

**DEPARTMENT OF DEFENCE RESPONSES TO
WRITTEN QUESTIONS FROM THE
18 OCTOBER 2006 HEARING OF
THE INQUIRY INTO NAVAL SHIPBUILDING IN AUSTRALIA.**

Comparative economic costs

The difficulty in undertaking comparative analysis is underscored by the findings of a recent work, First Marine International findings for the global shipbuilding industrial base benchmarking study, Part 1: Major shipyards. The study produced very helpful advice to the U.S. shipyards on how they could raise their productivity. It did not, however, assist the committee with its task of comparing economic productivity.

Question W1

Based on your experience in the industry could you inform the committee about the difficulties in conducting a comparative analysis of the productivity and cost effectiveness of Australian shipyards against international shipyards?

Response:

In respect of naval shipbuilding, there are significant difficulties in comparing the economic performance of Australian shipyards with international yards. These have been identified in a number of inquiry submissions/hearings, in particular by the Department of Industry, Tourism and Resources (DITR), and are acknowledged in the Naval Shipbuilding and Repair Industry discussion paper. This is because of subsidy arrangements implemented by previous and current governments (both in Australia and overseas) and other protection measures for the naval shipbuilding industry. The impact of these measures is difficult to quantify in order to produce meaningful comparative data.

This difficulty is exacerbated by the fact that there are differing national funding arrangements for military ships covering:

- design development and R&D costs of ships and equipment relevant to a particular acquisition;
- other cost attributions (or cost recovery) available from other related defence programs (eg staff allocations/skilling, etc); and
- broader infrastructure investment and other operating costs that may be hidden or charged differently to a specific ship program to suit commercial interests.

Underlying economic factors may also change over time, both regionally and nationally. An example is the skill challenges in Western Australia over the past two years which has resulted from competing demands for skilled labour from the natural and offshore resources sector. These factors can significantly affect labour pricing in a short time span. Even the US Navy has the challenge of comparing total ship production costs on the same destroyer design between two yards with widely differing labour structures and local economic factors.

A further difficulty in relation to cost comparisons is the effect of the scale or rate of production of the individual ships or series. The reports by First Marine International and Rand Corporation recognise this fact and note that productivity benchmarking only becomes more reliable where the scale of production is large. The reports suggest the use of sixth-and-subsequent ship productivity data for meaningful comparison. As DITR has stated, the productivity benchmark for low throughput yards like the Australian naval shipyards should not be compared with the productivity of a yard producing vessels on a much larger scale.

Commercial ship owners and defence organisations alike rely on commercial tendering to allow comparison of total cost to owner against specific requirements in the economic environment prevailing at the time. This comparison will reflect many economic factors including yard productivity, scale of production, subsidies, other program funding and underlying economic drivers in pricing.

Question W2

To your knowledge has any such study been conducted that would provide a benchmark against which to measure Australian shipyards? If not, why? If so, why are the results not public?

Response:

Defence considers the study by First Marine International to be the only public comparator of productivity factors across US/Europe/Australia. Due to the considerable commercial sensitivity of the results, public release of this analysis is aggregated to 'national averages'. Individual companies who have paid for their productivity to be reviewed are provided with results, comparing their yards against national/international averages. This data will not be accessible to the public unless released by a company.

Defence relies on the results of specific tenders to compare actual aggregate costs relevant at the time of acquisition against a specific requirement. Such information is provided to Defence in a tender on a commercial-in-confidence basis. Clearly, such responses are very commercially sensitive. Details are not for public release and are not known beyond the very small number of people in the tender evaluation team.

Local build premium

At the hearing on 18 August, witnesses took the Committee through the decision processes relating to whether a premium is paid for tender options which maximise Australian content.

Question W3

Are you able to list the past naval shipbuilding projects where a premium was provided, and give information on the amount of that premium and how the estimates were determined?

Response:

Defence does not directly apply a premium to undertake naval shipbuilding projects in Australia. In accordance with Commonwealth Procurement Guidelines, the source selection for the acquisition and sustainment of military platforms and systems is based on best value for money. The strategic value of generating and sustaining indigenous industry capabilities, as required in support of ADF operational capability and military self-reliance, is one of many factors taken into consideration in Defence's overall value-for-money considerations.

