Introduction

This submission deals with the effect of procurement failures on Australia’s defence posture.

Whatever the proposals put forward in the 2015 white paper they will fail unless they are properly resourced. Currently our procurement failures ensure an inadequate
operational capability. We have spent the money to provide adequate capability, however the ADF can only act as a valued adjunct to US forces and can only carry out significant missions in our area of operations with active US intelligence and logistic support.

The preliminary report of the Senate Committee identified most of the areas of failure in Defence procurement. To continue enquiries needed to call DMO and ADF personnel, politicians, reporters, industry representatives, consultants and retired ADF and DMO personnel. Many of the people who have detailed knowledge of the procurement failures have an interest in supporting the status quo and are complicit in maintaining the screen of silence.

While the Senate Committee may be able to further analyse the actual performance of the parts of the acquisition organization to determine causes of failure as judged against the original project aims and benefits also including cost, timeliness and utility; this process may result in a hardening the automatic defensive posture taken by DMO and increase the inertia and resistance to the necessary changes.

It may be sensible and more effective to propose [or mandate?] a change process which could be reinforced by further investigation if the need for change is disputed.

The Preliminary Report, released after Parliament had risen in December 2011, has received little or no media attention and there has been no public response from the ADF or DMO.

The information for this analysis is from general and defence media and press releases and various Government reports. Information is also available from retired Defence personnel, who are frustrated by the procurement failures and silenced to some extent by a sense of loyalty to their comrades. The claims made can be substantiated, at least to some extent.

This submission includes:

1.0 Strategic and Political Background to Defence Acquisition
2.0 Causes of Failure
3.0 Analysis of Deficient Projects
4.0 Defence Scientific and Technical Organization [DSTO]
5.0 Recommendations for a new Defence Acquisition Organization.
6.0 Implementation of Change

1.0 Strategic and Political Background to Defence Acquisition

Australia's strategic position requires protection and care of its territories covering a huge area of the globe stretching from Antarctic oceans to tropical seas, encompassing
islands and an entire continent that is rich in minerals but poor in water with two thirds of our continent desert.

Australia has around 1% of the world's economy; 0.3% of the world's population; spends1.2% of the world’s defence budget and is in the “Top Twenty” both in the size of its economy and defence spending.

Australia needs to project operational forces over its territory; to counter potential aggressors; to have a significant retaliatory capability; to support our defence alliances with expeditionary forces; to support neighbour nations with police action and emergency aid when asked to, and to foster good government, democracy and individual freedom wherever our forces are deployed. The ADF has its origins in the Citizen military that served in the two World Wars and enjoys huge public support. In line with the nation’s values, it is generally assumed that the ADF would not make war on civilians or resort to inhumane practises.

Australia has no territorial ambitions so an essentially defensive posture is maintained. To remain secure the capability and intentions of potential aggressors should be monitored to ensure the ADF has the capability to neutralize attack and to retaliate. A potential aggressor may identify any faults and deficiencies in our capability and shape their strategy to exploit what is perceived as a weakness in our defences.

Historically Australia counted on the UK as the colonial power and major ally. We now count on the nuclear protection of the USA and strongly support the ANZUS treaty in the expectation that the USA will come to our aid if we are attacked. This support argues for a high degree of interoperability between US and Australian forces which in some instances dictates corresponding capabilities.

The US has an annual Defence spend of some $687 billion us and while there are significant demographic changes in the US and their economy is under threat, the US is capable of projecting its military power anywhere in the globe. The US accounts for 42% of the total global military spend and remains the only super power. There are strong links between political alliances and the military spend in the US with Senators and Members of Congress actively pursuing military spend for their electorates and senior military commanders actively seeking a career after their time enforced retirement. This has sometimes shaped US capability with a knock-on effect in Australia. The political capital associated with the US military spend means that the US does not always buy the best available, it buys American to the best political advantage. With the exception of the US Marine Corps, there is little likelihood of any significant sourcing from other nations.

