

# Translating Australia's defence strategy into land warfare capability



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*This paper outlines Australia's post-2020 defence policy and describes how the Army is being modernised to give effect to it, within budgetary constraints. Initiatives include forward staging of logistics; littoral power projection; upgraded army aviation; establishing a health brigade; a focus on information warfare; an armoured vehicle replacement programme; a redesign of the brigades in Darwin and Adelaide; and a transformation of the fires systems, including air defence missiles, self-propelled howitzers, long-range fires, and land-based maritime strike.*

**Key words:** armoured vehicles; army aviation; Australia; defence capability; defence strategy; fires systems; information warfare; land warfare; littoral operations.

This paper will present an overview of government assessments concerning our international environment, the adjustment that Australia is making in its defence policy and the resourcing that is happening as a consequence. It will then address the Army at a macro level: starting with maintaining the force-in-being which is trained for its current tasks; while also recognising the need to prepare for the future – a future of both traditional and non-traditional outputs both for the Army and the Australian Defence Force (ADF) in an environment which is becoming increasingly volatile, uncertain, complex and ambiguous. These relationships between government policy and ADF implementation are illustrated in Figure 1, which shows documents that explain why change is needed (Defence 2020a, b), what is to change (Defence 2020c), and how the Army will contribute (Army 2020; Burr 2020).

superpowers, the United States and the Soviet Union. The notion of a 10-year strategic warning time of a potential state-on-state conflict involving Australia was articulated in that context. With the advent of the space and cyber domains in the last decade, the act of war is no longer tied down to physical distance or geography. The weaponisation of space and the interconnectedness of the world makes the 10-year preparation for major theatre conflict unrealistic. In the current era, the threats to our national security can be immediate, extraordinary and unexpected.

Further, wars are not declared anymore as Russia demonstrated in the Ukraine in 2014 when Crimea and part of eastern Donbas were captured. The current international order is being manipulated by rival nations conducting grey-zone military activities without conforming to the laws of war in place since the 1648 treaty of Westphalia<sup>1</sup> under which war is defined as an instrument of statehood – hence, there are rules and protocols for its conduct.

Hence, defence policy must visualise how to prepare and respond to sudden and unexpected contingencies. While geography remains relevant, Australia's strategic objectives need to move beyond the territorial nature of defence and expand how we work with friends and allies.

Policy analysis encompasses three key strategic defence objectives: to shape, deter and respond.

**Shape:** Shaping implies contributing to the security environment by working seamlessly with allies and partners to attain dominance of our joint strategic space and environment. It is the old Sun Tzu notion of pre-



**Figure 1:** The Australian government policy settings sit across the top layer below which depicts the ensuing policy outputs formulated and contributed by Defence [Source: <https://www.defence.gov.au/>].

## Australia's Defence Policy

Australia's 2020 *Defence Strategic Update* (Defence 2020a) was important in the context of the assumptions have been made about national security policy since 1973. In the 1970s, national security was dictated by the dynamics of the Cold War between the two

<sup>1</sup>The Treaty of Westphalia, signed in 1648, ended the Thirty Years' War (1618-1648) and the Eighty Years' War (1568-1648) and created the framework for modern international relations. The concepts of state sovereignty, mediation between nations and diplomacy, all find their origins in the text of this treaty.

venting war in order to win it as opposed to executing it (*i.e.* win without fighting).

**Deter.** If history tells you it is not possible to reduce the likelihood of war, the objective becomes to deter its occurrence. We need an ADF that is able to deter. So, how do you create an operational dilemma for the enemy; how do you take the first-mover advantage in a regional conflict; how do you impose your capabilities in the mind or on the will of your adversary to tip the balance away from their likely decision as it relates to the use of military hard power? Australia – with its 24 million people, 8.5 million km<sup>2</sup> in land area and a 0.5 million km<sup>2</sup> of maritime domain, and with limited means to deter a potential adversary in the Indo-Pacific region – is faced with a monumental challenge to secure our continental space because there is always a risk of being out-deterred. Some call it the escalation dilemma. If I turn up with my three battleships, and an adversary turns up with four and you have none left; then you have been escalated to a point of being out-deterred. So the notion of statecraft as a function of deterrence in the context of how we contribute to collective security really is a challenge.

