS and Centrelink internal resources.

Benefits

2.7 Savings and benefits were categorised as tangible and intangible. Tangible benefits identified in the Business Case included a reduction in the use of 'in-house experts', a reduction in the number of post claim contacts (due to the decision being explained to the customer at interview), overpayments that will not occur with the use of Edge, a reduction in training needs of staff, and a reduction in the use of letters and forms. These savings were expected to be offset somewhat by the extra time needed to complete claims and complex reassessments using Edge.

This figure arises from a negative return on investment for the early years, and the inherent nature of an NPV calculation that results in a greater discount the further the calculation goes into the future.

The figure of \$76.99 million was not used in the Business Case. It is the sum of the cumulative return from the Business Case before accounting for inflation, and is used here for consistent comparison with the estimated total cost.

As noted previously (paragraph 1.29), Centrelink disagrees with this view of the funding of the project.

- **2.8** Although not specifically stated in the Business Case, there was an underlying assumption that the bulk of claims would be processed during a face-to-face interview with the customer. This was a fundamental issue. The nature of expert systems supports an interview process where the expert system itself decides on the flow of questions, depending on answers to previous questions. Expert systems are less effective when entering data from a form where the questions are in a predetermined order.
- **2.9** The interview strategy was also aligned with Centrelink's 'Getting it Right' strategy. Getting all customer information at an interview, and providing the customer with the rationale behind decisions, was expected to reduce rework, customer queries, and complaints.
- **2.10** Intangible benefits identified in the Business Case were:
 - accurate identification and notification of entitlement;
 - improved customer awareness of available benefits and consequences in change of circumstances;
 - improved customer confidence in advice;
 - improved consistency in decision making and support for staff;
 - greater customer awareness of obligations;
 - improved speed of decision making;
 - future online access to a single, up-to-date rulebase for the business of all client agencies;
 - a stand-alone PC-based version of the Expert System for Centrelink's common transactions (available to third parties) with eventual capability for data transfer to Centrelink input systems;
 - improvement to policy through identification and removal of rarely or never invoked rules; and
 - Centrelink will be better placed to take on new business, for example issuing of passports. A rulebase could be built for associated processes and roll out of the new procedures could occur with a minimum of training, no need to print new stationary, etc. 35
- **2.11** As at the termination of the project in late 2003, none of the identified savings or benefits had been realised. Centrelink advised the ANAO that other projects benefited from the groundbreaking work of the Edge project. This is further discussed in paragraph 2.32 onwards.

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Expert System Project, Business Case Reference No. 98/394, 10 November 1999, Section C.

Risks

2.12 The Business Case recognised that 'implementing a huge production strength expert system on Centrelink's scale is a high-risk project'. Included in the Business Case was a risk analysis. The risk analysis identified 16 risks, of which 13 were considered high, or significant, risks to the project. In particular, the following high risk was identified (Figure 2.1):

Figure 2.1

High risk from original Edge Business Case

Risk	Mitigation strategy
Expert system and M204 ^(a) connectivity/mapping is a new area of work and may be more difficult than anticipated.	Monitor closely. Payments to the successful tenderer will be tightly linked to deliverables.

(a) M204 is the Database Management System Centrelink used on its central computer.

Source: The Expert System Project: Business Case Reference No: 98/394

2.13 In the event, this risk came to fruition. The issue proved to be a major source of delay in getting the connected version of the system rolled out. The mitigation strategy identified for this risk, that is to monitor closely and tightly link payments to the contractor deliverables, was unlikely to have been effective. This is because the responsibility to connect to the mainframe and M204 rested with Centrelink, as stated in the 1999 Business Case, rather than the contractor, SoftLaw.

Timeline

2.14 At the time the Business Case summary was presented to the FaCS Executive Board on 8 May 2000, a contract with SoftLaw³⁷ had been signed (on 25 February 2000) and the timeline for the Edge project agreed. The timeline given to the FaCS Executive Board was:

December 2000 – Stand-alone (not connected to Centrelink mainframe);

February 2001 – Policy Development Application;

March 2001 – Internet application (also stand-alone); and

July 2001 – Connected system (connected to Centrelink mainframe).³⁸

2.15 The Business Case timeframe provided for the connected version to be progressively rolled out to Centrelink's network from September 2001. In the

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³⁶ ibid, Executive Summary.

³⁷ SoftLaw was the successful tenderer that supplied software and expertise for the development.

Minutes of FaCS Executive Board Meeting, Agenda Item 1.1 Expert Systems Project, 8 May 2000.

event the roll out began in July 2002, 10 months behind schedule. It was subsequently stopped in February 2003 (see also paragraph 2.45 onwards).

Aims of the project

2.16 The Business Case stated FaCS' and Centrelink's business aims of the project. The business aims were supported by a number of business objectives. The Business Case stated:

The aims of the project from a Centrelink perspective are to:

- integrate an expert system (the System) with existing Centrelink systems and use it in Centrelink offices throughout Australia to connect customers with Centrelink payments and services. The System will be capable of integrating with the Life Events approach. It will also be used in a stand-alone mode in HIC [Health Insurance Commission] and ATO [Australian Taxation Office] offices to meet FAO obligations; and
- possibly use the System via the Internet (not connected to Centrelink's mainframes) to enable general public access including self-service.

The aims of the project from a FaCS perspective are to:

- optimise the accuracy, consistency and completeness of assessment decisions made by FaCS' service providers in delivering FaCS programs;
- improve FaCS service providers' capacity to respond to changes in legislation and associated rules;
- develop and maintain a FaCS rulebase module as the basis of all future expert systems for which FaCS is a program manager or in which FaCS is a policy stakeholder;
- develop and utilise a System to model policy changes to analyse and assess the impact of potential legislative amendments;
- promote better informed discussion between FaCS and the social policy community; and
- provide a system to promulgate social security legislation, policy and interpretation to the general community.³⁹
- **2.17** The Business Case did not include any identification of measures to determine whether these aims had been achieved.
- **2.18** The Edge system, particularly if used in an interview process, had the potential to meet the first of FaCS' objectives, and to improve the completeness of data collection, and the accuracy of the data collected. In part, this was due

Expert System Project, Business Case Reference No. 98/394, 10 November 1999, Aims and Objectives.

to the nature of expert systems ensuring that all relevant questions were answered during the interview, and the presence of the customer at the interview allowing for discussion and explanation of questions. However, it should be recognised that total accuracy can never be guaranteed by any system. There is always the potential for customers to supply incorrect information, and for errors to be made in entering data into the system.

Measurement of success

2.19 The Business Case did not include a strategy for measuring the realisation of benefits. The approach was limited to:

Measurements of Successful/Achievement of Outcomes

The phased Implementation Strategy outlined in Section D (Project Strategy) will enable us to carry out an ongoing assessment/evaluation in regards to achieving anticipated outcomes.⁴⁰

2.20 As indicated above, amongst the expected benefits of Edge was a reduction in rework, and a reduction in customer complaints and post-claim visits. In order to calculate any savings brought about by the introduction of Edge, FaCS and Centrelink would have needed to know the resources allocated to these tasks before the system was introduced. There is no indication that this data was available.

Other elements included in the Business Case

- **2.21** In addition to the major elements as stated above, the Business Case included the following elements:
- deliverables (stand-alone and connected versions);
- the roles of the three organisations;
- dependencies/relationships;
- constraints;
- risk management;
- monitoring and dispute resolution;
- project management structure;
- a brief statement on reviews; and
- an overview of project strategy.
- **2.22** The ANAO considers that better practice would have included metrics for measuring whether the project met its objectives, and measuring the success or otherwise of the project.

⁴⁰ Ibid., Measurement of Successful/Achievement of Outcomes.

2.23 The project would also have benefited by including better risk mitigation strategies for the risks identified.

Recommendation No.1

2.24 The ANAO recommends that FaCS and Centrelink include in future Business Cases, metrics for measuring the ongoing success or otherwise of the project.

Agencies' responses

FaCS

- **2.25** FaCS agrees with this recommendation and has already implemented measures to ensure this. Since the Edge project started in 2000 FaCS has put in place a standard project management methodology, known as the Project Management Framework.
- **2.26** Use of the Framework is required for all projects that report to the Executive Management Group (EMG). Projects are identified for reporting to the EMG with regard to risk, profile and value of the project.
- **2.27** The Framework includes standard requirements for reporting on the progress of a project, including performance measures and metrics. The steering committee for our largest current IT project regularly receives reports on a range of metrics for timing, scope and budget.
- **2.28** In addition, major IT projects are independently reviewed at a number of predetermined critical stages to ensure that the project meets underlying business needs. Our largest current IT project has recently undergone its first standard independent gateway review.
- **2.29** The review processes that FaCS has put in place also examine governance, project team structures and engagement of program business areas within FaCS, and the approach to development and deployment of the system to ensure that the project is closely aligned to business areas of FaCS.
- **2.30** FaCS is currently investigating Benefits Management practices and principles and how these may complement and be applied to IT related projects.

Centrelink

2.31 Agreed. All business cases coming forward for decision must now include a number of metrics which provide a basis for progressively measuring project outcomes and success

Actual benefits accruing from the project

- **2.32** The project was over time, over budget, and terminated before completion. Direct financial savings from the project were not realised, and the project was unsuccessful when assessed against its aims (paragraph 2.16). However, although not specifically included in the original Business Case, the agencies did gain benefits from the project.
- **2.33** A significant part of associated software developments are available for use by subsequent projects, such as the Customer Account Project.⁴¹ If not developed for Edge, this software would have had to be developed for these projects, with consequent extended development times and costs. Centrelink advised the ANAO that some \$12.6 million of capitalised expenditure on Edge is applicable to further developments.
- **2.34** Within Centrelink, Edge pioneered the use of Internet style functionality on desktops interfacing with ISIS. The requirements of Edge forced Centrelink to examine its network performance, resulting in network efficiencies, identification and elimination of bottlenecks, and greater network throughput.
- **2.35** A further benefit was that, for possibly the first time, ISIS could be compared with an independent competitive system. Edge was written strictly against the legislation. The legislation and procedural rules formed the rulebase for Edge. The implication was, where there were differences between Edge and ISIS, there was potential for ISIS to be in error. A considerable effort, by the Edge team, was required to resolve the differences between Edge and ISIS, and resulted in some corrections to ISIS. This issue is further discussed in paragraph 6.64 onwards.
- **2.36** Centrelink also advised the ANAO that, as a result of the Edge development, Centrelink now has a core group of staff with experience in the software and techniques needed for further developments in the multi-platform environment required for Centrelink to deliver its services through the Internet. A primary goal of Centrelink is offering customers the opportunity to access services through the Internet.

Business Case review 2002

2.37 The November 1999 Business Case for the project stated:

When the detailed planning occurs, milestones and management reporting points will be scheduled at regular intervals during the whole project.

Customer Account is a web-screen interface to customer data stored on the Centrelink mainframe. By using a series of 'views' that group customer data in a logical way, it makes information easier to access and understand.

Specifically ongoing reviews/progress reports will be carried out monthly. A full Post-implementation Review will be carried out after each major implementation phase.⁴²

- **2.38** The first (and only) major implementation phase occurred in July 2002 with the roll out of the connected version of Edge. Implementation of the previously completed standalone (discussed in paragraph 6.25 onwards) and PDA (see paragraph 6.35 onwards) versions was planned after the connected version was rolled out.
- **2.39** Roll out followed a major test of the system using Centrelink's User Acceptance Facility (UAF) located in Adelaide. It was therefore an appropriate time to conduct a full review of the system (identified in this report as the 2002 review). There was disagreement between FaCS and Centrelink as to the conduct of the review, with FaCS seeking an independent review, while Centrelink did not consider an independent review necessary.
- **2.40** In the event, the review was an internal one conducted by the Edge team. The report of this 2002 review also stated that a full post-implementation review of the implementation of the connected version would be carried out in April-May 2003, indicating that perhaps this 2002 review was considered a preliminary to a later major independent review.
- **2.41** The covering minute to the report of the 2002 review, addressed to FaCS and Centrelink Senior Executives responsible for overseeing the 2002 review, stated:

The review focuses on:

- restating original benefits and adding any new ones;
- providing an implementation status update;
- providing comment on projected risks and identifying any new risks;
- updating costs (including budget funding provided as part of the FAO initiative);
- providing information on additional costs and reasons why they have been incurred;
- reviewing, as far as possible, assumptions made in relation to productivity gains;
- updating Return on Investment projections; and

Expert System Project, Business Case Reference No. 98/394, 10 November 1999, Review.

⁴³ Review of the Expert System Business Case, 17 October 2002, p. 18.

- re-examining and stating non-tangible benefit areas.
- **2.42** The 2002 review concluded that the business aims and objectives from the original Business Case were still relevant and achievable.
- **2.43** The 2002 review report stated that development priority had been given to the connected application. The 2002 review report also stated that the community showed strong interest in the stand-alone version, and that further piloting would be undertaken following its completion in early 2003. FaCS had previously agreed to Centrelink representations that the stand-alone version not be released until Edge was available in all Centrelink offices.
- **2.44** The 2002 review report stated that the PDA was not specifically mentioned in the original Business Case. Deployment of the PDA was expected some time in 2003.

Timeframe delays

2.45 The 2002 review report discussed the delays, which had been encountered in the development timeframe. A table in the review listed initial target dates alongside actual dates. Key dates from this table are shown in Figure 2.2.

Minute from FaCS and Centrelink Edge Project Managers to FaCS and Centrelink Senior Executives, 17 October 2002.

Figure 2.2

Actual achievement against key target dates

Description	Target date	Actual date	Months difference
RFT close date	7 June 1999	7 June 1999	
Contract signing	End Oct 99	25 Feb 2000	4
Standalone ready for user acceptance	23 June 2000	13 Dec 2000	6
Standalone ready for Piloting	Sept 2000	Dec 2000	3
Connected system construction signoff	Early Nov 2000	31 May 2002	18
Connected system user acceptance	End Jan 2001	June 2002	17
Connected system test release	Early Feb 2001	July 2002	19
Connected pilot version ready (wave 1)	End June 2001	July 2002	12
Connected system progressive roll out	Sept 2001	July 2002	10

Source: Review of the Expert System Business Case, October 2002, Attachment 4—Project Delivery Schedule (Target vs. Actual).

- **2.46** As can be seen from the dates in the table, both for the standalone and the connected version, there was an attempt to catch up at the end of the phase. In particular, the timeline for the connected version appears to have been compressed. The user acceptance, test release, pilot version (Wave 1), and progressive roll out all occurred within one month, against a planned nine months.
- **2.47** The main factors that caused delays to the project were identified as follows:
 - Data Mapping more complex than envisaged.
 - Learning Curve steeper than anticipated.
 - Multiple Platform Complexity (within Centrelink) issues.
 - Multiple Platform Complexity across organisations.
 - The requirement to use Centrelink Online⁴⁵ and the associated complexity.

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⁴⁵ Centrelink Online is Centrelink's own middleware system (software between the mainframe and the PC), which controls access between web browsers and the mainframe.

- Transactionalising M204 Screens (which were assumed to have been done by the ISIS FAO Team).
- Unavailability of FAO expertise at appropriate times.
- Need for more extensive Piloting and UAF involvement than envisaged.
- Significantly more work than envisaged for Performance and Stress Testing.⁴⁷
- **2.48** Of these factors, the data mapping, multiple platform complexity, and the requirement to use Centrelink Online were identified as high risk in the original Business Case, as stated in paragraph 2.12.

Edge accuracy

- **2.49** Centrelink had previously (in November 2001) compared the accuracy of Edge with that of ISIS. The 2002 review report restated the major findings of this comparison: that ISIS had a 70 per cent error rate and that 74 per cent of these errors could have been avoided by using Edge. This was clearly seen as a major justification for continuation of the Edge project in the context of the 2002 review.
- **2.50** The ANAO also found other references to the results of the 2001 comparison of the relative accuracy of Edge and ISIS, in documents relating to the Edge project. The results were consistently used to support continuation of the project. The details of the 2001 exercise, and a subsequent exercise undertaken in March 2003, are discussed in paragraph 6.53 onwards.

Optimistic functionality expectations

- **2.51** The 2002 review report stated the expectation that the December 2002 release of Edge would be capable of processing 90 per cent of FAO customers, the March 2003 release 95 per cent, and the June 2003 release almost 100 per cent. These predictions proved to be optimistic.
- **2.52** In March 2003, Centrelink mandated the use of Edge in two CSCs. Mandated use meant that Customer Service Officers (CSOs) in these CSCs were required to use Edge first to complete customer claims. The mandated exercise found that less than 50 per cent of claims could be processed through Edge.

⁴⁶ Converting the normal ISIS/M204 screen presentations into transactions that could be used by Edge.

⁴⁷ ibid., p. 4.

2.53 The ANAO noted that the predictions provided by the Edge project team to both organisations' Executives were optimistic, particularly in relation to the proportion of claims the system would be capable of processing at a particular time. These included predictions given to the Guiding Coalition, those contained in Centrelink's quarterly report to FaCS, and those included in planning documents internal to the team. However, the 2002 review report notes that 'the processing of customers is not limited by the modelling of the legislation but by the interaction with ISIS and ensuring compatibility'. The ANAO understands this sentence to mean that, while the Edge system itself had the functionality to process claims, for some claims the functionality to communicate with ISIS was not available. 'Ensuring compatibility' in the sentence is taken to mean that some other claims were not to be processed through Edge, as the Edge result was different to the result that ISIS would give for the same customer.

Costs and benefits

2.54 The 2002 review report identified that expenditure over the first three years of the project had increased from an original estimate of \$35.62 million, to a new estimate of \$43.76 million. Further, the estimate for the first five years had increased from \$47.28 million to \$64.94 million. Savings were also revised down from an annual \$27.78 million (conservative) to \$23.18 million. This was because of a revision in the salary-related administration figure, that is, the estimated overheads per employee relating to administration (not including property overheads). The 2002 review stated the original Business Case had used an inappropriate figure for this. In addition, expected program savings were reduced by \$1.32 million.

2.55 No attempt was made to revise the underlying assumptions on which the annual savings were calculated (reduced staffing, training, and rework). The review stated 'the Edge Steering Committee has decided these areas will be measured when the Edge has been fully implemented and "bedded down" (three to six months after implementation)'. The review also stated 'the evidence to date suggests that the assumptions made in the Business Case and the consequent productivity estimates will materialise once full roll out is achieved." As in the original Business Case, no attempt was made to determine metrics for measuring savings or success.

⁴⁸ ibid.

⁴⁹ ibid., p 8.

Risks

2.56 The 2002 review examined the risks identified in the original Business Case, and added two new risks, while retaining all of the original 16 risks. The particular risk of connectivity/mapping with M204 identified earlier (paragraph 2.12) drew the following comment:

Connectivity and transactionalisation were/are much more difficult than originally envisaged. Data Mapping was very complex in areas such as child maintenance. All three partners are involved in Data Mapping and are working together to understand the different requirements and develop appropriate solutions. There is a critical dependence on keeping M204 and Edge synchronised. There is a risk of changes to ISIS not being properly communicated to Edge and visa versa. However, this is the price that is paid for highly integrated systems that reuse data across systems and platforms. It is no different to what happens now across Centrelink IT for Scripts, Sprite, IES, SAMS etc. This risk is currently mitigated by IT stakeholders meetings conducted by the IT Front Door for each release. Automated mitigation strategies are under consideration but cannot be delivered in the short term. It should be noted that data mapping problems should become apparent during the testing period that precedes each Edge release.

Development of the rulebase was initially done without due consideration of the interfacing (to ISIS) requirements. This resulted in a number of complex Data Mapping issues and delays to the project. Some could have been avoided or reduced if the interfacing requirements had been identified earlier in the project.⁵⁰

2.57 Throughout the Edge project, a Risk and Issues Committee addressed the project risks. This is discussed further in paragraph 4.90 onwards.

2002 review summary

- **2.58** The report of the 2002 review was delivered on 17 October 2002. At this time, the first two Waves⁵¹ had been rolled out. Although users had expressed reservations about the limited functionality available in the release, the 2002 review report stated that such reservations had been expected.
- **2.59** The 2002 review report stated the expectation that the December 2002 release would process 90 per cent of customers, rising to almost 100 per cent by June 2003. These expectations were not met. An independent review at this time may have taken a more critical view of the project.

⁵⁰ Ibid., Attachment 6, Risk No.8.

Progressive implementation of Edge in Centrelink offices was termed 'Waves' to avoid confusion with releases of improved functionality.

- **2.60** As mentioned above, the project condensed several delivery dates into one for the roll out of the first Wave, and the testing of the release at the UAF encountered numerous problems (discussed further in paragraph 6.66 onwards). An independent review may also have questioned the strategy of roll out with limited functionality.
- 2.61 However, the 2002 review took place after roll out had begun, and was almost certainly too late to alter the roll out strategy. Better practice would have been to have an independent review after the UAF testing and before roll out, as roll out is a critical point in the project.
- **2.62** Centrelink provided the following advice on initiatives taken since the inception of Edge.

Since the inception of the EDGE initiative in 1997, Centrelink has put in place a range of measures to improve the governance, conduct and outcomes of major and minor projects. These measures include:

- the creation of General Manager (SES Band 2) positions to oversee a portfolio of interrelated business, project and service delivery functions;
- the introduction of mandatory project management qualifications for project managers;
- the introduction of Gateway Reviews within the Refresh Program to assess the readiness of medium to high risk projects to progress to the next phase or milestone. The review model is now being extended to encompass non-Refresh projects; and
- the creation of the Business Transformation Domain in 2004 as part of a new Centrelink business model in which the functions of IT and business capability creation projects and service delivery have been brought together. ⁵²

Business Case review 2003

2.63 In mid 2003, FaCS and Centrelink agreed to conduct a major independent review of the project (identified as the 2003 review in this report), to assess whether there was a viable business case for further development of the Edge system. The review team recommended termination of the project, which occurred in November 2003. The 2003 review is discussed in detail in Chapter 7.

⁵² Centrelink response to ANAO issues papers, 24 December 2004.

3. The Edge (Life Events Expert System) Procurement Process

This chapter examines the procurement process leading to the appointment of SoftLaw as the preferred tenderer, and the subsequent signing of contracts for development of the Life Events Expert System (LEES, later renamed Edge).

Introduction

- **3.1** FaCS and Centrelink undertook a complex procurement process to purchase the products and services necessary to introduce a Life Events Expert System (LEES, later renamed Edge). The agencies adopted a multi-stage procurement method covering:
- a Request for Information (RFI) issued to selected parties;
- an invitation to build the prototype Planning Your Retirement (PYR) system; and
- a Request for Tender (RFT) issued to two parties.
- **3.2** This process led to two contracts being signed with the preferred tenderer, to develop the Life Events Expert System, and for Software Licences and Support.
- **3.3** Figure 3.1 illustrates the timeline for the procurement process.

Figure 3.1

Procurement processing timeline

Date	Event
23 April 1998	Draft RFI issued for comment
1 May 1998	Final RFI issued
13 May 1998	RFI closed
23 October 1998	Steering Committee approved PYR development
4 December 1998	Successful RFI respondents invited to develop PYR
13 April 1999	RFT draft issued for comment
29 April 1999	RFT issued
7 June 1999	RFT closed
7 June 1999	PYR delivered
14 September 1999	Steering Committee approved Tender Evaluation Working Group (TEWG) preferred tenderer
19 November 1999	Centrelink Board noted preferred tenderer
25 February 2000	Two contracts signed with SoftLaw
6 March 2000	Unsuccessful tenderer debriefed

Source: ANAO analysis of FaCS and Centrelink information.

Commonwealth procurement

- 3.4 Competitive tendering and contracting can be a complex task that draws on a wide range of expertise, including people and project management skills, as well as more technical skills such as procurement. This chapter deals with the procurement process up to signing the contracts and debriefing the unsuccessful tenderer.
- 3.5 Under the *Financial Management and Accountability Regulations* 1997 (FMA Regulations) an official performing duties in relation to the procurement of property or services must have regard to the Commonwealth Procurement Guidelines (CPGs). ⁵³ Officials must make written records of any actions that are not consistent with the Guidelines and state their reasons for their actions. ⁵⁴ Agencies, or officials undertaking procurement, also have an obligation to be aware of relevant government policy and to reflect its requirements in the way they do business. ⁵⁵

⁵³ Financial Management and Accountability Regulations 1997, Regulation 8(1).

⁵⁴ Financial Management and Accountability Regulations 1997, Regulation 8(2).

⁵⁵ Financial Management and Accountability Regulations 1997, Regulation 9(1)(a).

3.6 The ANAO sought to determine whether, during the Edge project, core policies and principles stated in the relevant CPGs were observed in selecting a supplier for the development. Figure 3.2 below sets out the core policies and principles of the CPGs applicable at the time of the Edge project procurement process.

Figure 3.2

Australian Government Procurement Principles

Planning

Sound Planning ensures that the objectives of competitive tendering and contracting are clear, that the implementation strategy addresses all issues that need to be managed during and after the tender process, and that the process will be consistent with the Commonwealth Procurement Guidelines.

Value for money

Value for money is the core principle underpinning Australian Government procurement. This principle, in a competitive procurement process, requires a comparative analysis of all relevant costs and benefits of each compliant proposal throughout the whole procurement cycle (whole-of-life costing). Buyers will not necessarily obtain the best available value for money by accepting the lowest-price offer that meets mandatory requirements.

Open and effective competition

Open and effective competition is a central operating principle for all Commonwealth procurement. It requires:

- a framework of procurement laws, policies, practices and procedures that is transparent;
- · openness in the procurement process; and
- encouragement of effective competition through procurement methods suited to market circumstances.

Ethics and fair dealing

In procurement, as in all aspects of business and public administration, if all parties involved comply with ethical standards they can deal with each other on a basis of mutual trust and respect and conduct their business in a fair and reasonable manner, and with integrity.

Accountability and reporting

Accountability involves ensuring individuals and organisations are answerable for their plans, actions and outcomes. Openness, transparency and good record keeping in administration, through public reporting, are essential elements of accountability.

National competitiveness and industry development

Through its procurement, the government seeks to promote the development of Australian and New Zealand industry, including small and medium enterprises, by means that are consistent with the achievement of value for money objectives.

Support for Commonwealth policies

The Commonwealth uses its procurement to support a range of policies. The government also expects suppliers to comply with the laws of the land, for example those relating to trade practices, privacy and crime.

Source: Department of Finance and Administration, Commonwealth Procurement Guidelines: Core Policies and Principles, March 1998, and Competitive Tendering and Contracting, Guidance for Managers, March 1998.

