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JOINT COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT

Reference: Defence major projects report

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**JOINT STATUTORY
COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT**

Thursday, 19 March 2009

Members: Ms Grierson (*Chair*), Mr Georgiou (*Deputy Chair*), Senators Barnett, Mark Bishop, Boyce, Bushby, Feeney and Lundy and Mr Bevis, Mrs Bronwyn Bishop, Mr Bradbury, Mr Briggs, Mr Butler, Ms King, Mr Neumann and Mr Robert

Members in attendance: Mr Bevis, Mrs Bronwyn Bishop, Mr Georgiou, Ms Grierson, Mr Robert

Terms of reference for the inquiry:

To inquire into and report on:

Defence major projects report

WITNESSES

GILLIS, Mr Kim, General Manager Systems, Defence Materiel Organisation..... 1

GUMLEY, Dr Stephen, Chief Executive Officer, Defence Materiel Organisation 1

**HINDMARSH, Mr Tony, Director-General, Change and Assurance; and Chief Audit Executive,
Defence Materiel Organisation 1**

McNALLY, Dr Ray, Senior Director, Australian National Audit Office..... 1

McPHEE, Mr Ian, Auditor-General, Australian National Audit Office..... 1

**WAY, Mr Paul, Director, Assurance Management and Committee Support, Defence Materiel
Organisation 1**

WHITE, Mr Michael, Executive Director, Australian National Audit Office..... 1

WHITE, Mr Peter, Group Executive Director, Australian National Audit Office 1

Committee met at 8.51 am

GILLIS, Mr Kim, General Manager Systems, Defence Materiel Organisation

GUMLEY, Dr Stephen, Chief Executive Officer, Defence Materiel Organisation

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WHITE, Mr Michael, Executive Director, Australian National Audit Office

WHITE, Mr Peter, Group Executive Director, Australian National Audit Office

CHAIR (Ms Grierson)—I welcome everybody here this morning to this public hearing of the Joint Standing Committee of Public Accounts and Audit on the first major projects report. The Auditor-General tabled the *Major projects report 2007-08* on 27 November last year. That report was a pilot that provided cost schedule and capability information on nine major Defence projects. It is expected that in future years the major projects report will report progress on up to 30 of Defence's major acquisition projects.

As the committee stated in its report, *Progress on equipment acquisition and financial reporting in Defence* tabled in August last year, the committee will vigilantly monitor the annual major projects reports to ensure that their scope and depth are not diminished in any way. The public hearing today is an opportunity for the committee to review the pilot report and to provide feedback to the ANAO and the DMO on the content and format of future major projects reports.

Before beginning, I advise witnesses that the hearings today are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. The giving of false or misleading evidence is a serious matter and may be regarded as contempt of parliament. The evidence given today will be recorded by Hansard and will attract parliamentary privilege.

I would also say to the committee members that the report, its format and its future will be our focus. We have certainly presented our major report on Defence acquisition; that was almost a two-year inquiry. So we will not be revisiting every matter of these projects but we are very interested in the accountability side of this report and certainly its detail, rigour, reliability and its reflection of reality. I do welcome witnesses from the Australian National Audit Office and Defence Materiel Organisation. It is nice to see familiar faces, although there are a couple of changes. We have received a submission from the Audit Office, but does either agency wish to make a brief opening statement before we proceed to questions?

Mr McPhee—I have a brief opening statement.

CHAIR—Thank you.

Mr McPhee—The DMO *Major projects report 2007-08* represents a substantial step towards improving transparency in, and accountability of, Defence's substantial major capital equipment investment program. DMO faces significant project management challenges in its role of delivering to the Australian Defence Force weapon systems and platforms on time, on budget, and to the required levels of quality, safety and capability. I am confident that increased transparency and accountability will assist this committee, the parliament and other key stakeholders to better gauge the overall achievements of this very significant program and assist DMO in pursuing its project management improvement agenda.

The 2009 DMO major projects report is expected to report on the progress of 15 major DMO projects, with the number of projects increasing up to 30 projects in subsequent years. At the same time, the ANAO will undertake analysis of each project's performance and, over time, the emerging trends across all projects.

The committee will be interested to know that I have received a letter from the Comptroller and Auditor-General of the UK, Mr Tim Burr, complimenting us on our work with DMO on the *Major projects report*. The ANAO and the committee have received helpful advice from the UK National Audit Office on the report's development. I am pleased to advise the committee that we have agreed to continue our cooperation to learn from, and support, new ways both our offices are developing in analysing Defence acquisitions.

In closing, I would like to acknowledge the support and considerable work of the DMO in developing the first *Major projects report* and assisting the ANAO staff in their project reviews. Chair and committee members, I and senior executives are very happy to respond to any questions that the committee may have.

CHAIR—Dr Gumley, would you like to make an opening statement?

Dr Gumley—Mr Gillis will make an opening statement.

CHAIR—Thank you.

Mr Gillis—I wanted to raise a few points. I think the engagement and relationship between the audit office and the DMO is sound and improving. The pilot process has been a very productive process. The way forward in the future has been agreed. Process plans and schedules have now been agreed between the two organisations and we think that the next six projects are executable and at the level that is appropriate for both organisations.

