

The Defence Capability Review 2003

A Modest and Incomplete Review

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03 An ASPI Strategic Insight

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The story so far...

On 7 November 2003 the Minister for Defence announced some outcomes of the Government's Defence Capability Review (DCR) 2003. The DCR had two aims. First, it was to 'rebalance' the Government's defence capability plans in the light of changed strategic circumstances since the current Defence Capability Plan (DCP) was first approved in 2000. The Government's assessment of those changes was published in *Australia's National Security: A Defence Update 2003*, released in February 2003.

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Second, the DCR was to respond to acute concerns within Government, including Defence, that the existing DCP had become unaffordable as the cost of projects had increased beyond the DCP estimates, and more broadly that current capabilities and investment plans could not both be sustained within the present funding projections.

The DCR process is evidently not yet complete. The Minister's 7 November DCR statement outlined what he described as "some of the more significant" decisions taken by the Government in the DCR. He acknowledged that the review of the DCP is "still not quite complete", and that the reprogramming of projects to meet financial pressures in the DCP is "some of the detail that we're settling at the moment". So further changes to the DCP may still be in the offing.



Australian Navy guided missile frigates, FFGs. The two frigates to be retired under the DCR, HMAS Adelaide & Canberra are the top two ships.
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The key decisions announced so far are:

- replacement of Australia's existing Leopard 1 tanks with new main battle tanks
- the introduction of SM-2 missiles to four of the Navy's guided missile frigates
- up-scaling the planned replacements of two of the Navy's amphibious ships from around 12,000 tonnes to around 26,000 tonnes
- retiring the two oldest FFG frigates by 2006 upon the arrival of the last ANZAC frigates
- laying up two mine hunter coastal vessels
- withdrawal of the F-111s from service by 2010 depending upon the successful upgrade of the F/A-18 as well as introduction of the Airborne Early Warning and Control (AEW&C) and new air-to-air refuelling (AAR) aircraft.

More minor announcements include the decision to limit the number of new Air Warfare Destroyers to three—earlier plans had envisaged up to four—and to opt for a US combat system on those ships, and a decision to replace the oiler HMAS Westralia with a commercial ship, not a purpose-built military one.

These changes do not amount to a major revision of the DCP. Other than the decision to buy new main battle tanks, all of the capability enhancements build on projects already contained in the DCP from 2000. And the original overall DCP funding commitment of around \$50 billion over the next ten years remains largely unchanged.

Nonetheless the changes that have been made raise some interesting questions both about the Government's strategic priorities and its financial plans for Defence.

Strategy

Two broad strategic trends are evident in the changes to Australia's defence plans announced from the DCR. First, the DCR trades off reductions in capability over the coming decade to fund enhancements in capabilities for the following decade. The early retirement of the entire F-111 fleet and two FFGs as well as the laying up of two mine hunters represents a net reduction in ADF capability below the levels planned and funded in the original DCP. In return the DCR offers longer-term enhancements to tanks, naval air warfare and amphibious lift capability.

Second, the DCR displays a general trend towards buying and operating a smaller number of larger and more capable platforms and systems, rather than larger numbers of less capable ones. Under the new plans, we will have fewer but bigger tanks, fewer but more capable major surface combatants, and fewer—though hopefully more capable—strike aircraft. There are clear benefits in this approach, but also real costs in terms of the ADF's ability to run concurrent and sustainable operations in the longer term. And the strategic rationale for this shift in emphasis is unclear.

The DCR does offer some clarification of the Government's key strategic priorities. Since mid-2002 Senator Hill has suggested in a number of speeches that the 2000 White Paper's emphasis on Australia's region was outdated, and that a major shift in priorities was needed towards an ability to respond to global threats of a transnational nature. The DCR has reaffirmed that the defence of Australia and regional requirements are the primary drivers of force structure, and it appears to endorse the judgement in February's *Defence Update* that our contributions to coalition operations beyond our region would continue to be at the level of niche capabilities.

