## Maralinga Rehabilitation Project Tendering and Commercial Arrangements

## **Department of Primary Industries and Energy**

## **Performance Audit**

## **Tabled 9 December 1996**

**Audit Report No. 18 1996-97** 

## **Abbreviations**

**ACS** Australian Construction Services

**AGS** Australian Government Solicitor

**ANAO** Australian National Audit Office

**ARL** Australian Radiation Laboratory

**DPIE** Department of Primary Industries and Energy

**ISV** In Situ Vitrification

MARTAC Maralinga Rehabilitation Technical Advisory Committee

MOU Memorandum of Understanding

**RFT** Request for Tender

**ROI** Registration of Interest

## **Summary**

## **Background**

## The clean-up

1. Between 1953 and 1963 the British undertook a number of nuclear weapons tests at Maralinga in South Australia. The tests resulted in the radioactive contamination of a number of sites within the 3200 sq. km test area. In 1985 the Royal Commission into

British Nuclear Tests in Australia recommended the rehabilitation of the Maralinga nuclear test site. The Government responded in 1991 with a plan that will see the contaminated soil buried in large trenches as well as the treatment of existing debris pits.

- 2. The Department of Primary Industries and Energy (DPIE) represents the Commonwealth's interest and has the overall responsibility for the successful outcome of the clean-up. A consortium led by Australian Construction Services (ACS) won the contract for the overall management of the project. The estimated value of the contract is \$10 million. ACS (now WORKS Australia) is a business unit of the Department of Administrative Services.
- 3. The project commenced in the first half of 1994 and is due to be completed in 1999. The estimated cost of the rehabilitation is \$104 million. The British Government has agreed to pay some \$45 million in an ex gratia settlement of Australia's claims against Britain concerning the British nuclear test program in Australia.

## Parliamentary interest

4. The Parliamentary Committee on Public Works conducted an inquiry into the project in February 1995 and reported to Parliament in June 1995 recommending that it proceed, subject to a review of the suitability of the In Situ Vitrification (ISV) process that turns the pits' contents into an inert glass-like material. Also, in 1994 questions were raised in Parliament over the tendering process that led to ACS being awarded the project management contract as well as the ability of ACS to do the job.

## The purpose of the audit

- 5. The objective of the audit was to determine whether the Commonwealth's interests were adequately protected in terms of both the contractor selection process that led to ACS being awarded the contract for the overall management of the project and the actual commercial arrangements between DPIE and ACS.
- 6. As part of the audit, criteria were developed which considered whether the Commonwealth procurement guidelines were adhered to, as well as whether the commercial arrangements clearly detailed the goods and services to be provided, their cost and timing of delivery.

#### **Overall conclusion**

- 7. The audit found that there were no indications of any impropriety in the tender selection process. Also there was nothing to suggest that ACS did not have the ability to manage the project successfully. However, it was found that fundamental requirements of the Commonwealth's Procurement Guidelines were not fully applied during the tender selection process.
- 8. The audit also found that the commercial arrangements between DPIE and ACS contained a number of ambiguities and inconsistencies in terms of the rights and obligations of each party. Nevertheless, to date the project appears to have worked well, in part due to the well-developed administrative procedures between the two Commonwealth entities, DPIE and ACS.

## **Key findings**

## **Tendering selection process**

- 9. The incomplete application of the Purchasing Guidelines resulted in:
  - not all of the tender selection criteria being made clear to the tenderers; and
  - the selection methodology being at times less than rigorous.
- 10. Detailed tender documentation was prepared and distributed to the three short-listed tenderers. There were also numerous contacts between the DPIE and the three tenderers. Nevertheless, the two unsuccessful short-listed private sector tenderers failed to fully appreciate DPIE's requirements for obtaining value for money while maintaining a high degree of control over decisions affecting the highly complex project. The unsuccessful short-listed tenderers expressed dissatisfaction with the tendering process. Both believe they have more relevant experience and project management skills than ACS.
- 11. In response to the concerns expressed by the unsuccessful tenderers over the tender selection process, DPIE obtained further advice from the Attorney-General's Department as to the general conduct of the tendering process. The legal review found that, while the selection process was conducted with probity, there were shortcomings with the assessment and selection procedures. The Attorney-General's Department suggested that DPIE should have obtained further legal advice during the tendering process.

## **Commercial arrangements**

- 12. DPIE and ACS are part of the same legal entity, the Commonwealth. As the Commonwealth cannot enter into a contract with itself, a Memorandum of Understanding (MOU) forms the basis of the commercial arrangements between DPIE and ACS.
- 13. However, the MOU between DPIE and ACS underpins a number of subcontracts involving ACS and various private sector entities. The ANAO is concerned that the ambiguities and inconsistencies in the 'head' contact may well be reflected in the subcontracts, putting the Commonwealth at some risk in terms of quality, cost and timing of delivery of services.

#### **Department's response**

- 14. DPIE responded positively to the report. Of the three recommendations, two were agreed to in full and the other in part.
- 15. DPIE considers that the performance of ACS as project manager has demonstrated that its selection represents a successful tendering outcome. ACS' performance can be judged from its successful completion of Phase I of the project within 4 per cent of the total of estimated hours and agreed scope changes. This is a small overrun for the investigatory phase of a large project.
- 16. With the benefit of hindsight, DPIE would have made some minor changes to the conduct of the tender assessment and provided assistance from specialists in Commonwealth purchasing to the expert assessors on the form of their written assessment. These deficiencies were correctly identified by ANAO and DPIE accepted the audit recommendations.
- 17. Nevertheless, DPIE does not believe that the tender assessment process was anything

### **Recommendations**

Set out below are the ANAO's recommendations with Report paragraph reference and DPIE's abbreviated responses. More detailed responses and any ANAO comments are shown in the body of the report. The ANAO considers that DPIE should give priority to all recommendations.

The ANAO *recommends* that DPIE, during any future tender selection process:

- (a) inform potential tenderers clearly and consistently about the form and nature of the assessment criteria to be used and any relative weightings that might be applied;
- (b) ensure the tender evaluating process is both rigorous in its methodology and fair to all tenderers, in accordance with Commonwealth procurement guidelines;
- (c) ensure that Departmental requirements are clearly communicated to all relevant parties; and
- (d) ensure that the Commonwealth's procurement guidelines are adhered to by either using in-house staff that have procurement experience or engaging outside assistance with Commonwealth procurement expertise.

