

North of 26° south and the security of Australia

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All bases aren't equal in the defence of Australia

John Caligari, 28 May 2020

I read with interest the recent *Strategist* posts by [John Coyne](#) and [Graeme Dunk](#) in which they apparently took different stands on the importance of [northern Australia](#) for our defence. With better definition of how the Australian Defence Force uses its more than 100 bases, I can see the common threads of both authors' arguments. The north and south of Australia offer unique characteristics that, taken together, serve to support the ADF's capability to defend Australia.

Given current events and emerging tensions, understanding why ADF bases are where they are is even more critical. Defence Minister Linda Reynolds [noted last October](#) that the Defence Department was working on reassessing the strategic underpinnings of the 2016 defence white paper—not too soon.



Image: Department of Defence.

Where the bases are and what purpose they serve are fundamental to Australia's force posture. How the ADF is postured is key to its capability to offer the greatest range of response options to the government. Central to this range of options is the ADF's ability to generate the right forces for any required deployment. The concepts of force generation and force deployment are the foundation of basing decisions. The ADF has home bases, mounting bases and bare bases, all of which serve specific purposes.

Home bases are used for force generation and maintaining preparedness. Bare bases are activated, and mounting bases are established for specific operations and contingencies. The ADF needs the right mix of types and locations of bases to achieve the greatest flexibility to be successful in the widest range of operations.

Decisions on home basing locations are significantly influenced by sunk costs, the cost of ownership of expensive platforms and the retention of ADF personnel. They involve significant infrastructure optimised to produce the best-prepared forces for contribution to the joint force for deployment. They are also generally single-service bases to enable maximum stability of location for ADF families and engagement of local industry. Decisions to change home basing locations are significant, with long lead times and high costs. This force generation responsibility is the primary concern of the service chiefs. Force generation involves keeping all elements of the ADF well prepared.

A mounting base is chosen for a specific offshore operation as the most suitable place on Australian soil from which to mount a force. It is generally an expansion of a suitable home base. A mounting base will not typically have all the force elements required for a specific operation given the joint requirements of most missions. It provides a place to assemble force elements from home bases around Australia to form a joint taskforce.

The function of a mounting base is to receive and integrate a joint team. Once the team is assembled, the mounting base is used to prepare and rehearse the integrated force for likely tasks, and then deploy the force into the designated area of operations. The operations to which they might deploy range from disaster recovery, evacuation or humanitarian relief through to combat.

The characteristics that influence the suitability of locations in Australia for home bases and mounting bases are different. A home base requires liveability and lifestyle for families, defence industry support for cost-effective maintenance of platforms and equipment, and infrastructure to optimise training. Home bases for the navy and air force need to be situated where personnel can access the skills and services to support their platforms and equipment. There are lots of these in the southern parts of the country.

A mounting base, on the other hand, is selected based on proximity to potential operations. Considerations include operational security; accessibility by road, rail, sea and air; and sufficiency of infrastructure and logistics to support mounting, deployment and generally sustainment of the force.

The Australian Army's three combat brigades are on home bases that have ready access to large and suitable field training areas. There are lots of these in the north. They also happen to, most often, offer the best mounting bases.

Utilisation of the optimal mix of home, mounting and bare bases is what enables the ADF to offer the greatest flexibility in providing effective response options to government. Mounting bases are identified as needed, based on the type and location of an intended operation and the preparation and integration needs of the mounting force. If the joint taskforce has significant land force elements, then the mounting bases are typically in northern Australia.

Both Coyne and Dunk make some good points, and the way each of them describes the problem provides important insights. What is clear is that southern Australia is key to successful force generation, particularly for the air force and navy, and northern Australia is key to successfully mounting and deploying joint forces. A useful discussion would centre on how all levels of government and business can work together to optimise national security and best support ADF capability.

For print readers, the original piece with live links is at <https://www.aspstrategist.org.au/all-bases-arent-equal-in-the-defence-of-australia>.

The value of diversity in the defence of northern Australia

Dion Devow and Louisa Bochner, 12 June 2020



Image: Department of Defence.

It isn't news that diverse workforces are a key to producing high-quality, innovative and competitive results. There's [no shortage of evidence](#) from both the private and public sectors that diverse teams solve problems more effectively, think more creatively and are better for the bottom line than their homogenous counterparts.

In 2019, the chief of the Australian Defence Force, General Angus Campbell, set his sights on increasing Aboriginal and Torres Strait Islander representation in the ADF. He [said that he wanted](#) 5% of the ADF to be Indigenous Australians, 'bringing heritage, bringing diversity, bringing insights, bringing perspective that we cannot otherwise realise'.

Aboriginal and Torres Strait Islander people have a long history of [employment in the ADF](#), using their skills, languages, cultures and knowledge of the land in the defence of Australia. Indigenous Australians have participated in the armed forces [since before federation](#)—which is remarkable given the brutal and violent history between the white settlers and Aboriginal Australians.

More recently, Aboriginal and Torres Strait Islander people have been involved in ADF units such as the [North-West Mobile Force](#) (or Norforce, as it's more commonly known). That model should be replicated across the ADF to increase the number of Indigenous Australians in defence and to expand their impact. This approach could help establish pathways to progress Indigenous Australians' careers from recruitment to promotion through the ranks, and ultimately to levels as high as defence force chief.

The Northern Territory has a high percentage of Indigenous Australians living in both urban and rural settings. The ADF has an opportunity to fill [an increasing skills gap](#) in the territory by recruiting reservists, permanent members of the ADF, Defence officials and employees of defence industry. Darwin and Katherine are two major northern centres in which the ADF could focus its recruitment activity.