The education process has been developed to ensure that project managers understand the strategic value of the *Major projects report*. I have recently briefed the six new project managers regarding the strategic importance and it is to be their highest priority, other than actually delivering the capability. That is a very important document for the committee, the government and for our organisations.

The major project report will be a key document for the CEO and the general managers in DMO when presenting at estimates, at the JCPAA and also when working with the media. There

have been a number of occasions where I know that the CEO and myself have spent many hours trying to explain the history of a project—some of them going back 10 years—as to what the base-state dollars were and what were the extrapolations for exchange and indices, so it is a very good record for us to actually say, ‘This is the history and this is the documented, on-the-record, public statement of where the history of the projects are.’ It will be a very valuable document in those senses.

It does mitigate the misrepresentation of the data in the media. For example, the M113 program was recently represented as having a 1,000 per cent blow-out in cost. The reality is that program started at \$40 million and did grow into the hundreds of millions of dollars, but they were decisions of government where government had expanded the program from a minor mechanical repair to a significant upgrade of the program.

There is an improvement for us of the quality of the historical financial data. There are issues in the qualification in respect to the quality of specific instances of price and exchange variations sometimes going back into the early 90s. What we have to do is look at the actual materiality of those issues as to whether there is value for the Commonwealth and us in going back and retrieving historical data, with some going back 10-plus years.

We do need to improve the quality of our capability KPIs. It is one of the things that I think we have learned significantly from where the UK MOD is doing it better than we are. That is identifying what the KPIs are for capability to define when we have actually achieved the result as required by our stakeholder, which is the services.

The last one is the system’s engineering cycle. It is a very confusing environment sometimes. A project, over its 10-year life cycle, will not go through what was considered to be a traditional model of preliminary design, critical design and final design. Sometimes our projects are iterative, so we will end up going through cycles. It is one of the areas in the major projects report where when we looked at projects that are 10 to 15 years old, we could end up with 10 or 15 pages of design dates and I do not know whether there is a particular value for everybody to actually go down to that level of detail. We have worked very cooperatively with the ANAO to come up with an appropriate level.

Again, I would like to reiterate that we are very willing to cooperate with the committee and I think that the level of cooperation between the ANAO and the DMO has been a significant success.

CHAIR—Thank you. I can say to you that we were delighted when the report came down. It represented a lot of commitment by all parties, including the parliament, at both Senate and House of Representative levels. Auditor General, you have raised the point of getting to the level that is appropriate for the rigour of an audit that gives comfort to all those parties and it seems to me that the level is still not at that high requirement that perhaps we would be aiming for in the long term. Could you comment on what is still required to get to that appropriate level of assurance?

Mr McPhee—It is very important to acknowledge that it has been a good start.

CHAIR—Absolutely.

Mr McPhee—The pilot was done to test the data sheets, compilation and system support. It has come together in a time line that I would have to say I was pleasantly surprised with. Quite frankly, in my earlier days I was expecting a later report. It has been a good development.

We have learned from the first 12 months. My colleagues can perhaps speak a little bit more broadly on that. I think the one thing that we are conscious of is that some of the systems within DMO are probably not at the same level of maturity across the organisation and they do have an impact on the compilation of reporting information, particularly in the area of the costing information which we highlighted in our report. We will keep an eye on that and clearly if we think it is not up to scratch we will continue to qualify. Equally, I am conscious that DMO has got plans afoot to try to improve the quality of information systems and information as well.

CHAIR—In going to the specifics, it does seem that identifying and addressing risks to the MPR schedule is a major area of deficiency at this stage. We want some assurance that risks are identified and shown, and that is in terms of potential cost risks as well. That is missing information. I may be wrong; that may be my reading of it.

Mr McPhee—No. DMO certainly include the risk. I am saying that from our point of view, with the work we are doing, we have scoped it out because we cannot be confident that the complete list of risks is there at this stage. My people are working with DMO to see if we can get more comfortable with that over time.

CHAIR—What would need to happen for you to get to the stage where there is a match?

Mr McPhee—It is often a function of resources, I guess. I am very conscious that when we do performance audits, being the more in-depth audits that we do, we get to understand more about the risks. In fact, we are doing a couple of audits at the moment and you need quite a detailed understanding to get comfort around the risks to the delivery on projects. At this stage, I have not been comfortable to tell the committee that these risks are the ones that have been fully identified for all of these DMO projects reported. That is not to say that DMO is not highlighting risks and reporting them to the best of their ability; I am just saying that it would take a lot more time for us to get into the project detail to be able to say to you, ‘Yes, this is the complete list of risks.’ It is a function of resources, but a function also of how DMO compile their risks.

CHAIR—Dr Gumley, do you have sufficient systems to make sure that is available.

Dr Gumley—We do not have systems consistently right through the DMO. It is much more on a project-by-project basis. I recall our conversations of a couple of years ago when we discussed whether this would eventually turn into 30 performance audits every year and we concluded that was beyond the resources of either organisations to be able to handle it. Somewhere in all this we are trying to set the balance between giving the public the best information we can and not killing the organisation with audit activity. I am quite comfortable that where we have ended up is a good middle ground between those two. At any one time parliament can be assured that if there is a particular project that looks like it is not reporting the way it should be, then there is always the option for the Auditor General to have a performance audit into that particular project.