## **DPIE** response

Agreed.

The ANAO recommends that DPIE:

- (a) seek independent legal advice from a legal practice(s) with expertise in addressing legal issues arising from the Maralinga Rehabilitation Project as to whether the project's existing and future subcontracts adequately protect the Commonwealth's interests. The advice should assist in the management of existing subcontracts to avoid circumstances which may give rise to difficulties and should provide guidance in the drafting of future subcontracts;
- (b) ensure that the radiation safety procedures are adequate, that all subcontractors fully understand their obligations to abide by the procedures, and that ACS imposes sufficient controls and checks to ensure that all subcontractors adhere to the established procedures;
- (c) ensure that subcontractual obligations of all relevant parties in terms of cost and performance are clearly described and that payment is clearly linked to achievement of specified performance; and
- (d) ensure that the subcontracts contain firm delivery times, the

Recommendation No. 1 Para. 2.65

Recommendation No. 2 Para. 3.30 provisions for an extension of time are more exact than those in the MOU, an appropriate cap is put on the Commonwealth's liability for causing a delay, and the liquidated damages provisions are realistically based to provide an appropriate deterrent for late delivery.

## **DPIE** response

- (a) Noted.
- (b) Agreed.
- (c) Agreed.
- (d) Agreed.

Recommendation No. 3 Para. 3.32 The ANAO *recommends* that DPIE continue to seek legal opinion from a legal practice(s), with specific expertise in the relevant commercial area, as to whether the Commonwealth's interests are adequately protected when considering entering into complex or large monetary contracts.

### **DPIE** response

Agreed.

## 1. Background

This chapter summarises the nature of the project, events leading to its beginning, and the scope of the audit.

## The clean-up requirement

- 1.1 Between 1953 and 1963 the British undertook a number of nuclear weapons tests at Maralinga in South Australia. The tests resulted in the radioactive contamination of a number of sites within the 3200 sq. km test area.
- 1.2 In 1985 the Royal Commission into British Nuclear Tests in Australia recommended the rehabilitation of the Maralinga nuclear test site. After the examination of several options the then Government responded in 1991, selecting an option that involved burial of plutonium-contaminated soil and treatment of certain plutonium-contaminated burial pits. This was followed in 1993 by an agreement with the British Government over Australia's claim of British liability for the contamination. Under the settlement the British Government agreed to pay some \$45 million in full and final settlement of Australia's claims concerning the British nuclear test program in Australia.
- 1.3 The clean-up will involve the construction of three large trenches into which plutonium-contaminated soil and other debris will be buried. Also, a number of existing concrete-capped pits, containing highly contaminated debris, will be treated using an In Situ Vitrification process that turns the pits' contents into an inert glass-like material.

## The clean-up plan

- 1.4 The clean-up at Maralinga involves:
  - the construction of three large trenches into which an estimated 243 000 cubic metres of plutonium-contaminated soil and other debris will be buried;

- the use of ISV to stabilise and treat 21 pits containing highly contaminated debris, previously dug by the British in partial clean-up operations during the 1960s. The ISV process involves passing a high electrical current through each pit, melting the contents and converting them into a chemically inert, stable, glass and crystalline product resistant to human intrusion and leaching by ground water; and
- the treating of a number of other pits dug by the British containing lower-level contaminated debris.

1.5 The Department of Primary Industries and Energy represents the Commonwealth's interest and has the overall responsibility for the successful outcome of the clean-up. A consortium led by Australian Construction Services, a business unit of the Commonwealth Department of Administrative Services, won the contract to provide detailed engineering and project management services.

1.6 The project is being conducted in two phases. Phase One involved investigation and detailed design and documentation of the rehabilitation work along with planning and scheduling of the project, as well as developing a detailed project budget. Phase Two is the implementation phase, involving the letting of subcontracts by ACS for the actual clean-up operations. Phase One of the project started in the first half of 1994; the tendering for the major subcontracts under Phase Two commenced in the second half of 1995.

1.7 The project is scheduled to be completed by the end of 1999. The clean-up constitutes a large civil engineering project with particular health physics requirements which necessitate a special approach. Adding to the complexity are a number of uncertainties regarding the quantities and containment of radioactive waste. These uncertainties are:

- the exact volume of contaminated soil/debris to be removed;
- the varying degree of contamination in the different treatment sites; and
- the suitability of using the then relatively new ISV technology at Maralinga.

1.8 In addition to the technical complexities, the Department has to meet the concerns of the Maralinga Tjarutja Aboriginal people, who are the traditional landowners of the area adjacent to the test site. It is expected that after the clean-up is completed the test site will be returned to the Maralinga Tjarutja for traditional land use. Finally, there are the environmental impact considerations associated with such a large engineering project.

1.9 Given the many complexities and unknown factors associated with the clean-up, the Department has and will continue to maintain a close involvement with the project. The Department stated in the tender documentation that it will be represented throughout the project in all detailed engineering and project management activities.

## **Maralinga Rehabilitation Technical Advisory Committee**

1.10 To further assist in the management of the project, in September 1993 the then Government convened the Maralinga Rehabilitation Technical Advisory Committee (MARTAC). Comprised of well-recognised experts in a number of relevant fields, the role of MARTAC is to provide expert advice on a range of issues associated with the clean-up,

including environmental impacts, radiological protection for the workers and general site remediation measures.

## **Parliamentary interest**

1.11 The Parliamentary Standing Committee on Public Works completed an inquiry into the proposed clean-up method in June 1995. The Committee recommended that the clean-up works proceed. It also recommended that the results of the ISV trials be reviewed by independent experts and, if the trials prove inconclusive or unsatisfactory, that the future direction of the project should be reviewed. In June 1996 the Committee considered the results of the ISV trials and agreed to application of this technology in the project.

1.12 Questions were raised in Parliament during May and June 1994 over the tender selection process and ACS' relevant expertise.

## Concerns of unsuccessful tenderers

1.13 The two unsuccessful short-listed tenderers had also queried the tender selection process. One of the unsuccessful tenderers wrote to the Minister for Primary Industries and Energy as well as the Secretary to the Department expressing its concerns over the process. The other unsuccessful tenderer expressed its concerns over the process to the ANAO in the course of this audit.