The ADF also has the opportunity to involve a new generation of experts in science, technology engineering and maths from under-represented groups. The 2018 NT defence and national security strategy calls for adding high-tech platforms in the region to enable the territory to be nationally competitive, agile and on the forefront of new technological advances for defence. In 2018, the NT government's cyber awareness program was [digitised and expanded](#) to include 'a focus on improving opportunities for the business community to participate in the Defence supply chain'.

Improving the participation of women in the ADF is likewise crucial to filling its skills gaps. The involvement of women from all cultural backgrounds has been found to [increase capability](#) in the ADF. Increasing the number of women in the cyber workforce is crucial.

The 2017–18 report on women in the ADF noted that recruiting more women was crucial to ensuring that the ADF [secures the best possible talent](#). At that time, women made up 17.9% of the total ADF. Women's participation has improved considerably in the past decade and they now make up [21.5% of the navy, 14.3% of the army and 22.1% of the air force](#). Defence is aiming for female participation to reach [25% in the navy, 15% in the army and 25% in the air force by 2023](#).

Aboriginal and Torres Strait Islander peoples bring diverse skills that are vital to the defence of Australia's north, including unmatched, specific knowledge in areas that aren't taught in classrooms.

Communities in this region understand how to work in [extreme climatic conditions](#) and have crucial skills in [reconnaissance, observation and collection of military geographic intelligence](#). The 2016 defence white paper and accompanying investment program identified infrastructure investment, in particular for cyber capabilities at defence sites in Darwin and in the Katherine region, as a high priority.

Many Aboriginal people in the NT are expert linguists, sometimes speaking more than eight languages. These skills can be transferred to fields like cybersecurity to help meet the NT's increasing need for people who are proficient in coding languages.

Since the introduction of the [Indigenous procurement policy](#) in 2015, there's been no shortage of Indigenous businesses that Defence can contract to in the territory.

Drawing on these resources makes good sense, and the timing is perfect. [As argued last year](#), involving Aboriginal and Torres Strait Islander communities in Defence's work in the north will provide economic and security benefits to the region and ensure that Indigenous Australians can participate in the global economy.

There is still a long way to go. Attracting women and people from culturally diverse backgrounds to the ADF is notoriously difficult. It requires a rethink of how the ADF operates, including its approach to flexible working arrangements, to ensure it provides a safe and accepting environment.

That won't be easy, but it is absolutely in Australia's interests.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/the-value-of-diversity-in-the-defence-of-northern-australia>.

Renewable energy exports could be vital for Australia's post-fossil-fuel future

Hal Crichton-Standish, 26 June 2020



Image: Jeremy Buckingham/Flickr.

Development and industry investment in the Northern Territory has long been hampered by the cost of energy. The territory's focus on natural gas and liquefied natural gas for **almost all** of its energy exports has placed it in an increasingly insecure position as the world looks to switch to lower-carbon energy sources. Australia's key energy markets are all **considering** how to reduce their dependence on Australian coal and gas.

But a major new project in the NT may light up a way forward to a more sustainable export model for the long term.

During the 2019–20 bushfire season, Australia felt the effects of climate change driven by high global emissions, but the nation has fallen behind other countries in responding to renewable energy opportunities.

We can no longer rest on the argument that our net emissions make little impact on humanity's carbon footprint. Australia is the world's **20th** largest consumer of energy, and that doesn't take into account our relatively small population or the contribution our large exports of coal, oil and gas make to global emissions.

China and India have seen substantial growth in their renewables sectors in recent years. China has **outpaced** the entire European Union with its take-up of solar and wind power, and more than **one-fifth** of India's electricity generation comes from renewables.

The Northern Territory has a unique opportunity to capitalise on one of the largest new renewable energy projects in the southern hemisphere. **Sun Cable**, an initiative funded by a group of Australian investors, is planning to build the world's largest solar farm at 15,000 hectares near Tennant Creek. Most of the energy will be stored and exported via a high-voltage direct-current submarine cable to Singapore.

The \$20 billion-plus project will include a 10-gigawatt-capacity array of panels and battery storage to ensure a reliable energy supply. That's around 30 times the capacity of the Channel Island Power Station, which provides most of Darwin's power. The cable is set to pass through Darwin and Indonesia on the way to Singapore, making connecting to the Darwin power grid a relatively simple matter.

Sun Cable is an ambitious project that looks decades into Singapore's energy future. As natural gas (which currently makes up around 95% of Singapore's energy imports) becomes more **expensive**, and the cost of solar panels continues to drop, this project will offer new energy opportunities to the city-state.

The NT is similar to Singapore in its high dependency on natural gas for its electricity, but is uniquely placed to reap the benefits of its rich potential for renewable energy production.

For **decades**, Australia has enjoyed significant economic benefits from exports of coal and other non-renewable resources. If we hope to maintain jobs, and our **role** as an energy exporter, we need to manage the shift to renewable energy with the same level of foresight and long-term planning that informed the Sun Cable project.

The opportunities don't need to stop there. The **Asian Renewable Energy Hub**, backed by CWP Renewables, Macquarie Group and Vestas, is planning to build 15 gigawatts of wind and solar capacity in Western Australia's Pilbara region. The project, set to begin construction in **2026**, aims to provide cost-effective renewable power to the Pilbara as well as to export markets.

