The Auditor-General Audit Report No.34 1999–2000 Performance Audit

### Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

Australian National Audit Office

© Commonwealth of Australia 2000 ISSN 1036-7632 ISBN 0 642 44212 6

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Commonwealth, available from: The Manager, Legislative Services, AusInfo GPO Box 1920 Canberra ACT 2601 or by email: Cwealthcopyright@dofa.gov.au



Canberra ACT 16 March 2000

Dear Madam President Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in accordance with the authority contained in the *Auditor-General Act 1997*. I present this report of this audit, and the accompanying brochure, to the Parliament. The report is titled *Construction of the National Museum of Australia and the Australian Institute of Aboriginal and Torres Strait Islander Studies.* 

Following its tabling in Parliament, the report will be placed on the Australian National Audit Office's Homepage http://www.anao.gov.au.

Yours sincerely

L'huet

P. J. Barrett Auditor-General

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.

Auditor-General reports are available from Government Info Shops. Recent titles are shown at the back of this report.

For further information contact: The Publications Manager Australian National Audit Office GPO Box 707 Canberra ACT 2601

 Telephone
 (02)
 6203
 7505

 Fax
 (02)
 6203
 7798

 Email
 webmaster@anao.gov.au

ANAO audit reports and information about the ANAO are available at our internet address:

http://www.anao.gov.au

#### Audit Team

Grant Caine Michael Lewis

## Contents

Abbreviations/Glossary		
	mary and Recommendations	11
Sum	Construction of the new facilities for the NMA and AIATSIS	11
	Audit objectives and scope	12
	Overall conclusions	12
	Agency response	14
Kev	Findings	15
	Compliance with the Commonwealth Procurement Guidelines	15
	Project Management	19
Reco	ommendations	25
Aud	it Findings and Conclusions	
1.	Introduction	29
	Background	29
	Audit objectives	33
	Audit scope and focus	33
	Audit Conduct	34
2.	Project alliancing and this Project	35
	Constructing the new facilities using Project Alliancing	35
	Organisational Structure of the Acton Peninsula Alliance	37
	Features of the Alliance Agreement	39
3.	Compliance with the Commonwealth Procurement Guidelines	42
	Overview of the project's major procurement activities	42
	Commonwealth Procurement Guidelines	44
	CPG Core Principle 1: Value for money	46
	CPG Core Principle 2: Open and effective competition	51
	CPG Core Principle 3: Ethics and fair dealing	65
	CPG Core Principle 4: Accountability and reporting	68
	CPG Core Principle 5: National competitiveness and	
	industry development	72
	CPG Core Principle 6: Support for other Commonwealth policies Conclusion	78 81
		01
4.	Project Management	82
	Introduction	82
	Budget management	82
	Cost management	86
	Time management	95
	Quality management	97
	Design Integrity	100
	Relationship between cost, time and quality	102
	Other project management issues	107
	Conclusion	115

#### Appendices

Appendix 1:	Functions of the NMA and AIATSIS	119
Appendix 2:	Members of Evaluation Committees and their advisers	
	for the major procurement activities	120
Appendix 3:	Probity Guidelines for project participants	121
Appendix 4:	Summary of changes to construction timetable over time	123
Index		124
Series Titles		
Better Practice Guides		

## Abbreviations/Glossary

AIATSIS	Australian Institute of Aboriginal and Torres Strait Islander Studies
Alliance partners	Commonwealth, ACT, Architects, Building and Services Contractors, and Museum Exhibition Designers
ALT	Alliance Leadership Team
ANAO	Australian National Audit Office
ANZ	Australian/New Zealand
Architects	Ashton Raggatt McDougall in association with Robert Peck von Hartel Trethowan
BAU	Business as usual
Building and Services Contractors	Lend Lease Project Services, Tyco International and Honeywell
CCC	Construction Coordination Committee
commercial alliance partners	Architects, Building and Services Contractors, and Museum Exhibition Designers
Construction budget	The budgeted cost of constructing the new facilities. Includes (a) the budgeted Direct Costs and overheads & normal profit of all commercial alliance partners, and (b) budgets for construction contingencies and allowances
Construction costs	The cost of constructing the new facilities. Includes (a) the Direct Costs and overheads & normal profit of all commercial alliance partners (b) construction contingencies and allowances
CPGs	Commonwealth Procurement Guidelines
DCITA	Department of Communications, Information Technology and the Arts
DCITA's project costs	Project costs incurred by DCITA that are not part of the Construction costs. Includes (a) the \$3 million Quality Pool, (b) DCITA-appointed consultants (c) DCITA's portion of exhibition costs, (d) off-site ACT infrastructure works and (d) DCITA's contingency

gainshare	Includes cost savings or overruns against the construction budget and quality and time-related financial bonuses and penalties under the Alliance agreement
ISO consultant	Industrial Supplies Office consultant
ISONET	Industrial Supplies Office Network
JCPAA	Joint Committee of Public Accounts and Audit
LLPS	Lend Lease Project Services
Museum Exhibition Designers	Anway and Company of Boston USA, in association with Amaze Design Inc and DMCD Inc of New York
NCA	National Capital Authority
NMA	National Museum of Australia
PWC	Parliamentary Standing Committee of Public Works
PMT	Project Management Team
Project budget	The budgeted cost of the project. Includes: (a) the Construction budget, (b) other budgeted DCITA costs
Project costs	The cost of the project. Includes: (a) the Construction costs, (b) DCITA's project costs
RAIA	Royal Australian Institute of Architects
SMEs	Small to medium enterprises
ТОС	Target out-turn cost
UIA	International Union of Architects

## Summary and Recommendations

### 10 Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

### **Summary**

# Construction of the new facilities for the NMA and AIATSIS

1. In late 1996, the Government announced its commitment to establish new facilities for the National Museum of Australia (NMA) and Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) on Acton Peninsula in Canberra. The project has been allocated a budget totaling \$155.4 million and has a scheduled opening date of 12 March 2001. The Government recognised that the timeframe of a little over four years to complete construction was 'extremely tight'. Using a traditional tendering and construction approach, previous projects of this scale have taken six years to complete.

2. The Parliamentary Standing Committee of Public Works (PWC) endorsed the project and presented its report to the Parliament in July 1998. At the time, the Minister for Finance and Administration stated that:

the government has concluded that the method of project alliancing is the most appropriate delivery strategy for this complex project and the one most likely to achieve the project objectives relating to time, cost and quality...<sup>1</sup>

**3.** Project alliancing is a relatively new method of contracting that seeks to deliver a cost-effective outcome within a set time frame for a project through the project owner—in this case the Commonwealth— sharing project risks and rewards with contractors. Project alliancing has not previously been used by the Commonwealth and, according to the Department of Communications, Information Technology and the Arts (DCITA), not used on a building construction project anywhere else in the world. Throughout the project, DCITA has represented the Commonwealth.

**4.** In October 1997, the Parliament referred the project to the PWC for its examination and recommendation to the Parliament. The PWC held public hearings in December 1997 and February 1998. Although the PWC gave approval for DCITA to seek project alliancing partners, the PWC expressed concerns over (a) the cost of the project; (b) the costing

<sup>&</sup>lt;sup>1</sup> Parliament of Australia (1998), *House of Representatives Hansard of 1 July 1998*, p. 5789.

of the design brief and submissions; and (c) the relatively new alliancing method of construction contracting.<sup>2</sup>

**5.** Having regard to the concerns expressed by the PWC, the ANAO undertook an audit of the management of the construction of the new NMA and AIATSIS (which is referred to collectively as 'the new facilities' in this report).

#### Audit objectives and scope

**6.** The objectives of the audit were to examine the:

- project's compliance with the Commonwealth's requirements for the procurement of public works (ie. the Commonwealth Procurement Guidelines); and
- effectiveness of project management.

7. The scope of the audit, with respect to <u>compliance</u> issues, has been limited to:

- (a) the three major procurement activities—the appointment of the Architects, Building and Services Contractors and Museum Exhibition Designers (collectively known as the 'commercial alliance partners'); and
- (b) compliance issues arising from (a) that have on-going relevance to the project, the alliance and to procurement generally.

**8.** Although the audit focussed on the management of the construction of the new facilities by DCITA, the ANAO was mindful of the broader applicability of project alliancing to the Commonwealth as a whole.

### **Overall Conclusions**

#### **Compliance with the Commonwealth Procurement Guidelines**

**9.** The ANAO considers that the process for the appointment of the Architects, Building and Services Contractors and Museum Exhibition Designers substantially complied with the Commonwealth's requirements for the procurement of public works (ie. the Commonwealth Procurement Guidelines).

<sup>&</sup>lt;sup>2</sup> Parliamentary Standing Committee on Public Works (1998), Report relating to the proposed New Facilities for the National Museum of Australia and the Australian Institute of Aboriginal and Torres Strait Islanders Studies, Second Report.

<sup>12</sup> Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

**10.** The ANAO considers DCITA's employment of Probity Advisers and a Probity Auditor to oversee the major procurement activities as well as the development and use of probity guidelines by all those involved in the selection processes, as appropriate for the level of risks involved. Together, they added valuable assurance to the probity of the selection processes.

#### **Project Alliancing**

**11.** Successful project alliancing depends importantly on skillful management of the particular risks involved. With respect to this project, the ANAO considers that appropriate financial incentives are in place to encourage 'best for project' behaviour from DCITA and the commercial alliance partners to achieve the cost, time and quality requirements of the project.

**12.** Project alliancing offers potential benefits over traditional construction contracting methodology but it raises new and different risks that have to be managed—in particular, determining the appropriate balance between maintaining the spirit of the alliance and protecting the Commonwealth's financial interests. Nevertheless, project alliancing is a contracting methodology worth consideration by agencies involved in major construction projects—particularly high profile, prestige Commonwealth projects.

#### **Project Management**

**13.** The ANAO considers that DCITA and the commercial alliance partners have sound processes and procedures in place to monitor appropriately the progress of construction and manage the cost, time, quality requirements and other project risks in a timely manner.

14. Construction of the new facilities began in February 1999. Between then and October 1999, when audit fieldwork was completed, the construction timetable was revised three times as a result of construction delays. Many construction areas that were scheduled for completion by August/September 2000 are now scheduled for completion in December 2000/January 2001—only some two/three months before the official opening date. In addition, construction progress, as at October 1999, was about four weeks behind the project's 'critical path' and, with respect to some non-critical path components, over seven weeks behind the construction timetable.

**15.** The construction delays and other cost-related issues have created an unfavourable cost variance against budget of \$1.5 million as at October 1999. As the project is still a year away from completion, it is too early to determine the performance of the alliance in terms of project quality.

However, the ANAO considers that the quality measures and benchmarks developed, which are quite innovative for the construction industry generally, have the potential to achieve a sound quality result.

16. Although the project is currently behind schedule and has an unfavourable cost variance against budget, DCITA is confident that the project will be completed on time, on budget and to the required quality. The ANAO considers that the current construction timetable has virtually no scope for further time slippage and that the sufficiency of the construction contingencies and allowances may come into question later in the project should the unfavourable cost variances continue their current trend. The quality of the project could also be adversely affected unless cost and time-related tensions are well managed. In these circumstances, ongoing close monitoring of construction progress is essential to ensure that timely, remedial action is taken and that the required result is achieved.

**17.** Generally, DCITA has managed the project well to date having regard to its magnitude, lack of experience with the relatively new project alliancing approach and the tight timetable.

#### **PWC's concerns**

**18.** The ANAO considers that the PWC's concerns have now been addressed. The ANAO and DCITA both consider that the PWC's concerns would not have been so critical had DCITA's submission and comments to the PWC been better refined and clarified. The transcripts of the public hearings demonstrate clearly the confused nature of some of the evidence. Nevertheless, there was a clear need for assurance with the uncertainties involved.

#### Applicability of recommendations to all agencies

**19.** Although this report examined procurement compliance and construction project management issues only in relation to DCITA, the issues raised are relevant to other agencies considering the use of project alliancing methodology on their major construction projects. The four recommendations made also have general application to other Commonwealth agencies and have been phrased accordingly.

#### **Agency Response**

**20.** DCITA is supportive of the report and agreed with all four recommendations.

## **Key Findings**

#### **Compliance with the Commonwealth Procurement Guidelines**

#### **CPG Core Principle 1: Value for Money**

**21.** The ANAO considers that DCITA satisfied the value for money provisions of the Commonwealth Procurement Guidelines (CPGs) in the appointment of the Architects, Building and Services Contractors and Museum Exhibition Designers. In particular, the ANAO considers that:

- the Evaluation Committees adequately assessed the three major procurement activities against the 'price' criterion;
- the Probity Auditor's examination of proposed fees provided valuable assurance that DCITA and the project received value for money; and
- DCITA has adequately taken into account the whole of life costs and benefits throughout the project thus far.

**22.** However, the ANAO considers that the costing of the Stage Two architectural functional brief and assessment process—a concern of the PWC—could have been better handled. It would have been preferable for DCITA to delay the release of the brief until all design features had been identified and costed. Nevertheless, the ANAO considers that all entrants were treated equally and the process used by the cost consultant to examine each entrant's cost submissions, and incorporate the additional features, was reasonable given the circumstances.

#### **CPG Core Principle 2: Open and Effective Competition**

**23.** The ANAO considers that the process for the appointment of the Architects, the Building and Services Contractors and Museum Exhibition Designers demonstrated open and effective competition in compliance with the CPGs.

**24.** However, while the procurement processes were similar, the process of appointing the Museum Exhibition Designers was not of the same high standard as for the Building and Services Contractors. The appointment process of the Museum Exhibition Designers would have been improved had:

 proponents been provided with an industry briefing <u>before</u> lodging their proposals;

- the selection process not been varied by assessing proposals against weighted selection criteria when the Call for Proposals document indicated that all criteria were of equal value; and
- all proponents been given sufficient time to incorporate appropriate briefing material into their bids.

**25.** The ANAO considers that the process for calling for proposals from the Building and Services Contractors and Museum Exhibition Designers satisfied the CPGs' requirements for publicly notifying procurement opportunities. However, DCITA's failure to notify the architectural design competition in the *Gazette* contravened the same CPGs, although its effect was mitigated to a large extent by the provision of newspaper advertisements.

**26.** The ANAO considers that early attention to industry briefings for the Design Competition and Museum Exhibition Designers selection process may well have improved the range of interested parties and the quality of entries/proposals. The ANAO acknowledges the cost and logistical difficulties of holding a face-to-face industry briefing involving internationally based parties. However, sending a precis of the briefing (with questions asked and answered) or the use of available technologies, such as the Internet, could have been considered as a cost-effective means of briefing industry representatives who were unable to attend face-to-face.

**27.** The ANAO supports DCITA's approach to debriefing unsuccessful Building and Services Contractor proponents, particularly as this was DCITA's first selection process under project alliancing methodology. The ANAO considers that DCITA could have done more to debrief unsuccessful design competition entrants and Museum Exhibition Designer proponents who had been short-listed to the final assessment stage. Debriefings for these entrants and proponents could have been better structured and more fully addressed the selection criteria. Such debriefings could enable these organisations to submit better entries/ proposals for other Commonwealth work in the future.

#### **CPG Core Principle 3: Ethics and Fair Dealing**

**28.** The ANAO considers that the process for the appointment of the commercial alliance partners complied with the CPG principle of ethical and fair dealing. However, sufficient documentary evidence is not available to indicate that all members of Evaluation Committees and their advisers declared potential conflicts of interest or that all Evaluation Committees considered these declarations before the selection processes began.

**29.** DCITA engaged independent Probity Advisers to oversee the fairness and equity of the selection processes for the major procurement activities. The reports produced by these advisers at the end of each selection process indicate that they considered the selection processes to be ethical and fair to each and every entrant/proponent. The Probity Auditor engaged after the appointment of the Architects has, among other things, reviewed and reported on the selection processes for the Building and Services Contractors and Museum Exhibition Designers and advised on potential conflict of interest situations. The ANAO supports the employment of Probity Advisers and Probity Auditor as their independent scrutiny gives added confidence to the probity and propriety of the <u>major</u> procurement activities and on-going project management.

**30.** Before the appointment of the Building and Services Contractors and Museum Exhibition Designers, a comprehensive set of probity guidelines was developed. The guidelines provided advice to all people involved in the selection processes as to how they should act in, handle and document, probity-related situations that might arise during the selection processes. The ANAO considers that the probity guidelines were a valuable tool for managing probity issues during the selection processes and that, with the exception of conflict of interest declarations, those involved in the selection processes closely followed the probity guidelines.

#### **CPG Core Principle 4: Accountability and Reporting**

**31.** The ANAO considers that the major procurement processes are generally well documented. However, the ANAO found shortcomings with DCITA's compliance with the CPGs in terms of gazetting the letting of contracts and certifying key staff against the Commonwealth Procurement Competency Standards. The latter, which was a requirement of the CPGs at the time of the major procurement activities, was no longer required from August 1998.

**32.** The ANAO found that none of the key DCITA personnel involved in the three major procurement activities has been assessed against the Commonwealth Procurement Competency Standards—in contravention of the CPG requirement applicable at the time. However, DCITA indicated that its key staff attended relevant training courses prior to the major procurement activities. DCITA also drew on external expertise (including alliance facilitators, lawyers, Probity Advisers and a Probity Auditor), thus mitigating the impact of this non-conformance. The ANAO accepts that DCITA's non-assessment of its key staff against the Competency Standards did not have any obvious detrimental effect on the project. **33.** In its examination of the project, the PWC expressed concern over being presented with a number of different budgets for the project at various times. The ANAO considers that this occurred due, in part, to confusion within DCITA of the separate sources of funding for the project. For example:

- the Parliament's referral of the project to the PWC quoted a project budget of \$133 million (representing \$128 million approved by Government in November 1997 and another \$5 million appropriated through the 1997–98 Budget). This, however, excluded \$18.9 million in 'one-off establishment costs' for exhibition and relocation expenses that had been approved by Government for the project;
- DCITA's first submission to the PWC indicated that the project budget was \$152.4 million (representing \$128 million approved by Government in November 1997, \$18.9 million in 'one-off establishment costs', the \$3 million contribution from the ACT Government and \$2.5 million in funding for a footbridge approved separately by Government). DCITA, however, inadvertently omitted the \$5 million appropriated through the 1997–98 Budget; and
- DCITA's final submission to the PWC indicated that the project budget was \$151.9 million (representing \$128 million approved by Government in November 1997, \$5 million appropriated through the 1997–98 Budget and \$18.9 million in 'one-off establishment costs').

**34.** The final project budget of \$155.4 million represents the budget presented to the PWC in DCITA's final submission (ie. \$151.9 million), the \$3 million contribution from the ACT Government and another \$0.5 million of unexpended funds from the 1996–97 Advisory Committee process subsequently 'rolled over' into the project.

## CPG Core Principle 5: National Competitiveness and Industry Development

**35.** The ANAO considers that DCITA has generally encouraged the participation of Australian industry and, where practicable, small to medium enterprises (SMEs) in the major and other ongoing procurement activities of the project. However, Australian industry involvement and development might have been enhanced by including 'a substantial (or at least, significant) Australian content' requirement for foreign Museum Exhibition Designers. The ANAO notes that this was a requirement for foreign architects entering the architectural design competition.

**36.** Short-listed design competition entrants were given the opportunity to join forces with another architectural firm to meet the 'capacity' requirement of the selection process. The ANAO considers

that this action encouraged small business to participate in the competition. The fact that all short-listed entrants may not have met the capacity requirement in their own right demonstrates that small business can compete against larger enterprises when opportunities to submit joint proposals are permitted.

**37.** The ANAO notes that DCITA has already applied the Australian Industry-related recommendations from the recent report into Australian Government Procurement by the Joint Committee of Public Accounts and Audit (JCPAA), except for that relating to publishing the reasons where overseas goods and services worth \$100 000 or more have been purchased. In its response to the JCPAA report, the Government considered that existing mandatory reporting requirements are adequate.

## CPG Core Principle 6: Support for Other Commonwealth Policies

**38.** The ANAO considers that the process for the appointment of the Architects, Building and Services Contractors and Museum Exhibition Designers substantially complied with CPGs relating to support for other Commonwealth policies. However, the ANAO found shortcomings in notifying potential entrants/proponents of the following Commonwealth policies that apply to this project: Privacy Principles; Access to records; and, to a lesser extent, intellectual property rights; affirmative action; and, occupational health and safety. Although this did not have any obvious detrimental effect on the project, the ANAO considers it was a risk that could desirably have been avoided.

**39.** The ANAO considers that the Alliance Agreement adequately covers all applicable Commonwealth policies. However, although the Alliance Agreement contains clauses relating to access to records and the auditing thereof—a CPG suggested consideration—they do not fully reflect the substance of the model access clauses developed by the ANAO.

#### **Project Management**

#### **Budget Management**

**40.** The changes to the budgets of the various project components reflect a continual refinement of the project budget until April 1999 when the Alliance partners struck the official budgets for each project/ construction component. At the time of the audit, the Alliance had fully defined and agreed the scope of works for the Base Building construction component—the largest construction component. The ANAO considers that the current timetable for finalising the scope of works for the remaining four construction components should not adversely impact the construction timetable.

**41.** Budgets for construction projects typically include a number of contingencies and allowances throughout the project's life to cover additional costs that may result from incomplete design, project agreement with site workers and inflationary cost increases. The extent to which project design has been developed and construction progressed, determine the size of these contingencies and allowances. Information provided by DCITA's construction consultant indicates that contingencies and allowances currently included in the construction budget are at, or below, the generally accepted contingency levels for a project at this stage of development.

#### **Cost Management**

#### Alliance partners risk/reward regime

42. Under the risk/reward regime of the Alliance Agreement, DCITA and the commercial alliance partners would share any cost savings against budget in the proportion of 70:30 respectively. At the time of the audit, DCITA and the commercial alliance partners were to contribute to any cost overruns against budget in the proportion of 30:70 respectively, until the latter's cost overrun cap of some \$7.2 million was reached. Cost overruns in excess of this cap were to be funded 100 per cent by DCITA. The Alliance Agreement provided for the first \$3 million of DCITA's share of any cost overruns to come from the funds otherwise set aside for the commercial alliance partners to reward 'outstanding' quality performance on this project. Assuming that no other penalties were payable by the commercial alliance partners, the Quality pool could thus fund, from DCITA's point of view, a construction cost overrun of some \$10 million. Given that DCITA had another \$1.1 million client contingency fund set aside, some \$11.1 million in cost overruns (representing 8.2 per cent of the construction budget) could have been funded from within the existing project budget. DCITA would need to seek funds from the Federal Budget to cover any additional cost overruns. However, DCITA considers that this will not occur because:

- its cost consultants consider that the new facilities can be constructed within the available budget; and
- the commercial alliance partners have put their overhead and normal profit at risk in the knowledge that funding supplementation from Government is unlikely to be forthcoming.

**43.** In January 2000, DCITA advised that it was prepared to fund 100 per cent of the first \$0.7 million of any final cost overrun in the project out of DCITA's own client contingency funds. While DCITA had no legal obligation to fund the overrun beyond the terms of the Alliance

Agreement, it advised that underwriting any final cost overrun would help to drive the right behaviours for achieving overall outstanding results. DCITA also advised that its decision had the full support of the project's independent technical adviser, probity auditor, alliance facilitator and alliancing solicitor.

44. This issue illustrates the difficulty of determining the appropriate balance that must be struck between maintaining the spirit of the Alliance to act reasonably to achieve the project objectives and the need to protect the Commonwealth's financial interests and limit the payments that can be made to the commercial alliance partners in accordance with achieving value for money outcomes. Striking the right balance between the competing imperatives of cost, time and quality requires careful management and judgement on the part of those responsible for managing the Commonwealth's interests under the project alliancing approach.

**45.** Should cost overruns exceed \$10.9 million, the cap of the commercial alliance partners' liability would be reached. The commercial alliance partners would have no financial incentives or disincentives attached to the quality or time aspects of the project. Such a situation may put the project in jeopardy.

## Management of cost commitments, expenditure and forecasts/variances against budget

**46.** The ANAO considers that DCITA and the Alliance have installed a sound system for managing project cost commitments, expenditure and forecasts/variances against budget in a timely manner. However, as at October 1999, the project had an unfavourable cost variance of \$1.5 million against budget. This variance represents the forecast overrun in Base Building construction costs that can be expected to occur by the end of the project unless construction contingencies are sufficient to cover the variance, or adequate corrective action is taken. The majority of the variance relates to bulk excavation (earthworks) on the site where the extent of contaminated fill and unfavourable geological formations were underestimated at the time the budget was agreed. Unlike traditional contracting methods, where the project owner would have borne the increase in costs, all Alliance partners share in such a cost increase.

