



COMMONWEALTH OF AUSTRALIA

# Official Committee Hansard

## SENATE

FOREIGN AFFAIRS, DEFENCE AND TRADE REFERENCES  
COMMITTEE

**Procurement procedures for Defence capital projects**

THURSDAY, 11 AUGUST 2011

CANBERRA

BY AUTHORITY OF THE SENATE

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**SENATE**  
**FOREIGN AFFAIRS, DEFENCE AND TRADE REFERENCES COMMITTEE**  
**Thursday, 11 August 2011**

**Senators in attendance:** Senators Bishop, Eggleston, Fawcett, Johnston, Kroger and Stephens.

**Terms of reference for the inquiry:**

To inquire into and report on:

Procurement procedures for items identified in the Defence White Paper, *Defending Australia in the Asia Pacific Century: Force 2030* and in particular:

- a. assess the procurement procedures utilised for major defence capital projects currently underway or foreshadowed in the Defence White Paper, including the operations of the Capability Development Group and its relevant subcommittees;
- b. assess the timeline proposed for defence modernisation and procurement outlined in the Defence White Paper;
- c. assess proposals arising from the Defence accountability reviews, including, the Mortimer Review, the Pappas Review and the McKinsey Report (2010), in regards to enhancing accountability and disclosure for defence procurement;
- d. make recommendations for enhancing the availability of public information and parliamentary oversight and scrutiny of defence procurement in the context of guaranteed 3 per cent real growth in the Defence budget until 2017-18; and
- e. assess the effectiveness of the Defence Materiel Organisation including:
  - i. its role and functions,
  - ii. its processes, management structure and staffing, in particular as compared to similar organisations in the United Kingdom, the United States of America, Canada and other comparable jurisdictions and large Australian commercial enterprises,
  - iii. its full costs, assessed against the timeliness and quality of its output and the service it provides to the Australian Defence Force, and
  - iv. the extent to which it value-adds to national defence and to the long-term viability of Australian defence industries.

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**BURNS, Mr Christopher Mark, Chief Executive Officer, Defence Teaming Centre**

**MANSELL, Mr Brian, Chairman, Corporate Members Group, Australian Business Defence Industry Unit**

**O'CALLAGHAN, Mr John, Executive Officer, Australian Industry Group Defence Council**

**PRIESTNALL, Mr Graham, President, Australian Industry and Defence Network Inc.**

**TONKIN, Mr Robert, National Secretary, Australian Industry and Defence Network Inc.**

**WHITE, Mr Ben, Manager, Australian Business Defence Industry Unit**

**WILLOX, Mr Innes Alexander, Director, International and Government Relations, and Executive Director, Australian Industry Group Defence Council**

#### **Committee met at 13:05**

**CHAIR (Senator Eggleston):** I welcome the witnesses to this inquiry into procurement procedures for defence capital projects. This is the first hearing of the committee in relation to this inquiry. This hearing is public. Before the committee starts taking evidence, I remind all witnesses that in giving evidence to the committee they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee and such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to a committee.

The committee prefers all evidence to be given in public, but under the Senate's resolutions witnesses have the right to request to be heard in a private session. It is important that witnesses give the committee notice if they intend to ask to give evidence in camera. If a witness objects to answering a question, the witness should state the ground upon which the objection is taken and the committee will determine whether it will insist on an answer having regard to the ground which is claimed. If the committee determines to insist on an answer, the witness may request that the answer be given in camera. Such a request may, of course, be made at any other time. In relation to evidence given in camera, I have to add that under Senate regulations it is possible that the Senate may determine that such evidence be made public, although this happens very, very rarely.

The committee is hearing evidence today in relation to its inquiry into the procurement procedures for items identified in the defence white paper *Defending Australia in the Asia Pacific century: Force 2030*. I draw your attention to the five terms of reference, which call on the committee to, amongst other matters:

a. assess the procurement procedures utilised for major defence capital projects currently underway or foreshadowed in the Defence White Paper ...

Finally, on behalf of the committee I would like to thank all those who have made a submission to this inquiry and sent representatives today for their cooperation.

The first group of witnesses represents four interested parties. These are the Australian Business Defence Industry Unit, the Australian Industry Group Defence Council, the Australian Industry and Defence Network and the Defence Teaming Centre. The committee invites each of you in turn to make an opening statement. We will start with the Australian Business Defence Industry Unit.

**Mr B White:** Thank you for the opportunity to appear today. The Australian Business Defence Industry Unit was established in 1998 to represent defence industry companies to government and defence. Our mission is to help member companies through advocacy, engagement with government and defence, market information, and advisory services. I am currently the full-time manager, and I represent our membership on both the Defence Industry Innovation Board and the Capability Development Advisory Forum. Brian Mansell, from Austal Limited, is the current chairman of our Corporate Members Group. This group comprises 29 of the largest suppliers to defence, and our broader membership is around 200 companies nationally.

We note that the government is pursuing a number of reform streams, and we support these initiatives, as it is clear that between government, defence and industry we must all seek to improve on the current system. We believe that delivering defence capability must be a partnership between the government, defence and industry, and we would advocate that the more industry can be engaged as a true partner—at all levels and stages of the capability development and acquisition process—the more we can do together to meet these challenges.

Our submission to the inquiry was based on a policy paper produced in March this year, on which all our corporate members were invited to contribute and comment. The submission points to a couple of main recommendations. Firstly, industry needs clear signals and a degree of confidence to encourage it to invest in the defence market here in Australia. There are a number of other competing markets and, without a greater degree of certainty, return on investment and partnerships, industry will move away from the defence market as it currently is. Management boards and shareholders in the current economic environment, like government, are seeking greater degrees of certainty around the information they use to make business and investment decisions.

Secondly, if we are going to retain industry in the defence market—in particular, to meet the government's priority industry and future capabilities—there needs to be regular tranches of new projects and sustainment work directed to the sector. Defence work has historically produced peaks and troughs of demand. However, unless these peaks and troughs can be smoothed out to a degree, through tranches of regular work that can be relied upon to materialise and provide a good return on investment, the same degree of industry support to defence capability may not be around in the future as it has been in the past.

Defence industry requires complex capabilities and a highly skilled workforce. Unless this is sustained through programs of work, these capabilities will be lost and will take decades to rebuild at a substantial cost. Global supply chains and export programs will only have a limited impact on retaining industry capability in Australia, particularly to support Australian defence requirements. This is more so in the light of declining international defence budgets.

The key message is that while industry has to focus on achieving a return on investment, it also cares about delivering a world-class defence capability here in Australia. As a sector, we call for a greater degree of partnership and engagement by government and defence. Thank you. Brian and I are available for any questions.

**CHAIR:** Thank you very much. We have received your submission. Would you like to make any alterations or amendments to it?

**Mr B White:** No, we do not.

**CHAIR:** We now go to the Australian Industry Group Defence Council. I will ask you to also make a statement, and whether you wish to amend your submission in any way.

**Mr Willox:** We appear here today to follow up on our submission to the inquiry and have no need to alter our submission as it was submitted to the inquiry. The Australian Industry Group Defence Council represents several hundred companies who operate in the defence space, including defence primes, tier 2s and several relatively large SME organisations who are involved in the defence space.

Thank you for the opportunity to speak to you today about defence procurement and issues related to it. As you can see from the AI Group Defence Council's submission to the committee, we have offered 16 recommendations for improving defence capital equipment procurement. Defence capital equipment procurement is a complex business. At any one time, the Capability Development Group and the Defence Materiel Organisation have responsibility for more than 230 major projects or phases of projects. In data presented by Dr Stephen Gumley, the former CEO of the DMO, in 2009, of the 239 projects closed over the previous 10 years, 60 per cent were under budget, 23 per cent were on budget and 17 per cent were over budget. In separate work by the ANAO addressing 22 current defence projects, it was found that there were no cost overruns and, for off-the-shelf purchases, no delays in delivery. It identified, however, that more attention needed to be given to in-country sourcing to improve scheduled delivery. This is being progressively addressed by both Defence and industry. No other federal department nor commercial entity has such a large number of major projects to address concurrently. By far the majority of that activity is undertaken on time and on budget.

Without the defence industry, the Australian Defence Force would be unable to undertake its many operational responsibilities. This includes its deployment at war in Afghanistan. Australian military equipment such as the highly successful Bushmaster vehicles produced by Thales Australia is protecting ADF personnel in Afghanistan. Not one ADF soldier has been killed whilst operating in these vehicles, despite more than 30 Bushmasters being damaged by improvised explosive devices, or IEDs.

It is true too that deployed ADF personnel generally receive positive media coverage, particularly for their bravery in the battlefield. It is well deserved. By contrast, defence procurement often gets a poor rap. Sometimes

this is justified; mostly, however, it is not. It is true that there have been some spectacular procurement failures. The Seasprite debacle is but one example and the ongoing problems with the Collins class submarine availability is another. Wedgetail and FFG modernisation are others. These failures share a number of common themes, and these include overspecification including poor capability development arrangements, underestimate of cost and risk, ambitious scheduling, lack of access to intellectual property and acquisition of old second-hand platforms.

The recent revelation about delays to the Air Warfare Destroyer projects highlights yet again ongoing difficulties in bringing major projects in on time. Clearly, one of the failings related to the AWDs relates to capacity of the prime contractor to undertake the work effectively. A principal issue is the challenge of having to place the necessary experienced and skilled workforce to undertake the work on this ambitious, complex project as well as other major projects identified in the 2009 Defence white paper.

Defence has estimated that the defence industry workforce will need to grow by about 5,000 people to 34,000 to meet the requirements of the Defence white paper. Most of the growth will be required in the next decade, not this one, so there is time to prepare. Ai Group is playing a leading role in this regard, building on its existing group training program in association with ASC in South Australia to help provide apprentices for that program.

One of the issues being experienced by defence companies is the loss of personnel to the booming resource sector. The chairman of BHP, Jac Nasser, yesterday called on Australia to create a Silicon Valley style hub where more than 60,000 workers could be trained for that sector. While clearly desirable, this will pose additional challenges to the defence sector's skilling challenge. The recent revelation about delays to the AWD project highlights yet again ongoing difficulties in bringing major projects in on time.

We are pleased that Ministers Smith and Clare announced earlier this week their intention to continue with the implementation of the Kinnaird and Mortimer reviews, which were principally aimed at improving the capability development and materiel procurement processes within Defence. One worrying trend, however, is how the organisation continues to grow, both in number and with an expanded top-heavy structure at a time of a sluggish approvals process. At a time when manufacturing generally is doing it tough, this sends a poor signal to industry about public sector efficiency. I am sure the committee will want to test officials on this development later. But on behalf of the Australian Industry Group, once again thank you for allowing us to be here today to present evidence and we are very prepared to answer any questions that you may have for us.

**CHAIR:** Now we have the Australian Industry and Defence Network with submission 19.

**Mr Priestnall:** Thank you for inviting AIDN to submit a proposal to the review. In my short statement I would just like to explain the development of our proposal and touch on a few points in the executive summary of our proposal. AIDN is the peak organisation representing Australian defence industry small and medium enterprises, those companies which are frequently defined in many reviews as the innovators and entrepreneurs of the Australian defence industry. AIDN is comprised of chapters in each state and territory, with a national executive over the top of those chapters. We therefore have a combined membership of over 800 defence industry companies. In developing the AIDN submission, input was sought from all members and those inputs were refined into the submission during a workshop by the members of the AIDN national executive. The AIDN submission therefore represents an aggregated view of the organisation's position.

In regard to the procurement procedures used by major defence capital projects, AIDN has witnessed a slowdown in the approval rates for such projects, which has had a negative impact on the defence industry and has the potential to delay capability needed by the ADF and, through that delay, to increase the cost of providing that capability. AIDN's submission highlights that military off-the-shelf or MOTS procurement, which may mitigate risk and cost in the acquisition phases of the capability, can actually increase risks and costs when the sustainment or whole-of-life costs are analysed. The sustainment of ADF capability, an area where many SMEs operate, is the greatest cost to the government in acquiring and maintaining capability, yet this draws relatively minor focus and analysis within all ongoing reviews.

In assessing proposals from defence accountability reviews, AIDN highlights the importance of the Priority Industry Capability Innovation Program to defence industry innovators and future ADF capability. AIDN also requests a report on the implementation of the Mortimer review recommendations. AIDN proposes that acquisition cycles and a more commercial like focus within the DMO would be assisted by empowering middle level managers within the DMO with the jurisdiction to make decisions within their area of responsibility. AIDN's submission contains a number of recommendations for enhancing the availability of public information on defence procurement, including the appointment of defence industry ombudsmen, transparency of acquisition requirements, the inclusion of PIC-SIC value in developing project value-for-money determinations, and baselining current defence industry PIC-SIC capabilities to identify industry capability gaps for delivering Force 2030 ADF capability.

Chair, we have no further amendments to our submission.

**CHAIR:** Thank you, Mr Priestnall. I call the Defence Teaming Centre witness, Mr Christopher Burns.

**Mr Burns:** I thank you for the opportunity today to represent our membership here today, both through the written submission and in person today. The Defence Teaming Centre is the defence industry association in South Australia. Since writing this submission and submitting it, our membership has grown from 230 to 255 member companies, representing some 17,000-plus employees in the defence and security related industries. In developing our submission, we held three open forums for our members which were particularly well subscribed and attended. We also took both written and verbal submissions from our members.

At the Defence Teaming Centre we define our defence industry as those industries that are engaged in, or could be engaged in, supporting, developing or maintaining military capability. In doing that, we talk about any industry that services the fundamental inputs to capability. In that, we do not just focus on industry that services the major systems' fundamental input to capability, which tends to be where the DMO is; we service all the industries that service the entire Department of Defence. That gives us a very broad scope of membership that includes both prime contractors, small and medium enterprises, and professional service providers. In developing this submission, we found that our members were very motivated to provide feedback on their engagement with Defence, particularly in procurement processes. We also identified that our members felt there was a difference between the manner in which they were dealt with by the Defence Materiel Organisation and the way they were dealt with by other agencies within Defence. If anything, it could be said that the relationship with DMO is adversarial, whilst in dealing with other agencies there is a collegiate, engaged approach.

Our members repeatedly reported a decrease in the flow of work and projects coming out of Defence over the last few years. This is having a significant impact on the primes, the small and medium enterprises and the professional service providers. Delays in decisions are causing significant investment by these companies. Those decisions are not coming through and that is taking our industry to the edge. Our fear is that, if we do not get a flow of work out of Defence to keep those industries going, they are going to close up or, as my colleagues have said, move to other industries, like the resources industry.

We are at a critical point now. We need to flatten out the flow of work from Defence to make sure that we maintain a smart and innovative Defence industry here in Australia. That will ensure we are capable of providing the military capabilities that Defence is going to demand of us in the future. Again, thank you for the opportunity to be here today. I look forward to responding to your questions.

**Senator JOHNSTON:** Gentlemen, thank you for all of your submissions. I wanted to start by trying to draw together some common threads across each of the various bits of input you have had into what is and has been for a very long time a quite vexed issue of public policy. In the AI Group submission on about the second page it talks about the Kinnaird, Pappas and McKinsey reviews and the ongoing improvement that has been effected through those reforms but the need for a more 'commercially oriented operational' capacity. What do we mean by 'more commercially oriented'? What precisely are we looking to find when we talk about something being 'more commercial'? We will come to the risk elements in a minute, because all your constituents have to deal with commercial levels of risk which often government is not across. But when we look at an organisation such as this that has a business function almost, what are we looking for when we talk about commerciality? I am happy for anyone to answer that.

**Mr Willox:** I will go first, and I am sure others will join in as we go along. Thank you for the question. Going back some way, there have been questions about DMO's broader relationship with Defence and how it operates, such as whether it should be an executive operation and how it should operate in that sense and then how it should be devolved out of that. Then there are the questions about how it goes about its business. How does it do its business? What parameters does it put in around its business? Where we are coming from predominantly is that there is enormous frustration within industry that over time—and, in some senses, this is improving in some areas—those within DMO do not have a commercial background or commercial experience or commercial awareness of how the business world operates. There is little broader understanding on issues of risk, as you mentioned, or contracting or, more broadly, the pressures on business and industry—

**Senator JOHNSTON:** Such as?

**Mr Willox:** Time pressures, keeping business operating, dealing with, as I think has been alluded to in some of the submissions and presentations today, the lumpiness of the sector, where you will get periods of downturn and then periods of massive upturn. How do you deal with that? There is a perception or a belief by some within DMO and the defence establishment that a switch can be flicked, skilled workers can be found, projects can be delivered miraculously on time and on budget from a very low starting point. The time pressures get compressed



or you have changes made to specifications which are sometimes questionable and sometimes leave industry waiting for months or years for projects to be delivered from the time they were first announced. In the meantime, industry has had to pick up and operate project management teams to run this, then let them go and pick them up again. So it is that awareness of how business operates.

**Senator JOHNSTON:** Do you think some of those problems would be solved if at the capability group first pass level we had industry representatives feeding in sustainment issues, scheduling costs, tooling up and capital issues?

**Mr Willox:** That is one of the points in our submission. One of the key bugbears of industry is to get itself much more involved much earlier in the capability group.

**Senator JOHNSTON:** How do we avoid conflict of interest?

**Mr Willox:** There has got to be an element of trust in these relationships. You have to have some information—

**Senator JOHNSTON:** I love the element of trust, but I do not trust it.

**Mr Willox:** I will flip your question around the other way. If you do not have industry involved earlier on then you do have blow-outs. You have unsustainable demands being made on the industry going forward as you go down the pipeline. So to get industry involved earlier does reduce the risk there a little bit, and then the industry is at least able to say what is doable, what is possible, what is realistic and what is not as we go through the project. That is the sense that we are getting: industry is brought in too late in the process to be able to influence and shape the outcome, to make it much more sustainable, to get rid of some of what have been problems in the past. Your question is a good one.

**Senator JOHNSTON:** Most of us are very nervous when you say 'cost plus'. With a population of 23 million, we really are not in the business of being able to afford cost plus. So we necessarily have to have a competitive process. The problem with the level of expertise and industry participation in each of the larger projects—even the smaller projects—is that to get industry advice at the front end really does undermine the integrity of the process, so we are in a bit of a catch-22. Is it not something where we can have people who are no longer in the industry—we saw it with Kinnaird to some extent—who form a board with commercial and industry experience and who can hopefully divorce themselves from their past and provide something like what the probity officer provides DMO in some of those matters? It would be a sort of independent participation that is completely away from industry but with industry experience. Is that too exotic or unrealistic?