CHAIR—Senator Georgiou.

Mr GEORGIU—I am new to this particular process and I come with an empty mind. How much did this exercise cost the audit office?

Mr P White—Just over \$1 million.

Mr GEORGIU—Is that contained in the report?

Mr P White—Yes, it is.

Mr GEORGIU—I can find it.

Mr P White—It is \$1,030,000, from memory.

Mr GEORGIU—Having come from a background of substantive short performance audits—and we can take an old one being the Collins class submarine—I thought that was a superb report by the Auditor General. I am concerned that lacking that level of penetration into the Defence systems will result in us losing an awful lot that is not picked up in this sort of audit, which is expensive. It may be very useful for Defence, but I am thinking back to some of the things that we found with the Collins class. It was like drawing teeth for both the Auditor General and the committee. The committee was systematically taken down a very odd path, and it took us an extended period to be wise that we were totally lacking in any submarine capacity at all. How does this address that sort of issue in terms of the opportunity costs of this exercise? If that question does not make sense, then I will try again.

Mr P White—That is fine. There are a number of issues in there. First of all, we are not moving away from doing performance audits. We will still be doing performance audits of some Defence major projects. That is still going to occur.

Mr GEORGIU—As a consequence of this, will you go on your number of performance audits across the board?

Mr P White—At a more strategic level, over the last three or four years, when we have been doing around six performance audits in the Department of Defence, about four or five of them have been on the DMO side of things. Subject to the views of the Auditor General and JCPAA, we would always do probably one or two audits of major projects, but we are hoping to spread our resources a little bit wider and get into other areas of Defence.

We have a different mechanism here in terms of reporting to parliament. This eventually will enable us to report on up to 30 projects. It will cost about \$1.5 million a year to do that, but we will be able to cover 30 projects. Right at the moment we would be the first to acknowledge the report is a bit light on in terms of some of the information that we are providing, but we will only get to that position in probably about three years time where you will be able to see the benefit of this. I think that the committee, in its review, was getting at being able to track some of these major projects over time, similar to the UK approach.

From our discussions with the UK—we have worked closely with the National Audit Office on this—they have been doing this since the mid-1980s. They did say that it would take us about three years to try to build up this sort of information. It is just getting the balance.

CHAIR—There is separate funding for the DMO major project report and that will not mean that you will reduce your performance reports in Defence.

Mr P White—That is right. We are not reducing our performance audits in Defence. We have funding for this financial year that we are in and the next two years. We have quarantined that funding. We have got a separate cost centre. We are monitoring that and not using those resources, so it is not interfering with our performance audit coverage. I am expecting to table six audits in Defence this year and six next year.

Just to follow up with Mr Georgiou, we are hoping to spread our coverage a little bit wider in the Department of Defence rather than, as I said, having three or four audits a year focusing on just the DMO side of Defence.

Mr GEORGIU—On page 7 of your submission you say the reasons for the shortfall are essentially the redirection of resources and the high priority activities, such as the review of major Defence coverage.

Mr P White—That is right.

Mr GEORGIU—I wanted to make a point about quarantining.

Mr P White—The Auditor General felt that we had bipartisan support. This is before the government made the decision to fund us. We used around \$500,000 of our money to get this up and running.

CHAIR—It is a great investment.

Mr GEORGIU—Are we addressing whether quarantine is part of the reason for your shortfall in performance audits?

Mr McPhee—In going forward, I made an investment decision where I thought we had support.

Mr GEORGIU—I am not arguing that. When you say, ‘It has not impacted on our audits’, with one voice and in writing you say, ‘It has impacted on our delivery of performance audits’, I think that needs to be addressed.

CHAIR—That is the budget submission that you are looking at there.

Mr GEORGIU—Yes. They know what I am talking about.

Mr McPhee—I am happy to speak separately to Mr Georgiou. We self-funded the initial start-up of the DMO audit work. We thought we were getting budget funding but we did not, but going forward we have got it so things are more settled.

I would like to say two things. Firstly, on the performance audit side, I am sure Dr Gumley will not mind my saying this, but occasionally he has mentioned to me that sometimes the audit office’s performance audits do not convey a universal perspective of the DMO’s operation and

tend to pick on projects that might have an issue. He has made the point that when you are looking at DMO performance overall it is important to take a broader portfolio perspective. I accept the point he was making and, importantly, this report is now starting to provide a broader DMO portfolio perspective that individual performance audits of individual projects cannot provide. That is the first point.

The second point is, nevertheless if the committee thought it was important and that it was a priority for us to continue to do individual performance audits—to pick up on Mr Georgiou's points—and were to mention that to me, I would obviously take that into account in our forward programming as well.

CHAIR—Thank you. Dr Gumley.

Dr Gumley—I would hope the committee would see this as a very useful screening device. By reporting 30 projects at the certain level it should become clear, particularly with the historical background, which projects deserve a full performance audit.

I have noticed during the five years of doing this job that projects do not go bad overnight. It is very rare that some major risk eventuates just out of the blue and your project goes bad. Projects tend to get a series of characteristics about them; they deteriorate over a number of years. One would hope that this is going to provide that historical context year-on-year such that the committee and others who are interested can get a feel for what is changing.