**47.** The ANAO considers that the Alliance's risk/reward regime, coupled with the limitations on contractual scope variations and 'no blame, no disputes' ethos, provides an incentive to the Alliance to identify and effectively manage cost variances as early as possible. However, DCITA's recent decision to underwrite part of any final cost overrun has the potential to reduce this incentive.

#### **48.** The ANAO did, however, observe that:

- the unfavourable cost variance against budget was reduced to \$1.5 million only after an offset of \$1 million was released from construction contingencies (ie. construction contingencies no longer required). Therefore, the project has incurred total unfavourable cost variances of some \$2.5 million to date, which represents 50 per cent of the gross contingencies contained in the construction budget. Putting this figure into perspective, only 12.5 per cent of the construction budget had been spent by September 1999 and only 37.7 per cent of the budget committed by October 1999; and
- the original budgeted cash flow schedule for the project developed in June 1999 has not been amended despite significant revisions to the project timetable since that time. Comparing actual cash flows against the unaltered schedule of budgeted cash flows would give an overly optimistic view of the cash flow position of the project. As a result, it is not known whether construction expenditure to date is greater than would be expected under the current construction timetable.

**49.** In view of the cost variations mentioned above, the ANAO considers that they will require close and continuous attention throughout the project's life to achieve a successful result.

#### **Time Management**

**50.** The Alliance Agreement includes significant financial disincentives for the commercial alliance partners should the new facilities not be opened on time. There is no bonus for the completing the facilities earlier than the opening dates.

Of the three key performance aspects of cost, time and quality, 51. the ANAO considers that meeting timetables is the greatest risk for the Alliance. The ANAO also considers that the Alliance has a sound system for developing and varying the construction timetable over time and monitoring and managing construction progress against the specified timetable. However, the current construction timetable has significantly compressed tasks with many construction areas scheduled for completion close to the 'soft' opening date of January 2001 which is two months before the official opening date. This two-month buffer allows time to identify and correct any construction defects/faults and to train Museum staff. In addition, construction progress is some 4 to 7½ weeks behind the current timetable (as it has been for the past couple of months), caused mainly by the earthworks problems (see above) and to a lesser extent, above average rainy days and numerous small delays of a week or so in the delivery of materials from some sub-contractors. Continued timetable compression represents a risk to the project being completed on time and indicates the need for continuing close scrutiny of progress and swift corrective action to avoid further delays and to catch up to the current timetable.

#### **Quality Management**

**52.** DCITA has established a quality pool of \$3 million from within its project budget. This pool is available to the commercial alliance partners for constructing the new facilities to 'outstanding' quality. There are no bonuses for 'standard quality' (ie. Business-as-Usual quality) but the commercial alliance partners would incur a significant penalty should the new facilities fail to attain Business-as-Usual quality.

**53.** The Alliance's Quality Working Group and the Independent Quality Panel have developed quality measures and determined benchmarks for outstanding, Business-as-Usual and poor performance, together with the means of their assessment/measurement. The Panel, involving consultants with relevant experience, who are also independent of the Alliance partners, will report to, and provide advice to, the project managers on quality measurement.

**54.** The ANAO supports the establishment of a system to assess/ measure the quality of the project and considers that the quality measures and incentives, which are quite innovative for the construction industry generally, have the potential to achieve a sound quality result. As the project is still a year away from completion, the ANAO considers that it is too early to determine the performance of the alliance in terms of project quality.

#### **Design Integrity**

**55.** As the Architects were selected on the basis of a design concept that, in effect, represented only 12 per cent of full design documentation, DCITA considered it important to maintain design integrity throughout design and construction phases. The Alliance Agreement imposes heavy financial disincentives for the commercial alliance partners should design integrity not be maintained. The disincentives include forfeiture of their share of any cost savings and their normal profit. No bonuses are payable in relation to the maintenance of design integrity.

**56.** The ANAO considers that design integrity can be defined in terms of the new facilities achieving the purposes and objectives for which they were constructed in the context of the selected design. The independent Design Integrity Panel decided not develop a design integrity checklist as the dynamic nature of design concepts made it impossible to predict the types of issues that may arise. Although the Panel has not been briefed

on all aspects of design, reports to the project managers thus far indicate that design integrity is being maintained.

#### Management of other project risks

**57.** The ANAO considers that DCITA has a robust governance framework in place that is working well. DCITA is also managing well the project's insurance risks, Goods and Services Tax issue, foreign exchange risks, Year 2000 compliance issues, asset management issues and industrial relations issues.

## **Recommendations**

Although this report examined procurement compliance and construction project management issues only in relation to DCITA, the recommendations have general application throughout the Commonwealth and have been phrased accordingly.

RecommendationThe ANAO recommends that, in the interest of<br/>attracting the maximum number of the highest quality<br/>proposals, agencies:

- (a) brief industry on their major procurement requirements to the maximum extent practicable at the start of the procurement processes; and
- (b) consider using available technologies, such as the Internet, to assist in briefing industry where it is logistically impractical and/or cost prohibitive for all targeted suppliers to attend face-to-face briefings.

#### DCITA Response: Agreed

Recommendation	The ANAO recommends that agencies, in the interests
No.2	of demonstrating that major procurement activities
Para. 3.110	are undertaken ethically and fairly, ensure that:

- (a) members of Evaluation Committees and their advisers declare, in writing, all conflicts of interest or potential conflicts of interest that may impact upon selection processes; and
- (b) Evaluation Committees consider these declarations and their potential impact upon selection processes, and document its findings;

before the selection processes begin.

#### DCITA Response: Agreed

Recommendation No.3 Para. 3.124	The ANAO <i>recommends</i> that, to ensure that major procurement activities adhere to the Commonwealth Procurement Guidelines, agencies:
	(a) ensure that all contracts let are gazetted; and
	(b) consider having their staff involved in major procurement activities assessed against the relevant Commonwealth Procurement Competency Standards.
	DCITA Response: Agreed
<b>B</b>	The ANAO meanmands that in the interacts of better
Recommendation No.4	The ANAO <i>recommends</i> that in the interests of better monitoring of project progress, agencies adjust
Para. 4.43	immediately their budgeted schedule of cash flows
	in accordance with adjustments to the project timetable.

DCITA Response: Agreed

## Audit Findings and Conclusions

### 28 Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

## **1. Introduction**

#### Background

**1.1** The National Museum of Australia (NMA) was established under the *National Museum of Australia Act 1980* to research Australian history and develop a national collection of historical material. The NMA's objective is to create exhibitions and public programs that explore Australia's heritage and history, and to make the collection accessible to all Australians. The collection has been housed in several warehouses at Mitchell, ACT and has been largely unavailable for exhibition.

**1.2** The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) was established in 1964 as the Australian Institute of Aboriginal Studies. The Australian Institute of Aboriginal and Torres Strait Islander Studies Act 1989 provides the statutory framework for the operations of AIATSIS. AIATSIS maintains collections of audiovisual material, books, journals and manuscripts related to Aboriginal and Torres Strait Islander people. These collections have been housed at Acton, ACT. Appendix 1 contains greater detail of the roles and functions of the NMA and AIATSIS.

#### **Construction of the new facilities**

**1.3** In August 1996, the Minister for Communications, the Information Economy, and the Arts established an Advisory Committee to recommend the best site, cost options and strategies for developing the new facilities for the NMA and AIATSIS (which is referred to collectively as 'the new facilities' in this report). The Government allocated \$1.5 million in the 1996–97 Budget for this purpose. In December 1996, the Prime Minister accepted the Advisory Committee's recommendation to establish the new facilities on Acton Peninsula in Canberra.

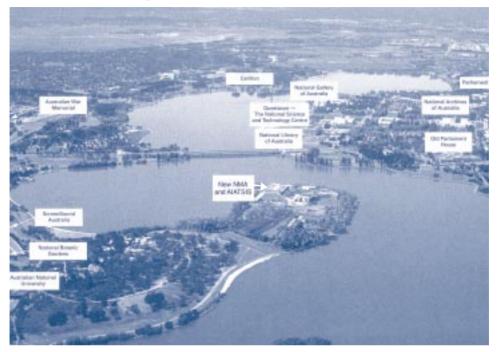
**1.4** The project has been allocated a total budget of \$155.4 million comprising:

- \$5 million appropriated in the 1997–98 Budget for design development and approvals;
- \$146.9 million allocated from the newly established Centenary of Federation Fund by Cabinet in November 1997;
- \$0.5 million in unexpended funds from the 1996-97 Advisory Committee process 'rolled-over' into the project; and

• \$3.0 million from the ACT Government as a contribution towards onsite and off-site infrastructure costs.<sup>3</sup>

Figure 1

Precincts surrounding the new NMA and AIATSIS facilities



Source: Ashton Raggatt McDougall & Robert Peck von Hartel Threthowan - architects in association.

**1.5** The new facilities form part of the Centenary of Federation celebrations. The new NMA is scheduled to open on 12 March 2001. AIATSIS is scheduled to open on 'a date to be agreed by the Alliance in the last quarter of 2000'. At the time of the audit the target date for the opening of the new AIATSIS was 26 November 1999, but DCITA subsequently indicated that the target date is currently being reviewed. The Government recognised that the timeframe of a little over four years to complete construction was 'extremely tight'. Using a traditional tendering and construction approach, previous projects of this scale have taken six years to complete.

**1.6** The Government's vision is for the new facilities to break new ground among the nation's museums and educational institutions by offering a range of experiences for visitors through combining contemporary exhibition techniques with new media technologies and live performances.

<sup>&</sup>lt;sup>3</sup> The last two mentioned funding sources in this paragraph were excluded from the DCITA's second submission to the PWC.

**1.7** The new facilities will provide a permanent exhibition of the National Historical Collection. The new facilities will, however, be less collection-driven than other museums and will develop suitable partnerships to draw from the estimated 2000 heritage collections around Australia.

#### Figure 2

#### The new facilities for the NMA and AIATSIS



Source: Ashton Raggatt McDougall & Robert Peck von Hartel Threthowan - architects in association.

**1.8** The new facilities will include a great hall, three main exhibition spaces, a digital theatre, research facilities, outdoor exhibitions and landscaping.

#### **Construction oversight**

**1.9** In February 1997, the Minister for Communications, the Information Technology and the Arts established the Construction Coordination Committee (CCC) to promote a cooperative and integrated approach to the development of the new facilities on the Acton Peninsula. The Deputy Chair of the NMA Council chairs the CCC. Other members are councilors or senior executives of AIATSIS, the ACT Chief Minister's Department, National Capital Authority (NCA) and the Department of Communications, Information Technology and the Arts (DCITA).

**1.10** In undertaking its advisory and coordination role, the CCC, amongst other things:

- monitors the design and construction of the new facilities to assess whether they fulfil the objectives of the Government and the Councils of the NMA and AIATSIS;
- advises on the selection of key personnel for the project and monitors their work; and
- monitors the expenditure of design and construction funds and provides accurate and up-to-date reports to the Minister about progress against the project timeframe and budget.

#### Figure 3

#### Stetches of the Museum interior and exhibitions



(Clockwise from top left) *Imaging the Country*, Crossroads Theatre entry area; Main Hall; Interactive discovery zone. Source: Anway & Company, Inc.

#### **Project Alliancing**

**1.11** The Parliamentary Standing Committee of Public Works (PWC) endorsed the project and presented its report to the Parliament in July 1998. At the time, the Minister for Finance and Administration stated that:

the government has concluded that the method of project alliancing is the most appropriate delivery strategy for this complex project and the one most likely to achieve the project objectives relating to time, cost and quality.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Parliament of Australia (1998), House of Representatives Hansard of 1 July 1998, p. 5789.

<sup>32</sup> Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

**1.12** Project alliancing is a relatively new method of contracting that seeks to deliver a cost-effective outcome within a set time frame for a project through the project owner—in this case the Commonwealth—sharing project risks and rewards with contractors. Project alliancing has not previously been used by the Commonwealth and, according to DCITA, not used on a building construction project anywhere else in the world. (Project alliancing is described in greater detail in Chapter 2).

**1.13** In October 1997, the Parliament referred the project to the PWC for its examination and recommendation to the Parliament.<sup>5</sup> The PWC held public hearings in December 1997 and February 1998. Although the PWC gave approval for DCITA to seek project alliancing partners, the PWC expressed concerns over (a) the cost of the project; (b) the costing of the design brief and submissions; and (c) the relatively new alliancing method of construction contracting.<sup>6</sup>

**1.14** Having regard to the concerns expressed by the PWC, the ANAO undertook an audit of the management of the construction of the new facilities.

#### Audit objectives

**1.15** The objectives of the audit were to examine the:

- project's compliance with the Commonwealth's requirements for the procurement of public works (ie. the Commonwealth Procurement Guidelines);
- effectiveness of project management.

#### Audit scope and focus

**1.16** The scope of the audit with respect to <u>compliance</u> issues has been limited to:

- (a) the three major procurement activities—the appointment of the Architects, Building and Services Contractors and Museum Exhibition Designers (collectively known as the 'commercial alliance partners'); and
- (b) compliance issues arising from (a) that have on-going relevance to the project, the alliance and to procurement generally.

<sup>&</sup>lt;sup>5</sup> Legislation requires that public works exceeding \$6 million be considered by the PWC. The PWC then reports to both Houses of the Parliament concerning the expedience of carrying out the works.

<sup>&</sup>lt;sup>6</sup> Parliamentary Standing Committee on Public Works (1998), *Op. cit.* 

**1.17** Although the audit focussed on the management of the construction of the new facilities by DCITA, the ANAO was mindful of the broader applicability of project alliancing to the Commonwealth as a whole. The ANAO examined the systems established by DCITA and the Alliance to manage the project, but did not audit the construction itself. The ANAO has not examined the facilities management procurement process for the completed site nor any sub-contracts or sub-alliances (ie. alliances between an individual commercial alliance partner and sub-contractor(s)) associated with the project.

**1.18** The audit included consultation with the PWC Secretariat, DCITA management and key personnel from the commercial alliance partners. In addition, major stakeholders, including the NMA, AIATSIS, the National Capital Authority, the Royal Australian Institute of Architects, the Master Builders Association and the Royal Australian Planning Institute, were consulted.

**1.19** The audit was undertaken using an audit test program that was developed with reference to the Commonwealth Procurement Guidelines<sup>7</sup>; guidelines issued by the PWC; and the better practices outlined by Purchasing Australia<sup>8</sup> and the ANAO<sup>9</sup>.

#### **Audit Conduct**

**1.20** The performance audit was conducted in accordance with the ANAO Auditing Standards and cost approximately \$200 000. The majority of the fieldwork was undertaken between April and October 1999.

<sup>&</sup>lt;sup>7</sup> Department of Finance and Administration (1998a), *Commonwealth Procurement Guidelines: Core Policies and Principles.* 

<sup>&</sup>lt;sup>8</sup> Purchasing Australia (1996), *Managing Risk in Procurement—A Handbook*; and Purchasing Australia (1997), *Applying Risk Management Techniques to Complex Procurement*.

<sup>&</sup>lt;sup>9</sup> ANAO (1996), Asset Management, Better Practice Guide; ANAO (1998), Audit Report No.34 1997–98 New Submarine Project.

## 2. Project Alliancing and this Project

# Constructing the new facilities using Project Alliancing

Project Alliancing is a form of contracting that seeks to deliver a cost-effective outcome within a set time frame for a project through sharing project risks and rewards.

The alliance process is an integrated team approach that involves the architect, the project manager, building and services contractors, and other parties likely to effect project outcomes.

#### Why project alliancing?

**2.1** Project owners, concerned that traditional contracting methods usually resulted in budget blowouts and time overruns, were looking for more effective methods for delivering projects. A European company, McDermott Engineering, observed that:

... the traditional contracting model is not well suited for projects which are inherently fast tracked and very focused, and which may need to be arranged at short notice, outside the normal process of competitive bidding.<sup>10</sup>

**2.2** The Australian construction industry has been looking for more effective and efficient methods of delivering building projects for some time. In recent years the industry has used a number of variations to traditional contracting, including Design, Document and Construct, and Project Management contracts. The industry has also participated in government schemes involving new methods of financing such as outsourcing infrastructure for public works projects to the private sector using Build Own Operate (BOO) and Build Own Operate Transfer (BOOT) structures.

**2.3** 'Partnering' is another contracting model that has been used within the construction industry in recent years. Partnering arrangements allow for construction or services to be provided in a context of fairness and good faith, in conjunction with contractually binding terms and conditions that are intended to avoid litigation.

<sup>&</sup>lt;sup>10</sup> P. Wilson (1994), *Partnering Alliancing: The Contractor's Viewpoint*, p. 3.

**2.4** Project alliancing, an extension of partnering, was first adopted in offshore oil and gas projects in the North Sea. It has since been embraced internationally by mining and offshore resources industries.

**2.5** Project alliancing was first used in Australia for major energy and ore projects in Western Australia and South Australia. More recently, public sector agencies have adopted project alliancing to procure construction and services. Projects include:

- NSW Rail Corporation's Maintenance Contracts;
- Sydney Water's Northside Storage Tunnel Project; and
- WA Water Corporation's Woodman Point Treatment Plant.<sup>11</sup>

#### What is a project alliance?

**2.6** A project alliance is an agreement between two or more parties, the project owner and the contractor/s, who undertake to work cooperatively, on the basis of sharing project risks and rewards. The aim is to achieve agreed commercial outcomes based on the principles of good faith and trust.

**2.7** Price is not the key consideration when selecting Alliance partners. The project owner selects contractors whom they assess as being most able to deliver value for money based on criteria such as:

- technical expertise and experience;
- financial and management resources;
- industrial relations and safety record;
- quality and time record;
- risk management; and
- environmental management.

**2.8** The tendering process is more complex and costly than conventional contracting methods. Despite this, alliance project tendering and selection processes have led to the commencement of construction in substantially shorter timeframes than has been the case under more conventional contracting arrangements.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> NSW Department of Public Works and Services (1998), Project Alliances in the Construction Industry: A Public Sector Perspective—Value for Money?, p. 1.

<sup>&</sup>lt;sup>12</sup> NSW Department of Public Works and Services (1998), *Project Alliances in the Construction Industry*, p. 46.

**2.9** Although project alliancing is a business relationship, the core of an alliance is the commitment of organisations involved and their project team. The successful integration and motivation of the alliance team determine the success or failure of the alliance. A project could therefore be placed at risk if key people do not work well within the team.

**2.10** Alliance partners broadly share the risks and rewards of the project. Table 1 illustrates the inherent logic of the risk/reward structure for project alliancing. Partners agree on a clear definition of the scope of the work (including quality) to be performed; an estimate of its costs and the construction timeframe; and, appropriate and reasonable commercial incentives based on time, cost and quality. Once target costs are agreed, Alliance partners must manage variations to the works within the agreed target cost. The performance of each Alliance partner impacts on the project's risk/reward outcome for all Alliance partners.

Table 1

Simple logic of risk/reward structure for project alliancing

Exceptional Performance	<b>→</b>	Exceptional Return	
Normal Performance	<b>→</b>	Normal Return	
Poor Performance	<b>→</b>	Poor Return	

**2.11** It could be suggested that this method of determining the target cost for a project is not as robust as obtaining a price through the competitive tender process or that lower project costs could be achieved at the expense of quality. Alliance partners work cooperatively to achieve cost, time and quality targets. To ensure that costs are not minimised at the expense of design integrity or quality, Alliance agreements provide financial incentives to encourage and reward outstanding performance in these areas. There are also strong financial penalties if the cost, time or quality targets are not achieved.

#### **Organisational Structure of the Acton Peninsula** Alliance

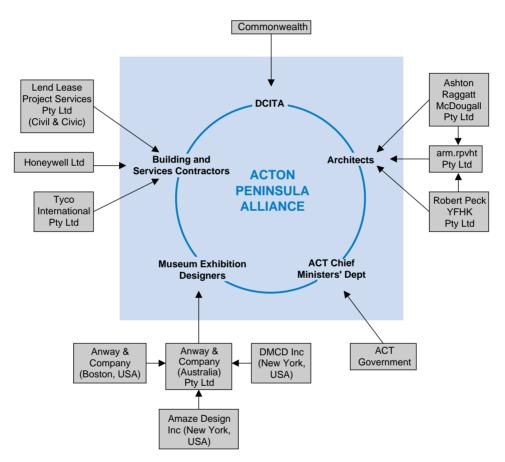
**2.12** The Construction Coordination Committee (CCC) oversees the actions of the Acton Peninsula Alliance (the Alliance) and its Alliance Leadership Team (ALT). The members of the Alliance (the Alliance partners) are:

- the Commonwealth—represented by DCITA;
- the ACT Government—represented by the Chief Minister's Department;

- the Architects—Ashton Raggatt McDougall and Robert Peck von Hartel Trethowan (architects in association);
- the Building and Services Contractors—Lend Lease Project Services (building contractors), Tyco International (services contractors), and Honeywell (services contractors); and
- the Museum Exhibition Designers—Anway and Company.

#### Figure 4

#### Members of the Acton Peninsula Alliance



**2.13** The ALT operates in a similar fashion to a Board of Directors. Members are senior executives or Directors of the Alliance partners who do not work full-time on the project. The Alliance Agreement requires a minimum of one representative from each Alliance partner to constitute a quorum at meetings and states that no decision can be made by the ALT unless it is *unanimous*. The ALT reports to the CCC and is responsible for ensuring the Alliance Charter is satisfied and that the obligations and commitments of the Alliance partners under the Alliance agreement

are fulfilled. At the time of audit, the ALT met monthly. The functions of the team include:

- creating the project vision;
- establishing and providing administrative support to the Project Management Team;
- establishing and maintaining a strong performance orientation;
- supporting the achievement of targets;
- ensuring corporate management support; and
- resolving conflicts of interest and disputes between the Alliance Participants.

**2.14** The Project Management Team (PMT) is accountable to the ALT for the implementation of the Alliance Agreement. The members of the PMT are representatives from the Alliance partners who are working on-site on the project. The PMT was established to implement ALT decisions, manage the day to day work of the project, and to ensure the project's objectives are met or exceeded. At the time of audit the PMT met weekly. The functions of the team included:

- establishing project systems;
- reviewing costs and scheduling reports;
- developing strategies to achieve set objectives;
- setting work priorities and
- reviewing and allocating resources.

**2.15** An Alliance Implementation Team was also established to ensure that the key principles of the Alliance Charter were maintained. The Team has since become defunct as DCITA considers that it has now served its purpose.

### **Features of the Alliance Agreement**

#### **Direct Costs**

**2.16** The Alliance Agreement provides for all construction-related costs to be charged to the project at their direct cost ie. the invoiced cost (inclusive of all sales tax reductions<sup>13</sup> and trade and other discounts) to the project/commercial alliance partners. Labour costs, which represent a significant proportion of project costs, include only directly applicable remuneration costs and statutory on-costs.

<sup>&</sup>lt;sup>13</sup> The project is exempt from sales tax.

**2.17** Payments to suppliers or commercial alliance partners are made after the expense has been incurred and incorporated into the project.

#### **Overhead and Normal Profit margins**

**2.18** The overhead and normal profit margins, in effect, represent the commercial alliance partners' base fees for being involved in the project. The margins are applied to the Direct Costs incurred by the respective commercial alliance partners. For example, if commercial alliance partner A had an overhead and normal profit margin of 7 per cent and it incurred \$100 of Direct Costs, DCITA would pay \$107 to commercial alliance partner A.

**2.19** The overhead and normal profit margins are designed to represent, at best, the average returns in recent years, of the companies involved in the Alliance. Therefore, for the commercial alliance partners to get the greater returns, the project will have to generate positive gainshare (ie. cost savings and/or quality bonuses).<sup>14</sup>

**2.20** The overhead and normal profit margins were negotiated and agreed by DCITA and the Building and Services Contractors/Museum Exhibition Designers prior to their formal appointment to the project. The Architects were originally appointed on a percentage-fee contract. Their overhead and normal profit margins were negotiated and agreed when the Architects decided to enter into the Alliance. The establishment of the overheads and normal profit margins for the commercial alliance partners is discussed in Chapter 3.