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Coastal Minehunter HMAS Diamantina returns from the Solomon Islands. The Government proposed to lay up two of these mine hunters.
© Defence Dept

Nonetheless the DCR does give hints that some important evolutions in Australian strategic policy are taking place. The language in the DCR announcement is brief and opaque, but it suggests that the Government is moving toward placing the defence of Australia and regional requirements as equal priorities with respect to force structure decisions, whereas hitherto the defence of Australia has had clear precedence. If so, this is a welcome and natural evolution in Australian strategic thinking. The fact is that the defence of Australia could never be separated from the security of our immediate neighbourhood.

But it is not clear whether, or how, the new force priorities that have been decided as part of the DCR relate to these underlying geographical priorities. Nor is it clear how they relate to the judgements offered in the

DCR announcement about the nature of future threats. The DCR statement says that the goal has been to ensure a balanced force that recognises, amongst other things, “the extra complexity of unconventional threats”. However a quick check of the capability enhancements proposed suggests that their utility is primarily in more conventional operations against the armed forces of other nation states, rather than in meeting unconventional threats which normally call on lighter forces suited to less traditional operations. And the decision to reduce capabilities in the nearer term to fund higher-level forces in the following decade seems out of step with the scale of the demands being faced by the ADF today, and which we must expect to continue over the next few years.

Money

The Government's statement on the DCR didn't contain any information on the costings underpinning the decisions. Without this information it's difficult to judge whether the enhancements represent best value for money, whether the cuts in capability are worth the savings realised, or whether there were better ways to realise those savings than by cutting capability.

Indeed the DCR has left the financial situation in Defence rather unclear. In answer to a question at the press conference following the DCR announcement, Senator Hill said that the DCR was developed on a "budget neutral basis", and that with the savings from the cuts to capability outlined in the DCR, and some reprogramming of existing DCP projects, the Government believes that the DCR and DCP can be delivered within the budget allocation already agreed to by Government.

This is a little surprising. Throughout 2003 there have been reports coming from within Defence that the Government's current defence spending projections are insufficient to sustain current capabilities and to undertake the investment needed in the DCP. In particular there have been claims that the costs of many DCP projects had increased beyond the estimates made back in 2000. The recently completed Kinnaird Defence Procurement Review 2003 stated that "the underestimation of the cost of new equipment specified in the DCP" was of great concern, and by implication, a major rationale for the Kinnaird Review itself. Estimates of the underfunding of the Defence budget as a whole ranged from \$2 billion to \$18 billion over the coming decade.

The Minister's statement suggests that these concerns about 'underfunding' of

Defence and especially of the DCP have proved unfounded. Either that, or there is much more substantial reprogramming and restructuring still to be announced for the DCP. It's more likely to be the former.

The Minister did acknowledge cost pressures in personnel, logistics and—for the first time—management of the Defence estate. No figures were provided on the size and nature of these pressures, but he did say that they'll be dealt with in next year's budget. The Treasurer recently nominated defence and security as the main priorities in next year's budget, but it seems unlikely that the 2004 Budget will result in any large increases in Defence funding. The Minister hinted as much when he said in his press conference that the wider pressures on the Defence budget have been with us for a long time, and that Defence has managed those pressures in the past. But his statement on the Government's preparedness to reschedule money "anticipated to spend in the first few years for the task further out" seems to give further substance to the claim that Defence is still finding it difficult to spend the money Government has allocated.

Tanks

The Government evidently plans to move quickly to buy the Army new tanks. It says that it will soon choose between the US-built Abrams, the German-built Leopard 2 and the UK-built Challenger 2. They are expected to decide to buy about 60 Abrams tanks at a cost of some \$600m. The Army currently operates some 100 Leopard 1 tanks.

The decision to buy a new fleet of tanks remains rather puzzling. There is of course no question that the ADF needs tanks of some sort, and in the 2000 White Paper process the Government took a clear decision to sustain a tank capability within Army into the future. The DCP provided

"it seems unlikely that the 2004 Budget will result in any large increases in Defence funding"



M1A1 Abrams, US Marine Corp, on exercise in Australia 2001 © Defence Dept

significant funds to upgrade and support the Leopards through to the year 2020, and as late as May this year the Minister announced the signing of further million dollar contracts under this upgrade program. The question is why the Government has decided to replace the Leopards now, and why they are apparently leaning towards the Abrams as the replacement.

