

# Performance Audit Report No.6 (2013-14)

# **Capability Development Reform**

## Audit objective and scope

- 4.1 The objective of the audit was to examine the effectiveness of Defence's implementation of reform to capability development since the introduction of the two-pass process for government approval of capability projects and government's acceptance of the reforms recommended by the Mortimer Review.<sup>1</sup>
- 4.2 The audit assessed Defence's progress in four critical areas that encompass recurring reform themes:
  - reforming capability development organisation and process;
  - improving advice to government when seeking approval;
  - improving accountability and advice during project implementation; and
  - reporting on progress with reform.<sup>2</sup>
- 4.3 This audit is primarily concerned with the pre-first pass approval process, referred to as the 'requirements phase', managed by Defence Capability Development Group (CDG), as opposed to the acquisition or sustainment phase.<sup>3</sup>

<sup>1</sup> ANAO Audit Report No. 6 2013-14, pp. 57-71.

<sup>2</sup> See, Table S.1 *Recurring themes in review of capability development in Defence*, ANAO Audit Report No. 6 2013-14, p. 19, and, Chapter 2, *Themes in Defence Reviews*, pp. 72-93, including Table 2.1 p. 86.

<sup>3</sup> See, *Summary*, ANAO Report 6 (2013-14), p. 23; The ANAO also conducts ongoing performance audit work with Defence Materiel Organisation (DMO) on the Major Projects Report, which focuses on projects that have received first and second pass approval. ANAO has also conducted a number of reviews into individual projects.

- 4.4 The 'requirements phase' is regarded as critical to the long term success of major projects, which are prone to complex risk, scheduling and cost issues. In particular, the focus of the audit was on the implementation of major reforms agreed to arising from previous inquiries and reviews, including the 2003 Kinnaird Review and the 2008 Mortimer Review.<sup>4</sup>
- 4.5 This type of ANAO performance audit is one of the new categories of 'follow up audits', which are aimed at assessing the degree to which agencies have implemented recommendations and embedded institutional change. In this case, the audit takes a wider and deeper view of the issue looking at reform of capability development through the prism of multiple external and internal reviews that have occurred over the past decade. The overall aim is to promote the sustained structural and cultural change needed to support improvements in the entire life cycle of capability development (requirement, acquisition and sustainment).
- 4.6 This chapter should be read together with ANAO Audit Report No. 6 2013-14.<sup>5</sup>

## Audit Conclusions

- In relation to organisation and process reforms, ANAO concluded that further organisation reform is required and there are further opportunities to improve the effectiveness of the capability development process. Progress toward strengthening the entry process for projects onto the Defence Capability Plan (DCP) had been slow.
- 4.8 Advice to Government had improved. A technical risk assessment approach had been implemented. However, further explanation of technical risk analysis would improve clarity of advice to government. Also, while Defence had decided not to implement full cost attribution of individual capabilities, this should not inhibit the pursuit of reasonable estimates of whole-of-life costs for individual capabilities.
- 4.9 The Department of Finance (Finance) is now involved at an earlier stage to provide an external review of estimates, which provides a greater opportunity to verify costing estimates. However, routine inclusion of 'off the shelf' options had yet to be achieved for all projects, which would

<sup>4</sup> Defence Procurement Review 2003, (Mr Malcolm Kinnaird AO Chair) (the Kinnaird Review); Going to the Next Level: the Report of the Defence Procurement and Sustainment Review (2008) (Mr David Mortimer AO, Chair).

<sup>5</sup> The report may be accessed here: <anao.gov.au/Publications/Audit-Reports/2013-2014/Capability-Development-Reform>.

enable government to weigh the relevant costs, benefits and risks and decide which option(s) to pursue.<sup>6</sup>

- 4.10 While Government did not agree to a proposal arising from the Kinnaird Review, to make DMO a separate executive agency, a mechanism had been put in place for the CEO of DMO to provide independent advice to government as envisaged by the Kinnaird Review.<sup>7</sup>
- 4.11 On the issue of improved accountability and advice to government during project implementation, the ANAO audit considered Joint Project Directives (JPD) and Materiel Acquisitions Agreements (MAA). ANAO concluded that JPDs had not been implemented in the way envisaged by the Government's response to Mortimer Review.<sup>8</sup> The MMAs had been reviewed by DMO, and a new regime of reporting variations from the original project would improve accountability.

## Audit recommendations

4.12	The audit report	made seven	recommendations

1.	To improve the skills and experience available during capability development, the ANAO recommends that Defence reconsider its staffing model for CDG project manager positions. This could include:
	<ul> <li>(i) considering whether the required military subject matter expertise can be adequately provided to capability development projects other than through having Service personnel in these positions; and</li> </ul>
	(ii) considering the formation of a dedicated ADF career stream for capability development.
	Defence's response: Agreed
2.	To improve the rigour of its assessment of capability development proposals before it recommends to the Government that they be included in the Defence Capability Plan, the ANAO recommends that Defence:
	(i) review its current processes against the recommendations made by the Kinnaird Review, and the strengthened DCP

8 ANAO Audit Report No. 6 2013-14, p. 39.

<sup>6</sup> ANAO Audit Report No. 6 2013-14, p. 35.