**Mr Priestnall:** There are two levels for this commercial type of interaction. One is at the higher level of requirements development, and some work is starting to be done on that by the Capability Development Advisory Forum but, more importantly, the environmental working groups that report up to that. These have been reinvigorated within the last six, except for the land one, which stayed in existence. There are also the maritime, air and other ones. In the case of the maritime one, 150 people attended a forum where we talked about ideas. So at that level of commercialism I think you can get in there—

**Senator JOHNSTON:** So large numbers solve the integrity problem.

**Mr Priestnall:** They do. And, as Rob has just whispered in my ear, if that information is public and contestable there are no probity issues. You can keep your IP separate. We are talking about ways of doing things, not how we are going to do it. How you are going to do it is the IP which the company keeps. Then we have an open competition with the best rates, looking at things like PICs, as I mentioned in my introduction—at that level. The other level is one which I think a lot of SMEs have issues with. I will cite an example. I went to a middle- to high-ranking DMO meeting. We were actually there to talk about getting information on PICs out and taking information in, which has always been from industry into the DMO. Before this meeting started, one of the gentlemen there asked me, 'How can we stop this waste and cost?' I said, 'I'll give you a hypothetical. If you have a project and you have told everyone the RFT will be released on day X, the worst thing you can do is come back to everyone a week before and say, "It's going to be released in X plus two weeks," and then a week or two later, "X plus four weeks or five weeks."' I said, 'The best thing to do is say, "We're not where we want to be yet. It'll be three months," so that I don't have 10 project engineers and a project manager sitting around, twiddling their thumbs, who have to be paid. In the next contract, I am going to have to get that back in general administrative overheads.' That is commercial awareness to do with cash flow and how businesses work, which some people—I am not saying all—do not have an understanding of when they are making decisions.

So there are two levels: one is about getting industry involved in the development of requirements and what types of capabilities you need; the other is promoting an awareness. I know the DMO has their business acumen programs, because I have presented to a couple, one quite recently, about how companies work. But I do not think

that is inculcated into the culture of the DMO's thinking—'If I make this decision, what are the commercial ramifications?' For a large company with deeper pockets, even though they are hurting, they can ride that out. They have multiple business streams. An SME, which are our powerhouse of innovation and entrepreneurship, cannot. I know there are quite a few from my home state of Western Australia sitting on this committee. They know the impact of resources and those people will go. This is similar to what Innes said.

**Senator JOHNSTON:** You have raised PICs, and I think we want to come back to what you understand a PIC to be and what DMO and government understand a PIC to be—whether there is a divergence or we are all on the same page. I would like to know what advantages there are to one of the common themes: executive agency. Why are we saying executive agency? Mortimer said it; I want you to tell the committee why you think executive agency will go some of the distance toward solving some of the problems.

**Mr Tonkin:** I am not sure that all the industry groups would agree that they are advocating an executive agency.

**Senator JOHNSTON:** If not, why not?

**Mr Tonkin:** From AIDN's perspective, I do not believe that we would favour an executive agency. The reason for that is that, when we talk about having a commercially aware and commercially sensitive DMO, we are not talking about a commercial structure; we are talking about, as Graham and Innes have both pointed out, an awareness and understanding of the pressures, demands, costs et cetera that relate to industry's engagement with government in these activities. If you were to establish an executive agency or, as you mooted in your comments previously, a commercial board of some sort, I suggest that you would simply impose yet another layer of structure on top of what is already there with a real risk that the organisation starts to see its purpose as itself, whereas the purpose of DMO is to provide a service in support of defence capability in the defence of Australia. What we would like to see is an efficient organisation focused on the delivery of that service and an understanding that you deliver that service in a complete partnership with industry and, primarily, Australian industry.

**Senator JOHNSTON:** How do you know if it is efficient?

**Mr Tonkin:** You know it is efficient if it produces the outcome that you want in the most cost effective way. The presumption that business is necessarily more efficient than government is something that you could spend a long time in this building debating and perhaps never get anywhere with the discussion. You would want to make sure that people are skilled. One of the pitfalls I think a number of submissions have pointed out is that there is an ineffective structure of delegated authority within DMO to empower people managing projects and the people approving projects, right up to the minister. They do not have a sufficient level of delegated authority to get on with it. If everything has to be deferred upwards, if every decision that is made is more complex, embracing more players, then, by nature, you delay the process. Efficiency, as Graham has pointed out, is about focusing on what is required, getting clarity of what is required, making a decision and then getting on with it. The eternal round of review, refinement, reconsideration and rejustification burns time, burns money and costs all our members jobs and economic opportunity. We should focus on getting those things right, cease to worry about structure, and worry about process and output. What we all want to see is capability delivered on time, on budget and effectively available to the people in the Defence Force. Members of the Defence Force in Afghanistan do not give a toss about the subtleties of organisational structures in Canberra; they give a toss about having what they want, when they need it and having it work. And that is what we are on about.

**Senator JOHNSTON:** There is a counter argument?

**Mr B White:** If I could just make the point about the early involvement of industry. We have been one of the groups, along with most of us here, advocating for greater and early engagement of industry through environmental working groups, project working groups and things like that. That process is just starting, so we will have to wait and see how that goes. It is looking very good at the moment. The couple of meetings that we have had have shown good signs.

One thing I would like to bring to your attention is some of the work currently being done in DMO on the Acquisition and Support Implementation Strategy, ASIS, which was briefed at the Defence and Industry Conference. It has a model whereby, for example, there may be scope to downselect a number of prime contractors in the requirements phase of a project so that that capability definition can be done in concert between Defence and industry in an open environment, while meeting some of the requirements for competition. Maybe we can further look at models like that.

I guess the point is that industry is often kept at arm's length, for a variety of reasons—media, probity, MOTS and COTS, value for money versus competition et cetera. Industry may see these kinds of proposals from DMO

as good. At this stage, industry is not really getting a good level of engagement to collaboratively come up with how the system can work. All the reform streams that we have so far seen are really tweaking the same system; the same system that we recognise overseas, in the US, the UK and other countries, is producing the same sorts of problems that we are seeing here. If we got industry and Defence together in the same room and said, 'Right, here are some proposals; let's look at them and put up a joint proposal to government on how the system might work or how we can improve the system,' then that might be another way to go.

**Mr O'Callaghan:** To go back to the issue of the DMO Advisory Board, I think Kinnaird and subsequently Mortimer provided some pretty sound guidance on why it should be structured that way, particularly with the sorts of commercial players sitting on the board, in addition to some of the secretaries and coordinating departments. To this day there has been no real explanation as to why that board is not operating. But it seemed to make sense from the point of view of what Kinnaird was recommending and then was subsequently endorsed by Mortimer.

Separately, just to pick up on the point that Ben White made, in years gone by the Capability Development Advisory Forum and its underlying environmental working groups for Air, Navy and maritime activity worked quite effectively because it provided companies in a collegiate sense to sit around a table with the Capability Development Group and identify in advance for those capabilities downstream risks associated with major design and integration activities. They could bring in the key players from key companies, likely to be involved but not at that point in any conflict situation, early in the piece to identify for the benefit of the Capability Development Group those elements associated with risk, complexity and schedule, which ought to be identified at that point.

**Senator JOHNSTON:** To your understanding, we are not doing that now?

**Mr O'Callaghan:** The good news is that, as a consequence of discussions with relevant ministers earlier this year, they have now decided to reinvigorate the Capability Development Advisory Forum and the environmental working groups. I think the key to all of this is that the overarching forum needs to provide clear guidance to the working groups. They need to not bite off too much work. They need to be specific about what the outcomes are that they are seeking to get and they need to focus clearly on ameliorating those potential issues related to risk and complexity. The underlying theme for all of the problems that we see from time to time, fundamentally, go back to complex design, complex integration and complex upgrading activity.

**Senator MARK BISHOP:** I want to ask a question of Mr O'Callaghan and Mr Willox, but other persons may wish to comment. In the last few days Minister Smith and his colleagues have put out some detailed commentary, in the context of the Black report, about restructuring of the Capability Development Group, and that is now presumably going to be a matter of actioning the decisions of the government. So the context in which I want to ask a question is to do with the recommendations of Black and the acceptance and decision of the government and the three ministers two or three days ago.

The government is restructuring the Capability Development Group. It is having two new associates go onto it. In effect there is going to be a heavy civilian involvement, more so than in the past. I understand the government is going to have representatives from Finance, Treasury and PM&C participate in the deliberations of CDG. So, to a significant extent, there is going to be a 'civilianisation' of the CDG. A lot of the criticism in the press of the DMO—we are all familiar with it—go to contestability, commerciality and the balancing of different interests. What is the AIGDCs assessment to date of the government's planned changes on the CDG? Secondly, will they be beneficial to industry? And will it achieve the continuity of reform that both government and opposition have indicated they both want and need in this area?

**Mr O'Callaghan:** I am happy to pick up on each of those areas. Regarding the planned changes to the Capability Development Group I think clearly there needed to be some changes. It is a moot point whether it should be headed by a civilian or by a military person. Take for example the current Chief of the Defence Force. He was an outstanding head of the Capability Development Group and deserves a lot of credit for the work he did. So it is not really the issue, but others might have a different view on that. You actually want to have in the role the best person who fully understands the issues relating to capability development, no matter whether the person is civilian or military. Will an associate secretary arrangement work? It probably will, provided that person has the ability to be able to challenge, for example, the sorts of requirements that come forward from time to time, among other roles.

In relation to it being a benefit to industry, we will have to wait and see. We would hope that if changes are being made there will be benefits to industry. If you take the baseline of those changes, combined with stronger industry engagement at the Capability Development Advisory Forum and the Environmental Working Groups, you probably will get a better outcome, and that is what we would be seeking.

What was your last question?

**Senator MARK BISHOP:** Benefiting industry.

**Mr O'Callaghan:** Let us wait and see. But let us put this in context. Kinnaird and then Mortimer and Pappas and, more recently, Black, and others, have consistently had a theme of improving the commercial focus of activity within Defence. From my own perspective I co-chair a contracting working group with Harry Dunstall, the head of the commercial area within the DMO, that brings to the table some key players from both primes and SMEs to think through improvements to tendering and contracting activity, with particular focus—and our submission addresses this—on those bugbear issues that have been annoying industry for many years: the cost of tendering, the unnecessary red tape, the unnecessary paperwork and the delays in getting to contract. This group has been fundamentally focusing on key areas like, for example, unlimited liability provisions caused through the Financial Management Act. Frankly, from the point of view of the flow-down to SMEs it is a complete nuisance and causes unnecessary angst every time companies sit down to negotiate contracts. It causes contractual negotiations to go for, in some cases, years when there should be a sunset provision that says 'after six months it should stop', frankly. We have been addressing issues, for example, like insurance. Every time the DMO wants to strike a contract with a company they drill in to find out what the insurance credentials are of companies. In the case of the primes, for example, their activity in Australia is a relatively small component of their worldwide activity and their insurance coverage generally worldwide is pretty good. You do not need to drill in every time you have a contract negotiation to attest to that. To the credit of the DMO and also of Harry Dunstall in particular, he has identified that as a reasonable issue to be smoothed out and we have done some good work in recent times to address that, so much so that, for example, he has had his DMO people visiting all of the prime contractors offshore to attest to their insurance credentials. We are still to see the final outcome of it, but I think it has been a positive development.

Another bugbear issue relates to IP. Who owns IP and who has access to it particularly at the time of upgrades? This is an area which we are starting to delve into, but it is a complex area and there will not be short-term solutions here. In terms of improving the commerciality, for example, of the DMO, I think this work in conjunction with key industry has been a really good development. The overarching role of the DMO board, just to pick up on Senator Johnston's point earlier, is this. If you take John White or Malcolm Kinnaird, who are members of that original advisory board, they brought to that board that independent expertise from the defence sector where they worked previously, balancing the advice from the coordinating departmental secretaries. I personally thought that was a very wise, sensible development consistent with Kinnaird and that it should be brought to bear again.

I will pick up on other point about the executive agency. I disagree with Rob here and I acknowledge his long-term experience in this area. Our position is that it was a worthwhile recommendation from Kinnaird. To this point in time no-one has said why it should not have happened and we know there was a lot of argy-bargy internally within the organisation about whether the DMO should be an executive agency or not.

**Senator JOHNSTON:** And it is still running.

**Mr O'Callaghan:** And there still is. What is the advantage from the point of having a separate entity like that? Frankly, it is an ability for the CEO to have the flexibility that a CEO in a commercial entity would have to a much greater extent, acknowledging, of course, the restrictions of parliamentary and Auditor-General requirements. They would still have obligations in that regard. But fundamentally the sorts of efficiencies that the strategic reform program is working towards would be driven much more effectively, personally I think, from the point of view of having that separate executive agency and the sorts of efficiencies that would come with it. An example is that in all of the program activity where industry is participating on SRP, industry is finding efficiencies and in some cases downsizing. But there is no equivalent in regard to the bureaucratic entity that remains. Frankly, there should be a shared responsibility there. That is an ongoing issue but it is one of those issues that have to be carefully managed over a period of time.

**Mr Willox:** If I may add one thing to that, I think there is undoubtedly a greater awareness—or has been in recent times—within the DMO that they do need to get closer to industry and the industry players to understand better how they do operate. That is clear through the Capability Development Advisory Forum, CDAF, and through the work on contracting working groups and the like. So there is work happening and it is not as if things have just stood still or there has been no movement at all. There is some movement there.

On the announcements that were made by the ministers this week, we have made some commentary. We have no problem at all with the two new associate secretary positions and they will undoubtedly work well depending on who they are. A lot will depend on the person and on the approach that they take to that position. We had two issues with it. One was that it did not come with any commensurate reduction within the defence hierarchy, as it

were, in any case, so it was just like a bolt-on, an add-on. That causes some concern. The other point is that in the new structure there is quite considerable fuzziness, we would think, around where the new CEO of the DMO actually reports and his reporting lines and how that will then influence the process downstream as time goes on. It appears that sometimes he will report direct to the secretary and sometimes he will report to the associate secretary. It is not clear under what circumstances and how this will work.

**Senator MARK BISHOP:** The organisational chart is very horizontal and the CEO of the DMO just reports straight up.

**Mr Willox:** But that does not reflect in the words that went with the announcement. That is the problem. The announcement does make it clear that in some cases he will report here and in some cases he will report there but the 'some cases' are not specified. Our concern then is: how does that flow down through DMO and their processes as time goes on, and what does that do for their influence? They are the ones who will still be running and managing the projects as time goes forward. That is something that needs to be worked through. We have no problem with the associate secretaries; it is just what has gone with it.

**Mr Burns:** You asked what the view of industry was. Without going into the specifics, could I offer what I believe the views of the small and medium enterprises are: they are review weary. There have been so many reviews and so many changes. Industry sees an increase in the bureaucracy as another layer that delays decisions. What they need is decisions that get work flowing out there. They probably do not really care about whether there are associate secretaries or more secretaries. If you are imposing more layers of bureaucracy that will delay the releasing of projects and decisions, that impacts on their bottom line and their cash flow. That is the way they see it.

**Mr Priestnall:** I would like to reiterate Chris's comments. If it leads to a reduction in the time that it takes to get projects approved and contracted, it would be a benefit to industry. If it leads to an increase in the amount of time that these functions occur, it is not a benefit at all; in fact, it is more of a hindrance and those opening comments of mine will just be exacerbated.

**Senator MARK BISHOP:** I just want to pin you down on the Capability Development Advisory Group. You are saying that it is meeting regularly and doing good work.

**Mr Priestnall:** It has met twice. There are quite a few of us here who actually sit on it. I am probably biased, but I believe from where we were before when it had not met to where we are now there has been engagement in getting the environmental working groups going. Ben, who is sitting at the end of the table, and I have been involved in obtaining the co-chairs. In fact, he is an interim one for the air. I believe that the issues there are impacting industry. So, in my opinion, it is a good start.

**Senator MARK BISHOP:** My question is: within the context of the original question about the restructuring of the Capability Development Advisory Group, it has added personnel from PM&C, Finance and Treasury. It got a little bit lost in a discussion on who cares whether it is a civilian or military leader, as long as it is effective. What I was trying to drive at was: does there need to be an effective rep from outside the defence services and appropriate government departments sitting on the CDAG, or does this Capability Development Advisory Group in whatever form and however regularly it meets adequately fill the role or the requirements of industry across the board?

**Mr Priestnall:** I think it does because of the fact that it has industry organisations and industry company representatives there. So there are quite a few people from industry who sit there who do not have a vested interest in which company wins which contract. In our submission, we said that generally we believe organisations such as AIDN and the others here can assist in this process of bringing Defence and industry closer together to bring about a situation which is reflected in both the white paper and the Defence Industry Policy Statement 2010, which talks about a team approach.

**Senator MARK BISHOP:** Is there an alternative view to that put by Mr Priestnall?

**Mr Mansell:** The idea or the concept of bringing more third parties to any forum or group puts another level of complexity to any sort of review process. I must say that I have been in the industry for quite a few years and every time a new government forms we get a new minister. It takes us, industry, on average about 18 months to two years to break them in—

**Senator MARK BISHOP:** To educate them.

**Mr Mansell:** Let us put it that way: to educate them.

**Senator MARK BISHOP:** We understand that. We are not offended.

**Mr Mansell:** to understand the complexities, the problems, the acronyms and the issues of the time. I agree with my colleagues, there have been more reforms than reforms for reform sake. The idea of getting CDAF going again was a good stroke. What it means is motivation and objectives. I go back to one of the questions that was raised just before. It was about putting a civilian or a military person in those capacities. Most definitely it should be a military person. From that point of view, let us be very clear about what the sole objective of Defence and the defence industry is: it is to support the war fighter. They are there to do a job; we are there to support that. It gets lost in translation over time, when we are going for value for money and we are going for competition. When we are going for that, who is actually being sacrificed? It is the end user. I believe that there has been a bit of a misuse of the value for money in competition to divide industry and Defence. Going back to putting in more and more people, I think by the time we educate them what gets sacrificed is the end result. There is collateral damage. One is the end user, the war fighter, and, two, industry suffers.

'Process' and 'trust'—they seem to be words that get used but not taken very seriously. For industry to do what it needs to do, it needs to have that trust—and that trust is diminishing. We need to know whether there is going to be a tender out on time. Industry will sort itself out. But reforms do not reform industry. We will sort ourselves out as to how we will react, respond and so on. But if it is a moving feast then, after a while, industry will say no.