Planning

- 3.7 Given the size and strategic importance of the Edge project, the ANAO sought evidence of thorough planning early in the procurement lifecycle. This included analysing options and adopting an appropriate procurement method, undertaking a procurement risk assessment, considering probity issues, and identifying key documents to be created during the process.⁵⁶
- **3.8** FaCS and Centrelink files contained no record of procurement planning. Nor was there any evidence of analysing available procurement options, or the potential impact on achieving a value-for-money outcome if they went to an RFT, given the investment to date in developing an expert system for the Caboolture trial.
- 3.9 Early in the planning process agencies need to identify, analyse and evaluate risk and plan for its management. FaCS and Centrelink advised the ANAO they developed a basic procurement risk assessment. They were, however, unable to locate a copy of the document or provide evidence of identifying and implementing any risk mitigation strategies.
- **3.10** The ANAO considers that the project's procurement planning did not meet better procurement planning practice as outlined in *Commonwealth Procurement Guidelines: Advice to Managers*.

Procurement method

- 3.11 Under the CPGs, the procurement method is not prescribed. However, agencies must choose methods to promote open and effective competition. Although the Edge project did not develop a procurement plan or analyse the available acquisition options, as mentioned earlier, it undertook a multi-stage tender process including:
- a selected RFI;
- the PYR challenge for successful respondents to the RFI; and
- a selected RFT.
- **3.12** The ANAO considers this staged procurement approach was sensible, given the system complexity and new technology it was implementing.

Department of Finance and Administration, Competitive Tendering and Contracting, Guidance for Managers, March 1998.

Department of Finance and Administration, Competitive Tendering and Contracting, Guidance for Managers, March 1998. p.14.

Request for information

- 3.13 At the time of the procurement process in 1998–99, expert systems were relatively new technology and the number of suppliers capable of developing expert systems was limited. The agencies issued the RFI documentation to only the eight vendors listed as supplying expert systems under the Department of Finance and Administration's PE68 contract.⁵⁸
- **3.14** The CPG requirement for open and effective competition specifies that adequate information must be provided to those wishing to respond to opportunities to enable them to do so effectively. Following the Caboolture trial, FaCS and Centrelink commissioned SoftLaw to undertake a comprehensive scoping report to specify the Family Decision Support System (FDSS) requirements. Parts of the scoping report were attached to the RFI to help respondents develop their responses.
- **3.15** Centrelink records indicate that FaCS and Centrelink took care to avoid implying a preference for any vendor in the documentation.
- **3.16** The draft RFI was issued for comment 23–28 April 1998; and the final RFI document was released on 1 May 1998. RFI responses closed on 13 May 1998.
- **3.17** Contrary to better procurement practice, ⁶⁰ Centrelink and FaCS developed the RFI evaluation criteria after the RFI closed on 13 May 1998. The ANAO was unable to determine whether the evaluation criteria were referred to the joint FaCS–Centrelink Steering Committee, or an authorised decision-maker, for approval.
- **3.18** Five companies responded to the RFI. Three respondents were assessed as meeting the RFI evaluation criteria and moved to the RFT stage. Two further respondents were advised they would not proceed to the RFT stage, as they had not responded formally to the RFI. That is, they had not provided necessary information as specified in the RFI documentation.

PE68 was a Commonwealth Government IT Services Panel Contract in place at the time of the Edge procurement process. It was administered by the Department of Finance and Administration.

Department of Finance and Administration, Commonwealth Procurement Guidelines: Core Policies and Principles, March 1998. p8.

Department of Finance and Administration, Competitive Tendering and Contracting, Guidance for Managers, March 1998. p26.

Tenderers' challenge—Planning Your Retirement

3.19 In November 1998, the Steering Committee added to the procurement process, a 'tenderers' challenge' to develop a small expert system. This was intended to validate FaCS' and Centrelink's strategic direction for expert systems, having regard to technical, commercial, staff, and customer acceptance issues. Based on a set-price contract, the agencies commissioned the successful RFI respondents to build a small expert system, PYR. Of the three RFI respondents, only SoftLaw and BHP IT⁶¹ accepted the PYR invitation.

Planning Your Retirement intellectual property

- **3.20** In line with better practice applying in 1998–99, agencies were not to use bids to unfairly acquire intellectual property. 62
- **3.21** FaCS and Centrelink went to considerable lengths to protect tenderers' intellectual property. The deadline for the PYR products played a key part in the agencies' desire to issue the RFT as soon as possible. This stemmed from concerns expressed by SoftLaw and BHP IT that, once the PYR product was delivered, intellectual property leakage might occur that could advantage the Commonwealth and/or competitors when responding to the RFT. To prevent this happening, the project aligned the PYR and RFT closing dates on 7 June 1999.
- **3.22** Centrelink records indicate that PYR systems were installed on standalone file servers in a physically secure environment. The agency restricted access to the PYR systems until after tender evaluations were concluded.
- **3.23** The ANAO considers that FaCS and Centrelink took appropriate steps to protect tenderers' intellectual property.

Request for tender

3.24 At the time of the RFT in 1998–99, a Centrelink multi-stage procurement process would normally have taken between 12 and 16 weeks. ⁶³ The RFT document was released on 29 April 1999 and closed on 7 June 1999, more than 12 months after the completed RFI stage. Discussions with FaCS and

BHP Information Technology Proprietary Limited was previously a wholly owned subsidiary of BHP. It was sold to Computer Sciences Corporation on 1 June 2000. Viewed September 2004. http://www.bhpbilliton.com/bb/investorsAndMedia/newsArchives.jsp?id=News%2F200%FNR_BHPNewsRelease240500.html.

Department of Finance and Administration, Competitive Tendering and Contracting, Guidance for Managers, March 1998.

⁶³ Department of Social Security, Buying for DSS, July 1995.

Centrelink staff, and examination of agency documents, including the joint FaCS–Centrelink Steering Committee minutes, indicate there were a number of reasons, as follows:

- the complexity of the procurement;
- the time required to consult extensively with, and to respond to, the needs of a wide range of stakeholders within both FaCS and Centrelink, as well as seeking advice from external advisers;
- FaCS and Centrelink being at different points in their system development lifecycle; Centrelink had identified its requirements and translated them into an RFT while FaCS was still developing its requirements for stakeholder review;
- the inclusion of the tenderers' challenge in the procurement process;
- Centrelink's difficulty in getting staff to provide input to the tender documentation;
- debate between FaCS and Centrelink over the RFT content; and
- a federal election wherein the policy platforms of an incoming government could impact on the project's direction.
- 3.25 The relevant CPGs provided that those wishing to respond to opportunities must be given adequate information to enable them to do so effectively. ⁶⁴ In the case of information technology requirements, the relevant CPGs stated that agencies must make requests for tender available to potential tenderers in draft form for at least one month to allow for comment before finalisation. ⁶⁵
- 3.26 The ANAO considers that the RFT contained adequate information for bidders by way of a detailed statement of requirements. Tenderers, nevertheless, expressed concern at the delay in releasing the RFT. They were also concerned about the short timeframe allowed to provide comments on the draft contract issued with the tender document and to respond to the final RFT. Two companies warned Centrelink that the tight RFT response time could impact on the quality of their tender. FaCS and Centrelink dealt with these concerns by holding an open forum where bidders could ask questions and provide feedback for inclusion in the final document. The agencies also extended the RFT closure date by two weeks.

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Department of Finance and Administration, Commonwealth Procurement Guidelines: Core Policies and Principles, March 1998. p8.

⁶⁵ ibid

The tender evaluation report commented unfavourably on the quality of the tender submitted by one of these companies.

- **3.27** As mentioned earlier, officials must make written records (including reasons) of any actions that are not consistent with the CPGs. FaCS and Centrelink files contained no documents recording the reasons for not allowing at least one month for comment on such an information technology draft RFT document.
- 3.28 The draft contract for developing the system was an attachment to the RFT. Compliance with the contractual conditions was also one of the three evaluation criteria for the tender. Accordingly, the ANAO considers that, while the project team mitigated the relatively short timeframes they imposed for comments and responses to the RFT, in view of the size and complexity of the statement of requirements and accompanying contract, they did not meet the requirements of the relevant CPG.
- **3.29** Several versions of the RFT were developed during the year following the completed RFI process. The Steering Committee minutes do not specifically record approval of the final RFT prior to its release. However, FaCS provided a minute detailing outstanding issues in relation to the RFT, and minutes of the meeting of 23 April 1999 showing that the minute was discussed. FaCS advised the ANAO: 'We believe that these two documents read together demonstrate that the final RFT documentation was approved by the Steering Committee.' 68
- **3.30** Tender responses were received from two consortia headed by SoftLaw and BHP IT respectively. Both tenderers were Australian companies and the prime contractor for the SoftLaw consortium was a small–medium sized enterprise.

Tender evaluation

3.31 At the time of the June 1999 tender, FMA Regulations required that:

An approver must not approve a proposal to spend public money (including a notional payment within the meaning of section 6 of the Act) unless the approver is satisfied, after making such inquiries as are reasonable, that the proposed expenditure:

- is in accordance with the policies of the Commonwealth; and
- will make efficient and effective use of the public money.⁶⁹

Financial Management and Accountability Regulations 1997, Regulation 8(2) states 'An official who takes action that is not consistent with the Guidelines must make a written record of his or her reasons for doing so'.

Email from FaCS to the ANAO, 10 December 2004.

⁶⁹ Financial Management and Accountability Regulations, Regulation 9, available from http://scaleplus.law.gov.au/html.numrul/15/7722/pdf/1997SR328.pdf [accessed September 2004].

3.32 Good administrative practice in tender evaluation involves determining the basis on which the winning tender will be selected, before the tender documentation is issued. It also involves devising evaluation criteria that will provide a methodology for distinguishing between tenders. Evaluation criteria should clearly identify the relative importance of all relevant factors and provide a sound basis for a procurement decision. Each tendered offer should be evaluated applying only the evaluation criteria and methodology notified to bidders in the request for tender documentation.

Tender evaluation planning

- **3.33** The RFT issued to prospective tenderers contained three basic selection criteria and listed many detailed requirements. Chapter 3 of the RFT also documented the intended evaluation process. FaCS and Centrelink formed a Tender Evaluation Working Group (TEWG), comprising staff from information technology and business units in each agency. The TEWG adopted a scoring methodology to rate and compare the requirements. However, no weightings were allocated to the criteria or requirements.
- **3.34** FaCS and Centrelink developed a Tender Evaluation Plan. FaCS' probity consultant advised the agency on 9 June 1999 that:

it's difficult (impossible) to demonstrate Probity unless a detailed plan exists before the evaluation begins. It would not be possible to get a Probity clearance in these circumstances.⁷⁰

- **3.35** However, Centrelink records show that the Steering Committee approved the Tender Evaluation Plan on 23 June 1999, 16 days after the tender closed on 7 June. Centrelink's records further demonstrate that the tender evaluation had commenced, with three major evaluators working on it almost full-time, before the Tender Evaluation Plan was approved. In the intervening period, between 7 and 23 June 1999, FaCS and Centrelink continued to debate their approach to evaluating the tender's content.
- **3.36** The TEWG sought clarification from both tenderers regarding their tender responses. Centrelink records show that the evaluation team was conscious that clarifying information must not constitute substantial change to the tender.
- **3.37** The ANAO considers that the project team did not meet probity better practice when it finalised the tender evaluation plan, after the evaluation process had begun. However, the ANAO found no evidence this impacted adversely on the RFT outcome.

Record of phone conversation between FaCS Project Manager and probity consultant.

Tender evaluation process

3.38 Although FaCS and Centrelink developed a tender evaluation plan, this did not include developing a set of procedures for the evaluation team to use. The agencies' records demonstrate that evaluators did not use a standard template when scoring the RFT requirements and capturing associated comments. The ANAO conducted a random crosscheck of scores transcribed from the raw evaluation forms to the tender evaluation report and found errors. When interviewed by the ANAO, Centrelink staff could not explain these discrepancies.

Value for money

- **3.39** The CPG relating to Value for Money required that procurement specifications be written in functional and performance terms, to encourage competition, particularly from Australian and New Zealand suppliers. The two tender respondents were Australian companies; and both were endorsed government suppliers. To promote open competition, a detailed scoping report was distributed with the RFI, and a comprehensive Statement of Requirements was included in the RFT documentation.
- **3.40** The TEWG undertook a comprehensive assessment of the proposals, submitted by SoftLaw and BHP IT, to determine whether each tender complied with requirements, timeframes and fitness for purpose. The TEWG used a software product to assist in capturing, storing and analysing the tender evaluation data.
- 3.41 The evaluation team went to considerable lengths to ensure they were comparing 'like' with 'like' bids. SoftLaw's tender response included charges for work that were not costed by BHP IT, and which covered work to be performed by Centrelink. The TEWG extracted those components from SoftLaw's tender response 'to provide a fairer comparison'. This resulted in the 'SoftLaw Adjusted' bid that was used throughout the tender evaluation process.
- **3.42** Figure 3.3 shows the 'total cost of ownership'⁷³ comparison using the SoftLaw Adjusted bid.

⁷¹ Tender Evaluation Report Section 8.3.

⁷² Tender Evaluation Report Section 8.6.

^{&#}x27;Total cost of ownership' was a term used in the Request for Tender. It was stated to include all operational and staffing costs, and any additional benefits that may accrue through Centrelink selecting a particular tender (Chapter 3 of the RFT).

Figure 3.3

Total cost of ownership

	3 years (NPV)	7 years (NPV)
Estimated SoftLaw adjusted total cost	\$37 796 277	\$50 567 844
Less estimated BHP IT total cost	\$33 316 638	\$39 679 535*
SoftLaw proposal more expensive by:	\$4 479 639	\$10 888 309

^{*&#}x27;BHP IT's offer was for three years only and included estimates for years four and five. [In its offer] BHP IT made no judgement regarding costs in years six and seven [these] were extrapolated by the TEWG based on the figures provided in BHP IT's tender response.'

Source: Centrelink's Tender Evaluation Report.

- **3.43** Although it was the higher cost proposal, the TEWG considered SoftLaw was the better value for money option. The reasons cited in the tender evaluation report included:
- SoftLaw's significantly higher score than BHP IT, particularly in functionality terms;
- BHP IT's higher risk proposal;
- BHP IT's tender proposal and responses to clarification questions contained insufficient detail to convince the evaluators that they were able to deal with many of the technical issues; and
- SoftLaw's slightly higher rating, ahead of BHP IT, in meeting relevant government policies.
- 3.44 The TEWG, in its tender evaluation report, recommended SoftLaw as the preferred tenderer. The recommendation was approved by the Steering Committee on 14 September 1999. On 16 November 1999, the Centrelink Board of Management, in considering the Business Case for proceeding with the development of the expert system, noted 'that the contract may be signed before the next Board Meeting'.

- **3.45** The ANAO considers that the Steering Committee had adequate support for the decision that the preferred tenderer offered better value for money. The ANAO notes, however, that the tender evaluation report could have been improved by:
- including FaCS' costs, throughout the financial evaluation section, to compare and assess the total vendor costs for the joint project;
- substantiation of the TEWG claim that SoftLaw would be able to deliver a quality solution approximately six to nine months ahead of BHP IT;
- attributing a dollar figure to anticipated savings due to the expected earlier delivery, which were expected to offset the higher SoftLaw cost; and
- attributing a dollar figure to some of the identified risks.

Ethics and fair dealing

- **3.46** In implementing CPGs regarding ethics and fair dealing, managers are required to consider privacy, information security, conflict of interest and dealing with the risk of unethical behaviour.⁷⁴
- **3.47** The ANAO examined documents and practices related to privacy, security, and conflict of interest. The ANAO considers the agencies took adequate measures to meet their obligations against these requirements.

Risk of unethical behaviour

- **3.48** A system of checks should be in place to limit the risk of unethical behaviour. This should be part of an agency's management and audit strategy as is applied in other sensitive areas of activity. All bidders should receive identical information and receive fair and equal consideration.⁷⁵
- 3.49 Although FaCS and Centrelink did not develop a probity plan for the procurement stage of the Edge project, Centrelink provided probity briefings for all tender evaluation team members before starting the evaluation process. Contractors working with the tender evaluation team were required to sign deeds of confidentiality. According to the agencies' records, bidders were given the same information on the same day and had identical lodgement dates for products and other material.

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Department of Finance and Administration, Competitive Contracting and Tendering: Guidance for Managers, March 1998.

Department of Finance and Administration, Commonwealth Procurement Guidelines: Core Policies and Principles, March 1998. p. 12.

- **3.50** FaCS appointed a consultant from a private law firm to act as independent probity adviser to both agencies throughout the tender evaluation process. The agencies also consulted the Australian Government Solicitor's office on probity issues, where they required a second opinion to that provided by the consultant. FaCS engaged a private law firm to advise them on the tender documentation and contract issues, and a consultant outsourcing company for procurement advice.
- **3.51** The TEWG, in its tender evaluation report, states that 'the tender evaluation process was conducted to the appropriate standards of probity and confidentiality.' The ANAO notes that a probity plan was not developed, nor was a probity audit undertaken, to support this statement. It was a self-assessment based on a Centrelink staff member's personal opinion. It was not based on any independent and systematic probity review of the project conducted by an appropriately qualified person, measured against a specific criteria set.
- 3.52 A number of probity issues arose during the procurement process and most were dealt with quickly and appropriately (for example an investigation into possible unauthorised access to shared folders on FaCS' computer network). After the RFT closed, however, there was considerable discussion between Centrelink and FaCS regarding the guidance received from the probity adviser concerning the tender evaluation plan, the tender evaluation process, and the tender evaluation report structure. FaCS also continued to seek probity and tender evaluation advice from consultants, other than their official project probity adviser, after the tender had closed. FaCS was advised that:

The evaluation methodology was very broad—it does not provide a precise explanation of the procedures that the members of the team will follow, the nature of their input and how it will contribute to the evaluation. The document should provide a detailed and clear explanation for a third party (perhaps looking at it some time after the event) as to how you will work. The idea is to be able to state this in advance of starting work so that you cannot be accused of making it up as you go along, or of slanting the outcome towards a particular bidder.⁷⁶

3.53 The final tender evaluation plan did not reflect this advice and the methodology remained very broad, with little in the way of procedures. FaCS and Centrelink files do not record the reasons for not following the consultant's guidance in this instance.

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⁷⁶ Email from probity consultant to FaCS Project Manager, 8 June 1999.

- **3.54** After the RFT had closed, FaCS and Centrelink continued to debate the evaluation methodology and tender evaluation plan approval process. They also disagreed about starting the tender evaluation without the approved evaluation plan in place.
- 3.55 The issues of concern outlined above should have been resolved before the RFT was issued, and certainly before it closed and the evaluation commenced. The FaCS in-house legal unit identified early in the RFT development stage that there were clear risks for the Commonwealth from a probity viewpoint. The ANAO considers the process could have been improved by considering the need for a probity adviser and/or probity auditor as part of the procurement-planning phase (see paragraph 3.34). In this project, the probity adviser's involvement, at an earlier point in the procurement process, would have resulted in less time-consuming debate on important issues after the tender had closed.

Contract negotiations

- 3.56 In approving SoftLaw as the preferred tenderer on 14 September 1999, the Steering Committee did so on the basis that it would reconsider its options if significant progress had not been made in negotiating threshold issues within one month. The Steering Committee also agreed to the recommended negotiating approach on the same day. The negotiating team comprised representatives from FaCS, Centrelink, and the Australian Government Solicitor's office, with a consultant from a private legal firm providing advice on an 'as required' basis.
- **3.57** Contract negotiations between the parties took five months, followed by an independent legal review of the draft contracts.
- **3.58** On 25 February 2000, the Centrelink delegate signed two contracts on behalf of the Commonwealth for:
- developing the Life Events Expert System; and
- software licences and support.

Compliance with Financial Management and Accountability Regulation 13

3.59 A person must not enter into a contract, agreement or arrangement under which public money is, or may become, payable unless a proposal to spend public money for the proposed contract, agreement or arrangement has been approved under FMA Regulation 9 or 10.⁷⁷ Centrelink was unable to provide the ANAO with evidence of the approved spending proposal to meet this requirement.

Debrief for unsuccessful tenderer

3.60 In line with the CPG requirement to offer unsuccessful bidders a written or oral debriefing, Centrelink wrote to BHP IT on 3 March 2000 attaching a written debrief on their tender response. The company also received an oral debrief on 6 March 2000. On 3 March 2000, the Australian Government Solicitor's office advised Centrelink to take notes at the debrief meeting, particularly regarding any questions raised by BHP IT. As FaCS and Centrelink files do not contain a record of meeting for the oral debrief, there is no record of the company's reaction or response to the agencies' feedback.

Record keeping

- **3.61** Good record keeping is essential for informed decision-making and accountability. The mechanisms for accountability within the Australian Government cannot work properly without good records. Records are the primary means by which government agencies explain their decisions and substantiate what they have done. Accountability has to operate both at the big picture level and at the finest level of detail.⁷⁸
- **3.62** In examining Centrelink procurement files, the ANAO noted that important documents, decisions and associated reasons were not filed or otherwise captured as a matter of record. The agencies were unable to provide the ANAO with important documents including:
- final RFT approval (paragraph 3.29);
- reasons for not allocating weightings to tender evaluation criteria (paragraph 3.33);

Financial Management and Accountability Regulations, Regulation 13.

National Archives of Australia, Record–keeping: A new Approach, http://www.naa.gov.au/recordkeeping/overview/new_approach.html#whyimport [accessed September 2004]

- reasons for FaCS and Centrelink not adopting the probity adviser's advice (paragraph 3.34);
- an approved proposal to spend public money under FMA Regulation 9 prior to entering into the February 2000 contracts with SoftLaw (paragraph 3.59);
- note for file regarding oral debrief provided to the unsuccessful tenderer (paragraph 3.60); and
- all 'raw' tender evaluation forms completed by the evaluation team.
- **3.63** The ANAO considers that the project's procurement records were characterised by:
- the recording of the decisions taken, but omitting any accompanying reasons for the decisions (for example, the Steering Committee's decision not to allocate weightings to the tender evaluation criteria);
- lack of response or comment on records raising significant issues (for example, a memo from Centrelink's National Purchasing and Contracts Unit advising, among other things, that a careful analysis of the costs and benefits of letting a contract to another party (that is, other than SoftLaw) must be undertaken in light of the considerable investment already made in product development);
- misfiled records; and
- records lacking some, and frequently all, of the following:
 - date;
 - author:
 - addressee; and
 - comments indicating status of document.
- **3.64** At the time of the procurement process, FaCS and Centrelink had paper-based archives systems. However, both agencies frequently relied on electronic files, stored on their computer networks, to provide the ANAO with evidence of their activities in relation to this procurement process. Due to the ease with which unprotected electronic files can be altered, these records are inherently less reliable.

- **3.65** The ANAO considers that FaCS' and Centrelink's procurement record keeping could be improved, to meet practice, by ensuring staff:
- have a thorough understanding of their record keeping responsibilities;
- are aware of the characteristics of good record keeping; and
- establish appropriate record keeping structures at the beginning of complex procurement processes.

Overall management of the process

- **3.66** The ANAO concluded that the Edge project procurement process was generally conducted in accordance with the relevant CPGs. However, some areas could be improved. These include planning, probity and record keeping.
- **3.67** FaCS and Centrelink advised the ANAO that, since the Edge procurement process, each agency has now implemented improved frameworks to assist staff with procurement activities, at all levels of complexity. These frameworks are readily available to all staff via the agencies' intranets.

4. Governance of the Project

This chapter discusses the governance arrangements for the project, including the operation of a number of committees associated with the project. It also discusses reviews by FaCS and Centrelink Internal Audit, and other reviews.

Background

- **4.1** Governance is the set of responsibilities and practices exercised by an organisation's executive with the goal of providing strategic direction, ensuring stakeholder and organisation objectives are achieved, managing risks appropriately and using resources responsibly.⁷⁹
- 4.2 IT governance is an integral part of agency governance. IT governance ensures that an agency's IT strategy is aligned with, and supports, the agency business strategy; appropriate control structures are implemented; IT resources are used responsibly; and IT performance is measured and appropriately managed. In summary, IT governance is a system of control to ensure that business objectives are achieved efficiently and effectively. 80
- **4.3** During the course of the audit, Centrelink provided a statement on the future of expert systems in Centrelink (included in this report as Appendix 2) and on Centrelink's current practices in project governance (included as Appendix 3). In the latter Centrelink states:

Centrelink has also developed a strategy to implement governance for architecture, which will ensure alignment and strategic direction. These arrangements have been put in place to ensure that the situation with EDGE will not happen again.⁸¹

Principles

- **4.4** In examining the governance of the Edge project, the ANAO considered the following principles appropriate:
- Responsibility for approving strategies, budgets and structures resides at agency board level.

SAI's Involvement in System Development: Opportunities and Risks. SAI Australia Response to SAI UK Principal Paper: 18th Commonwealth Auditors-General Conference, Kuala Lumpur, Malaysia 6–10 October 2002.

Governance, Control and Audit for Information and Related Technology, CobiT Guidelines 3rd edition, CobiT Framework Principles.

⁸¹ Centrelink response to ANAO issues papers, 24 December 2004.

- A clear framework for the governance of the project is in place, including clear definition of responsibilities, budgets, objectives, processes, methodologies and approvals.
- Performance targets are set and performance against those targets is monitored.
- Progress is regularly reviewed and appropriate action taken after each review.⁸²
- 4.5 The ANAO applied these principles in considering the governance arrangements put in place in relation to the Edge project within FaCS, within Centrelink, and in relation to the joint project. The next chapter focuses on the financial management of the Edge project.

Governance at FaCS

4.6 The Executive Board is the main committee or group advising the Secretary of FaCS. Other committees at FaCS relevant to governance of FaCS' IT projects are the Business Planning and Resource Allocation Committee (BARAC), the Information and Communications Technology Committee (ICTC) and the Risk Assessment and Audit Committee. Details of these committees are set out in Figure 4.1.

These principles, and other requirements used as a basis for this audit, were developed by the ANAO derived from several sources including CobiT issued by the IT Governance Institute <www.itgi.org>, principles stated in the UK Office of Government Commerce Gateway process <www.ogc.gov.uk>, and previous ANAO audit reports.

Figure 4.1

Governance structure relevant to FaCS' management of the Edge Project⁸³

Executive Board

The FaCS Executive Board meets monthly. The Secretary chairs the Board; members include the Deputy Secretaries, the Executive Directors, the General Manager of the Child Support Agency, the Chief Financial Officer, and two Assistant Secretaries on rotation. Centrelink is also represented. The Board provides strategic leadership, considers matters of significant strategic importance, and monitors departmental performance against goals in the strategic plan.

