Inquiry into ANAO Report 9 & 52 – 3 March 2016

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: LAND 121 Phase 3B

Question reference number: 1

Member: Brodtmann **Type of question:** provided in writing **Date set by the committee for the return of answer:** 1 April 2016

Question:

The ANAO report notes:

"The delays in the medium and heavy fleet acquisition have placed considerable pressure on the existing Unimog and Mack vehicle fleet, which has now well exceeded its life-of-type and is increasingly difficult and costly to maintain. Defence has reduced the overall size of the in-service fleet since 2010, by disposing of vehicles which were uneconomical to maintain; a process with attributed savings of \$9.837 million since 2011–12. Despite removing uneconomical vehicles, the average sustainment cost per vehicle for the Mack fleet has increased by some 80 per cent between 2009–10 and 2013–14, reflecting the advanced age of the fleet and difficulty in acquiring spare parts. In 2013–14, the average cost of sustaining Unimog vehicles was \$10 652; and \$27 899 for Mack vehicles. Defence informed Ministers in July 2013 that the Mack fleet will have difficulty supporting some of Defence's operational requirements from 2016, underlining the importance of delivering the new fleet as scheduled."

(a) Could Defence please provide the Committee with the total estimated cost of the result of the LAND 121 Phase 3B acquisition delay? This figure should be broader than just the sustainment costs of the individual vehicles.

Answer:

(a) The cost of the LAND 121 Phase 3B acquisition delay is approximately \$25 million (excluding GST).

While there has been a cost associated with retaining the legacy vehicle and trailer fleets in service longer than originally planned, this has been balanced against the estimated cost of operating the new vehicles and trailers.

Inquiry into the ANAO Report 9&52 – 3 March 2016

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Test and Evaluation

Question reference number: 2

Member: Brodtmann **Type of question:** Written **Date set by the committee for the return of answer:** 1 April 2016

Question:

Referring to the ASPI article by Dr Keith Joiner, 'The ANAO's grim picture of Defence testing & evaluation' 25 Nov 2015, http://www.aspistrategist.org.au/the-anaos-grim-picture-of-testing-and-evaluation/

Dr Joiner observed that the United States had a much more robust legal framework for ensuring T&E. He wrote:

"ANAO last audited Defence's T&E in 2001–2002. In the 13 years since, they've unfortunately found that there has been little or only late progress on most of their areas of concern. That's despite the concerns being reiterated in a Defence T&E Roadmap in 2008 and in the Senate Inquiry into Defence Procurement (especially Chapters 2 and 12) in 2012. In this same period US Defense has entrenched independent T&E into Congressional laws (Title 10) that provide mandatory independent annual reporting of all T&E measures to Congress on all major Defense acquisitions. Title 10 law also requires T&E competency in all US acquisition projects and T&E agencies overseen by the autonomous Defense Acquisition University. The book and movie The Pentagon Wars has clearly raised awareness in the US for the value of independent T&E for Defense acquisitions much more than in Australia. There's a clear option for the Australian government to follow America's lead with Defence Regulations if Defence doesn't institute strong, independent, early and adequate T&E for its critical capability decisions."

(a) Could Defence please comment on Dr Joiner's observations? Specifically:
(i) Has the US approach significantly improved their T&E performance?
(ii) If so, what can be learned from their experience and applied here in Australia?
(iii) Would such a formal legislative framework be advantageous here?

Answer:

(a) Dr Joiner's observations represent that of an ideal world where Test and Evaluation (T&E) budgets are much higher and are tailored for a different acquisitions approach compared to Australia. In general, Australia does not develop as much defence equipment as the United States (US) military and buys 'off the shelf' where possible. Australia is a beneficiary of the US T&E system, given our use of US off the shelf equipment purchases. If Australia were to develop its military equipment to the extent of the US, then T&E would need a greater focus and resourcing to the point where legislative bounds may be considered. However in the past, when Defence has been the backer of industry development, such as Bushmaster and the CEA radar, the results to date have proven that extra legal authority was not required.