With respect to naval shipbuilding, Defence defines the indigenous industry capability outcomes it is seeking in tender documentation. This assessment is undertaken on a project by project basis. The primary objective is to ensure that there is sufficient indigenous capability to support the operational capability of our naval vessels, once acquired. To this end, Defence seeks to use its acquisition leverage to generate the in-country skills, technologies and capabilities required to support the vessel throughout its life. The associated cost of developing program-specific indigenous industry capability is reflected in the overall value-for-money consideration of achieving program objectives.

Industry capability outcomes are not the defining factor in source selection decisions. Tenderers are assessed on a range of criteria, including the ability to meet Defence requirements, of which industry capability outcomes are but one aspect. The key determinants in source selection decisions are cost, the level of military capability being offered and the ability to meet Defence's schedule. Defence is unaware of any naval shipbuilding decision in the past 20 years that was not based on value-for-money considerations.

Question W4

Has Defence conducted any reviews of its naval shipbuilding acquisitions, to evaluate with hindsight whether price premiums have returned value for money over time, for example through more efficient through-life support?

Response:

Defence does not directly apply a premium to undertake naval shipbuilding projects in Australia. The benefits of conducting such projects in Australia, in terms of the indigenous industry capability it provides in support of naval operations and military self-reliance, forms part of Defence's value-for-money considerations.

Defence is unaware of any formal internal reviews to determine whether undertaking naval shipbuilding projects in Australia has returned value-for-money over time. The tender evaluation process and subsequent source selection decision for naval shipbuilding projects and naval sustainment contracts are based on value-for-money criteria, and this has partially obviated the need to undertake such reviews.

As part of its ongoing project management obligations, Defence regularly monitors contract performance, including the delivery of Australian industry involvement outputs, and assesses whether the services and products that are being provided by contractors represents value for money. In terms of Australian naval shipbuilding projects, the longer term value-for-money proposition is often difficult to assess. Given that much of the equipment on our naval vessels are provided by overseas Original Equipment Manufacturers, the ongoing overhaul costs can be significant, with minimal value-adding by an Australian shipbuilding prime contractor (although they still charge a management fee). On the other hand, having indigenous control over the ship design and system architecture can significantly reduce the cost and time associated with upgrades and design modifications.

Intellectual property

The focus on advanced technology and importance of systems integration in the new era of shipbuilding means that access and control over intellectual property is now a key element of Australia's shipbuilding and repair capacity. Dr Gumley explained on 18 August:

The other issue we have got to look at in all this is the intellectual property knowledge and sharing that comes from overseas countries. The thing that is most important to us is that we do have full access right to the IP coming from other countries. We do not want to become beholden to other countries, because in the future we will have to upgrade the ships, and so the whole IP picture and the design knowledge becomes part of the overall picture on which these decisions have to be made.

Question W5

Can you outline in more detail the processes in place in relation to IP negotiations? Are current arrangements satisfactory?

Response:

Defence deals with intellectual property rights in a unique way. Instead of seeking particular categories of intellectual property, Defence contracts for broad groupings of rights often designated as foreground, background and third party intellectual property. It does this because it is often difficult to determine what intellectual property exists or will exist, and the nature of that intellectual property.

Generally, intellectual property is assigned or licensed to Defence through contracts related to acquisition or support of capital equipment. It is essential that intellectual property arrangements in these contracts reflect Defence intellectual property requirements. Defence uses the Australian Defence Contracting (ASDEFCON) suite of tendering and contracting templates to set out an appropriate approach to intellectual property requirements, based on the complexity and risk level of the proposed contract. These templates can then be tailored to meet any project-specific intellectual property requirements.

Defence has identified a key principle within its Intellectual Property Management Framework. The task of “intellectual property needs identification” should be undertaken in conjunction with other planning activities for the relevant procurement. This needs identification phase forms the foundation of Defence’s approach to negotiating intellectual property rights. It is essential to identify what rights are needed before negotiations commence. Needs identification for intellectual property rights is undertaken on the same basis as needs identification for other aspects of procurement. This is a continuous process which is reviewed constantly as the requirement for ownership or control of intellectual property continues to develop. Points of review include any event or milestone which involves intellectual property, or any planning stage for an event or milestone which involves intellectual property.