Business Planning and Resource Allocation Committee (BARAC)

BARAC is responsible for guiding business planning, and determining and monitoring resource allocation and expenditure. A Deputy Secretary chairs BARAC. Membership includes the Chief Financial Officer and three Executive Directors on rotation.

Information and Communications Technology Committee (ICTC)

The function of the ICTC is to facilitate ICT-based support for FaCS business activities. To do this, the Committee coordinates strategic directions and technical architecture standards for ICT investments in the Department, while seeking to foster a business-centred ICT asset management culture. The committee meets at least quarterly. The committee is chaired at Executive Director level and includes several Assistant Secretaries and Directors, the latter on a rotating basis, and a State or Territory Manager on a rotating basis.

Risk Assessment and Audit Committee

The Risk Assessment and Audit Committee consists of a Deputy Secretary as chair, two Executive Directors, the General Manager of the Child Support Agency, and two independent members. The Committee's objectives are to ensure the Department's approach to implementation of its control framework is effective, and to provide assurance to the Secretary on the preparation and review of the financial statements of FaCs. The Committee has no decision-making authority; it functions in an oversight, review, and advisory role. It has authority to request any information it requires from any employee of FaCs, and to obtain any independent advice it considers necessary. The Committee meets quarterly.

Source: FaCS Annual Report 2001-02, and Committee Terms of Reference from FaCS intranet.

FaCS: Reports to the FaCS Executive Board and Executive

4.7 The FaCS Executive Board approved the Edge project, subject to qualifications imposed by the Board, which included preparation of a Business Case, in August 1998. In May 2000, the FaCS Executive Board discussed a submission on Edge. The submission followed the Centrelink Board of Management's approval of the Business Case for the project in November 1999, and the signing of the contract with SoftLaw in February 2000.

⁸³ During the course of the audit FaCS restructured its senior committees. The structure shown here is the one that was in existence during the Edge development.

4.8 The submission to the FaCS Executive Board contained the main details of the Business Case, including the timeline, costs and benefits, and four main risks of the 16 risks stated in the Business Case. The decision of the FaCS Executive Board was stated as follows:

The Board agreed to:

- 1 Note the attached submission, including the governance arrangements, identified risks and proposed mitigation strategies.
- 2 Endorse, for further discussion with Centrelink, the proposed principles concerning the funding arrangements at Attachment B of the submission taking into account concern raised with wording in point 3 about collapsing of ideas between FaCS and Centrelink.
- 3 Discuss the next stage of the systems development, including expansion of the knowledge base to other payments.
- 4 Quarterly reporting on the Expert Systems project and for an independent risk assessment of the project to be undertaken as soon as possible.⁸⁴
- 4.9 The May 2000 FaCS Executive Board decision did not make clear what the Board meant by 'quarterly reporting on the project'. Progress reports on the Edge project were provided to the Board in August and November 2000, and May 2001. However, the Edge project is not then mentioned in the FaCS Executive Board minutes until July 2002, and again in March 2003.
- **4.10** Business arrangements between FaCS and Centrelink include quarterly performance reporting from Centrelink to FaCS. These reports from September 2001 onwards included a report on Edge. It is not clear whether these general quarterly reports, which did include information on the Edge project, satisfied the FaCS Executive Board's reporting requirement.
- **4.11** The ANAO considers it is also not clear that the FaCS Executive Board was kept informed of a lack of progress in negotiating the MOU with Centrelink, and the consequent lack of agreement between FaCS and Centrelink on the funding arrangements for the Edge project.
- 4.12 A report on the project to the FaCS Executive Board, on 28 May 2001, advised that the MOU 'would be negotiated with Centrelink in the next few weeks.' The next reference to Edge in the FaCS Executive Board minutes was a July 2002 report on Centrelink issues by the Centrelink representative on the FaCS Executive Board, which included the roll out of Edge. The same meeting was informed that 'harvesting of savings from Centrelink for the expert

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Minutes of FaCS Executive Board, 8 May 2000.

Submission to FaCS Executive Board of 28 May 200, Agenda Item 2.1 Partnership Framework— Strategic Outcome Report.

systems project'⁸⁶ could still impact the Department's budget position. The minutes do not record any mention of the lack of progress on the MOU.

- **4.13** In July 2003, the FaCS Executive Board was advised that the review of Edge was scheduled to start on 4 August. The records for the Board meetings for the following six months, to the end of 2003, included monthly progress reports on Edge.
- **4.14** Despite the lack of clarity in relation to the reporting arrangements regarding the Edge project to the FaCS Executive Board, the ANAO considers that the FaCS Executive Board appeared to be appropriately informed on the progress of the project. However, the ANAO could not determine whether the FaCS Executive Board was appropriately informed of lack of progress in agreeing funding arrangements, between FaCS and Centrelink, for Edge.

FaCS: Reports to the Business Planning and Resource Allocation Committee and the Information and Communications Technology Committee

- **4.15** The FaCS Edge team did not provide regular reports to either BARAC or the ICTC. The ICTC considered it had no responsibility for Edge; Edge was considered an external IT project, whereas the ICTC was focused on internal IT projects. Therefore, there were no reports to the ICTC about Edge.
- **4.16** FaCS advised the ANAO that BARAC was a funding allocation committee, and did not have a monitoring role of the progress of projects. Funding for the Edge project was initially provided as part of the budget process funding the FAO. Therefore, BARAC was not involved in the initial funding process. FaCS advised the ANAO that each year the branch responsible for Edge (which varied) had to confirm funding for the year with BARAC. However, FaCS was unable to supply evidence of this funding confirmation.
- **4.17** BARAC was also involved on two occasions where additional funding was sought beyond that provided in the budget process (discussed further in paragraph 5.45 onwards).

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⁸⁶ Minutes of FaCS Executive Board, 22 July 2002.

Conclusion

- **4.18** The ANAO concluded that the FaCS Executive Board was appropriately advised of the progress of the project. However, the ANAO could not determine whether the FaCS Executive Board was appropriately informed of the lack of progress on agreeing funding arrangements, between FaCS and Centrelink, for Edge.
- **4.19** The Edge project was the largest IT development undertaken by FaCS since its creation in 1997. However, the IT Committee was not involved, on an ongoing basis, with the Edge project.

Governance at Centrelink

4.20 The committees at Centrelink relevant to governance of major projects are the Centrelink Board of Management, the Guiding Coalition, the Business Improvement Committee (BIC), the Information and Technology (I&T) Committee, and the Audit and Risk Committee. Details of these committees are given in Figure 4.2.

Figure 4.2

Governance structure relevant to Centrelink's management of the Edge Project

Centrelink Board

The Centrelink Board of Management governs Centrelink. The Board is responsible for ensuring the corporate governance framework is in place. The Guiding Coalition—the peak management group that includes all Centrelink Senior Executive Service officers—governs Centrelink internally.

The role of the Board is to:

- decide the Agency's goals, priorities, policies and strategies; and
- ensure that the Agency's functions are properly, efficiently and effectively performed.

Board committees assist the Board in ensuring the efficiency and effectiveness of the corporate governance framework. The Board decides which committees should operate. Currently there are three committees—the Audit and Risk Committee, the Quality Committee and the I&T Committee.

I&T Committee

The I&T Committee provides advice and direction to the Board on strategic I&T issues, particularly those likely to impact on Centrelink's ability to deliver government services.

Audit and Risk Committee

The Audit and Risk Committee supports the Board in ensuring Centrelink operates with proper financial management and internal controls and by reviewing specific matters that arise from the audit process.

Guiding Coalition

The Guiding Coalition is led by an Executive consisting of the CEO, the Deputy CEO Customer Service, the Deputy CEO Business, the Deputy CEO Business Capability and the Deputy CEO Digital Business.

The role of the Guiding Coalition is to:

- guide the organisation;
- set direction and lead change;
- establish a culture for the future;
- · be an educative forum; and
- · communicate decisions.

Business Improvement Committee

The Business Improvement Committee is a sub-committee of, and assists the Guiding Coalition to fulfil its responsibilities. BIC's responsibilities are:

- ensuring the most effective and efficient use of funds within Centrelink, including internal improvement projects and budget work;
- · approval and overseeing the Centrelink Project Program; and
- project management within Centrelink.

Source: Centrelink Annual Report 2002-03, Centrelink Project Management Policy (2001).

Centrelink: Reports to the Centrelink Board of Management

- **4.21** Updates on the Edge project were included in both the CEO's reports, and the I&T Committee reports, to the Centrelink Board of Management. Both reports made brief statements as to the current status of the project. There is no indication in the material provided to the ANAO that the Centrelink Board of Management was specifically informed at any point of the failure to agree on, and sign, an MOU with FaCS.
- **4.22** The CEO's report to the Board of April 2003 included a statement of the coverage of Edge, and the suspension of the roll out. The report stated:

Edge is still operational in 28 offices. Rollout has been suspended until concerns over stability and performance can be satisfactorily resolved. Improvements have been made in these areas since the March release, but concerns still exist.

Recently a 100 per cent mandating exercise was undertaken in Toowoomba and Bankstown CSCs. The purpose was to assess the level of stability and measure functionality. The results show, that despite covering 90–92% of all customer circumstances, less than this could be processed entirely through Edge. This was due to a combination of customers not in scope for Edge and system bugs.⁸⁷

Centrelink: Reports to the Information and Technology Committee

- **4.23** Edge was a regular item on the agenda of the I&T Committee. Following termination of the Edge project, a briefing on the 'learnings' from the Edge Business Case Review was provided to the I&T Committee on 10 March 2004.
- **4.24** The ANAO considers that the I&T Committee took appropriate steps to keep informed of the progress of the Edge project.

Centrelink: Reports to the Guiding Coalition

- **4.25** Edge was a regular item on the Guiding Coalition agenda for the period October 2000 to March 2003. A progress report was given to 13 of the 20 meetings of the Coalition for that period. In February 2002, the Guiding Coalition endorsed the formation of the Edge Implementation Committee (EIC).
- **4.26** In February 2003, shortly before the roll out of Edge was suspended, the Guiding Coalition was informed that 'Following the December Release more than 92 per cent of claims can be processed'. 88 In March 2003, the Guiding

⁸⁷ Centrelink CEO's Business Operations Report, April 2003.

Minutes of Guiding Coalition Meeting, 5–7 February 2003, Rydges Lakeside Hotel, Canberra.

Coalition was 'provided an update on the strategies being put in place to implement the Edge project.'89

4.27 However, the Guiding Coalition was not advised when the roll out of Edge was suspended in February 2003, nor was it briefed on the subsequent termination of the project. This would seem unusual given the view of the EIC that it was a sub-committee of the Guiding Coalition (see paragraph 4.84), and the fact that the BIC is also a sub-committee of the Guiding Coalition (Figure 4.2). However, as noted above, the Centrelink Board of Management and the I&T Committee, both of which included members of the Guiding Coalition, were appropriately informed of the progress of the Edge project.

Centrelink: Reports to the Business Improvement Committee and the Centrelink Projects Office

- **4.28** Centrelink required that the Edge project team report to the BIC on progress on a quarterly basis. An Edge Status Report was also provided to various interested parties, including members of the FaCS–Centrelink Steering Committee, on an approximately monthly basis.
- **4.29** The quarterly reports to the BIC were in a format prescribed by the Centrelink Projects Office (following the formation of that Office in 2001) and forwarded to the BIC by that Office. The report included progress against milestones and budget. In particular, the report advised the BIC of any under- or over-spend on the project. However, reports to the BIC over-estimated the expenditure of the project by some \$3 million (see paragraph 5.56).
- **4.30** The Edge Status Report detailed the progress made on the project since the last report, identified issues arising, and next steps. The report provided interested parties with a detailed statement of the project. The Status Report did not include financial issues.

Conclusion

4.31 The ANAO concluded that, generally, the Centrelink governance committees were appropriately informed of the progress of the Edge project. There are some exceptions, for example the Guiding Coalition was not briefed on the termination of Edge. Also, there is no evidence that the Centrelink Board of Management was kept informed of the lack of progress in completing the MOU between FaCS and Centrelink on the project.

Minutes of Guiding Coalition Meeting, 19–20 March 2003, Rydges Lakeside Hotel, Canberra.

Joint Project Agreement and Memorandum of Understanding

Joint Project Agreement

- **4.32** Following the formation of Centrelink (under the *Commonwealth Service Delivery Agency Act 1997*) on 1 July 1997, FaCS (then the Department of Social Security) and Centrelink developed a Business Partnership Agreement (BPA) as a framework for managing the relationship between the two agencies. The BPA was revised in 1999, 2000, 2001, and in 2004 as part of the FaCS-Centrelink Alliance 2004 relationship project.
- **4.33** A Joint Project Agreement (JPA) for the Edge project was included in the 1999 BPA, and mentioned in later versions of the BPA. The 2001–04 BPA, which concluded on 30 June 2004, stated 'details of funding allocated for and the financial principles governing the Edge (expert system) project are specified in the memorandum of understanding between FaCS and Centrelink'.
- 4.34 The two organisations developed a new version of the JPA during 1999 and 2000. In May 2000, FaCS signed the agreement and forwarded it to Centrelink for signature. The ANAO was advised that Centrelink signed the document, but the agencies were unable to provide a copy signed by both parties. However, the ANAO was informed by both agencies that they operated according to the agreement.
- **4.35** Work continued on a further JPA. In November 2001, an email between FaCS and Centrelink stated that the document was still undergoing revisions in mid 2001, and that FaCS was refusing to sign until the MOU was agreed. The ANAO obtained further versions of both the draft MOU and the JPA dated as late as 2003. However, the ANAO was unable to locate any further agreed and signed version of the JPA.

Memorandum of Understanding

4.36 The MOU was never agreed between the two agencies and was still outstanding at the termination of the project. Consequently, a number of issues defining the relationship between FaCS and Centrelink were never agreed. The main point of disagreement was the identification and timing of savings from the project. The contents of the JPA and the MOU were the subject of robust discussions between FaCS and Centrelink throughout the life of the project. In the event, the disagreement was never resolved and became irrelevant on termination of the project. However, in June 2004, Centrelink considered that FaCS owed it \$2.79 million (plus GST) but FaCS refused to pay. Centrelink eventually wrote off the amount. The MOU and funding issues are discussed in detail in the next chapter.

Dispute resolution

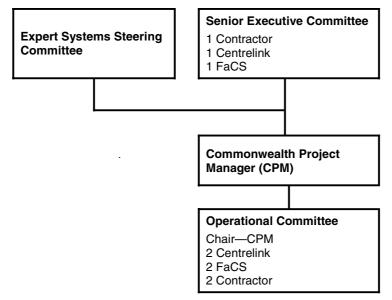
- **4.37** Centrelink provided the ANAO with an extract from the FaCS–Centrelink BPA of 2000–02, defining dispute resolution procedures that included escalation of a dispute to the agency heads, the Secretary of FaCS and the Chair of the Centrelink Board of Management, and then to agency ministers for resolution. These escalation procedures were not used to resolve the dispute between the agencies relating to the Edge MOU.
- **4.38** As mentioned in paragraph 1.4, since the termination of Edge, in October 2004, as part of the government restructuring of several departments and agencies, FaCS' responsibilities have changed. In addition, Centrelink now resides within the Human Services Portfolio. As the relationship between FaCS and Centrelink has changed, the ANAO makes no specific recommendation on dispute resolution procedures between the two agencies. However, the ANAO suggests that both agencies consider developing workable dispute resolution procedures for inter-agency agreements, including appropriate escalation arrangements.

Development Contract governance structures

4.39 The governance structure for managing the Development Contract with SoftLaw is defined in the Development Contract as shown in Figure 4.3:

Figure 4.3

Management structure as defined in the Development Contract



Source: Life Events Expert System Contract Part 3—Contract Management paragraph 11.

4.40 The roles of the Senior Executive Committee, the Commonwealth Project Manager (CPM), and the Operational Committee were defined in the Development Contract. The FaCS and Centrelink representatives on the Senior Executive Committee were also on the Expert Systems Steering Committee.

Expert Systems Steering Committee

4.41 The role of the FaCS–Centrelink Steering Committee was not defined in the Development Contract. The Steering Committee first met in March 1998 as the FDSS Joint Steering Committee. During the life of the Committee it changed names several times, ending as the Edge Steering Committee. The November 1997 Terms of Reference for the Committee defined its role as follows:

The role of the Committee is to:

- oversee the development and implementation of FDSS;
- devise a vision statement for FDSS:
- develop the strategic directions of FDSS; where necessary seek endorsement and funding from the DSS [now FaCS] Board of Management and the Guiding Coalition.
- 4.42 The Steering Committee was also to report to the FaCS Executive Board of Management, and the Centrelink Guiding Coalition, on a regular basis. FaCS provided secretariat services. The ANAO has not been able to identify any later version of the Terms of Reference. However, the JPA, included in the 1998–2001 BPA, states:

The Expert System Project is managed by a Joint DSS-Centrelink Steering Committee. The committee determines the strategic directions for the project and will be responsible for signing off on key milestones for the project, including the RFT documentation, the evaluation of the tender bids, the contract with the successful tenderer, the Joint Project Plan and the final evaluation of the project.

- **4.43** That JPA also states the membership of the Steering Committee to be three Centrelink members and two FaCS members, and other attendees.
- **4.44** The FaCS–Centrelink Steering Committee was also identified in the various subsequent JPA drafts. The JPA drafts stated: 'The Committee will represent the Commonwealth's interest and consider any issues affecting the relationship between the Contractor and the Commonwealth as well as internal Commonwealth issues.'90

Draft Joint Project Agreement for the Expert Systems Project, 2002–04, paragraph 5.4.

- 4.45 The FaCS–Centrelink Steering Committee met regularly in 1998 and 1999, at intervals of one to two months, during the tendering process. However, the FaCS–Centrelink Steering Committee only met once in 2000. This was in February to agree the final version of the Development Contract before it was signed on 25 February 2000. Work commenced on the project in March 2000. There were four meetings in 2001, the first in March and the final meeting in November 2001. This was the last full formal meeting of the FaCS-Centrelink Steering Committee, even though the Edge project continued until late 2003.
- 4.46 On four occasions, the BIC referred submissions made to it by the Edge project team, seeking additional funding for the project, to the FaCS-Centrelink Steering Committee. Details of these referrals and the financial management of the project are included in the next chapter (paragraph 5.49 onwards).
- **4.47** In 2001, as part of its development of a Project Management Framework, and creation of a Project Office, Centrelink developed rules for project steering committees. These rules included the expectation that steering committees would receive reports on the status of projects, and would have regular meetings. At its meeting of 24 July 2002, the BIC stated that, as the Edge project risk level is high, the Steering Committee should meet at least every eight weeks. ⁹¹
- **4.48** In 2001 and 2002, FaCS created a similar Project Coordination Unit and Project Management Framework. However, the ANAO noted that the Project Coordination Unit had no involvement with Edge.
- **4.49** In only meeting once in 2000, and never formally from November 2001, the joint FaCS–Centrelink Steering Committee did not accord with the project management rules of the two agencies. It also did not accord with the project governance structure as stated in the contract with SoftLaw.
- 4.50 It is also clear that the BIC expected that submissions to it, especially requests for additional funding, would be endorsed by the FaCS–Centrelink Steering Committee. However, in practice, the BIC referred submissions made to it for further funding for the Edge project, on to the FaCS–Centrelink Steering Committee on four occasions. No specific response to the BIC's referrals occurred in relation to the first three occasions. On the last occasion, in February 2003, Centrelink members of the Steering Committee met, and agreed to the relevant funding proposal. However, no FaCS representative was present at the meeting and no minutes were kept.
- **4.51** It is difficult to assess the consequences of the lack of FaCS–Centrelink Steering Committee meetings on the governance of the Edge project. The

⁹¹ Business Improvement Committee Project Decision, 24 July 2002.

Business Case review team found, in 2003, a perception by Edge team members of a lack of support by the senior management, due to the lack of Steering Committee meetings. Several interviewees commented that the committee did not meet often enough.

- **4.52** A significant responsibility of the Steering Committee was managing the relationship between FaCS and Centrelink for the project, including achieving agreement on the MOU that was never signed. The ANAO was advised that senior executives of the two agencies preferred to work 'one-on-one' to obtain agreement on various issues. Such meetings were frequently not documented.
- 4.53 The ANAO is of the view that the FaCS–Centrelink Steering Committee was there to provide direction and strategic advice to the project team, as stated in the 1997 Terms of Reference. The seniority of the FaCS–Centrelink Steering Committee members should have provided a vision of the agencies' needs and strategic direction that was not necessarily available to Edge team members. They also should have had the advantage of considering strategic issues without the distraction of the minutiae of the project. The lack of meetings of the FaCS–Centrelink Steering Committee increased the risk that the project would not meet the requirements of the organisations.
- 4.54 Centrelink suggested to the ANAO that a committee formed after the last meeting of the FaCS–Centrelink Steering Committee, the EIC, (see paragraph 4.82 below) was a de facto steering committee. However, the EIC distinguished its role from that of the FaCS–Centrelink Steering Committee and, for a number of meetings, had a meeting of the FaCS–Centrelink Steering Committee as an action item for the chair of the EIC. The EIC was a creation of Centrelink rather than of FaCS, and was concerned with implementing Edge in Centrelink, without necessarily regarding the requirements of FaCS. The Business Case Review of October 2002 stated the EIC 'focuses on implementation and deployment issues in the Centrelink network'.

Senior Responsible Owner

4.55 The report of a review of major government IT projects in the UK, strongly recommends the concept of a Senior Responsible Owner. The BIC meeting of October 2001 endorsed recommendations on project Steering Committees in Centrelink, but 'noted that the Business Owner is ultimately accountable for the project'. 94

⁹² Review of the Expert System Project Business Case, 17 October 2002, Executive Summary 7.0.

⁹³ Cabinet Office UK, Successful IT: Modernising Government in Action, available from <www.ogc.gov.uk>.

⁹⁴ Business Improvement Committee, Decisions of the Meeting, 9 November 2001.

- **4.56** The Senior Responsible Owner sits above the project manager. Edge had no single identified Senior Responsible Owner, and ownership was shared between FaCS and Centrelink. However, in the later stages of the project the Chair of the EIC undertook the role of the Senior Responsible Owner for Centrelink.
- **4.57** The UK report states that a number of projects failed because:
 - it was not clear where accountability lay at senior levels;
 - owners were not active or did not understand their role; and
 - ownership lay with more than one person or a committee. 95
- **4.58** These points of failure are applicable to the Edge project.
- **4.59** The ANAO concluded that the FaCS–Centrelink Steering Committee for Edge did not operate as an effective governance mechanism for the project, after the Development Contract was signed in February 2000. Following the February 2000 meeting of the FaCS–Centrelink Steering Committee, to agree the final version of the Development Contract, the Committee met on four occasions in 2001. However, after the meeting in November 2001, no further meeting of the Committee, which included the attendance of FaCS representatives, occurred.
- **4.60** The FaCS–Centrelink Steering Committee did not meet despite the clear expectations of Centrelink's BIC that it would. Indeed, at the BIC's meeting of 24 July 2002, the BIC stated that, as the project risk level is high, the Edge Steering Committee should meet at least every eight weeks.
- **4.61** A significant responsibility of the FaCS–Centrelink Edge Steering Committee was managing the relationship between FaCS and Centrelink for the project, including achieving agreement on an MOU. However, the MOU was never agreed and signed.
- **4.62** The ANAO considers that the ineffective operation of the FaCS-Centrelink Edge Steering Committee increased the risk that the project would not meet the requirements of both FaCS and Centrelink.

Recommendation No.2

4.63 The ANAO recommends that FaCS and Centrelink ensure that all project steering committees accord with the project policy and framework developed by the agencies, including regular meetings. The ANAO also recommends that, in future projects, FaCS and Centrelink identify and allocate responsibility to a Senior Responsible Owner.

⁹⁵ Cabinet Office UK, Successful IT: Modernising Government in Action, p18.

Agencies' responses

FaCS

- **4.64** FaCS agrees with this recommendation and has already implemented measures to ensure this. The FaCS Project Management Framework includes guidelines and procedures for staff to ensure that projects are effectively governed and managed. The Framework:
- includes reporting arrangements to the Executive Management Group to help ensure that project steering committees operate according to FaCS agreed processes, as well as allowing the Executive Management Group to track the progress of the project;
- includes guidance on standard roles, responsibilities and accountabilities, and includes key questions that steering committees should ask to test if a project is performing as planned;
- directs that there must be a single responsible project sponsor, whose duties are equivalent to the ANAO's senior responsible owner.
- 4.65 To ensure the Project Management Framework is working as effectively as possible, this will be assessed as part of the 2005 FaCS audit program. FaCS has also recently rationalised its governance systems to ensure clear accountabilities for all projects and program areas in FaCS. FaCS has also identified Governance and Resource Management as one of five core business processes in FaCS and work on this, including a review of governance arrangements, is a high priority for 2005.

Centrelink

- **4.66** Agreed. Centrelink has put in place a range of measures to improve the governance, conduct and outcomes of major and minor projects. These measures include:
- the introduction of mandatory project management qualifications for project managers; and
- the introduction of Gateway Reviews to assess the readiness of medium to high risk projects to progress to the next phase or milestone.
- **4.67** Project Steering Committees are required to use the Centrelink Project Management Framework. The framework provides details on membership, meeting dates, terms of reference and responsibilities.
- **4.68** All projects are assigned a Business Owner on approval of the project. Their role and responsibilities are clearly articulated in the Centrelink Project Management Framework. The duties of the Business Owner are equivalent to the ANAO's Senior Responsible Owner. The Business Owners will in future always be officers at SES level.

Senior Executive Committee

4.69 The role of the Senior Executive Committee as defined in the Development Contract was as follows:

The Senior Executive Committee will:

- (a) resolve significant issues concerning the Services, which are referred to it by either the Operational Committee, the Commonwealth Project Manager, or the Contractor's Representative;
- (b) operate as a high level dispute settling group of contentious issues such as those which have not been finalised by the Operational Committee; and
- (c) participate in other dispute resolution procedures in accordance with this Contract, as required.
- **4.70** As a dispute resolution reference committee, the Senior Executive Committee was never required to meet.