- (i) It is unknown if the US T&E approach has improved their performance as there is no 'base' to measure from.
- In regards to relative performance of T&E, there appears to be no (ii) qualitative gap in how our T&E activities measure up against US T&E activities. This is evident in the enthusiasm with which the US wishes to explore Joint T&E ventures with Australia. The Department of Defence, through the Australia Defence Test & Evaluation Office (ADTEO), has a very effective working relationship with the US through the office of the Director of Operational T&E (DOT&E). This is a formal arrangement through two Defence Memorandums of Understating (MoU) with the US. One of the MoUs is a bi-lateral with the Director of Operational Test and Evaluation office for collaborative T&E and the other is a new multinational MoU (Australia, Canada, New Zealand, United Kingdom and US), our traditional international partners, coordinated by the Director of Operational Test and Evaluation office. Both are designed to open up each country's expertise, experience, ranges and capabilities for collaborative T&E of many different capabilities.
- (iii) The current policy for Defence T&E is described in the Defence Capability Development Manual and mandates robust T&E throughout the capability life cycle. This includes early T&E to identify risks and operational T&E to ensure the capability meets requirements. This policy, together with implementation of recommendations contained in the recent First Principles Review and the Australian National Audit Office report 'T&E of Major Defence Equipment Acquisitions', will ensure the consistent application of T&E principles that will continue to strengthen our defence acquisition programs. Based on these points, it is not considered that a formal legislative framework is required.

Inquiry into the ANAO Report 9&52–3 March 2016

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Corporate Knowledge in Test and Evaluation

Question reference number: 3

Member: Brodtmann **Type of question:** provided in writing **Date set by the committee for the return of answer:** 1 April 2016

Question:

Regarding training and competency levels of staff who are engaged with T&E: (a) Can you outline what mechanisms are being used to maintain corporate knowledge when staff leave their positions in Defence's T&E areas?

(i) How are these mechanisms being put into practice. For example does it include comprehensive handover briefs and/or other documents?

Answer:

(a)(i) Corporate knowledge is maintained through the standardisation of Test and Evaluation (T&E) documents such as the Test Concept Document (TCD) at First Pass, the Early Test Plan at Second Pass and the Test & Evaluation Master Plan (TEMP) post Second Pass. These documents are endorsed and approved by senior stakeholders at a One Star/SES Band 1 level and ensure continuity of the test planning phase. Trial Reports are also approved by the senior T&E manager in an agreed policy and quality accredited format, which are formal Defence records.

Knowledge transfer can be a challenge particularly relating to staff turn over. Military posting cycles allow for a three year period and, in the main, members are able to conduct a handover to ensure corporate knowledge is maintained, with postings promulgated 3-6 months in advance. Australian Public Service employees tend to stay longer and provide consistency in regard to corporate knowledge.

Knowledge transfer in Defence is encouraged through a number of initiatives such as mentoring, networking, and transition to retirement programs. In addition, some areas of Defence plan a staggered rotation of staff, and some flexibility exists to extend military staff for an additional year to assist with this planning.

The individual T&E competencies for Defence are now being reviewed through a formal Skills Census that commenced 7 March 2016 and is due to be completed by

27 May 2016. The results will be used to improve T&E training and management, as recommended by the ANAO audit Test and Evaluation of Major Defence Equipment Acquisitions, Report No 9, 2015-16, and to update the current policy in the Defence Capability Development Manual.

Inquiry into ANAO Reports Nos. 9 and 52 – 3 March 2016

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Capability and Technical Risks

Question reference number: 4

Member: Brodtmann **Type of question:** asked on 3 March 2016, Hansard page 2 **Date set by the committee for the return of answer:** 1 April 2016

Ms BRODTMANN: We will go to paragraph 10, page 15, following on from the previous paragraph: Further, Defence did not advise Ministers of the significant capability and technical risks it had identified, before recommending a single supplier. Again, my question is why?

Air Vice-Marshal Hupfeld: I will have to take that question on notice in detail. My initial understanding was that we had not fully assessed those and that is where the concepts for a preview test and evaluation allow as to have a better look at the capabilities. Indeed, when we did conduct that in subsequent elements we did better understand the risks and therefore were better able to explain those to government when we took the subsequent process through for approval. The actual mechanics of gathering the information and the submissions that we provided to government at the point of the first evolution of this project, I would have to take on notice; I do not have the details at hand on that issue.

(.....)