#### Gainshare

**2.21** The risk/reward regime at the centre of project alliancing (refer to Table 1) is put into affect by the Gainshare provisions of the Alliance Agreement. This project has five gainshares that relate to the project's cost, timeliness (2), quality and design integrity. Some gainshares have the potential to apply only to the commercial alliance partners while both the commercial alliance partners and DCITA share others. The ACT Government does not participate in gainshare. Gainshares can be positive (ie. cost savings and/or bonuses) or negative (ie. cost overruns and/or penalties). Although positive gainshare has no set maximum, the commercial alliance partners' share of negative gainshare is limited (or 'capped'). In this project, the total overhead and profit at risk by the commercial alliance partners is some \$7.3 million (5.2 per cent of the construction budget).

<sup>&</sup>lt;sup>14</sup> There are no bonuses for completing the project early.

**2.22** The timing and size of all gainshare payments to and from the Alliance partners is determined by the ALT. To date, no gainshare payments have been made or received.

#### **Scope Variations**

**2.23** As the project progresses, additions, deletions and modifications to the originally agreed design and construction invariably occur. Under traditional construction contracts, these changes would most likely result in scope variations to the project. Building Contractors would lodge claims with the project owner to increase the cost and/or delay completion. After some negotiation, the project owner and building contractors would reach agreement on the scope variation. However, the Alliance Agreement states that only substantial variations to planned design and construction will constitute scope variations and that they are unlikely to occur. The occurrence and size of any scope variation would be determined by the ALT.

#### 'No blame, no disputes'

**2.24** The 'no blames, no disputes' ethos that is a key feature of project alliancing has been incorporated into the Alliance agreement. The Alliance partners, and their insurers, have waived their rights to pursue legal action against other Alliance partners for any project-related event except 'wilful default'.<sup>15</sup> As the project's risk/reward outcome is tied to the collective performance of the Alliance partners, 'no blames, no disputes' clauses ensures that each Alliance partner maintains an interest in maximising the performance of the other Alliance partners as well as themselves.

<sup>&</sup>lt;sup>15</sup> The Alliance Agreement defines 'Wilful Default as 'such wanton and reckless act or omission as amounts to a wilful and utter disregard for the harmful and avoidable consequences thereof ... but shall not otherwise include any error of judgement, mistake, act or omission, whether negligent or not, made in good faith ...'

## 3. Compliance with the Commonwealth Procurement Guidelines

# Overview of the project's major procurement activities

**3.1** From the outset, the construction of the new facilities involved three major procurement activities—the appointment of the:

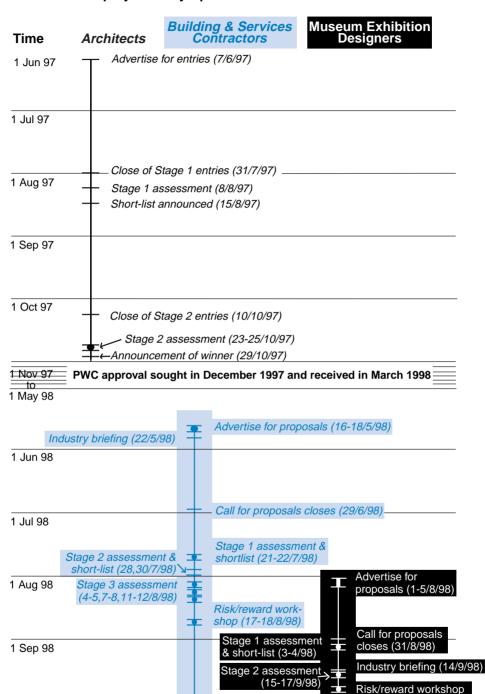
- Architects;
- Building and Services Contractors; and
- Museum Exhibition Designers.

**3.2** A design competition for the selection of the Architects for the new facilities took place in mid-late 1997. In mid- to late-1998, the Building and Services Contractors and Museum Exhibition Designers were selected in separate but concurrent proposal procurement processes. Figure 5 illustrates the key milestones for each procurement activity over time.

**3.3** Although three separate Evaluation Committees were established (involving mostly non-DCITA personnel) to select the Architects, Building and Services Contractors and Museum Exhibition Designers, DCITA were responsible for:

- the conduct of the selection processes;
- · documenting decisions and reasons for decisions; and
- ensuring that the Commonwealth's procurement requirements were adhered to.

**3.4** As DCITA determined the selection processes and was ultimately responsible for the procurement outcomes, the ANAO has directed questions to DCITA for process-related decisions made by the Evaluation Committees. Appendix 2 lists the members of the three Evaluation Committees.



Debrief unsuccessful proponents (16/10/98)

1 Oct 98

#### Figure 5 Timeline of the project's major procurement activities

(21 - 22/9/98)

#### **Competition and Probity Advisers/Auditor**

**3.5** In addition to the technical, project management and cost consultants used by DCITA and the Evaluation Committees during the selection processes, independent Competition and Probity Advisers were engaged to oversight the fairness and equity of the selection processes themselves. The reports produced by these advisers at the end of each selection process indicate that they considered the selection processes to be ethical and fair to each and every entrant/proponent.

**3.6** After the Architects were appointed, DCITA appointed a Probity Auditor to review and report on probity issues throughout the life of the project. The Probity Auditor has been involved in the selection processes for the Building and Services Contractors and Museum Exhibition Designers, reviewing overhead and normal profit margins, overseeing the project's internal auditors, providing advice on potential conflict of interest situations and developing the project's quality measurement framework.

**3.7** The ANAO supports the employment of properly qualified competition and probity advisers and auditors as their independent scrutiny gives added confidence to the probity and propriety of the <u>major</u> procurement activities and ongoing project management.

## **Commonwealth Procurement Guidelines**

**3.8** The Minister for Finance and Administration issued the current Commonwealth Procurement Guidelines (CPGs) in January 1998 under the Financial Management and Accountability Regulations. The Financial Management and Accountability Regulations require that officials performing duties in relation to the procurement of property or services <u>must have regard to</u> the Commonwealth Procurement Guidelines, and must make written records of any actions that are not consistent with the Guidelines and their reasons for doing so. DCITA did not document any departure from the CPGs.

**3.9** In its report into Australian Government Procurement, the Joint Committee of Public Accounts and Audit (JCPAA) noted that agencies are under no legal requirement to follow the CPGs and recommended that the Financial Management and Accountability Regulations be amended to require officials to act in accordance with the CPGs.<sup>16</sup> In its response to the JCPAA report, the Government did not agree with this

<sup>&</sup>lt;sup>16</sup> Joint Committee of Public Accounts and Audit (1999), *Report 369 Australian Government Procurement*, p. 30.

<sup>44</sup> Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

recommendation citing that the introduction of a mandatory requirement would add a level of inflexibility that might impact Chief Executive Officers' ability to tailor purchasing policy to their agencies' needs. However, there is a clear expectation that the CPGs will be followed unless there are particular circumstances that warrant a departure which would be documented.

**3.10** The CPGs are designed to allow agencies flexibility in the way they procure property and services while maintaining accountability and providing sufficient guidance to ensure that resources are used efficiently, effectively and with probity. The CPGs have six core principles that underpin the procurement activities of government agencies:

- Value for Money;
- Open and Effective Competition;
- Ethics and Fair Dealing;
- Accountability and Reporting;
- National Competitiveness and Industry Development; and
- Support for Other Commonwealth Policies.

In addition the CPGs contain some specific requirements that 3.11 agencies must comply with. For example, the CPGs require (a) agencies to gazette procurement opportunities and contacts let that are greater than \$2000; and (b) all persons undertaking procurement functions meet the appropriate Commonwealth Procurement Competency Standards. Although, the ANAO notes that from August 1998, (b) is no longer required. However, at the time of the major procurement activities, (b) was still required, and according to the Department of Finance and Administration (DOFA) it reflects 'best practice in Government procurement'.<sup>17</sup> In its recent report on Australian Government Procurement, the JCPAA disagreed with the 'downgrading' of the Commonwealth Procurement Competency Standards from mandatory to best practice and recommended the immediate reversal of this decision.<sup>18</sup> In its response to the JCPAA report, the Government noted that Chief Executive Officers are responsible for their staff's procurement competency and it would be inconsistent in the devolved APS management environment to remove this responsibility by mandating the Competency Standards.

<sup>&</sup>lt;sup>17</sup> Department of Finance and Administration (1998b), *Commonwealth Procurement Circular 98/3 Changes to the Commonwealth Procurement Framework*, p. 2.

<sup>&</sup>lt;sup>18</sup> Joint Committee of Public Accounts and Audit (1999), *Op. cit.*, pp. xxiii-xxiv.

**3.12** The current CPGs were in place at the time of procuring the Building and Services Contractors and Museum Exhibition Designers. However, the design competition to select the project's Architect occurred during a time when two earlier versions of CPGs were applicable (ie. from September 1989 until June 1997 and from July to December 1997). The ANAO has examined the appointment of the Architects in terms of compliance with the CPGs in place at the time. For the most part, the current CPG principles are more generic and outcomes focussed than their predecessors—but all cover mostly the same principles. In this chapter, unless otherwise mentioned, a current CPG principle was also a principle of the superseded CPGs.

### **CPG Core Principle 1: Value for money**

Value for money is the basis for comparing alternatives so buyers can choose the most cost-effective outcome. This requires careful comparison of costs, benefits and options... Price alone is not often a reliable indicator of value for money. Best value for money means the best available outcome when all relevant costs and benefits over the procurement cycle are considered. Buyers will not necessarily obtain the best available value for money by accepting the lowestpriced offer that meets mandatory requirements.

Source: Extract from Commonwealth Procurement Guidelines: Core Policies and Principles, p. 3.

**3.13** The process for selecting the Architects, Building and Services Contractors and Museum Exhibition Designers could be characterised as identifying the best project proposal and then considering price. Although price alone is not necessarily the most reliable indicator of value for money, it is a factor that cannot be excluded from value for money considerations. The ANAO considers that price is best considered through comparisons with other bidding suppliers as well as against a supplier's past prices or industry norms.

#### Architects

**3.14** In the design competition, the Evaluation Committee did not consider entrants' fee submissions until after the preferred entrant had been identified. The ANAO found that the Evaluation Committee had established that the fee submission of the preferred entrant was competitive with those of the other short-listed entrants. Had the Evaluation Committee determined that the preferred entrant's fee submission was not competitive, the design competition conditions reserved the right of the Evaluation Committee to negotiate the fee with the preferred entrant, or to select another entrant. The Architects were then appointed on a percentage-fee contract.

**3.15** In mid-1998, the Architects agreed to enter into the Alliance. At that time, the fee proposed by the Architects was scrutinised in the same way as were the proposed fees of the preferred Building and Services Contractors and Museum Exhibition Designers (see the *Fee Determination* sub-section below).

3.16 At the December 1997 hearings of the PWC, the PWC expressed its concerns over the significant increase in the cost of the functional brief (\$11.6 million) and the effect of this on the outcome of the selection process. The ANAO found that subsequent to issuing the Stage Two briefing kit, DCITA identified some desirable/necessary design features additional to those covered in the Stage Two briefing kit. DCITA's cost consultant considered that the additional features would take the cost of the functional brief from \$68 million (as noted in the Kit) to \$79.6 million. The short-listed entrants were not told of the additional features nor of the increase in the cost of the functional brief and had therefore used the functional brief contained in the Stage Two briefing kit as the basis for costing their entries. When performing an examination of the estimated cost submissions of each entry, the cost consultant, in addition to other cost adjustments, 'standardised' each entry by costing in the additional features.

**3.17** The Evaluation Committee and its advisers considered that the process for considering compliance with the cost parameters was fair and even-handed and that no entrant was disadvantaged. The Evaluation Committee concluded that three of the five entries, including the eventual winner, were 'within a manageable range for a project at this stage of development and could be delivered within cost without compromising design integrity'. The other two entries were considered to be either more difficult to deliver within cost or could not be delivered within cost.

**3.18** The ANAO considers that the costing of the functional brief and assessment process used by the Evaluation Committee could have been better handled. It would have been preferable for the Evaluation Committee to delay the release of the Stage two briefing Kit until all design features had been identified and costed. The ANAO notes that the design competition timeframe was tight and this is the most likely reason why entrants were not told of the additional features—resulting as it would in delays to the design competition timeframe. Nevertheless, the ANAO considers that all entrants were treated equally and the process used by the cost consultant to examine each entrant's cost submissions, and incorporate the additional features, was reasonable given the circumstances.

## Building and Services Contractors and Museum Exhibition Designers

**3.19** Prior to the Call for Proposals for Building and Services Contractors, DCITA obtained legal advice as to whether project alliancing would satisfy the requirement of Regulation 9 of the Financial Management and Accountability Regulations relating to *'efficient and effective use of public money'*. The advice indicated that Regulation 9 (and the value for money test) would be satisfied so long as there was adequate evidence to support the claimed benefits of project alliancing and the contract included some mechanism to limit the Commonwealth's ultimate liability. Subsequent legal advice obtained by the ANAO confirmed that the value for money principle of the CPGs had been satisfied because:

- the project had a fixed budget ceiling and the proponents were aware of the budgetary framework in which they had to work;
- proponents had to demonstrate how they would make the best use of the money available; and
- the selected proponent's costs were at or below the industry norm.

**3.20** Price was encapsulated in a selection criterion for both the Building and Services Contractors and Museum Exhibition Designers. The Evaluation Committees assessed proponents on their ability to:

- demonstrate their commitment to minimising capital and operating costs, in general; and
- offer suggestions on minimising such costs for this project.

**3.21** The ANAO found that the three proponents remaining in the final assessment stage of the Building and Services Contractors selection process all scored the same on the 'price' criterion and these scores were the best of all proposals. The preferred Museum Exhibition Designers also scored the best on the 'price' criterion at the final assessment stage in their selection process. The ANAO considers that the Evaluation Committees adequately assessed proponents against the 'price' selection criterion.

#### **Fee determination**

**3.22** After the preferred Building and Services Contractors and Museum Exhibition Designers were identified (and in the case of the Architects, when they agreed to enter into the Alliance), each contractor provided the respective Evaluation Committee with:

• financial information (such as tendered and actual profit margins) on each major project, or financial statements, covering the past three years; and

• a proposed combined overhead and normal profit margin that they were prepared to receive over and above the direct costs they incurred on the project.

**3.23** On the basis of the above information, plus the industry knowledge of its advisers, the Evaluation Committee either accepted or agreed slightly lower margins at the risk/reward workshop—subject to confirmation from the Probity Auditor. Subsequently, the Probity Auditor analysed the costing methodologies and practices of the preferred proponents and reviewed their financial statements/reports, results of past projects undertaken and industry benchmarks. The Probity Auditor either confirmed that the proposed overhead and profit margins were at or below previous operating results for these contractors or recommended a slightly lower margin for one of the proponents. DCITA and the commercial alliance partners accepted all the Probity Auditor's recommendations.

**3.24** The ANAO considers that the Probity Auditor's examination of proposed fees provided valuable assurance that DCITA and the project received value for money.

**3.25** An equally important aspect of value for money is the amount of financial risk (in the form of negative gainshare), the commercial alliance partners are prepared to accept should cost overruns occur or contractual penalties be applied. The commercial alliance partners have limited or 'capped' their share of negative gainshare to:

- the total overhead and normal profit of the Building and Services Contractors; and
- amounts lower than the total overhead and normal profits of the Architects and Museum Exhibition Designers

**3.26** Whereas large construction companies can afford to put their entire project financial remuneration at risk, such is not the case for smaller organisations such as the Architects and Museum Exhibition Designers. As the project represents a relatively large proportion of their work, DCITA considered that these organisations could be placed in financial difficulty had their full overhead and normal profit been called upon. The ANAO has determined that the commercial alliance partners' share of negative gainshare would have to exceed \$3.6 million before the negative gainshare caps of the Architects and Museum Exhibition Designers would be reached. DCITA considers, and the ANAO agrees, that the negative gainshare caps negotiated and agreed are appropriate financial incentives to encourage the right behaviour.

#### Consideration of whole-of-life costs and benefits

**3.27** The CPGs state that 'an assessment of the best overall net outcome for the Commonwealth should take account of all relevant whole of life costs and benefits'.<sup>19</sup> In other words, value for money requires running costs and the cost of ongoing maintenance, repairs and replacements for the completed site to be considered in conjunction with the initial capital cost. These whole-of-life costs form the basis for comparing different options during the course of construction.

**3.28** In the first instance the amendment to the National Capital Plan (enacted by the National Capital Authority (NCA) so that the project could commence) requires building materials to be *'low maintenance and durable'*.<sup>20</sup> The ANAO is satisfied that the NCA, through its staged approval of project works, has monitored the compliance of the Alliance with this development condition.

**3.29** The Evaluation Committee's assessment of design competition entries considered entrants' compliance with the functional brief that made numerous mentions of the need for the project to:

- avoid significant repairs/replacements;
- minimise maintenance and cleaning costs;
- achieve a balance between initial cost and life-time maintenance costs; and
- maximise energy efficiency.

**3.30** Similarly, the Evaluation Committees for both the Building and Services Contractors and Museum Exhibition Designers selection processes considered proponents' ability to minimise project costs, including life cycle costs.

**3.31** More recently, the Alliance has been considering different options for powering the site. The decision taken by the Alliance was based primarily on the estimated life-cycle costs of the various options.

**3.32** The ANAO considers that DCITA has adequately taken into account the whole of life costs and benefits throughout the project's life thus far.

#### Conclusion

**3.33** The ANAO considers that the processes followed in the selection of the Architects, Building and Services Contractors and Museum Exhibition Designers satisfied the value for money provisions of the CPGs.

<sup>&</sup>lt;sup>19</sup> Department of Finance and Administration (1998a), *Op. cit.*, p. 5.

<sup>&</sup>lt;sup>20</sup> National Capital Authority (1997), *National Capital Plan: Draft Amendment 20*, p. 11.

# **CPG Core Principle 2: Open and effective competition**

Open and effective competition ... requires:

- a framework of procurement laws, policies, practices and procedures that is transparent, ie. laws, policies, practices and procedures governing procurement must be readily accessible to all interested parties;
- openness in the procurement process; and
- encouragement of effective competition through procurement methods suited to market circumstances.

The principle requires effort and research by buying agencies to get the best possible outcome from the market by ensuring that:

- there is reasonable access for suppliers to procurement opportunities and that available opportunities are notified in the Gazette;
- where market circumstances limit competition, agencies recognise this and use procurement methods that take account of it;
- adequate and timely information is provided to suppliers to enable them to bid; and
- bias and favouritism are eliminated.

Source: Extract from Commonwealth Procurement Guidelines: Core Policies and Principles, p. 7.

#### **Architectural Design competition**

**3.34** The Evaluation Committee approved the Design Competition Conditions in June 1997, when expressions of interest were invited. The Royal Australian Institute of Architects (RAIA) did not endorse the design competition. The RAIA considered it did not comply with the International Union of Architects (UIA) Architectural Competition Guidelines in that:

- the architectural brief setting out the precise requirements of the project owners would not be completed until after the competition—thus design rework would be needed after the design competition;
- the government's timeframe for project completion was insufficient for an RAIA-endorsed international design competition; and
- there were other problems associated with the remuneration of shortlisted entrants, fee bidding, the adequacy of the judging panel, ownership of intellectual property and excessive indemnities/ warranties.

**3.35** The Evaluation Committee accepted the RAIA's suggestion to appoint a professional Competition Adviser to the Evaluation Committee. However, the RAIA stated that it '*remains convinced that the process adopted for this competition resulted in many leading Australian and international architects failing to enter the competition*'.<sup>21</sup> This opinion may have been correct as DCITA were expecting in the vicinity of 100 entries in the competition, but received only 76 entries. Of these, only 12 were from overseas (7 USA, 2 Hong Kong, 1 New Zealand, 1 France, and 1 Canada).

**3.36** The ANAO considers that the Design Competition Conditions, sent to those who lodged an expression of interest, clearly indicated:

- the purpose of the process was to select a design consultant and a preliminary design—not to select a completed schematic design; and
- the timetable for the design competition and the broader timetable for the project.

**3.37** The ANAO agrees with the Evaluation Committee's reasoning that there was insufficient time to pursue an UIA Architectural Competition. The ANAO is satisfied that at the start of the competition, entrants were made sufficiently aware of the difference between this competition and a standard UIA Architectural Competition.

#### Security of entries/proposals and assessment facilities

**3.38** Open and effective competition requires the confidence of all involved that entries/proposals will remain secure and their contents kept in confidence from the time of lodgment and throughout their assessment.

**3.39** DCITA took a number of steps to ensure the security of entries/ proposals and assessment facilities. These included:

- using the Competition Adviser to register all design competition entries;
- opening the tender box containing proposals from potential Building and Services Contractors and Museum Exhibition Designers in the presence of the Probity Adviser and/or Probity Auditor;
- restricting access to entries/proposals and assessment facilities to the Evaluation Committees and their advisers; and
- conducting security sweeps of assessment facilities before their use.

**3.40** The ANAO is satisfied that DCITA took adequate measures to ensure the security of entries/proposals and assessment facilities.

<sup>&</sup>lt;sup>21</sup> Royal Australian Institute of Architects (1999), *Submission to the ANAO dated 19 July 1999*, p. 3.

<sup>52</sup> Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

## Open and effective competition in the major procurement activities

**3.41** The ANAO examined the extent to which the procurement processes satisfied the CPG's provisions for open and effective competition. The outcomes of the ANAO's examination of each part of the selection processes are summarised in Table 2.

#### Notification of design competition / Call for proposals

**3.42** In June 1997, DCITA sought expressions of interests from registered architects (or architects eligible for registration) to enter into an 'international design competition' to select an architectural team for the new facilities.<sup>22</sup> Advertisements were placed in a major metropolitan newspaper from each State/Territory, two national newspapers and selected overseas newspapers. However, DCITA indicated that due to an administrative oversight it was quite likely that the advertisement was not placed in the *Gazette*,<sup>23</sup> thus contravening the CPGs.

**3.43** After receiving approval from the PWC in March 1998 to proceed, DCITA called for proposals from Building and Services Contractors in mid-May 1998 and from Museum Exhibition Designers in early-August 1998. Advertisements were placed in major metropolitan newspapers in Canberra, Sydney and Melbourne, two national newspapers and the *Gazette*. In respect of the Museum Exhibition Designers, advertisements were also placed in a major metropolitan newspaper from the other States/Territory and selected overseas newspapers. DCITA also notified museum exhibition designers from around the world by fax that a call for proposals had been announced.

It was originally planned that the site would also house the ACT Aboriginal and Torres Strait Islander Cultural Centre. However, the ACT government decided that this is no longer the case.

<sup>&</sup>lt;sup>23</sup> At the time of major procurement activities, procurement opportunities were gazetted in Telstra Transigo™.

## Table 2 Open and effective competition in the major procurement activities

	Major Procurement Activity		
Step in selection process	Architects	Building and Services Contractors	Museum Exhibition Designers
Notification of competition/ Call for Proposals	1	11	11
Industry briefing	x	11	x
Stages 1/2—Assess entries/ proposals & shortlist	J J	11	1
Stages 2/3—Final assessment to identify preferred entrant/proponent	J J	11	1
Negotiate fee or risk/reward regime	11	11	11
Debriefing unsuccessful entrants/ proponents	1	J J	1

 $\checkmark \checkmark$  - Step fully contributed to open and effective competition

✓ - Step partially contributed to open and effective competition

*x* - Step did not contribute to open and effective competition

**3.44** The ANAO considers that the process for calling for proposals from the Building and Services Contractors and Museum Exhibition Designers satisfied the CPGs' requirements for publicly notifying procurement opportunities. However, DCITA's failure to notify the architectural design competition in the *Gazette* contravened the same CPGs, although its effect was mitigated to a large extent by the provision of newspaper advertisements.

#### **Industry Briefing**

**3.45** A key feature of open and effective competition is to provide adequate and timely information to suppliers to enable them to bid.<sup>24</sup> One of the most direct means of providing information to potential suppliers is to brief them on the government's major procurement activities after expressions of interest, proposals or tenders have been invited.

**3.46** The Design Competition Conditions indicated that no questions could be asked or would be answered during Stage One of the competition. The primary reason was that with about 100 entries

<sup>&</sup>lt;sup>24</sup> Department of Finance and Administration (1998a), *Op. cit.*, p. 7.

expected, DCITA considered that it could have been inundated with questions and all questions and answers would have to be sent to all entrants. The ANAO notes DCITA's concern but considers that an industry briefing soon after the competition was announced may have provided a question and answer forum that was timely, practical and cost-effective. The ANAO acknowledges that it may have been difficult for potential entrants to attend a face-to-face industry briefing at short notice,<sup>25</sup> particularly those located overseas. However, the ANAO considers that a precis of any such briefing, together with questions asked and answered could have been sent to those registered entrants unable to attend.