<sup>7</sup> ANAO Audit Report No. 6 2013-14, p. 37. The advice envisaged is cost, schedule, risk and commercial aspects of all major capital equipment acquisitions.

entry process subsequently recommended by the Mortimer Review and agreed by the Government in 2003 and 2009 respectively;

(ii) undertake sufficient preliminary work on each proposal to inform a rigorous assessment (akin to a Gate Review) of the viability of the capability proposal and the likely reliability of the estimates of cost, schedule and risk; and

(iii) ensure that, subsequent to DCP entry, the scope of projects and estimations of cost, risk, and schedule continue to be reviewed and assessed as the project is further defined and developed for project initiation; and Government approval sought for any changes to the scope of the project, should it be required.

#### Defence's response: Agreed

3. To contribute to its understanding of the accuracy of its technical risk assessment process, the ANAO recommends that Defence conduct a review of the technical risk assessment advice it has provided to government for selected capability development projects in the light of subsequent experience in progressing those projects.

#### **Defence's response:** Agreed

4. To improve the transparency of its management of acquisition projects, the ANAO recommends that DMO supplement the acquisition project information on its website with acquisition project schedule data for all key milestones from contract signature to Materiel Acquisition Agreement closure, together with any approved variations and summary reasons for those variations.

#### **Defence's response:** Partially Agreed

5. To improve accountability for the management of its major projects, the ANAO recommends that Defence, through its Capability Managers, report each year all major projects closed during the year, including a reconciliation of the capability delivered against the most recent approval decision.

Defence's response: Agreed

6. To progress Defence's longstanding objective of seamless management of ADF capability throughout its lifecycle, the ANAO recommends that Defence consider the costs and

	benefits of introducing a system to allow Capability Managers to track and report on the progress of capability development projects from DCP entry through to project closure, with reports available, as required, to all Groups across Defence.
	Defence's response: Agreed
7.	To improve reporting and accountability for the achievement of expected outcomes from major reviews, the ANAO recommends that Defence implement systems to centrally monitor progress over time on the implementation of recommendations/reforms stemming from these reviews.
	Defence's response: Agreed

## The Committee's review

- 4.13 As part of the review, representatives of the Department of Defence, Defence Materiel Organisation (DMO), the ANAO, Australian Strategic Policy Institute (ASPI), and the Australian Industry Group (Defence Sector) (AIG) gave evidence at two public hearings.
- 4.14 A list of witnesses is at Appendix B.
- 4.15 The Committee's inquiry assessed Defence's progress in capability development reform under the following headings:
  - reforming capability development;
  - improving advice to government;
  - improving accountability and advice during project implementation; and
  - reporting on progress with reform.
- 4.16 Before canvassing the evidence, it is important to note that previous Kinnaird and Mortimer reviews, and the current ANAO audit, recognise that there has been incremental improvement in the performance of capability development. The ANAO has also recognised that defining, producing, delivering and sustaining complex multi-billion dollar capability projects is complex.
- 4.17 In 2011 CDG commissioned an independent portfolio program and project management maturity assessment (P3M3 assessment), which provided a basis for the Capability Development Improvement Program (CDIP) in

early 2012. The CDIP includes actions to address recommendations from previous reviews and will be a tool to measure progress in the future.<sup>9</sup>

## Reforming capability development – organisation and process

### CDG staffing model

- 4.18 The Auditor-General and successive reviews have emphasised the importance of professionalising CDG, and the contribution this will make to the overall improvement in Defence's performance in delivery of capabilities.<sup>10</sup> In particular, the Kinnaird Review and Pappas Review concluded that while military experience is valuable and necessary, alone it does not provide "the full range of skills needed to plan the multi-billion dollar acquisitions program".<sup>11</sup> The ANAO has recommended that Defence re-consider the current model and create a dedicated career stream in capability development.
- 4.19 The Committee focused on three issues:
  - the availability of the right skills in capability development;
  - staff turnover, and
  - leadership.
- 4.20 The Auditor-General and Dr Davies of ASPI, also recognised that military personnel bring expertise, which is important to inform the development of capability projects, and that the professionalism of CDG had improved.<sup>12</sup> However, the results of the staff survey conducted by ANAO showed that, among other things, 70 per cent of project managers rated their skills as relatively low compared to the complexity of projects they are asked to undertake. In addition, the survey revealed 20 per cent of CDG project managers said they had no skills or experience in managing projects before performing in their first project management role. <sup>13</sup> This indicates that there is significant work to be done to enable staff to perform their roles with confidence.
- 4.21 Defence advised that CDG is comprised of 327 staff, of which 54 per cent are uniformed.<sup>14</sup> According to Dr Davies, the profile varies across the CDG:

<sup>9</sup> *Committee Hansard*, 6 March 2014, p. 5.

<sup>10</sup> Committee Hansard, 6 March, 2014, p. 5.

<sup>11</sup> Mortimer Review, p.24; ANAO Audit Report No. 6 2013-14, p. 108-109.

<sup>12</sup> Dr Davies, ASPI, *Committee Hansard*, 6 March 2014, p. 8.

<sup>13</sup> Committee Hansard, 6 March, 2014, p. 3; ANAO Audit Report No. 6 2013-14, p. 305.

<sup>14</sup> Committee Hansard, 6 March, 2014, p. 8.