CHAIR—Mr Bevis.

Mr BEVIS—I think it is a very valuable process and a very useful tool so I congratulate all involved. Just so that I am clear, you mentioned that in doing this you drew on the experience of the UK and the US. You mentioned the UK audit office. I assume the US is the GAO?

Mr McPhee—Yes, that is correct.

Mr BEVIS—In the report on page 16, paragraph 12, you refer to the fact that this review is not as extensive as individual performance audits. I understand there is a difference, but can you elucidate the nature of the difference?

Mr McPhee—Essentially, it is the amount of work involved on the part of the audit team. We put significantly less resources into the review of each project in this work than we would in a performance audit.

Mr BEVIS—Perhaps I can phrase it differently. As a lay-person end-user of the report what might I notice that is different in this, in terms of qualitative analysis, compared to an audit report?

Mr GEORGIU—The performance review.

Mr BEVIS—Yes, a performance audit.

Mr McPhee—We would not go back in as much detail into contractual arrangements, into the reasons for contract variations and into a whole range of issues. We are basically at the higher level trying to get comfort that the information being reported by DMO in this report is sound.

Mr P White—I can add to that. The technique that we are using in this is a data collection technique. We have our forms which have drawn from UK experience and we are using that to gather the information. Whereas on a performance audit you would have your individual objective and very deep criteria that would allow you to drill down a lot further.

As the Auditor General said, in a way this is using our resources more widely, rather than looking at one performance audit in Defence, which costs us around \$400,000 to do. This will eventually allow us to do up to 30 projects. As I said, the benefit will be that across time and over the years you will be able to see how projects are tracking, whereas with an individual performance audit what you are getting is an in-depth review, but you are getting a snapshot at a point in time.

Mr BEVIS—In paragraph 16 you note that the ANAO was unable to rely on Defence's corporate financial management information system to provide the prime contract expenditure amounts. You go on and say, 'The accuracy of the spreadsheet information was not able to be substantiated during the review.' Can you tell me more about that?

Mr M White—I can explain. We put in there information that we thought was useful for the report, in terms of base-state dollars. As you would probably understand, we are looking at systems developed across the Commonwealth at the moment that record information on an accrual basis. The systems really should not be expected to maintain the data in the manner we were looking for it, but we were looking for a way of casting back that information and, because of the limitations in terms of time, we were not able to conclude by the end of the year.

Mr BEVIS—If I heard you correctly, you said that the DMO defence systems do not need to have that level of record for their purposes. I am paraphrasing, but I want to get it clear.

Mr M White—We record the information on an each year basis at that point in time and that covers us for fluctuations in foreign exchange as well as for inflation and all the rest of it. So those dollars in accrual financial statements are at that point in time, they have not been deflated and indexed back to a base-state point in time. The accrual system that the information was coming from and that we were looking for was not there in that format.

CHAIR—Dr Gumley, would you like to comment on that?

Mr Gillis—We were looking at some of the projects that were going back over 13 years. Some of the data that was originally collected was collected under an old defence system called DEFMIS and when it transitioned from DEFMIS into the current system of ROMAN we did not transfer all the granularity of that. They were decisions that were made some six or seven years ago. The other part of that is that, from our perspective and from our financial management perspective, to collect that data and have it historically accessible on the system so that every financial transaction is available in electronic form has never been required in the past. One of the things that we are trying to do is take a historical look back and then to validate our end-of-year annual assessments of where the foreign exchanges were. We do that, and we have that data

at the gross level, but to take that down into a subcontractor and invoice level to give the audit office that level of surety is a huge task. One of the things we are discussing at the moment is how material is that data and how much value it has, considering that at the high level we know it is accurate, but then there is the individual transactional level. The example I use of 13 years is HF Mod, a prime systems integrator. We are talking about anything up to 20 subcontractors and each and every one of those transactions would have to be validated. We are talking huge costs and huge numbers of man hours to do that sort of work.

CHAIR—Could you set limits on amounts or find parameters that would be acceptable to both of you?

Mr Gillis—They are the things that we are discussing at the moment. The nature of the first report was time constrained, because we had to produce it. This is an area that we have identified and an area where we are discussing the level of materiality that we need to have a look at.

CHAIR—The level of materiality will have to be very much agreed upon. I am sure there are parameters that you could set to make sure of the materiality, and also that you are not getting to a point which is laborious and impossible. I would like to know how those systems and processes will be standardised in the future. None of us want to see it qualified over and over because we cannot get to that agreed point; we want unqualified assurance. I think that would be something DMO and ANAO would both like to achieve. How can the systems and processes be standardised in the future and agreed upon to give that level of assurance that we all want to see? Would it require much change to the systems? Are you working on doing that?

Mr Gillis—It will require an update to our corporate financial systems. My own experience tells me that an upgrade to our corporate financial systems is not a quick thing. One of the things that we are talking about is not just updating the DMO system, because the ROMAN system is actually a Defence-wide system, and these things take time. For example, we have extremes. The current Wedgetail program does comply with this level of data and the project collects this level of data.

CHAIR—We will be carrying some for a while.