One of the things I put to one of our corporate roundtables was that it until recently decisions were done at the company level—SME and larger. What we are all experiencing at the moment is that the decisions will be taken out of the hands of the CEOs and the SMEs and the large ones, and it will be done by the stock market and our bank managers.

If we want an industry to hang around, we have all got to convince either our shareholders or our bank manager that it is worthwhile staying in. That is a circular way of answering your question. I will now come to the point. We do need to get responsible people on these committees. I believe CDAF is a good start. From the inaugural CDAF—I, along with my colleagues, sat on that—we gave clear direction from industry to John Harvey that, if we are going to do this, we want results back. John is a very highly motivated and professional human being. He is the ideal person, along with his predecessor, David Hurley. Again, they are good people. If you put people in for people's sake, it loses direction. I will probably go off transmit now.

**Mr Tonkin:** In relation to the participation of PM&C et cetera, there is value in engaging central agencies early in the process so that their awareness and understanding increases so that they do not slow the process up later. If you do not engage them as you are coming up the capability development path inside Defence, you will find them engaging when you go to draft the cabinet submission National Security Committee phase and you tend to go backwards. Again, it is an 'up and down the hills' process. But engaging does not mean sharing accountability with them. It has to be clear that it is Defence that has the accountability to develop those capability things coming up to the Minister for Defence. The more they are aware of it, the more that Defence can adjust to accommodate itself to their concerns and understandings and shape what is proposed, the more likely you are to have a smoother and hence quicker process overall. It is a matter of controlling that.

**Senator MARK BISHOP:** One of the major criticisms that has been extant for the best part of 10 years goes to schedule, slippage, time delay and scope creep. As more and more people become aware of this debate, the suggestion is that often the drafting or the specification is nowhere near as exact at either first phase or second phase and then post-second phase you have dozens and dozens and dozens of scope changes to major projects. Having people from PM&C, Finance, Treasury and, arguably, industry in there is designed to improve the process at that early stage. Necessarily, it is probably also going to delay things as they test, prod, ask questions and do their job and simply not accept at face value what the service chiefs might suggest is necessarily appropriate at the CDG level. So there is going to be, I suspect, some significant time delays attached to the changes to the CDG. Is that potentially an issue of concern that you have given any thought to?

**Mr Willox:** Time is money. That is always the case. The longer the delays roll out, the greater the money lost and the greater the frustration. Going back to an earlier question about the commerciality, the primes at least are part of a bigger picture. They are global entities and they report back to global headquarters about what is going on here all the time. I think the defence industry policy statement found that the biggest global component of a prime's business in Australia was three per cent. So it is not big in the overall scheme of things. There are always questions being asked. I hear all the time from the COs of the primes that they are being asked back at headquarters, 'What is going on? Why the delays? Why the delays? Why the delays?' It is often because of the specification changes and the scope changes that are made.

I think the key point is that, once a contract is set out and let, it should be dealt with expeditiously. What is happening more and more is that from the time the contract lets out to the time that it is finally dealt with approved changes are made the whole time to scope and to specifications. That adds costs the entire time. Where

we are coming from is that there would be delay at the start but at least if you can get some certainty getting towards the spiky end of the process that might be of some benefit.

**Senator MARK BISHOP:** Does that then suggest that the work at the CDG level is of such consequence that it needs to be significantly improved in terms of the quality of the people there, the type of output they make and the considerations they have regard to?

**Mr Priestnall:** Yes, that is true. The other point is that then you throw into the mix decisions that are not even in the white paper being made. Where do they come from? We can name a few. Ships are bought that meet some operational requirement that then end up not being sustained properly. Both governments have done this. Tanks have been bought which do provide the capability that is probably needed but nothing is done about all the rest of it. A decision is made to purchase a certain plane because it was the most cost effective, but was it submitted to the fully rigorous process which we now have in Kinnairds? Probably not. There is all this stuff that goes on. There are capability gaps, as we said in our submission, that need to be met. That is fine, but where is the public knowledge or the transparency on any of those procurements that are made? They might be to support people who need the equipment, but there might be equipment in Australia which we are selling overseas that can do the same job. From an Australian defence industry point of view, there needs to be more openness.

I will make one comment on your question. If you can get things sorted out, you will save 80 per cent of your potential problems in a project. This is from a person who used to work in the area that is now CDG. We were underresourced and we were set to time frames. We could not stop. Once the DCC set a milestone, we had to meet it. Sometimes we knew our requirements were not as good but we were told, 'They will get fixed up later on.' Those are the two things.

**Mr Burns:** Could I offer one simple example of a company in our membership who makes refrigeration and water cooling systems. They engaged with Thales in 1995 to develop the cool drinking water system for the Bushmaster vehicle. It is a water cooler. Since 1996 they have produced 11 prototypes which have all been tested and have all been up to the specifications set for that next iteration of specification. They have just done the last testing. As late as last week they went back to Thales, and said, 'when will we know that we are going to contract?' The answer from Defence is, 'We still don't know if we are going to install it.' They are at the point where they are just about to walk away from it. They are keeping on engineers, electricians and tradesmen in the hope that this contract to fit these water coolers to a military vehicle. After 15 years they have had enough.

**CHAIR:** Fifteen years is a long time.

**Senator FAWCETT:** Before we move away too much from the starting point with commercialisation and what the industry actually means by that. What has come through fairly clearly is that by commercialisation what you are really talking about is competence of the people in the system, whether they be uniformed or civilian. You are not talking about structure, you are not talking about process necessarily; you are talking about the competence of the individuals to understand (a) Defence's needs but (b) the impact of Defence's decisions on industry in terms of cash flow, ramping up skills, delays—all those kinds of things. Some of the discussions we have then flowed on to, whether it is the Black review and two associate secretaries or whether it is various boards, it is talking about fairly top-level education of some people at the broad policy level in terms of where we are going to go strategic decisions.

Project by project, what we see—and some of the submissions highlight—is that industry has seen a great variance in how individual projects within DMO not only respond to some of that corporate knowledge or guidance or awareness but even the written things like the Defence Procurement Policy Manual. One of the submissions highlights that there is a great deal of variance in that. So I wonder in part whether the thing that is being overlooked by all the reviews you have mentioned, including the most recent Black review, is that we are not actually focusing on holding people within the organisation to account to the systems we already have.

I would argue that, just as Defence in terms of its aviation capability has an airworthiness board made up of people who are expert in their field, whether that be operational or engineering, who once a year subject every aircraft type to a forensic audit of 'What are you doing in accordance with this rule or procedure? What are you doing for your training? What are you doing for your competence in this area? What are the impacts?' Every year they have to give account to this board, who are retired officers so they no longer have that interest in their own career; they are quite unafraid about speaking up and saying: 'Your baby is ugly; this is not going well', and giving advice in that case to the capability owner of the platform. In the DMO perspective, a similar model could have every project subject to a review once a year by somebody who has the capability and the military background, somebody who has a commercial background, like the airworthiness boards. If we subcontract the maintenance to an organisation that corporate organisation puts a submission in to the board. So a project who is in contract or who are bidding for contracts with the Commonwealth would have the opportunity once a year to

put forward a submission and say, 'The people you have engaged to run this project are actually not applying your own procedures and here is how their decisions are impacting us.' That board can then make recommendations up to the decision makers, whether that be the boards you are talking about at the higher level, for Defence then to actually have that internal control to make sure that, regardless of the structure or the process, we actually do what we have said we are going to do properly and we get appropriate decisions.

I would argue that the majority of the misunderstanding around risk and schedule originates from things that occur at that project-by-project level which are not accurately reflected up the chain. So decisions are made in complete ignorance sometimes of what is actually occurring within the projects—much to the frustration often of the people within the projects, because they do not have an independent path to reach straight up to the top decision makers and saying, 'This is broken.' Because often what they put forward as quite well-considered, well-informed, quantitative measures of risk or schedule risk are watered down to yellow or green traffic lights by the time it actually hits a minister's desk. I would argue that that would potentially bring about far more efficiencies that would benefit industry. I would be interested in your views?

**Mr Burns:** I agree with you, Senator. One of the things that we have found in broadening our interpretation of defence industry to cover all the fix is the question of why Industry Division is within DMO.

**Senator FAWCETT:** A very good question.

**Mr Burns:** We believe the industry division is a Defence asset; it is not just a DMO asset. If you have an industry division that was under the CDF and secretary, you would get a more consistent application of all the policies and procedures to all of the industry that serves all of the agencies of Defence. At the moment, there are inconsistencies depending on which agency you are dealing with, be it infrastructure, logistics or the DMO. It is that lack of consistency and application of the policy that causes a lot of frustration and delay.

**Mr B White:** Last week I co-chaired a working group on defence infrastructure with Defence Support Group. The three issues you just brought up in relation to materiel were exactly the same. With variance in project submissions across the DSG regions, companies were finding that what was required for a tender submission in Victoria was far different from what was required in Queensland and vice versa. To their credit, the DSG executives there, John Owens and his team, took that on board and said, 'Yes, that's an issue we have to fix.' Part of their problem was ramping up to meet an infrastructure workload which they had not had four years ago and the experience of the number of staff they have to do that. So it comes back to the staffing issue you talked about. It really needs from the top level down the push down, the need for that consistency and the application of procurement guidelines and the other relevant documentation.

Another issue discussed was peer review of infrastructure design. Defence might engage a group of companies to provide peer review on designs submitted and you would get, as you were talking about, a board made up of independent people with expertise to do that. That may be another model. We may need to look in other spaces for how this is done, whether that be in infrastructure or how civil organisations manage their shipping or logistics, things like that.

Also, a lot of expertise was coming out of the project management authority. These are the companies that essentially deal with a lot of the project management and contract administration for DSG in the infrastructure space. Those companies are expert at doing that role. DMO seems to suffer from a lack of expertise in the project management role to a certain extent but they are getting better and they are doing a lot of work to do that. It may be that there is scope for greater use of professional service providers or people from industry to assist in the project management and contract administration because that is where a lot of the expertise lies in the industry. Those are just three examples from another space. Our organisation covers not only DMO company CDG but also DSG and CIOG. We may need to look at examples as well.

**Mr Priestnall:** Going back to Senator Fawcett's proposition, I think there is a considerable benefit in what you are suggesting not only for major projects but also in the sustainable component of those projects as was the capital site. One of the positive aspects of what you were suggesting would be to overcome the dumbing down—I was not going to work use the word but I will—of upward reporting. A lot of things are filtered out of what is reported to come to a traffic light answer or a report on a page or whatever, so that there is unintended censoring. So the message that gets up to senior management, it would seem to us and to ministers, is often not the full picture because the full picture is complex and difficult to comprehend and present. Your mechanism would help to overcome that.

One caution I would suggest to you is not to allow such a mechanism to be yet another cause of delay. I can just see project managers saying, 'I will deal with that issue once we get the report of—'. Once you start the process, a three or four months collect the data, analyse the data, report process, that is another potential risk. So



working out a way that such boards would operate in parallel but not as part of the decision process, so it is not a device that can be used either by industry or by the DMO as a caution to go even in slower. Other than that, it would be a great way to engage the doers in communicating in a clever way upwards.

**Senator FAWCETT:** I am modelling this off the Airworthiness Board process—because the people who are on the board have a great depth of experience. Some of the reviews like the Black review are proposing three-year minimum postings. Well, I have got to say, three years is barely adequate to scratch the surface in terms of really understanding either the technical contracting or other aspects of defence procurement. What this enables is people with a great depth of who have seen various hurdles and pitfalls before to actually reach down into the organisation, bring forward information through their appropriate questioning, such that issues are actually brought to the surface and addressed far more quickly than allowing them to bubble away until they actually cause the embarrassment and the delay that the media tend to love. I think it actually would work in the industry's favour in that a lot of those things would be brought to the surface and dealt with, because the light of day will shine on them far earlier.

**Senator LUDLAM:** A couple of submitters have mentioned the potential usefulness of establishing a defence ministry ombudsman. I am just wondering if one of you would care to address what you think that office would most usefully do?

**Mr Priestnall:** I should probably answer that. It was in our submission. What has occurred in the past, whether it is actual or just a perception, is that the ombudsman would be someone who is independent, that a company with a question or a grievance could go to, because having a monopsonistic customer in many cases for defence industry companies, they do not want to be seen to be critical of the DMO or DSG, or whichever space they work in, because they believe that it could be used as a leverage against them to gain future work. It may not necessarily be a criticism that they want to put forward, but they may want to query something, and human beings as they are, someone working within a sustainment or a project office may see that query as criticism. Therefore, and dependent upon their personality type, they may hold this company and their questioning in a negative light. What the ombudsman could do is firstly accept these queries, or criticisms if they are, and then investigate them. I personally know that one person through our organisation who did query something within that system's program organisation, did not receive any work for the next five months.

**Senator LUDLAM:** So to put some safe space between the two. Do you feel there is enough work there for a full-time office?

**Mr Priestnall:** Even using the government's figures from the defence industry policy statement, which say between three or four thousand companies, I believe that there would be. However, there would have to be some sort of cost-benefit or business case developed to see whether that is a full-time or a part-time person.

**Senator LUDLAM:** My other question is possibly a bit more complex and I guess it opens up some of the issues that were raised before. A lot of the submissions have raised the tension around getting equipment off the shelf overseas, which in an upfront sense will be cheaper, and a few of you have raised the fact that it potentially raises your operating and sustainment costs. There is an enormous grey area in there. Nobody is proposing that we just develop our own indigenous fighter jet, for example. But Senator Johnston, for example, has done a huge amount of work on global manufacturing of uniforms. Between those two extremes, there is an enormous grey area. As defence contractors, you obviously all have an interest in as much as possible being procured and developed in Australia. But what kind of criteria do you use or do you propose that the government uses to make those decisions?

**Mr Priestnall:** First of all, in answering your question I just want to do a bit of a 'how did we get to this situation' exercise. If you look at the white paper, it said that MOTS would be used as a benchmarking exercise—which to me, is logical, it makes sense; we can buy one somewhere, it will cost us this much. In the intervening couple of years that has turned into a preference for MOTS, and that is not written down anywhere. I have even seen it written in contracts where, instead of being benchmarking a MOTS solution, it is 'We want a MOTS solution because it reduces risk.' Well, it does not always reduce risk—in fact, I propose that it can increase risk, in a lot of cases. Going back to your question I would not propose that we build a new fighter jet or a C17 in Australia because the numbers we have do not actually lead to that solution, but we always have priority industry capabilities which—we are going to talk about a bit later—have not been detailed.

If the strategic analysis has led us to believe—and that is what the white paper and the other reviews have come out and talked about—that we need to have self-reliance in these capabilities, if you are making a procurement decision which includes these capabilities, you would say that we would need to bias that decision toward a domestic supplier or at least an integrator. You cannot make it hard and fast; it depends on the capability. It also leads to 'Yes. What sort of allowance would you have in that business case?' You cannot say

'Well, it's going to be 10 per cent or 15 per cent.' Those are the sorts of decisions, I believe, and it is a grey area and it is up to some committee of learned people to judge what that is.

**Senator LUDLAM:** Does anyone else want to address that one?

**Mr Willox:** I would just add two points quickly to that. One is that the best sort of breakdown we can identify between procurement and sustainment for industry in Australia is about a 70-30 split; so 70 per cent of industry work in the defence base in Australia is sustainment—keeping things going and operating and running. That is what they do. The other point about not making fighter jets is certainly true, but what we can do—and do—is make significant components of fighter jets, for instance, looking at that JSF and the like, and then build into global supply chains and they become a global business for companies. That flows through from the prime right through to the SMEs who the prime operates with and develops and builds a partnership with so that that SME in time is then able to build into the global supply chain and build up a global business. They can get into exporting, in a way, without quite even knowing that they are doing it.

All these things are important to the nourishing and sustaining of the sector in Australia. It comes back to what our broader national security interests are. What do we want to do—which comes to the PICs, the priority industry capabilities—to keep industry going, at times we really need it, and what are the key industries that we need to enhance and develop for the time ahead? Those are the big issues that industry is wrestling with the whole time because 70 per cent of the business is sustainment. How do we sustain ourselves to sustain?

**Senator LUDLAM:** I would raise the example, if any of you would care to address it specifically, of a provision of future submarine capability, which is a live issue before this community. Does that fall into the category of fighter jets, as far as you are concerned, or military uniforms? Should we attempting to produce those here?

**Mr Priestnall:** My position is no, it does not, because—

**CHAIR:** Does not fall into which? Which side do you mean?

**Mr Priestnall:** I believe that the building and sustainment of submarines—which is one of the key strategic areas for Australia, noting our environment—should be done domestically. It does not mean we have to design it. I am not a submariner by background. Yes, there are issues with sustaining the Collins. You learn more by your mistakes than you do by the things that go right. I believe there is a strong body of knowledge and capability within this country if it is supported to do that. Again, someone will say that it is cheaper to build them overseas and bring them in. But what happens when they break down? You have no-one here.

**Mr Burns:** I am from the Defence Teaming Centre in South Australia, so this is a topic near and dear to my heart. We have proven the capacity to build submarines, and we have that capability in the country now. The Collins, for all the bad media, is one of the best conventional submarines we have out there. It is the only submarine capable of servicing what our nation needs in terms of military capability. To the best of my knowledge—and I am less of a mariner than Graham is!—there is nothing overseas in the conventional submarine capability that would fulfil the requirements of Australia without substantial redesign and modification. We have the capability in the country now. We should build on that capability, because it is a critical strategic capability for our nation's security and it needs to be built here in Australia.

**CHAIR:** On that very subject, though, if submarines are very important to our defence capability, the Collins submarine clearly is not working. How many of them are actually out there operational at the moment, and how does that fit in with our real and actual defence needs? It is all very well to talk about building submarines in Australia and how important they are in terms of our needs, but if were in some sort of situation now whereby we needed a full fleet of Collins submarines, we would be looking a little bit deficient, would we not?

**Mr Priestnall:** I am from industry but I was in the Navy. I am not a submariner, but I would say that out of six submarines you would probably only ever have four operational, unless for a short time you get more up. I do not know how many crews et cetera they have at the moment. All I am saying is that if they break down at least we can look after them. If it was something that was built overseas and we bought it from a country that may end up having an alliance with someone with whom we may be engaged in a disagreement and, as has happened in the past, they stop those supplies or equipment that we need, then where are we?

