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**Deloitte
Touche
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12 September 2003

Mr Russell Smylie
Manager Secretariat and Fleet Services
National Maritime Museum
GPO Box 5131
SYDNEY NSW 1042

Dear Russell,

DISPLAY AND WORKING BASIN PROJECTS – PROBITY REVIEW

In our capacity as probity reviewer of the Australian National Maritime Museum's (ANMM's) procurement process and contract structure for the Display and Working Basin project, Deloitte Touche Tohmatsu (Deloitte) has set out below its probity report. This probity report covers work carried out from 28 July 2003 with our initial interview with Mr Quentin Howarth, Assistant Director Corporate Services at ANMM, to the date of this report.

Scope of Work

Our review had as its primary objective to determine whether the procurement process has been conducted in a fair and equitable manner with due regard to probity. Specific tasks undertaken in meeting this objective are detailed in our engagement letter.

As per the *Probity Advice Brief Re Display and Working Basin Projects* document dated 28 July 2003 provided by the ANMM we have focussed on the following:

- The process that has seen ANMM arrive at the current contract arrangements with particular emphasis on the selection of Jones Rae Constructions and Van Der Meer Consulting as major contractors and consultants.
- The division of works and responsibilities.
- The number and hierarchy of contracts with particular emphasis on aspects of coordination, supervision and overall project management.

In conducting our review, we highlight that it is the responsibility of ANMM to ensure that appropriate probity controls are established and followed. We would also highlight that whilst the role of probity reviewer may require probity input to improve the level of decision making, we cannot, as probity reviewers be the decision maker in relation to probity issues arising. This responsibility resides with ANMM.

The review was conducted in accordance with Australian Auditing Standards AUS 810 and 902. The report has been prepared by Deloitte for the purposes of ANMM in relation to the probity of the procurement process for the Display and Working Basin project. No responsibility to any third party is accepted as the report has not been prepared, and is not intended, for any other purpose. Please note the Statement of Responsibility at the conclusion of this report.

Methodology

Deloitte approached the review as follows:

- Documented the project evolution from the original project plan to the current situation from records made available and interviews with relevant project participants

- Examined the current contractual and project organisational arrangements to gain an understanding of the current situation
- Examined any probity issues that were evident
- Benchmarked against industry practice where applicable
- Commented on any issues identified.

In conducting the review we have carried out the following tasks:

- Interviewed ANMM staff involved in the project
- Examined relevant ANMM Council Minutes and Briefing Papers
- Interviewed the consulting engineer, Mr James Van Der Meer
- Examined records of the tender process managed by Cox Richardson
- Interviewed by telephone the Chair of the Capital Works Committee, Councillor Farrell
- Interviewed the ANMM's project management adviser Mr Peter Katz
- Provided a verbal progress report to the Director ANMM.

Background

Cox Richardson Architects, responsible for the original design of the ANMM facilities at Darling Harbour, were engaged by the ANMM to create a masterplan for future development of the museum facilities. As part of the masterplan an expanded site boundary with a new Working Basin was proposed. This proposal has been coordinated with a project to reduce wave and wash action in the existing Display Basin for floating exhibits. The procurement and contract management aspects of this project are the subject of this review.

In early 2002 the ANMM Council approved preparation of tender documentation for works which would protect the existing Display Basin from wave and wash action resulting from the increased water traffic in Darling Harbour with a budget of \$2.7 million.

The original proposed solution was based on extending the existing wharves and installing wave barriers beneath the wharves. Design was prepared by Ove Arup Pty Ltd. Tenders were called using a selected list of contractors with known capability for marine works. Tenders closed on 24 July 2002 based on the Ove Arup design. The proposed contract envisioned a single head contractor and a standard form construction contract AS2124. The tenders received ranged from \$6.6 million to \$11.0 million compared with the pre tender estimate of \$3.63 million.

Following consideration of a number of design options the reuse of existing pontoons was proposed. The final design incorporates the adaptive reuse of large pontoons, sourced in Western Australia, moored between locating piles and with a retractable pontoon for access to the basin. A similar design is proposed for the future Working Basin. The work is proceeding under a "construction management" contract and a large number of individual contracts and purchase orders. The project scope has been expanded to include a new mooring dolphin for the Vampire exhibit at an estimated cost of \$350,000. The current estimated completion cost for the total project is \$4,488,000.

Current Position

The pontoons, sufficient for both Basins have been procured, adapted for the new use, shipped to Sydney and are stored ready for installation. Work is proceeding with piling with an anticipated Display Basin project completion by December 2003. The commencement of work on the Working Basin is dependent on planning approval and a final decision to proceed.