Mr Gillis—Yes. One of the problems that we have is that Wedgetail is probably one of our better resourced projects because of the nature and risks of the project. Whereas we are talking about some of the projects down here with eight or 10 people the financial management of those projects does not have the resources of the larger projects. What has happened is that Wedgetail has taken that on as an additional resource task that they have done over and above what our normal financial systems are doing. They are exceeding our expectations in the way they manage their financial systems.

For us to make a standardised approach we would have to talk to the audit office about what level they are going to require from us on an ongoing basis to ensure that is appropriate. We have to make a distinction between what is the future as opposed to what is the value in sorting out the past, because some of the past will be a very large effort.

CHAIR—The audit office is not able to distinguish. You give an assurance on the whole of the report; you cannot break it down by projects, can you? You cannot say, ‘This one is the benchmark and this one is not’?

Mr McPhee—We could have a look. We could break it down to particular projects if we were comfortable to say that seven of the 15 legacy projects have issues with systems and therefore we cannot provide assurance around the cost information in relation to those. We could, over time. I agree with what Mr Gillis is saying, we need to see how significant these matters are. We have a bit more time in this current year. We need to see how significant they are and, if we can, we will certainly narrow down any qualification that still exists to be more specific, and one would expect, on the basis of advice, that it would relate to the older projects.

Mr BEVIS—I appreciate the explanation. I particularly appreciate the fact that it is an ongoing area of discussion between Defence, DMO and the audit office. I have to say that it does put that paragraph into a much better context. When I read the paragraph I guess I was taking a dimmer view of what it was trying to tell me because there was no qualification on it. We would all appreciate advice of the outcome of your deliberations on that.

CHAIR—I was pleased to hear you say that you have time before the end of the year. How is the schedule travelling for this year’s MPR?

Mr Gillis—We did nine in the first year and we are assuming six this year. Of the six that we are doing some of those are very significant projects. We are balancing the workload. We have agreed to schedule. As I said, our processes that I have required by the end of March are to have all of the draft documentation and all the draft data accessible so it can be reviewed by my own staff. We can then be in a position, when the audit office starts its process, that we have got and collected all the data that they require and that we can provide to them with as fulsome information as possible. This year we are in a better position and obviously we are only going to get better at doing this each and every year.

CHAIR—It must be great comfort to DMO that some of these systems have been put in place and they will keep informing better and better practice all the time. I just want to go to the tabling of it this year. I have to say that last year it was tabled so late that it did not get the attention from stakeholders that it should have. It was quite a significant pilot report and the end of the year was the time when I thought it would get that scrutiny. There has been a lot of criticism and I thought this was an example of DMO and ANAO working together to respond to that in a very positive way. We really do not sit in December, except for a couple of days, so if it is tabled again in November you are going to have the same situation. It is not a report that should ever be hidden. Is it possible to reach an October tabling?

Mr Gillis—One of the realities here is that the data has to be up to the end of June.

CHAIR—Yes. We are talking about five months. When we had our original discussions we talked about five months from the end of the financial year.

Mr Gillis—That is November.

CHAIR—Is it going to take that much time?

Mr P White—Realistically it probably will. As I said, the National Audit Office has been doing this for around 25 years and they table theirs late November-December, but they do it on a financial year end at the end of March. I hear what you are saying, but if we can achieve late November then we have done quite well.

Dr Gumley—We could benchmark with the UK and give it to you in February.

CHAIR—Mr Georgiou.

Mr GEORGIU—Firstly, I think the point you made about having a broad perspective on Defence is very important, because we tend to focus on the stuff-ups. Secondly, from my perspective, the summary documentation of key events, financial variations and key problems, is fine. It is very accessible, whereas in the past getting stuff out of Defence has been a bit like drawing teeth. My difficulty is just the notion of ‘lessons learned’. I have just skipped over three or four of them and I could just about write a template for ‘lessons learned’ that would cover most of the lessons learned that are outline here. You must have real difficulty phrasing it in different ways so it looks a bit different, but lessons learned are longstanding lessons that should have been long learned. There is inadequate appreciation of technical complexity, difficulty with software specification and so on. That strikes me as being of limited use.

Mr Gillis—One of the things that I have found in observing Defence projects in the last five years that I have been involved with them is that lessons learned are fairly common. In the nature of the types of projects that we are talking about, these large complex systems integrations, which is where we are with these major projects, they all have the same issues. I can compare that to my peers in the UK and in the US. They are the same international lessons that we are all learning.

Not a lot of these are overly unique. They are very complex. They are systems integration and they are the lessons that we all have to learn. The issue is how we are learning the lessons. In the longer term, that is the reflection of our success or failure: how have we adapted and changed. But you are looking at an historical context here where we are going backwards and for most of these we have to look at what we are changing. I would hope that over the next five or 10 years of this report you see a transition where things do not happen anymore, or where we mitigate some of those risks.

CHAIR—For that to happen then lessons learned would have to be absolutely incorporated into your project management systems and your policy and practice, basically. Is that happening? We are really pleased to see that they have become part of that language now and we would really like to know whether it will be part of the systems that will always inform these reports.