**3.47** Soon after the announcement of the Call for Proposals for Building and Services Contractors, DCITA held an industry briefing in Canberra for all interested parties. The open briefing session provided an overview of the project and discussed the principles of alliancing and features of alliancing contracts. A closed briefing session was held afterwards for registered proponents (including those that registered on the spot) where questions were answered. The ANAO considers that the briefing session was a valuable exercise that aided industry's understanding of the project and the alliancing contracting method—which most of the proponents would not have experienced before.

**3.48** In contrast with the Building and Services Contractors selection process, an industry briefing was provided only to the short-listed Museum Exhibition Designer proponents just prior to the second assessment stage. DCITA indicated that this was due to the significant cost and logistical difficulties involved in holding a face-to-face industry briefing for all interested parties, most of whom are located overseas. The ANAO considers that the timing of the 'industry' briefing for the short-listed Museum Exhibition Designers meant that it could not generate interest from the museum exhibition design industry nor aid the industry's understanding of the project and alliance contracting method before proposals were lodged. The ANAO considers that available technologies, such as the Internet, could have been considered as a cost-effective means of briefing the industry representatives who were unable to attend face-to-face.

<sup>&</sup>lt;sup>25</sup> Although the ANAO notes that many Australian-based Building and Services Contractors were able to attend an industry briefing held within a week of the placement of advertisements.

### **Recommendation No.1**

**3.49** The ANAO *recommends* that, in the interest of attracting more, better quality proposals, agencies:

- (a) brief industry on their major procurement requirements to the maximum extent practicable at the start of the procurement processes; and
- (b) consider using available technologies, such as the Internet, to assist in briefing industry where it is logistically impractical and/or cost prohibitive for all targeted suppliers to attend face-to-face briefings.

#### Agency Response

**3.50** DCITA agreed with the recommendation.

#### Stages 1/2—Assess entries/proposals & shortlist

#### Architects

**3.51** The day before the closing of registrations of expressions of interest announced in the Design Competition Conditions, the competition timeframe was varied. The Minister for Communications and the Arts and the Evaluation Committee Chair announced a 1-week extension of the deadline for registering expressions of interest and a 3-week extension of the deadline for Stage One entries. All entrants that had registered an expression of interest were notified of the changes to these dates, thus preserving the fairness of the process. This extension did not change the RAIA's opinion of the timeframe for the architectural design competition.

**3.52** On the receipt of first-stage entries, the Competition Adviser ensured the anonymity of each entry by giving each a unique number and removing all identifiable markings. Until the Evaluation Committee short-listed entrants for Stage Two assessment, only the Competition Adviser knew the identities of all design competition entries. The ANAO considers that the anonymity of Stage One entries ensured that entrants' reputations could not unduly influence the Evaluation Committee or its advisers and thus aided open and effective competition.

**3.53** The day after the design competition closed, letters were sent to all those who lodged expressions of interest either acknowledging receipt of their entry or advising that an entry had not been received. This measure was adopted to ensure that DCITA had received all entries lodged by potential entrants.

**3.54** The Evaluation Committee expressed its disappointment that a majority of entrants failed to demonstrate any conceptual understanding

of the brief or the site. Nevertheless, the Architectural Adviser considered that the five short-listed entries '*permit the second stage of the competition to be used to refine options that best match the requirements of the brief*. All five short-listed entrants were Australian architectural companies. The ANAO considers that the short timeframe to submit competition entries may have contributed to the large number of 'poor' entries and the quality of entries may have been better had an industry briefing been held when the competition was announced.

**3.55** The ANAO found that the 76 Stage One entries were assessed according to the selection criteria contained in the Design Competition Conditions. The Evaluation Committee used a number of consultants to aid its decision including a cost consultant and officials from the NMA, the Department of the Prime Minister and Cabinet, AIATSIS and NCA. The use of consultants was foreshadowed in the Design Competition Conditions. The ANAO considers that Stage One assessment adhered to the selection process outlined in the Design Competition Conditions.

#### Building and Services Contractors

**3.56** Of the 10 proposals received, one could not be evaluated and scored against the selection criteria as the proponent provided insufficient information. Another two proposals, that failed to address significant aspects, were evaluated but their low scores reflected their incomplete nature. The remaining seven applications met the full requirements of the Call for Proposals document.

**3.57** The Evaluation Committee selected the four highest ranked proposals to proceed to the next assessment stage. The Evaluation Committee was pleased with the high standard of each proposal. DCITA notified each proponent on the outcome of Stage One of the assessment process before Stage Two proceeded.

**3.58** Throughout the assessment process, answers to general questions asked by Building and Services Contractor proponents were circulated to the other proponents, thus ensuring that all proponents had the same information upon which to develop their proposals/presentations.

**3.59** Each Stage Two proponent was interviewed separately for half a day. As noted by the Evaluation Committee:

Interviews were conversation based (rather than a formal presentation followed by pre-set questions) with the primary objective of discussing how proponents would meet the project objectives and jointly developing a mutual understanding of implementation issues. **3.60** Stage Two proponents were then re-assessed against the selection criteria. As scores between three of the consortia were so close (with only 1.5 percentage points separating the second- and third-ranked proponents), the Evaluation Committee decided to proceed to the final assessment stage with three proponents. Although the Call for Proposals document indicated that only two proponents would proceed to the final assessment stage, the ANAO agrees with the Evaluation Committee's decision on the basis of the closeness of the assessment scores.

**3.61** The ANAO found that the Evaluation Committee evaluated proposals according to the selection criteria contained in the Call for Proposals document and the weighting system/benchmarks agreed by the Evaluation Committee before calling for proposals.

#### Museum Exhibition Designers

**3.62** Throughout the assessment process answers to general questions asked by Museum Exhibition Designer proponents were circulated to the other proponents, thus ensuring that all proponents had the same information upon which to develop their proposals.

**3.63** DCITA received sixteen proposals by the due date from Australia (7), New Zealand (1), Canada (1), UK (3) and USA (4). On the advice of the Probity Adviser and Probity Auditor:

- the Evaluation Committee accepted a late UK proposal as there was evidence that it had been posted well in advance of the closing date; and
- five proposals were excluded from consideration as the companies involved submitted expressions of interest rather than comprehensive tender proposals.

**3.64** The ANAO found that the Evaluation Committee evaluated the 12 remaining proposals according to the selection criteria contained in the Call for Proposals document and the benchmarks agreed by the Evaluation Committee before calling for proposals. Eight proposals were immediately eliminated from further consideration as they either did not submit sufficient information to be assessed against all criteria or failed the minimum preset benchmark on one or more criteria.

**3.65** When assessing the remaining four proposals (1 Australia, 1 Canada, 2 US) against the selection criteria, the Evaluation Committee used a preset weighting system to arrive at a score for each. However, the ANAO considers that this varied from the Call for Proposals document that indicated that *'all criteria are ... of equal value'*.<sup>26</sup> The ANAO notes,

<sup>&</sup>lt;sup>26</sup> Construction Coordination Committee (1998), *Call for Proposals from Museum Exhibition Designers*, p. 26.

however, that this had little effect on the ranking of Stage One proposals as the totals of weighted scores did not vary significantly from the totals of the equally weighted scores and did not result in any change in the ranking of proposals.

**3.66** On the basis of the weighted scores, the Evaluation Committee selected the three highest ranked proponents for further consideration in Stage Two of the assessment process and excluded the fourth-ranked proponent—even though there was little difference (less than 1.6 percentage points) between the scores of the third and fourth-ranked proponents. The Evaluation Committee based its decision on the fact that the three short-listed proponents:

- scored higher than the fourth-ranked proponent on the two selection criteria with the greatest weighting (although the Call for Proposals document indicated all criteria were of equal value); and
- demonstrated different perspectives and styles and the fourth-ranked proponent did not provide further choice as it was closely aligned with the style of one of the three short-listed proponents.

**3.67** The ANAO considers that in pursuit of the overriding value-for money requirement, a key prerequisite in any multi-stage tendering process is competitive tension—obtained by involving two or more tenderers in the selection process. In this case, although there was a significant gap in the score of the third ranked proponent and the two higher ranked proponents, DCITA chose to short-list the third-ranked proponent but exclude the fourth-ranked proponent.

**3.68** The Evaluation Committee's decision not to short-list the fourthranked proponent contrasted with the handling of a similar scenario during the Building and Services Contractors selection process. When short-listing the Building and Services Contractors, the Evaluation Committee short-listed an extra proponent for Stage Three assessment based solely on the closeness of scores—a margin of 1.5 percentage points—in the interests of 'fairness and equity'.

**3.69** DCITA subsequently advised the ANAO that it was desirable to short-list a third Building and Services Contractors proponent because, if agreement with the first-ranked proponent could not be reached, then the second-ranked proponent would be considered—meaning the choice of the second-ranked proponent was critical. However, in the case of the Museum Exhibition Designers selection process, DCITA considers the choice between third-ranked and fourth-ranked proponents would not have been as critical because it was more likely that either the first-ranked or second-ranked proponent would be selected.

**3.70** The ANAO acknowledges that it is a matter of judgement for the Evaluation Committee as to the balance between the costs to the Commonwealth and proponents and the procurement outcome when determining the number of proponents to shortlist.

#### Conclusion

**3.71** The ANAO considers that the process for short-listing and evaluating architectural design entries and Building and Services Contractor proposals before the final assessment stage satisfied the CPG's provisions for open and effective competition. The ANAO further considers that the process for short-listing and evaluating Museum Exhibition Designer proposals generally satisfied the CPG's provisions for open and effective competition.

## Stages 2/3—Final assessment to identify preferred entrant/ proponent

#### Architects

**3.72** Although the Stage Two briefing kits were distributed in two parts at different times, all entrants were treated equally and all lodged their Stage two entries by the due date. Unlike the first stage of the design competition, short-listed entrants were able to ask questions. Answers to general questions were circulated to all short-listed entrants, thus ensuring that all entrants had the same information on which to base their Stage two entries.

**3.73** Two weeks into the assessment process, one short-listed entrant attempted to substitute another scheme for its original Stage Two entry without permission. The Competition Adviser found this to be totally unacceptable and ordered the reinstatement of the entrant's original Stage Two entry. The ANAO agrees with decision taken by the Competition Adviser as the other entrants would have been disadvantaged by such a change.

**3.74** The ANAO found that Stage Two entries were assessed according to the selection criteria contained in the Design Competition Conditions. The ANAO considers that Stage Two assessment adhered to the selection process outlined in the Design Competition Conditions.

**3.75** All five entrants were notified of the outcome of the selection process before the Minister announced the winner—Ashton Raggatt McDougall in association with Robert peck von Hartel Trethowan—on 29 October 1997. In accordance with the Design Competition Conditions (as varied by an approved circular), the unsuccessful short-listed entrants

were paid an honorarium of \$50 000, plus up to \$2000 to construct a form model of their design.  $^{\rm 27}$ 

#### Building and Services Contractors

**3.76** For the third and final stage, each short-listed Building and Services proponents separately attended a two-day workshop to discuss, among other things, how they proposed to meet the principles of alliancing and to establish an appropriate leadership team and management team.

**3.77** Following the workshops, each Stage Three proponent was reassessed against the selection criteria. The Evaluation Committee then selected the consortium of Civil & Civic, Tyco International and Honeywell as the preferred Building and Services alliance partner.<sup>28</sup> Their score was significantly higher than those of the other two proponents. All three proponents were notified of the outcome of Stage Three of the assessment process before the finalisation workshop proceeded.

**3.78** In accordance with the selection process, the preferred proponent then entered into negotiations to finalise the financial terms of the Alliance agreement (see *CPG Core Principle 1: Value for Money* above). After the satisfactory conclusion of negotiations, the preferred proponent was formally selected in late August 1998 as the Building and Services Contractors for the project.

#### Museum Exhibition Designers

**3.79** After completion of Stage One of the assessment process, the short-listed Museum Exhibition Designer proponents were advised simultaneously of the agenda for the upcoming industry briefing and interviews. After the industry briefing was held, three consecutive one-day interviews began the following day. The interviews were conversation based and provided the proponents with an opportunity to present slides and other visual material to demonstrate how their previous work related to the requirements of the Call for Proposals document.

**3.80** Although lots were drawn to determine the order of the interviews, the ANAO considers that the first proponent interviewed was at an apparent disadvantage from the proponent interviewed last. The first proponent interviewed had from 5:00pm on the industry briefing day to 9:00am next morning to incorporate information from the industry briefing for the interview. However, the last proponent interviewed

<sup>&</sup>lt;sup>27</sup> Such payments are often viewed as consideration for transferring intellectual property rights from the Architects to the project owner.

<sup>&</sup>lt;sup>28</sup> Civil & Civic now form part of Lend Lease Project Services.

had an extra two days to incorporate industry briefing information. The process used here is in contrast with the one used for the Building and Services Contractors where notification for the Stage Three workshops was staggered so that each proponent had the same amount of time to prepare. The ANAO notes that when the Evaluation Committee reassessed the short-listed proponents after the interviews, the scores for the first and second proponents interviewed decreased and the score of the last interviewed proponent increased. While this is not conclusive evidence of the impact of the interview timing, it does indicate a need to be careful to ensure reasonably equal treatment.

**3.81** DCITA indicated that logistics and cost meant that a face-to-face briefing and interviews had to be held in close proximity to each other. DCITA considers that the drawing of lots gave each proponent an equal chance of being interviewed first or last. The ANAO considers that regardless of the order of interviews, the last interviewed proponent had an advantage over the proponent interviewed first due to the time difference. The ANAO considers that the selection process would have treated proponents more equally had:

- the time between the industry briefing and the first interview been increased by a day or two; or
- the industry briefing not been held at all (given the ANAO's comments above—see *Industry Briefing*).

**3.82** The short-listed proponents were then re-assessed against the selection criteria. The Evaluation Committee then recommended the USA consortium of Anway and Company, Amaze Design Inc and DMCD Inc as the preferred Museum Exhibition Designer alliance partners. Their score was significantly higher than the scores of the other two proponents.

**3.83** After the Evaluation Committee had made its recommendation, the Council of the NMA was advised of the recommendation, the reason for the selection and the background of each short-listed proponent. In mid-September 1998, the Council of the NMA announced its agreement with the Evaluation Committee's recommendation. All short-listed proponents were immediately notified of the outcome.

**3.84** In accordance with the selection process, the preferred proponent then entered into negotiations to finalise the financial terms of the Alliance agreement (see *CPG Core Principle 1: Value for Money* above). After the satisfactory conclusion of negotiations, the preferred proponent was formally selected in late September 1998 as the Museum Exhibition Designers for the project.

#### Conclusion

**3.85** The ANAO considers that the process for the final assessment of the Architects and Building and Services Contractors satisfied the CPG's provisions for open and effective competition. The ANAO further considers that, although the procurement processes were similar, the process of appointing the Museum Exhibition Designers was not of the same high standard as for the Building and Services Contractors. The appointment process of the Museum Exhibition Designers would have been improved had:

- proponents been provided with an industry briefing <u>before</u> lodging their proposals;
- the selection process not been varied by assessing proposals against weighted selection criteria when the Call for Proposals document indicated that all criteria were of equal value;
- all proponents been given sufficient time to incorporate appropriate briefing material into their bids.

#### Debriefing unsuccessful entrants/proponents

**3.86** The CPGs mention that unsuccessful bidders should be offered a written or oral debriefing on the reasons for their non-selection against the selection criteria. One rationale for conducting debriefings is so that prospective suppliers may submit better proposals in the future.

#### Architects

**3.87** All unsuccessful Stage One entrants were notified in writing. Reasons for the Evaluation Committee's decision were not provided and no debriefs were offered. DCITA indicated that it was industry practice not to debrief architectural competition entrants eliminated at the first assessment stage.

**3.88** Although formal debriefs were not offered after the competition winner was selected, informal debriefing occurred when three of the four unsuccessful short-listed entrants accepted DCITA's offer to attend the public announcement of the winner of the design competition.

#### Building and Services Contractors

**3.89** After the Building and Services Contractors was selected, DCITA offered all unsuccessful proponents individual debriefings. Six of the nine unsuccessful proponents attended debriefings. The format for each debriefs was similar in that DCITA:

- described the selection process and probity measures in place; and
- provided individual assessments of strengths and weaknesses of their proposals.

**3.90** DCITA indicated that all but one of the proponents debriefed were satisfied with the feedback they received. The dissatisfied proponent expressed concern that (a) two of the short-listed firms were related; (b) large construction firms dominated the shortlist, and (c) considered that the project should have been broken up into smaller packages suitable for local operators. These matters are discussed later in this Chapter. According to DCITA, no other debriefed proponents raised these concerns.

**3.91** DCITA received extremely positive feedback on the use of alliancing from all debriefed proponents. According to DCITA, it received highly favourable comments on the selection process and its timeliness, and the clarity of the Call for Proposals document. DCITA indicated that most proponents considered that the cost of submitting proposals was much lower than for a 'design and construct' project.

#### Museum Exhibition Designers

**3.92** DCITA indicated that all unsuccessful Stage One and Two proponents were notified of the decision and reasons for decisions were not provided. DCITA indicated that no debriefs were offered to unsuccessful proponents and none were requested.

#### Conclusion

**3.93** The ANAO supports DCITA's approach to debriefing unsuccessful Building and Services Contractor proponents, particularly as this was DCITA's first selection process under project alliancing methodology. The ANAO considers that DCITA could have done more to debrief unsuccessful design competition entrants and Museum Exhibition Designer proponents who had been short-listed to the final assessment stage. Debriefings for these entrants and proponents could have been better structured and more fully addressed the selection criteria.

#### Conclusion

**3.94** The ANAO considers that the process for the appointment of the Architects, the Building and Services Contractors and Museum Exhibition Designers demonstrated open and effective competition in compliance with the CPGs.

**3.95** However, while the procurement processes were similar, the process of appointing the Museum Exhibition Designers was not of the same high standard as for the Building and Services Contractors.

## **CPG Core Principle 3: Ethics and fair dealing**

Commonwealth staff associated with procurement, particular those dealing directly with suppliers, should ensure that they:

- recognise and deal with conflicts of interest;
- deal with suppliers even-handedly;
- do not compromise the Commonwealth's standing through acceptance of gifts or hospitality; and
- are scrupulous in their use of public property.

Source: Extract from Commonwealth Procurement Guidelines: Core Policies and Principles, p. 11.

#### **Probity Guidelines**

**3.96** Prior to the processes for appointing the Building and Services Contractors and Museum Exhibition Designers, a comprehensive set of probity guidelines was developed. The probity guidelines provided advice to all those involved in the selection processes as to how they should act in, handle and document, probity-related situations that might arise during the selection processes. Matters covered included confidentiality, information disclosure procedures and tender receipt and security arrangements. The ANAO has reproduced the probity guidelines at Appendix 3 and considers them to be a valuable tool for managing probity issues that may arise in major procurement activities.

**3.97** The ANAO considers that, with the exception of conflict of interest declarations (see below), those involved in the selection processes closely followed the probity guidelines.

#### Management of potential conflicts of interest

#### Restrictions on entering the design competition

**3.98** To preserve the integrity of the selection process the following people were barred from entering the architectural design competition:

- members or employees of the project owners (ie. DCITA, NCA, NMA, AIATSIS, ACT government)
- assessors for the competition;
- consultants engaged by the Commonwealth for the project; and
- · close relatives of any of the above categories.

**3.99** The ANAO considers that the above exclusions added to the integrity of the selection process by avoiding apparent and perceived conflicts of interest.

#### Conflict of Interest declarations

**3.100** The ANAO considers that a key feature demonstrating procurement processes are ethical, fair and free from bias is an assurance that those involved in the procurement have no outside interest in the result. Therefore, in major procurement processes, it is important that all involved in the decision making process (including advisers) declare any potential conflicts of interest and that such declarations be considered as to the impact they may have or be perceived to have on the procurement process. In the interests of accountability, declarations and their consideration should be evidenced in writing.

**3.101** The ANAO, however, found shortcomings with respect to conflict of interest declarations in all the major procurement activities. Documentary evidence from the Design Competition and Museum Exhibition Designer selection process is not available to confirm that:

- members of the Evaluation Committees and their advisers declared conflicts of interest or potential conflicts of interest; and
- the Evaluation Committees considered the impact these declarations could have on the selection processes.

**3.102** The reports of the Probity Advisers for the procurement processes are silent on whether conflict of interest declarations and considerations occurred before the selection processes began.

**3.103** The Report of the Evaluation Committee for the Building and Services Contractors selection process indicates that the Evaluation Committee considered conflict of interest declarations at its first meeting and determined that none would adversely affect the selection process. However, only half of the project participants' declarations were made in writing. DCITA indicated that other declarations were made orally at the meeting and were not individually documented.

**3.104** The ANAO considers that DCITA could have better evidenced the conflict of interest declarations and their consideration by the Evaluation Committees.

#### Interactions with proponents during selection processes

**3.105** The ANAO noted instances where advisers to the Building and Services Contractors selection process were approached by, or had dealings with, potential Building and Services Contractors during the selection process. The ANAO found that, in accordance with the probity guidelines, the advisers concerned documented this contact and passed it on to DCITA for its consideration. In one instance, DCITA was concerned that contact between a selection process adviser and potential Building and Services Contractor may have compromised the integrity of the selection process.

After consulting with the Probity Auditor, DCITA sought a detailed record of the conversation in writing from both the adviser and potential Building and Services Contractor involved. On receipt of the two accounts of the conversation, DCITA and the Probity Auditor agreed that the integrity of the selection process had not been compromised. The ANAO considers that this potential threat to selection integrity was well managed by DCITA.

**3.106** During the Building and Services Contractors selection process, the Evaluation Committee observed that two of the four highest ranked proponents were related companies. The Call for Proposals document indicated that collusion between proponents was prohibited and should collusion be evidenced then the proposals of the proponents concerned may be rejected. The fact that two companies are related increases the inherent risk of collusion. However, the Evaluation Committee noted that the two companies involved operated as separate entities and had a history of competing against one another. The Evaluation Committee considered, and the Probity Auditor agreed that as there was no evidence of the proponents being involved in the other's proposal, probity requirements had not been breached. Given the circumstances, the ANAO concurs with the decision made here by the Evaluation Committee.

#### Ongoing management of ethics and fair dealing issues

**3.107** Alliance partners, in signing the Alliance Agreement, have undertaken to communicate freely and act honestly and ethically. The partners have committed to notifying each other of perceived or real conflicts of interest and to establishing and maintaining an environment that encourages timely sharing of information. This commitment is self-policed within the Alliance. At the time of the audit, there was no evidence of any conflicts of interest occurring within the Alliance, although the ANAO noted discussions concerning potential conflicts of interests with consultants to the Alliance (eg. membership of the Independent Quality Panel). The fact that potential conflict of interest issues have been discussed suggests that the Alliance is operating in the manner prescribed.

**3.108** The project's Probity Auditor, who is also Chair of the project's Audit Committee, attends most ALT meetings and other meetings where major issues are discussed or where issues of probity or ethics may arise. The Probity Auditor indicated that he is not aware of any conflicts of interest occurring within the Alliance. The Probity Auditor attributes the success of the relationship between Alliance partners to careful and thorough Alliance partner selection processes and to the open, honest and sometimes frank discussions that occur between the Alliance partners. The ANAO found that these discussions were well documented in the minutes of ALT meetings.

#### Conclusion

**3.109** The ANAO considers that the process for the appointment of the commercial alliance partners complied with the CPG principle of ethical and fair dealing. However, the ANAO has not sighted sufficient documentary evidence to indicate that all members of Evaluation Committees and their advisers declared potential conflicts of interest or that all Evaluation Committees considered these declarations before the selection processes began.

#### **Recommendation No.2**

**3.110** The ANAO *recommends* that agencies, in the interests of demonstrating that major procurement activities are undertaken ethically and fairly, ensure that:

- (a) members of Evaluation Committees and their advisers declare, in writing, all conflicts of interest or potential conflicts of interest that may impact upon selection processes; and
- (b) Evaluation Committees consider these declarations and their potential impact upon selection processes, and document its findings;

before the selection processes begin.

#### Agency Response

3.111 DCITA agreed with the recommendation.

## **CPG Core Principle 4: Accountability and reporting**

Accountability involves ensuring individuals and organisations are answerable for their plans, actions and outcomes. Openness and transparency in administration, by external scrutiny through public reporting, is an essential element of accountability. So is good record keeping.

Source: Extract from Commonwealth Procurement Guidelines: Core Policies and Principles, p. 13.