If you drill down a little bit further, you will find that the parts of the process represent the air, land and maritime environments have a much higher proportion of military people than does the Investment Analysis area, which has a higher proportion of civilian people.<sup>15</sup>

- 4.22 The significant presence of uniformed staff leads to regular rotations. The rotation of staff working on large scale and technically complex projects has two impacts:
  - it is insufficient time to allow staff to develop the expertise; and
  - short assignments create continuity problems for ongoing project management because several managers may be responsible for the development of project specifications.<sup>16</sup>
- 4.23 Defence clarified that while the audit rightly highlighted turnover of uniform staff as a factor, the audit figure of 40 per cent has dropped to 33 per cent in the past twelve months.<sup>17</sup> It was also the view of Mr Nicholson, Head of Government Relations, BAE Systems Australia representing the Australian Industry Group, that military turnover within CDG ensures a degree of up to date operational experience.<sup>18</sup>
- 4.24 In terms of formal qualifications, at the time of the review, less than 40 per cent of staff had completed the Capability and Technology Management Masters from the Australian Defence Force Academy (ADFA).<sup>19</sup> Additionally, 38 per cent of personnel had had more than one posting into CDG and that it was common for staff to rotate through related areas, such as DMO. At the second hearing, Defence advised that the Army now streamed people into capability development (CDG, DMO and Army Headquarters) and that Navy was also increasingly doing so.<sup>20</sup>
- 4.25 Defence considered that skills levels had improved and uniformed staff are 'effectively streamed into capability development or acquisition when they are not on operational postings.'<sup>21</sup> The Auditor-General did not accept this view, and reiterated that career management of military personnel is a factor in turnover of CDG project managers, and the

<sup>15</sup> *Committee Hansard*, 6 March 2014, p. 8.

<sup>16</sup> ANAO Audit Report No. 6 2013-14, p. 109.

<sup>17</sup> Committee Hansard 6 March, 2014, p. 2.

<sup>18</sup> Committee Hansard, 6 March 2014, p. 13.

<sup>19</sup> For further discussion on staff perceptions of skills and workforce issues see, ANAO Audit Report No. 6 2013-14, pp. 108 -122, Appendix 2, p. 305; and, *Committee Transcript*, 6 March, 2014, p. 3.

<sup>20</sup> Committee Hansard, 7 April 2014, p. 18

<sup>21</sup> *Committee Hansard*, 6 March, 2014, p. 2.

previous Chief of CDG has stated that 'it would be deleterious to a military person's career to keep them' in CDG.<sup>22</sup>

- 4.26 Defence emphasised recent reforms to improve professional skills and help de-risk individual projects include:
  - the restructure of the workforce away from single projects to a team based project/progam management model. This is intended to enable greater sharing of skills and knowledge, and provide greater stability for ongoing project management;
  - an increase in the number of staff undertaking the Capability Development Masters Course through ADFA;
  - the conduct of conferences on cost estimation to assess best practice and improve overall literacy about cost estimation; and
  - the investigation of an 'improved costs estimation tool'.<sup>23</sup>
- 4.27 AIG referred the Committee to the Projects of Concern List initiated by a previous minister (the Hon. Greg Combet MP) to provide a focused effort by Defence and industry to identify problems within projects that were causing delays and overruns. That List has been reduced from 18 to 6, and provided lessons that have been integrated into the process of reform.<sup>24</sup> However, AIG expressed the view that one of the most significant remaining missing elements is the 'failure to properly assess the risks associated with complex assisted integrations of complex weapons systems.'<sup>25</sup> According to AIG, this issue may be addressed by adopting a more programmatic approach, rather then organising management around individual projects.
- 4.28 In evidence on 7 April 2014, Vice Admiral Jones said that as part of the restructure of CDG, staff are organised in teams around programmes as part of de-risking major projects:

The other thing we have done in terms of trying to mitigate our risk is addressing all these individual projects as a program. So, we have now distilled these projects into 24 subprograms, each with a risk profile. And the staff who manage those subprograms are now in teams looking after a number of projects. As part of that professionalization, in managing our risk in providing the right expertise to project, within those 24 programs we have identified that there are about 33 courses that are compliant with

<sup>22</sup> *Committee Hansard*, 7 April 2014, p. 18

<sup>23</sup> Committee Hansard, 6 March 2014, p. 4.

<sup>24</sup> Committee Hansard, 6 March 2014, p. 12.

<sup>25</sup> Mr O'Callaghan, Committee Hansard, 6 March 2014, p. 11.

the Australian quality framework. We then look at the teams and map what skill sets each of those subprogram teams have and actively manage what training they should have and what adjustments to the team are needed...<sup>26</sup>

- 4.29 The third major issue is the question of leadership of CDG. The Kinnaird Review stressed the importance of leadership to drive and sustain reform of the capability development process and recommended that a Chief of CDG be appointed for five years at the military three star or a civilian at the equivalent level. According to ANAO, the appointment of the Chief of CDG is three years, and the average tenure is *less* than three years.<sup>27</sup> It was noted that, to date, the position has only been occupied by a senior military officer. In response, Defence argued that the Chiefs of CDG have been in the role of Deputy and therefore have greater longevity and experience in capability development than may first appear.<sup>28</sup>
- 4.30 On the question of reform, Dr Davies took a broader view, and argued that Defence operates '...as a federation of tribes' and needs a headquarters and a chief of staff to overcome the diffusion of responsibility, which makes is hard to 'cut through' and make incisive decisions. As an example, he stated '...the DCP is oversubscribed and what are we going to do about it? I think there is a management problem that is bigger than CDG'.<sup>29</sup>