A 3,500-kilometre-long submarine cable will connect the Pilbara, one of the world's **best** regions for solar and wind resources, with Singapore and Indonesia. Connecting Indonesia's Java-Bali power grid to the Australian grid, through Australia's north, would help efforts in both nations to **achieve** a 100% renewable power system by 2050. Not only would this be a significant step towards reducing Australia's carbon emissions, but it would also help revitalise Australia's energy sector as our trading partners **begin** to move away from importing fossil fuels.

Masayoshi Son, CEO of the Japanese company SoftBank, has **announced** his vision of connecting Northeast Asia's energy grids with Southeast Asia's. That would open up the possibility of Australia exporting renewable energy not only to Singapore and Indonesia, but also to the wider region. This would be a major business opportunity, while simultaneously helping Australia meet its carbon emissions reduction targets. Shifts in the Asia-Pacific energy market could put the NT at the forefront of a renewable energy future.

The territory has an opportunity, via the Sun Cable and Pilbara projects, to lead Australia on its transition from fossil fuel exports to renewable energy exports.

Industry leaders and government decision-makers should reach out to **Sun Cable** for partnership opportunities. The planned array of solar panels could easily supply renewable energy for the whole NT—if there's the political will and industry support to make the transition.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/renewable-energy-exports-could-be-vital-for-australias-post-fossil-fuel-future>.

Defence diplomacy's key role in shaping Australia's strategic circumstances

David Burke, 9 July 2020



Image: Department of Defence.

Prime Minister Scott Morrison released the [2020 defence strategic update](#) to define Australia's evolving challenges and provide guidance on defence policy, capability and force structure. The new strategic objectives are to 'shape', 'deter' and 'respond'. It appears to be a straightforward direction, but what meaning do these three words convey?

Defence language can be difficult to interpret for the uninitiated. Simple terms often carry broad and complex meanings, and the true intent of a strategy may not be immediately apparent without some assistance in translation.

During a discussion on the ABC radio program *PM*, host Linda Mottram described the new strategy as '[heavy on hardware, short on diplomacy](#)'. Indeed, the prime minister's [speech](#)—which included so much about new weapons (including long-range missiles), naval vessels, and air and space capabilities—makes that an obvious conclusion. It's clearly deter and respond, and is certainly heavy on hardware.

But what of the concept of shape? It's not necessarily about new weapons or use of force. In this case, the strategy is heavy on diplomacy, specifically defence diplomacy, a not well understood thread of the craft of international interaction.

During her [speech to ASPI](#) on the strategic update, Defence Minister Linda Reynolds said that she'd known defence diplomacy was important before assuming the role, but now understood 'just how critically important our relationships are not just in our region across the Indo-Pacific but globally'. The chief of the Australian Defence Force, General Angus Campbell, agreed and noted that the strategy implied 'engagement, partnership to build communities in our region'. So, how is this achieved?

Defence diplomacy generally happens at two levels: between individuals or small groups and through large-scale interaction during training or exercises. These activities occur not in isolation or for their own sake, but in support of whole-of-government foreign policy initiatives.

I witnessed firsthand the value of military diplomacy during my time as a student at Pakistan's National Defence University, followed by three years as the defence adviser to Australia's high commissioner in Islamabad. Pakistan is a complex country dominated by its military, but close relationships with Pakistani officers enabled me to assist the diplomatic mission with unique perspectives and access to key decision-makers.

Military officers are pragmatic, have shared experiences and often are prepared to communicate at a professional level when politics and international relationships are strained. I recall attending a reception in Islamabad and debating the cause of heightened tensions along the line of control in Kashmir with Pakistani and Indian officers. I discussed the merits of Chinese claims in the South China Sea with Chinese, US and Vietnamese attachés, and the complexity of the situation in Syria with Turkish and Arab counterparts. Continued communication among defence diplomats during difficult times can be invaluable.

Large-scale interaction between militaries is also a powerful tool for breaking down barriers and encouraging understanding across international boundaries and cultures. Participation in international training exercises encourages personal interaction at all levels, from the senior commanders down to the most junior sailors, soldiers and airmen. Through engagement, Australia can not only contribute to regional military capability, but also foster a deeper comprehension of Australians and our culture.

Military personnel from across our region often have limited opportunities to travel, and a visit to Australia for an exercise will leave them with so much more than new skills and procedures. When I met with young soldiers returning to Pakistan from courses and training in Australia, they spoke enthusiastically of new friends, the smell of the Australian bush, the excitement at seeing their first kangaroo and bewilderment that people eat meat pies. New insights, understanding and fond memories are powerful ways defence diplomacy shapes the region and relationships.

Ample opportunity exists in northern Australia to support military engagement with our neighbours. The top half of Australia is blessed with training ranges that are among the largest and best equipped for modern military training. As ASPI's [John Coyne suggests](#), there's spare capacity to increase international utilisation of these facilities, through either joint exercises or unilateral training following a model like the [Australia–Singapore Military Training Initiative](#).

The Northern Territory sits at the doorstep of Southeast Asia, and north Queensland with three major simulation-enabled training facilities is ideally positioned to support the government's Pacific step-up. Each can support deployments from its near regions to offer a unique opportunity to enhance Australia's defence diplomacy and regional cooperation.

This is one critical way the word 'shape' becomes more than an objective in a strategy document—it is an outcome brought to life through people-to-people defence diplomacy. The hardware is critical to the strategy, but the desire of all Australians is that it never be used in anger. We can help to ensure that if we achieve the strategic goal of mutual understanding through engagement and partnership to build communities in our region.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/defence-diplomacy-key-role-in-shaping-australias-strategic-circumstances>.