#### Documentation of major procurement activities

**3.112** The ANAO found that the major procurement activities, including decisions and reasons for decisions, to be generally well documented. Each Evaluation Committee produced a report summarising the selection processes. The Probity Advisers and, in the case of the design competition, the Competition Adviser also produced their own reports. DCITA has retained the selection criteria, scoring benchmarks and assessment reports on file. However, conflict of interest declarations and their consideration by the Evaluation Committees could have been better documented (see *CPG Principle 3: Ethics and Fair Dealing* above).

#### **Commonwealth Procurement Competency Standards**

**3.113** The Commonwealth Procurement Competency Standards identify the skills, knowledge and benchmarks that Commonwealth employees should be accredited to when undertaking procurement activities. Gaining a certificate of competency involves a combination of self-assessment and independent assessment against the various Competency Standard Units.

**3.114** In 1994, the Government required all persons undertaking procurement functions to meet the appropriate Commonwealth Procurement Competency Standards. Although no longer required from August 1998, this provision was a requirement at the time the procurement documentation (ie. design competition conditions and Call for Proposals documents) was developed. The ANAO notes that a recent JCPAA report into Australian Government Procurement disagreed with *'the downgrading of the competency requirement from 'mandatory' to 'best practice"* and recommended that the decision be reversed immediately.<sup>29</sup> In its response to the JCPAA report, the Government noted that Chief Executive Officers are responsible for their staff's procurement competency and it would be inconsistent in the devolved APS management environment to remove this responsibility by mandating the Competency Standards.

**3.115** The ANAO found that none of the key DCITA personnel involved in the three major procurement activities has been assessed against the Commonwealth Procurement Competency Standards applicable at the time.<sup>30</sup> DCITA indicated its key staff attended training courses on contract and project management prior to the major procurement activities. DCITA also drew on external expertise (including alliance facilitators, lawyers, Probity Advisers and a Probity Auditor) when it developed and administered the major procurement activities, thus mitigating this non-conformance. The ANAO accepts that DCITA's non-assessment of key staff against the Commonwealth Procurement Competency Standards did not have any obvious detrimental effect on the project.

#### **Gazettal of contracts let**

**3.116** Visibility of government business is promoted through the use of the *Gazette*. The CPGs provide that details of all commitments entered into by the Commonwealth with an estimated value in excess of \$2000 are to be notified in the *Gazette*. However, DCITA did not gazette the

<sup>&</sup>lt;sup>29</sup> Joint Committee of Public Accounts and Audit (1999), *Op.cit.*, pp. xxiii-xxiv.

<sup>&</sup>lt;sup>30</sup> Although staff from DCITA's Contracting Unit may have been assessed against these competencies, they were not intimately involved in the preparation of the call for proposals documentation or the selection processes.

contracts let for the Architects, Building and Services Contractors and Museum Exhibition Designers (although media releases were issued on the appointment of the Architects and Building and Services Contractors). The ANAO is satisfied that this administrative oversight that contravened the CPGs occurred as a result of the failure to notify DCITA's Corporate Services Branch of the letting of the contracts.

#### Approval of project by the PWC

**3.117** In October 1997, the Parliament referred the project to the PWC for its examination and approval. Public hearings were held in December 1997 and February 1998. The PWC's report was tabled in Parliament in July 1998. Although the PWC gave approval for DCITA to advertise for expressions of interest from possible alliance partners in March 1998, the PWC expressed concerns over (a) the cost of the project, (b) the costing of the design brief and submissions and (c) the relatively new alliancing method of construction contracting. The ANAO has examined each of the PWC's concerns.

**3.118** In its examination of the project, the PWC expressed concern over being presented with a number of different budgets for the project at various times. The ANAO considers that this occurred due, in part, to confusion within DCITA of the separate sources of funding for the project. For example:

- the Parliament's referral of the project to the PWC quoted a project budget of \$133 million (representing \$128 million approved by Government in November 1997 and another \$5 million appropriated through the 1997–98 Budget). This, however, excluded \$18.9 million in 'one-off establishment costs' for exhibition and relocation expenses that had been approved by Government for the project;
- DCITA's first submission to the PWC indicated that the project budget was \$152.4 million (representing \$128 million approved by Government in November 1997, \$18.9 million in 'one-off establishment costs', the \$3 million contribution from the ACT Government and \$2.5 million in funding for a footbridge approved separately by Government). DCITA, however, inadvertently omitted the \$5 million appropriated through the 1997–98 Budget; and
- DCITA's final submission to the PWC indicated that the project budget was \$151.9 million (representing \$128 million approved by Government in November 1997, \$5 million appropriated through the 1997–98 Budget and \$18.9 million in 'one-off establishment costs').

**3.119** Table 3 reconciles the budgets from DCITA's first and final submissions.

#### Table 3

Reconciliation of project budget

Budget Submissions	\$ m
Project budget: DCITA's 1 <sup>st</sup> submission	152.4
less: Footbridge (funding appropriated separately)	-2.5
ACT Government contribution	-3.0
Allocation from Centenary of Federation Fund	146.9
add: 1997-98 Budget appropriation	+5.0
Project budget: DCITA's final submission	151.9

**3.120** The final project budget of \$155.4 million represents the budget presented to the PWC in DCITA's final submission (ie. \$151.9 million), the \$3 million contribution from the ACT Government and another \$0.5 million of unexpended funds from the 1996–97 Advisory Committee process subsequently 'rolled over' into the project.

**3.121** The PWC's second concern relates to DCITA's handling of changes to the design brief and its costs that occurred after it was sent to short-listed design competition entrants. The ANAO considered this issue earlier in this Chapter (see *CPG Core Principle 1: Value for Money*). This ANAO report considers the alliancing method of contracting and so addresses the PWC's third concern.

**3.122** The ANAO and DCITA both consider that the PWC's concerns would not have been so critical had DCITA's submission and comments to the PWC been better refined and clarified. The transcripts of the public hearings demonstrate clearly the confused nature of some of the evidence. Nevertheless, there was a clear need for assurance with the uncertainties involved.

#### Conclusion

**3.123** The ANAO considers that the major procurement processes are generally well documented. However, the ANAO found shortcomings with DCITA's compliance with the CPGs in terms of gazetting the letting of contracts and certifying key staff against the Commonwealth Procurement Competency Standards.

### **Recommendation No.3**

**3.124** The ANAO *recommends* that, to ensure that major procurement activities adhere to the Commonwealth Procurement Guidelines, agencies:

- (a) ensure that all contracts let are gazetted; and
- (b) consider having their staff involved in major procurement activities assessed against the relevant Commonwealth Procurement Competency Standards.

#### Agency Response

**3.125** DCITA agreed with the recommendation.

# CPG Core Principle 5: National competitiveness and industry development

Government, as a major purchaser of goods and services, can act as a positive force to promote national competitive advantage and to develop competitive Australian and New Zealand (ANZ) industry through encouraging:

- competitive businesses with enhanced capacity to grow, invest, innovate and export;
- ease of access and reduced costs of doing business with government, particularly for small to medium enterprises (SMEs); and
- value added activities, and the training and skills development of the workforce.

Source: Extract from Commonwealth Procurement Guidelines: Core Policies and Principles, p. 17.

#### Introduction

3.126 An amendment to the CPGs in December 1997 provided for:

- departments and agencies to source at least 10 per cent of their purchases from small to medium enterprises (SMEs);<sup>31</sup> and
- tender documents for major projects to specify any industrial development requirements and associated evaluation methodology.

<sup>&</sup>lt;sup>31</sup> The JCPAA noted in *Report 369—Australian Government Procurement* that there was no agreed and universally applied definition of 'SMEs' and recommended that DOFA and the Office of Small Business develop one. In its response to the JCPAA report, the Government agreed with the recommendation.

**3.127** The CPGs indicate that agencies should consider and use the Model Industry Development Criteria for projects \$10 million or more to be developed by the Departments of Finance and Administration; Industry, Science and Resources; and Employment, Workplace Relations and Small Business. In May 1998, a draft set of model industry development criteria was circulated to Commonwealth departments and agencies for comment. In February 1999, the *Model Industry Development Criteria for Major Projects: Guidance Notes* was officially released.

**3.128** The CPGs also indicate that agencies should inform and educate Australian/New Zealand (ANZ) industry about opportunities for government business and where overseas goods are purchased in preference to ANZ goods, agencies must be able to demonstrate that ANZ suppliers had a fair opportunity to compete.

**3.129** In its recent report into Australian Government Procurement, the JCPAA affirmed its support for maximising opportunities for Australian industry from Commonwealth procurement. The JCPAA recommended that:

- departments and agencies source at least 20 per cent of their purchases from SMEs;
- the Model Industry Development Criteria for Major Projects apply to projects of \$5 million or more;
- agencies, if they have not already done so, sign a memorandum of understanding with the Industry Supplies Office Network (ISONET) that included, among other things, commitments to maximising the involvement of ISONET in the purchasing process; and
- departments and agencies publish electronically the reasons where overseas goods and services worth \$100 000 or more have been purchased.<sup>32</sup>

# Architects

**3.130** The CPG Principle on National Competitiveness and Industry Development did not exist in its current format when the design competition began and the Design Competition Conditions were drafted. However, it was the government's policy 'to maximise opportunities for ANZ suppliers to compete for Commonwealth business on the basis of value for money' by among other things, encouraging competitive ANZ suppliers to bid.<sup>33</sup> The ANAO notes that DCITA encouraged design competition

<sup>&</sup>lt;sup>22</sup> Joint Committee of Public Accounts and Audit (1999), *Op. cit.*, pp. 80, 86, 92, 95.

<sup>&</sup>lt;sup>33</sup> Department of Finance (1989), *Commonwealth Procurement Guideline 12: Australian and New Zealand supplies* (superseded).

entries from Australian and New Zealand architects by placing advertisements in the Australian press.

3.131 The Design Competition Conditions required the project's Architects to demonstrate their capacity to deliver the project, but also gave the opportunity for short-listed architects that did not meet the capacity requirement in their own right to join forces with another architectural firm before Stage Two of the selection process began. Once the five short-listed entrants were selected from the anonymous entries and their identities became known, the Evaluation Committee considered their (self-assessed) capability to undertake the project. On the advice of its project consultants, the Evaluation Committee encouraged some entrants to seek additional resource support. Once the additional support was obtained, the Evaluation Committee considered that all five entrants met the capability requirement and Stage Two of the selection process began. The ANAO considers that the opportunity of joining forces encouraged small business to participate in the competition. The fact that all five short-listed entrants may not have met the capacity requirement in their own right demonstrates that small business can compete against larger enterprises when opportunities to submit joint proposals are permitted.

**3.132** The Design Competition Conditions also required international entrants to include a *'substantial Australian component'* in their design team. However, DCITA indicated that there was no need to pursue this issue as all Stage One entries were treated anonymously and no international entrant was short-listed for Stage Two assessment. The ANAO considers that the competition had the potential to aid Australian industry involvement in the project by requiring international entrants to include a *'substantial Australian component'* in their design teams.

# **Building and Services Contractors**

**3.133** Although Australian-based construction organisations were targeted, the scope of the project effectively excluded small to medium construction organisations. As a minimum, the selection criteria required proponents to demonstrate their experience on at least three examples of work involving:

- complex buildings, services and landscaping projects; and
- projects of a similar nature to the Museum, with a construction value greater than \$50 million.

**3.134** The ANAO considers that given the scope of the project, it was appropriate to target large construction organisations that could demonstrate their experience on projects of similar size and nature. The ANAO further considers that breaking the project into smaller

construction packages for local operators, as suggested by one of the unsuccessful proponents, would have been impractical, particularly under project alliancing. It would have significantly increased the complexity of the contracting arrangements, management structure and the delineation of roles and responsibilities.

**3.135** The publication *Model Industry Development Criteria for Major Projects: Guidance Notes* was not available when DCITA prepared the Building and Services Contractors Call for Proposals document. However, the Call for Proposals document included the generic industry development requirement for proponents to demonstrate how they proposed to involve Australian enterprises, including SMEs, in the project. This requirement was included in one of the selection criteria. The Evaluation Committee determined that all short-listed proponents had adequately considered Australian SMEs and local industry in their proposals. The ANAO considers that the Evaluation Committee adequately considered how proposals met the government's industry development policy when selecting the Building and Services Contractors.

# **Museum Exhibition Designers**

**3.136** As was the case for the Building and Services Contractors selection process, potential Museum Exhibition Designers had to demonstrate their experience on at least three projects of a similar nature and value. DCITA indicated that it was standard industry practice to appoint Museum Exhibition Designers to carry exhibition services from concept development, through design, documentation, installation and commissioning. The Call for Proposals document allowed proponents to bid as consortia and nearly half of all proposals submitted were from consortia. Given the scope of work the successful Museum Exhibition Designers would undertake, the ANAO considers that it was appropriate to target designers with experience on projects of similar nature and value.

**3.137** The ANAO notes that DCITA contemplated making it a requirement for overseas proponents to form a consortium with an Australian company. However, DCITA decided not to pursue this approach because it considered there was a risk it might be seen as disadvantaging overseas proponents. Also, the contents of the Call for Proposals document would make proponents realise that they needed an Australian presence and some knowledge of Australian culture in their teams. The ANAO notes, however, that the Evaluation Committee made no direct or indirect assessment of the extent to which proponents demonstrated *'an Australian presence or knowledge of Australian culture'*. A US-based consortium was selected as Museum Exhibition Designers.

**3.138** Australian and New Zealand designers have had limited past opportunities to be involved in exhibition design work of the size of this project. Of the eight ANZ proposals submitted, five were eliminated in the first assessment stage due to lack of experience or skills set. (Another two failed to comply with the Call for Proposals document and were not assessed).

**3.139** DCITA's decision on Australian industry involvement here contrasts with its stance in the design competition. The design competition required overseas entrants to include a *'substantial Australian content'* in their design team. This could be interpreted as being a less formal and prescriptive approach to gaining Australian involvement in the project than forming a consortium with an Australian company. The ANAO considers that Australian industry involvement and development might have been enhanced by including *'a substantial (or, at least significant) Australian content'* requirement for foreign Museum Exhibition Designer proponents.

**3.140** DCITA incorporated the draft Model Industry Development Criteria for Major Projects and the associated evaluation methodology into the Museum Exhibition Designers Call for Proposals document. The Evaluation Committee also assessed proponents' ability to 'achieve or exceed nominated Commonwealth and ACT Government policy requirements'—which included the industrial development criteria. The Evaluation Committee determined that all three short-listed proponents adequately incorporated Australian SMEs and local industry into their proposals (mainly in the way of exhibition procurement) and the selected Museum Exhibition Designers had a strong commitment to involving SMEs and local industry in the project. The ANAO considers that the Evaluation Committee adequately considered how proposals met the government's industry development policy when selecting the Museum Exhibition Designers.

# **Alliance Agreement**

**3.141** The Alliance Agreement states that the Alliance will develop, implement and administer a procurement plan that maximises opportunities for ACT industries to participate in the project. In February 1999, the ALT accepted a proposal from NSW Industrial Supplies Office Ltd (ISO consultant) to provide consultancy services (so far, free of charge)<sup>34</sup> to the project to assist in identifying the supply capability of local industry. In March 1999, the Alliance and ISO consultant produced

<sup>&</sup>lt;sup>34</sup> Although ISO receives government funding through the Supplier Access to Major Project Fund administered by the Department of Industry, Science and Resources.

a Local Industry Development Plan that commits the Alliance partners to:

- maximise local participation in design and procurement within the constraints of time and budget; and
- recording and reporting the Plan's outcomes and achievements at regular intervals (initially monthly).

**3.142** Before sub-contracts are put to tender, the ISO consultant has input into the tender distribution list to ensure that relevant local suppliers are considered. The ISO consultant has also developed, and is maintaining, a record of all tenders and local industry involvement. Each month, the ISO consultant provides a progress report to the ALT. The ANAO considers that the use of an ISO consultant is a good method for DCITA to ensure that local industry is supported to the maximum possible extent on this project.

**3.143** Although DCITA is not closely monitoring the extent to which SMEs have participated in the project, the Architects, most of the construction sub-contractors working on site and a significant proportion of material suppliers would be classified as SMEs. The ANAO agrees with DCITA's assessment that small to medium enterprise (SME) involvement is, and will continue to be far in excess of 10 per cent. (Although a 10 per cent target applies at a departmental/agency-wide level, it is still worthy of note, as this project will represent a significant proportion of DCITA's procurement). SME involvement is highly likely to also exceed the 20 per cent target proposed recently by the JCPAA, but which was not supported by the Government in its response to the JCPAA report.

# Conclusion

**3.144** The ANAO considers that DCITA has generally encouraged the participation of Australian industry and, where practicable, SMEs in the major and other ongoing procurement activities of the project. However, the ANAO considers that Australian industry involvement and development might have been enhanced by including 'a substantial (or at least, significant) Australian content' requirement for foreign Museum Exhibition Designers. The ANAO notes that this was a requirement for foreign architects entering the architectural design competition. The ANAO notes that DCITA has already applied the Australian Industry-related recommendations from the JCPAA's recent report into Australian Government Procurement except for that relating to publishing the reasons that officers have purchased overseas goods and services worth \$100 000 or more. In its response to the JCPAA report, the Government considered that existing mandatory reporting requirements are adequate.

# CPG Core Principle 6: Support for other Commonwealth policies

The Commonwealth uses its procurement to support a range of policies. These include:

- policies to ensure the preservation of the environment and the national estate;
- workplace relations policy, particularly freedom of association;
- policies to advance the interests of Aboriginal and Torres Strait Islander people;
- affirmative action;
- occupational health and safety;
- trade and foreign policy; and
- Commonwealth-State coordination and cooperation.

Source: Extract from Commonwealth Procurement Guidelines: Core Policies and Principles, p. 19.

#### Introduction

**3.145** In some cases, the Commonwealth expects not only its suppliers, but the supplier's sub-contractors as well, to adhere to certain Commonwealth policies.

**3.146** The ANAO considers that, as a rule, where suppliers are expected to adhere to certain Commonwealth policies that are more onerous than private sector norms, potential suppliers should be made aware of these policies before responding to Commonwealth Calls for Tenders/Proposals. Supplier adherence to some of these Commonwealth policies may come at a cost which suppliers should be allowed to take into account in their proposals. In addition, it gives the Commonwealth an opportunity to assess potential suppliers on their willingness to adhere to these Commonwealth policies.

# Applicability to design competition

**3.147** The CPGs in existence at the time the design competition began did not recognise *Support for other Commonwealth Policies* as a core principle of Commonwealth procurement. However, by the time short-listed entrants were provided with a document outlining the terms and conditions under which the successful entrant would be appointed (ie. *Architects Roles and Responsibilities* document issued in October 1997), a

new set of CPGs had been issued. This new set of CPGs recognised *Supporting other Government Policies* as a core principle of Commonwealth procurement. This equates with the current *Support for other Commonwealth Policies* principle of Commonwealth procurement.

### Results

**3.148** The ANAO examined the extent to which the entrants/proponents of the major procurement activities were informed of the need to adhere to certain Commonwealth Policies. The results are summarised in Table 4.

#### Table 4

	Major I	Alliance			
Policy <sup>a</sup>	Architects	Building and	Museum	Agreement	
		Services	Exhibition	agreed to by	
		Contractors	Designers	the Architects,	
	Design	Call for	Callfor	Building and Services	
	Competition Conditions and/or	Proposals document	Proposals document	Contractors,	
	Architect's Roles	and/or	uocument	and Museum	
	and	draft		Exhibition	
	Responsibilities	agreement		Designers	
National Code of Practice for the Construction Industry	N/A	J J	11	J J	
Intellectual Property	11	11	X	J J	
Employment Opportunities for Aboriginal and Torres Strait Islander people	X	J J	11	<b>√</b> √	
Affirmative Action	x	11	11	<b>J J</b>	
Environment and National Estate Issues	11	J J	N/A	J J	
Privacy Principles	x	X	X	11	
Occupational Health and Safety	1	J J	1	<b>√ √</b>	
Access to Records	x	1	X	1	

#### Major procurement activities supporting other Commonwealth policies

a - Commonwealth policies such as workplace relations, quality and liability are specifically covered in Chapter 4 of this report.

N/A - not applicable

✓✓- Suppliers fully informed of Commonwealth policy requirements.

- ✓ Suppliers partially informed of Commonwealth policy requirements.
- **x** Suppliers not informed of Commonwealth policy requirements.

**3.149** As illustrated in Table 4, the ANAO identified Commonwealth policies which should have been notified to entrants and proponents. The ANAO considers that the procurement processes would have been improved had:

- the *Architect's Roles and Responsibilities* document indicated that the eventual competition winner was expected to adhere to certain Commonwealth policies; and
- Museum Exhibition Designer proponents been provided with a draft agreement when the Call for Proposals document was issued.

**3.150** As a result of these omissions, design competition entrants and Museum Exhibition Designer proponents could not be assessed on their intention to comply with the Commonwealth policies. This created unnecessary contracting risk for the Commonwealth. However, the ANAO considers that it did not have any obvious detrimental effect on the project.

**3.151** With respect to the Museum Exhibition Designer selection process, DCITA contends that it was not exposed to unnecessary contracting risk because it provided a draft Alliance agreement (that included the Commonwealth's policy requirements mentioned above) to the preferred Museum Exhibition Designers prior to the negotiation of the risk/reward regime. Only after the satisfactory negotiation of the Agreement's terms were the Museum Exhibition Designers formally appointed. The ANAO considers that it would have been better practice for DCITA to supply a draft Alliance agreement with the Call for Proposals documentation so that proponents:

- would have been aware of the Commonwealth's policy requirements at the time they lodged their proposals; and
- could have been fully assessed against the terms of the draft agreement.

### **Alliance Agreement**

**3.152** The ANAO considers that the Alliance Agreement adequately covers all applicable Commonwealth policies. However, the provision in contracts (where appropriate) for adequate access to records by the ANAO, as suggested by the CPGs, could have been improved.

**3.153** In late 1997 and again in early 1998, the ANAO wrote to agencies asking that, in drafting their contracts, they provide for:

 the agency to have access to contractor's records, information and assets directly relevant to contract performance to give the agency an adequate level of control and/or performance monitoring of contractual arrangements; and • the ANAO to have an equivalent level of access (but not unfettered access to contractor's premises) to enable the ANAO to fulfil its statutory responsibility to the Parliament.

**3.154** In a recent report, the JCPAA expressed its support for the ANAO to have such access to records and Commonwealth assets held on contractor's premises.<sup>35</sup> A recent Financial Control and Administration Audit of the ANAO also recommended that contracts include standard access clauses that will allow organisations and the ANAO to fulfil their respective accountability obligations.<sup>36</sup>

**3.155** Although the Alliance Agreement contains clauses relating to access to records and the auditing thereof, they do not fully reflect the substance of the model access clauses. The ANAO considers that DCITA should include the model access to records in its future contracts with the private sector.

# Conclusion

**3.156** The ANAO considers that the process for the appointment of the Architects, Building and Services Contractors and Museum Exhibition Designers substantially complied with the Commonwealth's requirements for the procurement of public works (ie. the CPGs).

**3.157** The ANAO considers DCITA's employment of Probity Advisers and a Probity Auditor to oversee the major procurement activities as well as the development and use of probity guidelines by all those involved in the selection processes, as appropriate for the level of risks involved. Together, they added valuable assurance to the probity of the selection processes.

<sup>&</sup>lt;sup>35</sup> Joint Committee of Public Accounts and Audit (1999), *Report 368—Review of Audit Report No.* 34, 1997–98 New Submarine Project—Department of Defence, p. 43.

<sup>&</sup>lt;sup>36</sup> ANAO (1999), Management of Contracted Business Support Processes, p. 39.

# 4. Project Management

# Introduction

**4.1** On a construction project with a timeframe extending over multiple years, it is important for the client, in this case DCITA, to ensure that appropriate management information systems are in place. These systems should monitor the progress of the project in terms of its cost, time and quality against budget in a timely manner. Such information will allow DCITA to account to the Minister and the Parliament concerning the project's progress and enable DCITA to take timely corrective action should the project not be progressing satisfactorily.

**4.2** In terms of the project's management information system, the ANAO examined the following:

- Budget management—refinement of the project budget, development of target out-turn costs and management of contingencies/allowances;
- Cost management—commitments, expenditure, cash flows and forecasting;
- Time management—scheduling and forecasting;
- Quality management and design integrity—development of quality and design integrity measures and independent assessment/ measurement systems; and
- Management of other project risks—governance framework, insurance, Goods and Services Tax, foreign exchange risks, Year 2000 compliance, asset management and industrial relations.