#### **Capability Development Process**

- 4.31 The ANAO report examined the capability development process and found shortcomings, including excessive documentation, and that capability committees were too numerous and not fully effective.<sup>30</sup> ANAO argued that the CDIP should include the views of external stakeholders, and would require appropriate priority and senior management attention to embed improvements to the capability process, including committee arrangements. The CDIP should streamline processes and documentation.<sup>31</sup>
- 4.32 In 2011 Defence commissioned an independent portfolio program and project management maturity assessment (P3M3 assessment), which provided a basis for the CDIP in early 2012:

<sup>26</sup> Committee Hansard, 7 April 2014, p. 4.

<sup>27</sup> ANAO Report No. 6 2013-14, pp. 102-103.

<sup>28</sup> Committee Hansard, 7 April 2014, p. 19.

<sup>29</sup> Dr Davies, Committee Hansard, 6 March 2014, p. 9.

<sup>30</sup> ANAO Report No. 6 2013-14, pp. 126-139.

<sup>31</sup> ANAO Report No. 6 2013-14, p. 139.

The intent of the Capability Development Improvement Program has been to establish a robust orchestration, scheduling, reporting and performance monitoring system of the Defence capability plan approval process, including the establishment of an integrated program and subprogram teams and a DCP portfolio management office.<sup>32</sup>

4.33 The CDIP will provide a basis for the future measurement of change and, Defence argued, has already driven the simplification of document requirements and internal processes.<sup>33</sup> The second tranche of CDIP reforms for 2014, includes the use of objective and subjective indicators to identify and prioritise the reform agenda:

> We have analysed causes for delays in projects getting to committees and last month held a workshop involving Defence, ADFA and industry....there will be an initiative to further streamline and accelerate the capability development process, selectively using lean methodology.<sup>34</sup>

- 4.34 Defence also reported that the capability development committees have been rationalised and that there are now only three committees:
  - the Project Initiation Review Board is the key committee. It comprises Chief CDG, Service Chief, the CEO or General Manager, the Deputy Secretary Strategy and the Chief Defence scientist as the members. The Review Board is now smaller and sets strategic direction.<sup>35</sup>
  - the Capability Gate Review is chaired by the Deputy of CDG and reviews the cabinet submission to make sure the document set for that project is ready to go to the Defence Capability Committee.
  - the Defence Capability and Investment Committee, is chaired by the Secretary and includes all the group heads. That committee resolves any high-level issues, particularly for major projects, for example, the Joint Strike Fighter project.<sup>36</sup>

#### Entry to the Defence Capability Plan

4.35 The ANAO drew the Committee's attention to Mr Kinnaird's concerns, that projects were being listed on the DCP without sufficiently rigorous analysis. The DCP is a public document that lays out the capabilities and force structure to support the Defence White Paper. Kinnaird's expectation

<sup>32</sup> *Committee Hansard*, 6 March 2014, pp. 1-2.

<sup>33</sup> Committee Hansard, 6 March 2014, p. 2.

<sup>34</sup> Committee Hansard, 6 March 2014, p. 2.

<sup>35</sup> Committee Hansard, 7 April 2014, p. 18.

<sup>36</sup> Committee Hansard, 7 April 2014, p. 8.

was that projects would have received first pass approval before entry onto the DCP, however, projects are being entered at the earlier initial selection stage.

4.36 According to ANAO there are two major risks that flow from entry to the DCP before the first pass approval stage of government decision making:

One is that the DCP is an industry orientated document and that creates momentum for the projects within it and a constituency for those projects. If you like, before government has actually approved the project at first pass.<sup>37</sup>

- 4.37 The need for greater analysis was also highlighted by the Mortimer Review and according to the ANAO those recommendations were only recently closed.<sup>38</sup>. The Senate Foreign Affairs Defence and Trade Legislation Committee has previously recommended a gate review at the point of entry to the DCP to address the issue.<sup>39</sup>
- 4.38 It became clear that Defence has an entirely different understanding and regards the Kinnaird Review as allowing for DCP entry before first pass approval.<sup>40</sup> However, the Mortimer Review also expected DCP entry at the first pass stage. Subsequently, the Committee heard from Defence that there is capacity to conduct a type of 'gate review':

My earlier point was that you can do a gate review but it would have to be different though because for some projects, you do not have sufficient information. ... If it was in a modified sense, taking into account that you do not have a lot of the elements that you would have when you get to the pre-first-pass, I think that is probably not an unreasonable recommendation.<sup>41</sup>

4.39 The industry perspective is that DCP is a useful document to assist government and companies to plan for investment and infrastructure. However, Mr O'Callaghan, AIG, told the Committee the DCP is 'overly ambitious and unachievable':

> Our advice to the committee and to government would be to be less ambitious. The scale of activity ... is a legitimate concern ... to enable companies to invest wisely in both of those areas, infrastructure and skills, it requires a high degree of certainty. We believe that certainty would come about by having a less

<sup>37</sup> Committee Hansard, 7 April 2014, p. 9.