Naval investment in northern Australia will strengthen national security

Tony McCormack, 17 July 2020



Image: Department of Defence.

The government's continuous shipbuilding program has provided a fillip for defence industry in South Australia and Western Australia, but benefits are also set to flow to other parts of the country. Importantly, Australia's north, particularly Cairns and Darwin, will see an increased naval presence that will not only strengthen the security of the north, but provide additional economic opportunities.

With a displacement over four times that of the Armidale-class patrol boats they are replacing, and a crew twice the size, the much larger and more capable Arafura-class offshore patrol vessels will bring a new level of capability to surveillance of the north. They will also bring an increased level of complexity to and demands on the regional defence industry capability required to support them.

The arrival of the Arafura class, scheduled for delivery between 2021 and 2030, coincides with a substantial program of infrastructure works at Darwin's naval base, HMAS Coonawarra. The works will remediate years of inattention during which capital investment in facilities failed to keep up with the growing size of the Royal Australian Navy's fleet.

Infrastructure improvements include a new fuel storage facility for ready-use fuel and a new wharf capable of berthing all classes of ships the RAN operates. The new fuel facility will be configured to refuel vessels alongside and will be able to pump fuel from the wharf to the storage tanks to refill them.

This will lessen the reliance on the Landbridge-leased East Arm port facility and reduce the number of fuel tankers on Darwin's roads, adding some resilience to fuel supply and storage. But with no refining capability in Australia's north, and limited bulk fuel storage, fuel supply remains a vulnerability.

With continuous shipbuilding comes the need for continuous sustainment. Under [Plan Galileo](#), the RAN intends to establish a regional maintenance hub in Darwin to provide logistic and maintenance support to any ship, current or planned, in the fleet. The hub will be made up of navy personnel, primary contractors, small businesses and service providers.

It will enable HMAS Coonawarra to act as a main operating base for the vessels on constabulary duties and a forward operating base for major fleet units. This should lead to more time spent in the north and less time transiting to and from the main bases in Sydney and Perth.

With enhanced sustainment, maintenance and training facilities, Darwin will also become an attractive location for allied and regional maritime forces. This provides a unique opportunity to establish Darwin as the Asia-Pacific centre for multinational patrol boat training and deeper maintenance.

In a further sign of a strengthened naval presence in the north, in May the government announced that six more Cape-class patrol boats would be built for the RAN. The new vessels are scheduled to be delivered between 2021 and 2023, allowing some of the Armidales to be withdrawn from service earlier than anticipated. As a majority of the Armidales are based in Darwin, it's likely that a majority, if not all six, of the new Capes that replace them will also be based there.

The additional Cape-class boats will also give the RAN the opportunity to further Australian Defence Force chief Angus Campbell's goal of increasing the representation of Aboriginal and Torres Strait Islander people in the ADF. In a similar concept to the army's regional surveillance units, such as the North-West Mobile Force (or Norforce, as it's more commonly known) and the 51st Far North Queensland Regiment, the RAN could recruit crews for one or two of the boats from the Torres Strait Islands and Tiwi Islands.

Both the Tiwis and the Torres Strait have a history of seafaring and their locations mean they're already invested in the security of the north. While maintenance would be conducted in Darwin, the boats could share the homeporting at NT Port and Marine's facility on [Melville Island](#) near Darwin and on Queensland's Thursday Island.

Training programs designed around the Cape class to develop these crews could be conducted through the [Navy Indigenous Development Program](#). As Campbell has said, increased recruitment of Indigenous Australians to the ADF *will create* a more inclusive and agile workforce, 'bringing diversity, bringing insights, bringing perspective that we cannot otherwise realise'.

While Defence is investing in capability and infrastructure for an enhanced naval presence, the Australian and Northern Territory governments and the private sector all have roles to play. Darwin needs to be ready to accept the increased numbers of personnel and their families. That will mean providing more educational and recreational facilities for families and employment opportunities for partners.

The success of the regional maintenance hub will rely on industry investing in facilities and providing the workforce to fill the range of roles required to support and sustain the force. [INPEX Australia's LNG project](#) has shown that Darwin can sustain an 'if there are jobs people will come' model. While this may work for the private sector in major critical infrastructure projects, defence industry may require further guarantees to secure its workforce.

The investment in new facilities and ships in the north provides a once-in-a-generation opportunity to build an interlinked mutual support system. By working together, all parties can optimise the investment to make sure that national and regional security are strengthened.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/naval-investment-in-northern-australia-will-strengthen-national-security>.

It's time to take an alliance-based approach to securing rare-earths supplies

Genevieve Feely and Rhys De Wilde, 6 August 2020



Image: Terrence Wright/Flickr.

China has dominated the world's supply of rare-earth elements for decades. Over the past year, however, there has been a growing recognition among the US and its allies (including Australia, South Korea, Japan and India) that sources of critical minerals outside of China need to be secured and that solutions need to be driven by governments rather than market forces, particularly since demand for these materials will skyrocket in the near future.

Recent [tensions in the Australia–China relationship](#) have made the need to diversify rare-earths production even more pressing. China currently produces 90% of the world's rare earths, so its dominance won't be shifted overnight. This underscores the urgency for Australia and its allies to minimise the risks of over-reliance.