The clearest explanation we have seen is from General Cosgrove, who has suggested that the ADF needs a new tank to provide better protection against anti-armour weapons. It would be interesting to see that argument developed, and to explore options for achieving better protection with the current tanks. It is not clear whether the Government looked at further upgrades for the Army's existing Leopard 1s rather than purchasing newer and bigger tanks.

However given that a number of modern new Leopard 2s are available on the second hand market then it's possible buying Leopard 2s would be at least as cost effective as upgrading our Leopard 1s while delivering a greater level of capability.

The latest model Abrams is a big, heavy, expensive tank. Its advantages for Australia over a lighter tank are not clear. Perhaps the key advantage would be increased ability to operate with US forces in coalition operations. But there would be little value to the US in such a contribution. A fleet of sixty tanks would only allow Australia to deploy about thirty on operations: alongside the thousands of tanks America can deploy this would be insignificant. The US would probably prefer Australia to focus on the kinds of capability in which we have acknowledged excellence—like Special Forces.

For independent operations in our own region, a fleet of 60 Abrams may be less capable than 100 upgraded Leopards. Heavier tanks are harder to deploy, and smaller numbers reduce the scope and flexibility of tank support. These disadvantages could outweigh the Abrams edge in armour and firepower. And it remains uncertain what additional infrastructure and operating costs also come with buying American.

Finally there is a question about priorities. Buying new tanks didn't seem to be a priority for Defence and Army in 2000 when the Government asked its military advisers for their capability priorities over the next ten years whilst formulating the DCP. New tanks never rated a mention then and the vulnerability of the Leopard 1 presumably is the same in 2003 as it was in 2000. And if, as the Government says, the ability to undertake independent operations in our own region remains our highest defence priority, there would have been a strong argument for spending more money on expanding our infantry forces rather than buying new tanks. The most persistent deficiency in Australia's land forces is not that they lack the extra firepower or protection that new tanks would offer, but that they have too few soldiers to sustain deployments. This could become particularly critical if we need to handle concurrent crises in our own region, which is quite probable. The relative priority of buying new heavy tanks against funding additional personnel in infantry and logistics areas is thus open to question.

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Frigates

As a result of the DCR two FFG frigates will be retired early. This decision seems strange given that the DCR itself acknowledges that the frigates have “been engaged constantly since September 2001 across a full spectrum of operations”.

The two frigates in question, HMAS Adelaide and Canberra, were commissioned in 1980 and 1983 respectively. The remaining four FFGs were commissioned from 1983 to 1993.

Even though it is the two oldest FFGs that have been retired, the decision doesn't seem to have much to do with their capabilities. Rather it is about saving money and freeing up personnel. The Minister's statement says that these retirements and lay offs are required to fund upgrades to the rest of Navy's surface combatant force (see below). The decision probably also has something to do with freeing up Navy personnel to adequately crew the remaining ships in Navy's surface fleet. At least \$500m remains of the \$1.445b FFG upgrade project. The Government has yet to announce how much money of this contract can be recouped through the retirement of two of the six FFGs that were to be upgraded.

As a result of this decision the number of major surface combatants planned to be in service with the RAN by 2006 will fall from fourteen to twelve. The Chief of Navy has made the point that this will still be one more than we have at present. But on present planning the fleet will fall again to eleven ships when the last FFGs retire. Admittedly the average capability of those ships will be higher, but recent experience suggests we are likely to need more less-capable ships rather than fewer more-capable ones in future. It's doubtful that will change much over the next ten years.