**CHAIR:** I was devil's advocating there, but it is an interesting argument.

**Mr Mansell:** The Collins is a bit near and dear to my heart from an industry point of view. When I left the Navy the submarine was just starting. It was the dawn of this industry that we are here supporting and talking about. The Collins, for all the mistakes everyone likes to bring up, actually started the industry. The people who were spawned from that program are now resident in BAE, Boeing, Lockheed Martin Australia and Raytheon Australia. That started from a handful of about 10 or 15 people. They all started from a company that I was

involved in previous to the submarine. So for all its faults it actually started what we are now benefiting from. I am with Graham in believing that at any operational time you will never have a full fleet. You do rotate, so at best we would have only four. But at the moment, coming back up to full time, one of the things we are experiencing is one of the things that came up before: by the time you get projects underway you end up with scope creep. One of the problems is that by the time you determine what you want and that finally goes to tender and you get the product you want there is obsolescence. As technology is going faster and faster we need to keep pace with that, but we are not. We are still working at a procurement process that is quite dated. So Collins is something that we should actually stand quite proud of from an industry point of view, whether or not it has faults, and we should note the lessons learnt. I do agree and stand wholeheartedly by the view that we should build those submarines in this country.

**Senator LUDLAM:** To me it feels like we have just outlined the real tension that exists between defence procurement as industry policy and defence procurement as providing for the security needs of the country. I agree that it has helped to get an industry sector on its feet but, having participated in a number of confidential Navy briefings, I do not think it has provided for four out of six seaworthy vessels at any given time. There have been extended periods of time when we have had virtually no capacity at all. I feel that that tension between industry's needs and the security needs of the country is perhaps one of the central issues that this committee is working on. With those strategic issues to one side, if we bring it back to the pure cost of procuring overseas or building it here, are there any examples that any of you could come to where you could show definitively that it has cost us more to buy something off the shelf over the long run, over the full maintenance cycle of whatever the asset is? I understand the theory but I am interested in getting some specific examples, if you have them.

**Mr Priestnall:** I do not have any figures that I could support that assertion with; I will have to take that question on notice.

**Mr Tonkin:** Senator, I think you had best ask Defence that question. It is a very good question to ask. I do not think we have the background information to give you a definitive answer to a definitive question. You have to measure the cost in its broadest sense so, turning it around another way, the question we would put is: how responsive is the sustainment of equipment that is purchased from overseas and what cost consequence does that then have for other things you want to do across the broader defence industry space? It is a much broader question.

It is clear that, yes, you can buy an aircraft cheaper through FMS, through the United States, than you can construct it in Australia. That is unquestionably so. The question is how you maintain that aircraft over the whole of its life, noting that the capital cost is about 10 to 15 per cent of the total whole-of-life cost of the capability. So the thing that is most critical to cost effectiveness is the sustainment, not capital. How is sustainment most effectively done?

**Senator LUDLAM:** I certainly will put those questions to Defence, but you are the ones making the assertion.

**Mr Burns:** I do not have historical data on previous acquisitions but we do have a living example at the moment with Project Land 121 phase 4, which is the protected mobility vehicle light. I will give you a brief history. Defence believed that the vehicles could not be fabricated in Australia and then engaged in the US joint light tactical vehicle program—in fact, invested \$40 million to be on that program. It is a \$1.5 billion project. That project in the US is encountering problems and it is probably not producing the vehicle that we really want or need to our specifications. Industry lobbied, and a new phase of the project was opened up to have an Australian manufactured and supported option. The three alternatives that have been offered up that can be manufactured and supported in Australia are proving to be just as capable as the JLTV vehicles. So we have a living example there at the moment.

The benefit of the made and supported in Australia vehicle is that we will have a vehicle that we effectively own the IP for, we will not be relying on another nation to upgrade or improve the vehicle, we will be unencumbered by any other restrictions from another nation—as an example, the ITARS restrictions—and we will have a vehicle that not only supports the exact capabilities we need for our Defence Force but even represents a potential export option.

**Mr O'Callaghan:** Can I just add some comments with regard to the future submarine program. The government announced in the context of the defence white paper in 2009 its intention to construct a new submarine fleet in Australia, and from an industry's perspective we welcomed the decision. The question that is before industry is: does it have the capacity to undertake the work? There is a sufficient lead time for a high degree of confidence that that can occur. Clearly we need to learn obvious lessons from the Collins class experience, not least of which is a matter I raised earlier, and that is access to the IP. That was a fundamental flaw in terms of where we have gotten to with Collins. At the time when we went down the path of constructing

Collins there was some degree of uncertainty about how we would access that. As we have gone through the life of the Collins, particularly the midlife upgrade situation, that issue alone has very much come to the fore. I would hope, from the point of view of government on the one hand and of industry on the other, that we are clearly learning those lessons. From industry's perspective there is no doubt that it has the capacity to be able to undertake the task that the government has now outlined.

One other obvious component in all of this is the development of the skills associated with it. There has clearly been a rundown of skills in relation to submarine capability. We need to use the lead time between now and when the construction actually starts to develop that skill base again, at a much higher level than previously was the case.

**Mr B White:** The scenario we are talking about comes back to some points I made in the opening statement, which were that industry needs clear signals and a degree of confidence to encourage it to invest in the defence market. As John O'Callaghan just said, government committed to the submarines. Our organisation as a rule does not comment on defence capability requirements—that is up to Defence and government to determine—but government committed to that capability and said it would be built in Australia, so companies are already pre-positioning themselves and investing heavily to deliver that capability, and now we are seeing the discussion come up as to whether it still should be done. That is just an example of where we are sending perhaps the wrong message to industry about investing in the Australian market, so that government statements and requirement statements cannot be relied upon.

**Mr O'Callaghan:** I will just add something else, picking up on a question that Senator Johnston asked earlier in relation to Kinnaird and Mortimer. One of the key elements in Kinnaird was, for those complex capability acquisitions, that there be upfront investment in dollars to ameliorate the risks associated with that complexity. To what extent that in fact has occurred I think is an issue which the committee may well want to have a look at, because to the best of my knowledge I do not think I have ever seen any statement out of officials in regard to that. But clearly, in regard to the Future Submarine Program, there is a case for a solid investment upfront to make sure that those problems associated with Collins are not repeated, consistent with Kinnaird.

**Senator MARK BISHOP:** I think that is probably a fair comment, Mr O'Callaghan. No-one is seriously going to argue that there needs to be adequate investment upfront. I really have to respond to or pick up on that point you made on the ability of Australian industry to adequately carry out the new subs program if tasked. You read the estimates transcript as well as everyone else does in this room, and you will recall the discussion that was held in the last two or three months about the inability of some firms to lay the keels, for God's sake—a mechanical engineering project down there in Melbourne. There was all sorts of blame between Defence and industry and the company. The designs were not there and the specs were not received from Spain and something was lost in translation—74 different reasons we can all give. If we cannot lay the keels in major shipyards at the beginning of an advanced destroyer project, how can you assert—and I say this with great respect—that we are capable of building the most advanced non-nuclear submarine in the world?

**Mr Tonkin:** Senator—

**Senator MARK BISHOP:** You may come to that, Mr Tonkin, in due course, but it is a question to Mr O'Callaghan first.

**Mr O'Callaghan:** I am happy to answer the question along the following lines. It partly relates to the lessons learned from the Collins experience, but also go back and look at the most successful shipbuilding construction in Australia in the last 25 years, the Anzac frigate program, at Tenix—highly successful. Ironically, it was at the shipyard where there is now a problem with AWD. Why has that occurred? I suspect there are a number of reasons for that, but one of the reasons is in fact the rundown of the skill base there because of the lumpiness of construction activity. That is one issue. My advice, to have the question answered sufficiently and properly, would be to go to the person who was actually the head of that entity at the time, Dr John White, who previously was on the DMO advisory board, and ask him the question, because recently, in the context of discussions we had at the defence and industry conference with him, he pointed out pretty clearly why there are problems with the AWD activity, and principally that relates to a failure to identify sufficiently the skilling requirements associated with undertaking the task. That goes back to that issue of running down skills. That is a clear lesson for future submarine activity.

**Mr Willox:** Under the white paper, the discussion about 12 submarines is largely there for strategic reasons. There is a strategic rationale for having 12 submarines put out in the white paper. We have a long lead time and what we are arguing—what we argued in our opening statement—is that we do have the lead time to develop the skills that are necessary to produce those submarines for a strategic purpose, to build them here. So we need to

start building up those skills now and develop that skills base so that we are in a position to have a long manufacturing and technical development process to go forward with.

What we have had in the past and what bedevils all the companies we represent here is that projects start and stop and then there are gaps; then they start and stop and then there are gaps; and then there are ramp-ups and ramp-downs all through this. So the pipeline does not flow; it either gushes or dribbles. It is that feast or famine scenario which bedevils the entire industry, because you do lose that skills base. They go off and work in resources or they go and open milk bars and delicatessens or whatever they want to do, and then they do not come back. We do not have that continuity of work, and that is the problem that affects and afflicts us all, right through. So we lose all the great technological and technical expertise that we developed through the Collins class submarines and the Anzac frigates, or it disappears or we cannot find it again. We cannot rummage around in the bottom drawer and just pick it up and start again. One of the great bugbears of industry is that there is not that continuity and they cannot hang onto the workforce. And that goes back to the question on the commercial understanding of DMO. Among many there, but not all, the feeling is that you can find the workers with all the requisite skills at the drop of a hat—or you will just be very nice and hang onto them for 15 years, in some cases, waiting for a project to get the green light.

**Mr O'Callaghan:** If I could just add something. Take, for example, the new head of ASC, Steve Ludlam, who happens to be a member of the Ai Group Defence Council Forum. He is bringing real expertise to this country from his UK experience which we should not underestimate. I think that, with the work he is doing—and that of Coles, who is coming across from the UK shortly in regard to the Collins—we need to be drawing on that expertise as we think through all of the issues associated with future submarines, learning from their experiences. I have a fair bit of faith in someone like Ludlam to get it right.

**Mr Priestnall:** Also, Senator, we offer the advice and never take the specific and apply it to the general. Just because someone did not do something correctly, it does not mean that everyone did. I am not pointing the finger there; I am just saying that you cannot say that the whole industry cannot do it.

**Senator JOHNSTON:** Did you want to say something, Mr Tonkin?

**Mr Tonkin:** They have said it fairly well, Senator, I think. I would just suggest that, if you want to figure out where the blame lies for the failure to have the keels, it lies with government. It is a failure of government policy over time to maintain a sustainable workload in the defence shipbuilding space to enable us to maintain their skills. That does not mean that you spend money on capability sustainment; it means that you spread the acquisitions over time. If you were to deliver ships in a succession, as they do in some other countries, you would find that we would have the capability to adequately undertake that task—provided you can read Spanish.

**Senator FAWCETT:** Is it a more appropriate question, Mr Tonkin, to ask not does industry have the capability but rather whether, in industry's view, the government has the character, in a three-year election cycle, to commit the country to a long-term, sustained program rather than block, build, replacement, gap, which has been the pattern in the past? Is that the real question—does the government have the confidence and character to do that?

**Mr Tonkin:** I suggest, Senator, that is something for you to answer rather than us!

**Senator FAWCETT:** Indeed.

**Mr Burns:** With the air warfare destroyer, Australian industry was not involved in the design of the hulls. If we want a good submarine, Australian industry needs to be involved in the design of that submarine. Actually, we needed to have started designing that, and the dollars needed to be invested in designing that, last year.

**Senator FAWCETT:** I would just like to take us back to the point with which Senator Ludlam started off this discussion, which is off-the-shelf acquisition, and some discussion around where those choices are made. At the moment the interaction between industry and Defence in terms of policy is owned by DMO. What we are really talking about here is capability. If we see the defence industry is not actually there to underpin job numbers but it is there to underpin defence capability then an alternate placement is in Capability Development Group. So as people are working up options to meet white paper guidance they do their modelling around likely attrition rates, battle damage repair requirements, depot level maintenance and where that may be placed, and even things like alliance considerations—if we invite the Americans to come and establish bases here and we are using common equipment then how can we leverage off that to have deeper level maintenance support bases here in Australia, not only for our equipment but for theirs and for other allies? Is Capability Development Group the more logical place to have our industry policy division so that it is actually focused on defence capability as opposed to job numbers?

**Mr Priestnall:** From AIDN's point of view, I would say yes.

**Mr Burns:** Sorry, I would differ. I go back to the point about the fundamental inputs to capability and that capability includes all those other elements, such as infrastructure and the support of it. As I said before, our belief is that industry division belongs at the highest strategic level underneath the secretary and the CDF looking at how Defence interacts with all of industry and not just those related to major systems.

**Senator FAWCETT:** Why does that negate the ability of CDG—and it is their own documents that actually bring out FIC, the fundamental inputs to capability, so they should be considering basing support requirements, collective training requirements and infrastructure? They are actually the people who drive all of those requirements, so surely that actually benefits your model of what defence industry looks like.

**Mr Burns:** I see your point and that is quite a valid point.

**Mr B White:** Because a lot of that capability is driven by white paper and strategic considerations maybe Strategies Group in VCDF is a better place to put it with a flow through down into CDG and to DMO. I definitely agree that CDG is in our experience where it is all coming together at the moment whether you are talking about the platform capability, the systems integration, the ICT aspects or the infrastructure aspects. It is all coming together at that early stage. But all that is being fed by the white paper and the strategic policy decisions being made by Defence. As per the announcements this week on the One Defence plan, maybe that is where industry policy should be driven so that it is considered at the highest level.

**Senator FAWCETT:** Do you think that placing industry division there may in fact deliver better outcomes in terms of PICs and SICs that actually then drive government investment decisions as opposed to being a nice picture on the wall that does not actually flow down to real outcomes for industry?

**Mr Tonkin:** I think the model of having it in capability is probably the better one, although I suggest a split and talk about industry capability, whether it is a division or whatever, policy responsibility lying with the capability area, because that draws on all of those things and can focus down on PICs and SICs, which are more specific and useful. It is difficult from the point of industry to understand what is actually in a focus way met by what are very broad descriptors. There has been a regrettable slowness in bringing any of those forward to a point of definition so that industry can do anything with them. But there is the other arm of the industry programs, such as SADI and other things, which have worked quite effectively in the DMO. It is a matter of ensuring from our perspective that those successful industry programs continue. If it is not broke, do not fix it. Why move that from DMO? The bit that is certainly not addressed are the capability issues which would perhaps be best placed in the capability area.

**CHAIR:** One problem you refer to is skills loss, which seems to be related to the intermittent nature of the contracts being available to you. Do you have the capacity to overcome that by seeking work from other countries and other sources? In Western Australia we have Austal, for example, which is building catamarans for the United States Marines I believe. Do you have capacity to seek regional contracts from other countries that might sustain your industry between Australian defence contracts, or is that not a realistic possibility?

**Mr Priestnall:** I do not want to steal Mr Mansell's thunder, because he is actually employed by Austal now. However, for Austal to get a lot of that work, they set up Austal USA, and most companies cannot set up. Austal has been a very good Western Australian company that has delivered a lot of programs not only in the US but all around the world, commercial and defence. It is a good model, but, for companies that work in defence, there are high barriers to entry and exit. You need to have certain processes and reporting, and it is very hard, nearly impossible—but Austal have done it—to work in the US.

**CHAIR:** They have, but there are closer countries in our region than the United States.

**Mr Priestnall:** Yes.

**CHAIR:** Perhaps, Mr Mansell, you might like to make a comment.

**Mr Mansell:** Just removing the Austal component from it, take your mind back to the early part of the industry. It was the old days of offsets, and the whole part was to inspire industry to learn new skills, develop products and then enter a market on a global level. The problem with that was the Australian capacity to compete on the global scale. You are trying to build a wing here, and then you go into Asia and you are competing against Boeing, which already has a dominance—or, in Europe, Airbus, and so on. So I agree with Graham on the ability for Australian industry to compete and establish themselves in the backyards of competing companies which have such a strong presence here: it is nearly impossible. For Australian companies to even get credibility to be accepted overseas—we are hardly accepted here. One of the things that we suffer from here is that, because our market is small, the first question we are always asked is: is the Australian government purchasing your equipment? The example that was given before about the refrigeration water on the Bushmasters lives forever more, right across the board. You are always questioned. In Australia, we are not risk takers. We used to be, but

we are not. And from that, for Australia to have a skill base and capacity to do it domestically but then try to think internationally, it is near impossible.

**Mr O'Callaghan:** Can I just pick up on an additional point there. I think if you use the Joint Strike Fighter model, where internationally the costs of developing that sort of model and that aircraft type have meant that countries have had to get together to get an outcome, and if you also consider, for example, the pressure on budgets in the United States, the United Kingdom and elsewhere, I think the logic is that over time the sorts of alliance type arrangements internationally will increase, perhaps including in the maritime sector. We do have a bit of a template in Australia, and that is that we did actually build Anzac frigates for New Zealand at one point, quite successfully, so there is a model to develop. What market there is regionally is a bit of a moot point, and that has been a debatable point for a long period of time. But I think in regard to our traditional alliance type arrangements, given their cost pressures at this point in time, there is a general disposition to start thinking about how we might work together to get those sorts of outcomes and get some continuity of work that way.

**CHAIR:** Thank you for that. It is good to have that on the record.

**Senator JOHNSTON:** Can I just raise the issue of the continuity of work. I note that none of you have suggested that there be any template of budgetary commitment out into the future such that everybody can see what the plan is. We—allegedly—cannot even keep to three per cent annual growth. The white paper does not even go out to four years and the money is not on the table. I am surprised that none of you have said, 'Why is there not a staged outline out to 2030?' because we have the shopping list but we have not got the costs laid out, which I think is fundamentally undermining of credibility in that regard. But none of you have said, 'Why don't we plan the budget out to support, and then either side of politics can be the dog in the manger and say, "No, we're not supporting that"?' I ask the question almost rhetorically because the answer is: we do not have a clue where we are going to be in two years, let alone 10 years.

**Mr Willox:** I was just going to say: you are asking a lot of yourself!

**Senator JOHNSTON:** Exactly, so we are never going to have a smooth ride.

**Mr Willox:** I do not think we would be in a position to ask that question; it would be very difficult. If we cannot work out what we are doing year to year, I do not think we can expect to work out to 2030 and beyond, and that is the issue. When you talk to people who are involved at different points of the gate process by which equipment is decided upon, purchased, built and sustained, they all blame each other for the delays. I think, to give ourselves a pat on the back there, we are probably being a bit realistic!

**Senator JOHNSTON:** Is there a solution to that?

**Mr Priestnall:** I was just going to reinforce what Mr Willox was saying. When we developed our submission, we looked at those areas which we believe we can realistically impact on. We looked at the overall framework. But we are actually focusing on having a system which will develop, which will move along and provide the industry with the opportunity to bid for work when it says it does—where we can make plans.