**4.3** This Chapter also addresses the operations of the project's governance framework and compares the costs of project alliancing with traditional contracting methods.

# **Budget management**

### **Project budget**

**4.4** Since the project received formal Government approval in November 1997, the project budget and its various components have changed over time. The original project of budget of \$151.9 million was increased to \$155.4 million after the project received \$3 million from the ACT government and another \$0.5 million of funds 'rolled-over' from the 1996–97 Advisory Committee process. The changes to the budgets of the various project components sensibly reflect a continual refinement of

the project budget until April 1999 when the Alliance partners struck the official budgets for each project component. Table 5 illustrates the budget's development over time.

#### Table 5

Development of the Project's Budget

Budget item		Original Budget November 1997 \$ m		PWC Budget March 1998 \$ m	Revised Budget (from April 1999 onwards) \$m	
NMA building		}		47.4	57.3°	
AIATSIS building		}		10.1	12.4°	
External works		}		14.0	14.6°	
		}				
NMA exhibition	NMA exhibition			}	d	
		}	133.0ª	} 34.1 <sup>bd</sup>		
NMA fit-out	NMA fit-out			}	5.4°	
AIATSIS fit-out	AIATSIS fit-out			}	1.9°	
		}				
Fees		}		} 29.3°	8.7	
Contingency		}		}	1.1	
Quality Pool					3.0	
Off-site ACT infrastructure <sup>f</sup>					1.0	
Exhibition fit-out:	Alliance		17.0	17.0	43.8 <sup>cd</sup>	
	DCITA				4.3 <sup>d</sup>	
Removal/relocation		1.9		b	1.9	
Total project budget		151.9		151.9	155.4°	

a – Represents \$128 million approved by Government on 10/11/97 from the Federation Fund plus \$5 million allocated through the 1997–98 Budget.

b - Removal/relocation costs included in \$34.0 million.

 c – By April 1999, fees and contingencies that had totalled \$29.4 million as at March 1998 had been substantially reduced through allocating most of the contingency (\$7.0 million in total) to other project components (as marked). The management of contingencies is discussed later in this issues paper.

- d 'NMA exhibition' costs included in 'Exhibition fit-out'.
- e The \$3.5 million increase in the total project budget occurred due to an allocation of \$3 million from the ACT government and an additional \$0.5 million rolled-over from the 1996–97 project feasibility study.
- f Relates primarily to the area surrounding the museum precincts and involves road signage, road/ intersection improvements and footpaths/cycleways.

**4.5** The final project budget can be separated into two parts—the Construction Budget (\$137.3 million) and DCITA's Project Costs (\$18.1 million). The Construction Budget has been further divided into five components—each with their own fixed budget (see Table 6). The budget of each construction component forms the basis for the target out-turn cost (TOC) of each component. TOCs are the financial benchmarks against which the Alliance partners will share in the financial risks and rewards from the Alliance (see *Cost Management* below). Whereas the component budgets reflect their maximum allocation of project funds, component TOCs have fully defined and agreed scope of works (ie. all individual items identified), as well as an estimate of their cost.

**4.6** TOCs should be negotiated and agreed as early as possible, preferably before procurement against the construction component is completed. As at November 1999, the Alliance partners had only agreed the Base Building TOC. Other TOCs are currently being negotiated and all should be agreed by the end of 1999 (see Table 6). To protect the Commonwealth's interest, DCITA has appointed and used its own cost consultants throughout the TOC negotiations. Although some contracts have been let for the exhibition fit-out component, the ANAO considers the current timetable for finalising the TOCs should not adversely impact the construction timetable.

#### Table 6

Construction component	Budget (\$m)	Progress towards finalising TOC
Base Building (NMA building, AIATSIS building, external works)	\$84.3	Agreed in April 1999
Exhibition	\$43.8	Agreed in December 1999
NMA fit-out	\$5.4	Agreed in September 1999
AIATSIS fit-out	\$1.9	To be finalised February 2000
Removal/relocation	\$1.9	To be finalised March 2000
Construction costs	\$137.3	
DCITA's project costs	\$18.1ª	
Total project costs	\$155.4	

a - Includes consultants' fees, client contingency, DCITA's exhibition fit-out budget, quality pool and ACT off-site infrastructure costs.

# Management of project contingencies/allowances

**4.7** Budgets for construction projects typically include a number of contingencies and allowances throughout the project's life. Contingencies include:

- *Design Development Contingency*—representing the contingency for additional construction costs arising from features yet to have their design finalised and incorporated in the mainstream construction budget;
- *Project Allowance*—representing an allowance for the costs associated with any project agreement for staff working on the site; and
- *Escalation*—primarily representing an allowance against inflationary cost increases over the life of the project.

These contingencies are not listed separately but are included in the budget of each construction component.

The extent to which project design has been developed and 4.8 construction progressed, determine the size of these contingencies and allowances. Early in the life of a construction project, contingencies and allowances can represent as much as 15 per cent of project cost. At the time that DCITA prepared the project budget for the PWC in March 1998, total contingencies and allowances represented 10.9 per cent of the project budget (based on a design that was 12 per cent complete). As the project progresses and the design becomes more developed, the scope of works and costs becomes better defined. Consequently, the size of contingencies and allowances decreases as they are reallocated to the mainstream construction budget. By April 1999, construction contingencies and allowances had decreased to 5.0 per cent of the construction budget (based on a design that was 70 per cent complete). By October 1999, construction contingencies and allowances had decreased further to \$4 million, representing only 2.9 per cent of the construction budget.

**4.9** Information provided by DCITA's construction consultant indicates that contingencies and allowances currently included in the construction budget are at, or below, the generally accepted contingency levels for a project at this stage of development. At the end of the project, any unused construction contingencies and allowances will be shared between the Alliance partners (see *Cost Management* section below).

**4.10** DCITA has its own client contingency in addition to the construction contingencies and allowances outlined above. This contingency, currently \$1.1 million, is designed to pay for cost overruns in excess of \$10.0 million or enhancements beyond the scope of the works specified in the TOC if not called on to meet any cost overrun. However,

in January 2000 DCITA advised that it was making its client contingency available to fund the first \$0.7 million of any final cost overrun for the project (see below). As the project progresses, if DCITA considers that its contingency will not be called upon, it will reinvest it back into the project (see *Cost Management* section below).

# **Cost management**

# **Cost Gainshare**

**4.11** The cost gainshare (or Post-TOC gainshare) is designed to encourage the Alliance partners to construct the new facilities in the most efficient and cost-effective manner.

4.12 Should actual construction costs be less than the TOCs/ construction budget, positive gainshare (ie. savings) will be distributed to the Alliance partners in the proportion of 70 per cent to DCITA and 30 per cent to the commercial alliance partners. The commercial alliance partners' share of savings would be distributed among themselves according to a pre-determined schedule. As the PWC were advised in March 1998, DCITA's share of any cost savings, including its \$1.1 million client contingency fund if and when no longer needed, would be reinvested in the project. The Alliance partners intend to develop a 'wish list' of prioritised features that could be incorporated into the new facilities if sufficient reinvested funds become available and time allows. The more time passes, the more difficult it will be to incorporate new features into the project. Therefore, the ANAO considers that DCITA should ensure that any such proposed new features represents value for money and value to the project.

The Alliance Agreement states that the Alliance partners will 4.13 contribute to any negative gainshare (ie. cost overruns) in the proportions of 30 per cent from DCITA and 70 per cent from the commercial alliance partners, until the latter's negative gainshare cap of some \$7.2 million was reached. The Alliance Agreement also provides for the first \$3 million of DCITA's share of any negative gainshare to come from the funds otherwise set aside for the commercial alliance partners to reward 'outstanding' quality performance on this project (ie. the Quality pool). Assuming that no other negative gainshare was payable by the commercial alliance partners, the Quality pool could thus fund, from DCITA's point of view, a construction cost overrun of some \$10 million. Given that DCITA had another \$1.1 client contingency fund set aside, some \$11.1 million in cost overruns (representing 8.2 per cent of the construction budget) could have been funded from within the existing project budget. DCITA would need to seek funds from the Federal Budget to cover any additional cost overruns. However, DCITA considers that this will not occur because:

- its cost consultants consider that the new facilities can be constructed within the available budget; and
- the commercial alliance partners have put their overhead and normal profit at risk in the knowledge that funding supplementation from Government is unlikely to be forthcoming.

**4.14** At the 27 January 2000 meeting of the ALT, DCITA advised that it was prepared to fund 100 per cent of the first \$0.7 million of any final cost overrun in the project out of DCITA's own client contingency funds of \$1.1 million. Any cost overrun in excess of \$0.7 million would still be shared between DCITA and commercial alliance partners in the proportion of 30:70, respectively. DCITA advised the ANAO that the reasons for this underwriting of any final cost overrun, if it were to occur, were:

- the project had incurred substantial additional costs in earthworks (about \$1.3 million) owing to the poor underlying geological conditions which had not been shown by the testing of the site;
- DCITA recognised that the commercial alliance partners has already agreed to add enhancements to the project, estimated to be in excess of \$0.7 million, without there being a contractual requirement or commercial incentive to do so and more were still being considered;
- the overrun, by putting great pressure on the need to achieve savings, was deflecting the Alliance behaviour from striving towards an outstanding result by limiting its ability to implement and seek further enhancements, thus acting to the detriment of the project; and
- while DCITA had no legal obligation to fund the overrun beyond the previous agreement, it advised that, in the context of the negotiations that are continually involved between all Alliance members, underwriting any final cost overrun would help to drive the right behaviours for achieving overall outstanding results.

**4.15** The Department also advised that their decision had the full support of the project's independent technical adviser, Probity Auditor, alliance facilitator and alliancing solicitor.

**4.16** This issue illustrates the difficulty of determining the appropriate balance that must be struck between maintaining the spirit of the Alliance as set out in Clause 2 of the Alliance Agreement to act reasonably to give effect to the intent of the agreement to achieve the project objectives and Clause 8 which protects the Commonwealth's financial interests and limits the payments that can be made to the commercial alliance partners in accordance with value for money outcomes. Striking the right balance

between the competing imperatives of cost, time and quality requires careful management and judgement on the part of those responsible for managing the Commonwealth's interests under the project alliancing approach.

# **Financial management responsibilities**

**4.17** One of the commercial alliance partners, Lend Lease Project Services (LLPS), maintains the financial records pertaining to the construction budget including:

- the management of construction cost commitments;
- the payment of accounts (after authorisation from DCITA); and
- the management of construction cost forecasting and variances against budget.

**4.18** In relation to DCITA's project costs, DCITA manages its own cost commitments, account payments and cost forecasting.

### Management of cost commitments

**4.19** As new sub-contracts or sub-alliances are entered into, or purchasing authorities approved by the Alliance or DCITA, the relevant amount is recorded as a project commitment in the financial records of the Alliance and DCITA. From examining the Alliance's and DCITA's processes for managing project commitments, the ANAO is satisfied that commitments are:

- incurred within the financial delegations of the Alliance and DCITA;
- recorded in a timely manner; and
- supported by appropriate documentation (ie. contracts or purchase orders).
- **4.20** As at October 1999:
- the Alliance had entered into construction commitments totalling \$51.7 million, representing 37.7 per cent of the budgeted construction cost; and
- DCITA had entered into project commitments totalling \$13.3 million, representing 88.5 per cent of DCITA's project costs (excluding the \$3 million Quality pool).

### Management of expenditure and cash flows

#### Construction expenditure

**4.21** With the agreement of DCITA, LLPS established an Alliance Trust Account with the Westpac Bank. The Trust Account is, in effect, a clearing account. LLPS submits progress claims regularly to DCITA, summarising all construction-related invoices from suppliers/sub-contractors that LLPS has approved for payment. DCITA evaluates these progress claims and associated invoices and when approved DCITA arranges a draw down of Centenary of Federation Funding (in the amount of the total progress claim) to the Trust Account. LLPS then draws cheques against the Trust Account to pay the approved invoices.

**4.22** The ANAO has examined the system established by LLPS to monitor construction expenditure and is satisfied that the system provides for invoices/claims to be appropriately certified, recorded, recommended/approved for payment and paid. Also, the balance of the Alliance Trust Account reconciles with the amount of unpresented cheques.

**4.23** However, the ANAO did observe that LLPS recommended and DCITA approved the payment of two invoices/claims of significant size before the expiration of the periods to which the invoices/claims related. Although this had no detrimental effect on the project, the ANAO considers that future payments should not be made in advance or before the expiration of the period to which the invoices/claims relate.

The ANAO also found that nearly 30 per cent of the invoices/ 4.24 claims it examined (on a sample basis), were approved for payment by DCITA and paid by LLPS earlier than the standard 30 days after invoice receipt outlined in DCITA's Chief Executive's Instructions.<sup>37</sup> In relation to one multi-million dollar sub-contract. LLPS indicated that a sevenday invoice-payment turnaround was agreed to by the Alliance in exchange for other (undocumented) non-cash benefits (eg. on a couple of occasions the sub-contractor could have raised a contract variation in its favour, but chose not to). DCITA indicated that the construction industry is notorious for its tardy payment of sub-contractors, which some small sub-contractors can ill afford. The Alliance is trying to avoid this situation. The ANAO accepts that available discounts can justify consideration of earlier than standard payment,<sup>38</sup> and there may be other non-cash related benefits that can justify the same consideration. The ANAO considers that earlier than standard payment should be assessed by DCITA on a case-by-case basis and, if approved, the reasons and conditions documented.

<sup>&</sup>lt;sup>37</sup> This excludes invoices/claims from Alliance partners for reimbursement of expenditure.

<sup>&</sup>lt;sup>38</sup> ANAO (1999), *Cash Management in the Commonwealth Public Service*, A Better Practice Guide, p. 8.

**4.25** The ANAO observed a few occasions where sub-contractors engaged by the Alliance began their work before contracts were executed—some involving very substantial amounts. LLPS indicated that this was quite common in the construction industry, to avoid undue project delays, while the paperwork is being finalised. In such cases, LLPS issues sub-contractors a letter of intent that indicates that the tender documents (which included a draft sub-contract) and the sub-contractors' response form the basis for proceeding with the work pending the execution of the sub-contract. The ANAO notes that there has not been any obvious detrimental effect on the project as a result of sub-contractors starting their work before sub-contracts have been executed.

**4.26** As at September 1999, \$17.1 million of the construction budget (12.5 per cent) had been spent.

#### Construction cash flow

**4.27** To determine how well a project is tracking in terms of its expenditure over time, continuous monitoring of actual cash flow against budget, coupled with monitoring achievement against the project timetable is necessary. The latter is important as changes to the project timetable will alter the timing of budgeted cash flows. The ANAO has found, however, that the schedule of monthly budgeted cash flows developed in June 1999 has not been amended despite significant revisions to the project timetable since that time. As the timetable revisions have tended to delay and compress project activities (see *Time Management* in this chapter), the ANAO considers that budgeted cash flows should also follow this pattern.

**4.28** On first glance, the cash flow position of the project, as at October 1999, appears reasonably satisfactory with expenditure some \$1.8 million less than budgeted for that period. However, this does not recognise that:

- the cash flow schedule should defer cash flows in light of the task delays and compression reflected in the current project timetable (see above); and
- the project is currently between 4 and 7½ weeks behind the current project timetable.

**4.29** Comparing actual cash flows against the unaltered schedule of monthly budgeted cash flows would give an overly optimistic view on the cash flow position of the project. As a result, it is not known whether construction expenditure to date is greater than would be expected under the current construction timetable. The ANAO considers that the cash flow schedule should be revised to accord to revisions in the project timetable.

#### DCITA's project expenditure

**4.30** DCITA indicated that, until the 1999–2000 year, its financial management system has not been useful to manage the expenditure on the project due to problems with its handling of purchase orders and report generation. As a result, the DCITA maintains a duplicate record of all project expenditure on spreadsheets. The ANAO notes that from mid-1999, the purchase order and report generation capabilities of DCITA's financial management system improved significantly. The ANAO considers that DCITA should expedite the transferal to using DCITA's financial management system to monitor the project's commitments, expenditure and payments.

**4.31** The ANAO has examined the systems used by DCITA to monitor its expenditure and is satisfied that invoices/claims have been appropriately certified, recorded, approved for payment and paid. DCITA staff indicated that a reconciliation of the spreadsheet expenditure records to DCITA's financial management systems for the 1997–98 year was performed and the systems reconciled to within a few hundred dollars. However, DCITA could not locate the reconciliation records. (At the time of the audit, DCITA was awaiting further information from its corporate services area before performing a similar reconciliation for the 1998–99 year). The ANAO considers that future reconciliations should be retained in secure location and performed soon after year-end.

**4.32** As was the case for construction sub-contractors, some of DCITA's consultants began work on the project before contracts were executed. DCITA indicated that it was departmental policy to send a draft copy of the contract to potential consultants as part of the tender documents. Unless the selected tenderer indicates otherwise, the draft contract then forms the terms of an implicit agreement, protecting the Commonwealth's interests until contracts are subsequently executed. This situation has had no obvious detrimental effect on the project. However, the ANAO considers that the Commonwealth's interests would be better protected if consultants were made to sign a letter of intent before beginning their work, as is the case with the project's construction sub-contractors when they begin work before contracts are executed.

**4.33** The ANAO found a wide range in the timing of payments relative to the dates invoices/claims were received by DCITA. The dates of many payments ranged from five days to over two months after the dates of the invoices. (The ANAO notes, however, that some of the late payments were caused by delays in finalising contracts.) In 1998, DCITA's internal audit area identified the timing of the payment of invoices as an issue requiring greater attention from DCITA. DCITA acknowledged to the

ANAO that payments prior to the internal audit report were somewhat tardy due, to some degree, to processing delays in DCITA's central accounts processing area. Since the internal audit report, DCITA's project team has engaged its own accounts processing staff and it has substantially reduced payment delays. DCITA considers that any payment delays still occurring are due, primarily, to competing work priorities delaying invoice certification (that goods have been received or services rendered). The ANAO considers that the timely payment of invoices/claims by DCITA should be a higher priority.

**4.34** As at October 1999, \$8.1 million of DCITA's project budget (excluding the \$3 million quality pool) had been spent. This represents some 53.9 per cent of DCITA's project budget.

# Management of cost forecasting/variances against budget

**4.35** At least twice a month, the Architects review progress as to the cost of the design aspects of the project. Any variances are entered into the variance summary schedule. A similar process occurs with respect to the construction aspects of the project. Each month the site managers review the progress of their areas of responsibility and identify possible variances to budgeted cost. These variances are vetted by the Construction Manager and once agreed, are entered in the variance summary schedule.

**4.36** As at October 1999, the variance summary schedule reported to the ALT indicated the project had an unfavourable cost variance of \$1.5 million (1.1 per cent) against the construction budget. This variance represents the forecast overrun in base building construction costs that can be expected to occur by the end of the project unless construction contingencies are sufficient to cover the variance, or adequate corrective action is taken. Construction variances are so far limited to the base building component as construction has not commenced on the other components.

**4.37** The design-related aspects of the project variance are forecast to be \$0.6 million over budget. Over 85 per cent of this amount represents the estimated costs of contractual commitments with the Architect's subcontractors that were in existence, but not identified, at the time the base building TOC was agreed. While other variances have occurred, by far the greatest construction-related variance relates to the bulk excavation (earthworks) on the site. Over \$1.3 million in extra costs has been or will be incurred as a result of underestimating the extent of contaminated fill and unfavourable geological formations on site when the TOC was agreed. Core sampling on site occurred before the TOC

was agreed and the earthworks budget was on an 'average case' basis. However, the site turned out to be a 'worst-case' scenario. Other earthworks problems include a damaged underground storage tank (for diesel fuel) that was discovered on site in September 1999.

**4.38** The unfavourable cost variances have been offset in part by the release of nearly \$1 million in construction contingencies and allowances that are no longer needed (due to the progress of the project). The remaining unfavourable cost variance of \$1.5 million and any future unfavourable cost variances may be further offset when the remaining \$4 million construction contingencies and allowances are released.

**4.39** Under more traditional contracting methods, the variances described above would have resulted in scope variations to the contract (and possibly the attribution of blame), increasing the construction cost and timeframe for the project owner. However, as discussed in Chapter 2 (see *Features of the Alliance Agreement*) scope variations for the variances described above are not part of the Alliance Agreement. Nevertheless, as noted earlier, in January 2000 DCITA decided to underwrite part of any final cost overrun.

**4.40** The ANAO found that the minutes of PMT and ALT meetings indicate the actions taken by the Alliance to manage unfavourable cost forecasts/variances as, and where possible. The Construction Manager observed that, particularly for the museum exhibition component, it was not yet possible to be specific as to whether the unfavourable cost variances will be reduced/eliminated because:

- not all design documentation has been completed; and
- trade packages (construction procurement) are still to be let.

**4.41** The ANAO considers that the Alliance's risk/reward regime, coupled with the limitations on contractual scope variations and 'no blame, no disputes' ethos, provides an incentive to the Alliance to identify and effectively manage cost variances as early as possible. This is evidenced by the satisfactory system in place to monitor the project's cost forecasts/ variances in a timely manner. However, DCITA's recent decision to underwrite part of any final cost overrun has the potential to reduce the incentive for the Alliance to manage cost variances effectively.

# Conclusion

**4.42** The ANAO considers that DCITA and the Alliance have a sound system of monitoring and managing project cost commitments, expenditure and forecasts/variances against budget in a timely manner. However, the management of construction cash flows and the timing of invoice/claim payments could be improved.

# **Recommendation No.4**

**4.43** The ANAO recommends that in the interest of better monitoring of project progress, agencies adjust immediately their budgeted schedule of cash flows in accordance with adjustments to the project timetable.

#### Agency Response

**4.44** DCITA agreed with the recommendation.

#### Figure 6

#### **Construction progress during October 1999**



Source: DCITA.

# **Time management**

**4.45** The Alliance Agreement states that the Alliance is 'committed to achieving the highest possible performance in regard to timely completion of the Project...'.

### Gainshares

**4.46** The Alliance Agreement has in-built financial disincentives for the commercial alliance partners should the new facilities not be opened by the project completion dates. The new NMA facilities are scheduled to open on 12 March 2001. At the time of the audit, the target opening date for the new AIATSIS facilities was 26 November 2000. However, DCITA subsequently indicated that the target date it is currently being reviewed and will be set on a *'date to be agreed by the Alliance in the last quarter of 2000'* as per the Alliance Agreement. The commercial alliance partners would incur a penalty for the late opening of NMA of \$1.9 million from the first overdue day, increasing to a maximum penalty of \$3.5 million over the next three months. A flat \$150 000 penalty applies should AIATSIS not be opened on time. There is no bonus for the completing the facilities earlier than the opening dates.

### History of the construction timetable

4.47 DCITA presented its first construction timetable in its submission to the PWC in October 1997. It showed that construction would be completed in August 2000. The PWC held its first public hearings into the construction of the new facilities in December 1997. DCITA had anticipated that the PWC would approve the project immediately after the hearings and DCITA was prepared to call for proposals from Building and Services Contractors. However, PWC concerns over the cost of the project, costing of the design brief and submissions, and the relatively new project alliancing contracting methodology delayed approval until March 1998 (see CPG Core Principle 4: Accountability and Reporting in Chapter 3). DCITA considers that its failure to gain PWC approval until March 1998 delayed the project by at least four full months. By the time DCITA presented a revised construction timetable to the PWC in February 1998, the estimated start of construction had been delayed by 51/2 months and the estimated construction period compressed by 3<sup>1</sup>/<sub>2</sub> months.<sup>39</sup> DCITA estimated that construction would be completed in November 2000.

<sup>&</sup>lt;sup>39</sup> Delays other those attributed to the PWC were factored into this revised timetable.

**4.48** In August 1998, when the Building and Services Contractors were appointed, programming and monitoring progress against the construction timetable became the responsibility of a full-time programmer employed by the Alliance. The construction timetable produced at this time was two pages long with most work 'packages' being represented as a single block of tasks. As more of the design documentation has been completed and procurement contracts let, more individual tasks making up the work packages have been identified and scheduled separately in the timetable. The current construction timetable (dated June 1999) recorded over 4500 individual tasks, most with a duration of six days or less. The identification of individual tasks is continuing and the programmer estimates that the final construction timetable will record over 10 000 individual tasks.