Defence undertakes its intellectual property negotiations in a standardised contract negotiation framework. Contract negotiations must comply with the policies set out in the Defence Procurement Policy Manual. Standardised processes for procurement, including contract negotiations, are contained in the DMO Quality and Environmental Management System. This sets out the common DMO processes to be followed in contract negotiations for major capital equipment, minor capital equipment and rapid acquisitions. The intellectual property aspects of contract negotiations must be undertaken in accordance with the above policies and processes. They must also comply with the policies and procedures outlined in the Defence Intellectual Property Manual. This provides a standard set of principles available to all Defence staff undertaking intellectual property negotiations.

Assistance with intellectual property negotiations is available to all members of DMO and Defence. Departmental Procurement Policy Instruction 6/2005 outlines the legal services offered by General Counsel Division, DMO. DPPI 6/2005 states that it is expected that DMO members will contact General Counsel Division for assistance with “intellectual property matters”. This includes intellectual property negotiations. Where internal resources are insufficient to assist with a particular task, General Counsel Division engages providers from the Strategic Commercial sub-panel of the Defence Legal Services Panel to provide specialist advice.

DMO considers that the current arrangements for intellectual property negotiations are satisfactory. A structured system of policies and processes exists and is accessible to all members of DMO, and specialist assistance with respect to intellectual property is available on request.

Question W6

Who carries responsibility for ensuring satisfactory IP outcomes are negotiated?

Response:

Responsibility for ensuring satisfactory IP outcomes ultimately lies with the delegate responsible for approving the final contract. In the DMO this is typically a Star Rank or Senior Executive Service officer within the particular domain responsible for the procurement. For less complex procurements, the delegate is generally at the rank of Colonel (E) or Executive Level 2.

For higher value complex and strategic procurements, the responsible project team should develop a negotiation directive before entering into negotiations. Any intellectual property issues identified during the tender evaluation phase will be included in the negotiation directive. The directive should include DMO’s optimal negotiated position, one or a number of acceptable fall-back positions and the point at which an outcome is unacceptable. The results of the “intellectual property needs identification phase” often form the basis for determining the various acceptable and unacceptable positions for inclusion in the negotiation directive.

Where projects have difficulties with developing positions on intellectual property and other legal matters in their negotiation directives, General Counsel Division is available to assist.

Question W7

Where should control of IP optimally lie - for example with primes, subcontractors, designers, or Defence itself?

Response:

The principles which govern the ownership and control of intellectual property in various Defence contracts are set out in the Defence Intellectual Property Policy, Developing and Sustaining Defence Capability: Defence Intellectual Property Policy 2003 ("the Intellectual Property Policy"). This reflects the Chief Finance Officer's responsibility under section 44(1) of the Financial Management and Accountability Act 1997 (FMA Act), to manage the affairs of Defence in a way that promotes efficient, effective and ethical use of the Commonwealth resources for which the Chief Executive is responsible. Intellectual property is such a resource.

The Intellectual Property Policy sets out a number of key strategies which include the control of intellectual property and the sustainment of a national defence capability.

The Intellectual Property Policy recognises that intellectual property plays a critical role in the development and sustainment of Defence capability. To this end, Defence must ensure that it owns or licenses rights to all intellectual property that it requires to develop and sustain Defence capability. Defence must ensure that it has access to all appropriate technical data to enable it to exercise its intellectual property rights. As a minimum, Defence must secure sufficient control of intellectual property to allow for the use and support of the relevant Defence capability.

The Intellectual Property Policy also recognises the role of intellectual property arrangements with Australian industry in developing and sustaining a national defence capability. Defence must ensure that its intellectual property arrangements with Australian industry contribute to this goal. To this end, Defence facilitates access by Australian industry to Defence intellectual property and assists Australian industry to benefit from that access, as appropriate. Defence also facilitates Australian industry access to third party intellectual property, with the goal of developing a national defence capability, where this is consistent with ownership and licensing rights.

The needs identification phase of procurement will identify the scope of intellectual property rights in a project and guide the project team in determining which rights should be owned by Defence, or licensed to Defence. Whilst ownership of intellectual property will give Defence the greatest flexibility, Defence may pay a high premium to own the intellectual property. It may be more cost-effective to negotiate a broad licence over the necessary intellectual property, if this will allow Defence to achieve its operational or business goals. In some scenarios ownership of intellectual property may be required, despite the added expense, for strategic or national security reasons. This might include the development and sustainment of Australian capabilities in various defence industries.