**Senator JOHNSTON:** In other words, the capability plan has to be cast in stone.

**Mr Burns:** You have to stick to it once you have made it.

**Mr Priestnall:** Yes—well, we always know there are going to be things that happen and things that have to change.

**Senator JOHNSTON:** And that is the most we can ask for.

**Mr Priestnall:** Yes.

**Mr Tonkin:** I do not think 'cast in stone', with due respect to my colleague; it is not possible. I have spent a lot of my career wrestling with the defence budget. I am aware that it goes up and it goes down, and trying to even hold it at zero real growth over a number of years was quite a challenge, but I think you can meet the objective that you are talking about by recognising that, even if the defence budget remained at zero real growth or was growing at less than projected in the white paper, there are still a substantial amount of resources available in the capital program. You then have to exercise discipline in what else you add to the capital program and construct each of these major components—I am only talking about some of these major components which drive, with a flow-on effect, an overall impact on industry capability—and build each of those in a phased way. Simply, if you view it as a series of slices of the opportunity of money going forward, you can take some of that slice of money and say, 'We'll allocate that to these projects which have a continuing impact over, say, a 10- or 15-year time horizon.' That may mean, if the overall resources available to Defence diminish in the future, the impact of that is on extra things and new things. It may be on the rate of activity. It may be on the level of personnel that are afforded. It may be—shock, horror—on the size of the department, which perhaps could be trimmed profitably.

All those things can be done, but you sustain that bit. So you can do these things at once without getting into what would be very nice—three per cent per annum real growth for 20 years?

**Senator JOHNSTON:** I think we do that to some extent.

**Mr Tonkin:** No, I do not think we do, Senator.

**Senator JOHNSTON:** All right, but with a white paper out to 30 years we have obviously got—

**Mr Tonkin:** We have a promise.

**Senator JOHNSTON:** a disconnect between the promise and the commitment to the promise.

**Mr Tonkin:** Our history tells us that we do not sustain our funding in the defence space for that level over that period of time because externalities impact. Defence is not isolated from the economic activities of the rest of the country.

**Senator JOHNSTON:** Pappas alone was very telling in his assessment of where we are going to be in funding and looking out for what we have got, let alone what we want. I note that some of you have referred to the number of first and second pass approvals. Where does the responsibility lie for two of the 15 projected first pass approvals and eight out of 14 second pass approvals 2010-11? This is your golden opportunity to tell us the way you feel about that.

**Mr Priestnall:** I think it lies with government.

**Senator JOHNSTON:** How so?

**Mr Priestnall:** Due to whatever reason, within either the department or the cabinet, they have been unable to pursue the number of projects that they thought they would in that time. Whether there were, as Robert said, externalities which impacted on that or not can be debated. However, we have to have some sort of planning horizon, so we look at the DCP. We give it a risk weighting. But it just seemed, when these came out of Capability Development's figures themselves, from the ADM conference in February, that there had been a sharp drop-off. Could it be that there were pressures on the funds that were needed? Could it be that the complexity of the projects that they were making decisions on was such that it took longer to do; there were more options than had been thought? I am not privy to that information. But the flow on for that, as we have said in the AIDN submission, is that, firstly, capability is not going to be reached in accordance with the time line in the white paper. It was not just plucked out of thin air; this was developed from strategic assessments. Secondly, things that are delayed, funnily enough, cost more. It is not like buying a flat screen TV, which is far cheaper now than it was two years, because the level of technology refresh keeps the prices going up. I am not sure why it has not, but responsibility must be within that collective government.

**Mr B White:** I think some of that is due to the amount of information that is now required at first pass, particularly. That is in line with my comments at the beginning, where industry is looking for certainty of information, and so is government in this current media cycle that we have. The amount of information that CDG is having to put up at first pass is far more than what it ever has been. To get that information and certainty takes time. Of course, they will not be prepared to take a proposal forward until they have the certainty of information. Industry is not at the stage to be able to provide a lot of that certainty, particularly in relation to emerging technologies and what might be on the horizon in a decade when the project is anticipated to come to fruition. That comes back to our discussion on risk, MOTS and COTS, and what level of risks you are willing to accept. The level of information that is required is probably affecting the amount of projects that are going forward.

**Senator JOHNSTON:** But you have been told that in 2013-14 the curve is going to be ever so much steeper, which would tend to suggest that they know where they are going to be and what they are going to be doing. Are we in a position to deal with the 2013-14 curve as it is starting to emerge?

**Mr Burns:** The challenge is to retain the skilled workforce now and over the intervening period in the face of the resource boom. My fear is that we will hit the marker in 2013-14 and the industry will not be able to turn around and say, 'We have the skilled workforce' because there had not been that flow of work.

**Senator JOHNSTON:** Yes, but I find it difficult that they can say there were only two first passes that came through, yet in 18 months time we will have a hell of a lot more. How does this work out? What is the reason for this?

**Mr B White:** It would be interesting—I do not think any of us have done this, but Defence may have—to look at the number of companies that are leaving or are likely to leave the defence market and the pressures they are under to do that from their shareholders and boards, who are looking for certainty. We are certainly seeing a lot leave at the moment, and I suspect by 2013 there will be quite a few more.



**Mr O'Callaghan:** To be realistic, last year was an election year, so there was that chicane but it is a natural part of the process. I also think it is probably worth having a look at the National Security Committee of cabinet process because clearly there have been issues there, which industry is not privy to. From the discussions we have in this town, we are aware that there were difficulties there. So it basically requires leadership to drive that agenda. That is the key.

**Senator JOHNSTON:** We have had this debate with the DMO from our side about PICs. What is the industry's understanding of what a PIC means?

**Mr Priestnall:** From AIDN's point of view, I have had a bit to do with assisting DMO in defining the PICs. My belief is that the PICs, as they are written now, are broad. If you go back to the statement and the white paper, they are just areas where the government may intervene; it does not say they will. There are several mechanisms that they could use to do that, such as focusing that capability into overseas markets through the global supply chain, the work that the Defence Export Unit does or finding work and bringing it forward. You could look around and you may see an example of where that has happened. My understanding is that these PICs will be further defined within the next 6 to 12 months. Some of them have been defined but have not been released; my understanding is that further review needed to be done. What do they mean? I think one thing is that they are an indication of the intent of government of capabilities that need to be resident in Australia and where they will act. It does not mean that your company, if it falls in a PIC, will be supported, and that is clearly stated.

**Senator JOHNSTON:** No; but I am talking about industry. Industry can take comfort from a PIC; is that your understanding?

**Mr Priestnall:** My understanding is that if you are not in a PIC, you have less comfort than if you are.

**Mr Tonkin:** You can take more comfort.

**Mr Priestnall:** Yes—take more comfort.

**Senator JOHNSTON:** More comfort until a foreign price comes along and blows you away.

**Mr Priestnall:** Yes, but we have not seen any actual use of them, so that is the point. It has only been two years!

**Senator JOHNSTON:** Is it lip-service? Are we just saying this to give you a feel good or is there some commitment to someone who has a priority industry capability that we value and want for a rainy day? Meaning that, if everything else falls to the ground, we want them to be standing.

**Mr Willox:** It is seen as that which we cannot afford to be without, basically. When the worst-case scenario happens, do we have this skill, this capability—this ability within our country to supply these specific areas, whether they are 12 or 14? How they are refined down the track is something that we are all very interested to see, because they do chop and change and there are always the arguments about what is in and what is out and why. Is sonar capability the same as being able to supply uniforms? That is how broad it is. But the take-out that we have is that if you are not in a PIC industry you are in a lot of trouble.

**Mr Tonkin:** We would see it as a genuine commitment. We do not think this is a piece of rhetoric; it is a genuine commitment stemming logically from the white paper process to identify those areas, as Innes has described, that we cannot do without. But how we operationalise it is a huge challenge.

**Senator FAWCETT:** I will agree with you when I see bound decisions about where we procure things from.

**Mr B White:** As an ex-uniformed person, I can see the rationale behind PICs. Our organisation will not comment on what should be a PIC or not; that is up to government and Defence. But, in any further hearings and deliberations with companies, you might just ask, 'Could you take a PIC as it currently is to your bank manager?' That is the key question.

**Senator FAWCETT:** I want to finish by coming back again to the question of MOTS and COTS, because it goes to this whole issue of why we buy overseas. A comment was made earlier which I found quite interesting: there is a recognition within industry that, whilst there is no written policy that requires MOTS and COTS to be the preference—the written policy just says that it should be there as a benchmark—the industry's feedback to this committee is that you see that shaping Defence's culture in terms of how they proceed.

I am interested in your feedback for specific projects. Have you seen that actually shape how Defence has funded the project and how they have structured their project team in terms of skills and expectations around whether in fact there will be a residual risk or development required. I think project 5402—the air-to-air refueler—is probably a classic example of something that was considered as MOTS, or essentially as COTS, and was funded and structured as such, and defence was caught out in terms of a product that was clearly quite developmental in parts and has had flow-on effects to schedule and cost et cetera. But it all stems back to that

change in culture that almost wants to believe that something is not developmental and can be classified as MOTS and COTS.

**Mr Priestnall:** I can give you an example. I have seen in a contract the words 'our preference is for a MOTS solution'—and I will make the one point that MOTS does not mean 'overseas'; there can be MOTS solutions in Australia; it means military off-the-shelf—and further in the contract it said, 'If the factory acceptance tests of this piece of equipment are to be done in your home country, you don't have to include the price of that, because we have another budget item for that.' So when the Australian company bid against it and lost they were a bit concerned that an overseas country did not have to have their travel costs involved in this so that there was a one-for-one comparison, and even in FMS the actual freight component for parts is not included in a bid.

**Senator FAWCETT:** To go into slightly more detail on that, have you seen examples in this where Defence has proactively recognised that there is a difference between the appetite for risk in many provider nations in terms of certification basis for equipment and what we require of our operators? Have you actually seen evidence where they have really tried to dig down to say, 'If we buy this as an FMS purchase with all the risk assumptions that the host nation has made, do we really understand the cost difference and what catch up programs may be required here, or alternatively what waivers may be required by the minister to our standards to enable the ADF to operate the equipment?' or have they just proceeded on the blind assumption that, if it is used by the US or someone else, it is good enough for us?

**Mr Priestnall:** I have not seen an example, but from discussions I have had I would be led to the latter.

**Mr Burns:** I refer to my example before, with the project LAND 121 phase 4, where they were going down the JLTV acquisition. It was the American vehicle and they said, 'No problems; we'll get the lower risk.' It was not until lobbying by industry to get an Australian option put up that they actually sat back and were forced to look at an Australian option.

**Senator FAWCETT:** Just for the record, what is industry's understanding about most FMS cases? If you look, for example, at the American military you have the National Guard, the bulk of people in the main regular forces and then the special forces and the more high-end capabilities. Most FMS cases go to what we call big army, big navy et cetera, but often the kinds of capabilities Australia actually wants are up in the special forces area. I look, for example, at the ability to fly a Chinook off an LHD, which needs a rotor brake, which is not in big army's configuration—it rests in special forces—but the FMS case drives us to big army. Is it industry's understanding that that is where most FMS cases are targeted?

**Mr Priestnall:** My comment is not so much about the funding but just experience. I remember that one of the former chiefs of capability development said that there are actually no MOTS solutions for the ADF, because you have to modify everything you get unless you operate it to the US, English or French operating procedures. So with just about every bit of those things that we buy we have to change at least the software or the integration, or we want something. So there are a couple of examples—if you bought a gun for example, but we actually do make those. If you bought something like that then you could operate it in the same way, but with anything with integration we always have to change it.

**Senator FAWCETT:** So the only true MOTS solution would be if we bought everything from the US Marine Corps, who happen to have most of the capabilities we want and they already talk to each other.

**Mr Priestnall:** Yes.

**Senator FAWCETT:** In which case we could probably close down the CDG and DMO and actually achieve some SRP savings.

**Mr Priestnall:** We would still need to check it. The area that I work in is tactical data links, and you have big problems there with interoperability, which I know Senator Johnston knows about. I cannot really comment on your actual question; that is just my experience.

**Mr Tonkin :** FMS is a very big machine, but you can target your FMS acquisitions down to the precision that you are talking about. So, if we wish to apply the rigour and use the FMS system to our advantage, there is no reason why through FMS you could not buy a special forces enabled Chinook capability. But it is a matter of whether someone has taken the time and the trouble, both here and in looking at interacting with the FMS system in the United States, to make sure that that option is available and at what cost et cetera, rather than just taking the simple solution and saying: ' Well, here's the Chinook. This must be the right one. It's cheaper. Go for that.' That goes to how we are structured in our acquisition, how we are structured and populated in terms of the people on the ground in the United States et cetera. It is a system which does have to be managed very rigorously.

**Senator FAWCETT:** By informed people.

**Mr Tonkin :** And also squeezed, because an awful amount of Australian dollars sit in FMS accounts in the United States and they have never come back, and there are hundreds of millions of dollars. If you do not actively harvest it back, you find yourself actively overpaying for lots of things.

**CHAIR:** I think we will have to wind up there; we are a little bit over time. I thank you all for appearing this afternoon. It has been a very valuable discussion, so thank you all.

**Proceedings suspended from 15:20 to 15:33**

**BOND, Mr Kim, Senior Director, Performance Audit Services Group, Australian National Audit Office**

**CAHILL, Mr Matt, Group Executive Director, Performance Audit Services Group, Australian National Audit Office**

**HOLBERT, Ms Fran, Executive Director, Performance Audit Services Group, Australian National Audit Office**

**McPHEE, Mr Ian, Auditor-General, Australian National Audit Office**

**WHITE, Mr Michael, Executive Director, Performance Audit Services Group, Australian National Audit Office**

**CHAIR:** Welcome. I remind senators that the Senate has resolved that an officer of a department of the Commonwealth or of a state shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions asked of the officer on these matters to a superior officer or a minister. This resolution prohibits only questions asking for opinions on matters of policy and does not preclude questions asking for explanations of policies or factual questions about when and how policies were developed.

The committee has received your submission, which has been marked as number 22. Do you wish to make any alterations or amendments to your submission.

**Mr McPhee:** There are no amendments, thank you.

**CHAIR:** Would you like to make a brief opening statement before we go to questions.

**Mr McPhee:** Our submission to the committee canvasses key steps that defence has taken over the last decade or so towards putting in place more effective whole-of-life capability management. The steps taken have included the formation of the Defence Materiel Organisation, the establishment of the Capability Development Group and implementation of the two-pass approval process for major acquisitions. Recent audits that we have undertaken have examined parts of defence's procurement processes as well as the outcomes of individual procurement projects.

In our submission we briefly mention audits of the two-pass process and of the Super Seasprite helicopter project, both tabled in June 2009, as well as the audit of the lightweight torpedo replacement project, tabled in May 2010. Our submission also mentions our ongoing work reviewing DMO's major acquisition projects in the annual major projects report. This is a significant report, first tabled in November 2008, prepared by the ANAO and DMO to inform the parliament on the status of major defence equipment acquisition projects. The report includes a range of analysis, but noteworthy is the observation by the ANAO that adhering to schedule remains the major challenge for the DMO and industry contractors.

Most recently, in June this year, after we had made our submission to the inquiry, we published an audit report on acceptance into service of Navy capability. The audit examined the procurement life cycle of 20 major acquisitions for Navy. We found some significant issues, including that Navy, CDG and DMO did not have a shared understanding of the risks to the generation of the expected capability from Navy projects and had not taken shared responsibility for mitigating those risks. Responsibility for oversight and regulation required clarification and essential engineering positions were not being filled. Overall, we found that, without the application of greater discipline by defence in the implementation of its own policies and procedures, improved communication and collaboration across the relevant parts of the defence organisation during a project's life cycle and the maintenance of adequate records to support appropriate monitoring of capability development performance, the necessary improvements in acquisition outcomes will not be achieved.

I should mention also that I have recently approved additional work in the capability development and acquisition area. We will be looking again at the lightweight torpedo and the two-pass process, as well as picking up on the DMO gate review process. Our current intention is to table those reports in the 2012 winter and spring

sessions of parliament. My colleagues and I are happy to assist the committee on issues relating to procurement of defence capital projects arising from our work.

**Senator JOHNSTON:** Thank you, Mr McPhee, as always, for bringing your officers to our committee and for your very detailed and informative—and, may I say, helpful—submission. The common theme, I think, that we have had for many, many years now, more than five, is that the recommendations, the analysis and the advice are there on the table. In paragraph 17 you seem to encapsulate the essence of what is the problem:

The ANAO concluded that Defence had established an appropriate administrative framework for implementing the process but was not consistently adhering to it.

Why on earth is that the case? Is there anything that we can do about it that we are not already doing?

**Mr McPhee:** Thank you for your comments about the office's work and, I think, your fairly astute identification of this point. In preparing for the committee's hearing this afternoon, I went back across some of our recent audit reports, including the one on acceptance into service of Navy capability and the previous one we did on the planning and approval of major capital equipment projects. The concluding comments were very much about the importance of defence applying greater discipline in applying its own procedures and policies that have been mapped out. I think we have said in a number of audit reports that we think the policy and procedural framework does the job. It is a question of the discipline in the application of the procedures, which, after all, are there not to create bureaucracy and red tape but to mitigate risk and to manage these projects successfully. At the end of the day it is part of the leadership and governance responsibilities within the department to ensure that emphasis is given to these particular matters. It can be just fundamental issues of supervision, adherence to practices and agreed policies, and at the end of the day that is the responsibility of senior managers in the department.

**Senator MARK BISHOP:** Let me jump in there, Mr McPhee, because Senator Johnston has opened up the issue. I have read your last two or three reports on various aspects of Navy, and you make the point that effectively the Chief of Navy has become disempowered. Presumably that permeates down through the entire Navy organisation and effectively emerges into dysfunction in carrying out tasks, which manifests itself in the whole scheme of mishaps that have been made public in more recent years. Why and how has the Chief of Navy become disempowered, with all the consequences that flow from that? Secondly, to follow Senator Johnston's bouncing ball, how is it that Navy in particular, and more generally some aspects of the other services, do not have regard to sound administrative arrangements, proper processes, appropriate discipline, appropriate reporting, attention to guidelines—all of the basic things that are necessary to get from A to B in an effective organisation?