ACTING CHAIR: I have two final questions and then I will throw to other members. Again, the ANAO did not advise ministers of the significant capability and technical risks it identified before recommending a single supplier. Again, can someone from Defence tell me why they did not advise the minister of the day of the risks?

Air Vice-Marshal Hupfeld: I will have a go at answering that. The specific details of why, as I have said previously, I will take on notice. But based on what we knew at the time, how we were conducting our acquisition process certainly linked to test and evaluation. The level of information and the understanding of the risk I think was what the problem was, and therefore that may not have been provided as advice to the minister of the day. But the actual process we went through and the elements of risk that were assessed I would have to take on notice to provide a more full answer.

Response:

The preferred tenderer was advised to Government in August 2007 as part of Second Pass approval where the technical risk was assessed as medium. This did not involve the selection of a particular vehicle. The preferred approach was to proceed to an Offer Definition and Refinement Period (ODRP) with a single preferred tenderer. Government was advised that prior to contract signature Defence would define, refine and confirm the tendered offers based on the key issues, activities and deliverables identified during evaluation.

A comparative ODRP to mitigate risk leading to final source selection occurred in the second quarter of 2008.

Introductory negotiations during the ODRP, along with a vehicle demonstration and compliance test, identified an increased level of technical risk and gave rise to significant concerns with the preferred tenderer's capacity to deliver against its tendered offer.

Due to increased levels of technical, cost and schedule risk identified, Government was advised in June 2008 that Defence could exercise its discretion under the conditions of tender and invite all initial tenderers back into the evaluation process, and initiate a tender resubmission process.

Inquiry into ANAO Reports 9 & 52 – 3 March 2016

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Report 52 Figures

Question reference number: 6

Senator: Conroy

Type of question: asked on Thursday, 3 March 2016, Hansard page 6 **Date set by the committee for the return of answer:** 1 April 2016

Question:

ACTING CHAIR: That was 2013. So phase 3 was \$3.5 billion in 2007; it then got split and got second-pass approval for phase 3B in 2013, and that was for \$3.382 billion. Can someone from Defence or perhaps ANAO provide me with numbers for how many protected and unprotected vehicles we were scheduled to receive at second-pass approval? There is a graph on page 52, but I would be more interested in exact figures than columns.

Mr Clarke: Page 67, table 3.4 indicates 1357 protected MOTS vehicles, 958 unprotected MOTS vehicles—

ACTING CHAIR: Was that at 2007 second-pass approval?

Mr Clarke: That is correct.

ACTING CHAIR: Do we know how many we got when we had the revised second pass in 2013?

Mr Wilkinson: Table 2.2 on page 47 goes through the different variants. That was for the current status at the time that the audit was tabled.

ACTING CHAIR: Can someone add that up for me? Is that less than the 2007 figure? Did you reconcile them anywhere?

Mr Wilkinson: We did not reconcile the figures. We gave a detailed table of each variant.

ACTING CHAIR: I will come back to that because I would be keen to compare the numbers. We are in a situation, where six years after the initial second pass, the cost for phase 3B is slightly less than the cost for the entire phase 3 as originally envisaged in 2007. Can anyone in Defence enlighten me as to why there was the cost blow-out? Was it because we underestimated the cost of these vehicles in the first or second pass approval?

Mr Gillis: We are just reconciling the numbers.

Maj Gen. Coghlan: At page 67 of the report the table there gives the numbers of 1,357 and 958. Our current purchase is 1,172 protected.

ACTING CHAIR: How many for unprotected?

Mr Gillis: We are just doing the maths. We are just adding up.

ACTING CHAIR: Sorry to ask these things.

Air Vice Marshal Hupfeld: Would you like us to take that on notice to get the actual figures for you?

ACTING CHAIR: I would like the rough order of magnitude now. I am not going to hold you to every single truck.

Air Vice Marshal Hupfeld: That would be the concern if we add them up wrong now—

ACTING CHAIR: If you could confirm the figures—

Unidentified speaker: 1,364 is our initial—

ACTING CHAIR: 1,364, and I acknowledge that it may change. So we are looking at probably about 2,400 or 2,500 vehicles with a bit less protected and a bit more unprotected. Unprotected will be cheaper than protected, by definition. Presumably, the second pass approval in those seven [2007?] for the \$3½ billion also had light vehicles in it—3 alpha, presumably?