## Audit objective and methodology

1.14 The objective of the audit was to determine whether the Commonwealth's interests were adequately protected in terms of both the contractor selection process that led to ACS being awarded the contract for the overall management of the project and in the consequential commercial arrangements between DPIE and ACS. The audit was intended to provide guidance to DPIE on key issues and areas of risk it should address in selecting contractors and drawing up commercial arrangements. As part of the audit, criteria were determined to consider whether the Commonwealth procurement guidelines were adhered to, as well as whether the commercial arrangements clearly detailed the goods and services to be provided, their cost and timing of delivery.

## 1.15 The analysis examined:

- the type and depth of information supplied to the tenderers;
- the selection criteria used in the tender selection process;
- the assessment of the tenders against the selection criteria;
- the clarity of the commercial arrangements between DPIE and ACS; and
- whether the commercial arrangements adequately protected the Commonwealth's interests.

1.16 The ANAO reviewed records of the tender selection process and the drafting of the commercial arrangements. The ANAO was assisted by legal consultants from the firm Clayton Utz in assessing the adequacy of the commercial arrangements. Discussions were held with officers from DPIE and ACS, and the secretariat of the Parliamentary Standing

Committee on Public Works, as well as representatives from the two unsuccessful short-listed tenderers.

- 1.17 The ANAO's field work was conducted during the periods August to October 1995 and April to May 1996. Field work involved an inspection of the Maralinga test site.
- 1.18 The ANAO provided a mid-term discussion paper on the tendering issues and another paper on the commercial arrangements to DPIE, as well as generally keeping DPIE informed of our assessments during the course of the audit.
- 1.19 The audit was conducted in conformance with ANAO Auditing Standards and cost \$140 000.

## 2. Tendering Process

This chapter describes the tendering process, discusses the process for evaluation of tenders and summarises events following the selection of the successful tenderer.

#### Lead role of consultants

- 2.1 DPIE engaged as consultants two highly qualified experts in the engineering and scientific fields to advise on the Maralinga rehabilitation project. Both were involved in the technical assessment that preceded the formulation of the clean-up plan and are members of MARTAC.
- 2.2 The consultants also took a lead role in the tendering process, including the preparation of tender documents, the assessment of the tenders and recommending to the Department the selection of ACS. One of the consultants had experience in public sector tendering and tender selection in Australia and overseas. During the tender selection process, the two consultants sought advice from other members of MARTAC but MARTAC as a body was not involved in the tender decision-making process. The Department maintained involvement in the tendering process by appointing a senior officer with considerable experience in nuclear issues to provide administrative support, as well as an SES officer to provide higher-level Departmental input.
- 2.3 Given the consultants' detailed knowledge of the unique and complex nature of the Maralinga clean-up, it was prudent for the Department to seek their views on the various technical issues associated with the clean-up, including the tender selection process. Nevertheless, despite the tender selection experience of one of the consultants and the involvement of Departmental officers, there were departures from the Commonwealth's procurement guidelines, involving the tender selection criteria and the general selection methodology. These issues are detailed below.
- 2.4 It should be stressed that there were no indications of any impropriety in the tender selection process. However, closer observance of the guidelines would have provided greater assurance as to the protection of the Commonwealth's interests and may have prevented the subsequent criticism of the process by the unsuccessful tenderers as well as questions being raised in Parliament regarding the process.

#### **Initial assessment**

2.5 The initial assessment was based on the responses to the Department's four-page

'Registration of Interest' (ROI) document issued to those organisations that answered newspaper advertisements and a gazettal notice inviting expressions of interest in providing detailed engineering and project management services for the Maralinga cleanup. The ROI document, in addition to providing relevant background and services-required details, sought information on twelve specific points (or criteria) from the potential tenderers. It was made clear that organisations would be short-listed on the basis of the information they provided in terms of the twelve criteria. A total of 35 organisations responded to the ROI document. The placement of newspaper advertisements and the gazettal notice inviting expressions of interest in tendering were in accordance with Commonwealth procurement guidelines.

#### Additional criteria introduced

2.6 It was during the assessment of the 35 organisations that two additional selection criteria were introduced. These were the level of Australian involvement in the project and the selection of Canberra as the preferred location of the proposed project office.

## Level of Australian involvement

- 2.7 The Department recognised that, given the unique and highly complex nature of the clean-up, overseas expertise would be necessary for the successful management of the project. This was reflected in the fact that the majority of the contenders indicated the involvement of overseas personnel in their project teams. This included the ACS-led consortium. An indication of the highly specialist nature of the clean-up was the repeated inclusion, in a number of proposed clean-up consortia, of the same individual companies with specialist nuclear rehabilitation expertise. This again included the ACS-led consortium.
- 2.8 Nevertheless, the Department appeared to want to maximise as much as possible the level of Australian involvement in the project. This concern appeared to stem from reasons of cost and project management. Given the complex nature of the project, the Department was keen to minimise costs associated with the agreed scope of the project work. Excessive use of overseas personnel with their travel and living allowances would have increased costs. In addition, overseas personnel could bring their own work practices, based on their home country's regularity framework, which potentially could have run counter to the regulatory arrangements established for the project in consultation with Australian regulatory bodies.
- 2.9 The Department's response was that there was no selection criterion involving the 'level of involvement'. The issue was, however, raised through selection criteria dealing with price and capability to undertake the work. Access to appropriate overseas expertise in handling radioactive materials was regarded as a positive indicator of capability to undertake the work. On the other hand, too heavy a reliance on overseas expertise would impact on costs. A reasonable balance of overseas and domestic expertise was required.

## Project office location

2.10 Organisations were asked to indicate the proposed location of their project office in their responses to the ROI. They were not told that Canberra was the preferred location. Consequently, a number of differing locations were nominated, Canberra, Melbourne, Adelaide, Maralinga and Perth.

- 2.11 The Department's concerns over the location of the project office were threefold. First, a project office out of Canberra would lessen its opportunity to influence and control the project. Secondly, if the office was out of Canberra there would be the additional costs associated with travelling in and out of Canberra for meetings etc. Finally, there would again be additional costs if an organisation were to establish an office in Canberra and transfer staff in.
- 2.12 In response DPIE has advised that an office in Canberra was a lower-order consideration in assessing registrations of interest. Although a desirable attribute, a project office in Canberra was not an essential requirement in determining the short list and, following short-listing, played no further part in deciding the successful tenderer. One short-listed tenderer did not have a Canberra project office. This tenderer was advised that its proposed project office location was acceptable to DPIE but that a proposal to have the project manager in Canberra managing a design team elsewhere was not favoured.