<sup>38</sup> Committee Hansard, 7 April 2014, p. 9.

<sup>39</sup> ANAO Audit Report No. 6 2013-14, p. 149.

<sup>40</sup> Committee Hansard, 7 April 2014, p. 9.

<sup>41</sup> Committee Hansard, 7 April 2014, p. 15.

ambitious DCP. But it is a very valuable document and industry appreciates the regular updates of it.<sup>42</sup>

### Improving advice to government when seeking approval

4.40 The ANAO audit examined the capacity of CDG to de-risk projects at the early project selection stage through more accurate projections of whole of life costing, and better identification and advice to government on technical and scheduling risks. ANAO found that there have been improvements in advice to government and this was restated during the hearing.<sup>43</sup> The ANAO stated that technical advice from the CEO of DMO, and the Defence Science and Technology Organisation (DSTO) has improved the quality of advice to government.

#### Engagement with industry

- 4.41 The ANAO report did not examine early engagement with industry in detail. Vice Admiral Jones advised the Committee that Defence had established several industry partnerships but these were not explored in detail during the review. The point was taken up by the AIG, who argued that a lack of knowledge within CDG and DMO about both domestic and international industry capability 'prevents many solution options from ever being considered'.<sup>44</sup>
- 4.42 Mr Nicholson of AIG argued that, while Defence spoke about industry partnerships, there is not a culture of partnership with industry within Defence. He stressed the importance of involving industry at a much earlier stage to enable frank discussion when the operational concept is being developed and before technical advice is needed. In his view, this would enable Defence to possibly identify solutions, risks and capability issues that may otherwise not be known to them.<sup>45</sup>

#### Contestability

4.43 The issue of contestability was canvassed during the hearings. Dr Davies of ASPI argued that embedding contestability within the CDG is problematic.<sup>46</sup> ANAO had not examined this question in depth and was primarily concerned with contestability of costing.<sup>47</sup>

<sup>42</sup> *Committee Hansard,* 6 March 2014, p. 11.

<sup>43</sup> Dr Rowlands, Committee Hansard, 7 April 2014, p. 3

<sup>44</sup> Mr Nicholson, AIG, Committee Hansard, 6 March 2014, p. 12.

<sup>45</sup> *Committee Hansard,* 6 March 2014, p. 12.

<sup>46</sup> Committee Hansard, 6 March 2014, p. 8.

<sup>47</sup> Committee Hansard, 7 April 2014, p. 3

4.44 Vice Admiral Jones of Capability Development Group explained that previously a separate Force Development and Analysis Division (FDA) provided contestability on project selection, namely, what should go into the major capital equipment program.<sup>48</sup> The role of the new Capability Investment Analysis Resources Division, which is internal to CDG, is to scrutinise supporting documentation once a project is selected. The Investment Division is also responsible for developing the cabinet submission – a role that is different to the original FDA.<sup>49</sup>

#### Whole of Life Costing

- 4.45 The ANAO found that Defence had a mixed record on costing new projects, and tended to rely on Net Personnel Operating Costs (NPOC) rather than providing whole of life costing to government.<sup>50</sup> More recently, life cycle costs gross and net have been included but, according to ANAO, the meaning of these terms is not clear to decision makers.<sup>51</sup> Despite an internal policy on whole of life costing for major capital projects, the inability to attribute costs of individual capabilities through the existing financial systems means that whole of life costing for acquisition and sustainment is not visible to government.
- 4.46 This has been an issue in successive reviews, and the recent 2011 DCP Review found that NPOC costing were 'inaccurate, insufficiently documented and not updated' which has cast further doubt on the cost estimates that underpin capability development proposals.<sup>52</sup> In response to a more general question about visibility of actual costs over the life time of a project, Vice Admiral Jones told the Committee that:

...when we go to government for the approval of a project we go up also for the net personnel operating costs. That includes the through-life costs of the entire capability. So, when government considers the approval of a new capability they are approving its whole-of-life cost and comparing whole-of-life costs between alternate solutions to meet that capability required.<sup>53</sup>

#### Costing advice

4.47 The ANAO found that costing advice had improved with the earlier involvement of the Department of Finance, in line with recommendations

<sup>48</sup> Committee Hansard, 7 April 2014, p. 3.

<sup>49</sup> Committee Hansard, 7 April 2014, p. 3.

<sup>50</sup> ANAO Audit Report No. 6 2013-14, pp. 177-190.

<sup>51</sup> ANAO Audit Report No. 6 2013-14, p. 187.

<sup>52</sup> ANAO Audit Report No. 6 2013-14, p. 188.