Unidentified speaker: Yes, it did.

ACTING CHAIR: Can anyone tell me roughly how much that was of that original second pass?

Mr Gillis: We would have to take that on notice.

Dr Ioannou: The report has the details in it on that.

ACTING CHAIR: Take it on notice, but I suspect it will be many hundreds of millions if not a billion of it. But take it on notice. I am just trying to get in my mind—we are in a situation where we are spending probably around \$1 billion more in the 2013 second pass approval than in the 2007 approval, when you have removed phase 3 alpha and we are getting fewer protected vehicles and more unprotected vehicles. What is the reason for the significant increase in cost?

Mr Gillis: I think it is best that I take that on notice and I give you a complete breakdown of those.

ACTING CHAIR: If you would not mind.

Mr Gillis: We have a 10-year time frame and a number of different changes in vehicle mixes.

ACTING CHAIR: Absolutely.

Mr Gillis: So to do it just off-the-cuff would not be appropriate.

ACTING CHAIR: I understand. Could Defence come back and maybe replicate table 2.2, which is on page 47, with the 2013 second pass numbers against the 2007 second pass. Could you remove the phase 3 alpha costs, turn the two dollar amounts into constant dollars and then provide an explanation of what you attribute that cost increase to. It might be inflation or it could be just the cost of the vehicle.

Mr Gillis: There are going to be a number of different rationales, so we need to provide you with the details.

ACTING CHAIR: I appreciate that that is better taken on notice. On the basis of provisioning, there was a significant criticism. As Senator McAllister talked about, the only recommendation in the audit report was that Army and Defence as whole were changing the basis of provisioning to reflect what they could afford rather than what they needed to fulfil a capability. Is that an accurate description, in layman's terms, of the ANAO's finding?

Answer:

The following tables summarise the mix of protected and unprotected vehicles for LAND 121 Phase 3 Medium Heavy Capability (MHC) in 2007 and LAND 121 Phase 3B in 2013.

Basis of Provisioning at 2007 2nd Pass¹

Vehicles	Total BOP	Protected	Unprotected
Truck Medium-weight Cab Chassis ²	385	317	68
Truck Medium-weight Tray	971	474	497
Truck Medium-weight Tray Crane	226	135	91
Truck Medium-weight Tipper	25	11	14
Truck Medium Integrated Load Handling ³	329	175	154
Truck Medium Recovery	28	15	13
Truck Heavy Integrated Load Handling	356	227	129
Truck Heavy Recovery	46	25	21
Truck Tractor Medium ⁴	32	18	14
Truck Tractor Heavy	73	36	37
Totals	2471	1433	1038

Basis of Provisioning at 2013 2nd Pass

Vehicles	Total BOP	Protected	Unprotected
Truck Medium-weight Tray	1382	616	766
Truck Medium-weight Tray with Crane	237	141	96
Truck Medium-weight Tipper	39	24	15
Truck Medium Recovery	29	15	14
Truck Heavy Integrated Load Handling	559	236	323
Truck Heavy Recovery	59	37	22
Truck Tractor Heavy Equipment Transporter	110	21	89
Truck Heavy Tipper	99	33	66
Truck Heavy Fuel	22	0	22
Truck Light Maintenance (Mercedes-Benz G-Wagon)	122	0	122
Retrofit Protected Mobility Vehicle Maintenance	49	49	0
Totals	2707	1172	1535

Notes:

- 1. Basis of Provisioning taken from Director General Land Development Minute (reference AB650978) dated 26 Nov 07.
- 2. Truck Medium-weight Cab Chassis capability met by Medium-weight Tray and Medium-weight Tray with Crane Vehicles.
- 3. Truck Medium Integrated Load Handling capability met by Truck Heavy Integrated Load Handling.
- 4. Truck Tractor Medium Equipment Transporter capability met by Truck Heavy Equipment Transporter.

The total cost of the Medium-Heavy Capability element of LAND 121 Phase 3 at the 2007 Second Pass approval was \$2,572.5 million (2012-13 Portfolio Budget Statement Outturned).

The total cost of LAND 121 Phase 3B (Medium-Heavy Capability) at the 2013 Second Pass approval was \$3,298.2 million (2013-14 Portfolio Budget Statement Outturned).