#### **ANAO** comment

- 2.13 The use of two additional criteria, that is, level of Australian involvement and preference for a Canberra office, without the knowledge of the tenderers represented a departure from the procurement guidelines. The guidelines require, in part, that all appropriate information be provided to allow suppliers to position their capabilities and products to better achieve value for money. In effect, the Department reduced the potential for effective competition among the various tenderers.
- 2.14 If the Department was concerned about maximising Australian involvement, this should have been made clear in the ROI. This disclosure would have given all respondents, both Australian and overseas-based, an equal opportunity to put together proposals that fully took into account the Department's requirements. Likewise, the preferred location of the project office should have been made known to facilitate open and effective competition. Although DPIE maintains that these issues were not considered as selection criteria, the ANAO has observed that the documentation of the process treated these issues in a fashion similar to that for other criteria.

#### **Second-stage assessment**

- 2.15 Based on the responses to the ROI document, six of the original 35 organisations were listed for further consideration.
- 2.16 At this stage a second group of selection criteria using a points score system was introduced. This system introduced a degree of objective rigour to the selection process that accords with the Government's procurement guidelines. However, the benefits of this approach were not fully realised given the subjective way in which DPIE then chose from those listed six the final short-list of three organisations for final evaluation.
- 2.17 The points scores for the first four of the six ranked contenders were very close, particularly between the third- and fourth-placed organisations; so close that, in the end, the fourth-ranked contender was chosen ahead of the third-placed. The Department's rationale for the decision was that there was little difference between the two, but that the fourth-ranked contender's approach to the project's management was more in keeping with the Department's own, and its experience was more relevant.

## **Departmental comment**

2.18 DPIE's analysis of the final placings of the third and fourth registrants indicated that an initial consideration had decreased in importance since the request for registrations of interest. The fourth-ranked registrant satisfied key departmental requirements to an extent not fully reflected in the points score and was consequently ranked third. The decision to have a short list of three is consistent with Australian Standard AS 4120 'Code of Tendering' which states that principals should have regard to the costs of bidding. Several registrants expressed their preference for a restricted short list in view of the anticipated high costs of tendering.

#### **ANAO** comment

- 2.19 Different selection criteria can be used at different stages of a tender selection process. But again, it is most important that potential service providers are fully aware of the import of each set of criteria and when each will be applied. Commonwealth procurement guidelines indicate that potential providers should be clearly and consistently told about the form and nature of the selection criteria.
- 2.20 The documentation available provided little justification for interchanging the thirdand fourth-placed contenders. In terms of ranking the organisations, if the Department had difficulty in separating the top four suitable contenders, the preferable approach would have been to consider all four. After all, the objective was to identify the contender that offered the best value for money.

#### **Final-stage assessment**

## Tender documentation and project familiarisation

- 2.21 The three short-listed organisations were issued with a formal 'Request for Tender' (RFT) document. The RFT document provided detailed information on the engineering and project management services expected from the successful tenderer. The organisations were given seven weeks within which to lodge a tender.
- 2.22 During the intervening period the Department provided a two-day familiarisation visit to Maralinga. This was followed by meetings in Canberra with all three organisations, as well as letters on points of clarification.
- 2.23 Following the receipt of the tenders from the three organisations, the Department felt it necessary to provide further points of clarification as well as ask for additional information from all three tenderers. The three organisations were then invited, if they decided it was necessary, to amend their estimates of man-hours and price.

#### **Baseline estimates**

2.24 While waiting for receipt of the tenders from the three short-listed organisations, the Department prepared its own estimates as to the costs and staff-hours involved in phase one of the project and the refurbishment of the Maralinga village. The Department also commissioned an independently derived estimate that was very close to its own estimate. The Department stated that the benefits of preparing baseline estimates included providing the Department with some idea of what to expect from the tenderers, requiring the Department to detail how individual activities might be conducted, and providing information upon which to base discussions with the tenderers.

#### **Tender assessment**

#### Selection criteria

2.25 The RFT document contained information on the selection criteria (the third set to be used during the selection process) against which the three organisations were to be assessed. But the wording used in the RFT document suggests that the tenderers may not have known of all the criteria against which they were assessed. The RFT stated that 'Tenders will be assessed against criteria which will include, but are not necessarily limited to, the following' (that is, followed by the relevant criteria).

#### Initial assessment

2.26 The Department's initial assessment of the final tenders indicated that all three organisations appeared able to handle the work competently.

#### Tender interviews

2.27 The tender selection process culminated with interviews held with each of the three tenderers in March 1994. It was at the interviews that the issue was resolved as to which of the three tenderers could best satisfy the Department's prime concerns of obtaining value for money and maintaining the necessary influence and control over the project.

#### Australian Construction Services

2.28 At its interview the ACS was able to demonstrate that it had the right combination of having its costs close to the Department's baseline estimates and a project management approach that would allow the Department the required degree of influence and control. Although ACS had little experience in dealing with radioactive materials, one of its consortium partners had extensive experience. ACS won the contract because its costs were in line with Departmental estimates. The Department believed ACS' project team was the best overall and that it demonstrated a willingness to comply with the Department's requirements.

## Second tenderer

- 2.29 This tenderer was not awarded the contract because its staff-hour and cost proposals were nearly twice those of the Department's baseline estimates. Its proposed methods of dealing with the contaminated debris which were thought by the Department to be excessive. It appeared not to appreciate the Department's requirement for close involvement throughout the project. As well, the proposed use of its own technical review teams seemed to duplicate the work of MARTAC and of the Department's two consultants.
- 2.30 Following receipt of the Department's request for additional information on issues raised in its tender document, this tenderer realised that its tender was somewhat high on staff-hours, scope of works and expenses. It attempted to meet the concerns of the Department, in responding to the request for further information and at the interview, by showing a willingness to lower costs and generally confirm that it would meet the client's requirements. However, the Department had lost confidence in the second tenderer's ability to do the job and deliver value for money.