Your last set of reports is replete with examples of that dysfunction, on page after page after page. It seems to me that the allegation of disempowerment of the Chief of Navy flying through the organisation and the dysfunction of all the process matters that Senator Johnston referred to are linked. How do those things occur, how is it remedied and what steps need to be taken? I think everyone in this committee and previous ministers of this and the previous government must be sick to death of this constant aberrant behaviour. Please answer those two questions, Mr McPhee.

**Senator JOHNSTON:** Paragraphs 20 and 21 are particularly relevant to some of the issues my colleague has raised.

**Mr McPhee:** Let me give you my perspective on the defence organisation and the way it operates. Every organisational structure has benefits and disadvantages. The organisational goal has to be to maximise the benefits and to compensate for disadvantages so that they do not become a lead weight on organisational performance. What we have seen in the defence organisation over the years is that in the search to improve their performance there has been a level of centralisation of particular functions in key organisations, like DMO. In the past, Navy might have had particular responsibilities but they have been shifted across to the DMO, and similarly for Army and Air Force. The great benefit of that is that you are putting in the one organisation a critical mass of people with the right skills to deliver on project acquisitions and sustainment. That is the big strong positive. We could go more into the benefits of the DMO structure. The downside, of course, is that it then creates greater organisational linkages across the organisation for DMO and Navy to talk together and to communicate, and similarly across the services. In the interests of getting the skills in a central place and in getting the efficiencies and returning some savings to budget, you pay the price in increasing the complexity of communication and liaison within organisations. I think that is part of the issue here. It is not to say the organisation is necessarily the wrong organisation or approach; it is about how to compensate for the additional issues. In the Navy report we refer to matrix management, which meant that in the past the Chief of Navy had direct control and responsibility and could crack the whip to get things done but now, under the new arrangement, you have agreements between the two organisations; you have to be clear on who is responsible for what and how prices are set. It becomes a

more complex managerial task to get the priorities settled and the work completed. That is the issue. What we have been saying in our work, and you have picked up on it very well, is the importance of having clarity around responsibilities between the various organisations, and we refer to the seamless processes required to make sure it happens effectively, and the importance of each organisation following the agreed policies and procedures to manage the risks and deliver acquisition projects on time, on budget and as agreed in terms of capability. It is a complex and large-scale organisation so we have been working hard at trying to get that streamlined through our work and recommendations to encourage a more effective outcome.

The other point you raised concerns how do we get a difference going here. I want to refer you to an illustration of something that I found personally quite powerful in observing Defence at work—a positive experience. In 2005 my office had significant issues with the financial statements in Defence. You will recall this. In 2004 and 2005 we issued what in our auditing parlance is called a disclaimer of opinion. It meant that we could not rely on the integrity of Defence systems to produce credible information, so we were not giving any comfort through our audit opinion. It is a very severe form of audit opinion. Ric Smith was the secretary of Defence and General Cosgrove was CDF. Up until that time the accounts, the financial statements, the reports et cetera were seen as a Department of Defence issue—it was seen as an administrative issue, not so much a service issue. Ric Smith and General Cosgrove got together and agreed that they were part of the solution. I have pulled out a sheet that they issued at the time. They called it Defence's Financial Flagship. With your forbearance, Chair, there are two quotes I want to refer to. They had a major meeting with staff, and Ric Smith said:

This is the crucial part of our remediation work; in fact, it is more than remediation—it is a change management framework. We could fix all these other problems one at a time and then next year they would be back again if we do not get this financial control framework in place. I am representing it in our organisation as a very significant change management programme because it is not what we have had in the past.

General Cosgrove said:

Every one of us has to accept personal responsibility and our particular accountability to see that our books are fixed. There'll be no excuses accepted, to say 'I'm very busy on operations'. If we don't get the fundamentals fixed, that is, our finances, by taking responsibility and working with our people, then operational success will not be sustained and all the world will see we are half-baked.

With leadership from the top, the CDF and the Secretary, working like that with us, we agreed that this was a matter that could not be solved in one year. We agreed on a strategic approach to sorting out the issues. There is an important message there: you cannot fix everything at one time; you have to sort out the priorities, take them on board and nail them, basically. The following year we as an office issued a qualified audit opinion, which is still significant but not as serious as a disclaimer, because Defence had fixed everything except inventory and specialist military equipment, from memory. Then the following year they focused on inventory and specialist military equipment. I forget when it was resolved, but we were able to give a clear opinion.

I think there are some important messages in this case study. Firstly, the strong signal from the top is a collective issue that we need to fix, and have the whole organisation understanding that the leaders believed it was a priority. On clear messages, they provided support and training programs. I spoke at some of them with the senior executives to lend support to the work that they were doing and, over time, they fixed it. Now the Defence financial systems are not perfect, but they have overcome many of the very significant problems they had back in 2005.

So, to answer your second question, it is a complex world that they work in but the fundamentals of having a strategic priority, focusing on a smaller number of key things, resolving those and building up your skills over time is an important part of success. The other thing I would say is that we tend to hear the bad news out of Defence quite a lot but there are some successes there, and I always say to people in Defence that it is important to build on your successes. The classic example—again, an accounting example, but I am sure we have other examples as well—is that we can come across inventory warehouses where in one part of the country someone will have their inventories lined up with their records, the arrangements are perfect and it is well ordered and well kept. In another part of the country it can be quite at the other end of the spectrum.

So there are wonderful opportunities there for getting hold of the commander who is running the show that has very good performance to explain to colleagues what it is that they have done to make the difference. That brings credibility, because it is one of their peers and not necessarily someone on high telling them exactly what it is that they have to do. So I think that is very powerful and they have plenty of success stories that they need to build on where they have made a difference and, clearly, that was what they were trying to do. I am aware as well that they are trying to build up their skills. Our reports highlight serious deficiencies in some areas in particular skill sets,

and you would be aware of the work that DMO has put in over recent years to try and improve their project management efforts.

That all needs good support, and I think the other thing that our reports probably highlight is that sometimes these projects run for a such long period of time that, even with the new reforms and new approaches, it is almost too late to recover on some of the earlier problem projects and so it is a very difficult organisation in which to gauge what the performance is today and where the differences are being made. To summarise, the importance of leadership governance and arrangements being put in place to make sure that there is adherence to agreed practices is essential for their ongoing success.

**Senator MARK BISHOP:** Mr McPhee, I asked you a two-part question, and I thank you for the detailed explanation at the end. You referred to complex management arrangements as perhaps the answer to why there was this effective disempowerment of Chief of Navy and a range of issues deriving from that. I have had a lot to do with a lot of the senior people in Navy over the last 10 years, and almost without exception they are highly educated, motivated, skilled, well trained and willing to accept challenge—they have all the right sorts of ticks. As you know, they get examined fairly closely on a range of issues, so you get to see who delivers and who does not. All of those men and women are capable, tomorrow, of understanding and implementing complex management arrangements because they do the equivalent on a daily basis in running their ships and the like. Why are they not doing regularly what they are manifestly capable of doing?

**Mr McPhee:** Good question. I might ask one of my colleagues to step through some of the issues in this very area of acceptance into service of Navy capability that the audit highlighted.

**Senator FAWCETT:** Sorry; before we go there, I do not think that actually answers the question, because the Black review, for example, has likewise come to the point where it is recognised that we have gone from commander control to command by committee. Your work is fantastic—and I echo Senator Johnston's comments; over a number of years ANAO has done some great work. The Black review has very good observations but it does not actually address the underlying question of why Defence has gone from the organisation that Black recognises in a footnote to his report, which has very good, clear, competent and responsible command systems, to a large organisation that is considered to be ineffective, inefficient and unaccountable. I would argue that it is not the only complex organisation in the world, and if we look at NASA and the British Ministry of Defence and then we look at the reviews into things like the Columbia shuttle disaster—

**Senator MARK BISHOP:** Chair, excuse me; I am taking a point of order. I asked a question to the witness about Navy. I did not ask a question about the effectiveness of the Australian Defence Force or defence services generally. I would like to have my question answered please. If Senator Fawcett wants to come in on a different tangent, that is his right, but I asked a question.

**CHAIR:** We will uphold that point of order. Please answer the question put by Senator Bishop.

**Ms Holbert:** In terms of Chief of Navy and what happened over the period covered by these 20 projects—if you go to look at 20 of their major projects, you are covering a fair amount of time—you have reform after reform sweeping through Defence, always looking for that magic silver bullet that is going to solve everything. But reforms have unintended consequences. That is always going to be the case. Some of the unintended consequences, we think, are as a result of the work that we did in looking at acceptance into service, are that when you pick up resources and move them from one part of Defence to another part of Defence because you are going to get that new part to do something—say, you take the capability guys out of Navy and you put them over in the Capability Development Group, because that is who is going to do the capability proposals going forward—you have taken out of Navy and from Chief of Navy that guidance and assistance about requirements determination and how that fits with what is going along in the process of developing new capability.

When you get to a situation where you have had the requirements determined over in one area, say, in the Capability Development Group—albeit that the matrix system is meant to work, everybody's input is meant to have been had and everybody is meant to have signed off before it goes to government—then it gets handed over to DMO, who are meant to sign the contract and have embodied in the contract functional performance specifications that will reflect the requirements that you have defined.

You are supposed to manage that process as it goes along, and you have to do trade-offs and so forth to get to an end basis. What was happening was we were finding that, when it was getting to the end of that process, Chief of Navy is the person who has sign off that the ship is fit for service, that it is safe for their people, that it is safe for the environment and that it complies with the international law of the sea obligations. He, as an individual, has to sign that off, and the commanding officer who then takes the ship out is responsible for the vessel. The regulatory framework that was supposed to support the Chief of Navy to do that had been affected by the

movement out of Navy of some of these capabilities which went with capability development and so had moved over to Capability Development Group. It meant that the technical regulatory framework had stepped back and was not engaged with the procurement framework being operated through DMO. It is not clear how so much distance could have arisen given that there are Navy people in Navy, in DMO and in CDG. But it is the case that gaps opened up in the knowledge those different areas had about how risks were developing and what was going on with them. This audit was focusing on procurement but, as we are all aware, it opened up to a greater degree in the sustainment area with the amphibious vessels. I will get Mr Bond to give you some more structured information.

**Mr Bond:** One of the other compounding factors with moving people around inside the organisations is that Navy officers are frequently very capable and very well trained and they also have specialisations which they pursue during their careers. When they are moved from position to position, they may or may not have opportunities to continue the development of those specialisations over time, whether they are on the weapons system side or whether they are on the structural engineering side of the business and in other aspects of bringing capability to full development. So one of the unintended consequences that we believe is being played out in the successive changes that have gone through Defence and its arrangements for procurement is that there has been a degree of interruption with the development of these streams of people—and they are expensive to train and expensive to replace. There has also been a concomitant movement into the private sector, sometimes simultaneous with, sometimes consequential to, changes in the procurement process. This has been noted by previous committees. The joint committee noted it in 1998 and noted that there was a risk involved in the process of supporting defence industry in Australia—that industry might, for instance, cherry-pick personnel who might be difficult to replace at a later date. At that stage, they simply warned that that was a possibility. It appears that that may, to some extent, have come to fruition.

We have consulted with Engineers Australia on the availability of engineers in Australia at the moment. Their advice to us is that there are engineers graduating. Yes, there is a demand for them at the moment. Their principal observation to us, which I am sure they would be happy to confirm, is on the nature of the engineering labour market in Australia and the nature of specialist employment in Australia for other technical specialists, which is not necessarily within the naval procurement area, for instance, or within the defence procurement area overall. So there are some compounding factors that have gone along with the organisational changes that have happened over time which have meant that the chiefs of the services, particularly Navy in the case we examined, may not have had access to the full range of support, technical or other, that they may have needed at the time.

**Senator FAWCETT:** I am thrilled with your answer, because it goes directly to my point, which is that, if we look at things like the review into the *Columbia* disaster or the Haddon-Cave review into the loss of the *Nimrod*, they point to exactly this issue of unintended consequence of continual reform—reform largely driven by efficiency measures where there is a mindset that says, 'If we can make Defence more like a business, we will get better and cheaper outcomes.' So the gaps that you were talking about arose, you were quite sure, from a combination of the changes and movement of people—the shared service type model, which has led to all the committees—and the outsourcing of the Commercial Support Program, or CSP, that started in the early 90s. That outsourcing led not only to a considerable downsizing of Defence's technical workforce but also, to some extent, to a weakening of their regulatory structure overseeing that.

So Defence has become less and less able to understand what industry is or is not doing for it, particularly when they go for the BIT contracting that Navy had in the past. What I would be interested in your comment on is this: if the underlying cause, as has been very clearly identified through, particularly, the Haddon-Cave review, is this unintended consequence of splintering and breaking the continuity of command and corporate knowledge, is the path to recover that to not have more layers of bureaucracy and shared services but to come back to more focused command and control by Defence leaders of all of the fundamental inputs to capability they need to achieve their outcome—that they must actually be given control of that. Would you care to comment?

**Ms Holbert:** I think we would have to layer our answer. The overarching point you are making touches on government policy—the decision on how they want to arrange and govern the Department of Defence. I do not think the Auditor-General would consider that we should necessarily be forming a view on that. What we do form a view on is the consequences of actions as they are taken. Auditing necessarily looks backwards, but we try to take the lessons from what we see, looking backwards, and go forward with them.

For the kinds of things you are talking about, where we are getting concerns through the patterns of audits we are doing—the Super Seasprite, the lightweight torpedo, the M113 and the broader audit of the acceptance into service of capability for Navy—the assumption is that if you fix the overarching governance mechanisms and if you work on a high-end complex project management techniques you will solve your problems. What we are



finding is that those are all important and they all matter a great deal, but if you assume that the fundamentals are occurring, you may be mistaken. We were very surprised to find, at the end of the day, that there is not an overarching systems engineering manual for Defence. It is a major engineering organisation—we were surprised.

The auditors that I have had involved in doing this work in recent times are qualified in this kind of field. Unfortunately, Dr McNally is not with us today—he did the acceptance into service report. He was a Navy engineer, then an intelligence officer in Defence and then has been with us working on Defence audits for some 15 or 16 years. He is a very experienced man. He was looking at it through the lens of all of the reforms you are talking about, from the shutdown of the naval shipyards, through the Commercial Support Program and the DRP, to the changes in philosophy of how we will manage procurement and capability development. He was distilling it down to: in these 20 projects, have the things that needed to be done been done? Have they been done by people who are appropriately qualified? Are they recorded? That last part is not bureaucratise. If you are talking about a piece of complex equipment and you do not know the details of the configuration, you cannot sustain it properly. It was down to the brick-backed basics, and that is in fact what took us the time in this audit report: drilling down through 20 projects to the basics of what had and had not been done. Mr Bond can give you a little bit of detail about that.

**Mr Bond:** Dr McNally and I worked on the audit together. How we approached the audit was to take, if you like, the administrative steps that would represent the underlying systems engineering processes that you would expect to have seen in place across the 20 projects. We looked for the overlying administration that would show adherence to basic—essential, if you wish—systems engineering steps, from the initial requirements phase in deciding what it is that you would like to build, through building and commissioning it, to decommissioning it. We did not get to decommission with these, but what we were really looking at was whether we could see the administrative framework that lies over the top of what is a commonplace type of systems engineering arrangement which you would expect to see in any large engineering endeavour of any complexity. We found a pattern of inconsistent application of steps. We document those in the naval acceptance audit. We show that while you can find the bones of those processes throughout Defence, we did not find them universally adhered to and we did not find them joined up. So where one organisation may have been given responsibility for one stage of the process, it has not necessarily smoothly handed over to the next phase of the process. Nor was there sufficient overlap. So, for instance, when DMO was doing the testing, prior to handing it over, of equipment that was required to go to Navy we were not seeing sufficient involvement of the naval personnel who were going to have to take it from DMO, take it out to sea and test the weapons systems. What we were noticing as we were working our way through the audit was that, as the Auditor-General said, there are some very good basic design features underneath the way defence approaches its work. So the systems engineering process was there. However, what we have found in the disjointedness of the processes and in the case of there not being an overarching systems engineering manual available to the people who have to carry through these processes—and, I stress, that includes the engineers, the project managers and the program managers; they all need to be across these issues—is that the inconsistency of the application was severely hampering defence's capability.

Again, they are capable officers. They are well-educated people, and there are frequently highly skilled people within the organisation. What we were looking at and what the audit was pointing to was a need to focus on the basics. As my colleague Fran Holbert was saying, you can change the way you manage the basic processes and you can get good results with a number of different ways of managing it. Leadership is, of course, essential and coherent arrangements are essential, but beyond that the organisation could be arranged in a number of ways. We did not make any observation in the audit about the way in which defence was arranged. What we were alluding to and what we were trying to reinforce in the audit was the necessity to return to the basic processes that are involved in procurement.

There is a degree to which some of the skills are shared or distinctly held by defence versus industry. There is, if you like, a degree of commonality of interest between industry and defence in making sure these processes are followed. We saw that it was not a lost cause. There was actually cause for hope in all of this. We were asking that more attention be paid to the basics of the processes.

**Senator FAWCETT:** In your audits, have you looked at organisations, for example, such as the Directorate General Technical Airworthiness within the Air Force?

**Ms Holbert:** Yes, most recently in the context of the Super Seasprite audit. In fact, what happened there was that the DGTA process was working really quite well. One of the major flaws in the Super Seasprite contractual arrangements was that the contract was signed in 1997 when Navy had its own specific airworthiness framework. The whole-of-ADF framework came in, administered by DGTA, in 1998, but the decision was not made to

reopen the contract and to put that requirement on the contractor to produce an aircraft that was certified under the whole-of-ADF airworthiness framework.

The other thing that is worth acknowledging is that Air Force has the most of its engineering positions filled. It is the least hollowed out on engineering of the three forces. With Navy, one of the things that we were drawing out of the information looking over the period of time that we did, 20 years or so, was that when you make decisions to do outsourcing often people follow the outsourcing. We had had inside the Defence organisation a very strong technical training regime. A lot of people went outside defence after major commercialisation and outsourcing. We have not necessarily seen that replaced by industry being able to take up the training to quite the same extent. Now that generation are retiring from the workforce. It is at a time when there are other demands for engineers other than the defence industry because of the mining boom et cetera. You now have the Rizzo report on Navy saying, 'We have to rebuild engineering in Navy.' I would say that our audit report absolutely supports that finding and recommendation. What I am not so certain about is the solution.

**Senator FAWCETT:** Have your audits covered, for example, that there is some work within Army to look at a concept of insourcing, rather than just doing frontline maintenance—again, this is aviation specific—and then outsourcing secondary maintenance?