Therefore, the decision on ownership of intellectual property rights is a decision that Defence must make on a project by project basis taking into account all the relevant factors that relate to each individual project.

Question W8

What are the key lessons from IP issues associated with past build programs?

Response:

In general, when negotiating intellectual property issues, it is Defence's experience that the following matters often need to be addressed to reduce the likelihood of difficulties arising in relation to intellectual property:

- the ownership regime: whether it is more appropriate to own or licence various intellectual property rights;
- commercialisation of intellectual property and competition issues;
- approvals, including export control;
- liability;
- warranties;
- termination of the agreement;
- access to technical data;
- ensuring that any relevant external country laws are met, including any restraints on intellectual property and technical data;
- access to suppliers' or subcontractors' intellectual property;
- the scope of any licensed intellectual property rights. This will include:
 - the degree of exclusivity offered to the licensee;
 - the field of technical use;
 - the territorial scope of the licence;
 - minimum performance requirements;
 - transfer of technology provisions;
 - access to improvements;
 - methods for dealing with infringement of intellectual property;
 - protection of the intellectual property rights;
 - royalties and payments.

Mark Thomson wrote in a recent CEDA publication that past experience has shown that foreign governments—including our closest ally the US—are all too often unwilling to release the intellectual property needed to effectively exploit the capability of weapons systems.

Question W9

Does Australia as a relatively small power have the leverage to successfully negotiate agreements that would provide Australia with the necessary access and rights to IP? Could you give reasons for your answer and if possible examples of successful negotiations?

Response:

A successful negotiation of intellectual property rights is one which grants Australia access to the intellectual property and technical data necessary to develop or sustain a particular capability. The degree of leverage Australia possesses in intellectual property negotiations depends largely on the nature and value of the procurement. Several factors affect this degree of leverage.

The 2006/07 DMO budget is \$8.7 billion. Of this, approximately \$5.1 billion will be spent on acquisition and \$3.6 billion on sustainment. This is approximately 0.8% of Australia's Gross Domestic Product. This is a large budget from an Australian perspective; it is smaller from an international perspective. This gives DMO some leverage in negotiating contract terms, including intellectual property rights, with Australian companies. As the market amongst advanced industrialised countries for the defence industry is relatively small, Australia retains a reasonable degree of leverage with international companies. Some difficulties have arisen with US companies because of restrictions on exporting US information, including associated intellectual property, under the International Traffic in Arms Regulations. These difficulties apply to all countries dealing with the US, not only Australia.

DMO adopts a number of mitigation strategies to deal with difficulties that arise with negotiating intellectual property rights. Where appropriate, DMO buys commercial-off-the-shelf and military-off-the-shelf capabilities; these generally have appropriate intellectual property rights attached to them as standard. Where DMO has been unable to obtain intellectual property or technical data from an equipment manufacturer, it uses strategies such as agreements with other countries to enable a transfer of the intellectual property or technical data needed to meet a capability requirement. One example of this is the successful transfer of necessary intellectual property as part of the Hornet Upgrade Program.

Capacity

At the Committee's hearing on 18 August, Mr King commented that there was significant capability around Australia to construct AWD modules and that this was not just within the shipbuilding industry. Mr King noted that the underpinning concern at the moment is capacity.

Question W10

Could you expand on the distinction between industry 'capability' and 'capacity'?

Response:

“Capability” in this instance refers to industry’s “shipbuilding related skills and the necessary infrastructure” to construct the AWD modules, while “capacity” is the measure of the “available labour” to carry out the work. At a number of locations Australian industry has the experience and facilities required to build AWD modules (capability). The capacity of Australian industry to build the AWD modules depends upon the availability of skilled people during the desired build period.

Being mindful of competing Australian projects that also require substantial metal fabrication labour, the AWD Program, in conjunction with industry partners ASC and Raytheon, is currently undertaking a series of industry engagements to better understand Australian industry’s capacity and commitment to undertake the task of building the AWD modules. Initial indications appear positive, but will need to be confirmed in due course.