<sup>53</sup> Committee Hansard, 7 April 2014, p. 7.

from the Kinnaird Review.<sup>54</sup> Vice Admiral Jones explained that Finance provides the cost estimation memorandum, which lays out the requirements that Defence must meet (Estimates Memorandum 2011/36). Finance also checks and verifies the cost model when developing coordination comments on the Cabinet submission.<sup>55</sup> The timeliness of Finance's advice was audited by ANAO, which found that timeliness has generally improved.<sup>56</sup>

#### Military off the shelf options

- 4.48 A related issue is the extent to which government is presented with a range of options, including military off the shelf options, as a means of containing costs and scheduling risk. The ANAO audit found that cost and scheduling can be more accurately forecast where military off the shelf options are adopted compared to projects that are developmental.<sup>57</sup> The ANAO data on major projects also shows that schedule performance is better in relation to military off the shelf acquisition than Australianised Military Off The Shelf (AMOTS), 'which is better again than developmental work'.<sup>58</sup>
- 4.49 While there was general agreement that advice to government has improved, the Auditor-General made the point that 'as soon as you have integration the complexity and the risk go up '...I think it comes down to skills, experience and learning from the past'.<sup>59</sup> In response, Vice Admiral Jones argued that the improvement in technical risk advice to government from the Chief Defence Scientist and independent advice of the DMO CEO has meant that the nature of the projects has changed. While these improvements were welcomed by the review, it was clear that military off the shelf options are not routinely included in submissions to government. Consequently, it is difficult to assess the extent to which government is making choices between all alternate options.

#### Continuous build

4.50 Vice Admiral Jones made the point that, continuous build, rather than the 'stop start' or a one off up-grade approach, would also serve to reduce risk.<sup>60</sup> This issue was explored in greater detail with AIG, who spoke at

<sup>54</sup> ANAO Audit Report No. 6 2013-14, p. 191.

<sup>55</sup> *Committee Hansard,* 7 April 2014, p. 3.

<sup>56</sup> ANAO Audit Report No. 6 2013-14, p. 197.

<sup>57</sup> See Chapter 9, ANAO Audit Report No. 6 2013-14, pp. 198-210.

<sup>58</sup> Committee Hansard, 7 April 2014, p. 2.

<sup>59</sup> Committee Hansard, 7 April 2014, p. 4.

<sup>60</sup> Committee Hansard, 7 April 2014, p. 5.

length of the uneven approach to capability development within Australia. The lack of a clear bi-partisan agreement on whether there is a strategic advantage to Australia having an in-country naval or submarine building capacity was said to contribute to uncertainty, cost and loss of domestic skills.<sup>61</sup>

 4.51 Warren King of the Defence Materiel Organisation addressed the issue of continuous build as part of the Committee's inquiry into the 2012-13 Defence Materiel Organisation Major Projects Report:

At the end of the Anzac ship project, which was a 10-ship project, we were building at international benchmark and cheaper than we could buy them from Europe. So it is not about propping up an industry or anything; it is about how to get an efficient industry. The question, therefore, starts with: does the Australian government of the day believe in having it? And if you do—and that is a question—then the only way you can make it efficient is to have an ongoing program and the right management. It is as simple as that.<sup>62</sup>

4.52 AIG argued that building assets, such as ships and submarines, in blocks of three or four at a time, would prevent the loss of the workforce and skills and enable industry and Defence to adapt and incorporate new technology over a longer time frame.<sup>63</sup> AIG also advocated the complete privatisation of the delivery of military capability, although they acknowledged that this was outside the terms of the current ANAO performance audit report.

## Improving accountability and advice during project implementation

4.53 Part 4 of the ANAO report addresses the tendency for the scope of capability projects to vary overtime without clear government authorisations, and delays in reporting to government changes of difficulties in costs or scheduling. The ANAO found that Defence has a 'propensity' to depart from government decisions.<sup>64</sup>

#### Government authority - variations in scope

4.54 One of the internal reforms introduced to address the problem of variations in scope identified by the Mortimer Review was the Joint

<sup>61</sup> *Committee Hansard,* 6 March 2014, p. 13.

<sup>62</sup> Warren King, Defence Materiel Organisation, *Committee Hansard for JCPAA Inquiry into the* 2012-13 *Defence Materiel Organisation Major Projects Report*, 20 March 2014, p. 11.

<sup>63</sup> Committee Hansard, 6 March 2014, p. 12.

<sup>64</sup> ANAO Audit Report No. 6 2013-14, p. 242; see also Table 12.1, p. 244.

Project Directive (JPD).<sup>65</sup> The intention of the JPD is to reflect the decision of the Government and to provide consistent base information that remains with Defence. This overcomes the practice of cabinet decisions being unavailable after a change of government, which is problematic for projects that may take over a decade to complete.

- 4.55 However, ANAO found that despite strong expectation from Ministers and senior management, JPDs have not been introduced in the way that was expected. Importantly, the recommendation to introduce JPDs was signed off by a senior committee responsible for implementing JPDs in early 2010 when the process had been decided, but at that stage no JPD had been produced. This was two years after the government's 20 point response to the Mortimer Review.<sup>66</sup> The ANAO says that '…only after ministerial intervention in May 2011 did Defence finalise any JPDs'.<sup>67</sup>
- 4.56 During the hearing, Vice Admiral Jones stated that the JPD is part of the cabinet submission process for first and second pass approval. The document reflects the Cabinet decision at first pass stage and, along with the Material Acquisitions Agreement (MAA), remains attached to the submission.<sup>68</sup> If there is subsequent direction, including adjustment to scope in the project, the JPD would be adjusted at the second pass stage. Vice Admiral Jones advised that the JPD will be reviewed annually and the MAA updated and, if over time a project requires adjustment, the JPD will be adjusted to reflect that later decision.<sup>69</sup>

#### Delays in reporting difficulties/changes

4.57 The ANAO also found lengthy delays in reporting progress or difficulties in project management. In one case no advice on the progress of the project had been provided for ten years.<sup>70</sup> This issue has been raised and commented on by ministers and senior management. In response to questions, Vice Admiral Jones informed the Committee the situation had been rectified by ministerial submission, and that Defence had worked through the backlog. The Committee was also told:

We have a database where we look at: how long has it been since a project has been reported to government? We use that as a gross

<sup>65</sup> For detailed discussion, see Chapter 11, ANAO Report 6, pp. 219-232.