## Third tenderer

- 2.31 The third tenderer was rated by the Department as having the best understanding of the project. This stemmed from its project manager, who was assessed as being the best of the nominated three. The third tenderer's consortium also had relevant experience, having been involved in the remediation of radioactive sites for the US Government.
- 2.32 However, in the Department's view, the third tenderer failed to be awarded the contract because it did not meet the Department's concerns over value for money and control of the project. The major problem for the Department was the third tenderer's proposal that the majority of the actual clean-up work not be subcontracted. Instead the third tenderer offered to manage the whole project as a turn-key operation, claiming that this would be more cost-effective. There would be one management team for the entire operation, as opposed to having to liaise with other major contractors and deal with the management of the various subcontractors. This would, it was claimed, minimise any disruptions to the work schedule as well as lower costs associated with modifying equipment for dealing with radioactive materials.
- 2.33 The Department rejected this turn-key proposal. At the time of the tendering selection process, the project was not fully defined. The Department, therefore, considered it was not meaningful to talk in terms of a fixed-price contract. Given the many unknowns associated with the clean-up, the Department was concerned about keeping a tight control on costs. Competitive tendering for the various clean-up tasks was one way of achieving this.
- 2.34 It is worth noting that the third tenderer's turn-key approach was not apparent during the earlier stages of the selection process. The Department has stated that it believes it unlikely that the third tenderer would been short-listed for further consideration if it had proposed the turn-key approach in responding to the earlier ROI document.

#### **ANAO** comment

- 2.35 Despite the detailed information contained in the RFT document, the visit to Maralinga and meetings with the Department, the two unsuccessful tenderers still did not fully address the Department's requirements. This was particularly the case when it came to understanding the Department's requirements to obtain value for money while maintaining a close involvement throughout the life of the project.
- 2.36 Another factor that mitigated against the third tenderer's turn-key proposal was the unavailability to any of the short-listed tenderers of commercial nuclear indemnity insurance coverage for work involving the handling of radioactive materials. This was known to the three tenderers at the time they were preparing their tender submissions. In the end it was the Commonwealth that had to accept the liability for such cover. The ANAO agrees that it was reasonable that, as the Commonwealth had to accept such liability, it should have greater control over the conduct of the project than a turn-key approach would allow (see Chapter 3 for further discussion on the insurance coverage issue).
- 2.37 In regard to the selection criteria used during the final assessment, as discussed in para 2.18, the use of different sets of selection criteria at various stages of the selection process is acceptable. However, in the interests of open and effective competition, the Department should have informed potential tenderers clearly and consistently about the form and nature of all the assessment criteria to be used and any relative weightings that

might be applied.

## Post-decision analysis by the unsuccessful tenderers

#### **Second tenderer**

- 2.38 This tenderer believed that it was misled during the tendering process due to the inadequacy of both the definition of scope of services required and the normalising approach (the adjusting of each of the tenders to a common base for comparison purposes) that was adopted.
- 2.39 Following the announcement of ACS' success, the second tenderer wrote to the Department in early May 1995 requesting a debriefing. At the debriefing it was confirmed that its offer of services was in excess of requirements, resulting in a price twice that of the other tenders.
- 2.40 On the issue of normalisation the Department indicated that it had deleted from each tender the staff-hours associated with the stipulated health physics and geotechnical subcontractors as well as any work in excess of the services sought in the RFT documents. However, the second tenderer believed that the normalisation should have included the various ways each of the tenderers intended to approach the required work as set out in the RFT document. Each of the three tenderers had its own way of meeting the Department's requirements, i.e. there were different methods for dealing with those debris pits that were not to undergo ISV treatment and the degree to which the Maralinga village was to be refurbished. The second tenderer believed that these various approaches should have been 'normalised' in order to determine best value for money.
- 2.41 The second tenderer had expected an opportunity to enter into negotiations with the Department based on the normalisation of the three tenders.
- 2.42 The Department has stated that the second tenderer had no grounds upon which to expect further negotiations. The second tenderer's offer price was so far out of line with all other estimates that there was no basis for negotiations. Further, the Department quotes the Australian Code of Tendering AS 4120 which states 'Principals should first exhaust negotiations with the initial preferred tenderer before negotiating with subsequent tenderers'.

#### Third tenderer

- 2.43 On 2 May 1994 this tenderer wrote to the Minister for Primary Industries and Energy, expressing its concerns over the selection process and asking him to reopen the evaluation of tenders process.
- 2.44 The tenderer stated that it was the only tenderer which had current state-of-the-art experience in the type of nuclear rehabilitation required at Maralinga. It had 50 years' experience in the nuclear industry and ten years of directly related experience in the rehabilitation of hazardous sites. It considered the ACS team to be relatively inexperienced, and not able to translate theoretical knowledge into the necessary practical application to make the project a technical, safe, timely and cost-effective success.
- 2.45 This was followed on 25 July 1994 with a letter to the Department's Secretary, stating that it did not believe that ACS was technically capable of performing the work, as

well as questioning the independence of the Department's consultants. It sought reimbursement of costs associated with its bid for the contract, estimated at around \$200 000. This was disallowed in accordance with the conditions of tender as set out in the RFT document.

- 2.46 At an interview with the ANAO, the tenderer expressed disquiet over the way the selection process was conducted and about whether the principles of competitive neutrality had been applied in respect of all tenderers.
- 2.47 The Department has stated that assertions by the third tenderer regarding ACS' experience ignores the fact that another member of the ACS team has comparable nuclear experience.

#### **ANAO** comment

2.48 Despite the detailed RFT document, various pieces of correspondence, the visit to Maralinga and the meetings between the Department and the three tenderers, the two unsuccessful short-listed tenderers failed to address the Department's requirements to obtain value for money while maintaining control over decisions affecting the project; so much so, that one tenderer had staff-hours and costs nearly twice that of the Department's estimates, while the other proposed a turn-key operation thought inappropriate by the Department.

2.49 The ANAO has been unable to ascertain any reasonable explanations as to why the two unsuccessful tenderers, both commercial parties and with some years of experience, failed to appreciate the Department's requirements to such a degree. However, possible explanations include:

- despite the high level of contact between the Department and the short-listed tenderers, the Department's concern to achieve value for money while maintaining control over decisions affecting the project was not always clearly articulated and/or the unsuccessful tenderers failed to appreciate the Department's requirements; and
- the RFT document, while detailed in terms of required services and the scope of work, was somewhat less specific in terms of how the work was to be done. This led to three different proposals of which only one (ACS) was close to the Department's own baseline estimates and preferred management approach.
- 2.50 The ANAO considers that the Department should have assured itself that all three of short-listed tenderers had a clear appreciation of its requirements. This is particularly important given that, as the Department stated, at the time of the tendering selection process the project was not fully defined, with many unknowns associated with the cleanup. It would have been better practice had the Department developed, and been able to articulate, a fuller understanding of baseline costs prior to calling for tenders from the three short-listed organisations, rather than estimating the costs after the tenders had been called. This would have enabled the Department to have provided further information in the RFT document as to what was expected from the short-listed tenderers, thereby effecting greater competition between the tenderers.
- 2.51 As it was, the tender selection process saw no effective competition between the three short-listed tenderers. Also it should be of concern that the Maralinga tender

selection process has led to two prominent civil engineering firms gaining the perception that competition may not always be fair and open when a government business unit is a competitor.