Dr Gumley—I can offer an example. Systems integration is a lessons learned in many of these projects. We have set up a systems integration cell specifically to chase best practice. It is headed by a band 2 DMO officer, who has been set up in Adelaide. It has a team growing to six or seven people just to be experts for the Commonwealth in systems integration. I do not think the systems integration issue in projects is going to be fixed in six months or 12 months. It is a three- to five-year task. But the resourcing and the people were put in place a few months ago.

CHAIR—They are not going to work apart, are they? They are no use being a unit apart; they have got to be woven in. Is that going to happen?

Dr Gumley—I had a report yesterday—I am looking at it right here—on a very complicated issue with the new big amphibious ships that we are buying. The fact is that project touches 41 other projects, and we are still finding that there might be a few more than that, how do you integrate that with air, land and sea environment? That is going to be a very tricky and complex piece of engineering to do. We are aware of the challenges out there and we are doing something about it.

CHAIR—Would it be possible to include in section 5 of the PDSS a table with that sort of information? I will give it to you very specifically because we are looking for an answer on these matters. Are they an issue identified that is the lesson description? When you identified it, a description of the lesson, project management aspects relevant to the lesson and a statement on how the lessons learned will be incorporated into policy and practice in the future. Is it something that we can start to document a bit better in this report?

Dr Gumley—As you identified, a lot of these are systemic issues. You will find that it would probably be more appropriate to look at those at the introduction and to have a section relative to lessons learned that we have taken out. What we are doing, as opposed to trying to add it into each and every data sheet—

CHAIR—How will we know? How will the public know?

Mr GEORGIU—Can we go back to your example?

CHAIR—No. I want an answer to that. How will the public know that lessons have been identified, responded to and built into a system?

Mr Gillis—We can address that.

CHAIR—How?

Mr Gillis—One of the issues that I have in respect of the document is that by the time we get to 30, if we repeat the same lessons learned, the same data and the same response 30 times then we will just confuse the document. I think it is something where we should probably be looking at a specific section at the front which is, 'Here are the lessons learned.' Anything that is specific to a project needs to be put into the project data sheet. Anything which is a systematic lesson learned and our response to it should be put in a summary sheet at the front, which is still available to the public.

CHAIR—I can understand that. Will the new unit that is doing that systems integration be able to report on it in a more generic way?

Dr Gumley—It is not their tasking at the moment. At the moment I am getting them to study it.

CHAIR—Can they report to you?

Dr Gumley—Yes. They can report to me. What I am giving them is a couple of specific examples for them to develop their practices on it. I am not interested in too much theory, I actually want them to be able to look at individual projects and what we can learn from them.

Mr Gillis—In addition to that, that is not the only response that we have got, that lessons learned on systems integration. We now have a series of gate reviews which we initiated about nine months ago.

CHAIR—Has that been built in?

Mr Gillis—All major projects are reviewed predominantly by the two general managers, the general manager programs and the general manager systems. The types of projects that are sitting in here are the things that we review. We will sit down with the project managers and the capability managers. Probably the most significant set of questions and analysis that we look at is in the area of systems integration, especially for large major projects. You have two very senior project managers and we also call in independent experts to come and have a look at that aspect of systems integration to make sure that we have that level of coverage. Again, this is how we have responded to lessons learned and we are putting these things into practice now.

Mr GEORGIU—I think what you are addressing is a systems problem and we have a team addressing that. That is what I would be looking to, because individual fixes are one thing but if you are talking about systemic issues then the fact that work is being put in hand, even if the work will take a number of years to bring to fruition, it would give us a degree of comfort that an issue has been identified, the solution is a little bit unclear, but we are working on what is best practice. That would be really useful.

Dr Gumley—I completely agree. There is no point in having this if what we are doing is minor problems. We have got to come up with solutions.

Mr Gillis—In respect to the systems integration issue, we are sometimes the prime systems integrator, for example on HF Modern and some of the more technical ones. The vast majority of the time the prime contractor, the BAE's or Boeings or whatever, are the systems integrators. One of the things that I do very regularly is work with the CEOs at those major prime companies to look at and assess how they are improving their own internal practice of systems integration. Again, we can observe those things, but the reality is that they are the systems integrator and we need to get them to improve their performance. This is one where we are the contract manager or the project manager from our perspective, but most of the systems integration is actually occurring at the prime level, so we need to look at how they do it and then to give ourselves some assurance that they are improving their performance.

With some of the larger primes we have very lengthy and vigorous discussions with them about the quality of some of their systems integration and some of their performance. We have to look at the way they integrate their change management processes to improve their own performance. We can do it in some of the areas, but the reality is that we are talking about how we are actively working with industry to change their processes.

CHAIR—Mr Bevis.

Mr BEVIS—I would like to get it clear that I am interpreting your process and maturity scores that were applied to different projects correctly. As I understand it, you have a maximum on a maturity score of 70 points?

Mr Gillis—That is effectively a delivered product meeting all of its requirements.

Mr BEVIS—I just want to calibrate that for my purposes in interpreting this. Take the C17, which is basically military off-the-shelf, largely on budget, largely on time. They get a score of 65, so what did they do wrong? How did they lose five points on military off-the-shelf?

Dr Gumley—The sustainment system is not properly in place and there are some problems with them. It takes a couple of years to develop up the sustainment. One of the measures in getting the equipment ready for operations is sustainment.

