

The Auditor-General  
Audit Report No.3 2002–03  
Performance Audit

# **Facilities Management at HMAS *Cerberus***

**Department of Defence**

Australian National Audit Office

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of Australia 2002

ISSN 1036-7632

ISBN 0 642 80658 6

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Canberra ACT  
31 July 2002

Dear Madam President  
Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Defence 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 *Facilities Management at HMAS Cerberus*.

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



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

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# Abbreviations

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ANAO	Australian National Audit Office
CMC	Comprehensive Maintenance Contract
CSIG	Corporate Services and Infrastructure Group
DEMS	Defence Estate Management System
DEO	Defence Estate Organisation
ID	Infrastructure Division
IGD	Inspector-General Division
KPI	Key Performance Indicator
RFT	Request for Tender
RWL	Repair Work Liability
TEB	Tender Evaluation Board
TEP	Tender Evaluation Plan

# **Summary and Recommendations**





# Summary

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## Background

1. HMAS *Cerberus* is a Navy base situated south-east of Melbourne, Victoria. As a major Navy training establishment, it conducts initial recruit training, and specialist category training in areas such as communications and engineering. The Australian Defence Force (ADF) Schools of Catering and Physical Training are situated there, as is a major health centre for operational and training needs. The health centre and other facilities at HMAS *Cerberus* were re-developed several years ago.
2. Allegations about Defence Estate Organisation's (DEO's) facilities management at HMAS *Cerberus* and other Defence bases in Victoria were investigated by Defence's Inspector-General Division (IGD) in 2000. The IGD reported in February 2001 that it had found procedural and managerial deficiencies in certain DEO activities and that about half the allegations investigated were either proved, or at least supported, by available evidence.
3. The main issues that relate to facilities and their management at HMAS *Cerberus* are as follows:
  - problems with the design, and defects in construction, of the health centre that were not fixed by the designer or builder and were rectified largely at Defence cost;
  - unresolved facilities problems, particularly those that pose health and safety concerns;
  - inconsistencies in holding contractors accountable for performance, and inadequate documentation and recordkeeping; and
  - breaches of procurement requirements and guidelines.
4. Most of the facilities problems at HMAS *Cerberus* arose from 1995 to 1999. Until July 1997, Defence facilities were managed by the particular Service, which, in the case of HMAS *Cerberus*, was Navy. DEO was formed in 1997 to manage facilities and other Defence estate functions on behalf of the individual Services. DEO was renamed Infrastructure Division (ID) in July 2001.
5. In August 2001, the then Minister for Defence announced that, in response to continuing concern over facilities management at HMAS *Cerberus*, he had asked the Australian National Audit Office (ANAO) to conduct an independent investigation. The ANAO agreed to review these matters.

6. The objective of the audit was to examine facilities management issues at HMAS *Cerberus* with a view to clarifying those of concern and ensuring that lessons would be learned from them to assist Defence facilities management generally.

## Conclusion

7. The ANAO's audit confirmed the findings made by IGD in relation to facilities management and maintenance problems at HMAS *Cerberus*. These included cases of inadequate contract management and inconsistencies in holding contractors accountable for performance, inadequate documentation and record keeping and breaches of procurement requirements and guidelines. Infrastructure Division is implementing IGD's recommendations to assist in avoiding further problems of the kind that occurred at HMAS *Cerberus*. IGD found that, although there were certain deficiencies in ID processes elsewhere, the problems identified at HMAS *Cerberus* were not systemic.

8. Inadequate documentation hampered the IGD's and the ANAO's ability to investigate the issues at HMAS *Cerberus*. The ANAO endorses IGD's recommendation on improving document management and file handling. Infrastructure Division intends to continue to improve its records management particularly by enhancing its use of electronic records.

9. Work has also begun on implementing an earlier ANAO recommendation on recruitment, development and retention of Defence estate staff. Infrastructure Division recognises that more needs to be done on training and skilling of estate management personnel.

10. Defence's Comprehensive Maintenance Contract (CMC) for Victoria provides for a contractor to maintain facilities at Defence bases in Victoria, including HMAS *Cerberus*. There were allegations of bias in the process of awarding the contract but the ANAO found no evidence of this. However, the process could have been improved to reflect better practice. CMCs are expected to bring about efficiencies in facilities management and support improved contract management, but management of CMCs needs to be supported by quality assurance procedures.

11. Addressing facilities maintenance reactively and with no systematic approach to risk management has further exacerbated problems at HMAS *Cerberus*. Infrastructure Division recognises there are still a number of shortcomings with its facilities maintenance and other estate services. The Division is aware of the need to make improvements and has advised that it is taking steps toward a more strategic approach to management of facilities maintenance.

12. Many of the issues identified by this audit, and the investigation by the IGD, point to the need to upgrade facilities management practices at HMAS *Cerberus* to encourage a stronger focus on performance and the protection of the interests of the Commonwealth. Leadership, training and skills development would contribute to this end.

13. Defence has acknowledged that it faces a number of key areas of risk and emerging priorities which must be monitored and addressed if it is to deliver the performance expected of it by the Government. Defence states that these include the complexity of managing and maintaining its extensive spread of bases and properties to meet capability priorities, efficiently use available resources and provide for the needs of Defence personnel.

# Key Findings

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## Review of IGD Findings (Chapter 2)

14. The ANAO's audit confirmed the findings from the IGD investigation in relation to facilities management and maintenance problems at HMAS *Cerberus*.
15. In the cases examined, the audit found inadequate contract management and a lack of consistency in keeping contractors accountable for delivering according to specification. As a result, Defence incurred greater costs for projects than if contractor performance was appropriately managed.
16. Poor documentation management has been a contributing factor in the problems experienced at HMAS *Cerberus*. It has also impeded both the IGD's and the ANAO's ability to investigate the facilities management issues.
17. Infrastructure Division has implemented an IGD recommendation on entertainment and hospitality expenditure, to accord with procurement guidelines, and is implementing IGD recommendations on document management and contractor accountability and an ANAO recommendation on staff qualifications and experience. IGD also found that, although there were certain deficiencies in ID processes elsewhere, the problems identified at HMAS *Cerberus* were not systemic.

## Ongoing issues at HMAS *Cerberus* (Chapter 3)

18. Management of fire safety issues at HMAS *Cerberus* has been appropriate. Electrical problems appear to have been resolved and are not an ongoing concern.
19. Blue/green discolouration of tap water, known as 'blue water', has been a problem from about six months after construction of the health centre at HMAS *Cerberus* in 1996. Although blue water is a problem that occurs in many parts of the world, it is difficult to identify the cause and to take remedial action. The problem cannot be fixed quickly, particularly in a facility the size of HMAS *Cerberus*, as possible solutions must be monitored through ongoing water testing to measure the results of particular strategies.
20. However, the reports and investigations of the blue water problem conducted by the various consultants have come to similar conclusions. It would, therefore, have been preferable had Defence taken more decisive action to address the problem earlier, which should be a lesson for the future.

## Contract tendering and management (Chapter 4)

21. The ANAO found no evidence to support the claim of biased tendering practice in awarding the CMC but that the process could have been improved to reflect better practice. The qualitative means of assessing the relative merits of the tendered prices in conjunction with quality were not clear, and left scope for uncertainty as to the basis of the final decision. Future tender assessments for large contracts would benefit from use of a probity adviser to advise on the process, and suitable methodology to combine the technical and pricing aspects of a tender. This would assist in reaching a more objective and defensible decision that demonstrates best value for money.

22. The use of key performance indicators (KPIs) in the CMC will allow improved assessment of contractor performance over time. There will remain a need to gather information on some of the existing input related indicators as these are useful in providing information regarding a number of compliance matters for CMC management. A key element of moving to improved KPIs is the introduction of appropriate performance monitoring devices for plant and equipment used to service buildings. Currently, there is no timetable for implementing these devices.

## Risk management (Chapter 5)

23. Infrastructure Division does not have a formal, systematic approach to risk management in contracting at HMAS *Cerberus*, of the kind envisaged by the Defence procurement policy. Given the recurring nature of some of the problems, a systematic approach to risk would have helped in managing or avoiding the facilities management problems experienced at HMAS *Cerberus*.

24. Infrastructure Division informed the ANAO that it is revising its approach to the maintenance management of the Defence estate and that this will involve a considerably more systematic and strategic focus for risk management. The new approach, based on the risk management standard, is to use an assets appraisal process that will rank facilities maintenance and the associated risk management issues on a more Defence Infrastructure-wide basis rather than a regional basis.

## Response to the report

25. In its response to the report, Defence agreed to the ANAO's three recommendations, one with qualification.

# Recommendations

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*Set out below are the ANAO's recommendations aimed at improving the effectiveness Defence's management of facilities. Report paragraph references and abbreviated Defence responses are included here, with more detailed responses shown in the body of the report.*

## **Recommendation**

### **No.1**

#### **Para 4.10**

The ANAO recommends that, on tenders for contracts of significant value, Defence consider appointing a probity adviser to advise on tender assessment procedures and provide assurance that the process accords with the tender evaluation plan and is equitable.

*Defence response:* Agreed.

## **Recommendation**

### **No.2**

#### **Para 4.22**

The ANAO recommends that Defence use a suitable methodology for assessing contract tenders to ensure that technical and pricing factors are appropriately combined to achieve an objective decision and best value for money.

*Defence response:* Agreed, with qualification.

## **Recommendation**

### **No.3**

#### **Para 4.35**

The ANAO recommends that Defence put in place a timetable for the implementation of appropriate performance monitoring devices for plant and equipment that service buildings and implement the devices at the earliest practical date.

*Defence response:* Agreed.

# **Audit Findings and Conclusions**





# 1. Introduction

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*This chapter provides information on facilities problems at HMAS Cerberus and the Inspector-General Division's investigation of allegations. It summarises findings from a recent review relevant to Infrastructure Division operations. It also sets out the audit objective and approach, and indicates the report structure.*

## Facilities problems at HMAS Cerberus

**1.1** HMAS Cerberus is a Navy base situated south-east of Melbourne, Victoria. As a major Navy training establishment, it conducts initial recruit training, and specialist category training in areas such as communications and engineering. The Australian Defence Force (ADF) Schools of Catering and Physical Training are situated there, as is a major health centre for operational and training needs.

**1.2** A major redevelopment of facilities at HMAS Cerberus began in 1994. It included building a new health centre, refurbishing the cinema and band complex and renovating the indoor pool complex. There have been a number of problems with HMAS Cerberus facilities. Allegations were made, initially by a whistleblower in Defence, concerning corruption and incompetence, defects in the facilities works, and disputes, threats and relationship issues about contract management at HMAS Cerberus and other Defence bases in Victoria. These have been raised a number of times in Parliament by Mr Anthony Byrne MP<sup>1</sup> and in *The Herald Sun* newspaper.