While Australia will willingly respond to the US alliance, there needs to be some caution so that sufficient independent capacity to respond is maintained in the circumstances that the US is distracted or disinterested. It would be very tempting for the US to consider Australia only as an auxiliary force that fits into their deployment plans. In WW1 the ANZAC was considered as such a colonial force; by the end of that war it was very clear that arrangement did not suit our needs and should never be repeated. This
was reinforced in WW2.

Australia follows the US lead in most things and may wrongly consider itself a mini super power. But in actively fostering the alliance it seems that Australia’s political leaders may seek to curry favour with the US and may make off-the-cuff arrangements to acquire certain bits of US hardware.

In Australia senior commanders have close relationships with the local defence industry, and some have aspirations of industry employment. The local industry prizes its close and evolving symbiotic relationship with DMO and ADF. This mutes complaints that industry has and enables DMO to claim a high level of industry support.

US commanders are also responsible for their inventory of equipment whether it is active or mothballed and are always keen to turn surplus equipment into real money. The Australian Navy’s purchase of two second hand ships may have reflected this. It was rumoured at the time that they had been purchased without a survey. This means that someone accepted an American assessment of the ship’s condition. This would be like buying a used car without a club inspection or roadworthy certificate. The Abrams tanks purchased were also in need of significant unplanned rectification of their communications equipment. It is also not clear how the tanks in operation can be transported and supplied with fuel and ammunition. There are insufficient trucks in the ADF to service and supply a full blown tank attack.

Sweden is a nation of 9.5 million and is determined to prevent attack by making an aggressor’s military effort too great for them to even consider attacking. Its procurement policies and procedures are focused and very effective. In addition to maintaining appropriate levels of capability, Sweden is also a significant exporter of sophisticated arms. Like some other smaller democratic nations such as Canada and the Scandinavians; their acquisition policies and systems could be studied. Australian processes have been based on a UK, two-pass system that takes four years [WW1 was over in four years] to get approval to commence acquisition and are applied to an industrial/political system that is closer to the US model. We may have the worst of both worlds.

The peace-time battle for military commanders is to maintain an appropriate capability. Their adversaries in this struggle are government departments that have infiltrated the defence force personnel and culture.

The ADF needs to acquire capability which offers the highest practicable protection to its personnel. Equipment does not always need to be the best available; it only needs to counter the capability of potential aggressors.

The current failures in procurement have seriously harmed Australia’s defence capability. Our military leaders have abused the trust of the Australian public. It is to be hoped that our military leaders can effectively pray for peace because they could not win even a small war.
2.0 Causes of Failure.

DMO BEHAVIOURS

DMO will go to extraordinary lengths to avoid admitting mistakes.

There is a high level of error, ignorance and incompetence in project assessment and execution.

In assessment and critical decision making, assumptions made are not subject to simple checking.

Detailed DMO errors and inconsistencies when documented are rarely acknowledged or refuted by DMO. In the 600 page DMO procurement procedure the word “appeal” does not appear.

Answers to complainants are deliberately delayed to wear out the complainant.

If challenged legally it is likely that DMO will use its deeper pockets to outspend a SME litigant. Because of the high cost of preparing a brief, the avenue of legal action becomes too expensive for SMEs to consider. The likely response from DMO would be to persist in protecting their position by testing the depths of the complainant’s pockets.

SME complainants are often excluded from selection in subsequent tenders or requests.

POLITICAL INFLUENCE

The process responds to political influence. The relationship between Thales and DMO [RFP Land 121 Phase 4] is an example where DMO has chosen a less than optimal course of action because of political pressure and influence.

There is nothing wrong with local members and companies trying to push their own barrow, though they may be ignoring the best interests of the ADF. However if the acquisition process responds to [or is forced to respond to] political pressure then the capability of the ADF may be compromised.