Defence would actually own that whole process but then insource industry at different levels to boost the workforce so that Defence can still have people with that technical mastery going through all levels and actually owning and understanding the process so that we have informed officers who then go on to Capability Development Group or DMO et cetera and have that depth of knowledge. Have you covered that?

**Ms Holbert:** No, not recently. That would be with the MRH90s?

**Senator FAWCETT:** It is broader than that. It is looking more at how they are going to approach and actually recover this engineering capability.

**Ms Holbert:** Our recent work in Army has been on land projects, so, no.

**Senator JOHNSTON:** Going to the capability group, in these two paragraphs you have talked about MOTS and then you have got onto CDG. Referring to your report No. 48, which I think was most helpful, you found that these officers had not been adequately trained and they lacked appropriate supporting management structures, processes and tools to carry out their role. Now to my first question, and this is where we either go down the correct path or we start to get off the path and into the shrubbery and then onto the wrong path. My first question is, do they know that? Do they think they have an understanding? Do they know what they do not know? That is the 'former Secretary of Defence's type' question.

**Ms Holbert:** That report was tabled on 30 June 2009. The field work, including the focus groups that we did with the desk officers, was a little bit older than that; it had been done the previous year. This is an area that has been receiving a fair bit of attention in Defence, and you will see it in the context of the Black review. Again, they are talking once more about the need to beef up the skilling inside the Capability Development Group; the creation of the Associate Secretary Materiel; and the issue of wanting to get the linkages with DMO working with CDG and DSTO to get the capability proposals stronger and better. So, it is an area where we are hoping to find that there has in fact been improvement. As the Auditor-General mentioned in his opening statement, he has just designated an audit to go back and look at the two-pass process again. We will go back and look at not only the quality of the submissions coming forward to government—the documents underpinning it: the operational concept documents; the functional performance specifications; and the operational concept documents—but also at what has happened in Capability Development Group in terms of its maturation as a group doing the development of capability proposals: how they have gone with their skilling; with their training; with the improvements they are looking for; and where they are planning to go. Could I say that we are actually telling you more than we have yet told Defence, because this has only just occurred.

**Senator JOHNSTON:** Are you going to look at the rotational doctrines in this group? One of the glaring issues you raise is that just when somebody gets a really good handle on what they are doing in their own little space, they are transferred away. I did not hear you mention that. I think that is a significant element.

**Ms Holbert:** The Black review mentions that they are going to at least go to three-year rotations.

**Senator JOHNSTON:** Is that enough?

**Ms Holbert:** It depends how they are going to use them. At the time we were there auditing last time one of the issues, and the reason the project managers felt under-trained, was that they were doing a lot of work in the costing of proposals and they were doing a lot of the project management for the capability projects as they went through first-pass and second-pass. They felt that in those areas they had gaps in their training and knowledge, yet they had been brought into Capability Development Group for their war-fighter's skills and knowledge to inform

the identification of options for consideration by government. So, some of it will be how they are being used. So, I do not know that we would make a blanket statement one way or another as to how long they should be there. Some of it is about how you choose to organise the structure to use the skills of the people you have to get the outcomes that you want.

**Senator JOHNSTON:** I want to briefly go to the item 'Improving project management skills'. From paragraph 31 I see that 1,200 DMO staff have been either certified or enrolled. I am happy about that and I think that is a significantly large number of personnel, but do we have the fruits of that or are we expecting any fruits? It is all very well to have a label, a title and a piece of paper, but is it going to mean anything, do you think?

**Ms Holbert:** My colleague Mr White can probably answer more about this because he does the major projects report. Because on the assurance report we are looking each year at a growing number of projects, it is more contemporaneous about current projects. When we are looking at the project audits they tend to be a bit more mature. There is not a lot of point in doing our kind of detailed work on a project that has only just started because there is a limit to the insights that you can get. Usually they are a bit longer in the tooth by the time we are looking at them. I will get Mr White to respond.

**Mr M White:** My understanding was that Dr Gumley was convinced that it was showing improvement. From my own perspective, it is an indicator that we would look at in an environment about the number of qualified people—whether you are looking at qualified accountants for CFOs or qualified engineers or qualified project managers in a project management business. It is fairly early days since when the process started to grow and we are looking at it within each of the projects that we look at for the major projects report. In general, I would say that there has to be a strong influence throughout the organisation just by that increase in skills.

**Senator JOHNSTON:** Have you had a look at the curriculum? Have you had a look at what they are getting certified to do? Does it satisfy you and fill you with confidence that we are on the right path?

**Mr M White:** There is a range of different certifications within that group, but I would say that it is now prevalent within the DMO that you see people proud of their qualifications. There are a lot of materials around DMO about people working within qualified areas and I think it is starting to be embodied in the project management that we see within the project offices.

**Mr McPhee:** Certainly, Dr Gumley was a very strong supporter of that and he signalled that very clearly. I agree with the comment that it is only an indicator but I think it is absolutely the right direction to be taking the organisation in.

**Senator MARK BISHOP:** I will switch the discussion now to paragraph 35 of your submission, where you refer to large numbers of amendments made to specifications over time. You instance a number of reports on contract change proposals and you go through them. The grapevine suggests that there have already been something in the order of 35 or 40 similar amendments occurring in the AWD project. What is your diagnosis of this disease—this constant scope creep after second phase has been approved—regardless of the constant refrain we hear of complexity or rapid escalation of technology?

**Senator JOHNSTON:** 'Contagion' might be a better word.

**Senator MARK BISHOP:** Why is this occurring? Is it necessary to remedy it?

**Mr M White:** We generate that information from the information and data we collect in the major projects report. As a non-engineer, I see it as problematic because of the amount of changes to the recording and practices impacting on each of the SPOs that we visit, and the difficulty they have in being able to lay their hands on accurate data at an immediate point in time. I am not questioning the need for those changes or whether or not there should have been a different development process to reduce the number of them, I reflecting more on the impact it has on the management of the offices that we see.

**Senator MARK BISHOP:** That is an answer that goes to the adequacy of systems and the retention of information. My question is more about why there is this rapid escalation. What is the root cause of this constant scope creep and scope change after second phase has been signed off by the government and DMO is in the implementation stage?

**Mr Bond:** The first point to note is that numerous changes to contracts are not necessarily a sign that things are awry. They can be a legitimate response to changed circumstances that may have arisen while you were working on, for instance, the AWD, where you would want to go back to the table with the contractor to make sure you were still talking about building the thing that you both wanted to achieve.

The other cause is usually at the requirements phase, at the outset, where a significant amount of up-front investment is required to break a project down to the greatest possible detail to identify all the risks that you

possibly can and find ways of treating them or agreeing on how you are going to treat them, or not treat, them prior to going to contract. That is usually the other cause of significant changes in requirements over the lifetime of a project. That usually generates, in and of itself, a certain number of contract changes. As more contract changes occur you would suspect that that would mean there were more things that needed to be identified at the outset—at the requirements phase.

We noted, when we were looking at the acceptance into service of Navy capability, that the requirements phase for a number of the Navy projects was not as complete as it should have been. I think we found that seven out of 20 had a full set of documents that showed us that there had been a comprehensive consideration of requirements, at least at the second pass stage. So there is definitely room for improvement there.

**Senator JOHNSTON:** Can you tell us why there is such a short fall? Haste?

**Mr Bond:** One of the reasons that it was not universal across the projects was that it was a change that had been introduced subsequent to the project starting up. So the requirement for the two pass process antedated the conception of some of these projects. That, again, is the problem that arises when you have very long projects and successive management changes occur. It is not that two pass was a bad change; please do not make that inference. That was one of the causes. The other cause, as far as we could tell, was related to complexity and was related to the need for significant effort up front to deal with complex projects.

**Senator JOHNSTON:** Are you talking money, personnel or what?

**Mr Bond:** Personnel would be one of the main drivers: having the people on hand in the right place at the right time to be able to do the complex and detailed assessments that would retire risk earlier and lead to fewer changes in specification down the track, hopefully, all other things being equal.

**Senator JOHNSTON:** Are we talking pre first pass?

**Mr Bond:** Pre first pass is helpful but it is really to the culmination of the second pass that we will be returning to look at to see if we can get an indication of an improvement in the detail and the quality of that process.

**Senator MARK BISHOP:** When you talk about pre first pass, is the solution in terms of personnel in seriously beefing up the composition of all of the services in the CDG—the quality of people, adequacy of training, appropriate remuneration, maintenance in the job for more than 12 months or two years, retention of corporate knowledge? Is that the place or is it otherwise?

**Ms Holbert:** I think you will find that the successive reviews—Kinnaird, Mortimer, the Defence Budget Audit and the Black review—are creeping along the path of trying to beef up those things. I think it is at the Kinnaird stage that integrated project teams make their appearance. Then Mortimer says, 'They're very important; you need to do more.' Then in the last couple of years there has been, 'The DMO needs to be bumping up its role; it needs to be very much involved in the equipment acquisition strategy and in the costings so that by the time you get to second pass you have tender-quality costings to put in front of government and you have properly tested options where you have accurate well-informed assessments of risks attaching to the various options. So they are moving along a continuum where attention is being paid to this. The Black review, having come out this week, once again emphasised that this is an area where they need to get better at it. One of the other things that is difficult is that an agency like Defence, with very long projects, goes through times when there is likely to be more money available to it and times when there is going to be less money available to it, and some of the behaviours that you get as you go through processes can be influenced by externalities like that. When you are talking about a large-scale investment upfront into a project to de-risk it, everybody might agree that it is a good idea to do, but how much you are prepared to invest, how much time you are prepared to invest and how long you are prepared to wait for the capability are all matters that have to be negotiated with government.

**Senator FAWCETT:** You mentioned before, Mr McPhee, the fact that you felt Defence actually had many of the policies and processes it needed but people were not actually being held to account to apply those consistently across the board, which goes to closed-loop control systems. MBA theory would say that any good learning organisation has good internal accountability and closed loops. Again, in the aviation field, which is my background, Defence has achieved that quite well with the Airworthiness Board process, whereby they have people who are experts in their field—technical or operational—who are retired, so they no longer have a career to be concerned about, who have a great depth of corporate knowledge, who come in on behalf of the capability manager and review, once a year, how something is working. Part of that review is that they open the floor to anyone who is involved. In fact, they not only open it; they require the attendance of companies who are involved in contracting, pilots, maintainers et cetera. They gather all that information and they actually probe quite proactively to bring information forward. Because of their experience, they know that there is probably a skeleton

in that cupboard, so they will go looking for it and bring that out—and things that may not normally be reported will be dragged out and exposed.

Could we see that model applied into both CDG and DMO, whereby once a year every project, both at its conceptual capability development stage and into the acquisitions stage, has this forensic third-party experienced 'no concerns about my career' audit from a group who would have a range of operational, technical, procurement and industry knowledge? In fact, the industry may well be part of the witnesses to come and actually provide that input. That would then go to whatever level within the DMO or Defence to provide that assurance that at least once every year we are forensically checking that people are following process, and not only following process but actually adding value, whether it is in 12 months or three years, by bringing this weight of knowledge into the current teams of people. Do you have any comments on that approach?

**Mr McPhee:** I think that is a good idea, certainly in concept. One of the reasons that DMO was very keen to work with us on this major project report was to get on an annual basis the status of each of the projects, the risks to delivery and to be quite open about that. Dr Gumley was a very, very strong supporter of that. He wanted to build the learning organisation that you refer to. I think there is no doubt about it that that is a model that we would like to see in Defence, where it does become more of an organisation that learns and develops itself. You want a self-evaluating, self-assessing organisation, and to do that you get back to your point—the management 101 stuff about governance and good score-keeping systems and knowing where you stand and good documentation et cetera. My colleagues may wish to speak a little bit more about the specific details that you referred to. The other thing I would want to recognise is that change takes time. We see it not just in Defence but in many other organisations. Policy decisions get taken, senior executives may need to move on to the next important priority or the next development and the question becomes: what arrangements are in place to sustain the implementation of the reform that was a good idea and was necessary to make sure you deliver on the outcomes expected?

That is a critical issue for governance across the Public Service—to make sure that it actually happens. I think there are any number of ways you can skin the cat, but certainly at the end of the day goes down to leadership and taking a fairly inclusive approach, the sort that you referred to, to say: 'Well, what are the risks we've got to deal with? What are the priorities?' And agree to do those. I think one of the challenges, looking at Defence from afar, is that there are lots of things they need to deal with and the question is: What is the priority and who is responsible for what? That is a big challenge in an organisation.

But, as I say, I am deeply encouraged by situations where they have actually said, 'This is a priority and we need to focus on it.' They have got the skills, they have got the ability to coordinate. No-one can coordinate better than military people and ex-military people. So I think they have to work at fixing these issues, because it does go to their reputation and standing and, at the end of the day, their ability to recruit and retain people as well. So it is very important. I will just see if my colleagues want to add further to the specific example you referred to.

**Ms Holbert:** In terms of the specific example I think there are a couple of linkages. One is that the Black review does talk about red teaming, where they are talking about building internal contestability on all sorts of aspects of decision making in Defence. I could see that fulfilling some of the sorts of roles you are talking about.

But I think the other thing is where the history of things has a part to play. With the robust airworthiness process that we have in the ADF today, it found its roots in some serious air accidents and a perception of risk. The openness of how those committees are handled are influenced by the Chicago convention and the fact that air traffic is seen as an inherently risky thing and that everybody should feel open to talk in order to make sure that the best possible decision is made. These are all good things. I suppose I was a little surprised when we went into the naval space and there was not a similar process for seaworthiness. I was a bit surprised. But by the time we were doing this audit, the most recent Chief of Navy had started to instigate an annual process for vessels looking at a seaworthiness board. So sometimes it is the immediacy to managers and the perception of risk that makes reforms take, and I think with the DGTA example, that is the kind of thing that we are talking about there. But I think it also would be incorrect not to nod to the fact that Defence are aware of this need for increased clarity about who is making decisions, increased contestability so that they use all of the knowledge and skills inside the organisation to try and get the best result, rein in the committee system and get some personal accountability going. Defence has said that is what they need to do, the minister has said that is what they need to do. It will now be a matter of how that translates into action.

**Senator KROGER:** The industry groups that we had earlier on highlighted that there was not only this systemic I might call 'cultural' approach to decision making in DMO but if you added onto that the view that industry have that they take an adversarial approach, if you like, with industry, and that is also significantly impacting not only the relationship with industry but they believe the inputting into that decision-making process.

Mr McPhee, in your reviews that you have undertaken, in addition to the decision-making processes, do you think that there is a cultural issue in the way in which DMO relates to industry and the way in which they work with industry—that that affects, perhaps, the outcomes?

**Mr McPhee:** I do not have enough evidence to be able to comment on that with any authority. I would say, though, on the positive side, that you do want your culture to be performance orientated and reflect the values of the organisation. That is an important role for leadership in any organisation. I cannot comment on the specifics of the industry relationship. I do not know whether my colleagues can.

**Ms Holbert:** For us, there is some difficulty in commenting broadly on the industry relationships because it tends to only be in the context of specific projects, and unfortunately the projects that I have looked at in recent times have all been projects where there is tension. We would not really have much to offer on that. The only thing I would say in DMO's defence a bit is that part of what has been asked of them under the reforms both with Kinnaird and Mortimer, and successively, is to behave more commercially. Holding people to contract and being specific about what is required in RFTs and assessing tenders according to the rules that you have said you are going to do sometimes can be seen as being hard-nosed or adversarial with industry. Certainly, we would have seen some evidence of where there is better attention being paid to acting in the Commonwealth's interests in those kinds of scenarios.

**Senator KROGER:** I personally think that competitive attention is good. It is the way in which you factor in competitive attention versus appreciating the fixed dynamics that the industries are dealing with themselves and how that plays into the tender process for DMO and so on. That goes back to communication, actually. It is all about communication at the end of the day.

**Ms Holbert:** And earlier rather than later.

**Senator KROGER:** It is about getting the interaction between industry, DMO and Defence right at the beginning and us being sufficiently certain and doing sufficient research about our requirements so that we define requirements that means something to industry and the industry is in an informed position when they are putting in bids, proposing prices et cetera. As the Auditor-General said, that is plain communication and contracting in a proper way.

**Mr Bond:** In forming our views on the Navy audit, we drew on a considerable amount of overseas information—overseas travel—and spoke to colleagues in the United States, Canada and the United Kingdom. One of the emerging features of the commercial shipbuilding world, for instance, is an extremely high level of communication between the potential buyer and the shipbuilder on what is to be built. Intense involvement goes on between those two parties in the process of deciding what will eventually go to fixed-price contract. The development phase in the commercial sector, in the case of complex ships, for instance, can take up to six or seven years, simply in the development phase. It involves both contractual, technical and legal effort on behalf of both parties and, on behalf of the prime shipbuilder, subcontracting arrangements being foreshadowed with people who might provide propulsion systems, communication systems or the other components of the vessel.

What we have noticed and what has been documented elsewhere is that the movement to fixed-price contract does not occur in the commercial sector for large ships until everyone is very certain as to what they are signing up for. It is not that everyone then leaves the table with their hands off and leaves it to the shipbuilder; they remain intimately involved throughout the process of the construction and testing of the vessel so that when problems arise during that process the shipowner's representative will be in the yard, a representative of the classification society who is going to issue the certificates so that it can be insured will be in the yard, and, if there is a bank involved to finance it, they have their engineer in the yard so that difficulties can be resolved as rapidly as possible. Where they cannot be resolved rapidly, they escalate it through their contractually predetermined processes. What we have noticed in the commercial sector and is documented in the commercial sector is that while that development phase can take a very, very long time, the construction phase can be measured in months. You can have a very large ocean liner constructed within 18 months and a very complex ocean-going oil exploration vessel constructed in 24 months, and we are talking about projects with values of anywhere between \$150 million and \$2½ billion. So part of the issue with contracting on any large complex project, whether it is defence or commercial sector, is the detailed attention to the specification process but overseen by the project management and the contractual negotiation process. Sometimes we see issues arise in our individual audits that we do into projects where it becomes clear that the parties have not understood what it was they were signing up to, whether it was Defence on the one hand or whether it was the contractor on the other. This, of course, is going to give rise to dispute and tension down the track. As Fran said, when we have gone into projects with tension, that is one of the things we frequently note, that there has been a misunderstanding.

**Senator KROGER:** One of the observations that was made—a specific instance was not provided; it was a general observation, and I am speaking in general terms—was that industry in many instances would not be forthcoming about putting their concerns on the table because they were concerned about repercussions. That goes to the question: how can you have effective communications if one party is concerned about repercussions? I guess it is the chicken and egg situation. How do we improve this scenario?