**4.49** The current construction timetable makes allowances for public holidays and a two-week shutdown over Christmas/New Year. The timetable also has a two-month buffer from the 'soft' opening date in January 2001 to the official opening date in March 2001 to allow time to identify and correct any construction defects/faults and to train Museum staff.

**4.50** As a result of numerous construction delays, consecutive construction timetable revisions have recorded significant delays and compression/paralleling of construction tasks. All eight construction areas except the Main Hall were scheduled, in April 1999, for completion at least three and a half months before the 'soft' opening date of mid-January 2001. However, the June 1999 timetable now schedules six of the eight construction areas to be completed within one month of the 'soft' opening date. Appendix 4 illustrates the changes to the construction timetable over time.

# Monitoring construction progress against timetable

**4.51** Each day the programmer visits the site and discusses construction progress with the site managers. Each week, the programmer and site managers meet formally to determine construction progress and forecast progress over the coming fortnight. Construction progress is then plotted against the current construction timetable.

**4.52** As at October 1999, construction progress was about 4 weeks behind the project's 'critical path' and, with respect to some non-critical path components, up to 7½ weeks behind the current construction timetable. The delays occurred, primarily, as a result of the earthworks problems encountered by the Alliance (see *Cost Management* in this Chapter), and to a lesser extent, above average rainy days and numerous small delays of a week or so in the delivery of materials from some subcontractors (eg. façade).

**4.53** The programmer indicated that uncertainties caused by the weather and incomplete building and exhibition design documentation inhibit the ability to reliably predict when the project will be back on schedule. Until construction is completed to the roofing stage (early 2000), weather poses the greatest threat to construction progress. Once the facilities are roofed, DCITA indicated that the Alliance has much greater control over its own destiny.

**4.54** Other potential risks to the project timetable are:

- Building design—to date this has kept ahead of construction—although, in some respects, only just ahead;
- Works approvals from the NCA DCITA does not expect any delays in obtaining the outstanding approvals; and
- Exhibition design—a one-month delay occurred when the NMA Council did not approve the exhibition 'concept' design and it had to be significantly reworked. This did not delay the project overall but DCITA indicated that exhibition design is now becoming the project's 'critical path'.

**4.55** The ANAO has found that PMT and ALT meeting minutes indicate the actions taken by the Alliance to manage construction timetable delays as, and where possible.

# Conclusion

**4.56** The ANAO considers that the Alliance has a sound system for developing and varying the construction timetable over time and monitoring and managing construction progress against the specified timetable. However, the current construction timetable has significantly compressed tasks with many construction areas scheduled for completion close to the 'soft' opening date. In addition, construction progress is some 4 to 7½ behind the current timetable. This could represent a risk to the project being completed on time and indicates the need for continuing close scrutiny of progress and swift corrective action to avoid further delays and to catch up to the current timetable.

# **Quality management**

**4.57** The Alliance Agreement states that Alliance partners 'are committed to ensuring that the Works are of the highest quality, consistent with a 'Best for Project' approach, and fit for their intended purpose'.

# Gainshares

**4.58** DCITA has established a quality pool of \$3 million from within its project budget. This pool is available to the commercial alliance partners for constructing the new facilities to 'outstanding' quality.<sup>40</sup> There are no bonuses for 'Business as Usual' (BAU) quality but the commercial alliance partners would incur a penalty of between \$1.9-\$2.0 million should the new facilities fail to attain BAU quality.

# Establishing quality criteria

**4.59** Establishing results-based quality measures is fairly innovative for the construction industry. Therefore, for the most part, DCITA and the other Alliance partners have had to develop them from a low knowledge and experience base. In November 1998, the ALT approved the establishment of a Quality Working Group to, among other things:

- develop a methodology and criteria for measuring quality for the project (including benchmarks of outstanding, BAU and poor quality) for approval by the ALT;
- recommend members for the Independent Quality Panel to the ALT; and
- be the first point of contact between the ALT and the Independent Quality Panel.

**4.60** The Quality Working Group comprised representatives from each Alliance partner, the Probity Auditor, the alliance facilitator, an independent technical advisor and a specialist advisor who had direct experience in developing quality measures for the Sydney Water alliance. The Independent Quality Panel was established to report to, and provide advice to, the ALT on quality measurement. DCITA appointed three consultants to form the panel and their backgrounds include architecture and construction, exhibitions and museum design, and construction project management.

**4.61** From late 1998 to mid-1999, the Quality Working Group developed and refined the quality measures. In June 1999, after endorsement from the Independent Quality Panel, the ALT approved the Quality Measures for the project (see Table 7).

<sup>&</sup>lt;sup>40</sup> Although the size of the quality pool would be reduced by the Commonwealth's share of negative gainshare (ie. cost overruns) in excess of \$0.7 million.

**4.62** The Quality Working Group and Independent Quality Panel determined benchmarks for outstanding, BAU and poor performance, together with the means of their assessment/measurement. Each quality measure has also been weighted to reflect its importance. DCITA indicated that:

- the quality measures are in addition to the standard industry quality measures (eg. concrete strength and consistency) covered in the Building Code of Australia; and
- benchmarks of BAU quality represent the BAU quality for the commercial alliance partners which DCITA, based on information from its advisers, considers to be above the industry norm.

# **Measuring quality**

**4.63** The Independent Quality Panel recently approved a working draft document describing by whom, how and when the quality measures are to be measured. The scoring system for each quality measure is yet to be determined and approved. However it is known that some quality measures will be assessed and 'scored' progressively throughout the life of the project (eg. quality of lake water). Other quality measures will be measured progressively but assessed and 'scored' at the end of the project (eg. finishes and workmanship). This allows the commercial alliance partners to determine how they are performing and take corrective action (if not already at 'outstanding quality') or accept that outstanding performance will not be achieved.

**4.64** As the project is still a year away from completion, the ANAO considers that it is too early to determine the performance of the alliance in terms of project quality.

**4.65** Quality measurement and assessment will extend a full 12 months after the new facilities' opening date. This allows time to rectify building teething problems and canvass visitor satisfaction—on which some of the quality scores depend. The ALT will ultimately decide on the amount of rewards or penalties for the commercial alliance partners arising from the quality of the project.

#### Table 7

#### **Quality Measures for the project**

Category/Sub-category	Quality measure	Weighting factor
Buildings and Exhibitions		
Buildings (\$0.9 million quality pool)	<ul><li> Quality of built finishes</li><li> Non-conformances</li><li> Defects</li></ul>	5 2 2
Exhibitions (\$0.9 million quality pool)	<ul> <li>Design quality</li> <li>Use of content</li> <li>Integration of technology</li> <li>Accessibility</li> <li>Visitor experience</li> </ul>	3 3 1 1 2
Construction phase	· ·	
Environment (\$0.3 million quality pool)	<ul> <li>Environmental management</li> <li>Waste management</li> <li>Water quality</li> <li>Air quality</li> <li>Energy efficiency/greenhouse gas emissions</li> <li>Ecologically sustainable development</li> </ul>	1 2 1 3 1
Indigenous Employment Opportunities (\$0.3 million quality pool)	<ul> <li>Enhancing opportunities in construction period</li> <li>Enhancing opportunities beyond construction period</li> <li>Training</li> <li>Employment</li> <li>Supportive workplace</li> </ul>	1 1 2 2 1
Public Relations (\$0.3 million quality pool)	<ul><li>Promoting the site</li><li>Industry recognition of alliancing</li><li>Stakeholder image</li></ul>	1 2 2
Safety (\$0.3 million quality pool)	<ul><li>Management processes</li><li>Safety outcome</li><li>Individual intention</li></ul>	1 3 2

### Conclusion

**4.66** The ANAO supports the establishment of a system to assess/ measure the quality of the project and considers that the quality measures and incentives have the potential to achieve a sound quality result.

# **Design Integrity**

**4.67** The Architects were selected on the basis of a design concept that, in effect, represented only 12 per cent of full design documentation. Therefore, DCITA considered that it was important for integrity of the design concept to be maintained until development of full design documentation.

# Gainshare

**4.68** The importance of design integrity is demonstrated by the heavy financial disincentives for the commercial alliance partners should it not be achieved, involving the forfeiture of their share of all positive post-TOC gainshares (ie. cost savings) and normal profit. No positive gainshare is payable in relation to the maintenance of design integrity.

# Establishing design integrity criteria

**4.69** In late 1998, an independent Design Integrity Panel was established to assist the pre-existing Design Integrity Working Group to:

- establish appropriate processes for measuring design integrity;
- undertake ongoing monitoring and assessment of design integrity; and
- provide regular written reports on design integrity to the ALT.
- **4.70** The Working Group and Panel agreed that design integrity meant:
- the intellectual and physical persistence and manifestation of the design concept;
- the conceptual aspirations of the project and how these are sustained and fulfilled in the final product; and
- '...having no part or element wanting, unbroken, material wholeness, completeness, entirety ...' (Shorter Oxford Dictionary).

**4.71** The ANAO considers that design integrity can be defined in terms of the new facilities achieving the purposes and objectives for which they were constructed in the context of the selected design.

**4.72** The Design Integrity Panel decided not to develop a design integrity checklist as the dynamic nature of design concepts made it impossible to predict the types of issues that may arise during the project.

# Monitoring design integrity

**4.73** Since late 1998, the Design Integrity Working Group and Panel have convened every month or so to be briefed on the development of design concepts (eg. Garden of Australian Dreams, Exhibition storyline). At the time of audit, the ANAO observed that the Panel had recommended that designers reconsider two potential design amendments. Although the Panel has not been briefed on all aspects of design, reports to the ALT thus far indicate that design integrity is being maintained.

**4.74** At the end of the project, the Design Integrity Panel will prepare a final report for the ALT on its view of the maintenance of the project's design integrity. The ALT will ultimately decide on whether design integrity has been maintained.

# Conclusion

**4.75** The ANAO is satisfied with the process for determining whether the project's design integrity is maintained and its associated incentives.

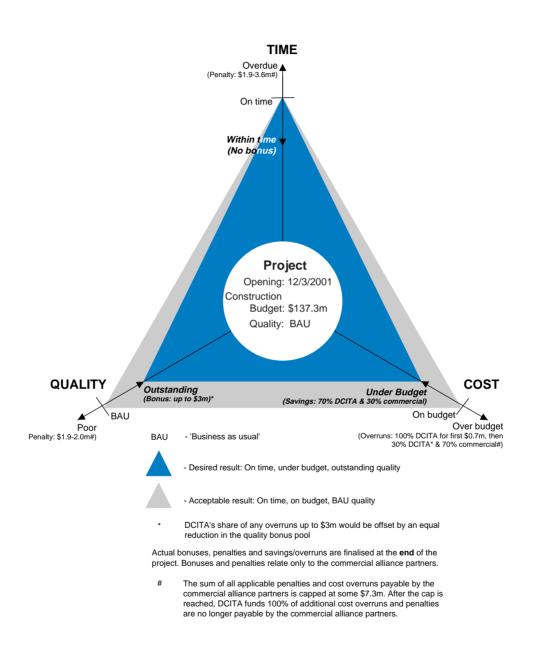
# Relationship between cost, time and quality

**4.76** DCITA's and the commercial alliance partners' performance on this project will be judged according to how well they perform in terms of the project's cost, timeliness and quality. As indicated above, the ANAO considers that appropriate systems and procedures have been developed to enable management to monitor each of these aspects. However, under project alliancing arrangements these three aspects of performance are related such that a change in one often has an effect on one or both of the other two. Figure 7 illustrates the relationship between the time, cost and quality aspects of the project.

**4.77** The project's risk/reward regime, in effect, reflects the financial importance of the timeliness and quality aspects of performance relative to the pure cost aspect of performance. This is because the commercial alliance partners would receive or be liable for 100 per cent of the time and quality-related bonuses and penalties, but would receive only a share of cost savings (30 per cent) and would be liable for a larger share of cost overruns (70 per cent). Table 8 illustrates positive and negative gainshares that would result from some of the risk/reward permutations on this project.

**4.78** By way of illustration, the commercial alliance partners would receive \$2.9 million gainshare from this project if it was 'On time, Outstanding quality and \$1 million Cost Overruns' or \$2.6 million if it was 'Overdue, Outstanding quality and \$5 million Cost Savings'. In these circumstances, it would be in the interests of the commercial alliance partners to use the projected \$6 million difference in costs to complete the project on time (see ① in Table 8). Similarly, the commercial alliance partners would expect greater financial returns from this project if it was 'On time, Outstanding quality and \$2 million Cost Overruns' than if it was 'On time, BAU quality and \$5 million Cost Savings'. Once again, the return to the commercial alliance partners would be better if the \$7 million difference in costs was used to increase the project quality from BAU to Outstanding (see ② in Table 8).<sup>41</sup>





<sup>&</sup>lt;sup>41</sup> The financial returns to the commercial alliance partners from the situations described would, in fact, be *greater* than that shown in Table 8. This is because the commercial alliance partners would receive overheads and normal profit on any extra direct costs incurred by them to open the new facilities on time or improve quality.

Table 8
Scenarios of commercial alliance partners expected gainshare return <sup>a</sup>

Project	Project	Cost savings/overruns (\$'000)						
Time⁵	Quality <sup>c</sup>	\$5m savings	\$2m savings	\$1m savings	On Budget	\$1m overruns	\$2m overruns	\$5m overruns
On Time	Outstanding	4500	3600	3300	3000	2700	1700	-1300
On Time	BAU	1500 🔨	600	300	0	-210	-910	-3010
On Time	Poor	-375	-1275	-1575	② -1875	-2085	-2785	-4885
Overdue	Outstanding	2600 🔶	1700	1400	1100	800	-200	-3200
Overdue	BAU	-400	-1300	-1600	-1900	-2110	-2810	-4910
Overdue	Poor	-2275	-3175	-3475	-3775	-3985	-4685	-6785

a - This table ignores the overheads and normal profit that would be forfeited by or payable to the commercial alliance partners as a result of saving on direct costs or incurring additional direct costs, respectively.

b - There is a sliding penalty scale for overdue completion of construction. This table assumes the minimum penalty of some \$1.9 million.

c - There is a sliding penalty/bonus scale for performance between poor and outstanding quality. This table assumes the maximum bonus and penalty for outstanding and poor performance, respectively.

(1) and (2) are explained in the text.

**4.79** Of the three performance aspects, the ANAO considers that meeting timetables is the greatest risk for the Alliance. When DCITA received PWC approval to proceed with the project, the proposed construction timetable (dated February 1998) was considered to be 'extremely tight' by all witnesses who appeared before the PWC.<sup>42</sup> However, construction did not actually start until some 4 months after the start date proposed by the February 1998 timetable. The current timetable has since significantly delayed the completion of most the construction components to within one month of the 'soft' opening date.

**4.80** As noted earlier, construction as at October 1999:

- was about 4 weeks behind the project's critical path and, in parts, up to 7½ weeks behind the current timetable;
- had an unfavourable \$1.5 million variance against budget; and
- quality cannot be determined at this time, as the project is still over a year away from completion.

**4.81** DCITA and the Alliance can see three options (or combinations thereof) for getting the project back on schedule:

- (a) Delaying completion by moving the 'soft' opening date (currently mid-January 2001) closer to the official opening date of mid-March 2001. The ANAO notes that there is a limit to how close construction can be completed relative to the opening date (to allow time to train Museum staff and identify and correct construction defect/faults); and/or
- (b) Compressing the construction timetable further by:
  - (i) working extended shifts or more days per week; and/or
  - (ii) paralleling more tasks and engaging additional site workers.

**4.82** Options (b)(i) and (b)(ii) come at an extra cost the project can ill afford. Also, the site has been working a seven-day week and extended daily hours since August 1999 in an attempt to reduce the time overrun. Provision has been made in the construction contingency for the extra salary and wage costs involved. The provision will be progressively increased over the next six months.

<sup>&</sup>lt;sup>42</sup> Parliamentary Standing Committee on Public Works (1998), *Op. cit.*, p. 84.

**4.83** The management of the construction cost is further complicated by the size of unfavourable cost variance against budget. The unfavourable cost variance against budget was reduced to \$1.5 million only after an offset of \$1 million was released from construction contingencies (ie. construction contingencies no longer required). Therefore, the project has incurred total unfavourable cost variances of some \$2.5 million to date, which represents 50 per cent of the gross contingencies contained in the construction budget. Putting this figure into perspective, only 12.5 per cent of the construction budget had been spent by September 1999 and only 37.7 per cent of the budget committed by October 1999. The ANAO considers that the value of unfavourable cost variances and the adequacy of the construction contingencies to cover them will need close monitoring.

**4.84** Cost and time-related tensions could well affect the quality of the new facilities in two ways. First, increasing quality is usually accompanied by an increase, in cost and, sometimes, an increase in elapsed time. Second, DCITA's share of cost overruns in excess of \$0.7 million would be funded from the quality pool.<sup>43</sup> Therefore should cost overruns increase, the financial incentives for the commercial alliance partners to perform to 'outstanding quality' decrease. (However, should the new facilities not meet BAU quality, the commercial alliance partners would be liable for a penalty of \$1.9–2.0 million).

**4.85** Although the timeliness of the project is important, so too is the management of the project's cost. In a 'worst case' scenario, should cost overruns exceed \$10.9 million, the cap on the negative gainshare of the commercial alliance partners would be reached. DCITA would then be required to fund 100 per cent of additional cost overruns and the commercial alliance partners would have no financial incentives or disincentives attached to the quality or time aspects of the project. Such a situation may put the project in jeopardy.

**4.86** In November 1999, DCITA indicated that, although the project remains behind schedule, the Alliance has not fallen further behind over the past couple of months and still has \$4 million in construction contingencies and allowances in place.

**4.87** As noted in the recent construction progress report from the Minister to the PWC, the Building and Services Contractors are confident that with the remedial action planned or currently being taken, the project

<sup>&</sup>lt;sup>43</sup> DCITA would fund 100 per cent of the first \$0.7 million in cost overruns from its own client contingency.

continues to be on track for completion on time and budget by 12 March 2001. However, in view of the cost and time factors mentioned above, the ANAO considers all aspects will require close and continued attention if this target is to be achieved.

# Other project management issues

**4.88** Although good management of the time, cost and quality aspects of a project are fundamental, invariably there are other project-related issues or risks that also need to be managed well to ensure a project's success. Although a whole-of-project risk assessment was not conducted, the ANAO has identified the following issues or risks that apply to this project:

- Governance framework;
- Insurance;
- Goods and Services Tax (GST);
- Foreign exchange risks;
- Year 2000 Compliance issues;
- Asset Management; and
- Industrial Relations.

#### **Governance Framework**

**4.89** There are a number of aspects to the governance framework that encapsulates the project. These include the structure of the project management bodies, communication and consultation with key project stakeholders (including the eventual site owners), internal controls, public accountability, ongoing facilities management and administration costs.

#### Project management structure

**4.90** The organisational and management structure for the project involving the CCC, ALT and PMT is described and illustrated in Chapter 2. The ANAO considers that the relationship between these management bodies is appropriate. These three bodies are performing their functions satisfactorily and timely management action has been taken in response to issues put to or raised by the management bodies.

#### Communication and consultation with key project stakeholders

**4.91** Both Councils of the NMA and AIATSIS are represented on the CCC that oversees the project. NMA and AIATSIS, together with the NCA, will be the collective site owners after construction is complete. The ANAO found that representatives from NMA and AIATSIS meet with

DCITA every week or two to discuss construction progress. Ad-hoc meetings are also convened when necessary (eg. when negotiating the NMA and AIATSIS fit-out requirements).

**4.92** Both the NMA and AIATSIS indicated to the ANAO that they are satisfied with the amount, method and timeliness of consultation between themselves and DCITA in relation to the project. Both agencies consider that they have decision-making capacity on the areas of construction that are important to them (eg. lighting, air conditioning, fit-out finishes etc.). Both agencies also consider that the new facilities will meet their current and future needs.

**4.93** The NCA has a dual role in relation to the project. One of the NCA's roles is membership on the CCC as it will be a part site owner with a management responsibility on completion of construction. The NCA's other role is statutory—to ensure that the project complies with the National Capital Plan through staged approval of works. The NCA indicated that although it has not examined all construction plans for the project, the project complies with the National Capital Plan (as amended).

### Internal Controls

**4.94** In May 1999, the Alliance appointed internal auditors for the project—distinct from the internal auditors of DCITA. The project internal auditors have completed a risk assessment of the project and have identified and rated the following areas for examination over the life of the project:

- Budget management;
- Time management;
- General management;
- Risk management;
- Resource management;
- Scope management; and
- Reporting.

**4.95** The ANAO considers that the areas of proposed audit coverage address the ongoing risks for the project. However, it is too early to comment on the depth of coverage or testing proposed.

**4.96** The Alliance has also established a Project Audit Committee to which the project internal auditors will report their findings regularly. The Project Audit Committee, chaired by the Probity Auditor, will provide advice to the ALT on probity and efficiency/effectiveness issues.

**4.97** The ANAO supports the establishment of an internal audit function and Audit Committee for the project. They can provide assurance as to the probity of the construction process, as well as improving the efficient and effective use of resources.

#### Public Accountability

**4.98** On the tabling of the PWC's report in Parliament in July 1998, the Government agreed to the PWC's recommendation that the PWC be provided with six-monthly reports on the project's progress until completion. The Minister for the Arts and the Centenary of Federation submitted the first progress report, covering the period July 1998 to January 1999 inclusive,<sup>44</sup> to the PWC in late March 1999. The second report covering the period February to July 1999 was submitted to the PWC in late-September 1999.

**4.99** DCITA forwarded the first progress report and covering letter to the Minister for his approval in mid-March 1999. The covering letter stated that 'progress to date is satisfactory and the project is on schedule for completion on budget by 12 March 2001'. The ANAO considers that this statement may be open to different interpretations. At the end of the first reporting period (ie. 31 January 1999) the statement was correct. However, at the time it was prepared:

- the construction timetable had been recast, extending construction by a further 55 days; and
- the design documentation and project procurement (both of which feed into construction) were up to two weeks and five weeks, respectively behind schedule.

**4.100** The ANAO considers that covering letters to future progress reports to the PWC would be clearer if statements as to the project's progress were prefaced with an applicable date (eg. 'As at 31 January 1999 ...').

**4.101** During the course of the audit, the ANAO discussed the content of the draft second progress report to the PWC with DCITA. As a result, DCITA revised the second report before it was provided to the PWC by including greater detail on the progress of construction and timetable changes. The ANAO considers that the second report now contains much better information and is now satisfactory.

<sup>&</sup>lt;sup>44</sup> The first report was revised from covering six months to seven months to keep it up to date after there were delays in its clearance in the New Year.

#### Ongoing facilities management

**4.102** As well as managing the construction of the new facilities, DCITA has been looking ahead to the future of the site once construction has been completed. In July 1999, DCITA sought expressions of interest for a facilities manager to manage all aspects of the new facilities, surrounding grounds and on-site infrastructure on behalf of the NMA, AIATSIS and NCA. If viable, the facilities manager will manage:

- building maintenance and renovation;
- security, safety, health and environmental issues;
- building operations, maintenance and engineering services;
- business services such as transport, courier and office services;
- catering and restaurant services;
- information technology and telecommunications; and
- grounds management.

**4.103** An early appointment will enable the facilities manager to have input into the construction of the new facilities and thereby maximise the new facilities' compatibility with a cost-effective facilities management strategy. In addition, likely costs of such a facilities management function might be quantified earlier and aid the budgetary processes of the NMA, AIATSIS and NCA. The ANAO considers that the approach taken by DCITA provides an opportunity to minimise the life-cycle costs of the project.

#### Administration costs

**4.104** As well as funding the construction of the new facilities, the \$155.4 million project budget also has provision for project consultants engaged by DCITA— some \$4.1 million for alliance establishment and independent advisers' costs. However, the running costs of DCITA's unit responsible for the construction of the new facilities are funded from DCITA's running cost budget and not from the project budget. DCITA estimates that its project unit will consume some \$5.5 million in salary and administration running costs (eg. travel) over the life of the project (ie. 1997–98 to the 2001–02 financial year).<sup>45</sup> Running cost budgets for the project unit peak at some \$1.4 million in both 1999–2000 and 2000–01 financial years.

<sup>&</sup>lt;sup>45</sup> Calculated on a full-cost basis, the administration costs of DCITA's project unit would be appreciable more.