Along with meeting the demands of broader Australian industry, the potential impact of building LHD’s concurrently with AWDs will need to be evaluated. This will be done as part of the Second Pass consideration process to be undertaken by Government in mid-2007.

Question W11

Could you cite a few examples of the other sites or industry sectors which have module construction capability?

Response:

In an attempt to better understand the capability and capacity of general industry to build large ship modules, an AWD Alliance team undertook visits to shipbuilding and steel fabrication sites in WA, SA, Vic, NSW, Qld, Tasmania and New Zealand.

While the more traditional shipbuilding companies at Williamstown (Vic), Tomago (NSW), Henderson (WA), Cairns (Qld) and Whangarei (New Zealand) have the capability to build modules, there are also alternative building sites. These include but are not limited to Whyalla (SA), Brisbane (Qld) and New Plymouth (NZ). Several general fabrication and engineering firms have expressed a genuine interest in AWD module fabrication. At least one of these companies, at their own expense, is taking steps to obtain naval shipbuilding expertise.

Broader benefits

Defence explained that technology transfer and access to IP form part of the evaluation of tenders but that other benefits:

such as potential spin-offs to industry at large and wider benefits to the economy, such as increased employment, may be recognised but play little or no part in the numerical evaluation. Such benefits will be noted in advice to Government.

Question W12

Accepting the difficulties in quantitatively estimating the value of broader economic benefits, how are wider benefits assessed by Defence in order to be 'noted in advice to Government'?

Response:

In respect of the AWD Program, the business cases to be developed for Second Pass consideration provide the opportunity to supply Government with qualitative and quantitative information on the wider benefits of the program. Adequate access to intellectual property and technology associated with the design, construction and support of the platform will be an essential element of any recommendation to Government. Knock-on effects such as industry skilling, regional development, engagement of local businesses, enhanced employment opportunities and a range of other factors will be noted in the business cases. Other Government departments and agencies such as the Department of Industry, Tourism and Resources, will be engaged by the AWD Program in assessing potential benefits.

In respect of the LHD Program, the tender incorporates a strategy which seeks as far as practicable to maximise Australian content during the build phase, within budgetary guidance. The tender also stipulates Australian content requirements for through-life support and mandates certain Australian systems as costed options.

However, tenderers will also be able to submit an additional proposal - 'Tender-Initiated Options' - which will increase the contribution of Australian industry, but at increased cost which may exceed the guidance in the Defence Capability Plan. The Tender-Initiated Options proposals will need to demonstrate specifically that they offer value for money by showing the marginal benefit of the extra expenditure that will accrue to the Commonwealth and to Australian industry.

Tender evaluation will also consider the projected benefit of effects on the wider economy. This element will be conducted by contracted, independent third-party experts. The analysis will examine the tenderer's economic benefit assessment including the validity of assumptions, their economic viability and the likely effects of the proposal on other major defence projects.

Witnesses from the Department of Industry, Tourism and Resources told the committee that they have a role to 'provide advice to government through the minister on the industry aspects of major defence procurement decisions'.

Question W13

Does Defence assess industry aspects of procurement decisions independently, or rely on advice from DITR?

Response:

Defence has prime responsibility for assessing the industry capability aspects of Defence procurement decisions. The Industry Division (ID) within the Defence Materiel Organisation (DMO) is tasked with providing advice to Defence project areas on industry capability issues. In undertaking this role, ID has developed a good working relationship with the Department of Industry, Tourism and Resources (DITR), and consults with them, as appropriate, on the industry aspects of Defence projects.

ID has regular meetings with DITR to discuss industry capability issues and also arranges project briefings for DITR staff to develop a good appreciation of, and seek feedback on, the project-specific industrial outcomes that Defence is seeking. The strength of the relationship between Defence and DITR is evident on a number of projects (e.g. New Air Combat Capability, AIR 7000 Phase 1 Unmanned Aerial System), where both agencies contribute resources to promote cost effective Australian industry capability outcomes.

Question W14

What is Defence's relationship with DITR in relation to procurement decisions? Are there formal avenues through which DITR provides advice or comment to Defence on Australian industry involvement in specific projects?