**Respond.** When war comes, the response must be credible. Should conflict come, we have an enduring responsibility to our people to respond credibly. That directs priorities when it comes to investment – how we hedge risk against limits of capability. We want a standard-of-living commensurate with our society's expectations. This balance affects how much we spend on national security without compromising the cost of living, making sure that sovereignty and self-defence are not compromised in so doing.

So, policy resets the context of how we think about the operating environment; about how we might shape, deter and respond to a changing international system, while being conscious and responsible, knowing that we are of limited means and that we are a medium power with leadership responsibilities in this region. In the global context, however, we are of limited power compared to other nations – the comparison is what I call relational power.

When it comes to offsetting our inadequacies as a medium power, you could work with friends and allies, and we do. Here, the *Defence Strategic Update* (Defence 2020) provides the strategic context by which we recognise the changing nature and character of the international strategic order and how we respond to it. The last two aspects of the *Update* relate to emerging technology, artificial intelligence, robotics, automation, and the use of quantum computing, for example as another offset.

The ADF will never out-brigade or out-division a potential adversary in the region. Historically, in the context of our military contributions, it has been the intelligence, resourcefulness, creativity and positive attitudes of the Australian people that has been decisive *e.g.* Monash at Le Hamel/Amiens, Morshead at Tobruk,

Clowes at Milne Bay. The Defence Strategic Update drives the need to invest, attract and retain our best and the brightest people to build the ADF we need for the future.

The *2020 Defence Force Structure Plan* (FSP) (Defence 2020b) which accompanies the *Update* forecasts \$55 billion in land capability to realise the stated defence policy outcomes. This scale of investment is commonly expressed as 2 per cent of GDP, but in 2022 it will actually be 2.11 per cent. This is the floor by which Defence will be funded to realise the directions of the government.

The *Defence Transformation Strategy* (Defence 2020c), or transformation plan, which also accompanied the *Update* is about being able to be more efficient in delivering capabilities by thinking about service and reform.

The last two documents, the *Land Operational Concept Document* (Australian Army 2009) and *Army's Contribution to Defence Strategy* (Burr 2020) cover concepts, capabilities and the tactics; and the way Army organises and generates forces to ensure it can employ operational art to move, shoot and communicate commensurate with its direct missions and also be effective in close combat.

I would encourage you to read them because they give the high-level setting of what we are about to do in terms of recapitalisation. The government, though, has indicated that it will conduct a fourth posture review, so this work will continue to evolve over time. It will start to manifest itself in planning and decisions over the next 12 to 18 months.

## The Army Budget

The Army is a AUD\$9.9 billion a year enterprise in terms of funds under management, which would place it among the top ten securities if it were registered with the Australian Securities Exchange. In 2001, the ADF total headline figure was about \$12.1 billion a year; in 2022 it will be \$48.6 billion with the Army's share about \$9.9 billion. Over time, that increased investment comes with the increased responsibility and expectation that we will deliver on these government directions through capability. This includes platforms, personnel, organisation, estate and infrastructure.

A key element is the sustainment budget, which is the cost of the Army as it grows from 2022 to the end of the decade. We are recapitalising the Army of today in accordance with the policies outlined in the *Defence Strategic Update* based on the global and regional environmental assessments that apply to Australia and how we plan to shape, deter and respond to future defence challenges.

Capitalisation and sustainment are the strategic levers by which you can affect change using the one defence system to provide the desired future force. There are four aspects on which I want you to focus:

- major systems (platforms): tanks, armoured personnel carriers, infantry fighting vehicles, self-

propelled howitzers, facilities, the garrison (from which we fight in terms of force generation), and operational certification (so that our units can be deemed suitable for future warfighting);

- our people, our single most important asset – they will determine how successful we can be;
- our plans; and
- our organisation – the operational and logistics structures on the Army order of battle.

We are resourcing these four factors to give government and the ADF the set of capabilities needed to meet the challenges of the future.