**4.105** The ANAO was unable to perform any quantitative comparisons of the cost of administering a construction project under alliancing versus traditional contracting methods. Sufficient reliable quantitative information from this and other Commonwealth construction projects was not readily accessible to make such a comparison viable.<sup>46</sup> However, anecdotal evidence suggests that the administration costs incurred by DCITA in setting up the project alliance were greater than would have been incurred had the project used traditional contracting methods. As project alliancing has not been used in the Commonwealth Public Service before and not for a building construction project anywhere in the world, DCITA has been 'breaking new ground' in terms of:

- procurement arrangements for the Building and Services Contractors and Museum Exhibition Designers,
- project management arrangements; and
- managing the risks that project alliance raises.

**4.106** DCITA has engaged consultants not normally engaged under traditional contracting (eg. Alliance facilitators). The NCA indicated to the ANAO that early in the project it considered that, unlike Defence, DCITA was not an 'expert client' when it came to construction projects. The NCA further considered that DCITA's lack of expertise meant that it engaged consultants in excess of those an 'expert client' would have engaged- even after taking the new project alliance approach into account. DCITA indicated that it had gone to great lengths to ensure that Commonwealth probity and proprietary expectations were met or exceeded. In this context, DCITA engaged a Competition adviser, Probity Advisers, a Probity Auditor, Project Internal Auditors and Project Audit Committee.

**4.107** The project has also been innovative in terms of quality measurement, industrial relations and in its use of IT (eg. ProjectWeb) and has attracted a lot of political, public and professional interest.

**4.108** DCITA considers that the project's ongoing and post-construction administrative costs will be lower that would be expected under traditional construction contracting methods. DCITA also considers that the project's favourable outcomes will outweigh any additional administration costs incurred as a result of the construction contract method chosen.

<sup>&</sup>lt;sup>46</sup> Although DCITA indicated that a joint CSIRO/QUT research project into the construction of the new facilities will conducting an in-depth examination of the project's administration costs.

### Insurance

**4.109** Adequate insurance coverage is important to reduce or eliminate the impact of adverse financial events on the project. In late 1998, DCITA determined that Comcover would not be able to provide adequate insurance coverage for the project. The Alliance then engaged an insurance broker to provide insurance advice and arrange the insurance coverage.

**4.110** At the time of the audit and on the advice of the insurance brokers, the Alliance as a whole took out public liability and contract works insurance policies. Workers compensation, professional indemnity and motor vehicle insurance is the responsibility of each alliance partner. The Alliance is still considering the need for marine transit insurance.

**4.111** To implement the 'no blames, no disputes' ethos of project alliancing, DCITA and the commercial alliance partners sought waivers of subrogation from the commercial alliance partners' insurers. Subrogation, in the insurance context, is the insurer's right to be placed in the insured's position so as to be entitled to the advantage of any rights the insured may had against a third party. In the context of this project, if an insurer was able to 'stand in the shoes' of an Alliance partner and commence legal proceedings against another Alliance partner, this would be contrary to the stated aims of the Alliance partner has sought a waiver of subrogation from their insurers for any project-related event involving another Alliance partner(s).

### Goods and Services Tax (GST)

**4.112** Legal Advice obtained by DCITA indicates that the project will be subject to the GST from 1 July 2000, some 8 months before the project's opening date. Although the GST legislation had not been passed at the time the Alliance Agreement was negotiated, it contains specific clauses that state that should a GST be introduced, the commercial alliance partners can claim the amount of GST from DCITA. The Commonwealth will, in effect, carry the cost of this tax. The project budget, however, makes no allowance for cost increases caused by the GST (except to note that project costs shall not include any input tax credits claimable by suppliers).

**4.113** The recently established GST Implementation Unit of DOFA has indicated that it intends to recommend to the Government that Departments (including DCITA) be reimbursed for the financial consequences of any GST imposed on them during the GST transitional period (ie. essentially contracts spanning the period on or before

8 July 1999 to 1 July 2000 or later). The ANAO notes that the ultimate treatment of GST imposed during the transitional period is a matter for the Government to decide. Although the GST's imposition will be cost neutral from the point of view of DCITA and the commercial alliance partners if the Government adopts DOFA's position, the cost of the project itself would increase by the amount of GST imposed.

**4.114** The ANAO considers that the project and the commercial alliance partners will benefit little from the abolition of whole sale sales taxes and other levies<sup>47</sup> on the GST's introduction because:

- the project is exempt from wholesale sales tax and has been budgeted for on this basis; and
- the State-based taxes to be abolished have a small, if any, impact on the project.

### Foreign Exchange risks

**4.115** In May 1999, DCITA determined that the project has a significant exposure from foreign exchange risk. DCITA estimated that up to \$16 million will have to be paid in foreign currency (USD) over the life of the project. Most of these payments relate to the fees of the US-based exhibition designers and some of the exhibition fit-out components. Unless the payments are hedged, movements in exchange rates could benefit or cost the project by as much as \$250 000 for every one-cent variation in \$A/\$US exchange rates.

**4.116** After numerous foreign exchange hedging discussions between DCITA and DOFA over several months, DCITA indicated that the Alliance has secured full hedging of its estimate forward \$US exposure through the Reserve Bank of Australia. DCITA has advised that the project is now protected against any fluctuations in the value of the \$A against the \$US.

### Year 2000 compliance issues

**4.117** In February 1999, DCITA and the other Alliance partners considered the Year 2000 compliance issue and recommended a strategy for its management that included:

• reviewing existing suppliers' exposure to Year 2000 compliance issues and state of readiness and seeking assurances from suppliers of the same; and

<sup>&</sup>lt;sup>47</sup> This includes State-based taxes (primarily BAD tax & FID duty and most stamp duty) that the State Premiers agreed to abolish in return for a share of GST revenue.

• for new suppliers, including clauses in tender documentation and contracts requiring contractors to warrant that products will be Year 2000 compliant.

**4.118** Although the Alliance Agreement is silent as to Year 2000 compliance issues, DCITA indicated that any problems caused by Y2K issues are not grounds for making a scope variation to the project's cost or timetable. Commercial alliance partners are required to manage any Year 2000 compliance issues, including those of their sub-contractors, within the existing construction budget and timetable.

### Asset Management

**4.119** To facilitate the construction of the new facilities, at the time of the audit the Alliance had purchased equipment and furniture costing about \$1 million that will not form part of the finished works. Most of this equipment, mainly IT related and furniture, is located in the project office on site. However, some equipment being used by the Architects is located in Melbourne.

**4.120** Maintaining and tracking the movements of assets is important, as any proceeds from their disposal are credited against the construction costs. At the time of the audit:

- the project's assets management policy and asset register had not been completed or updated; and
- cost forecasts and variances do not make any allowance for proceeds from the disposal of these assets.

**4.121** DCITA indicated that the Alliance has now developed and is implementing an assets management policy that has also been audited by the project's internal auditors. DCITA also indicated that although disposal value of assets is likely to be small, it agreed with the ANAO that it would be helpful to factor these potential proceeds into the costings for the project.

### **Industrial Relations**

**4.122** The Office of the Employment Advocate has undertaken an audit of the project in terms of its compliance with the industrial relations aspects of the *National Code of Practice for the Construction Industry*. The audit found that, overall, the Alliance partners had a positive attitude to the Code and the shortcomings identified were relatively minor.

**4.123** DCITA indicated that the project agreement between the Alliance partners and the site workforce was ratified by the Australian Industrial Relations Commission on 1 February 2000.<sup>48</sup> This project agreement is innovative for the construction industry generally as it provides rewards for outstanding performance. Just as the Alliance partners can be rewarded for achieving outstanding quality, so too the workforce would receive performance pay. The Office of the Employment Advocate indicated that it intends to follow-up on implementation of the project agreement.

### Conclusion

**4.124** The ANAO considers that DCITA has a robust governance framework in place that is working well. DCITA is also managing well the project's insurance risks, Goods and Services Tax issue, foreign exchange risks, Year 2000 compliance issues, asset management issues and industrial relations issues.

### Conclusion

**4.125** Successful project alliancing depends importantly on skillful management of the particular risks involved. With respect to this project, the ANAO considers that appropriate financial incentives are in place to encourage 'best for project' behaviour from DCITA and the commercial alliance partners to achieve the cost, time and quality requirements of the project.

**4.126** Project alliancing offers potential benefits over traditional construction contracting methodology but it raises new and different risks that have to be managed—in particular, determining the appropriate balance between maintaining the spirit of the alliance and protecting the Commonwealth's financial interests. Nevertheless, project alliancing is a contracting methodology worth consideration by agencies involved in major construction projects—particularly high profile, prestige Commonwealth projects.

**4.127** The ANAO further considers that DCITA and the commercial alliance partners have sound processes and procedures in place to monitor appropriately the progress of construction and manage the cost, time, quality requirements and other project risks in a timely manner.

<sup>&</sup>lt;sup>48</sup> The *National Code of Practice for the Construction Industry* allows Project Agreements so long as the project's cost is greater than \$25 million.

**4.128** Although the project has an unfavourable cost variance against budget and is currently behind schedule, DCITA is confident that the project will be completed on time, on budget and to the required quality. The ANAO considers that the current construction timetable has virtually no scope for further time slippage and that the sufficiency of the construction contingencies and allowances may come into question later in the project should the unfavourable cost variances continue their current trend. In these circumstances, ongoing close monitoring of construction progress is essential to ensure that timely, remedial action is taken and that the required result is achieved.

**4.129** Generally, DCITA has managed the project well to date having regard to its magnitude, lack of experience with the relatively new project alliancing approach and the tight timetable.

Canberra ACT 16 March 2000 P. J. Barrett Auditor-General

flowett

# **Appendices**

## 118 Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies

### Functions of the NMA and AIATSIS

#### National Museum of Australia

The National Museum of Australia (Museum) was established under the *National Museum of Australia Act 1980* to research Australian history and develop a national collection of historical material. The Museum's objective is to create exhibitions and public programs that explore Australia's heritage and history, and to make the collection accessible to all Australians.

The role of the Museum is to collect, interpret and communicate what it means to be Australian. The Museum's National Historical Collection contains approximately 175 000 items and documents that relate to three integrated themes:

- Australian Society and History;
- People's Interaction with the Environment; and
- Aboriginal and Torres Strait Islander Heritage and Cultures.

The National Historical Collection has been housed in several warehouses at Mitchell, ACT and has been largely unavailable for exhibition.

# Australian Institute of Aboriginal and Torres Strait Islander Studies

The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) was established in 1964 as the Australian Institute of Aboriginal Studies. The *Australian Institute of Aboriginal and Torres Strait Islander Studies Act 1989* provides the statutory framework for the operations of AIATSIS. The main functions of AIATSIS are to:

- undertake, promote and conduct research into Aboriginal and Torres Strait Islander Studies and publish the results;
- encourage other persons and bodies to undertake similar research;
- assist in the training of research workers;
- maintain a cultural resource collection of materials relating to Aboriginal and Torres Strait Islander Studies; and
- encourage understanding within the general community of Aboriginal and Torres Strait Islander issues.

AIATSIS maintains collections of audiovisual material, books, journals and manuscripts. These collections have been housed at Acton House, Acton ACT.

# Members of Evaluation Committees and their advisers for the major procurement activities

### **Architectural Design Competition**

- NMA—Chair of the NMA Council
- Museum of Victoria—Program Director of the Indigenous Cultures Program
- ACT Department of Business, the Arts, Sport and Tourism—Deputy Chief Executive
- NCA—Chief Executive
- DCITA—Deputy Secretary

Advisers: Competition Adviser, Architectural Adviser, Landscape and Heritage Adviser, cost consultants, project managers

### **Building and Services Contractors**

- Legal Adviser (Chair)
- DCITA—First Assistant Secretary
- ACT Department of Business, the Arts, Sport and Tourism—Deputy Chief Executive
- NCA—Acting Chief Executive
- the Architects—Principal
- Construction company—former Chairman

Advisers: project managers, cost consultants, the Architects, DCITA, alliance facilitators, Probity Adviser, Probity Auditor

#### **Museum Exhibition Designers**

- Legal Adviser (Chair)
- DCITA—Executive Director
- NMA—Director
- Te Papa Museum of New Zealand—Director of Research and Development
- Museum of Contemporary Art—former Director
- the Architects—Design Manager
- Building Contractor—Project Manager

Advisers: cost consultants, alliance facilitators, Probity Adviser, Probity Auditor

### **Probity Guidelines for project participants**

The following probity guidelines were used in the Building and Services Contractors and Museum Exhibition Designers selection processes.

Issues	Guidelines
Probity assurance	A probity auditor has been engaged to review and report on probity issues throughout the project life-cycle.
	A probity adviser has been engaged to provide independent advice to the project team during the selection process.
Resolution of probity issues	Project participants must refer all issues concerning the probity of the project to the Department for resolution. The Department will seek the advice of the probity adviser and/or probity auditor and refer issues that are not clearly covered by established probity guidelines to the CCC for resolution.
Project participants	A register will be kept of all project participants and other persons having a legitimate interest in the project, including the nature and significance of their involvement or interest.
Confidentiality	All project participants must sign a confidentiality agreement.
Information disclosure	No project information is to be disclosed to other persons unless authorised by the CCC.
	All inquiries are to be referred to [the Assistant Manager—Alliance Support] or in his absence to [the Chief General Manager—Acton Peninsula Project]
	File notes are to be made of all inquiries and a copy sent to [the Assistant Manager—Alliance Support]
Conflicts of interest	Project participants must disclose all relationships which could be perceived to constitute a conflict between their obligations to the project and their private, personal or business interests.
	[Tenderers will also be required to make such disclosures]
Contact with tenderers	Project participants must not have any contact with tenderers or be involved in the preparation or presentation of tenders unless specifically authorised by the Department.
Calling of tenders	Open, competitive tenders are being invited.
	Project requirements are defined in the Call for Proposals document.
	Evaluation criteria relate directly to achievement of the project objectives and are set forth in the <i>Call for Proposals</i> document.
	An evaluation committee has been established included representatives of the CCC, the project architects and legal adviser. The evaluation committee will be assisted by specialist advisers, who will be subject to the same probity requirements as Evaluation Committee members.
	The evaluation guidelines, weightings and scoring system have been documented and approved by the CCC.
	A data room has been established to ensure that all tenderers have full access to all relevant project information.
	continued next page

Issues	Guidelines
	Tenderers must seek any clarification or elaboration of the project requirements in writing. Where appropriate, responses will be made available to all tenderers. The Department, will, as required, seek advice from probity adviser on whether responses should be referred to all tenderers.
Receipt of tenders	Tenders will be received in a locked tender box that will be opened and tenders recorded in accordance with established Departmental procedure.
	The probity adviser and probity auditor will be present at the tender opening and will undertake an initial compliance check of all tenders.
Security of tenders	Evaluation copies of tenders will be stored in a secure evaluation room accessible only by tender evaluation committee members and advisers.
	Tenders must not be removed from the evaluation room unless authorised by the Department.
	The original of each tender will be kept in a separate secure location.
Evaluation of tenders	Tenders will be evaluated in accordance with the approved evaluation criteria and guidelines.
	The probity adviser and probity auditor will be present at all meetings of the tender evaluation committee and all meetings with tenderers.
	All contact with tenderers during the tender evaluation will be subject to approval by the Department and appropriately documented.
Tender evaluation reports	A comprehensive and detailed tender evaluation report will be prepared by the tender evaluation committee.
	The report will be accompanied by reports from the probity adviser and probity auditor on probity aspects of the selection process.
	No details of tender evaluation processes or results, or of any tender, will be disclosed unless authorised by the CCC.
Approval	Selection of the successful tenderer will be approved by the Secretary, Department of Communications and the Arts, on the recommendation of the Evaluation Committee

Source: DCITA 1998

### Summary of changes to construction timetable over time



## Index

#### Α

Alliance Leadership Team (ALT), 7, 37-39, 41, 67, 76, 77, 87, 92 93, 97-99, 101, 102, 107, 108
Architects (see also commercial alliance partners), 7, 8, 12, 15, 17, 19 23, 33, 34, 38, 40 42-44, 46-52, 54, 56, 60 61, 63, 64, 70, 73, 74, 77-79, 81, 92, 99, 114, 120
Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), 7, 11, 12,

29-31, 32, 34, 57, 65, 83, 84, 95, 107, 108, 110, 119

#### В

Building and Services Contractors (see also commercial alliance partners), 7, 12, 15-17, 19, 33, 38, 40, 42-44, 46-50, 52-55, 57, 59, 61-67, 70, 74, 75, 79, 81, 95, 96, 106, 111, 120, 121

#### С

commercial alliance partners, 7, 12, 13, 16, 20-23, 33, 34, 39, 40, 49, 68, 86-88, 93, 95, 98, 99, 101-104, 106, 112-115

Commonwealth Procurement Competency Standards, 17, 26, 45, 69, 71, 72

Commonwealth Procurement Guidelines (GPGs), 8, 12, 15-19, 26, 33, 34, 42, 44-46, 48, 50, 51, 53, 54, 60-65, 68-73, 78-81, 95

construction budget, 8, 20, 22, 40, 84-86, 88, 90, 92, 106, 114

Construction Coordination Committee (CCC), 7, 31, 32, 37, 38, 58, 107, 108, 121, 122

#### D

debriefing unsuccessful entrants/ proponents, 16, 54, 63, 64

#### G

gazettal of contracts and procurement opportunities, 16, 17, 26, 45, 51, 53, 54, 69, 71, 72

#### L

- Industrial Supplies Office (ISO), 8, 76, 77
- industry briefings, 15, 16, 54, 55, 57, 61-63

#### J

Joint Committee of Public Accounts and Audit (JCPAA), 8, 19, 44, 45, 69, 72, 73, 77, 81

#### Μ

Model Industry Development Criteria for Major Projects-Guidance Notes, 73, 75, 76

Museum Exhibition Designers (see also commercial alliance partners), 7, 8, 12, 15-19, 33, 38, 40, 42-44, 46-50, 52-55, 58, 59, 61-65, 70, 75-77, 79-81, 111, 120, 121

#### Ν

National Capital Authority (NCA), 8, 31, 34, 50, 57, 65, 97, 107, 108, 110, 111, 120

National Code of Practice for the Construction Industry, 79, 114, 115

National Museum of Australia (NMA), 8, 11, 12, 29-32, 34, 57, 62, 65, 83, 84, 95, 97, 107, 108, 110, 119, 120

#### Ρ

Parliamentary Standing Committee of Public Works (PWC), 8, 11, 12, 14, 15, 18, 30, 32-34, 47, 53, 70, 71, 83, 85, 86, 95, 105, 106, 109 **Project alliancing** alliance agreement, 8, 19, 20, 22, 23, 37-41, 61, 62, 67, 76, 80, 81, 86, 87, 93, 95, 97, 112, 114 cost overruns and cost savings (see also gainshare), 8, 20, 21, 23, 40, 49, 85-87, 98, 101, 102, 104, 106 gainshare (see also cost overruns and cost savings) 8, 40, 41, 49, 86, 93, 95, 98, 101, 102, 104, 106 probity advisers, 13, 17, 44, 52, 58, 66, 68, 69, 81, 111, 120-122 probity auditor, 13, 15, 17, 21, 44, 49, 52, 58, 67, 69, 81, 87, 98, 108, 111, 120-122 project budget, 18-20, 23, 70, 71, 82-86, 92, 98, 110, 112 Project Management Team (PMT), 8, 39, 93, 97, 107

#### S

selection criteria, 16, 48, 57-64, 68, 74, 75 small to medium enterprises (SMEs), 8, 18, 72, 73, 75-77

#### Т

target out-turns costs (TOCs), 8, 82, 84-86, 92

## **Series Titles**

### Titles published during the financial year 1999–2000

Audit Report No.32 Performance Audit Management of Commonwealth Non-primary Industries

Audit Report No.31 Performance Audit Administration of Tax Penalties Australian Taxation Office

Audit Report No.30 Examination Examination of the Federation Cultural and Heritage Projects Program

Audit Report No.29 Performance Audit *The Administration of Veterans' Health Care* Department of Veterans' affairs

Audit Report No.28 Audit Activity Report Audit Activity Report July to December 1999 Summary of Outcomes

Audit Report No.27 Performance Audit *Risk Management of Individual Taxpayers Refunds* Australian Taxation Office

Audit Report No.26 Performance Audit *Army Individual Readiness* 

Audit Report No.25 Performance Audit *Commonwealth Electricity Procurement* Australian Greenhouse Office Commonwealth Scientific and Industrial Research Organisation Department of Defence Department of Finance and Administration

Audit Report No.24 Performance Audit Commonwealth Management and Regulation of Plasma Fractionation Department of Health and Aged Care

Audit Report No.23 Performance Audit *The Management of Tax Debt Collection* Australian Taxation Office

Audit Report No.22 Performance Audit Weather Services in the Bureau of Meteorology Department of the Environment and Heritage

Audit Report No.21 Financial Statement Audit Audits of the Financial Statements of Commonwealth Government Agencies for the Period Ended 30 June 19999. Audit Report No.20 Performance Audit Special Benefits Department of Family and Community Services Centrelink

Audit Report No.19 Performance Audit Aviation Safety Compliance Civil Aviation Safety Authority

Audit Report No.18 Performance Audit Electronic Service Delivery, including Internet Use, by Commonwealth Government Agencies

Audit Report No.17 Performance Audit Commonwealth/State Housing Agreement Department of Family and Community Services

Audit Report No.16 Performance Audit Superannuation Guarantee Australian Taxation Office

Audit Report No.15 Performance Audit Management of Australian Development Scholarships Scheme Australian Agency for International Development (AusAID)

Audit Report No.14 Performance Audit *Commonwealth Debt Management* 

Audit Report No.13 Performance Audit Management of Major Equipment Acquisition Projects Department of Defence

Audit Report No.12 Financial Control and Administration Audit Management of Contracted Business Support Processes

Audit Report No.11 Performance Audit *Financial Aspects of the Conversion to Digital Broadcasting* Australian Broadcasting Corporation Special Broadcasting Service Corporation

Audit Report No.10 Financial Statement Audit Control Structures as Part of Audits of Financial Statements of Major Commonwealth Agencies for the Period Ended 30 June 1999

Audit Report No.9 Performance Audit Managing Pest and Disease Emergencies Agriculture, Fisheries and Forestry—Australia

Audit Report No.8 Performance Audit Managing Data Privacy in Centrelink Centrelink

Audit Report No.7 Financial Control and Administration Audit Operation of the Classification System for Protecting Sensitive Information Audit Report No.6 Audit Activity Report Audit Activity Report January–June 1999 —Summary of Outcomes

Audit Report No.5 Performance Audit *IP Australia—Productivity and Client Service* IP Australia

Audit Report No.4 Performance Audit Fraud Control Arrangements in Education, Employment, Training and Youth Affairs

Audit Report No.3 Performance Audit *Electronic Travel Authority* Department of Immigration and Multicultural Affairs

Audit Report No.2 Financial Control and Administration Audit Use of Financial Information in Management Reports

Audit Report No.1 Performance Audit Implementing Purchaser/Provider Arrangements between Department of Health and Aged Care and Centrelink Department of Health and Aged Care Centrelink

# **Better Practice Guides**

Business Continuity Management	Jan 2000
Building a Better Financial Management Framework	Nov 1999
Building a Better Financial Management Support	Nov 1999
AMODEL Illustrative Financial Statements 1999	Jul 1999
Commonwealth Agency Energy Management	Jun 1999
Corporate Governance in Commonwealth Authorities and Companies–Principles and Better Practices	Jun 1999
Managing Parliamentary Workflow	Jun 1999
Cash Management	Mar 1999
Management of Occupational Stress in Commonwealth Agencies	Dec 1998
Security and Control for SAP R/3	Oct 1998
Selecting Suppliers: Managing the Risk	Oct 1998
New Directions in Internal Audit	Jul 1998
Life-cycle Costing (in Audit Report No.43 1997–98)	May 1998
Controlling Performance and Outcomes	Dec 1997
Management of Accounts Receivable	Dec 1997
Protective Security Principles (in Audit Report No.21 1997–98)	Dec 1997
Public Sector Travel	Dec 1997
Audit Committees	Jul 1997
Core Public Sector Corporate Governance (includes Applying Principles and Practice of Corporate	
Governance in Budget Funded Agencies)	Jun 1997
Administration of Grants	May 1997
Management of Corporate Sponsorship	Apr 1997
Return to Work: Workers Compensation Case Management	Dec 1996
Telephone Call Centres	Dec 1996
Telephone Call Centres Handbook	Dec 1996
Paying Accounts	Nov 1996
Performance Information Principles	Nov 1996
Asset Management	Jun 1996
Asset Management Handbook	Jun 1996
Managing APS Staff Reductions —supplementary Better Practice Principles in Audit Report No.49 1998–99	Jun 1996