2.52 In response DPIE has said that comprehensive information about the Department's requirements was provided in the Request for Tender. DPIE did not specify how tenderers were expected to do the work. It was for tenderers to explain their approach to the project and for these to be assessed by the Department's advisers.

## Legal advice on the tendering process

- 2.53 As part of the response to the concerns raised by the third tenderer, the Department's Secretary sought legal advice in May 1994 from the Australian Government Solicitor (AGS) as to the validity of the tenderer's concerns, as well as the general conduct of the tendering process.
- 2.54 Concentrating on the assessment of the three short-listed tenderers, the legal review found that the selection was conducted with probity. Nevertheless, it found there were some shortcomings with the assessment and selection process.
- 2.55 AGS found that the Department had, in effect, contracted out the assessment of the tenders to its consultants. The consultants, while experts in their chosen fields, did not appear to be fully apprised of Commonwealth tendering requirements. This manifested itself in the following ways:
  - the assessment of the three tenders was not specifically written against the selection criteria, leading to a less than fully transparent assessment process; and
  - the two consultants did not formally meet as a selection panel; rather, they exchanged views largely through correspondence and telephone calls, resulting in an incomplete and again an unclear record of the decision-making process.
- 2.56 The Department had appointed a senior officer to monitor and assist the consultants but this person had no tendering experience. It was felt that, if the Department was going to contract out tendering, it needed to ensure that the persons involved had a proper understanding of the Commonwealth tendering procedures.
- 2.57 AGS suggested that the Department should have obtained further legal advice, particularly during the assessment and debriefing stages of the tendering process. The involvement of a legal adviser in those stages should have ensured that the final assessment of tenders complied in all respects with the procurement guidelines.
- 2.58 The Department has stated that earlier advice from AGS indicated their attendance at interviews with the three short-listed companies was not necessary.
- 2.59 Another important issue identified by the legal review was the teaming arrangements proposed by each of the three tenderers. Each of the tenderers headed a consortium or team. The skills and proposed contribution by each member of these teams were considered as part of the assessment. However, there were no indications that the teaming arrangements for each of the three tenderers were actually examined. If the teaming arrangements were not part of some commercial agreement, the Commonwealth took the

risk that the teams would actually be put in place and work together. In regard to the ACS team, there was no binding commitment between ACS and its team members. Rather, reliance was being placed on letters of intent. Again the Commonwealth was taking the risk that ACS would ensure its team would be put in place.

2.60 DPIE has responded that teaming arrangements for tendering purposes are almost always by way of exchange of letters between parties agreeing to work together if they are successful, rather than through the entry into formal contracts. This is particularly so where, as occurred in this project, a nominated subcontractor (or 'team member') is named in more than one tender bid. The risk to the Commonwealth needs to be offset against the significantly increased cost to each tenderer if proof of formal teaming arrangements is required before evaluation of a tender.

#### Conclusion

- 2.61 The Department and its consultants have little doubt that ACS is capable of successfully managing the Maralinga clean-up.
- 2.62 The ACS team won the contract for three main reasons. First, it had the civil engineering skills and nuclear expertise necessary for the job. Second, its costs were in line with the Department's estimates. Third, and most importantly, it demonstrated a willingness to comply with not only the Department's technical but also the control requirements.
- 2.63 The Department had responsibility for a highly complex project with many unknowns still present. Therefore, it is understandable that the Department adopted a conservative approach to the management of the project, wanting to minimise the risks and costs associated with the project through a high degree of ongoing involvement.
- 2.64 However, the Department should have ensured that all short-listed tenderers had a clearer appreciation of Departmental requirements, thereby effecting open and effective competition during the tender selection process.

#### **Recommendation No.1**

- 2.65 The ANAO recommends that DPIE, during any future tender selection process:
- (a) inform potential tenderers clearly and consistently about the form and nature of the assessment criteria to be used and any relative weightings that might be applied;
- (b) ensure the tender evaluating process is both rigorous in its methodology and fair to all tenderers, in accordance with Commonwealth procurement guidelines;
- (c) ensure that Departmental requirements are clearly communicated to all relevant parties; and
- (d) ensure that the Commonwealth's procurement guidelines are adhered to by either using in-house staff that have procurement experience or engaging outside assistance with Commonwealth procurement expertise.

## **DPIE** response

2.66 Agreed. DPIE considers the selection of the project manager for the Maralinga

rehabilitation project was rigorous and fair to all participants. Nevertheless, ANAO identifies some areas of potential improvement of tendering performance.

2.67 Since the tender process, the Department has issued detailed guidance in the form of a tender checklist to ensure adherence to all aspects of Commonwealth Procurement Guidelines. As the checklist now forms part of the Secretary's Instruction on Procurement, it is considered that there is sufficient guidance to minimise any future non-compliance with the Procurement Guidelines.

## 3. Commercial Arrangements

This chapter discusses the considerations affecting the nature of the commercial arrangements between DPIE and the agencies carrying out the work.

## **Background**

#### Three major agreements

- 3.1 There are three major commercial arrangements associated with the Maralinga cleanup project:
  - a Memorandum of Understanding (MOU) between DPIE and ACS for the overall project management of the clean-up project;
  - a second MOU between DPIE and the Australian Radiation Laboratory (ARL) for
    the provision of a number of radiological services including: the establishment and
    regulation of radiation protection procedures, the monitoring of the project
    workforce for radiation exposure, the establishment of boundaries from within
    which the plutonium-contaminated soil is to be removed and the verification that
    the residual levels are acceptable once the soil has been removed; and
  - a contract between DPIE (on behalf of the Commonwealth) and Geosafe Corporation for the use of the ISV technology in stabilising the various debris pits.