**1.3** Defence's Inspector-General Division (IGD), through its Management Audit Branch, investigated the issues in 2000 and reported to Defence management in February 2001.<sup>2</sup> IGD referred allegations concerning personnel issues to Defence Personnel Executive for examination. The IGD investigation focused on the whistleblower's allegations concerning the tendering process for Defence's Comprehensive Maintenance Contract (CMC) in Victoria (which includes HMAS Cerberus) and previous contract management problems.

**1.4** In summary, the IGD found procedural and managerial deficiencies in certain Defence Estate Organisation (DEO) activities and that about half the allegations investigated were either proved, or at least supported, by available evidence.<sup>3</sup> IGD found that a small number of allegations appeared to be incorrect, and that several other allegations could not be determined because relevant

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<sup>1</sup> HR Hansard 19 June 2001 pp. 27999–28002, 9 August 2001 pp. 29499–29500 and 19 March 2002 pp. 1347–1350.

<sup>2</sup> Inspector-General Division, Management Audit Branch, *Investigation of Allegations Made About the Defence Estate Organisation*, 13 February 2001, Report No.200169.

<sup>3</sup> IGD Minute to the Secretary of the Department of Defence, 21 February 2001.

departmental records were not available. The IGD made recommendations to redress the deficiencies identified.

**1.5** The main issues that relate to facilities and their management at HMAS *Cerberus* are as follows:

- problems with the design and defects in construction of the health centre that were not fixed by the designer or builder and were rectified largely at Defence cost;
- unresolved facilities problems, particularly those that pose health and safety concerns;
- inconsistencies in holding contractors accountable for performance, and inadequate documentation and recordkeeping; and
- breaches of procurement requirements and guidelines.

**1.6** Most of the facilities problems at HMAS *Cerberus* arose from 1995 to 1999. Until July 1997, Defence facilities were managed by the relevant Defence<sup>4</sup> group or Service, which, in the case of HMAS *Cerberus*, was Navy. DEO was formed in 1997 to manage Defence facilities and other estate functions on behalf of the individual groups. DEO was renamed Infrastructure Division (ID) in July 2001.

## CSIG Business Model

**1.7** ID is one of three Divisions in Defence's Corporate Services and Infrastructure Group (CSIG), and therefore operates under the CSIG Business Model. The CSIG Business Model, dating from December 2000, was designed to enable the constituent parts of CSIG to do business according to the following principles:

- a customer focus;
- one point of contact for customers;
- integration of planning, budgeting and reporting processes; and
- maintenance of strong product lines (infrastructure, information systems and service delivery) to underpin the single point of contact with the customer.

**1.8** By December 2001, however, concerns about service delivery prompted CSIG to arrange for a senior officer to review the Business Model in consultation with CSIG staff. The review, completed in February 2002, concluded that numerous improvements could be made in the delivery of CSIG services at a

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<sup>4</sup> 'Defence' comprises the Department of Defence and the Australian Defence Force (Navy, Army and Air Force).

regional level and that there were indications that enhanced service delivery in the regions is not sustainable in the long term without enhancing national office support by means of clear planning processes; a single line of reporting; and clearly defined products with associated performance criteria. It commented on confusion between the roles of the product developers (i.e. technical control) and the service deliverers and the need for a clear focus on service delivery in accordance with prescribed standards. It found that there were no or few training programs to skill people for their new role.<sup>5</sup>

**1.9** To remedy the situation and assist in applying the principles of the Business Model, the report made recommendations, with a timetable for action. These improvements would enable CSIG to deliver services in a manner seen by Defence clients as seamless, consistent across regions and responsive to their changing needs. Improvements concerning consistency of services across regions, service standards and staff training will help address facilities management issues brought to notice at HMAS *Cerberus*. The review is referred to further at paragraph 2.65.

## The ANAO audit

**1.10** In a media release on 23 August 2001 (Appendix 1), the then Minister for Defence announced that, in response to the continuing concern over facilities management at HMAS *Cerberus*, he had asked the Australian National Audit Office (ANAO) to conduct an independent investigation. The ANAO agreed to review these matters and, in doing so, to have regard to the comments made by Mr Byrne MP.

**1.11** The objective of the audit was to examine facilities management issues at HMAS *Cerberus* with a view to clarifying those of concern and ensuring that lessons would be learned from them to assist Defence facilities management generally.

**1.12** Criteria for the audit were based on the ANAO's expectation that sound facilities management in Defence would be based on the following:

- equitable tendering processes;
- sufficiently detailed and maintained documentation demonstrating the contractual obligations of both parties, relevant performance standards and assessments undertaken, and pricing structures;
- professionally managed relationships between Defence's ID and its contractors;

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<sup>5</sup> CSIG, *Review of CSIG Business Model for the Delivery of Service to CSIG Clients Report*, February 2002.

- a risk management plan compliant with Australian risk management standard AS/NZS 4360:1999 addressing issues of contract management, contractor performance, and health and safety concerns;
- contract management staff with appropriate training and experience; and
- compliance with relevant Defence policy.

**1.13** The criteria were applied to the main issues outlined above to identify any problems in the approach to facilities management at HMAS *Cerberus*.

### *Audit approach*

**1.14** The audit was undertaken in four stages. The first stage reviewed IGD findings in relation to facilities management at HMAS *Cerberus*. The second stage aimed to assess implementation of IGD recommendations. The third stage examined certain ongoing facilities issues and action taken to address them. The fourth stage of the audit considered the facilities management contract and whether risk management of facilities is adequate.

**1.15** The ANAO engaged Mr Pat Farrelly, a consultant with expertise in contract administration and tendering processes, to assist in examining allegations concerning Defence's Comprehensive Maintenance Contract (CMC) for Victoria.

**1.16** The ANAO interviewed relevant Defence personnel in Canberra, Melbourne and HMAS *Cerberus* and examined available documentation. The ANAO also interviewed representatives of a number of firms involved in providing facilities services to HMAS *Cerberus* under contract to Defence and are grateful for their assistance.

**1.17** The IGD investigation dealt with allegations concerning Defence facilities contract management in Victoria. The ANAO audit focused on issues related to facilities at HMAS *Cerberus*. The ANAO did not examine allegations concerning the facilities maintenance contract that were centred on a dispute between Defence's head contractor and a subcontractor, because they concerned a commercial relationship between two non-Commonwealth bodies.<sup>6</sup> The ANAO did, however, examine DEO's contract management role in this matter.<sup>7</sup>

**1.18** The proposed report of the audit was provided to Defence in May 2002. The report was completed after considering Defence comments received in June. The audit was conducted in conformance with ANAO auditing standards and cost \$197 000.

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<sup>6</sup> This issue was raised by Mr Anthony Byrne MP at House of Representatives Hansard 19 June 2001 pp. 27999-28002, 9 August 2001 pp. 29499-29500 and 19 March 2002 pp. 1347-1350.

<sup>7</sup> See paragraphs 2.31–2.38, 2.45, 2.46 and 4.26.

## *Previous audits*

**1.19** The ANAO has conducted three performance audits of Defence estate management.<sup>8</sup> Common elements in the reports were a need for DEO/ID to improve its financial management, contract management, compliance with formal requirements, staff training and guidance, documentation of decisions and recordkeeping. The second audit concerned Defence facilities operations, and is relevant to the present audit. An extract from the conclusion to the report is set out below.

9. The significant staff reductions made within a relatively short timeframe has decreased the knowledge base and skills available to DEO. This has been compounded by the introduction of new and significantly different management practices. Not all DEO contract management staff have the appropriate skills to manage large, complex facilities maintenance contracts in the Defence environment.

10. With the creation of DEO, the emphasis was to deliver estate services on a priority basis by region rather than by individual establishment. In practice, this has not always been the case, with variations in regional procedures resulting in a lack of transparency in decision making and with funding not always being applied to identified priorities. Regular two-way consultation between DEO and some clients did not occur which impacted adversely on DEO's ability to efficiently and effectively deliver the FACOPS [Facilities Operations] Program and on associated client satisfaction.

11. The effectiveness of Estate management could be significantly improved if better information were available to target where scarce maintenance resources should best be spent. Such information includes the capture of actual costs (Output attribution) and the contribution each asset makes to Defence capability. Australian Defence Force input in capability requirements is essential to ensure that Estate management decisions are justified on Defence priority and cost effectiveness grounds.<sup>9</sup>

**1.20** A recommendation on qualifications and experience of DEO staff made in that report was mentioned in the Minister's media release and is followed up in this report.

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<sup>8</sup> The three reports are:

- Audit Report No.37 1999–2000 *Defence Estate Project Delivery* April 2000;
- Audit Report No.26 2000–2001 *Defence Estate Facilities Operations* December 2000; and
- Audit Report No.58 2001–2002 *Defence Property Management* June 2002.

<sup>9</sup> ANAO Audit Report No.26 2000–2001 *Defence Estate Facilities Operations* paragraphs 9–11.

## Report structure

1.21 Succeeding chapters report on the four stages of the audit identified above as follows:

- Chapter 2 examines IGD findings on facilities management at HMAS *Cerberus* and the extent to which recommendations have been implemented.
- Chapter 3 considers three ongoing issues at HMAS *Cerberus* (fire protection, electricity supply and blue water) that raise health and safety concerns and reports on action taken to address them.
- Chapter 4 looks at the tender evaluation process for the CMC for Victoria and the ability of the contract to overcome problems of the kind encountered in previous maintenance contracts.
- Chapter 5 considers Defence's approach to risk management of its facilities. It looks at problems that arose at HMAS *Cerberus* from a perspective of risk management and considers Defence's proposals for learning lessons from the problems.

## 2. Review of IGD Findings

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*This chapter examines the IGD findings related to facilities management at HMAS Cerberus and the extent to which IGD recommendations have been implemented.*

**2.1** As indicated in Chapter 1, the IGD investigation focused on a whistleblower's allegations concerning the tendering process for Defence's CMC<sup>10</sup> for Victoria (which includes HMAS *Cerberus*) and previous contract management problems. The IGD found procedural and managerial deficiencies in certain DEO activities and that about half the allegations investigated were either proved, or at least supported, by available evidence.<sup>11</sup> IGD found that a small number of allegations appeared to be incorrect, and that several other allegations could not be determined because relevant departmental records were not available.

**2.2** The ANAO examined the IGD findings related to facilities management problems at HMAS *Cerberus* by reviewing relevant documentation and interviewing Defence personnel and contractor staff. The aim of this review was to confirm the findings and to ensure that ID reduces the likelihood of problems of that kind recurring by implementing the IGD recommendations.

**2.3** The findings made by IGD and the ANAO and action taken to implement IGD's recommendations by DEO<sup>12</sup> are outlined below.

### Contractor performance

#### IGD finding

**2.4** Allegations were made that DEO did not hold contractors accountable for poor performance on facilities project work at HMAS *Cerberus*. Projects included the following: the collapsed vent ducting in the indoor pool complex; the corrosion of the health centre roof; cracking and moisture seepage in the concrete slab in the health centre; blue water from health centre taps;<sup>13</sup> the unroofing of an accommodation block by wind; and problems on the West Head Gunnery Range re-roofing project.