One of the greatest challenges for rare-earths projects, particularly compared to other key Australian exports such as iron ore and coal, is getting upfront financing. Investment is spread thin among a plethora of small investors, creating barriers to market entry for substantial projects. This creates risks that are prohibitive for single investors in the absence of government backing. The scale of the investment problem suggests that allied governments need to work together on providing financing for exploration, mining and processing if they are to develop adequate new supply chains.

There have been promising developments on the domestic front. Defence Minister Linda Reynolds [signalled](#) the possibility of increased government support to get rare-earths projects off the ground, considering the immense value they hold for defence applications. Each of Australia's F-35 fighter jets, for example, [contains](#) 417 kilograms of rare-earth elements; most technology

applications require only a minute amount. China recently **sanctioned** Lockheed Martin, restricting its access to the rare-earths supplies needed to produce key parts. Actions like this accelerate the need to take an alliance-based approach.

Elsewhere in government, the Department of Industry, Science, Energy and Resources released a critical minerals strategy last year and established the Critical Minerals Facilitation Office. These are steps in the right direction, particularly if there's close collaboration with the Department of Foreign Affairs and Trade as well as Austrade to tap into their wealth of knowledge on promoting trade opportunities and acting as a facilitator. But in the face of the increasing supply-chain risk, there needs to be more decisive action.

A roadblock to greater allied cooperation right now is the political situation in the US. There have been **rumblings** among some Republican members of Congress that government funding and support should be given only to US companies. For a commodity like rare earths, this is not a viable or appropriate path to take. China's strength in rare earths comes from its grip on both upstream and downstream processes. While one ally may not be able to assume all the risks of funding and establishing rare-earths projects, they can mitigate these risks by working together.

Rather than just focusing on securing supply locally, the US should move towards incorporating its local fabrication into a broader international strategy of close cooperation. When Japan's supply of rare-earth minerals was cut off by China in 2010 as bilateral relations deteriorated, it pursued a **strategy** of international cooperation to deal with the crisis. We are not at crisis point yet, but we shouldn't allow it to get to that stage before pursuing a similar strategy and consolidating a joint allied approach.

Some of this cooperation is already happening. Lynas, an Australian-owned company that runs one of the most significant rare-earths mining projects outside of China, has received support from international counterparts, including an initial investment of US\$250 million from **Japan** in 2010. More recently, Lynas has **partnered** with US company Blue Line to build the first facility for processing heavy rare earths outside of China, located in Texas. This is a sign that roadblocks in the US political system aren't going to be as hard to overcome as originally thought.

Australian rare-earths miner Arafura Resources is piloting a project that will see its minerals processed in Colorado in a partnership with US company USA Rare Earths. Arafura is ready to supply significant amounts of key rare-earth elements, including neodymium and praseodymium, which are used in magnets and aircraft engines, but needs greater visibility and investment to do so. Other projects in Australia face similar hurdles.

These partnerships should be encouraged through advocacy by Australian government officials in strategic locations. Australia's ambassador to the US, Arthur Sinodinos, **indicated** that he has been advancing the Lynas case with the US Congress and the White House. This support needs to be broadened and include a push against US-only policies on rare earths, which do not serve the wider agenda of minimising over-reliance on supplies from China.

For its part, the Australian government should look towards becoming an investor in this sector if it is serious about developing a rare-earths supply chain independent of China. Looking even deeper into the future, investment should be made in exploring more sustainable ways of processing rare earths so the country that's hosting processing facilities doesn't bear the environmentally destructive impacts of processing.

Australia and close allies on this issue are at a critical juncture. The aftermath of Covid-19 will have far-reaching impacts on the global economic situation but also offers the opportunity to remake vital supply chains. Securing the rare-earths supply chain through investment **featured** prominently in the recent joint AUSMIN statement, signalling its importance to the US–Australia relationship. But more robust advocacy is needed, and Australia should now take the lead in convening a high-level meeting with key allies to kickstart viable alternatives for rare-earths supplies.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/its-time-to-take-an-alliance-based-approach-to-securing-rare-earths-supplies>.

More investment needed to keep northern Australia's military ranges world-class

Tony McCormack, 1 September 2020



Image: Department of Defence.

Northern Australia can expect to see more visits from US forces, which will create both economic and strategic benefits for Australia.

Two recent US government decisions are set to change how the US military, and particularly the US Marine Corps, will operate in northern Australia.

The first major change was the announcement at the [2020 AUSMIN](#) meeting that the US and Australia intend to establish a US-funded, commercially operated [strategic military fuel reserve in Darwin](#). The proposed facility will join a network of other US military strategic reserves spread across the Indo-Pacific in locations such as South Korea, Japan, Guam, Singapore, Hawaii and Alaska.

While the details of fuel types, grades and capacities have yet to be released, one would anticipate that they would cover the spectrum required to operate all types of military aircraft, ships and ground equipment employed by the US military.

When added to Prime Minister Scott Morrison's earlier announcement of significant infrastructure works at Royal Australian Air Force Base Tindal, designed to support visiting US Air Force aircraft up to and including B-52 bombers, the fuel reserve cements northern Australia's role as an integral part of the US deployment strategy in the Indo-Pacific.

As ASPI's Peter Jennings [wrote](#) recently, 'No one builds a big petrol station without planning to use it', and you can say the same about constructing hardstands, fuel storage and weapon magazines at RAAF Tindal. We can certainly expect more frequent visits to RAAF bases Darwin and Tindal by US Air Force aircraft in the future.