The difference between the 2007 and 2013 figures is \$725.7 million. This included \$712.2 million of LAND 121 supplementation approved by Government as part of the second pass approval to deliver the required capability. Key factors included an increase in vehicle numbers under a revised basis of provisioning; changes to operational requirements (including updated requirements for digitisation); and changes to legislative requirements (including environmental and work health and safety).

A further \$13.5 million was received to provide for exchange rate variation between June 2012 and Second Pass approval in 2013.

Inquiry into ANAO Report Nos. 9 & 52 – 3 March 2016

ANSWER TO QUESTION ON NOTICE

Department of Defence

Topic: Audit Report 9

Question reference number: 7

Senator: Conroy

Type of question: asked on Thursday, 3 March 2016, Hansard page 12 **Date set by the committee for the return of answer:** 1 April 2016

Question:

ACTING CHAIR: I have a couple more questions and then I will open it up to other members. Why put in place an acceptance testing and evaluation regime that conflicts with the contract? Why put in place a test for something that the contract would specify is not to be available until ship 2?

Mr Fitzpatrick: A number of the test and evaluation items were scheduled to be available or to be completed after both ships were available.

ACTING CHAIR: But Commodore Hughes, in his testimony just then, said, 'We'd approved these tests, but in the end we didn't do them, and we didn't worry about doing them at that stage because the contract says those things were supposed to be done only for the second ship.'

Cdre Hughes: No, no—if I could qualify that. The tests were done for ship 1. We took it to sea and we did everything, but the OQE, the objective quality evidence, in some cases was contracted to be delivered after the second test had achieved that event. What we were getting were interim reports, and the program manager in CASG sea-rode every trial and literally witnessed every trial himself. So we had a particular individual who was really on top of his brief and could give us that assurance. There were a number of documents that were interim type documents, not formal, signed-off, cleared OQE as per the contract. My comment is I do not think I would like to see that again, because one of the issues the ANAO rightly brought up was that it made us have to rely on our own professional judgement based on what evidence we had. It is not that there was not any evidence or the trial did not occur; it was that we did not necessarily have a formal peace of OQE that we could take forward with us.

ACTING CHAIR: But this testing regime, presumably, was developed in, what—it would have been finalised in 2013, 2014?

Cdre Hughes: The contract was signed in 2007.

Mr Fitzpatrick: 2007.

ACTING CHAIR: No, the internal decision about what tests you do for acceptance. When was that documentation developed?

Mr Fitzpatrick: In 2007.

Mr Gillis: In 2007. And, going back to one of your previous questions about accountability, I signed that contract on behalf of the Commonwealth, so I take the accountability and responsibility for that signature in 2007. I have read this audit report, and I take note that we should have done this in ship 1 and in ship 2. We looked at it. I think our intent was always that we do the interims and then we would do the final. Because we had two ships in a class, the final report was to be at the second ship, but we did undertake it at the first ship. So I take that accountability, and I have taken on that lesson.

ACTING CHAIR: Thank you, Mr Gillis. Turning to the testing regime, I can understand balancing these things out, getting the font ready, getting the format ready, but it is still the case that, as of the audit report, nearly 12 months after system acceptance the percentage of approved harbour and sea acceptance trial test reports had risen only to 38 per cent of 60 per cent. Thirty-eight per cent nearly a year after acceptance is pretty low, isn't it? It is a long time to correct fonts and typos.

Mr Fitzpatrick: Just to clarify that, that is 38 per cent, or 31 per cent, of the reports that were started. A number of those were not intended to be completed until after operational availability, because there are things like the steel plates where you need to bring in a landing craft to do that, and you have to train people to do that. You have to train people to work in proximity, to bring the landing craft in proximity to the helicopter dock, and that takes time.

ACTING CHAIR: You might have this with you—if not, please take it on notice: what percentage of trial test reports that it was intended would be complete for acceptance were outstanding as of August 2015, and how many are still outstanding now?

Mr Fitzpatrick: I will take that on notice.

Answer:

At August 2015 Harbour Acceptance Tests Reports had 61% of test reports still outstanding. At February 2016 there are currently 52% outstanding.

At August 2015 Sea Acceptance Tests had 39% of test reports still outstanding. At February 2016 there are currently 30% outstanding.