Commonwealth Project Manager

- **4.71** FaCS and Centrelink agreed that Centrelink would appoint the CPM. The CPM had overall responsibility for managing the project, including responsibility for determining if the SoftLaw deliverables specified in the Development Contract met the requirements of the Development Contract, and authorising payment to SoftLaw for the deliverables. The Edge Project Office helped the CPM manage the Contract. The Contract stated:
 - 14.2 The Commonwealth Project Manager will act as the agent of the Commonwealth (not as an independent certifier, assessor or valuer) in discharging each of the functions of the Commonwealth Project Manager under this Contract.
 - 14.3 The Contractor must comply with any reasonable instruction by the Commonwealth Project Manager given or purported to be given under a provision of this Contract. All instructions to be given by the Commonwealth Project Manager must be in writing.
 - 14A The Contractor must comply at all times with the Commonwealth Project Manager's reasonable requirements in relation to its evaluation and review of the Services including but not limited to the provision of financial, technical and other information.
- 4.72 The ANAO examined in detail changes to the Development Contract, payments for deliverables (including payments withheld where the deliverable did not fully comply with the contract), and reports on the progress of the project. The ANAO considers that the various people occupying the position of CPM discharged the duties of the position according to the requirements of the contract.

Operational Committee

- **4.73** Part 3, section 13 of the Development Contract required the parties of the contract to establish an Operational Committee. The Contract stated membership, roles and responsibilities, and reporting requirements. The Contract outlined the Operational Committee Report Structure (see Appendix 4). ⁹⁶
- 4.74 The ANAO considers that the requirements contained in the Contract were appropriate. They clearly set out the role of the Operational Committee in the overall governance structure of the project. Their inclusion in the Contract provided a formal basis for the processes and procedures for the Operational Committee. The operational committee was required, as per clause 13.4, to:
 - review and monitor progress under the Contract and report thereon in writing to the parties and, if required or requested, to the Senior Executive Committee;
 - when appropriate, recommend in writing to the Commonwealth Project Manager or to the Senior Executive Committee any variations to any part of the Contract, and include with any recommendations the Committee's written reasons for those recommendations;
 - identify and discuss alternative solutions for circumstances, issues and other factors affecting, or which may affect, the Services to be delivered under the Contract;
 - attempt to resolve major issues relating to the performance of the Contract, and, where it is unable to resolve an issue, to refer that issue to the Senior Executive Committee;
 - where relevant, discuss methods for the improvement of the quality or efficiency of the delivery of Services and the performance of the Contractor's obligations under the Contract;
 - discuss alternative strategies for successfully dealing with issues raised, with a view to formulation of an appropriate strategy for implementation by the Contractor;
 - address issues which may lead to dispute under this Contract;
 - foster effective liaison between Project teams and other relevant areas or persons connected with the provision of the Services;
 - prior to any Contract Material being placed on a Commonwealth System, allocate tasks for procuring any certification required by a contractor of the Commonwealth in respect of such Contract Material; and
 - carry out such other functions as are required of it in this Contract or as determined by the Senior Executive Committee or as otherwise agreed in writing between the parties.

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⁹⁶ Life Events Expert System Contract Schedule 9, Part D.

- **4.75** The Development Contract required that the committee consist of at least two representatives from each of the three organisations, and be chaired by the Commonwealth Project Manager. The committee always had this representation, and was often joined by others with specific areas of involvement in the project.
- 4.76 Clause 13.1 of the Development Contract established the Operational Committee and instructed that the decisions of the Operational Committee must be recorded in the minutes referred to in sub-clause 13.12. The minutes recorded attendance and apologies, decisions and matters to be actioned. Minutes were also substantial enough, when read in conjunction with the Operational Committee Report (see below), to explain what occurred to those who were unable to attend the meeting. Both FaCS and Centrelink kept and recorded the minutes on official files. In addition, minutes were held in electronic form in the 'Teamroom' allowing access for all Edge project staff.
- 4.77 The minutes of the meetings recorded any action items arising from the meeting. These action items were then numbered and discussed until a resolution was reached and the item could be closed. Each action item had a responsible person allocated to it, and outcomes were recorded in the minutes and operational committee reports.
- **4.78** The main responsibilities of the Operational Committee were to manage the relationship between the contractor and the Commonwealth, and ensure the detailed management of the Development Contract and its deliverables. These responsibilities were recorded in the minutes and the Operational Committee Reports.

Operational Committee Reports

- **4.79** The Operational Committee Reports were a formal monthly deliverable of the Development Contract by SoftLaw. The Development Contract stated as follows:
 - 13.5 The Contractor agrees to provide to the Operational Committee a monthly report electronically in a format which enables historical analysis and at a minimum level of information, as required by the Operational Committee to carry out its functions under this Contract addressing progress on the implementation of the Services.
- **4.80** SoftLaw met this requirement of the contract.
- **4.81** Overall, the ANAO considers that the Operational Committee met its requirements under the terms and conditions of the Development Contract.

⁹⁷ The 'Teamroom' was a Lotus Notes database structure providing access and storage of important documents of the Edge Project.

Edge Implementation Committee

4.82 The EIC was not defined as part of the governance structure in the Development Contract. Centrelink first proposed it in February 2002. The EIC first met on 15 March 2002. The Centrelink Edge business owner (SES Band 2 level) chaired the committee.⁹⁸

4.83 In February 2002, the CPM wrote advising potential EIC members of the proposed EIC membership (one representative from FaCS, eight from Centrelink, none from SoftLaw), and EIC responsibilities and scope. The memorandum advised that the EIC would report to the joint FaCS–Centrelink Edge Steering Committee (which never met during the life of the EIC). Meetings were expected to occur monthly. The responsibility and scope of the EIC were stated to be as follows:

The Implementation Committee will be responsible for:

- monitoring and overseeing the implementation of Edge; and
- overseeing the evaluation of Edge and the Post Implementation Review.⁹⁹

4.84 The first meeting of the EIC discussed its relationship with the FaCS-Centrelink Steering Committee. The minutes record the following:

The linkages between this Committee and the Edge Steering Committee were discussed, with it being noted that the Steering Committee has a wider focus (and includes more FaCS issues) whilst this Committee will focus on the implementation within the Centrelink network. In addition, the Edge Steering Committee is effectively a sub-committee to the Centrelink Business Improvement Council [sic] and to FaCS management whilst this is a sub-committee to the Centrelink Guiding Coalition. ¹⁰⁰

- **4.85** As noted above (Figure 4.2), the BIC is a sub-committee of the Centrelink Guiding Coalition. The above record seems to imply BIC was not a sub-committee of the Guiding Coalition.
- **4.86** The ANAO examined the minutes and papers of the EIC. The EIC made decisions on the roll out of Edge, the 2002 review of Edge and had a major influence on the 2003 review of Edge. The EIC initiated the 2003 comparison of Edge and ISIS (see paragraph 6.60).

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The first meeting had a total of 16 attendees and apologies, including FaCS members. Towards the end of the project in May 2003, a meeting had 33 attendees and apologies.

Memorandum from Centrelink Edge Project Manager to specified FaCS and Centrelink officials, 18 February 2002.

¹⁰⁰ Edge Implementation Committee Minutes, 15 March 2002.

4.87 The ANAO considers that the EIC discharged its responsibilities for implementing Edge appropriately. However, as the FaCS–Centrelink Steering Committee never met during the life of the EIC, despite being an action item on the EIC agenda for several meetings, the EIC did not report to it.

Other committees

4.88 The Edge project had a number of other committees and regular meetings to address various aspects of the project, and to facilitate communication between groups. Some of the Committees are discussed below.

Joint Project Committee

4.89 The Joint Project Committee was defined in the FaCS–Centrelink JPA. The Committee met immediately before the Operational Committee, to discuss the FaCS–Centrelink position on issues. The ANAO was informed that no minutes of the meetings were kept as the issues discussed were raised and minuted at the Operational Committee.

Risk and Issues Committee

- **4.90** The Risk and Issues (R&I) Committee was a sub-committee of the Operational Committee, membership included SoftLaw, FaCS and Centrelink. Initially, meetings were held on a weekly basis. During 2001, this was reduced to a monthly basis. The Committee first met on 21 June 2000, and continued meeting regularly until June 2003.
- **4.91** All Edge project staff, from both SoftLaw and the Commonwealth, were entitled to raise formal risks and issues. A person initiating a risk or issue would first complete a Risk/Issue template and forward it to their Team Leader. The Team Leader would then complete an assessment of the issue on the request form and forward it to an R&I Committee member for acceptance.
- 4.92 If the R&I Committee member did not accept the risk or issue, feedback would be provided to the originator. If the risk or issue was accepted the R&I Committee member could choose to either: complete the Potential Cost and Treatment Description and present the risk/issue at the next R&I Committee meeting; or present the request at the next R&I Committee meeting for discussion on the potential cost, treatment options, and further action to be taken. The R&I Committee would then forward the risk or issue to the identified resolution group and track it through to completion.

- **4.93** The Terms of Reference for the R&I Committee specified that, if a risk is accepted, the Committee will: 'set appropriate review dates; put in train mitigation strategies or assign responsibility to others; review accordingly; close as able; and refer to the Operational Committee, if appropriate'.¹⁰¹
- **4.94** Initially risks and issues were tracked in separate registers. In September 2000, the issues register was closed and all issues were reclassified as risks. All risks were given a unique number and were recorded in a Risk Register.
- **4.95** The R&I Committee escalated risks and issues to the Operational Committee for deliberation when it was assessed that this was warranted. The R&I Committee reported to the Operational Committee by including a summary statement in each Operational Committee report.
- **4.96** The ANAO concluded that the Risk and Issues Committee procedures were appropriate for the project. Meetings were held regularly, and risks were appropriately assessed.

Incident and Change Committee

- **4.97** Edge systems were tested to verify that they met specified business and technical requirements. The Structured Testing and Incident Reporting System (STAIRS) was a system used to record descriptions of tests, and to raise Incidents/Queries and Enhancements relating to tests. An Incident/Query was an unexpected result that occurred when a test was performed, or an unexpected result or problem that occurred in an environment outside a testing exercise. Enhancement requests were suggestions or opportunities to improve a system.
- **4.98** STAIRS tracked information on the progress on resolving the Incident/Query or Enhancement. Testers would initially refer Queries/Incidents to the Incident Coordinator who passed them to the appropriate resolution group. Where it was unclear which resolution group the issue belonged to, it was referred to the appropriate Change Control Committee (CCC).
- **4.99** CCCs were responsible for assessing the viability and priority of enhancements referred by the Incident Coordinator, discussing the merits and feasibility of enhancement requests, assessing critical and high priority queries and incidents, and schedule builds and releases to include bug fixes and enhancements. If issues were unable to be resolved by one of the CCCs, they were referred to the R&I Committee through the Incident Coordinator.

¹⁰¹ Risk and Issues Committee Terms of Reference.

- **4.100** In August 2001, an Incident Coordination Committee (ICC) was formed, replacing the CCCs, to streamline the incident coordination process by reducing the number of CCCs, and the number of incidents getting though to resolution groups. Queries that had an obvious resolution group were sent directly to the resolution group, but were also considered by the ICC. Queries with no obvious resolution group, or which were likely to impact upon multiple resolution groups were referred to the ICC for discussion.
- **4.101** The ICC met three times per week during testing phases and once per week during non-testing phases. The ICC was responsible for:
- confirming the priority, classification and query area of queries;
- deciding which queries to action and which can, for the present, be deferred (or lowered in priority);
- nominating the appropriate resolution groups or developers for queries which originally had no clear single owner;
- vetting queries which have been referred directly to resolution groups to ensure there is no additional impact on other areas;
- vetting declined queries to ensure that all necessary factors have been considered in declining the query (in some cases, the reason for declining the query may need to be improved, in others, the query may need to go to another resolution group for action); and
- escalating queries, as required, to the Risks and Issues Committee.
- **4.102** Minutes were not kept for the ICC meetings because decisions were updated directly into the STAIRS database during the meeting.

Incident Coordination Committee and Change Control Committees conclusions

4.103 The ANAO found that the STAIRS database was effectively used to track information about incidents, queries and enhancements, and that the CCCs and, and their replacement, the ICC, handled the resolution of incidents, queries and enhancements effectively.

Internal audits

4.104 Both FaCS' and Centrelink's Internal Audit areas completed reviews of the Edge project. FaCS reviewed the project in early 2003 using external consultants. Centrelink had an ongoing review process, reports from which were provided in February 2001, March and July 2002 and April 2003.

FaCS

4.105 The FaCS external consultant's review of the project was necessarily restricted to FaCS' involvement in the project, and could not comment on Centrelink's responsibilities. The consultant's report of March 2003 gave the following findings:

Positive findings

- Communication and reporting structures at the operational level of the project within FaCS were sound. Minutes of meetings were taken in most cases and there was also regular informal verbal communication;
- Staff resource numbers appeared adequate for the project and skills were of the required level;
- The level of commitment to achieving the project objectives was extremely high;
- It would appear at this point in time that the project objectives, from a
 FaCS perspective, will be achieved albeit at a later date than first
 envisaged;
- The partnership between FaCS and SoftLaw has worked well; and
- It appears, at this point in time, that the project outcomes will adhere to the organisational strategic directions and goals.

Key findings

- Project governance was not structured as planned;
- Roles and responsibilities of project members were not clearly understood across the project;
- The project management principles, processes and budget reporting were not clear to key team members;
- The FaCS team did not have an overall schedule of their project work;
 and
- Project documents were not kept relevant and up to date.
- **4.106** FaCS management agreed with all recommendations of the internal audit report, with an implementation date of September 2003.
- **4.107** In the March 2003 report, the consultant stated that 'the Edge project looks like achieving the strategic objectives set out as the project began'. However, eight months later the project was discontinued.

4.108 FaCS provided the following comment:

It should be noted that the report referred to is the 2003 Internal Audit report and it concluded that, 'the review could not determine the effect of the delay on the investment in the project because the calculations of the savings attributed to the project were not clear' and identified this as a topic relevant to further audit. This was explicitly covered by the April 2003 Centrelink Internal Audit report, which identified the issue of potential savings as High Risk. Notwithstanding inevitable jurisdiction issues around examining savings in Centrelink, it would have been wasteful for FaCS internal audit to have covered the same areas that Centrelink already was. ¹⁰²

Centrelink

4.109 Centrelink reviews of the Edge project were undertaken internally. Centrelink Internal Audit had a continuing involvement in the project, and attended the Edge Risk and Issues Committee meetings.

February 2001 report

4.110 Issues raised in this report included communication between Microsoft and non-Microsoft software, outstanding or deferred test queries, business requirements not addressed in phase one, security controls, refinement of data validation requirements, and inadequate stress testing.

March 2002 report

4.111 This report classified issues according to risk. The more significant risks were stated as follows in Figure 4.4.

Figure 4.4

March 2002 significant risks

Level	Risk
Major	Network response times.
Significant	Concern that cost/savings may have changed in a material way such that projected net benefits may not be achieved.
	The scalability of Edge.
Moderate	Security between Edge and ISIS.
	Data mapping between Edge and ISIS.
	Required response times for acceptance into production not yet specified.

Source: Life Events Expert System (Edge) System Development Audit Progress Report March 2002.

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¹⁰² FaCS response to ANAO issues papers, 22 December 2004.

4.112 The July 2002 report updated the March 2002 report, and raised the network response time risk, from 'Major' to 'High'.

April 2003 report

4.113 The April 2003 report by Centrelink Internal Audit is significant. At that time, Edge had been rolled out to 28 CSCs. However, roll out had been paused in February 2003. The report stated the more significant risks as follows in Figure 4.5.

Figure 4.5
April 2003 significant risks

Level	Risk
High	Concern that cost/savings may have changed in a material way such that projected net benefits may not be achieved.
	Network response times.
Major	Developing Edge functionality in parallel with the same functionality on the mainframe results in delays in specification of the required Edge processing. This can reduce the testing time available for Edge or even result in Edge not having the same functionality as ISIS releases.
Significant	The scalability of Edge.
	The current design of Edge may not be suitable for some new business requirements.
Moderate	Security between Edge and ISIS.
	Data mapping between Edge and ISIS.
	Required response times for acceptance into production not yet specified.

Source: Life Events Expert System (Edge) System Development Audit Progress Report April 2003.

- **4.114** This report identified a number of concerns, several of which were identified by the 2003 Business Case Review team as reasons for recommending terminating the project. These included:
- the design of Edge may not be suitable for some new business requirements;
- problems in running Edge and ISIS in parallel; and
- projected net financial benefits may not be achieved.

- **4.115** Other significant matters raised in the April 2003 Internal Audit report were:
- the December 2002 release of Edge aimed to bring the functionality of Edge up to approximately 92 per cent. A mandating exercise¹⁰³ showed this to be less than 50 per cent;
- CSOs reporting Edge as unreliable, unstable, and taking longer than ISIS; and
- Edge asking many more questions than ISIS, before approving the payment of a benefit that ISIS had already approved.
- **4.116** At this time, Internal Audit estimated the total cost of the project had increased from \$41 million to \$58 million (on a purely cash basis and including FaCS costs) to June 2003. The later 2003 Business Case review also reported the cost to be \$58 million.
- **4.117** The relevant agency audit committee reviewed the findings of each of the internal audits undertaken in relation to the Edge project and a timeline was set for implementation of audit recommendations.

Other reviews

4.118 During the progress of the project, a number of reviews were conducted, on various aspects of the project, some internally, and some by external organisations. In late 2001, the CPM asked Microsoft Enterprise Services to conduct a wide-ranging review of Edge. In November 2002, Centrelink conducted a review of the Edge Architecture. Common to these two reviews were comments on the complexity of the Centrelink technical environment. One example is the statement that 'operation of the Edge system depends on 23 sub-systems, many of which are not controlled by the Edge team.' Failure of any one of those sub-systems would have resulted in a failure of Edge.

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¹⁰³ A mandating exercise required CSOs to attempt to first use Edge to complete transactions.

¹⁰⁴ Edge Architecture Review, 1 November 2002, paragraph 5.17.

- **4.119** Another common comment of the reviews was, that some of the technologies used in Centrelink are old and no longer supported by the vendors. An example was provided of Centrelink's COLFrame¹⁰⁵ being unable to use services, introduced to the standard 11 years previously, as the version of the applicable software used by Centrelink did not support the services.' 106
- **4.120** It was beyond the scope of this audit to assess the Centrelink I&T technical environment. The ANAO understands Centrelink is currently addressing the issues in its 'IT Refresh' program. However, the ANAO is of the view that one of the reasons the Edge project was terminated was not due to any inherent defects in expert systems, but because Centrelink had difficulties in successfully integrating the expert system into its current IT environment. This was due both to the constraints of that environment, and the complexities of the solution developed for the integration of Edge with the mainframe. The difficulties resulted in delays in implementation, and reduced functionality for the Edge system.
- **4.121** Centrelink provided the following statement on the complexity of its current IT environment.

There are a number of dimensions in describing the complexity of the current IT environment in Centrelink created over the last 4 years. They are:

- **1. Size.** Centrelink runs a very large IT operation—whether measured by the number of functions, transaction rates, database size etc. The rate of increase of additional functionality measured by function points since June 1999 is in the order of 20%. Since 1999–2000 the storage capacity has increased by 57.3%, bandwidth by 143% and mainframe millions of instructions per second by 346%.
- **2. Re-use.** Rather than copying code and having to maintain multiple copies of the same functionality, Centrelink has invested in the practice of 're-use'. This reduces the total code base, increases quality, and enables faster construction of new systems. However, it is more complex, and requires Centrelink to consider broader impacts when we change the common code.
- **3. New Technology.** Any project introducing new technology increases the risk and complexity. EDGE introduced expert systems, and a number of Microsoft and Java facilities that were new to Centrelink. During this period Centrelink also introduced telephony functions on the desktop and via self-service necessitating tighter and more complicated integration of information

¹⁰⁵ COLFrame. Centrelink Online Framework. COLFrame is an application architecture developed to support the development of Centrelink's business applications. Edge was one such application. COLFrame was developed concurrently with Edge.

¹⁰⁶ Edge Architecture Review, 1 November 2002, paragraph 5.18.

¹⁰⁷ IT Refresh is a major injection of government funds into Centrelink's IT systems. IT Refresh will allow Centrelink to modernise its IT systems to provide better access for customers, and improved services and linkages for government, community groups and business.

and communication technologies, as well as integration of the new technologies with the established or legacy technology environment.

- **4. Multiplatform.** When there is a need to develop, test, and deploy software components over multiple hardware platforms (as EDGE did with Intel servers and COLFrame on Sun Servers) then there is a risk attached to complexity with configuration management, monitoring and security etc. Centrelink introduced a midrange platform and began the separation of presentation, from midrange from mainframe platforms, during the early 2000s. This is still the overall technology architecture direction, a 5-tier application architecture that will retain the value of existing core resources and maximise the ability to deliver services over multiple channels and client devices.
- **5. Versioning.** Centrelink operates in a very rapidly changing release environment. Because of the large number of releases of new functionality each year, projects cannot work on a fixed baseline but must accommodate many changes by related projects during their development timeframe. ¹⁰⁸
- **4.122** The priority development of Edge was the connected version. Prime responsibility for linking Edge to ISIS was the responsibility of Centrelink. It is therefore appropriate that Centrelink Internal Audit was more involved in the project. Centrelink internal audit reports identified many of the issues raised in the 2003 Edge Business Case Review.
- **4.123** The ANAO considers that the day-to-day management of the Edge project was undertaken in accordance with the structures specified in the Development Contract. At this operational level, there was generally ongoing and effective communication between FaCS, Centrelink and SoftLaw on the project, in particular through the Operational Committee. However, governance arrangements between the two agencies in the form of the JPA and the MOU, and the operation of the FaCS–Centrelink Steering Committee, did not accord with the needs of the project, or with the needs of the agencies.
- **4.124** The Edge project was of sufficient importance to be included in the Business Partnership Agreement between the two agencies. Therefore, the ANAO considers it would have been appropriate for the Boards of both agencies to have been informed of the lack of progress on the MOU, and for both Boards to have stated their views on the situation.
- **4.125** The ANAO considers that reporting arrangements to the governance committees of Centrelink were in place and were appropriate. However, the costs of the project provided to BIC were in error to an amount of \$3 million, and advice about the ability of Edge to process FAO claims was overstated.
- **4.126** The ANAO considers that it would have been appropriate for FaCS ICTC to have been more involved in the project.

¹⁰⁸ Centrelink response to ANAO issues papers, 24 December 2004.

5. Financial Management of the Edge Project

This chapter examines the financial management of the Edge project, including the Development Contract with SoftLaw.

Background

- **5.1** The Edge project represented a substantial financial investment by FaCS and Centrelink, and involved management of a significant and complex contract with SoftLaw.
- 5.2 An important element of contract management is to have procedures in place to manage payments against deliverables, variations to the contract, quality of services delivered, and reporting of progress against milestones. The contract manager needs to ensure that appropriate processes are in place to assess the quality of the deliverable before accepting it as complete.
- **5.3** The ANAO sought to determine whether FaCS and Centrelink appropriately managed the Edge project finances and the Development Contract with SoftLaw. The ANAO also considered whether appropriate procedures were followed when contract changes were made.
- **5.4** The ANAO considered whether:
- the process for accepting deliverables was in accordance with the guidelines specified in the contract;
- payments were made against agreed project deliverables specified in the contract; and
- changes made to the contract, including extensions to the scope of the project, were approved at the appropriate level and were tracked accurately.
- **5.5** Once the Business Case for a project is complete, the next step is to agree the budget. The ANAO sought evidence that:
- appropriate arrangements were made for Edge project funding; and
- the costs of the Edge project were within the approved budget and approved variances.
- 5.6 Regular and accurate reporting on the status of the finances of a project provides assurance that spending is within budget. The ANAO examined whether FaCS and Centrelink provided timely, factual and concise financial reports to the appropriate governance committees.

- **5.7** The ANAO considered whether:
- appropriate committees were regularly updated on the status of the finances of the project; and
- the Edge project team adhered to recommendations made by committees responsible for overseeing the financial status of the project.

Management of the Development Contract

- 5.8 Payments to SoftLaw were made against contract deliverables. The Edge Project Office provided a coordination point for all Edge project activities and was a central point for contractual document management. The Edge Project Office included Centrelink, FaCS, and SoftLaw representatives, with the Project Office Manager being from Centrelink. The Edge Project Office was responsible for tracking changes made to the Development Contract, and assisting the CPM with the deliverable acceptance process, including payment for deliverables.
- **5.9** The CPM was responsible for determining whether Development Contract deliverables were ready to be accepted, as well as authorising the payment for any accepted deliverables. The Edge Project Office was responsible for supporting this deliverable acceptance process.
- **5.10** When a deliverable was considered capable of being accepted, or a milestone achieved, SoftLaw was required, under the terms of the Development Contract, to advise the CPM in writing. Upon being informed that a deliverable was ready for acceptance, the Commonwealth was entitled to conduct tests and examinations in order to determine whether the deliverable or milestone would be accepted.
- **5.11** If the deliverable were accepted without qualification, a Memorandum of Acceptance (MOA) or Certificate of Acceptance (COA) for the deliverable or milestone would be signed by the CPM and sent to SoftLaw, along with an invoice request for the deliverable. On receipt of the MOA or COA, SoftLaw would provide an invoice to the CPM to approve and sign. A letter confirming approval of the payment would be sent to SoftLaw and the Commonwealth would make a payment to SoftLaw.
- **5.12** If the deliverable were accepted subject to remedial work, the responsible officer in Centrelink or FaCS would complete a form detailing the remaining work required and, when the remedial work was complete, the responsible officer would sign it off.
- **5.13** If the deliverable were accepted, but was considered incomplete or otherwise subject to a reasonable reduction in payment, the reduced payment

was made. On completion and acceptance of the outstanding work, the outstanding balance was paid. If the deliverable report was marked 'rejected' the work was re-included on the schedule and the final result was a new deliverable. This was updated in the Deliverable Tracker.

5.14 FaCS, Centrelink and SoftLaw were all able to initiate a Contract Change Request. The party initiating the Contract Change Request was responsible for advising the Edge Project Office. The Edge Project Office recorded details of the proposed change request. Copies of the Contract Change Request were provided to all people listed on the Contract Change Action Sheet, which contained a list of officers from FaCS, Centrelink and SoftLaw who were required to review and approve contract changes.

5.15 The ANAO considered that:

- the process for accepting deliverables was in accordance with the guidelines specified in the contract;
- payments were made against agreed project deliverables specified in the contract; and
- changes made to the contract, including extensions to the scope of the project, were approved at the appropriate level and were tracked accurately.

Payments between FaCS and Centrelink

Memorandum of Understanding

- 5.16 The costs estimated in the Business Case were higher than provided for in the Budget funding. The funding shortfall from the Budget was estimated at \$12 million. In December 2000, agreement was made between FaCS and Centrelink that the extra funding needed would be met through a cost sharing arrangement between the agencies.
- **5.17** The arrangement required FaCS to transfer funds to Centrelink. The CPM, a Centrelink Officer, was responsible for disbursement of project funds. An MOU was proposed to formalise the arrangement for sharing the costs and savings between FaCS and Centrelink.
- **5.18** Initially the MOU was to take effect from 1 July 2001. FaCS developed a draft MOU in consultation with Centrelink. The first version of the MOU was presented to Centrelink for consideration in June 2001. Key points in the draft MOU were as follows:
 - No funds will be borrowed from the Department of Finance and Administration for the project.