Project Objectives and Performance Measures

The overall project objective is the creation of a sheltered Display Basin with the reduction of the effects of wave and wash action in order to:

- Provide a safe working environment for maintenance of the vessels
- Allow safe access to the vessels and

- Reduce damage to vessels and mooring pontoons.

The agreed brief with the original project managers, Cox Richardson, contains reference to a report from the consulting engineers which examines the wave climate in Darling Harbour and sets as a design objective a "good wave climate" in the basin as defined in available standards. The standards allow waves of up to 150mm within the basin within this definition. The original design solution was expected to achieve this result except in the case of "the 15m motor cruiser" which would result in a 190mm wave. As this vessel was expected to only pass the Display Basin occasionally the overall result was considered acceptable in the agreed brief.

With the revised design further calculations were carried out which again showed an acceptable result except for the "the 15m motor cruiser".

Contractual Arrangements

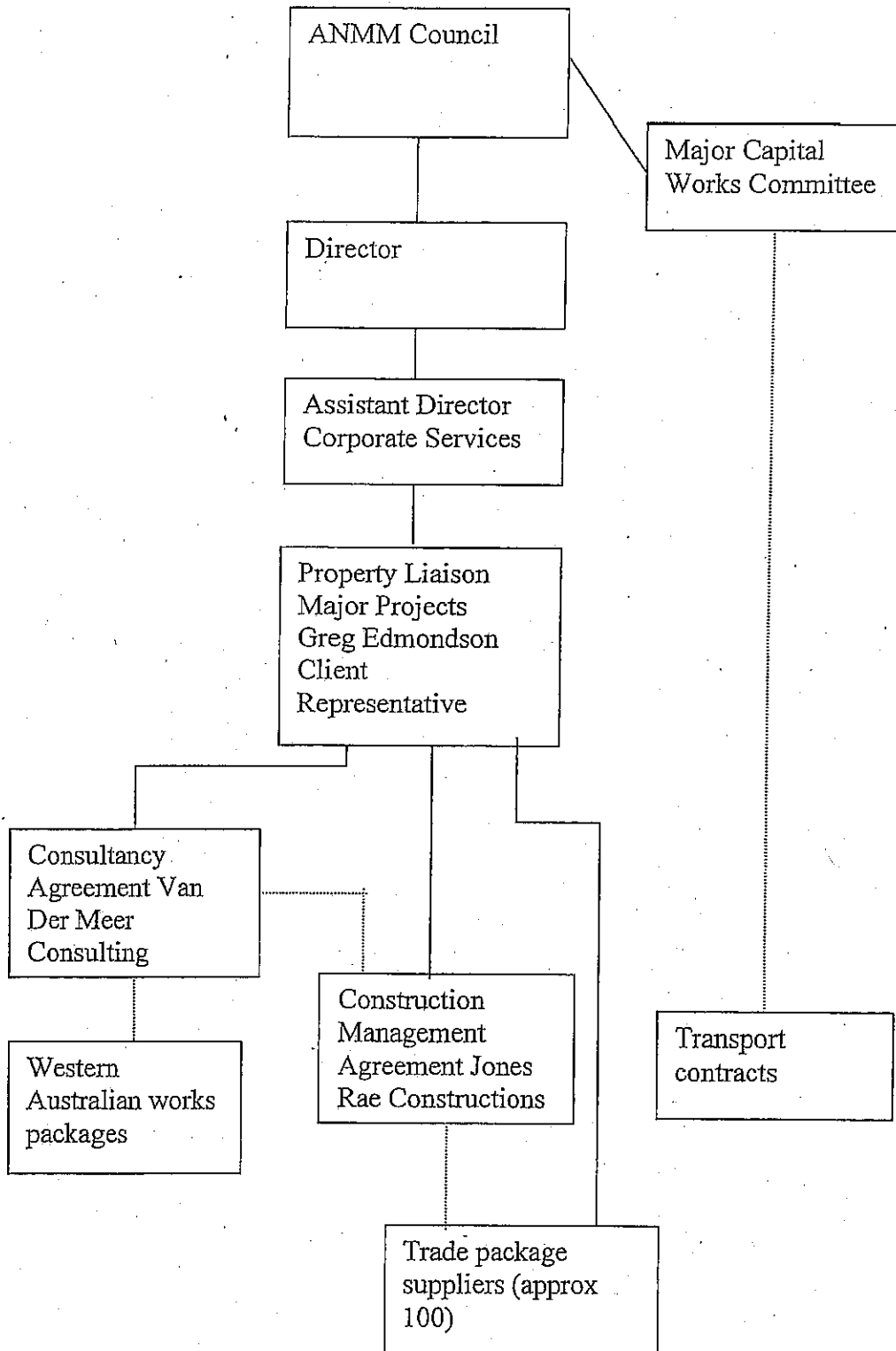
The major contractual arrangements in place enabling the project at the date of this report are:

Service	Contract with	Value	Status
Master plan and stakeholder liaison	Cox Richardson Architects		Current
Engineering Design and oversee construction. Includes nine sub-consultants and procurement services in WA.	Van Der Meer & Associates	\$226,000 plus up to \$42,000 at hourly rates plus travel plus approx \$77,000 for sub-consultants (at cost + 10%). Approximately \$345,000.	Current
Purchase of existing Pontoons	J& P Metals	\$520,000. The Display Basin proportion is \$231,000 and \$289,000 is for the future Working Basin.	Completed
Refit, paint transport pontoons work in Western Australia	Six contracts with various suppliers	Total \$2,002,000. The Display Basin proportion is \$881,000 and \$1,121,000 is for the future Working Basin.	Substantially completed
Construction management services, Sydney Works	Jones Rae Constructions	\$692,000 plus 25% of savings or less 25% of cost over run based on budget of \$1,700,900	Current
Trade packages	Various (approx 100) as recommended by Jones Rae. Subject to competitive tenders, quotes.	Budget \$1,700,900	Current

Advice from Mr Greg Edmundson of ANMM is that the Display Basin Project is expected to be completed within budgeted values stated above.

Project Organisation

From discussions with ANMM staff the project organisation can be depicted as follows. The diagram does not show the detailed involvement of the Chair of the Capital Works Committee in the overview of the work in Western Australia:



The Procurement Process

Procurement Timeline

Activity	Date
Tenders close on original design	24 July 2002
Council approves negotiations with lowest tenderer	September 2002
Council agrees to purchase barges	27 November 2002
Barges purchased	November 2002
Van Der Meer proceeds at hourly rates	
Council approves change in contract structure	February 2003
Proposed contract structure	5 March 2003
Consultancy Agreement with Van Der Meer signed	15 April 2003
Council approved construction contract arrangements	June 2003
Construction Management Agreement with JR signed	30 July 2003

Construction Contracts

The review showed that the process of calling the initial tenders appears to be well managed and excellent records exist at Cox Richardson who were acting as the ANMM's project managers.

On receipt of tenders it was noted by ANMM that all tenders substantially exceeded the budget estimate. Negotiations subsequently commenced with Jones Rae Constructions, the lowest tenderer, to look to options to reduce the scope and cost of the work.

Mr. Quentin Howarth, Assistant Director Corporate Services of the ANMM advised that during this process Jones Rae located some barges in Western Australia available for purchase at scrap value that could be adapted for use.

ANMM, particularly Councillor Farrell pursued this option together with the consultant Mr. James Van Der Meer who had coincidentally had previous professional involvement with the barges. Both parties were conveniently located in Western Australia. (Following receipt of the high tender prices Van Der Meer Consulting had been engaged by ANMM to provide a peer review to the original design and to examine alternatives to reduce the cost.) A submission was put to the ANMM Council to negotiate the purchase of the barges before the opportunity was lost.

Mr. Quentin Howarth advised that Van Der Meer Consulting was engaged at hourly rates to provide design and planning services while the final contract arrangements were negotiated.

Discussion of Procurement Process for Construction

In cases when the tenders received exceed the available budget it is accepted practice to open negotiations with the otherwise preferred tenderer in order to reduce the scope and cost of the work. This is in accordance with typical government tendering guidance, for example the *NSW Code of Tendering for the Construction Industry 1996*. In this project Jones Rae Constructions (Jones Rae) was the highest ranked tenderer. During negotiations, Jones Rae offered a number of options including the innovative reuse of existing pontoons. It is reasonable to expect a design and construct style of contract would result from such negotiations. In this case Jones Rae advised that they had no Professional Indemnity Insurances and could not provide a design service. In order to address these issues ANMM chose to extend the current brief of Van Der Meer Consulting, which was to provide peer review to the original consultant Ove Arup Pty Ltd, and to proceed with a new design. Once the scope of the revised design was established ANMM negotiated and entered into a construction management contract with Jones Rae.