Response:

Defence is responsible for the preparation of tender documentation, the evaluation of tenders and the subsequent provision of advice to Government on preferred tenderers. In performing this role, Defence consults with DITR on industry capability issues, as appropriate, but there are no formal mechanisms to seek DITR advice.

Having evaluated tender responses, Defence prepares a submission for consideration by the National Security Committee (NSC). In preparing this submission, Defence formally consults with the central agencies, and other agencies as appropriate. Submissions to be considered by NSC are first considered by the Secretaries Committee on National Security (SCNS). This Committee comprises the Secretaries of the Department of Prime Minister and Cabinet and the Treasury; the Secretary of the Department of Finance and Administration is seconded

when major projects are under consideration. Depending on the nature of the submission, other government agencies can be seconded to SCNS. For those submissions with significant industry capability issues, the Secretary of DITR would be invited to SCNS to ensure that industry issues were appropriately addressed. In such cases, the Minister for Industry would also be invited to NSC.

Policy on Australian industry involvement

In the UK and the U.S., observers have been critical of the failure of both governments to provide their industry with a coherent industrial strategy toward the shipbuilding sector. In the Australian context, both Professor Paul Dibb and Dr Mark Thomson have recently argued that the Australian government should have a new Strategic Industry Policy Statement which identifies the strategic capabilities that must be produced in-country and 'then use open competition on the global market to equip ADF for the rest'.

However, Lieutenant General David Hurley stated in his opening address to the committee on 18 August 2006 that:

it is hard to see how a projection beyond the ten to twenty years influenced by the DCP can be prudently extended. To do so would require faith in a linearity of development of technology...At this point in time we do not know what the surface and sub-surface capability after the Anzac and Collins classes will look like and therefore the nature and characteristics of industry involvement.

Question W15

Is the uncertainty over the development of future technologies the only stumbling block in devising a Strategic Plan that identifies strategic in-country capabilities?

Response:

With respect to naval shipbuilding, Defence defines the indigenous industry capabilities and technologies it requires on a project by project basis. This is not due to uncertainty regarding future technologies, but reflects the fact that in-country industry capability requirements will differ from project to project.

As previously noted, the primary industry objective is to ensure that there is sufficient indigenous capability to support the operational capability of our naval vessels, once acquired. Defence uses its acquisition leverage to generate the required level of in-country skills, technologies and capabilities to meet this objective. The nature and level of skills, technologies and capabilities required for support is assessed on a project by project basis.

Defence has identified certain strategic in-country capabilities that are required from Australia's naval shipbuilding sector. These critical capabilities are detailed in the draft Naval Shipbuilding and Repair Sector Plan and the Electronic Systems Sector Plan. The Defence Industry Policy Review, currently underway at the direction of Minister Nelson, is expected to provide greater clarification of Australia's critical industry capabilities, including the level of activity required in-country in support of ADF operational capability and military self-reliance.

Defence understands the benefits of developing a Strategic Plan for critical industry capabilities where there is some doubt as to whether the current level of demand is sufficient to sustain a required level of in-country activity. With respect to naval shipbuilding, Defence

believes that there is sufficient shipbuilding and sustainment demand over the coming decade to sustain the required level of in-country activity for critical industry capabilities.

Mark Thomson wrote in a recent CEDA publication that:

Rather than flirting with exotic acquisition strategies or interventions to shape the local defence industry market, the government should simply sort out the strategic capabilities it needs to keep in-country and then use open competition on the global market to equip the ADF for the rest. This should not be so hard.

Question W16

Would you like to comment, with regard to naval shipbuilding, on Mr Thomson's observations that it should not be so hard to 'simply sort out the strategic capabilities Australia needs and then use open competition on the global market to equip the ADF for the rest'?

Response:

Defence would broadly support the observation made by Mr Thomson that having sustained the strategic industrial capability needs, open competition should be used to secure the remaining capabilities.

The primary focus of Defence industry policy is to ensure that Australian industry has sufficient capability and capacity to support ADF operational capability and military self-reliance. When endorsed by Government, the Defence Industry Policy Review might be expected to reiterate this policy focus. The Review should provide greater clarity on Australia's critical industry capabilities, including the level of activity required in-country, within each of the critical capability domains, to meet Australia's operational capability and military self-reliance objectives.