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<sup>10</sup> A Comprehensive Maintenance Contract is used to engage a head contractor to manage and coordinate general building and facilities maintenance works, and to manage and action performance-based and scheduled fixed plant and equipment maintenance work, for a tendered sum. The contract envisages that the head contractor will engage sub-contractors. See discussion of CMCs in ANAO Audit Report No.26 2000–2001 *Defence Estate Facilities Operations* paragraph 3.33 et seq.

<sup>11</sup> IGD Minute to the Secretary of the Department of Defence, 21 February 2001.

<sup>12</sup> DEO became Infrastructure Division (ID) in July 2001.

<sup>13</sup> Blue water is a blue-green discolouration of water, apparently a result of corrosion of copper water pipes.

2.5 Several projects reviewed by IGD disclosed a clear reluctance by DEO to pursue contractors/consultants for alleged poor quality work. Both the accommodation re-roofing and health centre project records referred to aspects of poor quality design and workmanship by contractors or consultants, yet all the evidence obtained by IGD indicates that rectification work was largely at Defence expense. IGD reported that it found no evidence that effective action was taken to hold contractors or consultants responsible for the work performed on those projects.

## **ANAO findings**

2.6 ANAO findings on particular projects and issues are summarised below.

### *Indoor pool vent ducting*

2.7 The collapse of the air conditioning duct in the indoor pool complex was considered to be the responsibility of the managing contractor responsible for design and construction of the pool and associated services. In this case, Defence held the contractor accountable for poor quality work and ensured that the rectification work was completed at no further cost to the Commonwealth. Evidence shows that the managing contractor and its subcontractors met the cost of the rectification work and that Defence did not incur any costs. The managing contractor also sent a letter to the commanding officer of HMAS *Cerberus* stating that, if the pool became unusable during the rectification works, the managing contractor would meet all reasonable costs associated with relocating the training activities to the nearest pool.

### *Corrosion of health centre roof*

2.8 Excessive corrosion of the health centre roof occurred because lightning reduction cabling in contact with roof sheeting led to electrolysis between the two materials. As this was considered to be a result of a design fault, the construction contractor agreed, via a contract variation, to separate the two materials to stop further corrosion.

2.9 Minutes of the Project Control Group (a steering committee for the HMAS *Cerberus* redevelopment) Meeting on 26 September 1996 show that this was the option selected by the project director. The minutes explain that:

...it is possible that the money could be recovered from the designers, as the stuff up is theirs. This would not be resolved before a decision has to be made as to which option to adopt. The total of design error variations under review by [DEO's law firm] is approaching the \$1 million mark. It is to be expected that any claim for payment will be bitterly contested by the designer and their professional indemnity insurer. If such a case were to be won, the damages would most likely



disappear into an anonymous bucket in Canberra and not benefit either the project or the base. It also makes no economic sense to replace a roof until it fails, and this roof may last another ten years.<sup>14</sup>

**2.10** Information from the construction contractor and Project Control Group meeting minutes indicates that DEO did not pursue the design firm for the perceived design fault. The ANAO recognises that action to rectify the problem had to be taken before money could be recovered from the design firm. However, since the problem was considered to arise from the design firm's specifications, DEO might at least have taken action to recover costs associated with the remedial work. The ANAO concluded that Defence bore the additional costs and did not make adequate effort to protect the Commonwealth's interest in the matter.

### *Cracking and moisture seepage*

**2.11** In 1996, moisture seepage through cracks in the concrete slab in the health centre resulted in bubbling in the vinyl floor covering.<sup>15</sup> An independent structural design engineer found that the cracks were very fine and were not unusual for this type of structure. The engineer confirmed that the cracks were not a structural concern and expected the structure to perform well for the expected life of the building.

**2.12** Defence's superintendent of works initially pursued the construction contractor in regard to the seepage of moisture through the slab, but it was later considered to be a design-related problem and not a construction issue. The outcome was that the construction company, by means of a contract variation, was instructed to build a cut-off drain around the perimeter of the facility. As DEO did not attempt to pursue the design firm (the same firm as in paragraph 2.10) to rectify the problems, the ANAO concluded that DEO did not adequately protect the Commonwealth's interest in this case. The ANAO understands that the firm is no longer in business.

### *Blue water*

**2.13** As indicated above, there have been occurrences of blue water from the health centre taps at HMAS *Cerberus*. The problem began about six months after construction of the health centre.<sup>16</sup> More recently, there were occurrences of blue water in other buildings at HMAS *Cerberus*. Blue water is a blue-green discolouration of water, apparently a result of corrosion of copper water pipes.<sup>17</sup>

<sup>14</sup> Minutes from Project Control Group Meeting on 26 September 1996.

<sup>15</sup> Letter to designer from structural engineer regarding floor cracks, 18 January 1996.

<sup>16</sup> RAAF 6 Hospital Minute, *Investigation of Potable Water Supplies—HMAS Cerberus Health Facility*, 8 March 2000.

<sup>17</sup> According to ActewAGL, the cause of blue water is unclear. Research has found that corrosion can occur in various types of copper pipes, old or new. Blue water appears more common in pipes left still for a long time or that are not regularly used.

**2.14** Given that water experts are unclear about the cause of blue water, it could be difficult to show that blue water at the HMAS *Cerberus* health centre is a result of poor contractor performance, particularly as blue water has been found in HMAS *Cerberus* buildings that contractors on the health centre did not work on as part of the major redevelopment. IGD found that Defence had not attempted to establish responsibility for the blue water. The ANAO notes, however, that, given information from water experts, responsibility may not lie with any contractor. The blue water problem is addressed in more detail in Chapter 3.

### *Unroofing of accommodation block*

**2.15** HMAS *Cerberus* accommodation block roofs, containing asbestos, were replaced by Australian Construction Services (ACS) in 1993. In 1995, one of the roofs was blown off and, later, another roof was partially uplifted by wind. Asset Services undertook remedial works at Defence expense. At the time, ACS and Asset Services were part of the then Department of Administrative Services (DAS). Defence wrote to Asset Services indicating concern and disappointment and that it was lucky that no one had been injured. Defence pointed out to Asset Services that the roofing problems were related to 'design, superintendence or works conducted under the aegis of DAS by either ACS/Works Australia or, in this case, Asset Services. ... I trust your procedures have been reviewed and that there will be no similar incidents in the future'.<sup>18</sup>

**2.16** The ANAO acknowledges that it would have been impracticable for Defence to take legal action against DAS, since both were Commonwealth departments. However, it would have been appropriate for Defence to seek to have DAS accept responsibility for the work that led to the unroofing and for the cost of remedial action.

### *West Head Gunnery Range*

**2.17** The West Head Gunnery Range re-roofing project at HMAS *Cerberus* was undertaken in 1993–94. Water later leaked into the building through the roof. Evidence indicates that inadequate management by Defence and poor performance by sub-contractors had led to the work not being completed as originally specified. The Australian Government Solicitor's Office advised Defence that it would have a poor case for action against the contractor.

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<sup>18</sup> Department of Defence Letter to Asset Services (DAS) from Director General Facilities Navy, 29 July 1996.

## *Conclusion*

**2.18** The cases summarised above indicate instances of inadequate contract management and lack of consistency in holding contractors accountable for delivering according to contract specification. As a result, Defence incurred greater costs for projects than if contractor performance was appropriately managed. These cases occurred several years ago, and the design firm involved in two cases is understood not to be in business now. The ANAO accepts that it would no longer be practicable to pursue recovery of costs.

## **IGD recommendation on contractor accountability**

**2.19** In response to findings summarised at paragraph 2.5, IGD recommended that DEO develop capability to hold contractors accountable for poor performance.

**2.20** The recommendation has application to building contractors and maintenance contractors. In respect of the former, Infrastructure Division (ID) advised that it has changed requirements for facilities work tenders, which must now include the basis of a project quality plan that is to form part of the contract. ID is reviewing its suite of capital facilities and comprehensive maintenance contracts to improve the management of maintenance and defects during the defects liability period. The review is also examining the applicability to the construction contracts of the contract reporting methodology, titled 'Company ScoreCards', developed by the Defence Materiel Organisation.

**2.21** In respect of maintenance contractors, the ANAO found that, in line with further development of CMCs, ID has established a performance framework that identifies key performance indicators (KPIs) to be monitored. Examples of KPIs include 100 per cent maintenance defect correction and 100 per cent delivery of monthly reports within agreed timeframes. With assistance from a consultant in facilities management, ID has developed KPIs to assist ID staff prepare the monthly report on the CMC for Victoria. The report is to enable Defence to monitor performance of the head contractor under the contract.

**2.22** The CMC head contractor is required to use the Defence Estate Management System (DEMS), an information system used for logging requests from customers via the Help Desk, for invoicing and project management. This enables ID to utilise DEMS when gathering and assessing performance information. ID also holds monthly meetings with the head contractor as part of the performance framework. Performance information is further discussed in Chapter 4—Performance reporting under the CMC.

**2.23** ID's assessment of contractor accountability has weaknesses in the area of quality assurance of technical maintenance repairs. ID has confirmed that the benefits of having an independent random technical audit are being reviewed. However, the ANAO had expected that ID would already have a program of focused reviews, since Defence had agreed in 2000 to the following recommendation in an earlier ANAO performance audit report on DEO's facilities operations (FACOPS) program:

The ANAO recommends that DEO regularly monitor contract work involved in the delivery of the FACOPS Program, through a program of focused reviews, to ensure that work is being delivered as required under contract.<sup>19</sup>

**2.24** The US General Accounting Office made the following comment recently on Department of Defense (DOD) management of service contracts:

The Inspector-General [of Defense] found that oversight of contractor performance was inadequate in a majority of cases, and in some cases DOD officials could not show that they had actually reviewed the contractor's work.<sup>20</sup>

**2.25** The challenges facing Defence involve utilising the new performance framework, introducing random checks on technical maintenance work and directing contractors to meet contract requirements and to take corrective action when performance does not meet required standards.

### *Liquidated damages*

**2.26** The IGD recommendation on contractor accountability is relevant to an earlier ANAO recommendation on liquidated damages. Liquidated damages are an amount agreed in a contract as representing the cost that the principal would incur if the contractor does not meet specified contract requirements. The contractor is liable to pay the amount if the requirements are not met. A contract provision for liquidated damages helps secure contractor accountability for performance of a contract.

**2.27** An ANAO report on DEO's construction projects commented that DEO was reluctant to claim the amounts and recommended that practices in this area be reviewed and clarified.<sup>21</sup> DEO agreed to do so.

**2.28** The review was carried out by DEO and Defence Materiel Organisation. The Defence Estate Management Guide now clarifies practice on liquidated damages. It also provides management strategies and revised contract provisions

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<sup>19</sup> ANAO Audit Report No.26 2000–2001 *Defence Estate Facilities Operations*, December 2000, p. 56.

<sup>20</sup> US General Accounting Office, *Contract Management: Trends and Challenges in Acquiring Services*, GAO-01-753T, May 2001, p. 6.