- The project will be funded internally and will include a transfer of \$2m from FaCS to Centrelink in 2001–02.
- Contractor development costs will be paid from Budget funds.
- Licence costs will be paid from Budget funds until 2001–02. Each agency will meet its own licence costs from 2002–03 onwards.
- Savings will be used in the first instance to reimburse FaCS and Centrelink for costs they have incurred.
- Savings will then be shared jointly by FaCS and Centrelink on a 50–50 basis. This will be reflected in a reduction in payments to Centrelink equivalent to the Centrelink share of savings. A protocol will be developed to articulate an agreed methodology for the measurement, reporting and verification of realised savings.
- Centrelink and FaCS agree to invest or spend the savings in a manner that benefits the portfolio. The proposed expenditure is to be identified prior to the commencement of each financial year in relevant Budget papers and is to be conveyed to portfolio Ministers. 109
- **5.19** The draft MOU contained tables that specified the agreed reimbursement of expected savings from 2001–02 onward. The tables provided details of the costs each agency would have each year, as well as when the savings would be generated, and the level of savings that would be generated each year.
- **5.20** Centrelink expressed a number of concerns regarding the methods for calculating costs. These concerns were that the draft MOU did not take into account some extra costs that Centrelink would incur over the first three years, increased costs in licences, the depreciation value for capital projects, and estimated net savings not including ongoing project costs.
- **5.21** Discussions between FaCS and Centrelink on issues relating to the proposed MOU continued and the MOU was not signed on 1 July 2001, as originally intended. A \$2 million payment from FaCS to Centrelink, proposed under the MOU in order to maintain the 50–50 split of costs in 2000–01, was not made. The two major issues surrounding the proposed MOU, that continued to be debated between FaCS and Centrelink, were who should bear the financial responsibility for extra costs, and what method should be used to calculate savings.

Discussions on methods to calculate savings

5.22 In the November 1999 Business Case, two estimates of expected savings to be generated by the project were provided, a conservative estimate and an

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Draft Memorandum of Understanding: Between the Department of Family and Community Services and Centrelink 2001/02–2003/04.

optimistic estimate. Both estimates were based on the assumption that a fully operational and accepted system would be rolled out within two years, with savings commencing at the beginning of year three, which was 2001–02. The conservative estimate was \$27.78 million per year and the optimistic estimate was \$40.62 million per year.

- **5.23** The savings were based on the best estimates available at that time, given that the FAO did not exist at the time of calculation. In mid-June 2000, it was recognised that an inappropriate salary related administration figure of \$14 618 had been used in the original Business Case, rather than \$6056 which was the correct figure at that time. The savings estimates were revised down to account for the amended figure. ¹¹⁰
- **5.24** Also, program savings were no longer used as part of the savings estimates as they were not considered 'harvestable' savings for FaCS or Centrelink. With both revisions taken into account, the revised optimistic estimate was \$35.4 million and the conservative estimate was \$23.18 million.
- 5.25 The roll out of Edge was delayed, and no savings were realised for 2001–02. A number of discussions were held at this time between FaCS and Centrelink, about how to calculate future savings for 2002–03. Draft versions of the MOU were continually revised because FaCS and Centrelink did not agree on the method of calculating savings for 2002–03. FaCS wanted savings levels to be specified in the MOU with the intention of harvesting savings in order to continue funding the project. Centrelink wanted a review committee to determine the level of savings once the connected version was in production, to enable firm savings figures to be available.

Discussions over extra funding

- **5.26** Centrelink informed FaCS, in early 2002, that \$4.06 million (\$2.03 million from each agency) in additional funds for 2001–02, was required for SoftLaw to carry out work that was outside the scope of work described in the Development Contract. In February 2002, FaCS wrote to Centrelink, advising that it would provide the additional \$2.03 million needed to meet its share of the extra costs of the contract with SoftLaw, on condition that the MOU would be signed.
- **5.27** In November 2001, Centrelink informed FaCS that in 2001–02 a transfer from FaCS to Centrelink of \$2.29 million would need to occur to maintain a 50–50 share of costs. FaCS responded in February 2002 expressing concern that ongoing delays meant that expected savings were not generated. FaCS noted that it had intended to use these savings to provide further funding for the project. FaCS proposed that the \$3.2 million funding, that was expected to be

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¹¹⁰ Review of Expert System Project Business Case 17 October 2002.

FaCS' share of the development costs in 2002–03, as well as the \$2.09 million¹¹¹ owed from 2001–02, be realised through harvesting savings foreshadowed in 2002–03.

5.28 Centrelink responded to FaCS as follows:

It would seem that your proposition in the MOU is that Centrelink bear the cash flow issues and all the risk associated with this project including whether or not savings are harvestable in 2002–2003. Again this is unacceptable to [Centrelink].

This project was established as on a true partnership arrangement with shared costs, shared risks, and shared cashflow issues and shared savings whatever they may be. 112

- **5.29** In July 2002, Centrelink presented a revised draft MOU to the FaCS project team that estimated project expenditure for FaCS, in 2002–03, of \$4.38 million. FaCS subsequently approached its BARAC for funding for the Edge project of \$4.38 million in 2002–03. 113
- **5.30** BARAC rejected the request for \$4.38 million stating that it had allocated \$3.2 million for 2002–03. BARAC advised the FaCS Edge team that \$1.5 million¹¹⁴ for the additional costs of the contract with SoftLaw would be potentially available if a compelling Business Case could be made. FaCS explained to Centrelink that BARAC's position was that, because the costs were related to Centrelink responsibilities, they were Centrelink costs as opposed to project costs.
- **5.31** In response, in late July 2002, Centrelink proposed that FaCS contribute \$2.88 million in 2001–02 and that Centrelink redeem the remaining \$2.905 million, required for costs to be shared 50–50, by subtracting it from FaCS' share of the savings.
- 5.32 On 2 September 2002, during an Edge project meeting attended by FaCS and Centrelink, a decision was made to commission an independent review to be completed by a person or company chosen by both FaCS and Centrelink. FaCS informed Centrelink that no money would be forwarded from FaCS to Centrelink, until the Business Case for the Edge project had been revised, independently reviewed, and agreed between FaCS and Centrelink.

¹¹¹ FaCS reported it owed Centrelink \$2.09 million and Centrelink reported \$2.29 million. One of these figures appears to be an error, it is unclear to the ANAO which figure is correct.

¹¹² Email to FaCS from Centrelink, 26 February 2002.

¹¹³ The \$4.38 million was made up of Salary \$1.66 million, Administration \$1.04 million, SoftLaw \$1.5 million and Licence maintenance \$0.18 million.

¹¹⁴ It is unclear why the total FaCS considered providing to Centrelink, (\$3.2 million and \$1.5 million) adds up to \$4.7 million rather than \$4.381 million.

- **5.33** An internal review conducted jointly by the FaCS and Centrelink Edge project teams was completed on 18 October 2002. Centrelink advised the ANAO that this review was intended as a precursor to the planned external review. In December 2002, FaCS decided not to pursue an external review and to pay the money owed to Centrelink up to June 2002 (\$4.2 million), in return for Centrelink agreeing to sign a revised MOU, and a JPA.
- **5.34** In May 2003, Centrelink sent a revised MOU to FaCS. FaCS responded with further revisions. The points of disagreement between the two agencies' versions of the MOU were still focused on savings and costs issues.
- 5.35 Centrelink wanted 'a protocol to be developed to articulate an agreed methodology for the measurement, reporting and verification of realised savings'. It also wanted to establish a review group comprising an external assessor and representatives from FaCS and Centrelink. This review group would investigate and determine the level of savings after completion of the roll out. FaCS believed this 'would erode the worth of the MOU because it would allow Centrelink to argue for reductions in the level of savings.' FaCS wanted the MOU to specify what the savings would be, and when they would be harvested.
- **5.36** Centrelink also wanted the MOU to state that additional costs would be shared 50–50. FaCS wanted this statement removed from the MOU because they had been subject to additional expenditure due to delays in implementation on the Centrelink side. FaCS was seeking to limit its exposure to future unquantified costs.
- **5.37** In August 2003, FaCS and Centrelink jointly commissioned an Edge Business Case Review to assess whether there was a viable business case for the further development of the Edge system. When the terms of reference for this review were signed, FaCS paid \$2 million of its share of costs, and agreed to pay the remainder on completion of the review. The review resulted in termination of the project.
- **5.38** The costs and savings issues were not resolved between FaCS and Centrelink. The MOU was not signed prior to termination of the project. The disagreement over savings became irrelevant as no savings were generated throughout the duration of the project.
- **5.39** FaCS considered they owed Centrelink \$4.2 million for expenses accrued through the Edge project for 2001–02. After paying the \$2 million to Centrelink when the terms of reference were signed, the balance owing to Centrelink was \$2.2 million. FaCS paid \$0.139 million for its share of the costs

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¹¹⁵ Centrelink's May 2003 version of the MOU.

¹¹⁶ FaCS May 2003 draft of the MOU.

of the 2003 Edge review. FaCS informed the ANAO that the remaining \$2.06 million was paid on 20 January 2004.

5.40 Centrelink considered FaCS owed a further \$3.069 million (including GST, \$2.79 million without GST), for 'FACS' share of costs associated with the Edge project for the financial year 2002–2003'. Centrelink invoiced FaCS for this amount in November 2003. On 17 June 2004, FaCS responded with:

I am now in a position to confirm that FaCS will not pay invoice number 1803517 for \$3,069,000.00 (inclusive of GST). This is due to the cancellation of the project and that savings over the past few years have not been generated. Accordingly, I would be grateful if you would write-off this debt.¹¹⁸

- 5.41 On 24 June 2004, Centrelink wrote-off this debt.
- 5.42 The MOU was to be used to formalise the funding arrangements for Edge. A consequence of the MOU not being signed during the life of the Edge project was that there were no formal arrangements, between FaCS and Centrelink, for how the Edge project was to be funded. A FaCS internal audit in March 2003 reported this as a finding. The audit indicated:

Whilst budget reporting is performed, no overall financial management plan exists for the project. The overall budget process for the project is not clearly articulated and as such there are varying opinions as to the source of the project funds. The project has no definitive end, so it is unclear how the funding has been calculated and subsequently the calculation of any savings.¹¹⁹

5.43 FaCS agreed to this finding and advised that, by September 2003, it would document how the project finances would be managed. However, the project was terminated in November 2003.

Overall funding between FaCS and Centrelink

5.44 The FaCS Executive Board and the Centrelink Board of Management gave approval for the Edge project, including the initial estimated cost of the project. However, the source of funding, above the original funding of \$18 million from the FAO funding, was never clarified. The proposed MOU between FaCS and Centrelink, which would have clarified funding, was never signed. Instead, FaCS' BARAC and Centrelink's BIC approved additional funding for the Edge project on an ad hoc basis.

¹¹⁷ Invoice from FaCS to Centrelink 12 November 2003.

Letter to CFO of Centrelink from CFO of FaCS, 17 June 2003.

¹¹⁹ Internal Audit, Family and Community Services Edge Project Review March 2003.

Internal financial reporting

Business Planning and Resource Allocation Committee

5.45 The BARAC Terms of Reference state that it was responsible for monitoring the resource allocation and expenditure of FaCS (see Figure 4.1 in chapter 4). The FaCS project team was not required to submit reports to BARAC about Edge on a regular basis, as BARAC was a funding allocation committee only. FaCS advised the ANAO that:

Edge was sponsored directly by the FaCS Board, and as such it had its own separate governance structure, i.e. it did not report to the Board through the ICTC–ITRC... The fact that Edge was in essence a Board project would of course also be the reason that BARAC did not consider Edge in detail year on year. ¹²⁰

5.46 BARAC first approved funding for Edge in early 2002, when additional funding of \$2.03 million was approved for extra costs associated with the project, to be paid to SoftLaw through Centrelink on signing the MOU. In mid 2002, the FaCS project team approached BARAC requesting \$4.381 million. BARAC approved \$3.2 million, which was the allocated funding for Edge in 2002–03.

5.47 On 22 July 2003, FaCS provided a Minute to BARAC containing information on the reasons for an 8.6 per cent overspend during 2002–03. FaCS explained that it was due to unexpected, and unfunded, expenditure associated with More Choice For Families (MCFF).

Business Improvement Committee

5.48 The BIC was responsible for approving Centrelink's funding for the Edge project. This included annual funding proposals as well as any requests for additional project funds. BIC held meetings on a monthly basis. During these meetings, decisions were made on requests for extra funding, and out-of-session decisions were also approved. Figure 5.1 lists BIC funding decisions relating to Edge by date.

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¹²⁰ Email to ANAO from FaCS 9 September 2004.

Figure 5.1

Business Improvement Committee Edge funding decisions

Date	Funding decisions
19 Dec 2000	The expense budget of \$17.15 million 2000–01 approved. Funding sought for 2001–02 (\$6 240.7) and 2002–03 (\$5 033.8) is noted.
19 June 2001	Not approved. (a) There is an \$8.1 million provision in Financial Plan.
15 Aug 2001	Interim funding of \$517 500 approved subject to similar funding from FaCS.
23 Oct 2001	Capital funding of \$3.1 million approved on the basis of cost sharing with FaCS.
26 Feb 2002	Approved \$2.03 million additional funding (2001–02), with an additional \$2.03 million (2001–02) if agreement is not reached with FaCS concerning cost sharing arrangements.
26 Mar 2002	BIC noted the request to reallocate \$2.2 million capital to 2002–03 Project Capital budget.
24 July 2002	Approved 2002–03 funding of \$10.1 million for project expenses \$58 000 for capital.
25 Feb 2003	Approved additional 2002–03 funding of \$2.97 million to be funded from financial plan.
22 May 2003	Approved 2003–04 earmarked funds of \$5 million project expenses.
22 July 2003	Approved 2002–03 additional funding of \$10 248 capital for a software purchase.
26 Aug 2003	Approved release of 2003–04 \$2.6 million project expenses from earmarked funds of \$5.0 million.
21 Oct 2003	Approve release of \$850 000 project expenses from remaining 2003–04 earmarked funds of \$2.1 million project expenses to continue the operational aspects of the project until 31 October 2003 pending outcome of the Edge Review.
12 Dec 2003	Approve release of remaining 2003–04 earmarked funds of \$1.29 million project expenses for:
	 closure activities and staffing for the period of November to December 2003 (\$1.03 million);
	- two Statute Licence payments due in December 2003 and April 2004 (\$499 365); and
	- the Feasibility study ^(b) (\$191 600).

⁽a) The ANAO was unable to clarify what was not approved.

Source: Decisions of Business Improvement Committee Meetings.

5.49 On four occasions, BIC referred submissions to the FaCS–Centrelink Edge Steering Committee. In January 2002, BIC instructed the 'Steering

⁽b) The Feasibility study was a recommendation of the 2003 Business Case review. At the time of writing this report, the study had not been completed.

Committee to come to an agreed financial position for this project and report back to BIC as a matter of urgency'. ¹²¹ An Edge Project Funding Overview was provided to the Edge Steering Committee. When, in late February 2002, BIC had received no response from any member of the Steering Committee, the CPM assumed this indicated there were no objections.

- **5.50** In February 2002, BIC approved additional funding of \$2.03 million (2001–02). BIC also agreed to provide an additional \$2.03 million (2001–02) for project expenses, if agreement was not reached with FaCS concerning the cost sharing arrangements. These issues were referred to the Edge Steering Committee.
- 5.51 In March 2002, BIC asked the Edge Steering Committee to consider the 2002–03 revised cost estimates and deliverables. In May 2002, the CPM sent a memorandum to the Steering Committee, containing the 2002–03 Project Proposal. The Steering Committee did not respond, and it was assumed this indicated there were no objections.
- 5.52 A bid for extra funding, of \$3.2 million for 2002–03, was made to BIC in December 2002. These extra costs consisted of \$1.10 million of Centrelink costs for March 2003 and June 2003 Development Work, and \$2.10 million was for SoftLaw costs from January to June 2003. BIC referred this request to the FaCS–Centrelink Edge Steering Committee in January 2003. On 11 February 2003, a Steering Committee meeting was held where Centrelink attendees, in their roles as BIC and Edge Steering Committee participants, approved the additional funding. FaCS representatives were not invited to this meeting. In February 2003, BIC approved additional funding of \$2.97 million for completion of a package of development work for March 2003 and June 2003.

Edge Reporting to the Business Improvement Committee

- **5.53** The Edge Project Office was required to report to the BIC, through the Centrelink Project Office, on a quarterly basis. The BIC reports were in a format prescribed by the Centrelink Project Office. The reports contained statements on the progress of deliverables and milestones, and the status of the project budget. They included details of the costs incurred by the project and whether there was an underspend or an overspend, information on the status of savings during the quarter, and a table which provided information on the cash position of the project at the end of the quarter.
- **5.54** BIC received quarterly reports from the Edge Project Office beginning in September 2000. The last quarterly report to BIC was produced in July 2003. After this time, the Edge Project Office provided one further report in October 2003, under a different format to that specified by the Centrelink Project Office.

¹²¹ BIC meeting minutes 29 January 2002.

5.55 A table was provided in each quarterly report, which gave an update of Edge expenditure. In the last quarterly report, dated 15 July 2003, details were provided of the Centrelink cash position in relation to the Edge project as at 30 June 2003 (see Figure 5.2).

Figure 5.2

Edge Project—Centrelink cash position as at 30 June 2003

	1999–2000	2000–01	2001–02	2002-03	Total
	\$m	\$m	\$m	\$m	\$m
Cash Inflow					
Revenue Stream	0.00	8.48	3.39	1.56	13.43
Capital Stream	0.00	9.49	1.37	1.37	12.23
	0.00	17.97	4.76	2.93	25.66
Cash Outflow					
Centrelink	2.90	5.21	6.81	6.23	21.15
SoftLaw	2.80	9.49	5.03	5.41	22.73
FaCS	1.00	2.45	3.00	3.20	9.65
Software–Hardware purchases	1.20	1.14	2.73	0.06	5.13
Maintenance				0.29	0.29
Savings (Edge-Families)	0.00	0.00	0.00	0.00	0.00
Total	7.90	18.29	17.57	15.19	58.95
Net Cash	-7.90	-0.32	-12.81	-12.26	
<u>Cumulative</u>	-7.90	-8.22	-21.03	-33.29	
FaCS share	2.95	-2.29	3.41	2.93	
Cumulative FaCS		0.66	4.06	6.99	

Assumptions-Notes:

- FaCS share calculated by dividing Net Cash by two and subtracting FaCS contribution.
- 2. Figures are Centrelink actual spending for 2002–03, FaCS is an estimate only.
- 3. Revenue stream is budget funded.
- 4. The line that shows as 'maintenance' refers to licence maintenance costs.
- FaCS' share at end of 2002–03 is \$6.99 million.

Source: Quarterly Report to BIC 15 July 2003.

5.56 The July 2003 quarterly report to BIC stated the total expenditure on Edge, as at 30 June 2003, was \$58.95 million. In examining this information, the ANAO identified discrepancies. Centrelink advised the ANAO that:

Minor discrepancies have been highlighted in the financial reporting of Edge to BIC. The figures reported to BIC were overstated by \$3 million over a four-year period and this is attributed to the accrual treatment of invoices. 122

- **5.57** Centrelink informed the ANAO that this was due to a misunderstanding of the impact of accrual accounting on the finances by the Edge Project Office.
- **5.58** There is an issue with an error of this significance being included in information provided to the BIC. The ANAO suggests that Centrelink address the issue of how to ensure information provided to the BIC is correct for future projects.
- **5.59** With the overstated reporting taken into account, the total expenditure on Edge, for the financial years 1999–2000 to 2002–03, was \$55.95 million.

Operational Committee reports

5.60 SoftLaw was required, as part of the Development Contract, to provide monthly Operational Committee Reports. The reports provided project updates, including details of the new contract material and financial information. The reports detailed items that SoftLaw had invoiced the Commonwealth for during the previous month, under both the Software Licences and Support contract, and the Development Contract. The last Operational Committee Report was produced on 2 July 2003.¹²³

Actual costs

SoftLaw costs

5.61 Schedule 2 of the Development Contract contained the Project Payment and Implementation Plan, which included a list of all the service deliverables arranged according to the month they were due. The original contract, signed on 25 February 2000, was for a 20-month period from March 2000 to December 2001. The total cost of the original contract was \$12.77 million.

5.62 A number of changes were approved to this contract throughout the duration of the project. The price of the final contract, including all the contract changes was \$23.8 million. However, \$0.25 million was withheld from payment for the connected configuration. Accordingly, SoftLaw was actually paid a total of \$23.55 million over the span of the Service contract from March 2000 to March 2003.

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Letter from Centrelink to the ANAO, 17 September 2004.

¹²³ The Operational Committee meeting of 2 July 2003 decided to change its structure to concentrate on exception reporting by members. Therefore, Operational Committee Reports from SoftLaw were no longer required.

5.63 The three Parties agreed that, from 1 April 2003, the project would enter into a new phase, where SoftLaw payments would be based on time and materials, where SoftLaw would be paid for contractors on an hourly rate, and would charge for materials when used. The time and materials funding arrangement was used from 1 April 2003 until the termination of the project in December 2003. The total cost of the time and materials deliverables was \$3.9 million.

5.64 Separately, Schedule 10 of the Development Contract was for provision of software licences and support. This included costs for initial fees, and annual fees for both Runtime Licences and Development Licences. The costs of the licences varied depending on the number of licences purchased at a particular time. The total cost of licences and licence maintenance was \$3.2 million, on top of the \$0.7 million licence costs that were included as deliverables as part of Schedule 2.

5.65 The total of all payments made to SoftLaw for the Edge project was some \$30.7 million.

Business Case review 2003

5.66 FaCS and Centrelink jointly commissioned the 2003 Edge Business Case Review in August 2003, to assess whether there was a viable business case for further development of the Edge system. The expenditure on Edge, stated in the 2003 Business Case Review report, was approximately \$60 million; this figure comprised the costs incurred from 1999–2000 to 2002–03. FaCS provided the ANAO with the figures used to construct the figure of approximately \$60 million. The total of these figures was \$58.95 million, which is the same as the total reported in the final BIC Quarterly Report. Centrelink advised the ANAO this figure was overstated by \$3 million, as indicated in paragraph 5.56, making the total expenditure incurred, from 1999–2000 to 2002–03, \$55.95 million. This excludes expenditure on More Choice For Families, and Parenting and Age Pension work.

5.67 The Business Case Review team excluded from its calculation of the total expenditure on the Edge project the costs associated with changes made to Edge to accommodate the More Choice for Families initiatives, (which totalled \$2.17 million, of which \$0.7 million was already captured in the Edge total cost); and a preliminary investigation of the inclusion of Parenting and Age Pension into Edge (which totalled \$0.41 million.) These costs were excluded on the basis that funding for them was separately provided through a 2003–04 Budget measure. 124

The Edge Project

¹²⁴ Email from Centrelink 22 June 2004.

- **5.68** The 2003–04 costs of Edge were \$3 million for payments to SoftLaw, \$1.6 million for Centrelink staff costs, and \$2.71 million for FaCS costs (the difference between the total FaCS' expenditure of \$12.36 million and the reported FaCS expenditure until 2003 of \$9.65 million).
- **5.69** FaCS' total expenditure over the life of the Edge project was \$16.426 million. Of this, \$4.06 million was paid to Centrelink for shared expenses accrued during the life of the project. The remaining \$12.36 million was for FaCS (staff and other) costs for the project.
- **5.70** Centrelink's total expenditure was \$52 million. This included \$32.6 million of internal funding from Centrelink, as well as \$18 million in Budget funding provided in the 2000–01 Budget. Of the total \$52 million expenditure, \$4 million was for capital purchases, \$25 million was for internally developed software, and the remaining \$23 million was expensed.
- **5.71** Information provided by FaCS and Centrelink, confirmed to the extent possible by the ANAO, assessed the total expenditure on Edge to be \$64.4 million, between the signing of the Development Contract in February 2000, and the termination of the project in December 2003. This includes costs associated with the More Choice for Families, and Parenting and Age Pensions projects.

Financial implications of ceasing Edge

- **5.72** Centrelink capitalised \$25 million in work associated with delivering functions required for the original scope of the Edge project. The write off of the Edge asset consisted of the constructed functionality that could not be used for other Centrelink projects. To deliver the Edge system, six discrete functions had to be constructed. An assessment was made of each of these functions and an asset value was given to each.
- 5.73 Centrelink advised the ANAO that the Customer Account Start Up project was able to use around half of the Edge functionality. The value of the Edge functionality unable to be used by the Customer Account Start Up project was \$12.36 million, which was written off in 2003–04. A total of \$15.15 million was written off in 2003–04 for the Edge project. This consisted of \$12.36 million for functionality and \$2.79 million (\$3.069 million with GST) for costs Centrelink considered FaCS owed to it (see paragraph 5.40).

6. Progress of the Project

This chapter discusses the testing and roll out of Edge.

Methodology and planning

- 6.1 The ANAO expected well-established project development processes and methodologies to be in place. The ANAO sought a copy of the systems development methodology used for the project and a copy of the project plan. Centrelink was unable to provide a copy of a system development methodology for the Edge project. The latest project plan (titled Project Management Plans) that Centrelink was able to provide was last updated in May 1999, shortly after the RFT was issued and before the contractor was selected and the contract signed.
- **6.2** It was the clear intention of FaCS and Centrelink leadership that the Edge project develop a project plan. The JPA outlined in the FaCS–Centrelink Business Partnership Agreement of 1998–2001 stated:

A joint project plan outlining a schedule of tasks and key milestones for the project will be developed by DSS and Centrelink when the RFT is finalised and contracts have been signed with the successful vendor. The Project Plan will be subject to agreement by the Joint Steering Committee.

6.3 The final Business Case, as presented to the Centrelink Board of Management in November 1999, stated:

The Project Plan will include critical success factors and checkpoint the appropriate milestones for reference on progress to the Steering Committee.

- 6.4 The ANAO examined minutes of the FaCS–Centrelink Steering Committee meetings, held after the contract was signed in February 2000, but found no reference to the Committee agreeing a project plan. Neither FaCS nor Centrelink were able to provide a copy of such a project plan, which was current during development of the project.
- 6.5 The lack of a formal development methodology, and the lack of a formal project plan, is surprising in a major organisation as reliant on IT as Centrelink. A development methodology ensures a structured approach to development of systems, and ensures all aspects are addressed, including training, structured testing, formal reviews and stage approvals. A Project Plan provides direction for the project, and acts as a communication and control tool.