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Aegis Cruiser USS Bunker Hill fires SM-2 surface-to-air missile
© US Navy

The remaining four FFGs will have their air defence capabilities upgraded by acquiring the SM-2 missile. The Minister in his press conference acknowledged that “upgrading the SM-1 missiles to SM-2s on the FFGs is a challenging project”. In fact the project is understood to have doubled in cost over the past two years, and technically it remains a highly risky project. The FFGs are already undergoing a billion dollar upgrade that is some two years behind schedule due to problems in the design, development and delivery of the combat system software. And even if installed successfully the FFGs still won’t be able to utilise the full range of the SM-2s’ capabilities. So it’s open to question whether the money invested is worthwhile to gain what the Minister himself described as an “interim capability”.

Air Warfare Destroyers

The Government also announced that it would buy three air warfare destroyers (AWD). This is not a new proposal: in the 2000 White Paper the Government committed to purchasing “*at least* three air-defence capable ships”. With an overall budget allocation of over \$4 billion it was expected that project could end up buying at least four ships in total. At the press conference the Minister stated that the AWDs are a “little more expensive than what we might have first thought but we have factored that into the revised plan”. That would suggest that the final decision to purchase three instead of four ships has been due to increased costs. What remains unclear, however, is whether those increased costs are also due to the Government’s decision to confine the purchase to a US combat system, most probably the Aegis system, rather than having a more open competitive process.

Mine Hunters

The laying up of two mine hunters remains one of the more puzzling decisions taken in the DCR. The DCR states that “the Government’s strategic guidance will enable it to lay up two mine hunter coastal vessels” but provides no indication what that strategic guidance actually is. Only one week after the Minister announced the decision Defence released a statement publicising the positive role that one of those mine hunters played in the deployment to the Solomon Islands. Given that our patrol boat force will shrink from fifteen Fremantle boats to twelve (albeit more capable) Armidale class boats, the Navy’s six mine hunters provide a good back up capability for such patrolling tasks.

Moreover these ships’ core role of mine hunting remains highly relevant in our current strategic environment. In the event



USS Essex battle group—formation steaming—Though larger than the ships Australia will purchase the USS Essex (LHD-2) gives a good idea of the capability being sought. © US Navy

“Whether Australia has the shipbuilding capacity to build vessels of this size remains uncertain. The same goes for whether such a ship can be chosen and built in time for the retirement of HMAS Tobruk in 2010.”

of Australian involvement in a conflict between China and the US, or on the Korean Peninsula, the laying of mines in Australia's harbours would be among the more credible ways that an adversary could bring military pressure directly to bear on Australia. Mines could be laid covertly in Australian ports by seemingly innocent shipping. And mine warfare also remains a capability that the US depends upon its allies for in coalition operations. Of course the laid up ships could be brought back into service if needed, but that would take some—unspecified—amount of time. The requirement for mine-hunters could arise with very little warning, and for a marginal saving the strategic risks of cutting our capability by one third could be disproportionate.

Amphibious Lift

The Government has decided to replace the oiler HMAS Westralia with another second-hand commercial-standard tanker, which would then be refitted in Australia. This will save money compared with the original plan to build a purpose-designed vessel in Australia. The savings will help pay for more capable amphibious ships than was envisaged in the White Paper. The White Paper costings for the eventual replacements for the current amphibious ships—HMA Ships Tobruk, Manoora and Kanimbla—were based on ships around 12,000 tonnes.

The Government now plans to replace HMA Ships Tobruk with a larger amphibious vessel in 2010 and successively replace the two LPAs, HMAS Manoora and Kanimbla, with a second larger amphibious vessel and a sea lift ship. This means we'll move from having three amphibious ships to having two amphibious ships and one transport vessel.

Little detail is provided on the “larger amphibious vessel”. The Chief of Navy stated the ship would be in the order of 20,000 tonnes or more with the capacity of operating at least six helicopters. That compares with the LPAs (8,500 tonnes) and Tobruk (6,000 tonnes). Two vessels that would meet that requirement are the French Mistral class amphibious assault ships (200m long and 22,000 tonnes fully loaded) or the Spanish LHD ship (225m long and 26,000 tonnes fully loaded). Whether Australia has the shipbuilding capacity to build vessels of this size remains uncertain. The same goes for whether such a ship can be chosen and built in time for the retirement of HMAS Tobruk in 2010 as the DCR statement suggests. The Chief of Navy said no consideration was being given to using

these ships to operate fixed wing aircraft, such as a vertical landing version of the F-35 Joint Strike Fighter (JSF).