The second recent major announcement from the US was the release of the [commandant of the US Marine Corps' planning guidance](#). General David H. Berger lays out a radical new vision for the marines covering force design, warfighting, education and training, core values, and command and leadership. In the guidance, Berger designates the III Marine Expeditionary Force, based in Okinawa, as the main focus of effort—showing that the Pacific is at the fore in the marines' thinking.

Perhaps the biggest message in the commandant's planning guidance is that the US Marine Corps will change the way it fights. Berger has determined that large, cumbersome equipment and concentrated forces will be easily targeted in an age of long-range precision weapons. Consequently, the marines need to act to change the calculus of any adversary.

The marines will become a lighter, faster, more agile force supported by weapons and sensors with longer range and endurance. The Abrams tanks and bridging battalions will go, artillery cannon batteries will be significantly reduced, and other capabilities such as fixed- and rotary-wing aviation are also being trimmed. Berger says training facilities and ranges are antiquated and his force lacks the necessary simulators to sustain its readiness.

This is where northern Australia plays a part. For the marines, a new strategy demands a need to train in a new way. The Marine Rotational Force—Darwin deploys because Australia offers a strategic location in the Indo-Pacific to conduct realistic, multi-faceted, high-end training. The feedback from the marines is clear—they love Australia and its physically and mentally challenging training facilities. And with the Pacific now the corps' primary focus, expect bigger deployments in the future.

The Northern Territory hosts the best military training ranges in Australia and arguably some of the best the world. [Bradshaw Field Training Area](#), [Mount Bundey Training Area](#) and the [Delamere Air Weapons Range](#) together amount to 12,000 square kilometres, or five times the size of the Australian Capital Territory. In US terms, that's about the size of Connecticut, and in UK terms it's more than half the size of Wales. Add the maritime training and firing areas in the Timor and Arafura seas, and the facilities and ranges in the Northern Territory can meet most of the training needs of visiting US forces. While it's difficult for the US Marine Corps and US Army to find live-firing ranges on home soil where they can launch Hellfire missiles, opportunities abound in Australia.

Already electronically connected as part of the North Australian Range Complex, the vast open areas and associated airspace enable scalable manoeuvre exercises for land forces and air combat, close air support and bombing training for air forces. As the Mobile Threat Training Emitter System comes online it will also allow for training in the electromagnetic spectrum. These elements will enable combined arms training on a scale unachievable elsewhere, providing the perfect environment for the marines to apply their new strategy.

By further amalgamating training programs, Australian and US forces can exercise alongside each other, enhancing interoperability and strengthening deterrence. Importantly, they can also act as each other's opponents, testing skills and concepts.

Both Berger and the newly appointed chief of the US Air Force, [General Charles Q. Brown Jr](#), took their positions immediately following senior command appointments in the Pacific and are no strangers to Australia. They have both visited the Northern Territory in the past few years and are fully aware of the importance the bases and training ranges have for their respective services.

To remain relevant in a rapidly changing world, northern Australia's training areas and ranges need to keep pace with the modern threat environment and accommodate modern techniques and procedures. They need to be treated and managed as an integrated weapons system in their own right, and their future development must be guided by a deliberate plan to invest, renew and upgrade. Implementing such a plan will produce a unique, advanced training environment that meets the needs of the Australian Defence Force and visiting US forces into the future—and, as an added benefit, will also attract regional and international partners.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/more-investment-needed-to-keep-northern-australias-military-ranges-world-class>.

A belt and road by any other name: Government must review Darwin Port lease

Luke Gosling, 15 September 2020



Image: Department of Defence.

The Australian government says its new foreign relations bill is about one thing: ensuring foreign policy consistency by reviewing state and territory deals that could undercut Canberra.

Fair enough. Foreign policy is a federal—and constitutionally enshrined—responsibility. State and territory governments have been increasingly active in international engagements in recent decades. That’s a perfectly normal feature of globalisation that’s here to stay.

But there’s good reason to keep foreign policy powers concentrated in federal hands.

Thanks to its expertise, real-time reporting from the overseas diplomatic network and intelligence collection and assessments from all sources, the federal government will always be the best informed about the world and the custodian of Australia’s strategic policy.

A state like Queensland or New South Wales cannot be expected to have anywhere near the same situational awareness when making commercial deals with foreign powers. And in a dangerous world, hostile actors will seek to divide us. So, let’s not help them.

If this bill helps reverse the hollowing out of our capacity to prosecute Australia’s national interests, I’m all in. That would need to include a serious discussion about the chronic cuts to our frontline diplomatic network and aid program. But what concerns me is the clear political slant in this bill.

From the get-go, the government framed Victoria's [2018 memorandum of understanding with China](#) on the Belt and Road Initiative as the main problem that needed fixing. To be clear, the federal Labor leader, Anthony Albanese, has said that we would not have signed up to the BRI.

It's curious, though, that the government is waving the Victorian deal like a red rag while ignoring other BRI-related deals that are in plain sight. Like the lease of the Port of Darwin. To avoid blatant double standards, Darwin should be in the same conversation as Victoria.

'No, it shouldn't!' the government is now saying. The foreign minister has explicitly denied that Darwin Port would be reviewed as part of this bill. Marise Payne has claimed that this is because the 99-year lease of the port by the NT government was to a privately owned Chinese company, Landbridge Group, not a government entity. The [bill excludes](#) 'a corporation that operates on a commercial basis'.

Yet it doesn't take a degree in Sinology to understand that Western and Chinese private companies differ in important ways. In the Chinese system, outbound investors must register deals for approval with three government bodies, including the trade ministry. A private company that owns critical infrastructure abroad is still accountable to Beijing.