Did the DMO hold up the RFP Land 121 Phase 4 processes to allow the JLTV program to produce a conforming vehicle? Did DMO select the three “local” contractors [owned by international defence companies] partly on political appeasement to Thales, but also to ensure that the selected candidates could not compete with the reported performance of the JLTV?

At testing none of the proponents met the requirements and the JLTV program has since been cancelled in the US, with the loss of upfront payments and teaming costs probably exceeding $50 million. Now DMO has an arrangement for Thales to develop a suitable vehicle reported as a two year $20 million project. The original upfront arrangements were made around September 2007. After development and production these units will not be fully supplied until 2018. This is a long time to wait to provide protection to our troops who must patrol on foot when the heavier less manoeuvrable Bushmaster cannot be used.

There have been a number of projects where DMO has been invited to stump up front end development fees of millions of dollars where there is no certainty of an outcome. In some cases this money has been lost along with staff costs associated with joining the project team. These arrangements may be reasonable as a deposit to enable production to commence where physical goods are to be supplied. Up front development fees should never be paid. DMO should indicate a willingness to buy a satisfactory product when it becomes available. If that does not satisfy the supplier, DMO should source the product elsewhere or do without. It
would be interesting to identify the projects in this category and quantify the amounts lost.

Apart from the apparent universal fixation on buying US equipment of any age, condition, or state of development, the problem is that politicians have been unable to deal with the entrenched incompetence of DMO. If political decisions were not sought from, or offered by DMO then politicians would remain in position to curb DMO, rather than remaining silent.

Politicians who wish to support particular electorates and the alliance by agreeing to particular purchases should formally instruct the defence acquisition authority and table the instruction with its additional budget allocation in Parliament. The defence acquisition authority would be absolved from any deficiencies arising from the instruction and the purchase.

**PROCESS BOUND**

The process used is cumbersome; requires huge amounts of useless information; lacks effective risk assessment and is wasteful of time and resources.

The gate processes are intended to approve that the project goes on to the next stage. The approval to proceed implies poor decisions if projects subsequently fail or become “of concern”. The gate process is not intended to encourage changes in scope or increasing complexity and risk.

The evaluation process is aimed at selecting the best presented proposal; instead of the best, low risk, optimal cost solution.

Requirements are not written around the required function, insisting on performance guarantees and warranties from the supplier, within a fixed price with agreed escalations.

The process ensures that nobody in DMO is responsible for any late delivery, cost over run, or in-service performance failures.

When challenged that an error was made, the process is used as a shield for incompetence. The error will not be addressed and the complainant is given the stock answer that the proper process was used.

Buys of redundant equipment can be very effective particularly in an international climate that mandates defence cutbacks. This opportunity challenges the current processes. These purchases require serious testing and should come with a warranty or perhaps part payment is held against future performance and assurance that the delivered product has not been damaged or misrepresented. If there is significant Australianization required then the work may need to be progressed as a separate project with full risk assessment, budget, timeline and functionality requirements.

**LOCAL INDUSTRY RELATIONS**

Where the acquisition organization is instructed to favour a particular supplier or purchase by political pressure, ADF should only respond if the instruction is tabled in parliament with additional budget approved and are absolved from any subsequent product failures.
Australian companies do not have a right to supply to the ADF, but should be given the opportunity to openly and fairly compete with all other suppliers. Industry Departments should focus their assistance budget and resources on making the SMEs fit to tender. Industry support is a distraction, a source of risk and high costs to the ADF. Competitive proposals should be sought from local and overseas suppliers.

To minimize loss risk and delay the ADF should avoid artificial industry building.

It is interesting to note how disaffected and outspoken conference attendees from SMEs and Major companies are about the DMO’s slow and bureaucratic processes, poor decisions and interfering control which makes working with DMO very difficult and expensive. Many SMEs say they have or will withdraw from working with DMO. There is an over riding concern that DMO’s failures seriously reduce ADF capability. These views are rarely expressed directly to the ADF or publicly.