<sup>21</sup> ANAO Audit Report No.37 1999–2000 *Defence Estate Project Delivery*, Recommendation No.8.

to provide Defence and industry with more flexibility in collection and management of liquidated damages.<sup>22</sup>

## CMC tendering process

### IGD finding

**2.29** There was an allegation of collusion that DEO and a tenderer colluded during the process for awarding the CMC for Victoria. IGD reviewed the tender process for the CMC in Victoria, but found no evidence to substantiate this. However, it was clear to IGD that the tender process did not equate with best practice and that weaknesses were evident in the process.

### ANAO finding

**2.30** Given the nature of the allegation, and because DEO considered the CMC a strategic approach to improving management of its facilities maintenance, the ANAO examined the processes that led to the awarding of the CMC tender in Victoria. Chapter 4 reports the results. In summary, the contract was awarded to the tenderer that DEO assessed as having the best technical merit. The qualitative means of assessing the relative merits of the tendered prices in conjunction with quality were not clear, however, and left scope for uncertainty as to the basis of the final decision. The ANAO did not find evidence of bias in tendering practice.

## Compliance with guidelines

### IGD finding

**2.31** There were allegations concerning DEO's compliance with relevant procurement policy and guidelines in relation to project work at HMAS *Cerberus*. The work concerned the Junior Sailors Galley and the Sewage Rising Main projects. However, lack of original documentation prevented IGD from confirming that projects at HMAS *Cerberus* complied with procurement guidance.

**2.32** There were also allegations of significant problems regarding the contract for the Junior Sailors Galley at HMAS *Cerberus*. These concerned doubt about the original scope of works, oral contract variations, and disagreements over delays and whether the head contractor or subcontractor had requested a delay of works. It was difficult for IGD to determine what transpired in relation to the project, as the project file was missing and the project information recovered later was inconclusive.

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<sup>22</sup> Defence Estate Management Guide, Book 4 Part 24—Management of Liquidated Damages.

**2.33** IGD could not, therefore, confirm that the scope of works was constantly being changed, in breach of the Defence Procurement Policy Manual, and that the contract work was ‘put on hold’ at the request of the head contractor. IGD was advised that, due to the impasse between the head contractor and sub-contractor, DEO proposed to take over the management of the completion of works and obtained legal advice on the way to do so. The sub-contractor did not accept DEO’s proposal, which then lapsed.

**2.34** Collusive tendering was alleged in relation to letting the Sewage Rising Main works contract. The allegation was based on the existence of copies of two different tender recommendation documents: one was to award the contract to a short-listed sub-contractor and the other was to award the contract to the head contractor for the fixed plant and equipment maintenance contract at HMAS *Cerberus*. The two tender recommendations were signed within a day of each other. This alleged non-compliance with Defence guidelines for procurement could not be confirmed by IGD due to the absence of original documentation.

## **ANAO finding**

**2.35** On the Junior Sailors Galley and Sewage Rising Main works contracts there were indications of non-compliance with guidelines. However, poor documentation made this difficult to confirm.

**2.36** Clarifying the letting and management of these contracts was also problematic due to poor documentation and management of the documentation. The following guidance reinforces the importance of accurate documentation to successfully manage contracts:

The success of a contract may very well depend on the accuracy and credibility of the information recorded. Therefore, it is important to maintain and review the information gathered and keep it organised and user friendly for easy and reliable access.<sup>23</sup>

**2.37** Documentation of this project was inconsistent with the following Defence procurement policy guidance:

Each step of the procurement process must be adequately documented to ensure accountability and reporting requirements are met. Application of these principles ensures that the use of public moneys, the purchasing process and purchasing decisions are visible to the Parliament and can withstand public scrutiny.<sup>24</sup>

**2.38** The ANAO confirmed the IGD finding that the available evidence related to these projects does not conclusively show a breach of the procurement guidelines related to changing the scope of works and tender evaluations by Defence. The

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<sup>23</sup> ANAO Better Practice Guide, *Contract Management*, February 2001, p. 55.

<sup>24</sup> Defence Procurement Policy Manual, July 1999, Section 2-Chapter 5, Pt 504.

ANAO also confirmed IGD's understanding of DEO's attempt to obtain completion of the Junior Sailors Galley work by contracting direct with the head contractor's sub-contractor. It was also alleged that DEO's attempt was inappropriate. DEO records indicate that it was willing to include \$24 950 in the new contract price to cover claims for delays and interest while questioning the validity of the claim. In the event, the proposed new contract lapsed and the money was not paid.

## Contravention of hospitality and entertainment policy

### *IGD finding and recommendation*

**2.39** It was alleged that two senior DEO officers attended a dinner with officers of a firm tendering for the CMC in Victoria, at the tenderer's expense, during the process of evaluating tenders for the CMC in March 2000. DEO staff appear to have accepted hospitality from an existing contractor in two separate instances, of which one was during the tender evaluation period for the CMC for Victoria and involved a tenderer for the CMC. The acceptance of hospitality could have created the perception of a lack of fairness in the tender evaluation process and appears to be a conflict of interest situation, in breach of relevant Defence ethics requirements. It was also in breach of Defence Circular Memorandum No.53/98, which states that 'where those offers have even the slightest potential to give rise to the appearance of a conflict of interest they should be politely refused'.

**2.40** IGD recommended that DEO:

- promulgate instructions, drawing managers' attention to extant policy, to ensure entertainment and hospitality expenditure is properly approved; and
- direct staff to comply with Defence Procurement Guidelines. In particular, in regard to requests for tender which meet the open tender threshold, either follow the open tender process, or fully document the reasons for not doing so.

### **ANAO finding**

**2.41** Defence policy and guidelines give direction to Defence personnel about hospitality and conflict of interest issues. The Defence Procurement Policy Manual states that 'because of the particular sensitivity of the evaluation of tenderers, entertainment is not to be accepted by Defence personnel while they are engaged in those activities'.<sup>25</sup> Offers of hospitality are dealt with in Defence Circular Memorandum No.53/98. Evidence sighted by the ANAO supports the IGD finding. The ANAO notes that the particular tenderer did not win the CMC.

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<sup>25</sup> Defence Procurement Policy Manual, July 1999, Section 2-Chapter 3, Pt 310.



**2.42** The ANAO found that steps taken by Defence to implement the IGD recommendations involved sending instructions in Defence Minutes to all ID executive staff. In regard to entertainment and hospitality expenditure, the Head of ID reminded staff of the policies and guidelines that must be adhered to in the course of doing business. These are set out in the Chief Executive Instructions, a Defence Circular Memorandum, the Defence Procurement Policy Manual, and Defence Procurement Guidelines. Also ID personnel from Canberra conducted workshops on Defence Procurement Policies and Guidelines, with local ID personnel and staff from the head contractor.

## Recordkeeping

### IGD finding and recommendation

**2.43** Poor documentation management in DEO contributed to facilities management problems at HMAS *Cerberus* and made it difficult for the IGD to investigate the issues. DEO Project Delivery officers were unable to provide IGD with the complete set of relevant files for projects at HMAS *Cerberus* for the re-roofing of accommodation blocks and the vent ducting for the indoor pool complex. The files were considered essential to IGD review work in relation to several allegations. Without the files, it was not possible to reach a detailed conclusion in regard to the allegations. IGD also found that there was no efficient system in place to locate contract documentation. In response to requests for the files, the then Head of Defence Estate informed IGD in October 2000 that ‘the missing files...have not been located. ... I believe an additional search would not prove beneficial’.<sup>26</sup> The files would have helped IGD confirm action Defence took when projects such as these resulted in problems.

**2.44** IGD recommended that DEO ‘improve document handling and file management procedures, noting the need to retain and control files and contract records. Implementation of the Document and Records Management System (DRMS) should be considered’.

### ANAO finding

**2.45** The ANAO, too, was unable to locate Defence documentation on the accommodation re-roofing and indoor pool complex vent-ducting projects. For similar reasons, IGD and the ANAO experienced difficulties in examining DEO’s role in the contractual problems between the head contractor and the sub-contractor on the Junior Sailors Galley tiling contract at HMAS *Cerberus*. The dispute was a significant issue raised in Parliament by Mr Byrne MP.

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<sup>26</sup> Department of Defence Minute HDE 191/2000, 17 October 2000.



**2.46** Incomplete and conflicting documentation on this issue made it impossible to confirm the original scope of the Junior Sailors Galley tiling contract or whether it had been varied and whether the works had been delayed. Resolution of this contractual problem by the parties involved has been particularly difficult and the lack of adequate documentation has compounded the problem. The ANAO confirms the IGD finding of poor documentation management in relation to a number of projects and that no efficient system was in place to locate contract documentation.

**2.47** In August 2001 the then Head of ID informed the Minister for Defence that ID maintains central file records for capital procurement projects and CMCs and that Estate Operations Section has restructured its file system to accord with this direction.<sup>27</sup>

**2.48** ID has developed a central filing system for all project work for the Victorian region. This system is monitored and controlled by the contract administration section and files remain in the ID Victorian regional office. A document management system records location of files while they are being used in the regional office. A project correspondence and document register has been created to maintain contract information when a new project begins. As a result of previous documentation problems, ID maintains its own files, separate from the contractor's records.

**2.49** The ANAO endorses the IGD recommendation on improving document handling and file management procedures and notes that ID has advised its intention to continue to improve its records management by reducing its reliance on documents and enhancing its use of electronic records. The ANAO's report on Defence facilities operations had commented that documentation relating to procurement decisions, and required to support payments, was frequently unavailable.<sup>28</sup>

**2.50** A recent ANAO report noted the importance of proper document management by Commonwealth agencies: 'recordkeeping is an essential enabler in any organisation's corporate governance and critical to accountability'.<sup>29</sup> The desired outcome from document management improvements is that ID achieves sustainable recordkeeping that can aid management, withstand changes in organisation and assist accountability.

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<sup>27</sup> Department of Defence Minute HI 31/2001: Attachment A, Head of ID to Minister for Defence, 24 August 2001.

<sup>28</sup> ANAO Audit Report No.26 2000–2001 *Defence Estate Facilities Operations*, Chapter 3.

<sup>29</sup> ANAO Audit Report No.45 2001–2002, *Recordkeeping*, May 2002.

## Workforce recruitment, development and retention

**2.51** In his media release (Appendix 1) the then Minister for Defence said that he had directed that the Department implement by the end of the 2000–01 financial year the recommendations of an earlier ANAO report concerning the qualifications and experience levels of staff in DEO with a view to ensuring that all staff are able to meet the high standards in defence estate management expected by the Government (see paragraph 1.18).

**2.52** The ANAO recommendation was that DEO review its workforce recruitment, development and retention policies with the aim of ensuring the availability of staff with appropriate qualifications and experience to meet its program objectives.<sup>30</sup> Defence agreed to the recommendation at the time. The recommendation arose from ANAO findings that significant staff reductions made had decreased the knowledge base and skills available to DEO and that not all DEO contract management staff had the appropriate skills to manage large, complex facilities maintenance contracts in the Defence environment.