Mr BEVIS—So the score is not against projected stages of acquisition, it is against final acquisition, is it? As I understand what you just described it is not intended to be in place now anyway. I am just trying to figure out how they lost five points.

Dr Gumley—One of the things we do is mark ourselves in these maturity scores very hard. I know that when my own staff look at maturity scores I am predominantly marking projects down, rather than letting them stay there. We are very critical.

Mr BEVIS—I want to be clear on what you are marking them against.

Mr Gillis—In respect to the C17, it is one of the projects where the DMO was taking a more significant role in making sure that the full operational capability, including the logistic systems, was in place. If I look at the project staff, about two-thirds of the project staff working on the C17 project were operating on putting the logistics system in place. Because it was an off-the-shelf product, it was an acquisition process where the acquisition side of it was relatively low risk. The high risk was getting the logistic systems in place. Because we do not have that full logistics systems in place, and it was something that I would consider that the project was responsible for delivering, I have marked them down.

Mr BEVIS—Just so I am clear, that full logistics was scheduled to be in place at the time that you made that decision, or was it on track to be delivered in accordance with original specifications?

Mr Gillis—The full delivery of a complete logistics system did not meet the scheduled plan time for the project.

Mr BEVIS—That aspect was behind schedule.

Mr Gillis—Yes.

Mr BEVIS—Not only was it not there, but it was behind schedule.

Mr Gillis—It did not meet the full capability. We have C17s and they do have logistic support, but it did not meet all of the criteria that we set for it.

Mr BEVIS—I am still not clear what it failed to meet.

CHAIR—While you are looking for that I would like you to consider when we looked at the draft template that you were considering using on project maturity scores and benchmarks there was going to be a breakdown which would have answered Mr Bevis's question. Our first template that we looked at would have had schedule cost, requirement, technical understanding, technical difficulty, commercial operations and support, but in the final report we saw it came back to just current benchmark explanation.

Dr Gumley—It would be quite easy for us to give you the seven individual scores out of 10, if that is what you require.

Mr BEVIS—The reason I want to know is not so much to do with the detailed navigating exercise about the C17; I just want to be clear that in reading this report and subsequent reports that I am interpreting what I am reading accurately. So I would appreciate detail of how that was put together.

CHAIR—Why were the seven criteria attributes not included in the section as we first intended? Is it an intention to try to do that breakdown in the future?

Mr Gillis—If that is what the committee requires, then we can.

CHAIR—You will not have people asking the question because there will be an answer there.

Mr BEVIS—I suspect there are a few other people in the community that would be interested in that information as well.

Mr Gillis—One of the things with the benchmark scores is that they are a tool that predominantly Dr Gumley, I and other senior executives use within the DMO so that we can get a visual and quick look to see where they are relative to the benchmark score. If you look at the history of the C17, the C17 would have started at first and second pass and the benchmark would have been in the low 10s or 20s and it would have achieved much higher, because it was a fully developed off-the-shelf capability low risk. You would have seen its score actually developed across and the only time that it would probably have ever dropped below the benchmark has been at this last absolute scale where we are reporting on the logistics.

It is a fair reflection that even though we have what I consider to be a fantastically successful program, and probably one of the best programs that we have delivered in recent times, we are still reporting that we have not got everything perfectly right so therefore we are marking ourselves down by two points.

Mr BEVIS—Being military off-the-shelf I would like to think it is pretty close to good too.

Mr Gillis—The benchmark is 67 and we are achieving 65 at this stage.

CHAIR—You are saying that you are hard on yourselves. That is a subjective measure. We really want those objective measures and having those seven criteria there is good.

Mr BEVIS—In that process can you also identify how you determine the benchmark, as opposed to the maximum?

Mr Gillis—That probably needs a more fulsome explanation in the process.

Mr BEVIS—Without it, frankly, having a score is pointless to the reader. I would like to turn from the good to perhaps the bad and the ugly, from the C17 to Wedgetail. I notice on page 85 in the project schedule it shows a comparison of the initial and final operational capabilities and AWACS, the Wedgetail, is not very different on that graph, yet it is about three years behind schedule. How is it that it can be three years behind schedule but, when you compare the initial to the final operational capability, there is very little difference in the graph?

Mr Gillis—I will need to get some advice on the specifics of that particular data sheet. The advice I am receiving is that the percentage might look relatively small, but it is a three-year delay of a project over an eight or 10-year period of time. The longer the project, the percentage will actually look smaller.

Mr BEVIS—I would have thought a three-year delay over a 10-year program was a reasonably significant delay.

Mr Gillis—The other part in looking at IOC and FOC is that, although the first aircraft is significantly late, there is the full operational capability. For the other aircraft that they are looking at being available, they have actually compressed their time frame. The last aircraft due has not moved anywhere near as far as the initial aircraft, but it has actually compressed the process.

Mr BEVIS—But the key risk factors have not been addressed, either. Do you take account of the key risk factors?

Mr Gillis—The key risk factors are predominantly on the first air frame.

Mr BEVIS—That is not my understanding, but if your investigation is willing to testify to that then I would be interested to see it in black and white.

Mr Gillis—Obviously the key risk factors were going to be on the first two aircraft at the moment, which are going through the test and evaluation phase.