**Mr Cahill:** Effectively what Mr Bond was saying was that if you extend that unclear start into a long-term project where there is lots of technological change and then you are looking to say, 'We need to do some change management processes,' if you do not have the clarity about what your original configurations were then you are exacerbating the problem. Would that be fair, Mr Bond?

**Mr Bond:** Yes. What we have noticed is that the initial problems propagate through. It is extremely hard for us to opine on issues that have emerged. It is more a matter of looking at what the situation was at the outset and then following it through. It is hard to disentangle the causes of those kinds of problems.

**Senator MARK BISHOP:** Over the years you have probably made hundreds of recommendations to Defence or to various arms of Defence. By and large, Defence probably accepts 85 or 90 per cent of the recommendations in your reports. If it does not accept, it puts in a qualifier as to why and you have those discussions. But, by and large, hundreds if not thousands of recommendations you have made over the last 10 years have been accepted. Have you ever gone back and done a compliance study of the degree to which recommendations are made, implemented and maintained? In this discussion we are having there is a terrible repetition of cause and effect, not just in terms of procurement but in other issues going to culture and behaviour in Defence. They say they learn from them, they implement and they change, and then two years later we have the same instance in a different place. So have you ever done a study of compliance for all of your recommendations?

**Ms Holbert:** Not of all of our recommendations, but it just so happens that in 2009-10 we went to look at the procurement of explosive ordnance for the ADF. This is something ANAO has been auditing for the last 20-odd years; this was about report number 6. We had been saying things for a long time. We had been looking at things for a long time. Defence were going to do things for a long time.

Our methodology at the beginning of an audit that follows on from one that has had previous work is to ask for a management statement of the degree to which they have implemented the previous recommendations. We then go through and do substantive testing to look at the degree to which that assurance can be underpinned.

In this particular audit, which was Audit report 24 of 2009-10, the story was a little bit sad. The first recommendation was actually complete. That was good. On recommendation 2 they told us it was complete, but it was partially complete. On recommendation 3, I think they said that was complete, but it was limited. Recommendation 4 was overtaken by events—and those things can happen. Recommendation 5 was complete. On 11 there was limited progress. Recommendation 11 was:

The ANAO recommends that the Defence Materiel Organisation review processes for the acceptance of explosive ordnance to ensure that the level of initial receipt inspection is consistent with the risks associated with the procurement source.

Following the tabling of the previous audit, the DMO informed the ANAO that it would update its procedures. These amendments were approved and were to be formally incorporated at the next reissue of the manual during 2007. However, during fieldwork for this audit the ANAO found that the logistics procedure manual had not been updated since 2006. In addition, staff in the Munitions Branch informed the audit team that the logistics procedure manual was out of date and not used by staff. I will not bore you with the rest. Yes, we do go back and look at these sorts of things.

**Senator MARK BISHOP:** All right then, we have all got the message here. Mr McPhee, you write to this committee and you write to the Joint Standing Committee of Public Accounts and Audit, to which you report in another hat on a regular basis asking for recommendations for future work. And they have been writing to you. That should remind you of this conversation when you are thinking about future work in due course.

**Mr McPhee:** Yes, following up recommendations.

**Senator MARK BISHOP:** It is more than that. It is the issue of compliance with undertakings given on an ongoing basis—and openly complying.

**Mr McPhee:** I agree with it but—

**Senator FAWCETT:** Your earlier comment is very valid too. It is about learning the lessons.

**Mr McPhee:** It is a deeper managerial issue here.

**Senator FAWCETT:** Going to the question on learning the lessons, you referred to overseas. Are you familiar with the Haddon-Cave review?

**Ms Holbert:** It is not ringing a bell with me but I am sure it would with Dr McNally. Not only has he done our audits on Navy; he has done the audits on Air Force as well.

**Senator FAWCETT:** One of the very clear things that came out of that was their use of integrated project teams, which at a theoretical level sounds fantastic as it increases the communication and all the rest of it. It was actually a fairly key factor in reducing accountability or reducing technical knowledge or reducing ownership of issues, which all contributed to the eventual accident and the malaise that the British MOD found themselves in. I was a little alarmed in light of that. That is a very credible review and yet I see very recent reviews here for Defence recommending we go down the path of IPTs. I would be interested to get your perspective on how much weight the ANAO has placed in the past on reviewing other countries' audits and reviews and giving reports back to government with this: 'Here are lessons from other countries that we should be aware of.'

**Ms Holbert:** If I could turn it around the other way, if we are doing a performance audit where there is likely to be audit work done—by the Government Accountability Office in the US or the NAO in the UK or Canada—we will go looking for that. If it is sufficiently significant an audit and there is value to be gained by going and talking to our colleagues, we may well do that. Otherwise, we stay up into the middle of the night so that we can coordinate times and we ring each other up. So we do try and look for what the international audit findings are. We stay on top of things like the GAO's reports on the joint strike fighter, so all of that kind of thing. On this one, as to what Mr Bond was referring to before, on cruise ships and current industry, while Mr Bond himself is a naval architect and has actually been involved in building gas platforms, what we surfed off for recent information was a GAO report, which we have handed to the secretariat, where they compared the US Navy shipbuilding industry with the cruise ships and oil tankers industry. They went to the big international shipping yards.

**Mr Bond:** Yes, in Korea, Japan and Denmark, to name the three major areas that they went to. So we use that kind of information. You are referring to the Haddon-Cave inquiry and the Nimrod incident. Dr McNally and I discussed that. We did indeed talk about integrated project teams. What we were concerned about in the case of the teams was not so much about the formation of a team per se but that the proper mix of engineering disciplines was available to the team and was being coherently applied in the team. Again we were not necessarily alarmed about IPTs per se but we were thinking to ourselves what it is that underlies the functioning of IPTs that makes them work. That is what we were looking for in Defence. We looked at other matters. I think we refer to the *Westralia* coroner's report and that is particularly relevant for configuration management, one of the fundamental disciplines. We even went so far as to go back to be *Thresher* inquiry results from the 1960s to again get to grips with what is required at the fundamental level to be able to produce this kind of capability.

**Senator FAWCETT:** Are you saying you were looking at key competencies for example of the engineers within the IPTs? Did you dig a little deeper in terms of how we sustain and develop those competencies, if that becomes their predominant workplace are supposed to living within a technical services branch, which Defence used to have, to mentor and grow engineers? Did you look at how we sustain those appropriate engineering skills?

**Ms Holbert:** It is a matter of how much an audit report can do. For this audit report, with the Auditor-General's approval, we invested some very high-level resources. We did go to the United States, Canada and the UK. Not only did we speak to their audit offices but we also spoke to the Department of Defense and the MOD. We spoke to senior naval captains in Portsmouth et cetera to get to what it is they are doing. When you distil it, it comes to the same answer. There is no silver bullet; there is no replacement for going through the basic processes properly and setting up control loops that allow you to know you have done so. There will always be differences in perspective between acquirers of equipment and users of equipment. You look for communication methods to try to reduce the gap between them.

One of the key things we got out of speaking to the United States was how they manage their tech reg framework for accepting navy ships—that is, to work in lock step. They are in the shipyard every day as well as the people from the acquisition organisation, as is the contractor. It is working together so that as you do each stage and each subsystem everybody is on the same page, tick, the validation and verification is accepted. You know what the configuration is and you move on to the next step so that by the time you get to the end, to use their words, you 'avoid voyages of discovery' when you take on a piece of equipment.

**Senator JOHNSTON:** Going back to the CDG there is a paragraph here which the committee needs to look at—that is, paragraph 46. You mention the poor record-keeping in the CDG and a failure to adhere to the provisions of the DCDM in terms of record management and a continuing incapacity to demonstrate documentation. Firstly, how contemporaneous is that paragraph? Have we seen any changes or should we take the alarm bells which I suspect might be ringing their as being the current state of affairs?



**Ms Holbert:** The data that refers to is slightly earlier than June 2009. That refers to submissions that went to cabinet after the Kinnaird review up to about 2008. With the 20 projects we were looking for the key capability documents that sit underneath the cab subs, so we were looking for the operational concept document, the functional performance and specifications and the test concept document et cetera. We were looking to the consultation with DSTO and with DMO.

**Senator JOHNSTON:** Do any of those documents deal with ongoing sustainment?

**Ms Holbert:** Whole-of-life cycle is meant to be in the documents and we were looking for that as well.

**Senator JOHNSTON:** That was not there.

**Ms Holbert:** In the cabinet submissions, whole-of-life cycle was not appearing. There were a number of them where the only information was about the net personnel and operating costs rather than the whole-of-life cycle costs. Whole-of-life cycle and sustainment were discussed but you are testing my memory a bit here.

**Senator JOHNSTON:** What was not there?

**Ms Holbert:** Whole-of-life cycle costing was not in all of those submissions.

**Senator JOHNSTON:** And why was that, do you think? Can you help us with that? Was it too complex a calculation?

**Ms Holbert:** I do not think I could hazard a guess about why, because there was simply so much inconsistency in the documents. Originally the Auditor-General had wished us to do an audit where we looked at the quality of the advice that was going to government and we had to pull back from that because we could not get a sufficiently comprehensive set of records to do that kind of analysis. We pulled back to ask, 'Can we find a final, authorised copy of each of these documents?' We could only find roughly 50 per cent of the documents. That was a few years ago now.

**Senator JOHNSTON:** When are we revisiting this issue?

**Ms Holbert:** We are just starting to revisit it now.

**Senator JOHNSTON:** Roughly, when will you have an answer to what I think was the question?

**Ms Holbert:** In approximately 12 months.

**Senator JOHNSTON:** That is fine. We will deal with that and obviously we need to talk about that aspect. In paragraph 60 you raise a very novel and interesting issue about these material acquisition agreements. You talk about a project of concern list member who did not have a material acquisition agreement. Can you tell me which particular project that was? When I went to your footnote that was an ordnance acquisition and maintenance report that I could not quite relate to the subject matter of the paragraph.

**Ms Holbert:** No, the footnote is *ANAO Audit Report No. 37 2009-10*.

**Senator JOHNSTON:** Okay, I must have looked at the wrong report then. The lightweight torpedo project, which I think is a legacy project over a long period, did not have a material acquisition agreement?

**Ms Holbert:** At the time we initially looked at it during our fieldwork. I am dredging up memories here, but I think it became out of date and there was not one in place. It has subsequently been replaced with a current material acquisition agreement to which the capability manager, Chief of Navy is a signatory.

**Senator JOHNSTON:** I read your report and that is one of the particular projects that is really of concern. It has integration issues and a whole host of problems that are hard to remediate that probably mean we are going to end up with a big percentage missing from the capability, if we ever get it.

**Ms Holbert:** That has already occurred because they have removed all of the air platforms from the scope of the project. The Super Seasprite project was cancelled. The P-3 Orion has gone and the Seahawks have gone because they are getting close to their end of life. They are now only going to be integrated onto the Anzac ships and the FFGs. We had been asked by the previous Minister for Defence to go back and look at this again in about 12 to 18 months, so that is now. We are designating an audit and we are about to go in and look at the remediation of the project. The key issues that remained at the time we finished looking at the project were around the testing and evaluation to bring it into operational service, particularly the availability of objective quality evidence. They need to go to the partner navies, the French in particular, to get that rather than us having to do a big test program ourselves. We understand that there has been a lot of work going on in that field since and we will update that when we go back.

**CHAIR:** There has been a bit of discussion about off-the-shelf defence equipment. I noticed that you referred to that sort of thing in paragraph 22. From what you are saying, while the equipment is modified to meet particular Australian requirements in developmental acquisitions, they provide a capability solution for the ADF

that does not already exist. We heard earlier today some resistance to off-the-shelf defence equipment. What would you think? Is this a means of Australia being able to acquire defence equipment which may be more appropriate than trying to develop it ourselves?

**Mr M White:** It is something that we have been looking at developing some data on for the major projects report. It is early stages for where we are looking at it. At the moment, when something that can be sourced that meets the requirements—and that is the first and most important thing—it can be often brought into service without schedule slippage, which obviously is a big factor in what we have been looking at in the major projects report, and satisfactorily operated by the military. For some of the examples—and the C17 is a clear example—where it meets the requirements and it can be purchased with an FMS case, it can be brought in on time or even earlier than initial schedules. I suppose the point is that it really does need to meet requirements first.

**Mr Cahill:** I think MOTS does not come without risk. I think in Navy acceptance we make the point that it remains fundamental that senior responsible officers manage the definition, acquisition and acceptance phases of a military off-the-shelf and, most importantly, have clear visibility over the key decisions and the assumptions and the test and evaluation data that the vendor is presenting to you, to be confident that what is being presented to you is actually the case.

**Senator FAWCETT:** You highlight the importance there of informing the decision makers through having that test and evaluation data. That assumes that we have people who are competent to actually assess that data.

**Mr Cahill:** Yes.

**Senator FAWCETT:** One of the things that has disturbed me in the last 12 months is that, because again of this cultural creep that MOTS is the way to go, there are actually directives and papers now floating around Defence saying, 'Because we're moving to a MOTS-COTS world, we don't actually need to sustain a test and evaluation capability other than predominantly operational test and evaluation,' which is quite a different beast to the sort of test and evaluation are talking about. Have you come across that in your inquiries into Defence?

**Mr Cahill:** Ms Holbert might be able to answer that.

**Ms Holbert:** No, we have not come across that yet.

**Mr Cahill:** I think it is important to have the skills to be able to test the assumptions and representations made by the vendor. I think that the lightweight torpedo shone some light on that. It was originally presented as an in-service solution.

**Senator MARK BISHOP:** Or, more up to date, the point made by Senator Fawcett goes to the heart of your recent report on ships, where, for whatever reason, Navy was denuded of engineering expertise over a long period of time, perhaps over 20 years, and hence you had the problems in the last three to five years, because they did not have the in-house capability and expertise to do the job that was required. The point raised by Senator Fawcett, if it is indeed is correct, is a matter of concern, I would have thought, into the future.

**Ms Holbert:** In the Air Force space, you have got the double benefit that a lot of the MOTS equipment that you will buy is foreign military sales from the United States. You get a large body of objective quality evidence from the United States, plus the lessons they have learned through bringing it into service. You also have the DGTA tech reg framework, which is quite solid, well tested and in place, which I think is the point that the senator was making. In Navy, there are weaknesses in that area—we have pointed that out—and that raises risks. But also, with Navy you have many more situations where, while we will procure someone else's design—we are not going to develop a design from scratch for a major ship—at the same time, they are going to have to integrate with a whole range of other systems that we have got, because we simply cannot afford a new suite of systems for every vessel that we take on. So, as soon as you are having to integrate other systems, it has moved from MOTS to Australianised. But that is not an evil thing; it is just a fact of life.

**Senator FAWCETT:** I agree very much with your statement. I just want to clarify one point that you made—that, if something comes from a country like the US, there is a good body of certification data there that we can relax about. One of the things that I think the committee needs to understand is that there is a considerably different risk appetite in the United States compared to Australia. The issue, for example, of aircraft stall certification is one classic example where the depth and scope of their testing is not what we expect, and there are often things that are done here which highlight gaps and holes in their certification process. There was one just last year that was quite apparent.

**Ms Holbert:** This is starting to move out of our expertise, I would say.

**Senator FAWCETT:** I have one last question, if I can. Paragraph 7 of your submission talks about the challenges that Defence has—it goes to capital acquisitions, but it covers the whole Defence organisation—

around the fact that people need to actually look at all of the inputs and the capability, and you actually have a quote down there about the people, equipment, training et cetera. One of the things that we have had evidence about that have made that problematic for Defence is the fact that the leaders within Defence no longer control—they certainly do not own—many of those elements of capability. That goes largely to, again, the efficiency measures that have been driven through and the shared services model, particularly in the light of the Western Australian government's decision to descramble to egg over its shared services model. The comment in the report that backed that decision said no public sector implementation of shared services in Australia has actually achieved the efficiencies it was intended to. Do you have any views on our approach to shared services and whether in fact that is something that we should be continuing to invest in and in fact accelerate, as opposed to stepping back and saying, 'Are we actually better off to give control back to the commanders so they actually command and control the capability they need?'

**Ms Holbert:** We have to be very careful about the extent of work that we have done that can add value here. But I will make a couple of points. In the defence context at the moment, where they are talking about shared services, they are talking about corporate functions for shared services, whereas you prefaced the beginning of your comments about fundamental inputs to capability. In the acceptance into service report on Navy we did comment on the difficulties faced by capability managers such as Chief of Navy, taking on the role that under Mortimer they have been given for coordinating the fundamental inputs to capability, to bring a new capability into service. We said that, because he does not control all of those inputs, it is not clear how that coordination role is going to work and how capability managers are going to be able to influence the development of the fundamental inputs to make sure that the capability does come online. So, on that side, that is what we said in the report. In the shared services sense, we have not looked at that in the context of defence at all.

**Mr McPhee:** Senator, a diplomatic response to your question is that I think you are quite right. There is a fair bit of experience now with the use of shared services, and not all of it has been good. It is important that when organisations do adopt that model they have regard to the experience that is already out there and seek to compensate for the weaknesses that have been highlighted by earlier models and address the issue. It sort of touches on the earlier discussion that the big attractions, of course, are the efficiencies or the savings that can be made through the process. The issues that people have to watch are the level of service and the interconnections across the organisation or units to make sure things work smoothly. I think the writing is on the wall. So everyone needs to manage these arrangements very carefully.

**Senator FAWCETT:** I think it is important also just to highlight that it does actually go to FIC. I think that, if you look back within Australia's defence capabilities, there are some very stark examples where Air Force's capability to manage for airpower recognised as we moved towards stand-off weapons that we would need to do end-to-end testing with high explosive warheads, which means you preferably need to own the land that you are actually firing things over. They identified an opportunity to purchase a pastoral lease near an air weapons range that would enable them to do that, but because the shared service model meant that CSIG, as it was called that week, was responsible for that particular function, it ended up being a barney between the two stovepipes over whether it was actually a priority to save money by downsizing land or buying for capability. In the end, we lost the option to buy it, which means that the capability manager is then held to account years later—'Why didn't you take appropriate steps so you could test this weapon?'—whereas it is actually that shared service that goes right to the heart of FIC and the capability.

**CHAIR:** There being no more questions, we thank you for appearing this afternoon. It has been a very informative session, so thank you.

**Committee adjourned at 17:15**