#### **Memoranda of Understanding**

3.2 DPIE, ACS and ARL are all part of the same legal entity, the Commonwealth and, as the Commonwealth cannot enter into a contract with itself, MOUs form the administrative basis for the provision of specific services and payments involved. Of the three major commercial arrangements associated with Maralinga, only the agreement between the Commonwealth and Geosafe Corporation represents a legally enforceable contract.

#### **MOU between DPIE and ACS**

- 3.3 The MOU between DPIE and ACS is the prime commercial arrangement associated with the Maralinga rehabilitation project. It establishes a commercial framework for the provision of engineering services and the overall management of the project, with ACS in the primary role as project manager. In terms of the MOU, DPIE is referred to as the 'Commonwealth' while ACS is the 'Contractor'.
- 3.4 As indicated in Chapter 1, the project is divided into two stages, Phase One and Phase Two. Phase One is the preparatory stage of the project while Phase Two is the actual

rehabilitation work. As part of Phase One, ACS is responsible for the planning and management of the engineering services required for Phase Two as well as developing and implementing a management plan, including a budget, for Phase Two. This involves liaising with other organisations (ARL and Geosafe) retained under separate contracts with DPIE, calling for tenders for the provision of the infrastructure necessary for the clean-up, calling for tenders for the actual clean-up operations and responsibility for the provision of health physics protection for all workers in the radioactive areas.

- 3.5 The MOU deals with each of the two phases in markedly different ways The requirements for Phase One are relatively certain in terms of performance, time and cost requirements, while Phase Two is essentially expressed in terms of an agreement to agree on such issues as time and cost.
- 3.6 While based on a MOU, the commercial arrangements between DPIE and ACS have as much as possible been expressed in terms similar to those that would be used in a legally binding contract between commercial entities. Nonetheless, the MOU represents an understanding between two administrative arms of the Commonwealth and the obligations imposed are not legally binding. If a dispute arose over performance of the terms of the MOU, DPIE could not look to a court to enforce the arrangements it has made with ACS. The matter would have to be resolved ultimately at the executive level in accordance with established Commonwealth procedures.

## Legal advice on the MOU between DPIE and ACS

- 3.7 DPIE engaged the Australian Government Solicitor (AGS) to assist in drawing up the MOU. Both DPIE and ACS retained the AGS to act in negotiations to finalise the terms of the MOU. AGS was particularly instrumental in developing the provisions that dealt with Commonwealth's indemnity coverage for workers dealing with radioactive materials when it acted separately for DPIE and ACS.
- 3.8 As part of the audit, the ANAO engaged the legal firm Clayton Utz to provide advice as to whether the MOU between DPIE and ACS adequately protected the Commonwealth's interests.

#### Potential risk to the Commonwealth

- 3.9 The requirement for ACS to provide both engineering services and manage the project, and the different way the MOU deals with each of the two phases of the project, leads to a commercial arrangement that is a hybrid between a works contract normally used, say, for the construction of a building and a consultancy contract used in the designing, planning and provision of services. Clayton Utz called attention to a number of ambiguities and inconsistencies in the MOU between DPIE and ACS. Nevertheless, to date the project appears to have worked well, in part due to the well-developed administrative procedures between the two Commonwealth entities, DPIE and ACS.
- 3.10 However, the MOU between DPIE and ACS underpins a number of subcontracts involving ACS and various private sector entities. The ANAO is concerned that the ambiguities and inconsistencies in the 'head' contact may well be reflected in the subcontracts, putting the Commonwealth at some risk in terms of quality, cost and timing of delivery of services. Some of these ambiguities and inconsistencies are discussed below.

- 3.11 A contract sets out the rights and responsibilities of each of the parties and, while it becomes the subject of litigation only when there is an irretrievable breakdown in their relationship, it nevertheless needs to be clear and legally enforceable in that event. The ANAO considers that, particularly where projects contain complexities such as in the Maralinga project, it is prudent for the responsible agency to seek legal advice from specialists in the subject area.
- 3.12 DPIE has responded that the subcontracts are different in form from the MOU and were not derived from the MOU. The contracts between ACS and the subcontractors are standard contracts. The two major subcontracts are based on Australian Standard General Conditions of Contract AS 2124 or AS 4122, as is appropriate for the type of work being undertaken.

## Commonwealth provides indemnity coverage

- 3.13 During the tendering process for the project management contract it became apparent that commercial nuclear indemnity coverage was unavailable for persons working in radioactive areas. Consequently the Commonwealth assumed the risk for any claim for injury resulting from exposure to radiation.
- 3.14 The MOU details the Commonwealth's indemnity as well as compelling ACS to abide by any Commonwealth procedure and/or direction in respect of worker safety. The MOU also requires ACS to ensure that all subcontractors adhere to the same procedures and/or directions.
- 3.15 However, the MOU does not stipulate what these procedures and/or directions should be, other than to require ACS to negotiate, in association with DPIE, with the selected subcontractor CH2M Hill (a USA firm with extensive experience in radiation health physics) for the provision of health physics services. Given the risk facing the Commonwealth, it is clearly in its interests to ensure that the radiation safety procedures are adequate.
- 3.16 DPIE, as the Commonwealth's agency primarily responsible for the overall administration of the project, should minimise the risk to the Commonwealth by ensuring the adequacy of the radiation safety procedures and their implementation.

## Changes to scope of work

3.17 Changes to the scope of work that may be required by DPIE are provided for in the MOU. However, the mechanism to deal with any disagreement on how the changes will impact on the completion of the work or the price is less clear. The need for a clear mechanism is most important given that the exact scope of work for Phase Two has yet to be determined.

## Payment schedule and milestones

- 3.18 A payment schedule and milestones to be achieved are set out in an attachment to the MOU. However, there appears to be no linkage between the two. Payment appears to be scheduled without due regard for performance.
- 3.19 The payment schedule also refers to the reimbursement of agreed expenses at cost on the basis of a fixed monthly amount. However, there is no explanation as to what

constitutes these reimbursable expenses.

3.20 In response DPIE has stated that the payment schedule was devised more as a prediction of cash flow than a fixed schedule of payments. Payments to ACS are being made on the basis of monthly effort within budgeted hours. Likewise the monthly payment schedule for reimbursables was only indicative of expected expenditure. Reimbursables are those items that could not be predicted at the start of the project and includes such items as site transport costs.