The Collins class submarines were late, over budget, unsatisfactory in service operationally [noise and weapons control] and were difficult and expensive to maintain. They were an unlikely basis for a submarine industry. There has not been an overwhelming demand from other nations. Apparently there may be another 12 submarines constructed in South Australia. Though Australia’s defence needs are sometimes unique it would take a huge leap of faith to expect that this current project could be successful. Surely others could do it better? Or existing in service equipment acquired?

How the ADF’s capability is degraded by a seriously flawed acquisition system is demonstrated by Land 121 Phase 4. [See further information in the section headed “Political Influence”.] Commenced in 2001 with the intention of acquiring the JLTV from the USA, as yet a suitable product for this requirement has not yet been provided.

The need to provide employment or economic advantage in Australia should not influence acquisition decisions. Though local companies may offer a strategic advantage in sustainability and support, and they should have the opportunity to supply to the ADF, they do not have a right to do so at the expense of capability.

The ADF could pre-qualify or directly contract with Australian SMEs. To work only through the so-called Primes puts the SMEs at risk

**PROJECT MANAGEMENT**

The deficiencies cluster around project management and may account for 80% of the project managed acquisitions. Perhaps all this expenditure over the last ten years could be accounted for and assigned to the projects and the project outcomes assessed against the original intent of capability, timeline and cost.
Generally, in project management systems, total project review is used to fearlessly and openly review or post audit each project to identify opportunities to improve outcomes and avoid future failures.

A rigorous post project audit system should be implemented.

The culture and performance of this part of DMO is fatally flawed and requires complete renewal.

Project performance to date could be audited by the Auditor General if further reasons are needed to convince current personnel of the imperative to change.

Why are the people responsible for failure and inaction still employed in the ADF, DMO and DSTO? The top three management levels of DMO/DSTO should demonstrate why they should continue to be employed. [“I just got here” could be an acceptable response as long as there is a demonstrable commitment to change] Those that can show that they have made a positive contribution to capability would be able to apply for positions in an entirely new organization that replaces DMO and DSTO.

3.0 Analysis of Deficient Projects

Some deficient projects
1. **Project Waler** - a project in the early 90's for a new generation of vehicles - announced and then cancelled

2. **Project Mulgara** - a project in the mid 90's for a new light vehicle for the recon/special forces - announced then cancelled

3. **Project Bushranger** - The Bushmaster project was characterized by very poor DMO project management and DCIC even recommended cancelling this in 2001 - now the Bushmasters are regarded as critically important!

4. **Project Overlander** - started mid 90's - delay upon delay, then after a decision had been made it had to be re-tendered after the Rudd Govt came to power - now many years late

5. **M113 upgrade project** - awarded to Tenix in 1992. Stopped after a few years and then re-started with a totally different powerpack etc now many years late and of very little use in the new environment where I.E.D.s are the main threat.

6. **The Seaprate helicopter project** - a $1bn contract cancelled after the substandard helicopters had been delivered many years late.

7. **The Collins class submarines** - ordered in the early 90's, billions of dollars over budget and still not performing reliably or to specification

8. **The Manoora and Kanimbla** “rust buckets” the ADF bought from the US and spent a few hundred million dollars repairing and now they have to be scrapped because they are beyond repair with rust.

9. **Project JP129. The Boeing UAV project.** Cancelled.

10. **The JORN over horizon radar system** - may years overdue and many millions of dollars over budget

11. **Wedgetail airborne early warning system** - many years late now and according to reports not meeting specification.

12. **The Airbus A330 MRRT (multi role tanker transport) project** - running late again by a substantial margin

13. **The NH90 helicopter** project is in trouble with engine problems and is now also running late

14. **The Aussie tiger helicopter project.** Did not meet contracted milestones and performance so project had to be "re-base lined". Latest planned operational readiness status now December 2011 - 10 years after contract signature!