Construction management contracts are typically applied in projects where:

- the client wishes to retain a high degree of control and flexibility such as when works are in an operating facility
- the exact scope of work is uncertain until work commences such as a restoration or refurbishment project

- the client wishes to commence works before all design is complete or "fast track" to project
- the work is staged with an uncertain program
- the client can carry out parts of the work with internal resources.

The Display Basin Project has a number of these features.

Compared with a "do and charge" style of contract this form of procurement allows the client access to the expertise of the construction manager for a fixed price.

With a construction management contract, some of the risks carried by the contractor in traditional construction contracts transfer to the client. For example the final cost (excluding variations) is not known until prices are obtained for the last trade package and the cost risk is with the client. The client carries the interface risk if work packages are not coordinated in scope of work or in time and sequence. The client also incurs additional administration costs in payments are made directly to several package contractors and suppliers rather than a single monthly progress payment to a single head contractor.

These risks appear to have been addressed in the contract with Jones Rae by way of the cost and savings sharing provisions. The relevant clause is structured so that one third of any savings from the trade package budgets is paid to Jones Rae and one third of any excess is borne by Jones Rae.

One feature of the way in which the contract is proceeding is the large number of small supply and works packages being used by Jones Rae. In a construction managed contract it is usual to expect around twenty major packages being trade supply and installation and supply of major plant items. For this project there are approximately one hundred packages created so far, comprising individual supply, plant hire and labour contracts with the result that the ANMM is carrying out a high volume of administration in making individual payments.

Given the history of the project and the opportunity that arose to purchase the pontoons for reuse, the current contract arrangements do not appear to be inappropriate. Other options may have been achievable and may have been considered however we have not been able to identify any records of any comparison of alternative arrangements. In discussions with the ANMM Chair of the Capital Works Committee was able to describe the risk issues taken into account by ANMM and the ANMM Council in selection of the procurement method. From discussions with participants the final outcome appears to have been driven by the need to fast track procurement of critical supplies in order to meet the time objective of completion before the Christmas period 2003. The chosen option appears not inconsistent with the needs of the project.

Consulting Services

The original brief of Van Der Meer Consulting was to provide a peer review to the original design by consultant Ove Arup Pty Ltd, ANMM was dissatisfied with the performance of the original consultant in the estimation of the cost of the work and chose to extend the brief of Van Der Meer Consulting to proceed with a new design based on the pontoon solution. This role increased as the work of refurbishment based in Western Australia was not conveniently managed from Sydney and was driven by a shipping date arranged by the ANMM Council. Van Der Meer Consulting acted as the ANMM's agent in calling tenders, and supervising the work in Western Australia. The value and scope of the services increased from a small direct engagement at hourly rates to a design and supervision engagement valued at approximately \$345,000 including sub-consultant fees. This contract increase was benchmarked by ANMM against current market consultant fee scales.

Procurement in Western Australia

The revised brief to Van Der Meer Consulting dated 5 March 2003, included acting as the ANMM's agent in calling tenders, and supervising the work in Western Australia.

The brief required the invitation of tenders from a minimum of three contractors known to have the ability and appropriate insurances in place for the various packages of work.

The outcome of the procurement in Western Australia was as follows:

Painting, Contractor Total Corrosion Control, single tender value \$871,000 (\$387,000 is the Display Basin proportion), compared with a check price from another contractor.

Fabrication of marine fittings, Contractor Mills and Hassell, value \$482,600 (\$215,000 is the Display Basin proportion), lowest of three tenders. Tender panel selected by Van Der Meer Consulting

In our interview with Mr. James Van Der Meer he disclosed that Van Der Meer Consulting has a shareholding in Premier Steel who provided one of three tenders for fabrication of marine fittings obtained by Van Der Meer Consulting while acting as the Museum agent. This was not the lowest priced submission and was not recommended. There was a potential for a conflict of interest which does not appear to have been appropriately considered at the time of tendering. However this does not appear to have impacted on the final selection.

Removal of mining fittings, Contractor Mills and Hassell, value \$131,000 (\$60,000 is the Display Basin proportion), engaged on hourly rates to meet timing requirements.

All other packages were sourced by the ANMM Council.

Given the time pressure created by the shipping date arranged by the ANMM Council, and without knowledge of the market for such services in Perth it is not possible for Deloitte to comment on the adequacy of market testing carried out in procuring these packages.

Project Control and Reporting

The project is the largest capital work in the ANMM's budget and very important to the ANMM's development. There is weekly reporting to the Capital Works Committee and reports to each Council Meeting. The degree of involvement by the Western Australia Council member and Chair of the Capital Works Committee is significant.