**2.53** The Joint Committee of Public Accounts and Audit reviewed the audit report in 2001. The JCPAA indicated its support for the ANAO report and recommended that Defence review its performance indicators for DEO staff so that staff are encouraged to develop essential management and financial skills.<sup>31</sup>

**2.54** ID is taking steps regarding workforce recruitment, development and retention. ID recruited six new graduates in 2002, of whom four are graduates with engineering qualifications. Information provided by the Manager of ID in Victoria indicates that a 'Plan on a Page' (part of a Defence-wide initiative) has been introduced as part of a performance assessment framework for improving and developing the skills of ID personnel. The Plan on a Page is to allow managers, in consultation with staff, to identify the skill sets and training requirements of staff to achieve the outcomes set. Reviewed every six months, it comes under the Civilian Performance Framework and is part of 'Salary Progression and Personal/Professional Development'. Training sessions are organised and conducted to provide personnel with the necessary knowledge to fulfil their roles in ID and, as part of the Plan on a Page, the completion of such courses is recorded.

**2.55** Corporate Services and Infrastructure Group, of which ID is a part, recognises that more work is needed on the training and skills of personnel. As noted at paragraph 1.8, a recent Group review found that there were no or few training programs to skill people for their new role.

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<sup>30</sup> Audit Report No.26 2000–2001 *Defence Estate Facilities Operations* December 2000, Recommendation No.2, paragraph 3.55.

<sup>31</sup> Joint Committee of Public Accounts and Audit, *Report 385*, August 2001, Recommendation 5, paragraph 4.64.

**2.56** *The Defence Plan* acknowledges that Defence recruitment and retention are among several mission-critical issues that have, for some years, involved duplicated effort, nugatory work and no clear whole-of-Defence strategy to address them. The Defence Plan indicates that a new whole-of-Defence strategy map will assist in focusing resources on such issues.<sup>32</sup>

## IGD's Australia-wide review of ID Projects

**2.57** In his media release (Appendix 1) the then Minister for Defence stated that the Inspector-General had been requested to audit facilities management in States other than Victoria to ensure the problems at HMAS *Cerberus* were not reflected elsewhere.

**2.58** IGD conducted these audits concurrently with the ANAO audit. IGD subsequently reported that it had found that, although there were certain deficiencies in ID processes, the problems identified at HMAS *Cerberus* were not systemic.<sup>33</sup> IGD discovered a few examples where Defence failed to hold contractors accountable for their performance but this did not appear to be a widespread problem. The Minister was advised that detailed reports with recommendations to address these deficiencies identified during the review would be provided to ID for action.

## Follow-up of IGD recommendations

**2.59** The Joint Committee of Public Accounts and Audit (JCPAA) has frequently indicated its concerns about Defence's follow-up of recommendations by the ANAO, IGD and the JCPAA. IGD established the Audit Recommendations Management System (ARMS) as a means of monitoring the implementation of recommendations for the information of the Defence Audit Committee.

**2.60** The JCPAA repeated its concerns in 2001 and commented that:

The Committee notes Defence's putting in place controls to ensure that recommendations made by the ANAO, Defence internal audit [IGD] and the JCPAA are routinely monitored. The Committee expects the implementation of follow-up mechanisms to systematically report on outstanding recommendations which have not been implemented.<sup>34</sup>

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<sup>32</sup> The Defence Plan (first version, 2001), Foreword by the Secretary of Defence and the Chief of the Defence Force.

<sup>33</sup> Department of Defence Minute SEC820/01, Management Audit Branch Review of Defence Infrastructure, 13 November 2001.

<sup>34</sup> Joint Committee of Public Accounts and Audit, *Report 385*, August 2001, p. 38.

**2.61** Accordingly the ANAO expected that the IGD recommendations arising from its investigation of facilities management for the Minister would be recorded and tracked on ARMS. Their absence from ARMS, however, made it more difficult to establish their status and to track progress in their implementation. As the recommendations are still to be fully implemented, better practice would indicate that the recommendations, and the subsequent recommendations referred to at paragraph 2.58, should be formally recorded on a system such as ARMS to ensure that their implementation is kept under review by senior management and the Defence Audit Committee. (Defence advised the ANAO in June 2002 that recommendations arising from IGD investigations are not entered on ARMS but that recommendations arising from the IGD audit report of November 2001 were entered on ARMS in April 2002.)

## ID's future approach

**2.62** The findings set out in this chapter have some similarities with those in the ANAO's earlier reports on Defence Estate management, mentioned at paragraph 1.18. Common elements in those reports were a need for DEO/ID to improve financial management, contract management, compliance with formal requirements, staff training and guidance, documentation of decisions and recordkeeping.

**2.63** It was apparent in those reports that Defence Estate management and maintenance had not received attention commensurate with the size of the task. At the time of the ANAO report on facilities operations, the Strategic Plan for the Defence Estate stated that 'Maintenance has traditionally been treated as a lower order business issue: it is often regarded as unproductive; unimportant; and unglamorous'.<sup>35</sup> Recent discussions with ID management have indicated, however, that facilities management, and estate operations generally, is to receive attention in the context of an integrated CSIG.

**2.64** In the response to the ANAO's discussion paper (March 2002), ID added general comments indicating that:

- the discussion paper recognised that there are still a number of shortcomings by contractor and Defence staff involved with the delivery of regional services, and this reflects the evolving nature of the operations as Defence and Industry address the changed contractual arrangements; and
- process improvements would be considered in the national context, and changes that would support or improve transparency and public accountability of regional processes will be included in the regional change agenda.

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<sup>35</sup> Strategic Plan for the Defence Estate, Part 7-7 Facilities Operations, quoted in ANAO Audit Report No.26 2000–2001 *Defence Estate Facilities Operations*, p. 91.

**2.65** Subsequent discussions with ID management in April 2002, at the close of the audit, indicated that new senior executives in CSIG and ID were aware of the need to make changes to assist the regional offices in providing services to Defence clients. In response to the situation disclosed by the CSIG Business Model review (see paragraph 1.8), they had proposals in hand for the next step in implementing the Business Model and improving the integration of CSIG's three Divisions. A major reorganisation in CSIG would aim to deliver services in a manner seen by Defence clients as seamless, consistent across regions and responsive to their changing needs. This would help address facilities management issues brought to notice at HMAS *Cerberus*.

**2.66** More broadly, Defence acknowledges that it faces a number of key areas of risk and emerging priorities which must be monitored and addressed if it is to deliver the performance expected of it by the Government. Defence states that these include the complexity of managing and maintaining its extensive spread of bases and properties to meet capability priorities, efficiently use available resources and provide for the needs of Defence personnel.<sup>36</sup>

## Conclusion

**2.67** The ANAO's audit confirmed the findings made by IGD in relation to facilities management and maintenance problems at HMAS *Cerberus*. These relate to cases of inadequate contract management and inconsistent approaches to ensuring contractor accountability for performance, breaches of procurement requirements and guidelines, and inadequate documentation and recordkeeping. ID has implemented an IGD recommendation on entertainment and hospitality expenditure, and is implementing IGD recommendations on document management and contractor accountability and an ANAO recommendation on staff qualifications and experience. IGD recommendations on facilities management need to be formally recorded and monitored to ensure appropriate and timely action is taken to implement them.

**2.68** Action being taken by ID should assist in avoiding similar facilities management problems in the future. IGD found that, although there were certain deficiencies in ID processes elsewhere, the problems identified at HMAS *Cerberus* were not systemic. Nevertheless, new senior executives in CSIG and ID were aware of the need to make changes to assist the regional offices to improve their work and the services they provide.

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<sup>36</sup> *Portfolio Budget Statements 2002–03—Defence Portfolio*, p. 5.

## 3. Ongoing Issues at HMAS Cerberus

*This chapter considers issues concerning fire precautions, electricity and blue water at HMAS Cerberus. These issues formed part of the allegations investigated by IGD. The ANAO checked their current status because of the health and safety issues involved.*

**3.1** The ANAO identified a number of safety-related issues at the health centre at HMAS Cerberus that did not appear to have been resolved. These concerned fire safety, electric shock from light switches and blue water from taps. The ANAO checked to ensure that management had these issues in hand.

### Fire safety

**3.2** During the acceptance stage of the new health centre at HMAS Cerberus in 1996, fire safety deficiencies were identified in the roof space. Evidence indicates that the building was fully occupied but the 'important fire protection of exposed timber and steel members traversing the fire-walls remain incomplete'.<sup>37</sup> The building designer, in conjunction with fire protection consultants, undertook remedial work to overcome fire safety deficiencies. This was to enable the final certificate of completion for fire resistance protection to structural members to be presented on 20 August 1996 and to indicate that the problems had been addressed. Despite fire certification, fire safety deficiencies were still perceived to be an issue by some parties involved. Minutes of the December 1996 meeting of the Project Control Group stated that

A detailed reinspection by the building surveyor and structural engineer has been arranged to identify all [fire-related] non-conformances. When the report is received, First Assistant Secretary Facilities and Property recommended a meeting with the builder to ascertain which defects are agreed as the builder's responsibility for rectification.<sup>38</sup>

**3.3** During 2001, two reviews were conducted into fire safety issues at HMAS Cerberus. The head contractor instigated the first review as a result of concerns about the adequacy of fire and smoke doors in the buildings at HMAS Cerberus. This review led to the programming of works on the Defence Estate Management System (DEMS) to have unsuitable fire and smoke doors replaced.

**3.4** For the second review, ID commissioned a consultant to make a visual inspection of the built facilities at HMAS Cerberus to evaluate structural soundness and compliance of each building in relation to various building codes.

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<sup>37</sup> Letter from building certifier to designer 4 June 1996 regarding Fire Resistance Levels in Health Care Centre.

<sup>38</sup> Minutes of Project Control Group Meeting held on 3 December 1996.

The review identified a number of issues related mainly to fire safety compliance and recommended remedial action. The ID Manager for Victoria informed the Director for Estate Operations in Canberra of action taken as a result of the recommendations. Action was taken in line with priorities assigned by the consultant, with an emphasis on safety issues. Fire safety issues related to accommodation and the Marine Engineering Demonstration building were the highest priority problems addressed.

**3.5** Defence's approach to the recommendations indicates that safety concerns were addressed.

## Electricity issues

**3.6** Electricity issues were of concern during the acceptance stage of the health centre. IGD's interview with the previous ID project manager for HMAS *Cerberus* revealed that incorrect electrical fittings resulted in staff receiving electric shocks. A fax from United Energy, dated 8 March 1996, stated that a substation at the health centre contravened the Building Code of Australia and the Electricity Supply and Construction Regulations 1988. A number of other electrical issues were to be resolved before approval to energise the building was given. The building certifier's letter of 14 March 1996 to the contracted superintendent of works stated that the building certifier had been requested to undertake discussions with United Energy with the aim of reinstating electricity as soon as possible.