Mr BEVIS—That is like saying the key risk factors for the Collins class submarines were in the first sub and not in any of the others. It is not the case. If you have information to the contrary, I would be interested to receive it or hear it in the other committee which I chair. I read the report and I generally do think the report is very valuable. I appreciate it is the first of its type, but when I looked at that graph and I saw the variation on the AWACS to me being not very substantial at all, I wondered how that could be. I went to the detail on the project and it correctly points out the three-year delay and some of the other risks, but when it says ‘the initial operational capability’, I wonder is it indeed the initial operational capability or a revised capability? A number of these projects had initial schedules and indeed in the case of this project I do not think Boeing provided a schedule.

Mr Gillis—One of the things that you would also look at is the schedule for FOC for this capability. This is one of the purposes of this report, it is to do the analysis to show that. Initially when we signed the contract with Boeing it was for four aircraft and subsequently the government made a decision to add in an additional two aircraft, so that changed the basis of when we were expecting the FOC. It did not change the IOC, it changed when we were expecting to get the full operating capability of six aircrafts. There is a delta there and that is why we go through this reasonably forensic analysis that says: when was the first aircraft due, what was the actual base date, what did government give us guidance to do and, if there is any variation, it has to come back to a government change of decision or some guidance that identifies that base date change. The data here shows that we are talking about a 50 and 57 per cent delay on a capability, and that is a significant change.

Mr BEVIS—Is that reflected in the graph on page 85?

Mr Gillis—Yes. That is the way that I read it. You can compare C17. C17 says that its IOC variation was only down to five per cent and that its FOC was actually achieved ahead of schedule by a process. HF Mod, however, is a process with a significantly late program. That is where I see the reflection.

Dr Gumley—I think the data is consistent. Fifty-seven per cent over three years with a roughly six-year program; you have got a six-year program that is going to take you nine, so it is 50 per cent over.

Mr Gillis—HF Mod was originally about a six- or seven-year program and it is probably going to end up taking 12 years.

Mr BEVIS—The graph shows the comparison of the initial operational capability against the final operational capability. Is that correct?

Mr Gillis—No. It is showing where we are expecting as a percentage of the base date as to how late we are going to be as a percentage of what we expected. It is saying that we are expecting to be 50 per cent late in IOC and about 45 per cent late in FOC.

Mr BEVIS—When were we expecting to be 50 per cent late?

Mr Gillis—I do not understand the question.

Mr BEVIS—I guess that indicates I did not understand the answer. Can you run it past me again?

Mr Gillis—As Dr Gumley was saying, if we were expecting to have a project last for three years and it takes 4½ years, then we are expecting it is going to be 50 per cent late. That is what this is referring to. If, in fact, the Wedgetail program is approximately three years delayed against a six-year initial expectation of the schedule, then that is a 50 per cent delay.

CHAIR—You did not expect that to happen but you are reporting on that now.

Mr Gillis—No. Part of this process is that we provide the data. It is validated by the audit office who then check that against the base data to see if that chart and that data is accurate. Obviously, if you have asked that question, we need to be clearer in the explanation of that graph so that it is very clear to everybody.

CHAIR—I would like to explore capability a little bit more.

Mr BEVIS—I must apologise because I have another meeting I have to go to. Thank you.

CHAIR—That is going to make it very difficult.

Mr BEVIS—I have got to chair the committee.

CHAIR—I would like to ask this question, if you do not mind, Arch, and then we will have to put the other questions on notice. In terms of capability, is there some way that more information could be made available on those measures of effectiveness, as it has been done in the UK reporting, to facilitate perhaps that more accurate assessment of what percentage of capability is at risk and what can reasonably be assured as being achievable and what will not be achieved, for example, with regard to green traffic lights in the graph that you have got in the report on project capability.

Mr Gillis—In my opening statement we acknowledge that is an area that we have learned from the UK system. The UK MOD system does it much better than we do and it is an area that we are going to follow up so that we can provide better data.

CHAIR—So we can expect to see change. Have the five projects been selected at this stage?

Mr Gillis—There are six.

CHAIR—Yes, six. We had anticipated that we would be consulted on those in some way and we have not been. Has the ANAO been consulted on those?

Mr P White—We have been consulted. We have listed the projects in our submission. We are happy to have feedback from the committee on the projects. They do come from the top 30 area of DMO's program.

CHAIR—Will they give a spread of those projects with the size of expenditure, capability, risk and so on?

Mr P White—Yes.

CHAIR—Thank you very much for attending. I am sorry that it is the second last day of the session. We will have questions that we will put on notice and will require you to respond to those as soon as possible. I can only say, in conclusion, that it is a wonderful development. For this committee to see some accountability documented in a way that is for very general dissemination, even though we would like some more detail and I know we will get to that, it is very heartening for the work of members of parliament and we congratulate you on that. I just know that good things will come this year from all that work as well. Hansard may require some

clarification. On behalf of the committee, I would like to thank everyone for the evidence provided today. We wish you well for the end of the year.

Resolved (on motion by **Mr Bevis**):

That this committee authorises publication, including publication on the parliamentary database, of the transcript of the evidence given before it at public hearing this day.

Committee adjourned at 10.54 am