Pending the outcomes of the Defence Industry Policy Review, Defence believes that having defined the level of in-country activity required to meet our strategic industrial capability needs, and ensured that Defence demand is sufficient to sustain the required level of activity, the remaining work/capabilities should be subject to open competition on the global market.

In the opening statement of 18 August, LTGEN Hurley mentioned an initiative to expand the Rapid Prototyping, Development and Evaluation establishment (RPDE), facilitating early industry involvement in future capability solutions.

Question W17

The committee has received little information about the RPDE. Could you briefly outline its purpose and functions?

Response:

The Rapid Prototyping, Development and Evaluation (RPDE) Program was created by Capability Development Group (CDG), through a partnership between Defence and industry, to work collaboratively to accelerate the introduction of Network Centric Warfare (NCW) capability for the warfighting element of the Australian Defence Force. RPDE's operations are governed by a board chaired by Rear Admiral Tripovich, Head Capability Systems, with representatives from the Defence Materiel Organisation, CDG, the Defence Science and Technology Organisation and Defence industry.

RPDE is fully funded out to July 2007 through Capability Development funding and this allocation includes both operational and tasking costs. RPDE funding is allocated by the RPDE Defence Steering Group, comprised of 16 One Star and civilian SES Band One officers from across the three Services and various Defence Groups.

A small staff manages the RPDE Program and its aims are achieved by bringing together teams of experts from across Defence and industry to work collaboratively. These teams are involved in the examination of ADF organisations, processes and technologies from an impartial perspective, analysing their relevance and suggesting changes where needed. RPDE analyses the organisations, processes and technologies used by today's ADF warfighters in order to fully understand the scale of change required. Innovations through RPDE are not just technology focused, but can take many forms including the introduction of new technology, the development of methods to aid and support decision making, and the restructuring of an organisation or unit.

One of the key features of RPDE is that industry and Defence will share relevant knowledge and intellectual property to address specific NCW tasks set by Defence. Through this innovative and cooperative approach, RPDE seeks to reduce technical risk and the time taken to develop and deliver capability. The Program engages people, facilities, technologies and other context information from their industry participants and Defence. With these resources, RPDE addresses high priority Network Centric Warfare problems and other capability development analysis requirements from the Defence Steering Group to enable ADF capability planners to make changes to all or part of the fundamental inputs to capability accelerating their realisation of the benefits of Network Centric Warfare.

Industry structure

Carnegie, Wylie & Co report

In a joint media release of 15 January 2004, then Minister for Defence the Hon Robert Hill and Minister for Finance the Hon Nick Minchin announced the appointment of Mr John Wylie of Carnegie, Wylie and Co to 'provide commercial advice to the Government on a range of issues associated with the naval shipbuilding and repair sector and the Australian Submarine Corporation'.

In a joint media release on 27 May 2004 the above Ministers announced a series of decisions relating to the future of the naval shipbuilding and repair sector, noting that the decisions flowed from consideration of Mr John Wylie's advice.

In a submission to this inquiry, Engineers Australia has referred to Mr Wylie's report as The Restructuring of the Naval Shipbuilding Industry in the context of the sale of ASC. Although unsighted by Engineers Australia, they consider the report to have been influential in the government's return to a competitive market for naval shipbuilding.

Question W18

In light of the importance of Mr John Wylie's report in shaping the approach to contracting in the NSR sector, will Defence seek approval to release the report to this committee in-camera?

Response:

The Carnegie Wylie & Co report on Naval Shipbuilding was prepared at the request of the then Minister for Defence and the Minister for Finance. The Report was not prepared for Defence and the final report was delivered to the above-mentioned Ministers. As such, Defence does not own the report and is not in a position to provide the Committee with a copy of this report.

If the Committee would like to obtain a copy of the report it would be appropriate to approach the owners of the report, namely the Minister for Defence and the Minister for Finance.

Acquisition processes

The Committee notes that approval for acquisition of the AEGIS system for the Air Warfare Destroyer project was given independent of other phases of the project.

Question W19

Could you outline the assessment and decision process relating to the selection of the AEGIS system, how this fits with the Kinnaird process, and to what extent it is an exception to standard procurement processes?