**3.7** Minutes of the Project Control Group (a steering committee for the HMAS *Cerberus* redevelopment) and Occupational Health and Safety (OH&S) records at HMAS *Cerberus* indicate that there were electrical problems during the redevelopment of the health centre. However, there was no indication that this was an ongoing problem. The CMC head contract firm informed the ANAO that it had recently investigated electrical concerns without finding any problems.

**3.8** The Medical Administration Officer at HMAS *Cerberus* demonstrated to the ANAO team that some of the light switches at the health centre give off a flash when switched on. Maintenance staff suggested that this may be due to the type of light switch used and that, although there may be no safety risk, the flash may startle the user. The ANAO found that, although this had been a concern at the health centre for some time, there had been no recent reports of electric shocks and it appeared to be no longer a concern.



## Blue water

**3.9** As indicated in paragraph 2.13, blue water from taps at the health centre at HMAS *Cerberus* has been an ongoing problem. Blue water is understood to result from elevated copper concentrations, which, in drinking water, represent a danger to health. Understandably, this has been a concern to staff and patients of the health centre.

**3.10** Although blue water is a problem that occurs in many parts of the world, it is difficult to identify the cause and to take remedial action.<sup>39</sup> Blue water was observed at the new health centre within six months of opening in 1996 and it has not been remedied. Attempts to resolve the problem began in December 1996. When the problem began, DEO had not been formed. Navy was responsible for the facilities at HMAS *Cerberus* and associated maintenance at the time, and remained so until DEO was formed in July 1997 to take over Defence facilities management responsibilities. South East Water's water quality sampling and testing results were provided to the head contractor in June 1997. There appears to have been no further action to remedy the blue water problem from June 1997 to April 1999.

**3.11** The CSIRO examined the blue water problem at HMAS *Cerberus* in 1999 and made recommendations.<sup>40</sup> A later CSIRO report confirmed that, following the 1999 CSIRO report, the head contractor had undertaken a program of regular water flushing and copper analysis in an attempt to alleviate the problem and arranged for regular collection of water samples from the health centre to assess the effectiveness of the flushing program.<sup>41</sup> The second CSIRO review also discovered blue water in another building at HMAS *Cerberus*.

**3.12** In February 2000, an investigation by suitably qualified Defence personnel confirmed that 'a high level of copper remains present in the water four years after construction. This form of control (flushing) must be considered inadequate'.<sup>42</sup> A further consultancy report, in November 2001, made similar comments.<sup>43</sup>

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<sup>39</sup> Blue Green Water & Copper Corrosion, WSAA Water Quality Quick Guide July 2001, Water Services Association of Australia.

<sup>40</sup> Recommendations concerning copper corrosion at HMAS *Cerberus* Health Centre—CSIRO Manufacturing Science and Technology, 25 October 1999.

<sup>41</sup> Review of Copper Corrosion at HMAS *Cerberus* Health Centre, Roger O'Halloran—CSIRO Manufacturing Science and Technology, 21 March 2000.

<sup>42</sup> RAAF 6 Hospital Minute, *Investigation of Potable Water Supplies—HMAS Cerberus Health Facility*, 8/3/2000.

<sup>43</sup> The Environmental Health and Engineering Consultation to HMAS *Cerberus* Report, 2 November 2001.



**3.13** These reports recommended a number of strategies to address the blue water problem. These included action to:

- flush water regularly, and sample water to measure the effectiveness of this approach;
- replace copper piping network with PVC tubing or install in-line filters;
- develop and implement a monthly water quality monitoring program; and
- continue to hold community meetings to keep base personnel informed of test results and the action plan to improve quality.

**3.14** ID adopted an ordered approach in applying these strategies, commencing with the simplest and then adopting more resource-intensive strategies. Following the program of regular water flushing and sampling, the head contractor moved to replace the copper piping with PVC tubes.

**3.15** In response to the problem, bottled water is being brought into the health centre to provide safe drinking water. Such action accords with the general ActewAGL warning that 'severe copper corrosion can also increase copper concentrations in drinking water to levels that may affect health, both in the short term and long term'.<sup>44</sup> The Navy commanding officer at HMAS *Cerberus* issued information updates on the problem in September 2001. This included an information memorandum on water testing results and action that individuals should take to avoid consuming blue water.

**3.16** A memorandum was also forwarded to relevant managers directing actions to be taken to mitigate the risk of personnel consuming blue water. These included turning off all water coolers connected to mains supply and placing signs in buildings where high readings have been detected, advising personnel to use only high-usage taps and after flushing for 30 seconds. An environmental health and engineering consultant considered that the initiatives taken in educating base personnel on the problem were excellent.

**3.17** However, although anecdotal evidence indicates that the blue water problem was well known to personnel at HMAS *Cerberus* for some years, the ANAO found no firm evidence of advice to staff on the problem prior to August 2001. In response to this finding, the Chief of Navy informed the ANAO that 'anecdotal evidence of at least equal strength to that obtained by the ANAO indicates that Navy and the Command element of HMAS *Cerberus* acted appropriately in dealing with the blue water problem in the HCC (Health Centre *Cerberus*) once it was discovered'.<sup>45</sup>

<sup>44</sup> <[www.actewagl.com.au](http://www.actewagl.com.au)>, 19 November 2001.

<sup>45</sup> Chief of Navy minute CN97/23898, *ANAO Discussion Paper on Facilities Management at HMAS Cerberus*, 9 April 2002.

**3.18** At the time of the ANAO audit, copper pipes in the health centre were being replaced. A project brief showed that copper pipes are also to be replaced in accommodation buildings affected by blue water. A consultant was developing testing and monitoring documents for an ongoing program to check water quality. It would have been preferable, however, had Defence taken more decisive action to remedy the problem earlier, especially in the period from June 1997 to April 1999. Defence, for example, could have proceeded much earlier to the graduated remediation plan based on the results of fewer and more timely expert analysis.

## Conclusion

**3.19** Management of fire safety issues at HMAS *Cerberus* has been appropriate. Electrical problems appear to have been resolved and are not an ongoing concern.

**3.20** Blue water continues to be a problem at HMAS *Cerberus*. In consultation with the head contractor, ID is addressing this. The problem cannot be fixed quickly, particularly in a facility the size of HMAS *Cerberus*. Possible solutions must be monitored through ongoing water testing to measure the results of particular strategies. However, the reports and investigations conducted by the various consultants have come to similar conclusions. Consequently, it would have been preferable had Defence taken more decisive action to remedy the problem earlier, which should be a lesson for the future.

## 4. Contract Tendering and Management

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*This chapter examines the tender evaluation process for the Comprehensive Maintenance Contract for Victoria. It addresses the methodology used to compare tenders. The ability of the contract to overcome the problems of the kind encountered in previous maintenance contracts is also examined.*

**4.1** With the formation of DEO in 1997, there was a need to introduce a new contracting strategy in order to meet the lower staff targets within the Estate function. As a result, DEO devised regional Comprehensive Maintenance Contracts (CMC), each with a single managing contractor, to replace Defence's arrangements for separate managing contractors for general building and facilities maintenance and for fixed plant and equipment maintenance and any extant standing offer arrangements. The audit examined the tender process for the CMC for the Victoria region (which includes HMAS *Cerberus*). Defence estimated that services under that CMC would cost \$18 million over three years.

**4.2** Due to an allegation of collusion between DEO and a tenderer in the tender assessment process for the CMC, as outlined at paragraph 2.29, and the importance that DEO attaches to the CMC, the ANAO examined the process for evidence of bias in awarding the tender. A number of matters affecting CMC management were also reviewed to assess whether the contractual arrangements were appropriate and whether they would reduce the likelihood of problems of the kind encountered on earlier contracts at HMAS *Cerberus*. The audit drew on material compiled by IGD and Defence records relating to the CMC tender and contract management.

### CMC tender assessment process

**4.3** The ANAO examined records available regarding DEO's tender assessment process but did not examine the four individual tenders submitted. The assessment had regard to the Commonwealth Procurement Guidelines (March 1998) and the Defence Procurement Policy Manual (July 1999). Key documents examined were the Tender Evaluation Plan and the Tender Evaluation Board report.

## Tender Evaluation Plan

4.4 The Tender Evaluation Plan (TEP) covered relevant issues, such as evaluation criteria, tender aim and industry debriefings. It indicated that:

Price will not be scored and a subjective evaluation based on value for money will be carried out. As the tender process is one of a two-envelope system, tenders shall be initially ranked on technical merit.

4.5 There was no weighting given between technical criteria and price for each tender. The ANAO suggests that, to bring together technical merit assessment, and price and other financial aspects of a tender, use could be made of a quantitative method as a way of making an overall assessment of value for money in place of subjective evaluation.<sup>46</sup> This would be more important in cases where the technical rankings were relatively similar for two tenders.

4.6 The TEP also referred to the need to consider the 'risk to Defence' of a particular tender. This aspect also appeared to be considered in a subjective manner.

4.7 The TEP indicated that the Tender Evaluation Board (TEB) would comprise the Estate Operations Manager for Victoria/Tasmania, a representative from DEO Canberra and an independent industry representative. In the event, the TEB comprised three DEO staff (from Melbourne, Canberra and Sydney). There is no explanation on file for omitting an independent industry representative.

4.8 The only reference to review of the process in the papers examined was to a review by DEO branch heads in Canberra. The TEP made no mention of the use of a probity adviser (or probity auditor) as part of the tender assessment process, and there was no requirement to use one. The ANAO suggests that, in future tender assessments for contracts of significant value, the appointment of a probity adviser would make the process more robust and avoid, or at least minimise, risks that tender assessments do not meet appropriate standards of probity and equity.

4.9 A probity adviser could examine and comment on the tender documentation and tender evaluation plans, as well as observe the evaluation process itself, and consider matters from a probity or equity viewpoint. The adviser could indicate any concerns to the Tender Evaluation Board or other Defence staff as appropriate. This would allow any concerns to be dealt with immediately and give confidence that a fair and equitable tender process was undertaken.

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<sup>46</sup> Application of quantitative methodologies for tender evaluation in the Defence Procurement Policy Manual, Pt 734-751, would help make a tender outcome more defensible.

## Recommendation No.1

**4.10** The ANAO recommends that, on tenders for contracts of significant value, Defence consider appointing a probity adviser to advise on tender assessment procedures and provide assurance that the process accords with the tender evaluation plan and is equitable.

### *Defence response*

**4.11** Agreed. Defence agrees to appoint a probity adviser for a period of two years for all individual facilities contracts above \$20 million. At that stage, an assessment will be made as to the benefits resulting from the process and a decision will be made on whether the practice should continue.

## Tender Evaluation Board report

**4.12** DEO engaged a consultant to undertake an important part of the tender administration and assessment process. Based on the consultant's proposal to provide services, the consultant was involved in tender briefing; responses to tenderer queries; distribution of updates or alterations of the tender documentation to all tenderers; maintenance of tender records; preparation of a technical evaluation of tender proposals; participation in TEB deliberations; and preparation of a report on TEB deliberations.