There are advantages and disadvantages with purchasing larger ships. A smaller number of larger, more capable ships has the advantage of requiring fewer assets to be protected by escort vessels. Larger ships can transit more comfortably in higher sea states, have a longer range and can operate a larger number of helicopters (six landing spots versus two to three for smaller ships). But they also provide only the same number of docking spaces for landing craft as smaller ships. That means a larger number of smaller ships would have more amphibious lift overall than a smaller number of larger ships.

Individually larger ships are also higher value targets and if even one vessel is not available then the amphibious capability suffers a significant reduction (in this case 50%). And a greater number of smaller ships, while increasing the number of land craft you can operate, can also have increased flexibility for helicopter operations through the increased number of decks. And the use of larger helicopters such as the NH90 or EH101 helps to nullify the helicopter advantages of larger ships.

A smaller number of larger amphibious ships also decreases operational flexibility. The recent deployment of HMAS Manoora to the Solomon Islands lasted three months. Sending a 26,000 tonne helicopter carrier to do that task would have been a capability overkill. And it's debateable whether the ADF could afford to have 50% of its amphibious capability dedicated to what amounted to an ADF-supported operation.

This is backed up by Defence Science and Technology Organisation's (DSTO) modelling and Army's own Experimentation Framework which are

understood to have both concluded that a greater number of smaller ships offered more capability—and met Army's lift requirements better—than a smaller number of larger ships.

The specifications of the sea lift ship remain unclear. The Minister said the form of that ship is not a decision that's been taken to date and that a number of options are available. These would include commercial roll on/roll off ships (RO/RO) or high-speed catamarans such as the HMAS Jervis Bay used during the East Timor deployment and currently being trialed in the US. It's possible, however, that the experience of operating two large 26,000 tonne amphibious ships means that Defence might be unwilling to, or incapable of, purchasing a further sea lift ship for purchase cost, operating cost or personnel availability reasons.

So while the DCR commitment to enhancing amphibious lift will certainly result in a considerable increase to existing capabilities, it's uncertain whether this will be the best amphibious capability option for Australia.

F-111

As part of the DCR the Government announced that the F-111 could be withdrawn from service by 2010, some 5-10 years early. This will save Defence a lot of money—hundreds of millions of dollar annually. But now the F-111's retirement will occur before the arrival of its nominated replacement, the F-35 JSF. That might reflect a view that the JSF's won't arrive by 2012 after all. The Government now expects that further weapons upgrades to the F/A-18 in conjunction with the arrival of the AEW&C and new replacement AAR aircraft means Australia will have a strong and effective land and maritime strike capability without the F-111.

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Formation of F-111 & F/A-18 © Defence Dept

Given that Defence's difficulties with the F-111 upgrade program means it has failed to deliver operationally capable aircraft for a modern operational environment, the decision to retire the F-111 early makes some sense. The money being used to maintain the F-111s in service and upgrade them further can probably be better spent elsewhere.

However there remains uncertainty that the upgrades to the F/A-18s which are intended to enhance their strike capability will be completed before the F-111s retire. Even if they are successful, Australia's strike capability will have fallen well below the levels planned for in the 2000 White Paper. If the F/A-18 upgrades run into trouble, we could face a serious strike capability gap. This risk could be reduced if the Government had decided to buy two extra AEW&C. An option to purchase the extra two AEW&C aircraft expires in mid-2004. By exercising the option, for a 10% increase in the price of the AEW&C project we would get a 50% increase in the

number of aircraft and a similar increase in overall capability. We would also gain the capability to use the AEW&C aircraft in two different geographic areas. That means we could use them in a coalition operation deployed overseas while still retaining a capability to defend Australia. And the current budget allocation for the AAR project only allows for up to five aircraft which means we will probably only receive a total of four. More AAR would also be a good way to enhance our strike forces once the F-111's are gone.