#### **Subcontractor costs**

- 3.21 The MOU is not clear on how the cost of the subcontracts is to be determined. ACS is required to prepare management plans for both phases of the project, including budget estimates. However, the MOU does not provide a mechanism by which DPIE and ACS can agree on subcontract prices.
- 3.22 Clayton Utz believes that DPIE bears a substantial subcontract risk. The MOU places insufficient emphasis on DPIE ensuring that the provisions of time, cost and quality in the subcontracts are appropriate.
- 3.23 In response DPIE states that it has exercised control over the provisions of time, cost and quality in subcontract documents through the terms of the MOU. The *Attachment A-Scope of Works* to the MOU (Section 4-Phase 2 Scope of Work) requires ACS to 'call firm tenders' for listed items of work and also to 'assess those tenders and make recommendations to the Department as to which companies should be awarded subcontracts'. Clause 5.6 'Design Approval' of the MOU is also relevant. It states that 'The Contractor seeks appropriate approval from the Project Authority on completion of the design tasks nominated in the Scope of Work in Attachment A'. This provision authorises DPIE to review subcontract tender documentation, and these reviews took place.

#### No set delivery times for Phase Two

- 3.24 The MOU provides a set of delivery times for Phase One but not for Phase Two of the project. Instead, there are only some general provisions which require ACS to take all steps necessary to minimise delay resulting from its own work and that of subcontractors.
- 3.25 DPIE has argued that, given the complexity of the project with its many different types of deliverables, the establishment of delivery times for Phase Two in the MOU was inappropriate.

## Extension of time provisions somewhat general

- 3.26 The MOU contains provisions which, in part, entitle ACS to claim for an extension of time when delayed by reasons unavoidable or beyond its control. However, the provisions are unclear on how the responsibility for any delay will be determined.
- 3.27 The MOU also entitles ACS to claim for costs that result from delays caused by DPIE. However, no limit is placed on DPIE's liability, although such limits are normal in such clauses. Therefore, it is arguable that DPIE may face unlimited liability for any delays or breaches of the contract it may cause.

## Liquidated damages

- 3.28 DPIE is entitled to claim for liquidated damages for late delivery of prescribed supplies from ACS. However, the daily limit on the damages is not realistic reflection of the loss DPIE could face from the late delivery of supplies, given the size and complexity of the project
- 3.29 DPIE has agreed that the application of liquidated damages clause would not be straightforward, but states that there are strict provisions in the contract for delays in responding to its requirements.

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

#### 3.30 The ANAO recommends that DPIE:

- (a) seek independent legal advice from a legal practice(s) with expertise in addressing legal issues arising from the Maralinga Rehabilitation Project as to whether the project's existing and future subcontracts adequately protect the Commonwealth's interests. The advice should assist in the management of existing subcontracts to avoid circumstances which may give rise to difficulties and should provide guidance in the drafting of future subcontracts;
- (b) ensure that the radiation safety procedures are adequate, that all subcontractors fully understand their obligations to abide by the procedures, and that ACS imposes sufficient controls and checks to ensure that all subcontractors adhere to the established procedures;
- (c) ensure that subcontractual obligations of all relevant parties in terms of cost and performance are clearly described and that payment is clearly linked to achievement of specified performance; and
- (d) ensure that the subcontracts contain firm delivery times, the provisions for an extension of time are more exact than those in the MOU, an appropriate cap is put on the Commonwealth's liability for causing a delay, and the liquidated damages provisions are realistically based to provide an appropriate deterrent for late delivery.

## **DPIE** response

3.31 (a) Noted. DPIE has considered review of the terms of subcontracts as an element in the risk management strategy for the project. Areas of risk in the project have been assessed and prioritised in order to achieve the best allocation of management resources by DPIE directly and through the project manager.

A legal review of subcontracts is considered a relatively low priority given that the subcontracts are based on standard form contracts used in the civil engineering industry. There are no further significant subcontracts to be let which could benefit from such a review. A higher priority has been accorded to a management review of the project and an expert review of the project's radiation protection regime.

A management review of the project has recently been concluded by the Commissioner of the Snowy Mountains Hydro-electric Authority. This review found, inter alia, that site establishment, decontamination and soil removal programmes are progressing satisfactorily. An expert review of radiation safety by independent Australian and overseas experts has commenced and will be concluded early in 1997.

(b) Agreed. Project documentation explicitly identifies the importance of effective radiation safety procedures. Measures were taken in 1993 before commencement of the project to ensure expert advice is available on radiation safety issues. Detailed radiation safety procedures have been developed for the project and subjected to several stages of review. They have been endorsed by the project's independent regulatory authority, the Australian Radiation Laboratory. A further external expert review will report on practical application of procedures.

Project subcontracts contain specific clauses requiring adherence by subcontract personnel to the radiation safety procedures.

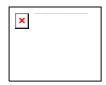
- (c) Agreed.
- (d) Agreed. Project subcontracts are standard contracts which provide appropriate protection of the principal's interests.

#### **Recommendation No.3**

3.32 The ANAO *recommends* that DPIE continue to seek legal opinion from a legal practice(s), with specific expertise in the relevant commercial area, as to whether the Commonwealth's interests are adequately protected when considering entering into complex or large monetary contracts.

## **DPIE** response

3.33 Agreed. DPIE was advised on the commercial arrangement with Australian Construction Services by the Office of Commercial Law of the Attorney-General's Department which has experience across a range of contractual areas in acting for government and protecting the interests of the Commonwealth. The subsequent opening of the legal practice of the Attorney-General's Department to competition has provided the Department with the opportunity to seek legal advice on contractual matters from a wider range of providers.



Canberra ACT P. J. Barrett

9 December 1996 Auditor-General

# **Appendix 1 - Performance Audits in the Primary Industries and Energy Portfolio**

Set out below are the titles of the reports of the main performance audits by the ANAO in the Primary Industries and Energy Portfolio tabled in the Parliament in the past three years.

Audit Report No.20 1994-95

Preliminary Study

- National Landcare Program

Audit Report No.10 1995-96

Sale of the Moomba to Sydney Gas Pipeline

Audit Report No.12 1995-96

Risk Management by Commonwealth

Consumer Product Safety Regulators

Audit Report No.21 1995-96

The Meat Research Corporation

Management of Project Fututech

Audit Report No.6 1996-97

Commonwealth Guarantees, Indemnities

and Letters of Comfort

Audit Report No.10 1996-97

Follow-up Audit

Energy Management of Commonwealth Buildings

Department of Primary Industries and Energy

Department of Administrative Services