This is confirmed by private companies' mandatory reporting requirements under China's national intelligence law. Just last year, [a Foreign Investment Review Board source](#) suggested that the Chinese law had effectively 'done away with the distinction between private and state-owned companies'.

Even if the government dismisses any questions around the lease of a critical infrastructure asset like Darwin Port to a foreign power, be it China or Canada, there's a bigger issue. You won't hear the government say this openly for obvious reasons—it oversaw the sale—but the 2015 lease of Darwin Port was part of the Belt and Road Initiative.

Officially, the Darwin Port sale wasn't badged as a BRI project. But it was undoubtedly part of it from Beijing's point of view, even if not from ours. For more than a decade, China has been buying up critical infrastructure such as ports around the world. But this strategic buy-up was given an authoritative policy rationale when Chinese President Xi Jinping launched his flagship Belt and Road Initiative in 2013.

That's when China's ports buy-up officially became part of the seagoing aspect of the BRI, dubbed the Maritime Silk Road. Confusingly, the 'road' part of the initiative is actually maritime. Through this BRI-propelled strategy, Chinese private or state-owned companies quickly acquired significant or controlling stakes in more than 76 ports in 35 countries, including Darwin and Melbourne.

So it should not have come as a shock to the government when, a month after the Darwin Port lease, Landbridge owner Ye Cheng openly [spoke in the media](#) about Beijing being interested in Darwin primarily in the context of the BRI.

This government has said that it considers Victoria's BRI deal to be inconsistent with its foreign policy. But when it comes to our strategic northern port, that concern vanishes into thin air. For some reason, the BRI is against the national interest in one jurisdiction but fine in another.

China is an important partner for Australia. But who owns our critical infrastructure is not a question about our relationship with China. It's about our sovereignty. Of China's 34 ports, none are foreign-owned and you can bet none will ever be. That seems consistent to me.

If it's worried about policy consistency, the government should start by reviewing the Darwin Port deal.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/a-belt-and-road-by-any-other-name-government-must-review-darwin-port-lease>.

Mitigating diffused security risks in Australia's north: a case for digital inclusion

Olga Boichak, 30 September 2020



Image: NASA Earth Observatory.

Australians' daily reliance on digital communications infrastructure—from smartphones and social media platforms to the National Broadband Network—is changing the nature of national security risks.

Just like our networked communication patterns, contemporary security risks are becoming [increasingly diffused](#)—geographically dispersed, nonlinear in their causes and outcomes, and difficult to predict and contain.

Lessons from armed conflicts in other regions can help policymakers think about how to develop resilient social and communications infrastructure in Australia's critical northern approaches.

The ongoing Russia–Ukraine conflict is one such case study. On 25 February 2014, polite uniformed men with no insignia inconspicuously took over the administrative buildings of Simferopol, Ukraine. These events represent a significant development in the conduct of modern-day warfare: not a shot was fired in the course of the Russian annexation of Crimea, in what is now known as the [most significant breach](#) of state borders since World War II.

In retrospect, the photos and news reports from those turbulent events in Crimea were deliberately obscure, which has become a distinctive feature of contemporary military conflicts. Due to their diffused nature, identifying and mitigating security risks calls for a combination of digital literacy and inclusion among the civilian population.

Following the annexation of Crimea, Russia repeated the same scenario in other eastern Ukrainian cities, including Donetsk and Luhansk. In response, citizens of Mariupol—the next strategic object of Russian interest on the map—took to social media to pre-emptively identify these patterns and mitigate the diffused and otherwise inconspicuous security threats in their city.

Grassroots [open-source-intelligence](#) communities are an emerging type of [social infrastructure](#) in which civilian networks rely on widely available information and communications technologies to build [resilience](#) to security threats. Thousands of Mariupol civilians spent their days and nights [collecting and verifying](#) intelligence from local social media posts and informants, and fighting the spread of false and misleading information about events in their city. This civilian effort became part of a coordinated response with local security services and the state military.

Arguably, had Mariupol been the first eastern Ukrainian city on the line of Russia's 'non-occupation' tactics, or had it lacked the critical communications infrastructure at the time when these events were unfolding, it would likely have joined the ranks of the separatist republics. Yet, six years later, Mariupol firmly remains a part of Ukraine.

The success of the city's citizen-led campaign makes a strong case for strategic investment in digital inclusion and digital literacy as a pathway for identifying and mitigating hybrid, externally orchestrated interventions. In a context where '[every battle seems personal, but every conflict is global](#)', as argued by 21st century war experts P.W. Singer and Emerson T. Brooking, what lessons can be applied from the Crimean scenario to the Northern Territory?

Despite the absence of historical claims on the Northern Territory by other nations in the Asia-Pacific region, the two territories—pre-2014 Crimea and the Northern Territory—share some commonalities. Both bear a centuries-long legacy of colonial violence toward the Indigenous populations, which resulted in socioeconomic disparities that continue to shape the local context.

Both are home to large-scale infrastructure developments, including externally funded [private-sector-initiated projects](#), and rely heavily on [tourism](#). Both also have a fair degree of self-governance within a broader national framework yet have a strategic geopolitical significance in maintaining domestic and regional security.

The changing nature of contemporary military conflicts calls for the ability to effectively mitigate diffused security threats. Hybrid conflicts, which blur the distinctions between digital and physical battlefronts and between military and civilian actors, call for an expanded understanding of the role Australian civilians can play in supporting these strategic capabilities.