Response:

On 11 August 2004, the Government announced the selection of AEGIS as the core combat system for the Air Warfare Destroyers. Defence recommended AEGIS as the best system for its air warfare combat needs based on cost, capability, risk and schedule following analysis by DMO and the Defence Science Technology Organisation, with the support of the US Navy.

Defence and DSTO assessed a number of combat systems in operation or under development by foreign defence forces. The decision to purchase the AEGIS Combat System reflected a range of factors including its proven ability, quantifiable cost, low risk and obvious interoperability with US forces.

The early purchase of the AEGIS Combat Systems can be seen as a product of the Kinnaird reforms which provides for increases in project investment early in a project's life, to reduce risks in the overall program. The Kinnaird process also encourages military-off-the-shelf options be considered where available. The AEGIS Combat System has been proven in service with the US Navy across a range of operations in recent years and has regularly been upgraded and improved to meet the changing nature of naval operations. The AWDs will be fitted with the latest open architecture version of AEGIS which will provide the RAN with the opportunity to upgrade the system over coming decades and benefit from the fact that there will be around 100 AEGIS equipped warships operating globally by the time the AWDs enter service.

The decision to purchase the three AEGIS Combat Systems during existing production cycles has avoided potential costs associated with restarting production at a later date. This cost avoidance represents a potential saving of over \$200 million.

AWD costs

The 2006–2016 Defence Capability Plan states that 'Estimated Phase Expenditure' for the AWDs (Project SEA4000) is between \$4.5 billion and \$6 billion.

In evidence given to the committee, Mr Greg Tunny, Managing Director of ASC Pty Ltd, hesitated in confirming the \$6 billion price tag for the AWD project.

This gives a somewhat different impression to that contained in the Defence Minister's May 2005 media release which stated that 'the project would be worth 'up to \$6 billion'. The figure of \$6 billion has been cited extensively in the media.

Question W20

Can you explain the certainty of a \$6 billion ceiling on the acquisition cost conveyed in the press release given the equivocation by ASC before the committee on 4 September?

Response:

The then Minister for Defence's media release of May 2005 accurately listed the Defence Capability Plan (DCP) cost of \$6 billion. Projected DCP costs are indicative only, and do not necessarily represent how much the government will eventually decide to pay for capabilities. Once the business cases are developed for Second Pass consideration, incorporating industry-generated total cost estimates, Government will decide which design best meets the needs of Defence based on a thorough assessment of cost, schedule, risk and capability considerations. Budgetary guidance provided to the companies is based on the DCP pricing.

It is not unreasonable that Mr Tunny could not comment on the total project costs as ASC is only responsible for ship construction costs. Other elements of the total project cost – including combat system, missiles and other ordnance, project management costs, test and evaluation, and contingency – are not within ASC's control.

Question W21

Could you explain the change in estimated costs of the project from the 2001 Defence Capability Plan to today's estimate?

Response:

The 2001-2011 DCP stated an estimated expenditure of \$3500m to 4500m, which was updated in the 2004-14 DCP to \$4500m to 6000m. This revision in the cost estimates allowed for the cost of additional capabilities, contingency and price movement. The 2006-16 DCP retains the estimated cost of \$4500m to 6000m.

Question W22

Can you explain why Defence (in its media release) has put an upper limit of the project's cost, particularly given the Defence Capability Plan states that "Estimated Phase Expenditure"...is indicative only, and does not necessarily represent how much the government will eventually decide to pay for capabilities'.

Response:

Defence is conscious of budgetary constraints and is conducting studies into both the Existing and Evolved design options against the approved DCP figure. The current design phase of the AWD program utilises the cost as an independent variable methodology to ensure cost is a key consideration throughout the design process and directly impacts on decision making in relation to design development (the response to Q 23 also refers).

Mr Derek Woolner has recently written that 'many observers [are] expecting price at contract signature to be closer to \$8 billion'.

Question W23

Are you aware of this estimate? Can you explain why some sources anticipate a significantly higher price tag than the government's estimate?

Response:

Defence is aware that some public commentators are estimating that the cost of the AWDs may be as high as \$8 billion. At present there are two design options under consideration that will vary in capability, cost, schedule and risk. This matter will be clearly outlined in the two business cases that will be put to Government for Second Pass consideration. The final cost of the AWDs approved by Government will be dependent upon these decisions.