6.6 Centrelink provided the following statement on its current project methodology:

From 1 July 2004, Centrelink requires that all projects over \$100,000 in cost be managed by formally accredited project managers. Accreditation is undertaken through the University of New England. Candidates must attend a training course, demonstrate their project management competence through a project management project and pass an exam. Achievement at the level of a Diploma student is required. Centrelink project managers are required to follow the Centrelink Project Framework as their standard project methodology. The Centrelink Project Lifecycle (Red Book) methodology is a subset of the Centrelink Project Framework for projects with IT deliverables. It is also Centrelink's key requirement for FMA assurance that projects with IT deliverables and compliance be separately monitored through a certification process.

Centrelink has required the formal use of methodologies for projects with IT deliverables since at least the mid 1980s. Prior to 1990 the standard methodology was SDM70. The Project Development Lifecycle (Red Book) was developed and adjusted to replace SDM70 in 1991.

In 1996 when formal project scheduling and effort recording were first implemented a number of additional methodologies, such as Object Oriented, were also made available for approved use to suit different project types.

The change in requirement for certifying the financial integrity of software applications brought about further focus on the use of the 'Red Book' reinforcing its mandatory use by all projects. Projects requiring different methodologies were permitted to use them when formally authorised by the Chief Information Officer.

Since 2002, Centrelink has introduced further methodologies for different technology type projects, particularly emerging technologies, where there is less certainty and experience. Three different methodologies can now be used under the umbrella of the broad assurance concepts of the 'Red Book'. 125

- **6.7** Notwithstanding the lack of a formal project plan, the Development Contract detailed much of the information that would be included in such a plan, including management structures, deliverables and timeframe. However, it did not include critical success factors for the project.
- **6.8** The lack of a development methodology by Centrelink was mitigated, at least in part, by SoftLaw providing its methodology.

¹²⁵ Centrelink response to ANAO issues papers, 24 December 2004.

Project start

- **6.9** As stated previously, the service contract with SoftLaw, the Development Contract, was signed on 25 February 2000. The first milestone activity was project establishment, which commenced on time on Monday 6 March 2000. ¹²⁶
- 6.10 The sequence of the project was: the standalone version of Edge was completed first, (but not implemented) in April 2001; the first connected configuration pilot was tested in November 2001; and SoftLaw delivered the PDA version in May 2002. Both the standalone and connected configurations were piloted, and a UAF in Adelaide (the Adelaide UAF is discussed in more detail in paragraph 6.66 onwards) was used to test connected version system releases, before roll out to CSCs. Roll out of the connected configuration to CSCs began in July 2002. In February 2003, after roll out to 28 CSCs, the roll out was put on hold pending further tests. The pilots and the roll out (paragraph 6.24 onwards) and the UAF (paragraph 6.66 onwards) are discussed in further detail below.

Deliverables

6.11 Each deliverable had a due date by which it should be completed, and the amount to be paid to SoftLaw on acceptance. Figure 6.1 lists the initial and final deliverables as stated in the Development Contract, as amended from time to time.

Figure 6.1
Contract deliverables

Deliverable area	Original contract	Final contract	Increase	% Increase
Core Configuration	11	11	0	0%
Exp Cust ^(a) and Integration I	8	8	0	0%
Exp Cust and Integration II	3	3	0	0%
Exp Cust and Integration IV	5	5	0	0%
Exp Cust and Integration V	4	4	0	0%
Mobile Config	9	9	0	0%
Rulebase development	24	27	3	13%
Exp Cust and Integration III	7	9	2	29%

¹²⁶ Operational Committee Report 15 March 2000.

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Deliverable area	Original contract	Final contract	Increase	% Increase
Project Management	51	67	16	31%
Internet Config	6	8	2	33%
Skills Transfer	54	72	18	33%
Policy Development Application	6	10	4	67%
Documentation	4	14	10	250%
Connected Configuration	13	66	53	408%
Standalone Configuration		10	10	n/a
SQL Server		3	3	n/a
Art for Edge		1	1	n/a
Complex Design Statements		6	6	n/a
Connected Configuration Development Extension		6	6	n/a
Exp Cust and Integration VI		7	7	n/a
FAO Project Management		4	4	n/a
MCFF Project Management		5	5	n/a
Parenting and Pensions (P&P)		10	10	n/a
Total	205	365	160	78%

⁽a) Expert System Customisation.

The items highlighted in blue are the deliverables added to the original contract.

Source: ANAO. Constructed from Development Contract amendments.

- **6.12** The final Development Contract (version 34) contained 365 deliverables. This was a 78 per cent increase over the original contract signed in February 2000. The Operational Committee discussed, reviewed and reported all changes and additional deliverables, with final sign-off being provided by the CPM. In total, there were 129 formal contract changes to the Development Contract.
- **6.13** As indicated in Figure 6.1, nine deliverable areas were added to the project between the original and the final Development Contract. The additions included deliverables for the MCFF project, and a scoping study for rolling the edge project to the Parenting and Pensions Payment areas. Inclusion of the latter would have provided 75 per cent coverage of all Centrelink Clients.

- 6.14 MCFF was first discussed in the Operational Committee minutes of 28 October 2002. It was originally referred to as the FTB A and B finetuning project. SoftLaw provided a proposal and quote to Centrelink for the work on 23 October 2002. At that stage it was expected that the work required for MCFF would not impact on the existing FAO Edge work for FaCS.
- **6.15** However, Centrelink had no funding available until December to undertake the work. In October 2002, SoftLaw raised concerns about the ability of FaCS and Centrelink to provide sufficient resources for working on three projects—Customer Account Start up,¹²⁷ Edge, and MCFF. The Operational Committee minutes record that 'due to the influence of MCFF, March Release has significant difficulties with not sufficient development and testing times.' 128
- **6.16** The MCFF work under the Edge project was separately funded. The requirement arose from government changes to the Families Tax Benefit during 2002. Changes were made to ISIS; Edge necessarily had to include the changes to match ISIS. During the course of the project, there were a number of changes to legislation that required changes to ISIS and to Edge. Appendix 1 lists the legislative changes.
- 6.17 Not all changes to the system requirements were a result of legislative changes, for example the major change required to meet the government's MCFF initiative related to a change in policy and was not a result of a legislative change. Figure 1.2 in Chapter 1 indicates legislative and other changes during the Edge development.
- **6.18** Although there was a 78 per cent increase in deliverables, most of these were in scope for the original contract and project requirements. The additional deliverables that were included in the rulebase development area reflected changes to the legislation. This was the same for the Policy Development Application and the Skills Transfer deliverables.

Meeting deadlines

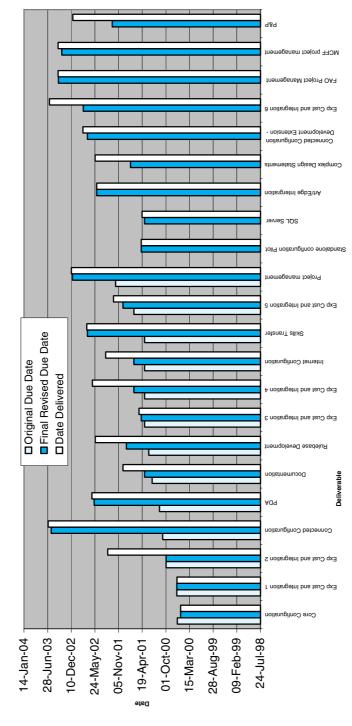
- **6.19** The original Development Contract was to be completed by 29 June 2001, with project management to continue until December 2001. In the event, the project was cancelled in November 2003, just before the revised expected completion date of December 2003.
- **6.20** Figure 6.2 illustrates the deliverable timelines. One deliverable went through six contract changes, and others up to three or four, which involved consequent changes in delivery dates.

¹²⁷ Customer Account Start-up was being developed by the same team as Edge, using the same SoftLaw technology.

¹²⁸ Edge Operational Committee Minutes, Wednesday 5 February 2003, section 4.1.2.

Figure 6.2

Timeliness of deliverables



Note: Those deliverables without a bar indicating original due date, were added to the contract after signature. That is, they were not part of the original contract.

Source: ANAO. Constructed from Development Contract, contract amendments, and deliverable acceptance certificates

- **6.21** The most significant of the delays was for the connected configuration deliverable. As noted earlier (paragraph 2.12), this was identified as a high-risk area from the beginning of the project. It required the Edge system to retrieve Customer information from ISIS using the services provided by Centrelink On-line. The project was close to time on those deliverables within the control of the project team (the core and standalone configuration). However, once the team had to rely on other Centrelink teams to resolve difficulties arising from connectivity with the mainframe, progress fell well behind.
- **6.22** By May 2002, the remaining outstanding deliverables were for the connected configuration, the Skills Transfer program, and for ongoing project management.
- **6.23** From November 2002, the connected configuration and project management deliverables were separated into two different streams, one for MCFF (first introduced to the Development Contract in November 2002), and the other for ongoing FAO/Edge development work. However, all deliverables remained part of the Development Contract.

General processes

- **6.24** Generally, each step of the Edge project went through a number of stages, which accorded with better system development practices. The stages were:
- identification of the scope of the stage/release;
- development of an implementation strategy;
- identification of training requirements, and development of a training strategy;
- Program Integration Testing, System Integration Testing, and User Acceptance Facility testing; and
- a post implementation review of the stage/release.

Standalone configuration

6.25 The standalone configuration (more accurately called the non-connected configuration) would enable users to use the system without being connected to ISIS. The intention was that this configuration would be used by FAO and Centrelink staff, and be made available for use by the social policy community and third parties that provide entitlement advice. It would allow users to investigate possible entitlements, to model and save scenarios, to prepare claims and to print provisional assessments.

- **6.26** The standalone configuration was tested in the Tuggeranong CSC in December 2000. Nine staff processed a total of 83 new claims, 18 by interview. Benchmarking work, to compare with ISIS, was not undertaken, as FaCS and Centrelink considered there was insufficient throughput. On 16 January 2001, a follow-up meeting was held with Edge project staff and Tuggeranong CSOs to review the pilot. Tuggeranong staff reported having enjoyed working with the application and found it easy to use.
- **6.27** Pilot 2 of the standalone configuration was tested from 17 April 2001 to 1 June 2001. The pilot was tested in five Centrelink offices, one call centre, and one Health Insurance Commission¹²⁹ site. A total of 386 claims were processed, of which 30 were by interview. Staff found the concept sound but requiring improvement. Customers interviewed by staff using Edge were given the option of being part of a survey. Five responded to the survey and the individual responses were included in the Evaluation Report.¹³⁰ Comments were generally positive.
- **6.28** At the request of Centrelink, implementation of the standalone version was put on hold until the connected version was available to Centrelink staff.

Connected pilots

- 6.29 On 9 November 2001, the Adelaide UAF deemed Edge suitable for release to pilot sites, subject to the sites being informed of the limited scope. Edge was, at that time, unable to process around half of claims (see paragraph 6.67 onwards). Connected Pilot 1 (CP1) was piloted at Stones Corner in Queensland, and Tuggeranong in the ACT, from 5 November 2001 to 7 December 2001. A total of 84 claims were processed using Edge. The system used by the pilot sites was able to process simple transactions. These simple transactions related to what Centrelink termed 'happy families'. Approximately 50 per cent of the FAO customer group have stable circumstances and require relatively simple FAO transactions. Only 50 per cent of ISIS/Edge connectivity transactions were enabled in the release used for CP1.
- 6.30 Centrelink claimed the test was successful. The report of the test states that 'the Edge system was successful in proving the use of a front end "expert system" to collect and assess customer information'. The report also states 'Edge also proved the ability to use existing customer information and to capture and retain collected information in the Centrelink database (ISIS

¹²⁹ It was intended that the Health Insurance Commission would be able to use Edge to advise customers of their Family Tax Benefit entitlements.

¹³⁰ Edge Project April/May Pilot Evaluation Report 12 July 2001.

¹³¹ Connected Pilot 1 Evaluation Report, Executive Summary.

upload and download)'.¹³² Centrelink considered connectivity with the mainframe was proven, and the only outage¹³³ was not due to Edge.

- **6.31** The evaluation report of the test noted that no legislative or policy errors were found in the Edge system. During the CP1 test, a comparison of the accuracy of Edge and ISIS was undertaken. This comparison and a further comparison of early 2003 is discussed in paragraph 6.53 onwards.
- **6.32** A second connected pilot was planned for April 2002. However, the ANAO could find no reports or evaluations of this second pilot, and no mention in the EIC or the Operational Committee minutes of the conduct of the pilot.
- **6.33** The programs (COLFrame) to enable Edge connectivity with the mainframe were being developed concurrently with Edge. Each time there was a change to these programs, appropriate changes had to be made to Edge. Connectivity with the mainframe was a cause of delays in implementing the connected version of Edge. As indicated previously, this was identified as a high risk in the original Edge Business Case.
- **6.34** Centrelink provided the following statement.

There were two aspects to the connectivity problems:

- The first was at the information level the mapping from detailed EDGE data items (e.g. yes/no on sub-sections in the Act) to more granular ISIS data items (e.g. 3-character codes staff enter on screens); and the need to capture extra items needed for ISIS processing (e.g. bank account) or management information purposes which were not explicitly mentioned in the legislation. The problem encountered is peculiar to expert systems and interfaces to external systems where there is no control of the definition of the source data. In the case of new systems for customer self service and business connectivity where ISIS-level questions are asked, the problem does not arise.
- The second (and probably lesser) aspect of connectivity was at the technical level. EDGE needed to sponsor the creation of a large number of transactions to handle all of the Families program data and hence 'scale up' the usage of this expert technology from its developing use with FAONET and IVR. Learnings in this area include the need to ensure the developers who create the backend transactions are able to test them for both the traditional 3270 screen usage as well as the new browser-based tools.

EDGE did fund and resolve many issues with connectivity – through improvements to COLFrame, testing, and general multi-platform skills that are

¹³² ihid

¹³³ An outage is when the system is unavailable for processing.

now being used by other multi-platform projects and the newer customer (self) service channels.

The pace of technology change is rapid, and in the last 5 years, the options to enable connectivity to support enterprise level volumes and scale have improved and strengthened. The COLFrame and MQSeries approach to mainframe connectivity is still current and used in production. Centrelink will be replacing COLFrame by a J2EE equivalent, but MQSeries will still be used to pass messages to ISIS.¹³⁴

Policy Development Application

6.35 The Commonwealth accepted the PDA on 16 May 2002 on an 'as is' basis. No further work was undertaken on it after its acceptance as the Edge team was concentrating on the connected version of Edge. The PDA was originally envisaged to be a tool for direct use by the FaCS policy areas. However, it became clear early in the development of the FAO rulebase that the rulebase itself was too complex for policy areas to manipulate directly. That, combined with certain complexities of the PDA itself, led to the realisation that policy areas were unlikely to directly use the PDA.

6.36 FaCS has several modelling tools for assessing changes to family related payments. The PDA was to be an additional tool. FaCS, in October 2001, considered any savings likely to be gained from using the tool to be marginal. The 2003 Business Case Review considered there was no clear strategy and business value in the PDA. The benefits were not sufficient to justify the cost of further investment in the PDA. The 2003 Business Case Review reported the expenditure on the PDA to be \$650 000. 135

Roll out

6.37 Roll out of the connected version of Edge to Centrelink CSCs (termed 'Waves' to avoid confusion with the roll out of functionality), began in July 2002, after testing at the Adelaide UAF.

Wave 1

6.38 On 15 July 2002, Wave 1 was rolled out to Springvale CSC, Vic; Modbury CSC, SA; Toowoomba CSC, Qld; and Stones Corner CSC, Qld.

6.39 A total of 545 FAO01 claim forms were processed, across all sites, for the four weeks beginning 15 July 2002 ending 9 August 2002. Of these:

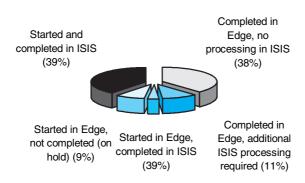
• 207 were completed in Edge with no further action required in the mainframe;

¹³⁴ Centrelink response to ANAO issues papers, 24 December 2004.

¹³⁵ Centrelink and FaCS, Report of the Edge Business Case Review, November 2003, paragraph 6.1.

- 58 were completed in Edge and required further information updated in the mainframe;
- 18 were started in Edge and completed on the mainframe (these cases identified fatal errors and bugs that were reported to the helpdesk and could not be completed or continued in Edge);
- 47 cases were placed on hold due to information missing on the claim form and further information was required to be obtained from the customer; and
- 215 were started and completed on the mainframe due to out-of-scope customer records. 136
- **6.40** Figure 6.3 illustrates the spread. The key issue is that only 38 per cent of the transactions attempted could be fully processed in Edge.

Figure 6.3
Processing statistics for Wave 1 sites



Source: Processing statistics for Wave 1 sites. Memorandum from CPM to Edge Implementation Committee, August 2002.

Wave 2

6.41 On 15 August 2002, the EIC agreed to the roll out of Wave 2, which began on 26 August 2002. In this Wave, Edge was rolled out to a further five offices: Cowra CSC, NSW; Top End Remote Services, NT; Carnarvon/Geraldton CSC, WA; Katherine CSC, NT; and Blacktown CSC, NSW.

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¹³⁶ Evaluator's report, Wave 1.

Wave 3

6.42 The EIC meeting of 8 October 2002 agreed to roll out Wave 3 to a further seven offices: Tamworth CSC, NSW; Aitkenvale CSC, Townsville, Qld; Revesby CSC, NSW; Hornsby CSC, NSW; Ringwood CSC, Vic; Mowbray CSC, Tas.; and Werribee CSC, Vic. In each of the previous two Waves, the Edge team had put on-site evaluators of the system into each of the offices, to facilitate the roll out. For Wave 3, no on-site evaluators were provided. Removal of on-site assistance was carried out as a test of the training and supporting mechanisms. The roll out of Wave 3 began on 4 November 2002. A review of Wave 3 was presented to the EIC meeting of 2 December 2002 and that meeting agreed to the Wave 4 roll out, as planned.

Wave 4

- 6.43 Wave 4 was rolled out on 9 December 2002 (to the remaining CSCs in Area South Metro, NSW). A report to the EIC meeting of 3 February 2003 stated that the main change in Wave 4 'has been the substantially increased scope of Edge from about 63 per cent to about 93 per cent of claims'. This same information was provided to the Centrelink Guiding Coalition of 5–7 February 2003.
- **6.44** The report of Wave 4 recorded a number of concerns of CSOs using Edge, including a perception that Edge was significantly slower than ISIS, and a number of 'annoyances'. The minutes of the 3 February 2003 EIC meeting record that 'an assessment of new claims processing had identified 19 areas of questioning to be removed ... which would enable Edge to move closer to mainframe processing times'. ¹³⁸
- 6.45 This meeting of the EIC also agreed to a repeat of the December 2001 accuracy exercise (comparing the accuracy of ISIS and Edge), and that there should be an exclusive use of Edge in two high performing offices to gather further information. The meeting agreed that there would be no further roll out of Edge until an analysis of these two exercises had been performed, and the results made available to the EIC. At the end of Wave 4, Edge was available in some 28 CSCs, out of total of around 320 Centrelink CSCs.

100 per cent mandate

6.46 Following the EIC decision on exclusive use of Edge in two offices, use of Edge was mandated at Bankstown (NSW) and Toowoomba (Qld) CSCs, for the period 17 February 2003 to 14 March 2003. Mandating the use of Edge

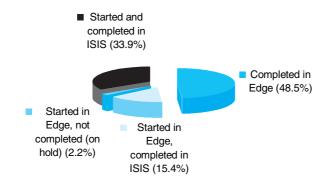
Edge Implementation Committee Minutes of 3 February 2003.

¹³⁸ ibid.

meant that CSOs would first attempt to use Edge to complete transactions, before using ISIS.

6.47 The final statistics presented to the EIC meeting of 18 March 2003 showed that, of 363 claims processed, 48.5 per cent were fully processed in Edge, a further 15.4 per cent were started in Edge and completed in ISIS, and 2.2 per cent were started in Edge and put on hold. Figure 6.4 illustrates the spread.

Figure 6.4
Processing during mandated use of Edge



Source: Graphical illustration of final statistics presented to the EIC meeting on 18 March 2003.

- 6.48 A 28 March 2003 analysis of the 363 claims against Edge current and proposed functionality indicated that future releases would increase the number of claims able to be processed wholly in Edge, reaching 81 per cent by the June 2003 release. At that stage, some 6 per cent of the 363 claims that had been processed in the mandating exercise would still be out of scope for Edge.
- **6.49** However, in July 2003, a separate exercise was conducted in a Centrelink useability lab.¹³⁹ This exercise assessed that, of the 72 claims processed in the exercise, 68.1 per cent were successfully processed in Edge.
- **6.50** The EIC decided, at its 8 April 2003 meeting, that Edge was not ready for further roll out at that time.

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¹³⁹ A useability lab was used to test the useability of the system from the users' viewpoint.

Implementation

6.51 FaCS and Centrelink adopted the sensible approach of a staged testing and implementation of Edge. This had the potential to pause, or terminate, the development at any point in the process. In practice, this pause occurred after roll out to a relatively small number of CSCs. Better practice, as identified in the UK Gateway review process, would have had an independent review of the project after the June 2002 Adelaide UAF testing, and before the July 2002 roll out. Such a review may well have paused roll out until additional functionality was available. In practice, a review was held later in 2002, and did not recommend pausing roll out.

6.52 While the Edge system was perhaps rolled out early, and with limited functionality, there were reasons for this early roll out of the system into production in a controlled, incremental fashion. The reasons included an inability to fully test the product at the Adelaide UAF, as the UAF was not fully supported at that time by Centrelink's IT infrastructure support group; and CSOs were requesting the product, as it promised to resolve a number of, then current, problems.

Accuracy and completeness of data

6.53 In April 2002, Centrelink informed the Parliamentary Joint Committee of Public Accounts and Audit that the Edge system was a solution to administrative errors. ¹⁴⁰

6.54 The decision to consider an expert system was the result, in part, from criticism, of Centrelink's accuracy and consistency, in the Ombudsman's Annual Reports of 1995–96 and 1996–97, and an Ombudsman's Report *Oral Advice, Clients Beware* of December 1997.

6.55 As mentioned previously (paragraph 6.31), in December 2001, Centrelink compared the accuracy of processing in Edge with the existing ISIS system. A Centrelink Internal Audit Report of March 2002 found the results 'broadly consistent with the findings of a recent audit of Family Tax Benefit'. The Edge–ISIS comparison found:

Edge assessments were found to have a much greater level of accuracy than ISIS processed claims. Out of 617 claims that have been through the Accuracy checking process:

- 70 per cent (430) of claims processed through ISIS had errors, of which
- 74 per cent (319) could have been avoided by using Edge.

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Joint Committee of Public Accounts and Audit, Official Committee Hansard, Tuesday 30 April 2002.

The balance of these problems relate to new claim action sheets not being attached and Medicare and Tax File Numbers not being removed from the claim. ¹⁴¹

6.56 The 'Accuracy Compare' exercise involved comparing the processing of claims using ISIS, to processing using Edge, and was divided between the Australian Capital Territory, South Australia and Queensland. UAF, CSC and Edge staff not associated with the office being reviewed carried out the work. The Accuracy Compare processing was undertaken from 19 November to 21 December 2001. 142

6.57 The implications were stated as follows:

Implication of Errors

There were 4 overpayments, ranging from \$9.36 to \$321.16 actually quantified with the strong likelihood of another 13. 12 underpayments (various Rent Assistance amounts and MAT payments) were clearly identified and a strong likelihood of a further 24 underpayments.

However, as customers were leaving questions blank on the paper claim form, these omissions could also generate underpayment or overpayments, in particular:

- Rent Assistance—results in customers possibly not receiving their full entitlement;
- Current income details not coded in ISIS—could result in an under or overpayment.

Other Getting It Right errors which causes rework for the CSO included:

- New claim action sheets missing from customer files;
- Customers requesting advance payments which is not actioned;
- Bank account details missing or not transcribed; and
- Contact details missing or not transcribed. 143

6.58 Centrelink provided the following statement in relation to the above accuracy check:

The issue surrounding the correctness in EDGE when compared to processing in ISIS has to be considered in the context of the significant work that was still being developed within Centrelink during the later part of 2001 to define and improve payment correctness and accuracy.

This work was still under development when the 'accuracy check' was undertaken in November 2001. The definition and methodology used in the

¹⁴¹ Connected Pilot 1 Evaluation Report, Version 1.0, 17 February 2003, 4.11 Accuracy Compare.

¹⁴² ihid

¹⁴³ Accuracy Compare 2001—Errors Detected Using Edge.

EDGE accuracy check do not and could not have reflected the definitions and methodologies finally agreed between FaCS and Centrelink and which are now being used in Centrelink and ANAO audits.

From 2001, there was significant work under way within Centrelink to define 'material' and 'non material' errors and agreeing to a definition of payment correctness and accuracy.

Centrelink and FaCS agreed in the 2001–04 BPA to work towards a new framework.

The framework has four key principles:

- explicit and binding agreement on what is to be measured;
- explicit and binding agreement on how measurement is to be done;
- the same definitions of what is to be measured applied at the quality control, quality assurance and external assurance levels; and
- the results will be transparent.

Definitions of correctness and accuracy are based on the 'four pillars':

- right person
- right program
- right rate
- right date.

Each of these pillars is translated into specific criteria for each payment. These criteria are drawn from the social security legislation and reflect the processes required for correct payment outcomes.

In February 2002, the FaCS Secretary and Centrelink CEO formally announced the Business Assurance Framework.

In July 2002, changes to quality control and quality assurance processes were introduced. These included improvement to the management process for quality control, changes to the Quality on Line tool and increased rigour around quality assurance.

The questions in Quality on Line were significantly changed to align with the new 'four pillar' definitions and set of core questions as mapped to legislation and policy.