<sup>66</sup> ANAO Audit Report No. 6 2013-14, p. 231.

<sup>67</sup> ANAO Audit Report No. 6 2013-14, p. 232.

<sup>68</sup> Committee Hansard, 7 April 2014, p. 24.

<sup>69</sup> Committee Hansard, 7 April 2014, p. 24.

<sup>70</sup> The Land 134 Phase 1 (Combat Training Centre) was approved in 2001 with delivery scheduled for 2007. In May 2012, the Minister was advised that the full scope of the project will not be delivered until 2014, ANAO Audit Report No. 6 2013-14, Table 12.1, p. 244.

indicator to see whether there are projects which could have had information which should have been brought to the attention of the minister... I am reasonably confident now that we have pretty much covered that, but we are making sure we continue to do that annual review of projects to make sure that we do not have material information that should be presented to the minister.<sup>71</sup>

- 4.58 The audit also found a significant number of terminated projects costing more than \$10 million in public expenditure.<sup>72</sup> In 2011 the Minister for Defence Materiel cancelled two projects: Land 112 Phase 4 ASLAV Enhancement, costing approximately \$25 million; and, JP 2048 Phase 1A, Landing Craft Mechanised costing approximately \$45 million. The first project was cancelled due to cost, schedule and technical risk, the latter was cancelled when the craft were identified as having the wrong dimensions to fit either the current landing platforms (amphibious) or the future landing helicopter docks. The hulls were also susceptible to infrastructure fatigue 'at sea state five'.<sup>73</sup> In 2008, the Sea 1411, Super Seasprite Helicopter was terminated with an expenditure of approximately \$1401 million. According to ANAO, this project was cancelled due to a range of technical issues, including difficulty in defining requirements and poor contract management practices.
- 4.59 Table 13.1 in Audit Report No. 6 2013-14 also includes three examples where Defence was unable to provide ANAO with figures on the actual expenditure at the time of the audit. These include Land 146 Phase 2 Combat ID, and Land 17 Phase 1C Self-Propelled Howitzer, cancelled in 2012, as well as Land 139 Phase 2 Enhanced Bridging Capability cancelled in 2003.<sup>74</sup> In an answer to a question on notice, Defence provided actual expenditure on the three projects:
  - Land 146 Phase 2 Combat ID \$3.839m
  - Land 17 Phase 1C Self-Propelled Howitzer \$2.7m
  - Land 139 Phase 2 Enhanced Bridging Capability cancelled prior to Government approval, and no funds spent.<sup>75</sup>

<sup>71</sup> Committee Hansard, 7 April, 2014, p. 24.

<sup>72</sup> ANAO Audit Report No. 6 2013-14, p. 252; See Table 13.1 *Projects cancelled, each with expenditure greater than* \$10 *million.* 

<sup>73</sup> Table 13.1 Projects cancelled, each with expenditure greater than \$10 million, p. 252.

<sup>74</sup> Committee Hansard, 7 April, 2014, p. 25.

<sup>75</sup> Department of Defence Submission No. 9.1, pp. 1-2.

## Reporting on progress with reform

- 4.60 During the audit, ANAO found inconsistencies between reports on progress to implement recommendations and the delivery of actual outcome. For example, ANAO found that Joint Project Directive were not in use at the time of the audit, and off the shelf options were not routinely provided to government although these recommendations were 'closed'.<sup>76</sup> Defence advised that the reporting to the Minister on progress with reform was now quarterly by ministerial submission. This advice also includes significant highlights from implementation of the Capability Development Improvement Program.<sup>77</sup>
- 4.61 Vice Admiral Jones also updated the Committee on progress to complete the recommendations arising from previous reviews. In relation to the Mortimer Review, the Senate Committee on Foreign Affairs, Defence and Trade, and the ANAO report on capability development reform he said:

As at 3 April 2014, Defence had completed 66 recommendations, or 69% are closed....of the 30 remaining initiatives, we have 13 that have been closed by process and are just awaiting the accumulation of evidence that the reform has been embedded in the way we do business.

In addition, to these 96 external recommendations, there are 125 recommendations and initiatives from internal reviews and reform programs. ...Of these, 112, or 90 per cent are completed.<sup>78</sup>

4.62 As mentioned above, the Committee took evidence that the CDIP is providing the framework for reform initiatives within Defence. Although this work has commenced without baseline data, part of the CDIP is to develop indicators to enable defence to measure progress. This framework was too recent to be tested through the ANAO performance audit. However, the CDIP will provide a framework and indicators against which future audit performance can be conducted.

<sup>76</sup> See Chapters 9 and 11, ANAO Audit Report No. 6 2013-14.

<sup>77</sup> *Committee Hansard*, 6 March, 2014, p. 3.

<sup>78</sup> Committee Hansard, 7 April 2014, p. 1.