**4.13** The TEB report notes that all members of the TEB indicated that they did not have any conflict of interest in relation to the contract. However, the report does not state that the consultant was asked to confirm that there was no such conflict.

**4.14** The TEB found that the initial tenders did not meet Request for Tender requirements. Defence obtained legal advice, and revised tenders were submitted. Emails from Defence's legal adviser and letters to the tenderers indicate that the legal advice was followed. The ANAO considers that it was appropriate to seek, and act upon, legal advice in the circumstances.

**4.15** Part of the proposed contract defined work to be performed under a Reimbursable Work Limit (RWL).<sup>47</sup> This provides that the cost of maintenance work under the RWL (e.g. less than \$1000) would be met by the contractor as part of its fee, and the cost of maintenance work in excess of the RWL would be met by Defence. The level of the RWL would therefore result in a different estimation of the value of the contract. Tenderers were required to tender on the basis of three different RWL values: \$1000; \$2000; and \$3000. The tenderers submitted different prices for each of the RWLs. The TEB report estimated the

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<sup>47</sup> In the CMC, Reimbursable Work Limit was renamed Repair Work Liability.

Defence exposure to additional expenditure for the RWLs, as shown in Table 4.1.

**Table 4.1**

**Possible Defence Exposure to additional expenditure**

RWL Limit	Estimated Defence Exposure for 3 years
\$1000	\$2 000 000
\$2000	\$1 000 000
\$3000	\$750 000

Source: Tender Evaluation Board report

**4.16** The TEB report does not indicate how these exposures were estimated. It is unclear whether the estimates were based on experience with similar contracts; a model based on assumptions regarding the money amount and frequency of maintenance work and associated administrative costs associated with different RWLs; or some other basis. The estimated exposures were added to each tender price to ascertain the least-cost tender options for each tenderer. For three tenders, the lowest estimated cost to Defence occurred with an RWL of \$2000 and, for one tender (the successful tender), the lowest estimated cost to Defence was with an RWL of \$1000. Without information on the way the exposures were estimated, it is not practicable to confirm whether Defence chose the tender and RWL that would provide Defence with the best overall value for money.

**4.17** The final assessment of the best two tenders compared the cost to Defence of one tender with an RWL of \$1000 (with the tendered price increased by \$2 million) with the cost to Defence of a tender with an RWL of \$2000 (with the tendered price increased by \$1 million).

**4.18** The assessment ranked one tender as being considerably better than the other on technical grounds (although both appeared to be satisfactory or acceptable on technical grounds). The tender that was ranked better on technical grounds (32 per cent better based on a comparison of weighted technical criteria) would be more costly to Defence (by seven per cent) on the basis of adjusted tender prices as indicated above.

**4.19** The difference in cost to Defence of seven per cent in the comparison made by the TEB using estimated RWL exposures depended on the size of those estimated exposures. The ANAO notes the differences shown by comparison of the two leading tenders' raw tender prices in Table 4.2.

**Table 4.2****Comparison of tendered prices**

<b>Basis of Comparison</b>	<b>Excess of price of successful tender over price of second best tender (%)</b>
\$1000 RWL option for both tenders	4
\$2000 RWL option for both tenders	13
\$3000 RWL option for both tenders	14

Source: Tender Evaluation Board report

**4.20** The TEB concluded that ‘the [successful tenderer] offer represents significantly better value for money than the other three tenderers’.

**4.21** As indicated earlier, the technical and price elements of the tender were combined to make a subjective assessment of value for money, and it is unclear how the TEB estimated RWL exposures to adjust tendered prices for price comparisons. The technical assessments made by the TEB (and advised by the external consultant), indicate that the successful tender was considerably better in technical terms. Nevertheless, the qualitative means used to bring together price and quality are unstated and leave the basis for the final deliberation unclear. The methodology employed and the evidence in the TEB report make it difficult to see how the final TEB decision was made. The ANAO found that the methodology used and the written evidence available in the TEB report leave scope for uncertainty as to the basis of the final decision.

## **Recommendation No.2**

**4.22** The ANAO recommends that Defence use a suitable methodology for assessing contract tenders to ensure that technical and pricing factors are appropriately combined to achieve an objective decision and best value for money.

### *Defence response*

**4.23** Agreed, with qualification. Facilities contracts are relatively simple and are usually fixed price lump sum contracts, with schedules of rates where necessary. Therefore, there are very few occasions requiring extensive pricing comparison of multiple components of a tender. The objective assessment of technical and pricing factors to determine the best value for money is a management decision, which in facilities contracts does not generally require a complex methodology to reach a supportable decision.



## CMC provisions

**4.24** The audit sought to assess, from a management viewpoint, whether the CMC aimed to protect the Commonwealth's interests.

**4.25** The contract contains safeguards of a kind expected in a contract of this type. For example, the types of insurance specified in the contract are consistent with the types of insurance specified in the tender documentation.

**4.26** An allegation was made that DEO attempted to take inappropriate action to resolve a problem concerning the CMC's predecessor (a general building and facilities maintenance contract). It concerned DEO's proposed action to try to resolve a dispute between its head contractor and a sub-contractor by becoming directly involved in the dispute. As indicated at paragraph 2.33, the ANAO found that the proposed action did not proceed. Under the CMC, however, Defence has a head contractor to manage sub-contractors and can avoid being involved in the detail of contract delivery, especially by a sub-contractor. Clause 10 of the CMC contract gives Defence powers to enforce delivery by the head contractor where problems occur between the head contractor and sub-contractor.

**4.27** The CMC contains various access,<sup>48</sup> investigation and audit provisions in the contract. Clause 11.8 allows Defence access to the contractor's activities and facilities necessary for examination and testing of any work or materials (including relating to sub-contract work). This would enable Defence to carry out quality assurance on work being undertaken. Defence advises that, so far, there has been no quality assurance carried out on the technical component of a repair, although it is considering the benefits of doing so by independent random technical audits. The ANAO considers that implementation of some form of technical quality assurance would help protect Defence's long-term interests. The contract has now been in operation for almost two years and technical quality assurance should have formed part of ongoing management oversight from the outset.

**4.28** Another key risk with a contract of this type is the accuracy of the data on which the tenderers have made their estimates. The ANAO understands that tenderers were provided with substantial information about the facilities, equipment and other assets to be covered by the CMC. Inaccurate information could result in extra costs to the Commonwealth (if assets had been understated) or over-payment to the contractor (if assets had been overstated). The ANAO notes that, as a result of Defence improving its asset register, there has been a

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<sup>48</sup> CMC clause 12.4 'Compliance and External Audit' states that 'The Contractor must: (b) cooperate with the Commonwealth and any Other Contractor engaged by the Commonwealth from time to time to carry out an external audit of the Contractor's activities'.



change to the contract to add more plant and equipment. Defence has had to reprioritise the equipment list and reduce the number of items under the performance-based regime to limit the cost implications of the additional items. Efforts to improve the integrity of asset lists on which this type of contract is based are an important part of the longer-term management of these contracts.

## Performance reporting under the CMC

**4.29** CMC clauses, under the heading *Performance Monitoring*, outline the approach to assessing contractor performance. Clause 16.2 *Setting Evaluation Criteria* describes how Defence and the contractor are to agree on evaluation criteria for performance monitoring. The current Key Performance Indicators (KPIs) for the CMC are outlined in the *Performance and Information Guide, Book 4—CMC Performance Measurement and Reporting* (9 November 2000) and broadly address issues such as timeliness of work, cost of works completed in relation to budgeted costs, and quality assurance.

**4.30** Infrastructure Division's Monthly Report Handbook (October 2001) for the CMC indicates how reporting should occur. It includes KPIs that are to apply to all CMCs. The Handbook sets out current KPIs and 'future KPIs'. The latter are awaiting appropriate devices for monitoring building plant and equipment<sup>49</sup> performance.

**4.31** The ANAO supports the move to the use of the 'future KPIs', as these will provide better indications of substantive performance over time. There will remain a need to gather information on some of the existing input-related KPIs, as these are useful in providing information regarding a number of compliance matters for CMC management. A key element of moving to improved KPIs is the introduction of appropriate performance monitoring devices for plant and equipment used to service buildings. However, Defence does not have a timetable for their introduction.

**4.32** The contractor's monthly report to Defence for November 2001 was prepared on the basis of the *Performance and Information Guide* mentioned above. The report, and records of meetings related to management of the CMC, indicated that the prime matters covered at these meetings were practical elements of the administration of the CMC. Matters reported by the contractor were largely input related and did not focus on the outcome performance of the CMC. The only customer feedback matters included were anecdotal comments from particular Defence staff members.

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<sup>49</sup> Building plant and equipment could include air-conditioning, fire and safety, and hydraulics.

**4.33** Reporting on performance related to compliance with statutory requirements is an area that needs improvement. The CMC directs the contractor to comply with all statutory requirements. The *Performance and Information Guide* includes statutory requirements as part of the evaluation criteria that the Contractor must meet. However, the monthly performance report fails to make comment as to whether the statutory requirements are being met. Changes to the performance report should be made to ensure that the contractor is completing and reporting against these activities.

**4.34** The ANAO supports the introduction of performance indicators, as outlined at paragraph 2.21, to provide Defence with further performance information and to enhance confidence in the quality of tasks undertaken. The ANAO also suggests that consideration be given to conducting surveys of ID's clients and reporting on logged complaints as a means of providing additional management information to assist Defence in managing the CMC. This material could be tabled by Defence at meetings and, over time, could provide additional trend data on the performance of the contractor.

## **Recommendation No.3**

**4.35** The ANAO recommends that Defence put in place a timetable for the implementation of appropriate performance monitoring devices for plant and equipment that service buildings and implement the devices at the earliest practical date.

### *Defence response*

**4.36** Agreed. The timetable for the implementation of the devices will be dependent upon available funding. Emphasis will be given to plant and equipment in strategic, high capability assets.

## **Conclusion**

**4.37** The ANAO found no evidence of bias in the process for assessing tenders and awarding the CMC. The qualitative means of assessing the relative merits of the tendered prices in conjunction with quality were not clear. Consequently, they left scope for uncertainty as to the basis of the final decision. Future tender assessments for large contracts would benefit from use of a probity adviser to advise on the process, and suitable methodology to combine the technical and pricing aspects of a tender. This would assist in reaching a more objective and defensible decision that demonstrates best value for money.

**4.38** The present CMC provides a more robust framework for ensuring that the contractor delivers satisfactory services and that the Commonwealth's interests are protected. Performance reporting should be improved to provide Defence with information to enhance confidence in the quality of tasks undertaken and to confirm compliance with performance standards. Relevant provisions in the CMC for ensuring performance should be exercised as necessary, to avoid problems of the kind experienced in the past.