Conclusion

In summary the consultant and contractor together with the ANMM staff and Council appear to have developed an innovative solution to meet the project objectives within funding and time constraints.

In respect of the specific issues indicated in the brief our comments are as follows:

- The process that has seen ANMM arrive at the current contract arrangements with particular emphasis on the selection of Jones Rae Constructions and Van Der Meer Consulting as major contractors and consultants.

In cases when the tenders received exceed the available budget it is accepted practice to open negotiations with the otherwise preferred tenderer in order to reduce the scope and cost of the work. This is in accordance with typical government tendering guidance. Jones Rae was the preferred tenderer for the original scope of works and provided to ANMM the suggestion to reuse existing pontoons that were incorporated in the final design. Nothing came to our attention to conclude that it was not unreasonable for ANMM to have negotiated with Jones Rae based on the final design.

The appointment of Van Der Meer Consulting and the subsequent increase in scope and value of the commission was a result of the way the project design and procurement evolved.

The value of the services increased from a small direct engagement at hourly rates to a design and supervision engagement valued at approximately \$345,000 including sub-consultant fees. This contract increase was benchmarked by ANMM against current market consultant fee scales.

- The division of works and responsibilities.

From the work undertaken in examining the history of the project it appears that the procurement process evolved in order to take advantage of an opportunity to acquire suitable existing pontoons at a low price in Western Australia. The division of responsibilities for works and procurement was then driven by the two work sites, Western Australia and Sydney. The process has also been driven by transport opportunities available to ANMM. While the usual choice for procurement of capital works is to combine responsibilities and enter into the minimum number of contracts the chosen option appears not inconsistent with the needs of the project.

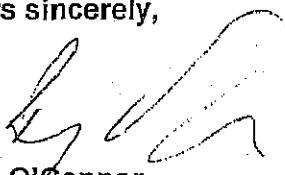
- The number and hierarchy of contracts with particular emphasis on aspects of coordination, supervision and overall project management.

The number and hierarchy of contracts were partly driven by the two work sites, Western Australia and Sydney and project programming issues. One unusual feature of the way in which the construction management contract is proceeding is the large number of small supply and works packages being procured by Jones Rae. In a construction managed contract it is typical to expect approx twenty major packages being trade supply and installation contracts and supply of major plant items. For this project there are approximately one hundred packages created so far, comprising individual supply, plant hire and labour contracts with the result that the ANMM is carrying out a high volume of administration in making individual payments.

Observation

There is potential to apply the experiences and knowledge gained with the Display Basin to the future work in the Working Basin to achieve simpler contractual and project management arrangements. ANMM could consider a short Workshop with key participants to consider procurement options and match the procurement method to the ANMM's project objectives for the proposed Working Basin.

Yours sincerely,



Rory O'Connor
Partner
Enterprise Risk Services

STATEMENT OF RESPONSIBILITY

This report has been prepared in accordance with Australian Auditing Standard AUS 810 "Special Purpose Reports on the Effectiveness of Control Procedures", AUS 902 "Review Reports" and on the basis of the following limitations:

Because of the inherent limitations of any internal control structure it is possible that errors or irregularities may occur and not be detected. Further, the internal control structure of the Australian National Maritime Museum, within which the control procedures that we have reviewed operate, has not been reviewed and no view is expressed as to its effectiveness. In accordance with AUS 810 and AUS902, a review provides a moderate level of assurance about the effectiveness of control procedures. A review is not designed to detect all weaknesses in control procedures as it is not performed continuously throughout the period and the tests performed are on a sample basis. Also, a review does not provide all the evidence that would be required in an "audit" (as described in AUS 810), thus the level of assurance provided is less than given in an "audit".

Any projection of the *evaluation* of the control procedures to future periods is subject to the risk that the systems may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

The matters raised in this report are *only* those which came to our attention during the course of performing our procedures and are not necessarily a comprehensive statement of all the weaknesses that exist. We cannot, in *practice*, examine every activity and procedure, nor can we be a substitute for management's responsibility to maintain adequate controls over all levels of operations and their responsibility to prevent and detect *irregularities*, including fraud. Accordingly, management *should not* rely on our report to identify all weaknesses that may exist in the systems and procedures reviewed, or potential instances of *non-compliance* that may exist.

The liability of Deloitte is limited by, and to the extent of, the Accountant's Scheme under the Professional Standards Act 1994 (NSW).