15. **The Caribou replacement project** is many years overdue. This important capability has already been lost (all the Caribous have now been retired) and still no replacement! What does this say about professional planning?


17. **Land 121 Ph 4.** DMO rushed to sign up for JLTV without proper research, then invited locally manufactured options against PMV-L to a different specification short listing 3 contenders as opposed to the two provided for in the RFT in the process ignoring the best contender, the PTS Pty Ltd Protector 2. Currently an acquisition solution is in doubt.

18. **Project 2097 (Redfin)** for vehicles for the Commandos. This project is already running 3 years late and the earliest these vehicles will go into service is in another 3 years time if all goes well. This capability could have been satisfied with platforms from Land 121 Ph 4 with some modifications and the SAS could also easily have used this platform instead of the Supacat Narys. The ADF is now going to end up with 3 different platforms for 3 basically similar applications.

And the list goes on.

**4.0 DEFENCE SCIENTIFIC AND TECHNICAL ORGANIZATION [DSTO]**

The activities of DSTO, all expenditure, funding and research grants together with their
outcomes in terms of improved capability could be evaluated by the Auditor General if there is resistance to organizational change.

There have been some outstanding non events, for example the unmanned drone program and the search for improved armour designs, which was the subject of a DSTO press release intended to protect the long term research effort that has gone nowhere by "discovering" [just then] that steel is the way to build armour [better than composite that was lauded by DMO] and that perhaps within two years they will be able to build a light APC such as those already in the market place.

DSTO should be disbanded and replaced by a new technical division that services the acquisition groups, providing product testing and assessment and the proven expert evaluators that the acquisition groups require.

5.0 Recommendations for a New Defence Acquisition Organization to Enhance Defence Capability

5.1 Introduction

The following organization description is intended to indicate what could be done, even with the very diverse and complex structure that exists now. The principles of short lines of responsibility and self contained outcome oriented units are important.

Through structural and organization change, appropriate processes and cultures could develop and failures in some areas would not be hidden behind success in others. A new organization’s divisions should separately publish outcomes against the originally approved cost, timelines, availability and functionality. This would establish the efficacy of the processes in use in the different divisions and provide for continuing evolution of processes that result in outcomes that enhance capability.

The separate organizations should be responsible through independent CEOs who report to a “Board” [or similar overarching body] comprised of the most senior defence officers and with involvement from Treasury and others such as Foreign Affairs. The “Board” would need a staff unit to assist to define and prioritize the required capabilities [Capability Development] to deliver the defence strategy and staff units such as a legal and compliance section; a strong internal audit team to ensure accuracy in reporting and compliance with the new policies and a Personnel, Performance and Policy group that develops appropriate policies, reviews all senior position applicants and assesses their subsequent audited performance.

The “Board” would be responsible for ensuring that the appropriate capability is timely matched to our operational forces’ mission requirements and supports the defence strategy, enhancing overall ADF effectiveness. It would be supported by the Capability Development function that processes intelligence and strategy to determine appropriate capability for authoring, prioritizing and budget allocation the “Board”
The new organization would not need a separate Minister and would not determine defence strategy. It would ensure that capability is maintained to support the strategy.

Instead of being a part of the ADF the new organization could be a Government Owned Corporation.

5.2 Appointing the Right People

Why are the people responsible for failure and inaction still employed in DMO and DSTO? The top three management levels of DMO/DSRTO should demonstrate why they should continue to be employed. Those that can show that they have made a positive contribution to capability would be able to apply for positions in the entirely new organization. To avoid the loss of functionality and to attract the right people it may be necessary to employ people on contract or to use a GOE as the employing body. To attract experienced competent effective Project Managers the organization will be required to meet the market in remuneration and conditions.