The Army is being modernised through several vectors to produce what is loosely termed the 'Army Objective Force'. This 'Force' takes the Army as it is today then, using the planned investment and direction from government and with the backing of the Army and Defence hierarchy, delivers the army of the future. There are 16 dedicated groups and services in the Department of Defence working in synergy to realise the desired future force structures. At the business end, the Army operating system, the land-force support system, and the logistics structures, including combat logistics, comprise the national support base which are echeloned to meet the strategic, operational and tactical outcomes.

We need to incorporate defence industry into this planning. Two-thirds of Alexander the Great's Macedonian army were camp followers and logisticians. That has not been lost on anyone. In the current era, these initiatives are drawing the defence industry in Australia and overseas into our logistic systems so as to provide some of the high-level expertise and personnel who are suitably qualified and so in demand that we cannot keep them in uniform. They are off working for Telstra or BHP *etc.* We need to be able to access that part of the community because we face a skilled labour crisis in this country.

We will now consider some specific initiatives.

### **Logistics Forward Staging**

The forward staging of land force logistics is the first interesting initiative. Pre-positioning vital equipment and logistics infrastructure in the training areas will shorten the mobilisation and deployment time from home barracks to the training area and make the fighting troops effective in the training area in the shortest time. Fighting troops primed in full combat gear only need to fly in and fly out (FIFO) for the actual training time.

For example, 1<sup>st</sup> Brigade stationed in Darwin regularly travels to Cultana in South Australia for their scheduled training exercises with indirect fires, tanks and other heavy capability. The usual schedule is: 14 days for mobilisation and travel from Darwin to Cultana; exercise for 14 days at Cultana; and 14 days to move from Cultana back to Darwin – a total of 42 days.

In the logistics pre-positioning and FIFO model, the fighting soldier spends approximately 40 days on the training exercise, and only two to three days in travel/logistics. We are considering introducing this both

in South Australia and at Shoalwater Bay for east coast units.

### **Littoral Operations**

In the halcyon days of pre-1972 when Army owned Landing Craft Heavy (LCH) crewed by a corporal, sergeant and a captain, troops and equipment could embark in an LCH, chug out of the port of Brisbane and turn up in the Solomon Islands or Papua New Guinea. In World War II, the 2<sup>nd</sup> AIF moved 800km down the East Septic River in New Guinea. The Army wants to attain that level of power projection and independent mobility across the littoral seam as part of modernisation.

The littoral manoeuvre focus is about right-sizing our manoeuvre systems in Townsville as this focus relates to reinforcing our joint amphibious system; and then also thinking about what power projection could look like from Darwin. Imagine if you could unload a land component working with Navy, or perhaps independent of Navy, shooting across what we call a brown water vector and then turn up in a region to provide a training serial or to be able to generate the kind of tempo that we think we are going to need in future.

I mean no disrespect to the senior service, but faced with all sorts of challenges these craft could be crew by Navy or they could be crew by Army water transport. It does not really matter. It is about adding capacity to and modernising the joint the amphibious system. We are seeking the ability to reimagine power projection from Darwin.

### **Army Aviation Command**

Army Aviation Command will be another important function of this activity. The Army has established a two-star aviation command to own and concentrate air worthiness as a function of land power within Army's capability system. Also, the government has decided to improve and upgrade the ADF's fleets of helicopters. First, the CH-47 Chinook heavy-lift helicopter fleet will be expanded from the existing 10 to 14 aircraft. Eventually, the ARH Tiger armoured-reconnaissance helicopters will be replaced with the Apache AH-64 multi-role combat helicopter. Separately, the MRH-90 multi-role helicopters also will be replaced.

The aviation upgrade effort is seeking to increase the efficiency of the aviation system by driving single defence providers into our sustainment base so as to provide aviation capability without compromise to its effects in a way that is sustainable, effective, affordable and, more importantly, integrated with the joint force.

### **Special Operations Command**

Special operations modernisation and consolidation in capability and equipment will continue from the Special Operations Command bases in Western Australia, South Australia, and New South Wales. Wholesaling will consolidate and thicken inventories held, with equipment refreshed and capability modernised over time.