Every quarter, Centrelink randomly selects a valid sample of customers from each of the major payments and checks their details and payment records. FaCS independently validates the results of this examination. The rolling results of the random surveys are reported in the Balanced Scorecard. The target for correctness is 95 per cent. Since the sampling process began in July

2002, Centrelink's payment correctness figures have exceeded 95 per cent every quarter. 144

- **6.59** Results of the November 2001 Accuracy Compare exercise were used in a number of instances, including the 2002 Business Case Review, to justify continued development of Edge.
- 6.60 In its meeting of 3 February 2003, the EIC decided that there should be a repeat of the December 2001 accuracy check exercise. The Service Integration Shop¹⁴⁵ (SIS) was to manage the process to ensure impartiality. The comparison was conducted between 5 and 14 March 2003 in four CSCs—Epping, Mt Druitt, Mt Gravatt and Townsville. The report of the comparison states:

The purpose of this work was to check at least 200 Family Tax Benefit (FTB) New Claims that had been processed in the ISIS and redo the same cases in Edge to check them against the four pillars of payment correctness under the Business Assurance Framework (right person, right rate, right date, and right program) and the Getting It Right Standards, to ascertain the difference in correctness between new claims processed in the ISIS against those processed using Edge. 146

- **6.61** The summary of the report states: 'This check has not found any significant difference for claims processed in Edge or ISIS.'
- 6.62 There is a significant difference between the two comparisons. The first seriously questioned the correctness of ISIS. Since that time Centrelink has placed significant effort into reducing error rates. This has included introducing its 'Getting it Right' program, and development of a Business Assurance Framework for income security payments (see paragraph 6.58).
- 6.63 The November 2001 Accuracy Compare may have been biased towards supporting the case for Edge. This was because the statement that 74 per cent of ISIS errors would have been corrected by Edge, assumed full functionality from Edge. However, full functionality was never reached in the development of the system. Regardless of whether the comparison was correct or not, the results were used to support the Edge case for continued development.

Differences between Edge and ISIS

6.64 As indicated in Chapter 2 (paragraph 2.35), one benefit of the Edge development was that Edge provided an independent verification of ISIS.

¹⁴⁴ Centrelink response to ANAO issues papers, 24 December 2004.

The Service Integration Shop was established in 2000. Its purpose is to support business development activities and achieve consistency and best practice across the organisation.

¹⁴⁶ Edge Correctness Comparison, 30 April 2003.

During the audit, FaCS provided the ANAO with a list of areas of difference between Edge and ISIS, where ISIS was potentially in error. 147 The ANAO sought a response from Centrelink on the current situation on the potential errors. Centrelink's response stated:

Legislative purity of ISIS

The Edge project identified:

- parts of the ISIS system that were allegedly not processing the claim in accordance with legislation and the related policy guide; and
- several questions which were either not asked in the Family Tax Benefit claim form (FAO01) or were not asked in the same way.

Calculations

ISIS system was implemented in July 2000 in accordance with Business requirements signed off by FaCS. Of the 17 issues highlighted:

- 13 (or 76%) are not an issue in that they either do not affect the customer's entitlement, have already been addressed through a manual workaround or reflect the business requirements as signed off by FaCS; and
- 4 (or 24%) have since been fixed. 148

Centrelink's detailed response to the 17 issues is provided in Appendix 5. Of note among the 17 issues were:

- in certain cases ISIS assumes 364 days in the year, rather than 365. Centrelink advised that this occurs in a small number of cases to avoid anomalous outcomes; and
- a number of issues relating to the way ISIS rounds figures, some of which Centrelink advises have been addressed.

User Acceptance Facility

Centrelink created a UAF in Adelaide in 1997. In January 2002, a usability laboratory located in the Centre commenced operations. In addition, usability exercises were held at CSCs from time to time. The Edge project team used the laboratory to test the Edge system on a number of occasions. In particular, testing was conducted, in the laboratory or in CSCs, before each release of the system. Following are discussions on some of the reports of the testing at critical times of the project.

Information provided in an email to the ANAO, 28 July 2004.

October 2001

- **6.67** In October 2001, a review was conducted of the Edge system before piloting the connected version of Edge in two CSCs. The test was conducted over three weeks. The following is a summary of the report of that review. ¹⁴⁹
- **6.68** At the end of week one, the team was unable to form an opinion on Edge for several reasons, including late training, the connected version of Edge only becoming available on the Friday of the week, and product errors resulted in no claims/assessments being completed in ISIS.
- **6.69** At the close of week two (2 November 2001), the review participants gave their opinion that staff could complete some work and, therefore, Connected Pilot 1 should go ahead.
- **6.70** At the end of week three this opinion remained unchanged. However, the participants considered it necessary to limit the use of Edge due to problems with the product, uncertainty about the preparedness of the pilot sites, and the limited scope of Edge.

July 2002

- 6.71 Edge was tested at the UAF in June and July 2002¹⁵⁰ immediately before the roll out of Edge to the first group of CSCs (Wave 1). The purpose of the use of the UAF in this instance was to 'ascertain whether Edge is ready for use by Network staff following roll out to the initial Wave sites'.¹⁵¹ The Executive Summary of the report of the test stated 'the participants of the Edge UAF are of the opinion that there is potential benefit in using Edge to process new FTB claims'.¹⁵² However, the report also noted that the version of Edge tested had some limitations. The Edge project team responded to the report by stating that Edge will only be used at the initial Wave sites to process FTB claims lodged on FAO01 forms.
- 6.72 In relation to the third and final week of testing, the report stated 'There continued to be major problems using Edge in the UAF during this week'. The problems included errors in the UAF ISIS environment, time out errors, and time taken to process in Edge. The Edge project team responded that 'these problems will not occur in production'. The UAF staff strongly agreed that limiting use of Edge in the initial Wave sites to FTB claims lodged on form FAO01 was the right approach.

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¹⁴⁹ User Assurance Connected Pilot 1 Team/Network Review Final Report, 5 December 2001.

¹⁵⁰ Edge Initial Roll out User Assurance Facility Final Report, 17 July 2002.

¹⁵¹ ibid., section 1.2.

¹⁵² ibid.

6.73 The results of all work cases attempted and completed during the UAF testing gave a 29.5 per cent 'unsatisfactory', 33.3 per cent 'average', and 37.2 per cent 'fine'. These results were against a wider range of processes than just processing of FTB claims from form FAO01. However, these percentages perhaps show a better indication of the limitations of Edge at that time, and are an indication of the difficulties that CSOs would have in trying to use Edge.

September 2003

- **6.74** An Edge Usability Laboratory Exercise was conducted at Tuggeranong (ACT) in September 2003. This exercise was conducted concurrently with, but had no connection with, the major review that recommended terminating the project in November 2003. This exercise showed a significant improvement in the number of claims able to be processed in Edge, and a small decrease in the time taken, compared with a previous exercise in July 2003.
- 6.75 The report of this exercise states that 88.64 per cent of claims could be processed through Edge, with 8.64 per cent of those requiring two or three attempts. However, three of the four CSOs participating in the exercise remarked that the claims sent for the exercise were fairly simple and not representative of the claims they would normally see. The report of the exercise stated: 'Given the time constraints on the network it would be unlikely that CSOs would persevere with Edge a second or third time.' ¹⁵⁴
- **6.76** Edge was due to be completed in December 2003, according to the deliverables as revised in the Development Contract. The usability exercises showed continued improvement over the 15 months following the roll out of Wave 1 in July 2002. However, the September 2003 exercise showed there were still significant deterrents to CSOs using Edge in preference to ISIS. An inability to progress 100 per cent of simple cases would not encourage CSOs to use Edge. It also appeared unlikely that Edge would be able to process close to 100 per cent of all claims, including complex claims, by the proposed December 2003 release.
- **6.77** A significant difficulty for the UAF in testing Edge was that it could not duplicate the production environment. Hence use of the UAF for testing of Edge provided less than optimum information upon which to make decisions. The ANAO understands the UAF has since been upgraded. Centrelink provided the following statement:

The complexities of the Centrelink 'production' environment are unique. The scale, scope, variety of applications and platforms required to deliver government services, and the fluctuation in demand loads on this 'live' system

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¹⁵³ Edge Usability Laboratory Exercise, Tuggeranong CSC, 29 September to 3 October 2003.

ibid., Conclusion.

cannot be successfully replicated in any known testing environment without significant investment and expenditure. However, Centrelink has now undertaken to develop and employ a range of system and user-based testing regimes that are able to test processes and tools to ensure that they are able to function satisfactorily in the production environment.

The recent enhancements to the testing regime for projects through the User Assurance Centre

- The User Assurance Centre (UAC) is now listed as a checkpoint holder in the Operational Readiness Checklist (ORC) for IT development within Centrelink. The ORC is to be used by all project managers during the planning stage of projects. Project managers will consult with the UAC and determine which UAC services are appropriate for their project so they can be scheduled and prepared for.
- UAC evaluation services focus on the user's ability to meet their required outcomes using the product/process but do not replace the need for system testing, performance testing etc. The usability and user acceptance (or otherwise) of products/processes can mean the difference between the success or failure of a project. The UAC also develops training packages with network staff input. For that reason Centrelink now requires projects to make early and frequent use of appropriate UAC services in the project life-cycle.

The improved outcomes expected through the earlier and more frequent UAC use in project life-cycle

- Highlighting usability issues earlier and throughout the project life-cycle means projects can make informed decisions about their direction/progress earlier rather than waiting till implementation to find their product/process has major usability issues. Trials and pilots are useful and necessary, but usage of products/processes by staff at those sites may vary from a project team's intended usage. The controlled UAC environment enables evaluations of the products/processes as intended to be used. The UAC provides impartial user-centred evaluations independent of the project teams responsible for developing products/processes.
- While it is not possible to completely replicate a user's environment (as there are too many variables involved) the UAC controlled environment enables the critical aspects of a user's contextual environment to be replicated. Representative users (customers/staff) are able to provide their open and honest feedback to UAC staff without worrying about providing potentially negative feedback to staff directly involved in developing the given product/process. ¹⁵⁵

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¹⁵⁵ Centrelink response to ANAO issues papers, 24 December 2004.

User surveys

6.78 From 10 to 14 February 2003, a staff survey was conducted to obtain user feedback from staff at four offices where Edge had been rolled out. The staff survey was conducted in conjunction with the mandated 100 per cent usage exercise, and the 2003 correctness comparison exercise. The intention was to inform the EIC of staff views and help determine the next stage of Edge implementation.

6.79 The Summary of Findings of the Edge staff survey reported the highlights to be:

The quality of training material and approach to training require review and update prior to further roll out.

Percentage of staff using Edge on a daily basis is low largely because of system issues and the ability to quickly switch back to ISIS.

Staff surveyed are experienced FAO officers and have good computer literacy skills. FAO experience and general computer skills do not appear to be major factors affecting Edge usage.

It takes at least double the amount of time to process basic FAO01 claims in Edge as compared to ISIS.

Staff appeared to be receptive of new technology. The reasons for Edge not being used consistently are due to its impact on workload build up (system slowness and instability), limited functionalities, and not being comparable to ISIS as a tool at present.

Interactive interview and 'what if' functions are rarely used by staff.

Ongoing support for staff in terms of help desk support, job aid and communication need strengthening.

Office structure and workflow management can impact on the level of Edge usage. ¹⁵⁶

6.80 The survey interviewed 17 staff, with the following results:

94 per cent (16 out of 17) had used Edge since training and 52 per cent (9) had used it within the last fortnight, 35 per cent (6) used the tool daily and 41 per cent (7) did not use it anymore.

¹⁵⁶ Summary of Findings – Edge Staff Survey, February 2003.

- **6.81** In relation to claims processing, the survey gave the following results:
 - While all surveyed staff had processed claims in ISIS, 44 per cent (7 out of 16) still used Edge to process claims. Main reason for not using Edge was because of its slowness and unreliability.
 - Except for one person, majority had not used Edge for an interactive interview.
 - Majority of staff surveyed processed basic FAO01 and FAO01 with maintenance [forms] in ISIS using 5–10 mins; whereas it took over 20 mins using Edge.
 - Since Dec 2002 release, 70 per cent (7 out of 10) did not use Edge to process majority of claims. Main reasons were out of scope, not aware of what's in scope, and not accessed Edge since Dec release. 157

6.82 However, the majority of staff found Edge easy to use. The report on the Edge staff survey made nine recommendations, including that Edge not be further rolled out until claim processing time was more comparable to ISIS.

Overall conclusion on the progress and roll out of the project

6.83 FaCS and Centrelink took a sensible approach to the staged testing and roll out of Edge, with the result that a relatively small number of CSCs were inconvenienced by the limited processing available through Edge, before roll out was discontinued. They also undertook appropriate testing and post implementation reviews after the various stages. However, it appears that pressures to implement the project, with significant limitations in functionality (whether due to Edge itself or due to connectivity with the mainframe), may well have contributed to the eventual termination of the project, in that CSOs became disillusioned with the system.

ibid., Section 6 Claim Processing.

7. Termination of the Project

This chapter discusses the 2003 Business Case Review after which the project was terminated. The key findings of the report of the review are discussed, together with other considerations affecting the project.

Business Case Review 2003

- 7.1 In August 2003, FaCS and Centrelink commissioned a review of Edge. The 2003 Business Case Review (2003 review) was led by an independent private organisation that also supplied the review methodology. The 2003 review team comprised FaCS and Centrelink staff who, for the most part, had had little to do with the Edge project, and could, therefore, be considered independent. The ANAO expected that there would be no pressure placed on the review team to make a particular finding, and found this to be the case.
- **7.2** The report of the 2003 review was released in November 2003, and it recommended that further development of Edge be discontinued. The Secretary of FaCS, and the CEO of Centrelink, accepted the report's recommendation. The key findings from the 2003 review were summarised as:
 - 1. Edge in its planned form is no longer properly aligned with the business needs of the Families program:
 - When Edge was envisaged in 1998, the environment for the Families program was stable, claims were relatively straightforward, and there was little customer interaction post-claim. Changes to the Families program in July 2000 have introduced a high level of post-claim interaction with the customer.
 - Edge was originally designed for face-to-face interactions with customers for the initial claim process. However, changes to the Families program mean that most of the claims are completed as a back office process and the post-claims work is handled mainly by telephone or back office processing.
 - 2. The operation of Edge in parallel with ISIS (Income Security Integrated Systems—Centrelink's mainframe based systems) places an unsustainable workload of dual development and maintenance on the available information and technology (I&T) resources.
 - 3. One of the key drivers for Edge was its potential to significantly improve accuracy in claims processing. However, changes to the Families programs mean that all outlays are protected by the reconciliation process. The main factor affecting adjustment of payment for the customer at reconciliation is the accuracy of income estimates—on which an expert system can have only a limited impact.

- 4. The level of benefits anticipated for the full roll out of Edge are unlikely to be realised and a significantly lower level of quantifiable benefits is now anticipated, leading to a negative return on investment.¹⁵⁸
- **7.3** The review report offered four potential options for the future of the Edge project, of which only one was recommended. The recommended option (option 3) was to target the use of expert systems for self-service:

Targeted use of expert system for self-service: ISIS drives the process, calling on rulebase driven modules where appropriate. The modules would be considered a 'bolt on' to ISIS. These processes could be used for all the current methods of processing as well as being adapted for use in a self-service environment.

Unlike options 1 and 2 where most aspects of the option are reasonably well defined or understood, this option has some unknowns at this time such as what modules would be appropriate and the interaction between the expert system and ISIS. Therefore, this option first requires a feasibility study. ¹⁶⁰

- 7.4 The ANAO notes that FaCS and Centrelink knew, before the Edge project began, of the changes to the Families program (to which the review report refers), which resulted in the protection of outlays by the annual reconciliation process between customers' estimated and actual income. That is, the changes had occurred before the tender was let for the Development Contract, and before the 1999 Business Case was prepared. The review report noted that the 1999 Business Case 'did not fully factor in the implications of income estimation and reconciliation for the balance of interactions with families pre and post initial claim'. ¹⁶¹
- **7.5** Centrelink provided the view that the above paragraph 'does not properly reflect the facts in relation to what could reasonably have been foreseen in terms of business need at the time the 1999 Business Case was prepared'. Centrelink stated:

What is missing in the paragraph is acknowledgment that the magnitude of number of customers who were (in the event) overpaid was at complete odds with the early expectations of both the policy department, FaCS, and Centrelink—the costing for the FAO assumed 5 per cent overpayments not the actual number of 33 per cent or more.

FaCS and Centrelink, Report of the Edge Business Case Review, November 2003.

The other three options that were canvassed were: Roll out Edge 'as is'; Edge 'end to end 100 per cent', i.e. total replacement of ISIS; and discontinue the use of expert systems for the Families program.

¹⁶⁰ Centrelink and FaCS, Report of the Edge Business Case Review, November 2003, para. 1.4.

¹⁶¹ Centrelink and FaCS, Report of the Edge Business Case Review, November 2003, para. 3.1.1.

¹⁶² Centrelink response to ANAO issues papers, 24 December 2004.

It was not until June 2002, that it became evident that more than one third of customers had an overpayment for the 2000–01 financial year i.e. the first year's operation of the family assistance payment system. A similar proportion of customers had overpayments in respect of the next financial year (i.e. 2001–02).

These reconciliation outcomes highlighted the difficulties associated with income estimation and elevated the importance of ongoing customer contact in Centrelink's business process i.e. the business need to prompt customers to update their income estimate and help them review and revise their estimates. ¹⁶³

- 7.6 The decision to terminate the project was taken in November 2003. The project would have been completed, according to the deliverables specified in the revised contract, in the release scheduled for December 2003. The minutes of the Operational Committee of 11 June 2003 recorded:
 - \dots advised that the current Operational Committee meeting (72nd) is the last. [The acting CPM] \dots expects that \dots [the CPM] \dots will sign the Certificate of Acceptance for the CPA (the last deliverable under the original contract) next week. ¹⁶⁴
- 7.7 The question is, when the project was so close to completion, why was it terminated. In the view of the ANAO, there were a number of problems with the project, not just those articulated by the 2003 review. The ANAO comments on the review are articulated below, followed by a discussion of other related issues.

2003 review key findings

- 7.8 The 2003 review finding that 'Edge in its planned form is no longer properly aligned with the business needs of the Families program' indicates a breakdown in either the initial understanding of the business, or in the construction process for the system. Indications are that both were factors in it not meeting business requirements.
- **7.9** The 1999 Business Case for the project specifically stated that the project was designed to meet the needs of the new FAO legislation. Nevertheless, Edge was designed to be interview-based, even though the legislation stated that reconciliation would be an end-of-year process.
- **7.10** In July 2001, the first annual reconciliation highlighted the impact of the reconciliation process, and perhaps should have prompted a review of the design of Edge.

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¹⁶³ ibid.

Operational Committee Minutes, 11 June 2003.

¹⁶⁵ Centrelink and FaCS, Report of the Edge Business Case Review, November 2003, Section 1.3 Key Findings.

- **7.11** During construction, redesigned workflows were created to help CSOs use the system when entering claims lodged by form. A major attribute of an expert system is the ability to determine the workflow from the answers given to questions. The creation of workflows to direct the line of questioning defeats this attribute. Entry of data from forms also reduces the opportunity to follow-up discrepancies in information provided, and hence reduces the ability of the expert system to ensure correct data.
- **7.12** During development of Edge, a major concern and difficulty for the Edge team was that ISIS was continually being modified in the light of experience with the new legislation introduced in 1999, and to meet subsequent changes to that and other legislation (Appendix 1 lists changes to legislation affecting Families program payments). Edge was continually being modified to track the changes to ISIS. The introduction of MCFF required the ability to continually adjust the Edge rulebase. Edge was not designed for this type of functionality.
- 7.13 The 2003 review finding that 'the operation of Edge in parallel with ISIS places an unsustainable workload of dual development' is stating the obvious. In the longer term one had to go, and the decision was made to terminate Edge at this time. In practice, it would be impossible to turn off ISIS until Edge could process all Families transactions and, at the time the project was cancelled, it was unclear when this would occur.
- **7.14** A Feasibility Study recommended by the 2003 review (the recommended option) considered the potential for melding the two systems; that is, use parts of the Edge system, where appropriate, and ISIS where not. This approach seems a sensible way forward.
- **7.15** The 2003 review found that changes to the Families program, which introduced the annual reconciliation process, reduced the potential of Edge to improve accuracy in claims processing. This is correct to a point. However, the accuracy of the claim still relies on the underlying data.
- **7.16** Further, as noted in paragraph 7.8, the 1999 Edge Business Case stated that the system was designed to support the new legislation, which had been introduced in 1999. It should have been clear in July 2001, at the time of the first reconciliation under the new legislation, that the reconciliation process changed the requirements for Edge.
- **7.17** The 2003 review finding that 'the level of benefits anticipated for the full roll out of Edge are unlikely to be realised' is probably correct. However, the bulk of the time and money had already been spent. Indications are that

¹⁶⁶ ibid

¹⁶⁷ ibid.

the project would have been complete in December 2003. However, it was unlikely that, by December 2003, Edge would have been able to process the full range of FAO transactions, in order to allow use of ISIS to be discontinued.

Other issues

FaCS-Centrelink relationship

7.18 Edge was a joint project between FaCS and Centrelink. The original proposal was for costs and savings to be shared equally. This principle was to be expressed in the form of an MOU. The MOU was never agreed and signed and there were tensions between the two organisations ending in FaCS refusing to pay a Centrelink invoice for \$2.79 million (plus GST) in June 2004. It is difficult to successfully proceed with a major project where the two organisations involved cannot agree on how the project will be funded. The ANAO notes that, during the project, tensions rose to the point where the CPM was prepared to instruct SoftLaw not to continue with FaCS-related work if FaCS did not make payments.

Interview-based processing

- **7.19** At the time of the Edge tender, Centrelink was early in its new life as a service delivery agency, and conscious of Ombudsman and ANAO criticisms of its accuracy and consistency. Hence an aim of the agency, at that time, was to ensure correct customer information in line with its 'Getting it Right' strategy. The initial view of the Edge project was that a face-to-face interview with the client would provide greater accuracy of information. It would also provide the client with greater assurance that all the client's circumstances had been taken into account. Also, that once the interview process was completed, there would be little need for further contact with the client, unless the client's circumstances changed.
- 7.20 This was the basis for the initial strategy of interview-based processing for families' payments. In the event, changes to the Families legislation, requiring an estimation of income and an annual reconciliation, together with client preferences for application by phone or mail, meant most claims were by means other than face-to-face interview. As the Edge system was designed to collect all information from clients at an interview, the time needed for the full data collection process made it less suitable for time-critical telephone interviews, or data deficient forms entry. This meant that, rather than Edge determining what question to ask next based on previous questions, a workflow process had to be developed such that Edge asked questions in the same order the questions were on the form (for form-based applications) and a more restricted set of questions developed for telephone-based applications.
- **7.21** Towards the end of development of Edge, the EIC made decisions to reduce the number of questions asked by Edge, to increase the speed of

processing. This reduced the comparative benefit of Edge, as compared with ISIS, in terms of collecting all appropriate data and improved accuracy of that data.

7.22 The original 1999 Business Case recognised that collection of full data in an interview would take longer than the ISIS process. The expectation was that the data collected would be more complete and more accurate; hence rework and client complaints would be reduced. However, in order to measure the reduction in rework it was necessary to determine the then current situation as a base for comparison. This was not done at that time, although Centrelink has undertaken work on this more recently.

7.23 Key Performance Indicators (KPIs) set by FaCS for Centrelink are a key driver for CSOs. ¹⁶⁸ The slower processing of Edge meant that CSOs had difficulty meeting the KPIs. In discussion with the ANAO, FaCS advised that it did not see the KPIs as a problem, and were happy to modify them to recognise the slower processing of Edge, in return for greater accuracy and less rework. However, the ANAO did not find any evidence that this view was communicated to CSOs, or to Centrelink. Accordingly, the CSOs saw Edge as an impediment to meeting their commitment to the KPIs, and so reflecting poorly on their performance.

The funding

7.24 The Edge development was initially funded through the Budget process associated with the new FAO legislation in 1999. Additional funding was needed, and there were disagreements between FaCS and Centrelink as to the contribution of each agency. FaCS wished to fund its contribution from expected savings. Centrelink needed cash from FaCS to complete the development. There was also disagreement between the agencies as to whether some developments associated with Edge should be considered part of the Edge project. The result was that the Centrelink Edge team had to continually approach the BIC for additional funding.

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¹⁶⁸ The applicable KPI for Family Tax Benefit is that 85 per cent of claims must be paid within 21 days of lodgement.

- **7.25** The 2003 review was, in part, a result of the concern that further funding was needed after expenditure to that point of some \$58 million, yet there was still not a definite end date in sight. There was also reluctance by the Centrelink Edge team to approach the BIC again, without an independent review demonstrating a sound case for further progress.
- **7.26** With the termination of the project, Centrelink had no further obligation to provide the savings to FaCS that were originally expected to be generated by the project.

The image

7.27 Edge was implemented without full functionality. While there were reasons for the early roll out, roll out of less than full functionality meant CSOs favoured processing in ISIS, which they knew worked, over Edge, which may or may not have been able to process a particular transaction. There was considerable disillusionment amongst CSOs and once the project got a poor reputation it was difficult to recover.

Feasibility study

7.28 The 2003 review recommended that a feasibility study be conducted to explore an option for the targeted use of expert systems, to leverage the work undertaken on the Edge project. At the time of completion of audit fieldwork, Centrelink informed the ANAO that the feasibility study was not complete. This was 10 months after the 2003 review recommended the study.

Canberra ACT 14 April 2005

Ian McPhee Auditor-General

9 mill

Appendices

Appendix 1:

Family Assistance Legislation changes since 1 July 2000

Main Family Assistance legislation

A New Tax System (Family Assistance) Act 1999 commenced 1 July 2000 (FA)

A New Tax System (Family Assistance) (Administration) Act 1999 sections 1 & 2 & sub-section 235(5) commenced 8 July 1999 remaining provisions commenced 1 July 2000

(FAA)

Schedules 5 & 6 of A New Tax System (Family Assistance and Related Measures) Act 2000

Schedules 5 & 6 (Transitional provisions) commenced 1 July 2000.

Schedule 3 of Family Assistance Legislation Amendment (More Help for Families-One-off Payments) Act 2004

Schedule 3 (enabling provisions for an administrative scheme) commenced 26 May 2004.