## **Committee Comment**

- 4.63 The Committee recognises that Defence has taken significant steps to implement recommendations made over the past decade by various reviews. It is encouraging that the CDIP adopted in 2011 is informed by an independent assessment and provides a framework to drive reform and achieve measurable outcomes. The Committee encourages Defence to maintain the momentum in the process of reform, and consider conducting a further dialogue, depending on the government's response to this report in 6 months.
- 4.64 The reform of capability development has been a concern for successive governments and, in the Committee's view, the ANAO audit has provided a valuable contribution to the reform process. The Committee supports the selective use of follow up audits, and the value of the audit in this context which took a wider and deeper view of the extent to which reform had been achieved. The Committee also notes that the Australian Public Service Commission is conducting a program of Capability Reviews, but has yet to conduct a review for the Department of Defence. The Committee will be interested to see the result of that analysis.
- 4.65 It is widely accepted that the DCP is oversubscribed and this, in turn, raises questions about the robustness of the analysis of projects entered onto the DCP. In response to the current mismatch the ANAO returned repeatedly to two key themes:
  - the question of skills; and
  - the ability to provide comprehensive information to government at the early selection stage.
- 4.66 The emphasis on increased professional training, the introduction of team based work and programing within CDG are positive developments. However, the Committee questions whether this goes far enough to address the underlying structural issue of staff turnover, which is driven by military postings. There was no evidence that Defence had attempted any 'blue sky thinking' about the staffing model, or how to ensure military expertise in the project identification process without relying heavily on uniform personnel. Nor does the Committee accept that relying on APS staff makes CDG inherently more susceptible to budget or staffing cuts.
- 4.67 There would need to be clearer evidence of a defined career path in capability development to give the Committee confidence that this issue is being addressed. This would involve career progression earned through demonstrated skill and expertise in capability development. It is not the intention of the Committee to exclude uniform personnel from these

positions but to emphasise the importance of the CDG attracting and retaining the mix and level of skills needed.

- 4.68 The Committee was also encouraged by the professionalism and commitment of the existing CDG leadership to reform. However, the previous Kinnaird recommendation that CDG be led by a three star uniform or equivalent civilian for 5 years has not been realised. Tenure over 5 years was intended to enable a suitable leader to take reform forward, without interruption by military posting. The government should give consideration to appointment of a civilian head when the position is next available. The Committee stresses that this is not in any way a reflection on the very significant efforts and progress made under the leadership of Vice Admiral Jones.
- 4.69 Simplification of the internal processes, and committee structure are welcome changes and so too is the greater engagement with industry. It is also encouraging that DSTO and DMO advice has improved the initial project selection process. These changes should start to yield positive results in the future.
- 4.70 Nevertheless, there is scope for strengthening the initial proposal selection. The Committee shares ANAO's concern that:
  - whole of life costing is not being performed as part of the initial project approval process; and
  - off the shelf options are not routinely included.
- 4.71 Whole of life costing is inherently difficult in long term complex major projects, however, the budget implications of major projects warrants a greater strengthening of this aspect of capability development. Building the costing estimation expertise within CDG must be a priority to provide government and the public with visibility of the likely expenditure. The Committee considers that adequately resourcing the Department of Finance to perform its function in a timely and expert manner is crucially important. Finance must be in a position to provide external scrutiny of costs, and robust advice to Cabinet.
- 4.72 Similarly, there is ample evidence that military off the shelf options would provide government with a range of alternatives to consider. Unless, military off the shelf options are routinely provided, with a rationale as to why it may or may not be the preferred option, it is difficult to assess the extent to which government has considered all the options available to it.
- 4.73 There is also scope for rethinking the point of entry of capability projects onto the DCP. There is an opportunity in the current environment to ensure that the next DCP is better matched to support the 2015 Defence White Paper. The DCP engages the legitimate interests of industry, who

must be able to rely on it to make investment decisions. In this respect, the Committee supports the recommendation of the Senate Committee on Foreign Affairs, Defence and Trade, that a gate review be conducted before a project is entered onto the DCP.

4.74 The Committee is very concerned that the audit report has found such significant delays in keeping government advised on the progress and/or difficulties in projects. This evidence and previous practice is unacceptable and not consistent with good public administration. A change in scope, costing and schedule must be subject to the appropriate level of ministerial oversight and Cabinet control. The Committee accepts the evidence that this backlog of progress reporting through ministerial submissions has been completed. The annual review of projects should now prevent the situation in the future of the Minister being the last to know if there are difficulties in major projects. In the future, the Committee expects to see an audit trail demonstrating that Joint Project Directives are a routine part of submissions to prevent unauthorised variations in scope and progress reports to government are regular and timely.

#### **Recommendation 2**

- 4.75 The Committee recommends that the Department of Defence consider a staffing model for Capability Development Group that ensures:
  - a reduced level of staff turnover;
  - that both uniformed and civilian personnel are able to acquire career progression through the acquisition of capability development skills and experience; and
  - a suitably qualified civilian head of Capability Development Group is considered for appointment when the role is next available.

### **Recommendation 3**

4.76 The Committee recommends that the Department of Defence require 'whole of life' costing be included in initial project approval at the project requirements phase of the capability development process.

#### **Recommendation 4**

4.77 The Committee recommends that the Department of Defence institute a gate review before a project is entered onto the Defence Capability Plan.

Dr Andrew Southcott MP Chair