## Health Brigade

We are establishing a health brigade to be designated 2nd Brigade. It will be based in Sydney and will have four like health units, including a reserve component. There are about 1700 allied-health soldiers in the Army, including 37 full colonels, 35 of them Army Reserve specialists. Hence, there is a need to think about technical integration. Health leadership and tactical health effects are critical parts of how we do anything in Army training or operations. Putting some stewardship and some controls around how we nurture health capability is really important.

## Intelligence and Information Warfare

Intelligence and information warfare operations are based in southeast Queensland with some 32 full-time staff. Information and intelligence-led operations are key enablers of modern warfare.

The value of information-led operations is being demonstrated in the current Russia-Ukraine conflict wherein President Zelenskyy has garnered unprecedented international support across the globe. By the way he presents himself and his country's dire emergency into houses of parliament all over the world, he is able to unify the international effort to support his activities. The strategic benefits of information warfare in future conflicts are evident.

We need to be able do that too, as an army, as a joint force and as a whole-of-nation, given some of the challenges we face in terms of population relative to others.

## Armoured Vehicles

The land combat armoured vehicle system replacement programme will commence with the acquisition of a combat reconnaissance vehicle (CRV). This will involve the introduction into service 211 of the new Rheinmetall Boxer CRVs, which are being built in southeast Queensland. They will replace the ageing Australian Light Armoured Vehicles and enable the traditional armoured cavalry role in operations.

The main battle tank upgrade programme will deliver the M1A2 Set V3 version of the United States Abrams tank. The fleet size will be increased and the fleet will be enhanced by a combat engineering vehicle capability, including bridging, mine ploughs, and dozers with the kind of obstacle breaching and manoeuvre capability modern close-combat forces require. Built on the M1 Abrams chassis, the upgraded vehicles will start to deliver into service in the next two to three years.

Self-propelled howitzers are a new capability for Army. The weapon is the AS9 built by Hanwha in Geelong, Victoria. A regiment of that system will be delivered into the Army by the end of this decade and that really does complete the close-combat function of the armoured system.

Army wants an infantry fighting vehicle (IFV) to replace the current M113 fleet of armoured personnel carriers – the proposal is currently with the government.

The intent is to acquire up to 450 tracked and turreted IFVs to be delivered into service before the end of the decade with the artillery ammunition resupply vehicles and the other echelon vehicles.

Combined with the upgrades in the combat engineering systems, the Army will build to a level of capability that we have not had outside of major conflict. Every soldier, be they a combat engineer, armoured fighting vehicle crewman, infanteer, artilleryman, a joint terminal attack controller (JTAC), a commander, a logistician, or a recovery mechanic, will all be under the same level of armoured protection. This is the most significant armoured system we have had in our army since our armoured division in 1944. In terms of its weight and its expectation, we put a lot of faith in this system as it relates to meeting the challenges of future operating environments.

As to positioning, we have in mind up to three battle groups. We would like to focus on generating that capability by using the land force forward staging concept that I explained earlier – positioning some of this equipment on training areas, driving simulation of the system from home stations and building efficiency in that context. In future, you will see a greater emphasis on how we pre-position, how we force generate, and how we use things like heavy rail to move many of our systems around the country.

## Combat Brigade Restructure

We are in the process of redesigning what currently sits in Darwin and what sits in Adelaide. The 1<sup>st</sup> Brigade is in Darwin with the Regional Force Surveillance Group. Stationed in Adelaide is an element of 1<sup>st</sup> Brigade: 1<sup>st</sup> Armoured Regiment (1AR); 7<sup>th</sup> Battalion, Royal Australian Regiment; 144<sup>th</sup> Signals Squadron; and 1<sup>st</sup> Combat Services Support Team (CSST). Also in Adelaide is the 9<sup>th</sup> Brigade, which is an Army Reserve brigade which includes units like 10<sup>th</sup>/27<sup>th</sup> Battalion, Royal South Australian Regiment, and A Squadron, 3<sup>rd</sup>/9<sup>th</sup> South Australian Mounted Rifles.