Table of changes

Legend:

Amending Section: Section in the amending Act that alters the parent Act

Commencement: Date of commencement of the amending section

Table A3.7.1

Family Assistance legislation changes since 1 July 2000

Act amended	Name of amending Act	Amending section	Commencement
FA	A New Tax System (Compensation Measures Legislation Amendment) Act 1999	Schedule 4	1 July 2000
FA	Compensation Measures Legislation Amendment (Rent Assistance Increase) Act 2000—which actually amended the A New Tax System (Compensation Measures Legislation Amendment) Act 1999, which in turn amended the FA	Schedule 1 (item 5)	1 July 2000
FA	A New Tax System (Family Assistance) (Consequential and Related Measures) Act (No. 2) 1999	Schedule 2	1 July 2000
FA	A New Tax System (Family Assistance and Related Measures) Act 2000	Schedule 1	1 July 2000
FAA	A New	Schedules 2, 5, 6	1 July 2000

Act amended	Name of amending Act	Amending section	Commencement
	Tax System (Family Assistance and Related Measures) Act 2000		
FAA	Social Security (Administration and International Agreements) (Consequential Amendments) Act 1999	Schedule 4	1 July 2000
FA	Social Security and Veterans' Entitlements Legislation Amendment (Miscellaneous Matters) Act 2000	Schedule 8	20 Sept 2000
FA	Family Law Amendment Act 2000	Schedule 3 (items 1A–1D)	27 Dec 2000
FA	Family and Community Services (2000 Budget and Related Measures) Act 2000	Schedule 2 (items 1–6)	1 Jan 2001
FAA	Family and Community Services (2000 Budget and Related Measures) Act 2000	Schedule 2 (items 7–10)	1 Jan 2001
FA	Family and Community Services Legislation Amendment (New Zealand Citizens) Act 2001	Schedule 2 (items 1–12)	30 Mar 2001
FAA	Family and Community Services and Veterans' Affairs Legislation Amendment (Debt Recovery) Act 2001	Schedule 3 (items 1– 15) Schedule 3 (items 16– 17)	1 July 2001 12 June 2001
FA	Child Support Legislation Amendment Act 2001	Schedule 1A (items 18–21) Schedule 4	1 Dec 2001
FAA	Family Assistance Estimate Tolerance (Transition) Act 2001	Schedule 1	1 Oct 2001
FAA	Family and Community Services Legislation Amendment (Application of Criminal Code) Act 2001	Schedule 1 (items 3–41)	2 Oct 2001
FAA	Child Support Legislation Amendment Act 2001	Schedule 1A (items 22–24)	1 July 2002
FA	Family and Community Services Legislation Amendment Act 2003	Section 4 Schedule 2 (items 1– 13) Schedule 2 (items 52– 71) Schedule 2 (items 73– 82) Schedule 2A	15 Apr 2003 15 Apr 2003 1 Jul 2000 1 Jul 2000 1 Jul 2000
FAA	Family and Community Services Legislation Amendment Act 2003	Section 4 Schedule 2 (items 14–51) Schedule 2 (item 72)	15 Apr 2003 15 Apr 2003 1 July 2000 1 July 2000

Act amended	Name of amending Act	Amending section	Commencement
		Schedule 2 (items 83–86)	
FAA	Family and Community Services Legislation Amendment (Australians Working Together and other 2001 Budget Measures) Act 2003	Schedule 7 (items 4–6)	24 April 2003
FAA	Family and Community Services Legislation Amendment (Budget Initiatives and Other Measures) Act 2002	Schedule 2	1 July 2003
FA	Family and Community Services Legislation Amendment (Australians Working Together and other 2001 Budget Measures) Act 2003	Schedule 1 (item 1A) Schedule 2 (item 1A) Schedule 6 (item 1)	20 Sept 2003 20 Sept 2003 20 Sept 2003
FA	Family and Community Services and Veterans' Affairs Legislation Amendment (2003 Budget and Other Measures) Act 2003 – which actually amended the Family and Community Services Legislation Amendment (Australians Working Together and other 2001 Budget Measures) Act 2003, which in turn amended the FA	Schedule 7 (item 2)	19 Sept 2003
FAA	Higher Education Support (Transitional Provisions and Consequential Amendments) Act 2003	Schedule 2 (item 95)	1 Jan 2004
FAA	Family Assistance Legislation Amendment (Extension of Time Limits) Act 2004	Schedule 1 (items 1–6)	20 Apr 2004
FA	Family Assistance Legislation Amendment (More Help for Families— One–off Payments) Act 2004	Schedule 1 (items 1–2)	26 May 2004
FAA	Family Assistance Legislation Amendment (More Help for Families – One–off Payments) Act 2004	Schedule 1 (items 3–13)	26 May 2004
FA	Family and Community Services and Veterans' Affairs Legislation Amendment (2003 Budget and Other Measures) Act 2003	Schedule 6 (items 1–6)	1 July 2004
FAA	Family and Community Services and Veterans' Affairs Legislation Amendment (2003 Budget and Other Measures) Act 2003	Schedule 4 (items 1–4)	1 July 2004
FAA	Family Assistance Legislation Amendment (More Help for Families – Increased Payments) Act 2004	Schedule 1 (items 9– 11) Schedule 2 (items 12– 33)	1 July 2004 1 July 2004

Act amended	Name of amending Act	Amending section	Commencement
FA	Family Assistance Legislation Amendment (More Help for Families – Increased Payments) Act 2004	Schedule 1 (items 1–8,11) Schedule 2 (items 1–11) Schedule 2 (items 43–48) Schedule 2 (items 49–50) Schedule 2 (items 51–52) Schedule 2 (items 53–54) Schedule 3 Schedule 4	1 July 2004 1 July 2004 1 July 2004 1 July 2006 1 July 2008 1 July 2008 1 July 2004 1 July 2004
FA	Military Rehabilitation and Compensation (Consequential and Transitional Provisions) Act 2004	Schedule 3 (item 8)	1 July 2004
FAA	Military Rehabilitation and Compensation (Consequential and Transitional Provisions) Act 2004	Schedule 3 (items 9–10)	1 July 2004

Source: ANAO Information Research Centre and FaCS.

Determinations related to Family Assistance

Legend:

Made under: The relevant piece of Family Assistance legislation the Determination was made under:

FA: A New Tax System (Family Assistance) Act 1999

FAA: A New Tax System (Family Assistance) (Administration) Act 1999

OPA: Family Assistance Legislation Amendment (More Help for Families—One-off Payments Act 2004.

Table A3.7.2

Determinations related to Family Assistance since 1 July 2000

Made under	Determination	Commencement
FA	Child Care Benefit (Absence From Care – Permitted Circumstances) Determination 2000	1 July 2000
FAA	Child Care Benefit (Allocation of Child Care Places) Determination 2000	1 July 2000
FA	Child Care Benefit (Australian Resident) Guidelines 2000	1 July 2000
FAA	Child Care Benefit (Breach of Conditions for Continued Approval) Determination 2000	1 July 2000
FA	Child Care Benefit (Eligible Hours of Care) Determination 2000	1 July 2000
FAA	Child Care Benefit (Eligibility of Child Care Services for Approval and Continued Approval) Determination 2000	1 July 2000
FA	Child Care Benefit (Hours of Eligibility Rules) Determination 2000	1 July 2000
FA	Child Care Benefit (Rates and Hardship) Determination 2000	1 July 2000
FAA	Child Care Benefit (Receipts) Rules 2000	1 July 2000
FA	Child Care Benefit (Recognised Work or Work Related Commitments) Determination 2000	1 July 2000
FAA	Child Care Benefit (Record Keeping) Rules 2000	1 July 2000
FA	Child Care Benefit (Session of Care) Determination 2000	1 July 2000
FAA	Child Care Benefit (Specified Qualifications for Registered Carers) Determination 2000	1 July 2000
FA	Child Care Benefit (Work/Training/Study Test Exemption) Determination 2000	1 July 2000
FA	Family Assistance (Higher Amounts) Determination 2000	1 July 2000
FA	Family Assistance (Higher Amounts) Determination 2000	1 July 2000

Made under	Determination	Commencement
	(No. 2)	
FA	Family Assistance (Immunisation Requirements Exemption) Determination 2000	1 July 2000
FAA	Family Assistance (Present Value of Unpaid Amount – Interest Rate) Determination 2000	1 July 2000
FA	Family Assistance (Vaccination Schedules) Determination 2000	1 July 2000
FA	Child Care Benefit (Absence From Care – Permitted Circumstances) Amendment Determination (No.1) 2000	1 Jan 2001
FAA	Child Care Benefit (Allocation of Child Care Places) Amendment Determination (No. 1) 2000	1 Jan 2001
FA	Child Care Benefit (Eligible Hours of Care) Amendment Determination (No.1) 2000	1 Jan 2001
FAA	Child Care Benefit (Eligibility of Child Care Services for Approval and Continued Approval) Amendment Determination (No. 1) 2000	1 Jan 2001
FA	Child Care Benefit (Recognised Work or Work Related Commitments) Amendment Determination (No. 1) 2000	1 Jan 2001
FAA	Child Care Benefit (Record Keeping) Amendment Rules (No. 1) 2000	1 Jan 2001
FAA	Child Care Benefit (Breach of Conditions for Continued Approval) Amendment Determination 2001 (No. 1)	1 July 2001
FAA	Child Care Benefit (Eligibility of Child Care Services for Approval and Continued Approval) Amendment Determination 2001 (No. 1)	1 July 2001
FAA	A New Tax System (Family Assistance) (Administration) (Penalty Interest) Determination 2001	1 Aug 2001
FAA	Family Assistance Estimate Tolerance (Transition) Determination 2001	5 Oct 2001
FAA	Family Assistance (Public Interest Certificate Guidelines) Determination 2002	6 Feb 2002
FA	Family Assistance (Immunisation Requirements Exemption) Amendment Determination 2002 (No. 1)	15 Mar 2002
FAA	Child Care Benefit (Eligibility of Child Care Services for Approval and Continued Approval) Amendment Determination 2002 (No. 1)	30 Oct 2002
FAA	Child Care Benefit (Allocation of Child Care Places) Amendment Determination 2003 (No. 1)	5 Feb 2003
FAA	Child Care Benefit (Eligibility of Child Care Services for Approval and Continued Approval) Amendment Determination 2003 (No. 1)	5 Feb 2003

Made under	Determination	Commencement
FAA	Child Care Benefit (Breach of Conditions for Continued Approval) Amendment Determination 2003 (No. 1)	1 July 2003
FAA	Child Care Benefit (Eligibility of Child Care Services for Approval and Continued Approval) Amendment Determination 2003 (No. 2)	1 July 2003
FA	Family Assistance (Meeting the Immunisation Requirements) Determination 2003	13 Aug 2003
FA	Family Assistance (Exemption from Immunisation Requirements) Determination 2003	19 Sept 2003
FA	Family Assistance (Meeting the Immunisation Requirements) Amendment Determination 2003 (No. 1)	19 Sept 2003
FA	Family Assistance (Vaccination Schedules) Determination 2003	19 Sept 2003
FAA	Family Assistance (Designated Date) Determination 2004	1 July 2004
ОРА	Family Assistance (One-off Payments to Families and Carers) Scheme 2004	23 July 2004
FAA	Family Assistance (Household Organisational Management Expenses (Home) Advice Program) Determination 2004	13 August 2004

Source: ANAO Information Research Centre and FaCS.

Appendix 2: The future of expert systems in Centrelink

Centrelink provided the following information to the ANAO on the future of expert systems in Centrelink:

An expert system may be defined as computer software that captures the knowledge base and decision-making principles for a specific discipline and assists users with drawing conclusions and making prescriptions within that discipline.

The business imperative for expert systems in Centrelink can be expected to become more important with time. The first key driver for this imperative continues to be the increasing range and complexity of services offered by Centrelink requiring access to expert scripts that can assist service delivery officers quickly and efficiently to make assessments, particularly in areas where they are unlikely to have significant expertise. The second key driver is the value in being able to analyse the increasingly rich set of real-time data that will become available to Centrelink though the connected online service enable risk, channels, to real-time profiling of assessment whole-of-community patterns, the need for corrective interventions into individual participation planning etc. Other drivers include efficiency, flexibility and responsiveness.

Expert system implementation will need to integrate with service-oriented core resources and flexible business process management. In particular users will need to be provided with support for direct service access to address narrow service requirements such as simple data correction, expert process scripts for complex assessments, and dynamic process scripts to enable innovative service delivery for specific purposes. Expert services which can be scripted into business processes will also be needed for specific services such as profiling customers for service streaming or risk management as part of the assessment process.

Business agility will be a key attribute of every successful organisation in future. For expert systems this means the deployment of discrete functional units that can be rearranged in different business processes enabling flexibility between front office, back office and batch processing without the requirement for duplication in services and processes.

Appendix 3: Centrelink Project Office and Project Governance

Centrelink provided the following information on its current governance structures for managing projects:

As technology becomes more pervasive the distinction between information technology and business blurs. One of the first places this becomes evident is project success (and project governance). Many advisory organisations such as the Standish Group, MetaGroup and the Gannthead Project Managers Forum all highlight the need for business involvement in what were once considered IT projects as critical for project success. Business involvement is considered to be in the top three critical success issues, with project prioritisation and outcome setting being the top two elements. With the possible exception of deep technology infrastructure projects, it no longer makes sense to consider any project as an IT exercise, rather they should be considered organisation exercises. This has been the case in Centrelink.

As part of its governance structure Centrelink has adopted the Centrelink Project Management Framework that is based on Prince 2 and includes a project management policy, high-level methodology, processes and templates. The framework provides a high-level overview of project management with underpinning workflows, templates, roles and responsibilities. It provides a greater level of detailed information, advice and assistance to project managers, business owners and staff.

Since 2003, the Enterprise Program Office is responsible for the implementation of a program/portfolio approach to project management within Centrelink and provides centralised support for projects under a program/portfolio approach to investment. This includes providing relevant tools for project management, including the Centrelink Project Management Framework, and associated tools for scheduling and effort recording as well as ongoing training and support of/for project managers, and support to program committees.

A key component of improved program and project management within Centrelink has been the development and implementation of a Quality Assurance Framework. As part of the Quality Assurance Framework for the Refresh Program, Centrelink has developed a Gateway Review Process to assess the readiness of a medium to high- risk project to progress to its next key phase or milestone. Importantly, this review model is now being extended to encompass non-Refresh projects.

Gateway reviews are carried out by an independent team of reviewers, at critical milestones or phases of a project life cycle. The number of Gateway reviews for a given project will differ but will generally align with the key phases of Centrelink's Project Management Framework—or as agreed with the Project Manager and Business Owner. Gateway Reviews are rigorous and independent and are considered best practice in Europe.

Reviewers are sourced from a Gateway Review Panel consisting of independent consultants, retired Public Sector Officers and current officers of other government departments/agencies

The purpose of the Gateway Review is threefold, it is a:

- 1. Go/No-Go Point establishing whether a project is ready (at a project, program and organisational level) to progress to the next project milestone and/or the next phase of its project life cycle.
- **2. Health Check** ensures that the project has been following corporate processes and procedures to a satisfactory standard and it progressing to plan.
- **3. Tool to ensure success of the project or program** overall, it provides the Business Owner and project team with a support mechanism to enable them to manage projects effectively.

Developed to complement rather than duplicate the current Centrelink Project Management Framework processes, the Gateway Review process has many benefits including:

- ensuring that key project and program stakeholders are made aware of project status, issues and progress
- providing a level of assurance that a project is ready to progress to the next phase or milestone and if not, that problems are identified and remedial action implemented quickly
- minimising common project risks such as scope creep by focusing project teams on the management of scope, time and budget
- providing a mechanism that enables a Business Owner to stop a project if it is no longer required or judged as unlikely to achieve its objectives within an acceptable cost.

The approach taken in dealing with the Refresh Projects will assist in enhancing Centrelink's Project Management Framework and help embed a program/portfolio approach to deliver required results and performance targets.

A program/portfolio approach to project management ensures that a series of projects can be undertaken to achieve program outcomes. This way there is a much more transparent view of project investment and how it links to the goals of the organisation. Accordingly, as the organisation's goals or priorities change, portfolio management allows much more flexibility in starting/stopping projects to meet those needs.

Centrelink has also developed a strategy to implement governance for architecture that will ensure alignment and strategic direction. These arrangements have been put in place to ensure that the situation with EDGE will not happen again.

Appendix 4: Life Events Expert System Operational Committee

Extract from the Development Contract

- 13.1 The parties must establish a committee (in this Contract referred to as the "Operational Committee"). Decisions of the Operational Committee must be recorded in the minutes referred to in sub-clause 13.12. Where contentious issues cannot be resolved by the Operational Committee the parties may decide to refer such issues to the Senior Executive Committee.
- 13.2 The Operational Committee will comprise:
- (a) the Commonwealth Project Manager, who shall be the Chair;
- (b) two Centrelink project personnel;
- (c) two FaCS project personnel;
- (d) two of the Contractor's project personnel, including the Contractor's Representative; and
- (e) such other persons as determined by the Committee from time to time.
- 13.3 The Operational Committee must meet:
- (a) within 2 Normal Working Days of a request by the Commonwealth Project Manager or Contractor's Representative to the other Committee members; and
- (b) at least twice monthly following the Commencement Date, or within such other periods as the Committee determines in writing;
- at Centrelink's offices in the Australian Capital Territory, or at any other agreed locations.
- 13.4 The Operational Committee will:
- (a) review and monitor progress under this Contract; and report thereon in writing to the parties and, if required, to the Senior Executive Committee;
- (b) report in writing on progress under this Contract to the Commonwealth Project Manager, the Senior Executive Committee, or the parties, when requested;
- (c) when appropriate, recommend in writing to the Commonwealth Project Manager or to the Senior Executive Committee any variations to any part of this Contract, and include with any recommendations the Committee's written reasons for those recommendations;

- (d) make recommendations to the Commonwealth Project Manager in respect of decisions to be made in accordance with clause 37 in respect of Acceptance;
- (e) make recommendations to the Commonwealth Project Manager in respect of decisions to be made in accordance with clause 49 in respect of the use of sub-contractors;
- (f) identify and discuss alternative solutions for circumstances, issues and other factors affecting, or which may affect, the Services;
- (g) attempt to resolve major issues relating to the performance of this Contract, and, where it is unable to resolve an issue, to refer that issue to the Senior Executive Committee;
- (h) where relevant, discuss methods for the improvement of the quality or efficiency of the delivery of Services and the performance of the Contractor's obligations under this Contract;
- (i) discuss issues arising from:
 - (i) other relevant areas or persons connected with the provision of the Services;
 - (ii) observations by the Commonwealth Project Manager of the Contractor's performance under the Contract; and
 - (iii) suggestions by the Contractor in relation to its performance under the Contract;

and either agree to an appropriate strategy for implementation by the Contractor or make recommendations for action to the Commonwealth Project Manager or to the parties as a result of these discussions;

- (j) discuss alternative strategies for successfully dealing with issues raised in accordance with paragraph (i), with a view to formulation of an appropriate strategy for implementation by the Contractor;
- (k) address matters referred to it in accordance with clauses 17 or 5;
- (l) address issues that may lead to dispute under this Contract;
- (m) foster effective liaison between Project teams and other relevant areas or persons connected with the provision of the Services;
- (n) prior to any Contract Material being placed on a Commonwealth System, allocate tasks for procuring any certification required by a contractor of the Commonwealth in respect of such Contract Material; and
- (o) carry out such other functions as are required of it in this Contract or as determined by the Senior Executive Committee or as otherwise agreed in writing between the parties.

- 13.5 The Contractor agrees to provide to the Operational Committee a monthly report electronically in a format that enables historical analysis and at a minimum level of information, as required by the Operational Committee to carry out its functions under this Contract addressing progress on the implementation of the Services.
- 13.6 The Contractor agrees to report to the Commonwealth as part of the Operational Committee meetings whenever a New Release or Update of a Deliverable becomes available.
- 13.7 Reserved.
- 13.8 All requests for enhancements and new functionality received by the Contractor from whatever source will be brought to the attention of the Operational Committee at the next Operational Committee meeting, in a format agreed by the Operational Committee.
- 13.9 Each request for enhancement or new functionality received will be documented with a recommendation to the Operational Committee to either accept or reject the request. Recommendations for any changes to the Project, Implementation and Payment Plan to incorporate the enhancement or new functionality will be put to the Operational Committee by the Contractor, with reasons for the recommendations.
- 13.10 Minutes of the Operational Committee meetings must be taken by one party (which minutes must include confirmation or correction of the minutes of the previous Operational Committee meeting) and that party must promptly provide a record of those minutes to the other members of the Operational Committee as soon as practicable after the relevant meeting.
- 13.11 Each party must promptly attend to any matters arising from the Operational Committee meetings that require its attention.
- 13.12 All persons who attend the Operational Committee meetings (including the members of the Operational Committee), must be suitably qualified and informed in relation to the matters to be considered by the Operational Committee and be able to provide sufficient information on a relevant matter to the Operational Committee to enable it to properly assess and direct progress under this Contract.
- 13.13 Each party must bear its own costs in respect of Operational Committee meetings held in the Australian Capital Territory, and of attending to the matters arising which require their action or attention. The Commonwealth agrees to reimburse the Contractor for its air travel costs at economy airfare rates associated with attending, at the request of the Commonwealth Project Manager, Operational Committee meetings held outside of the Australian Capital Territory. However, to be reimbursed such costs must first be approved by the Commonwealth Project Manager prior to being incurred, and

subsequently be substantiated. Any associated accommodation costs incurred will only be reimbursed at the rate applicable to non-Senior Executive Service officers of the Commonwealth Public Sector.

Appendix 5: Parts of ISIS allegedly not processing according to legislation (Centrelink response)

The main areas of ISIS identified as not processing completely, or correctly, together with Centrelink's response to each aspect, are detailed below.

	Issue	Description	Centrelink comment
1.	Rent assistance	ISIS assumes 364 days as opposed to 365.	For the majority of customers, paying rent weekly or fortnightly, the calculation is based on 365. In a very small proportion of cases in order to avoid anomalous outcomes for customers, when a monthly amount is entered into the Accommodation Circumstances (AC) screen it is automatically converted to a weekly amount, with the calculation of 52 weeks x 7 days (or 364 days). The number of customers affected is very small as most customers report weekly or fortnightly rent amounts.
2.	Blended families and shared care	ISIS fails to properly recognise these arrangements where the Large Family Supplement is concerned.	This is not the case, provided both parents let Centrelink know and the CSO codes the circumstances correctly, the system will correctly calculate the Large Family Supplement.
3.	Rounding rules for FTB	ISIS rounds differently to legislation.	Systems fix to address this issue was implemented in June 2001.
4.	Calculation of maintenance income	Incorrect calculation of maintenance in certain situations.	System fix to address this issue (as it relates to maintenance calculation issues where child is under 16) was implemented in December 2003.

	Issue	Description	Centrelink comment
5.	Adjusted taxable income fields	ATI components on different screen to taxable income, which can lead to staff not inputting data on Net Rental Property Loss—Edge system prompts staff to fill in all fields.	While Edge prompts staff to fill in all fields, staff member may still input '0' in error. In any event, customer receives letter confirming estimate provided and reconciliation process, after end of income year, ensures customer receives correct entitlement based on actual income (including Net Rental Property Loss).
6.	Overseas absences	ISIS was unable to apply overseas absence extensions appropriately.	This has since been addressed.
7.	Claim in substitution ISIS may not be processing claims in substitution in accordance with the Act.	This process is done manually in the Network. ISIS is not used for these cases. These cases are very rare.	These cases are manually processed in the Centrelink Network.
8.	Child Care Benefit week ending field Child Care Benefit entitlement is calculated on a weekly basis, running from Monday to Sunday. To qualify, a customer must meet the work/study/training test at some time during each week that they are claiming for. We need to cross reference the week claim with the work/study/training test for that week. The problem is that ISIS stores the week ending date as Monday of the previous week rather than the Sunday.	ISIS stores information about the work test based on the true date of effect—e.g. if the customer stops work and therefore fails the test on a Wednesday, the date the Centrelink Service Officer enters is Wednesday. It uses information recorded with the date of effect to determine true entitlement.	ISIS is using the correct entitlement date.
9.	Age of consent rules Centrelink has a policy of allowing a customer/partner to be put onto ISIS if they are under the age of 12. This is not supported by legislation.	The ability to create customer records for people under the age of 12 is standard ISIS processing and is used in some programs where the child is the customer. The FAO Detailed Business Requirement did not advise that there was an age limit for FTB customers	Family Assistance Office (FAO) legislation does not set an age limit for FTB customers.

	Issue	Description	Centrelink comment
10.	Periodic payments under the law of the Commonwealth Current processing does not reflect impact of foreign pensions (Italy, NZ). This needs to be addressed before incidents can be solved. Current FTB processing in ISIS does not reflect the possible impacts of receiving an Italian foreign pension through the reciprocal agreement.	If this is referring to the issue of portability and international social security agreements as defined in 2.2.1.4.2 of the FAO Detailed Business Rules—about notional family allowance for Agreement pensioners—it is reflected correctly in ISIS. If it is referring to income, foreign income is assessed in the income test in ISIS.	ISIS does reflect the correct 'notional allowance' for Agreement pensioners and assesses 'foreign income' in the income test.
11.	Changes to Edge to reflect the FAO01 claim form Certain Edge questions now have mandatory defaults to enable Edge to fit FAO01 claim forms, i.e. to ensure that Edge did not ask questions that were not asked on the claim form. Some of these changes may result in a possible overpayment of FTB.	The current system (ISIS) reacts to details that are processed. If Edge omitted questions then it may be possible for FTB overpayments.	This relates the materiality of questions asked by Edge as opposed to those asked in the claim form—none of the additional questions asked by Edge materially affects the customer's entitlement.
12.	Illness of the child does not appear in Section 6 as an exemption to immunisation		This appears to be a policy guide amendment rather than an ISIS issue.
13.	Individual receiving other government payments	The connected configuration of Edge will never ask a customer to provide info where they are already receiving a child related payment from another source—this relates to the payment of base rate FTB Part A where Department of Veterans Affairs (DVA) pensions are received by the customer.	The only payments affected currently are DVA payments. ISIS records DVA pensions and although the amount of Department of Veterans Affairs payment received is not recorded, the information that a Department of Veterans Affairs payment is being received for a child has the effect of restricting the rate of payment of FTB Part A to the base rate.

	Issue	Description	Centrelink comment
14.	Childcare percentage differs between Edge and ISIS	This is an inherent issue with the number of different systems within the Centrelink mainframe. Depending on the system and the Detailed Business Requirements on rounding and decimal places this will always be an issue. The system is currently working as per FAO business requirements.	This is a rounding issue between different systems and the number of decimal points used in the calculations.
15.	Rounding issue ISIS rounds to four decimal places and Edge rounds to two.		This issue was corrected in June 2001.
16.	Eligibility for an advance	The current ISIS processing reflects the FAO Detailed Business Requirements. Under the current system there is no 'dollar error' as advances are all fully recovered.	ISIS reflects the FAO Business Requirements as agreed between FaCS and Centrelink.
17.	Daily advance amount Recovery amounts differ between Edge and ISIS.	The FAO advances specification is 'signed off' on a six monthly basis. This issue can be considered at that time.	ISIS reflects the FAO Business Requirements.

Source: Centrelink.

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