Finally, there are three other important issues about the future of our strike capability raised by the DCR announcements.

- Defence needs to ensure that any new weapons to be integrated onto the F/A-18 will also be able to be integrated onto the F-35 JSF. The two stated projects in question, the Bomb Improvement Program and Follow-On Stand Off Weapon —totalling some \$500m of

investment—are expected to have an in-service date of 2007/08. The F/A-18 is due to retire from 2012. If we are to get more than 5 years worth of precision weapons capability on our aircraft for the \$500m spent then the weapons will also need to be compatible with the JSF. Furthermore depending on the actual weapons chosen, their integration onto the F/A-18 could be costly, lengthy in time and not guaranteed of success. Australia's track record of successfully integrating new weapons on old airframes is not a good one.

- Prior to the Government's announcement on the new retirement date of the F-111 an additional \$500m was planned to be spent on capability enhancements to the F-111 fleet. These included improved electronic warfare self protection, enhanced reconnaissance capabilities for the 4 RF-111Cs, and improvements to the F-111s precision strike capabilities. The Chief of Air Force stated that "one or two" of these enhancements "will be proceeded with", the rest of the projects are expected to be cancelled. However no detail was provided on which will stay and which will go, let alone how much it will save.
- At the same time as announcing the integration of a stand-off strike weapon for the F/A-18 the Government also announced the intention to integrate this weapon on the P-3C Orion aircraft. So for the first time the RAAF's maritime patrol aircraft, the AP-3C Orion, is to be given a stand-off land attack capability. Assuming the Government and RAAF are truly serious about using the AP-3C as a dedicated strike platform—rather than just a means of arguing that there won't be a capability gap when the F-111 are retired—then this should be considered as a serious option to replace

the F-111 strike capability rather than relying solely on the JSF. Past Australian and UK studies looked at the feasibility of using slow moving aircraft such as the P-3 and C-130 Hercules with larger carrying capacity than jet fighter aircraft as "bomb trucks", loaded with advanced cruise missiles that enable them to undertake strike missions at stand-off ranges out of harm's way. Depending on the ADF intent and experience with the AP-3C this may yet become a reality.

UAVs

The DCR announcement also states that the Air Force has plans for the acquisition of Global Hawk unmanned aerial vehicles. That decision is particularly welcome news as the future of the Global Hawk was under some doubt given the increase in its cost due to a number of capability enhancements sought by the Pentagon. In a recent press conference in the US, the Minister said that Australia's particular interest in the Global Hawk is "of the maritime surveillance variety". Given their demonstrated value in operations in Afghanistan and Iraq, however, it would seem sensible not to limit their roles and capabilities to just one particular environment.

Conclusion

On balance the DCR 2003 doesn't provide any real change from the broad strategic direction the Government announced in December 2000 when it released its Defence White Paper. And that would appear to be a good thing. But the DCR's emphasis on moving the ADF towards a smaller number of larger and more capable platforms does seem to focus more on the ADF's ability to undertake higher-intensity conventional coalition military operations.

Since the attacks of September 11 the Government has announced a number of separate measures within the Defence portfolio which will arguably increase our counter-terrorist capabilities in response to a terrorist attack within Australia. But the DCR doesn't seem to do much to increase our capability to handle independent lower-intensity unconventional operations in our immediate neighbourhood or beyond. Furthermore the DCR is only the next—not the final—step in the current review of the DCP. And it does not deal with any of the budgetary issues facing the DCP or Defence as a whole. So the DCR is unlikely to get rid

of the growing and widespread perception that the Government is either no longer committed to *Defence 2000* and the Defence Capability Plan that underpins it or that it can afford to realise those plans.

For these reasons it's time for the Government to consider the drafting of a new Defence White Paper to bring back a degree of confidence, certainty and consistency in Defence strategic planning. That would also enable the Government to re-establish the clear links needed between its strategic objectives, capability priorities and financial guidance.

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