**Figure 2:** The proposed posture of the Australian Army on the Australian mainland.

We are considering consolidating those systems in Adelaide under 9<sup>th</sup> Brigade. 1 AR and those other ancillary 1<sup>st</sup> Brigade units would become direct command units of 9<sup>th</sup> Brigade. Then 1<sup>st</sup> Brigade in Darwin would be right-sized, with its protected mobility systems to be more expeditionary and linked to the electronic operations system that we would like to introduce into northern Australia.

This would provide a brigade of capability in Adelaide, albeit specialised in ways that are different from the Plan Beersheba prescription of like combat brigades. That is not a bad thing as it would provide the opportunity to consolidate in South Australia and to focus attention on our Land 400 armoured vehicle systems. At the same time, it would enable us to demonstrate a unit of capability on a directed notice that is world's best practice. This 'tidy up' would produce a centre of excellence enabling us to drive efficiency and to shape and deter by way of having a credible capability.

### **Fires Brigade**

The planned indirect fires brigade will visibly transform the Army. Indirect fires include both artillery and missile systems.

**Air Defence:** The RBS 70 man-portable air defence system is being replaced with the Land 19 Phase 7B short-range ground-based air defence system which will introduce the National Advanced Surface-to-Air Missile System (NASAMS) into the Army. The facilities for these systems are being built in Adelaide. They will be delivered in the next couple of years to give the ADF a close air defence capability that it will build on later to create a future theatre system. Such a system right now is being used by NATO on the Poland-Ukraine border to provide close air defence for airfields that are pushing material into Ukraine.

**Self-Propelled Howitzers:** The next fires project will be the arrival of the AS9 self-propelled howitzer, which will both complement the armoured system and give us a self-propelled gun. It will enable the whole of a mechanised formation to move under the same level of protection. The counter-battery fire risk also is reduced as the AS9 system, being on tracks, can fire as much as half a battery and then move within one minute, whereas towed artillery cannot. You have only got to see the survivability risk Ukraine right now to understand the vulnerability of towed artillery. Self-propelled artillery is an important capability that will be delivered across this decade.

**Long-Range Fires:** Long-range fires are large calibre, heavy-hitting fires, which include missiles, cannon and other artillery. In this context, the Army has to become more operational in the way it views battlefield geometry and how it contributes to the joint force. In the 1980s, 100km was the deep battle space, and a 20km route march was commensurate to the the range of a D30 howitzer. That is still relevant, however the Army now will have to plan for the future the way the Air

Force and the Navy plan. Army has to think across theatres through long-range fires acquisitions. Equivalent to an air-warfare destroyer or an F35 fighter aircraft, our fire systems interconnect and bring resilience to the joint force, so there will be some significant investment in long-range fires.

**Land-based Maritime Strike Capability:** Land-based maritime strike is exemplified by the sinking of the Russian warship, *Moskva*, by Ukrainian anti-ship missiles in the Black Sea last April. The R-360 Neptune anti-ship cruise missile used to sink the *Moskva* is representative of the sort of capability Australia will seek to acquire as it revitalises its fires system as it relates to our geography. There is a long history of states using coastal artillery to achieve sea control and to deny choke points. The technological opportunity is about how the various joint force fire systems, including coastal batteries, can be integrated. Land-based maritime strike assures operational heft for the Army, similar to the capability of the Air Force and the Navy.

### **Conclusion**

The impact of satellite communications, space-based intelligence, surveillance and reconnaissance, and the use of cyber to pass real-time information to operational forces, are all going to be potent force multipliers in future warfare. It is crucial that we plan and modernise our ability to take counter measures against the same types of technology used by an adversary to neutralise and undermine our own systems. To this end, significant investments in information operations, public affairs, meteorological reporting as it relates to intelligence, and enhanced theatre-level electronic warfare, are in the pipeline to give the Army the operational edge and capability to fight future wars.

**The Author:** Brigadier Langford joined the Australian Army in 1992 and has held a range of command appointments, including in the Special Forces. He has served as a staff officer in Joint Operations Command, Army Headquarters, Special Operations Headquarters, and Forces Command. His operational service includes deployments to Timor Leste, Afghanistan, Bougainville, Solomon Islands, Iraq, Israel, Lebanon, Syria, and the South-West Pacific. He has been awarded the Distinguished Service Cross on three occasions.

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