5.3 Organize to Achieve Outcomes; Right Culture, Right Processes

The new organization could have five independent units or divisions:
- Sustained supply [acquisition and distribution of regularly required supplies and services];
- Technical development, testing and assessment [on specific contracts];
- Major acquisition [contracted off the shelf];
- Major acquisition projects [project managed],
- Major acquisitions, second hand

Care, maintenance, replacement and training for legacy systems should also be re-organized, perhaps as a separate unit or as units within each arm of the service.

Sustained Supply

This unit establishes and manages sustainable supply lines and logistical systems to supply user approved services and supplies, using sophisticated purchasing, inventory control and distribution systems. They should operate within budget and access additional funds when necessary to keep units operational when tempo increases. Their cost effectiveness is measured against the operating capability of the units they supply.

Their task: The right stuff in the right place, at the right time, every time.

Technical development, testing and assessment

Comprised in part of competent former DSTO staff, this staff unit services the acquisition groups, providing product testing and assessment and the proven expert evaluators that the acquisition groups require.
Their task: Provide competent technical advice as and when required by the acquisition groups.

**Major acquisition [contracted off the shelf]**

This division offers superior contract development and administration and could utilize some appropriate staff now within DMO. The contracts should agree price, delivery, functionality and include warranties. The purchases must be for supplier specified equipment and supplier developed options. If Australianization is needed [it should be separately justified, costed and risk assessed] which requires significant additional ADF funded research and development and resources the project should be managed by the project group.

In effect this group competes with the other acquisition groups.

**Major acquisition projects [project managed]**

This unit sets up discrete self-contained project management teams to deliver the defined capability on time and within budget and retains the same team members through to post project evaluation when each team member is rewarded, deployed to a new project or terminated, as appropriate. If the project is not meeting targets it should be reviewed in totality and may be cancelled, continue with new authorized target or a replacement project team.

Their task: Achieve project success [on time, within budget, achieving the required functionality] through competent, committed, self-contained project teams for each project.

**Major acquisitions, redundant equipment**

This can be a very effective source of suitable capability and depends on assessment of equipment functionality and condition. The supplier should be requested to provide on-going support and have appropriate portions of their payment withheld against future in-service performance, with any necessary rectification funded from the withheld payments. In current negotiations, it could be assumed that Australia maybe the only buyer and that a financially attractive arrangement could be made.

If Australianization is needed [it should be separately justified, costed and risk assessed] which requires significant additional ADF funded research and development, the project should be managed by the project group.

This group requires a high level of operational skill, engineering and contracting skills.

The division should keep up-to-date lists of equipment that is available or is becoming available and formally provide this information to Capability Development to see if there are possible matches.

In effect this group competes with the other acquisition groups.

**Legacy systems availability**
This function needs review to ensure that stored capability systems such as bridging; multi-port helicopter refuelling; ablutions, water purification and waste systems; and emergency equipment are maintained in deployable condition and personnel training in their deployment and use is kept up-to-date.

Apart from the waste of resources, it must be embarrassing for our senior commanders to have to continually beg the US for assistance in these areas, particularly when our own stored equipment is unusable.

Currently this function seems to exist within the ADF, but is not effective. The review should ascertain what equipment is involved and assign responsibility for keeping it ready for deployment and its operational functionality should be regularly audited.

6.0 Implementation of Changes.

Supporters of the status quo and the existing organization can be brought to accept and be committed to change, as an alternative to continuing reviews publically outing them as incompetents who have seriously damaged Australia’s defence capability.

A key group, Personnel, Performance and Policy [PPP] should be established, comprised of experienced capable turnaround and restructuring experts.

The PPP should devise a structure and organization that that will deliver the ADF’s purpose and select the people who will head up the new units and commence filing the organizational slots in accordance with their position descriptions as devised by PPP.

New policies should be devised by the PPP for each unit to address the causes of failure; the specific unit’s function and to ensure that a culture of compliance and commitment to achievement is established.

The re-organization should be based on attracting competent staff from any source. The units could be quickly established from some of the competent existing personnel. The Major Acquisition [Projects] may be best renewed project team by project team and wiring them into the group.