## 5. Risk Management

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*This chapter considers problems that arose at HMAS Cerberus from a perspective of risk management. It examines how Defence is implementing solutions to assist in learning lessons from these problems.*

### Benefits of risk management

**5.1** Risk management assists organisations in making decisions, assessing business processes and generating successful outcomes. Defence procurement policy states the following:

The level of risk should be identified as to whether it is acceptable or unacceptable and balanced against the likelihood of it occurring and balanced against the objectives of the procurement. In being able to identify those factors which are likely to contribute to those risks, it should be possible to anticipate these problems and take measures to reduce their probability of occurring.

Risk analysis involves identifying the likelihood of a particular event occurring, whereas risk assessment involves analysing the impact from that risk actually occurring. Risk may be categorised as high, medium or low. These levels are determined by balancing the likelihood of occurrence with the impact if that event occurs.<sup>50</sup>

**5.2** ID does not have a formal, systematic approach to risk management in contracting at HMAS Cerberus, of the kind envisaged by the policy. Given the recurring nature of some of the problems, a systematic approach to risk would have helped in managing or avoiding the problems.

**5.3** The Australian standard describes the application of risk management as:

the term applied to a logical and systematic method of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risks associated with any activity, function or process in a way that will enable organisations to minimise loss and maximise opportunities.<sup>51</sup>

**5.4** Organisations can use risk analysis, and resultant strategies, to identify and anticipate risks and their possible consequences. It can also provide a sound basis for proactive management and contribute to realising and exploiting opportunities to the organisation's benefit.

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<sup>50</sup> Defence Procurement Policy Manual, July 1999, Chapter 2, Pts 209 and 210.

<sup>51</sup> Australian Standard for Risk Management, AS/NZS 4360:1999, section 1.2.

5.5 Risk management could provide benefits to ID such as more effective prioritisation of funding for maintenance and improved perceptions of ID management and accountability. It could also help avoid situations that may result from Occupational Health and Safety (OH&S) issues. ID's approach to risk management has not proceeded from a strategic framework perspective. In the absence of systematic risk management, the management approach at ID's regional, or base, level has been reactive. This limitation could be viewed as another contributing factor to the facilities problems experienced at HMAS *Cerberus*.

5.6 For example, given that accommodation block unroofing could have resulted in serious injury, the risk should have been managed more effectively after the original occurrence. Concerns about the qualifications and experience levels of ID staff, and their ability to manage contracts, should also be addressed within a risk management framework.

5.7 Management problems at HMAS *Cerberus*, such as the failure to hold contractors accountable for performance and the various facilities issues such as blue water, could have been reduced, and possibly remedied, had the following parts of the risk management standard been implemented:

Responsibility, authority, and interrelationship of personnel who perform and verify work affecting risk management shall be defined and documented, particularly for people who need the organisational freedom and authority to do one or more of the following:

- a) initiate action to prevent or reduce the adverse effects of risk;
- b) control further treatment of risks until the level of risk becomes acceptable;
- c) identify and record any problems relating to the management of risk;
- d) initiate, recommend or provide solutions through designated channels;
- e) verify the implementation of solutions; and
- f) communicate and consult internally and externally as appropriate.<sup>52</sup>

5.8 Delegating to an individual the responsibility for problems at HMAS *Cerberus*, such as blue water, and documenting (and maintaining the documentation) of all preventative strategies, investigative actions and the information provided to personnel, would have helped minimise risk. The importance of documentation has been frequently reinforced throughout this audit and is supported by the following part of the risk management standard:

Each stage of the risk management process should be documented. Documentation should include assumptions, methods, data sources, and results. Documentation should be held:

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<sup>52</sup> Australian Standard for Risk Management, AS/NZS 4360:1999, p. 6.

- a) to demonstrate the process is conducted properly;
- b) to provide evidence of a systematic approach to risk identification and analysis;
- c) to provide a record of risks and to develop the organisation's knowledge database;
- d) to provide the relevant decision makers with a risk management plan for approval and subsequent implementation;
- e) to provide an accountability mechanism and tool;
- f) to facilitate continuing monitoring and review;
- g) to provide an audit trail; and
- h) to share and communicate information.<sup>53</sup>

## ID's future risk management approach

**5.9** Defence recently introduced its own Risk Management Implementation Plan. In their Foreword to the document, the Chief of the Defence Force and the Secretary of the Department recognise that 'formal risk management is no longer discretionary and is now considered an essential component of public sector management and sound corporate governance'.<sup>54</sup> The Plan is to be supported by guidelines to managing risk in Defence.

**5.10** ID provided the ANAO with the following information about its proposal to revise its approach to maintenance management of the Defence estate. ID indicated that this would involve a considerably more systematic and strategic focus for risk management. The new approach, based on the risk management standard, is to use an assets appraisal process<sup>55</sup> that will rank facilities maintenance and the associated risk management issues on a more infrastructure-wide basis. Four key factors will contribute to asset appraisal and assist in allocating limited funds to facilities maintenance in the most effective manner. The factor that will contribute most to the management of risk is the consequence factor.<sup>56</sup> This will provide an indication of the risk and impact of not undertaking a proposed maintenance activity.

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<sup>53</sup> *ibid*, p. 21.

<sup>54</sup> Defence—Risk Management Implementation Plan 2002–2003, April 2002, Foreword.

<sup>55</sup> The asset appraisal process for the Defence Estate portfolio is designed to be a structured approach that helps in the identification of priorities amongst competing demands for limited funds.

<sup>56</sup> The other factors are:

- the contribution factor, which addresses the relative importance of an estate asset to defence capability;
- the condition index, which measures the extent to which actual condition meets acceptable condition for the asset; and
- the suitability factor, the extent to which the design of an asset matches its intended function.

**5.11** The Australian risk management standard identifies the two influencing factors for risk as the impact of risk and the likelihood of occurrence. ID's consequence factor is consistent with this aspect of the standard. The risk management strategy will also be applied throughout the asset hierarchy from the individual facility level (a particular building), to the base level, regional level and finally the national level. Risks that need to be considered for a building on a base will vary from those considered at the national level when assessing priority for planned maintenance works. The consequence factor for facilities will be determined using a formula that will use a weighting for different risk issues.

**5.12** A summary report, created for each level, will be created to report on the issues and the consequences of inadequate funding for the works. The draft Asset Appraisal Manual states that 'the process is intended to provide a consistent framework for decision making while recognising that there will still be a need for a qualitative judgement in the final decision'.

**5.13** The ANAO notes that assessment of maintenance issues in a risk management framework is a useful starting point for ID. However, the approach to risk management should have a wider focus. Risk management requires the identification of all risks, assessing their priorities and evaluating them for their potential impact on the resources required and outputs/outcomes achieved in accordance with the risk assessments made.

**5.14** ID's risk management framework could benefit by addressing other types of risk that can affect the achievement of its outcomes. These would include legal issues, failure to meet performance targets, and lack of appropriate skills to manage contracts and achieve successful outcomes for ID.

## Conclusion

**5.15** ID has faced numerous problems at HMAS *Cerberus*, exacerbated by inadequate documentation of decisions, and by addressing facilities maintenance reactively, with no systematic approach to risk management. ID has recognised these weaknesses and has advised that it is taking steps toward a more strategic approach to management of facilities maintenance. The ANAO encourages ID to pursue this new strategy to full implementation to improve facilities maintenance and management of business-related risks.



P. J. Barrett  
Auditor-General

Canberra ACT  
31 July 2002





# **Appendices**



## Appendix 1

### Media Release by Minister for Defence

MEDIA RELEASE

The Hon. Peter Reith MP

Minister for Defence

Leader of the House of Representatives

23 August 2001 MIN 317/01

### HMAS CERBERUS

In response to the continuing concern over facilities management at HMAS CERBERUS, I have asked the Australian National Audit Office (ANAO) to conduct an independent investigation.

Claims about HMAS CERBERUS were first made to the Secretary of Defence in March 2000. At that time the then Minister directed that an investigation into performance of the Defence Infrastructure Division (formerly Defence Estate Organisation) in Victoria, including HMAS CERBERUS, be undertaken by the Inspector General of Defence. The Inspector General's investigation was completed in February 2001.

I was disturbed by the Inspector-General's finding that the evidence appeared to indicate that there could be some substance to approximately half the allegations made in connection to facilities management at HMAS CERBERUS.

In April this year I directed the Secretary of Defence, Dr Allan Hawke, to put in place timeframes for implementing the Inspector-General's recommendations on improving probity, financial management and record keeping.

That process is under way.

In addition, I have directed that the Department implement by the end of the 2000/01 financial year the recommendations of an earlier ANAO report concerning the qualifications and experience levels of staff in the Defence Estate Organisation with a view to ensuring that all staff are able to meet the high standards in defence estate management expected by the Government.

The Department (the Inspector-General) has also been requested to audit facilities management in states other than Victoria in order to ensure the problems at HMAS CERBERUS are not reflected elsewhere.

Public accountability and the maintenance of public confidence in the efficient employment of resources by Defence is important. To that end I have now asked

that the ANAO conduct an investigation into the matters associated with facilities management at HMAS CERBERUS.

For further information contact:

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Department: Rod Corey—Head, Infrastructure Division 02 6266 7453

## Appendix 2

### Performance Audits in Defence

*Set out below are the titles of the ANAO's previous performance audit reports on Defence operations tabled in the Parliament in the last five years.*

Audit Report No.5 1997–98

*Performance Management of Defence Inventory*

Audit Report No.34 1997–98

*New Submarine Project*

Audit Report No.43 1997–98

*Life-cycle Costing in Defence*

Audit Report No.2 1998–99

*Commercial Support Program*

Audit Report No.17 1998–99

*Acquisition of Aerospace Simulators*

Audit Report No.41 1998–99

*General Service Vehicle Fleet*

Audit Report No.44 1998–99

*Naval Aviation Force*

Audit Report No.46 1998–99

*Redress of Grievances in the Australian Defence Force*

Audit Report No.13 1999–2000

*Management of Major Equipment Acquisition Projects*

Audit Report No.26 1999–2000

*Army Individual Readiness Notice*

Audit Report No.35 1999–2000

*Retention of Military Personnel*

Audit Report No.37 1999–2000

*Defence Estate Project Delivery*

Audit Report No.40 1999–2000

*Tactical Fighter Operations*

Audit Report No.41 1999–2000

*Commonwealth Emergency Management Arrangements*

Audit Report No.45 1999–2000

*Commonwealth Foreign Exchange Risk Management Practices*

Audit Report No.50 1999–2000

*Management Audit Branch—follow-up*

Audit Report No.3 2000–2001

*Environmental Management of Commonwealth Land—follow-up*

Audit Report No.8 2000–2001

*Amphibious Transport Ship Project*

Audit Report No.11 2000–2001

*Knowledge System Equipment Acquisition Projects in Defence*

Audit Report No.22 2000–2001

*Fraud Control in Defence*

Audit Report No.26 2000–2001

*Defence Estate Facilities Operations*

Audit Report No.32 2000–2001

*Defence Cooperation Program*

Audit Report No.33 2000–2001

*Australian Defence Force Reserves*

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