Countermeasures should extend beyond the cybersecurity domain and focus on two key aspects: first, supporting national efforts in expediting the NBN rollout to remote areas in the NT while also ensuring the service is affordable, especially for [young people and marginalised groups](#); and second, strengthening civil society institutions and promoting public education campaigns on disinformation and media manipulation.

Contributing to Australia's defence shouldn't be the exclusive purview of the Australian Defence Force members. As the Ukrainian example demonstrates, committed citizens and community groups with high digital media skills and a good knowledge of the local context can become key actors in identifying hybrid, externally orchestrated interventions.

While a direct military attack on the Northern Territory may be unlikely, civilian resilience—the ability of citizens to identify and react to diffused security threats locally—is becoming paramount in maintaining domestic security in hybrid contexts.

In the present environment where most of us work, shop and socialise remotely, this combination of digital literacy and digital inclusion would feed into strengthening long-term civilian resilience capabilities and contribute to the defence of Australia's north.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/mitigating-diffused-security-risks-in-australias-north-a-case-for-digital-inclusion>.

Exmouth base needed to plug naval gap between Perth and Darwin

John Coyne, 8 October 2020



Image: Department of Defence.

To make sure that northern Australia is ready to support a range of defence contingencies, the region must have socially and economically prosperous communities. Supporting the development of these kinds of communities is no easy task, because it requires a coordinated effort across multiple levels of government.

With few votes, and even fewer politicians representing the voters who cast them, getting coordinated policy action on northern Australia in Canberra is a challenge.

Australia's traditional approaches to critical infrastructure investment, like the user-pays model, do not work as well in the north. It's little wonder, then, that local, state and territory governments and entrepreneurs in the north look to the defence organisation to support their ideas.

Our progressively more unpredictable strategic environment supports the bold new infrastructure investments (such as [condensate plants](#), [rail spurs](#) and [ship lifts](#)) proposed for many northern jurisdictions. These kinds of investments often benefit national security and defence contingencies while also stimulating short- and long-term economic activity. Unfortunately, market forces usually fail to support such investments.

Western Australia's North West Cape illustrates this point well.

Since World War II, the North West Cape and, in particular, the town of Exmouth have been an operational and strategic outcrop for Australia and its allies. Today, with rising geopolitical tensions in the Indo-Pacific, the area is key strategic terrain for a range of contingencies.

The Exmouth township sits approximately 1,300 kilometres north of Perth. It rests on the closest point of the Australian mainland to Christmas Island and the Cocos (Keeling) Islands, the British Indian Ocean Territory and the Sunda Strait in Indonesia—one of Australia's main ocean trading routes to Asia.

[Naval Communication Station Harold E. Holt](#) sits 25 kilometres north of Exmouth on the North West Cape. It is home to the very low frequency radio transmission facility designed to communicate with both Australian and allied submarines.

The strategically important [Royal Australian Airforce Force Base Learmonth](#) is 35 kilometres south of the town and shares facilities with the local airport.

Unfortunately, [Exmouth](#) itself remains severely underdeveloped, which imperils the resilience not only of the local community, but also of the defence presence in the area.

Road trains supply Exmouth with fuels for both civilian and Australian Defence Force use. Aviation fuel in Western Australia is single-sourced from the state's only operating refinery, which is in Kwinana, south of Fremantle. Every one of the approximately 6 million litres of aviation fuel stored at Learmonth is trucked 1,300 kilometres by road.

The 8 million litres of diesel consumed annually at the joint communications facility is imported from overseas via a tanker berth at Point Murat, which is adjacent to the facility but unfortunately also within the Ningaloo Coast World Heritage Area.

These arrangements leave the Defence Department with significant supply-chain vulnerabilities.

At present, there are very few viable options for refuelling warships between HMAS Stirling in Fremantle and Darwin. The absence of an appropriate port facility also means that naval vessels operating to the west and northwest of Australia must return to Stirling for refuel and resupply.

Enhanced maritime infrastructure at Exmouth could extend the range of the Royal Australian Navy's operations in the Indian Ocean. Refuelling the Collins-class submarines in Exmouth would likely extend their patrol ranges by up to two weeks.

A veteran-owned and privately funded multiuser port is currently being planned for Exmouth. A multiple-berth jetty is intended for vessels of up to 12 metres of draught, which would allow the operation of every class of RAN vessel and most allied ships in service.

This project offers multiple benefits to both Australia's sovereign strategic fuel resilience and the RAN's operational sustainability.

RAN fleet unit replenishment could be conducted at this new facility before operations and during respite periods. Replenishment at sea could also then be undertaken via tankers drawing from Exmouth fuel reserves.

The Australian Border Force would also benefit significantly from this option.

This kind of investment will also provide long-term benefits for the local community by promoting several new economic opportunities.

So, with all these potential security, social and economic benefits, what's the problem? Especially given that the federal government is looking to enhance resilience, promote economic growth and invest in critical infrastructure.

Defence is reticent to make a long-term commitment to using the facility when its long-term operating budget seems in general to be on shaky ground.

The [Northern Australian Infrastructure Facility's](#) loans don't support the kinds of infrastructure investments that Defence and northern communities need either. And without a long-term Defence commitment, NAIF and equity investors are far from keen to invest. And without an 'anchor' client, making the project work is hard.

This is not an argument for Defence to jump into the driver's seat. The department, with its growing long-term commitment to capital investments, is understandably loath to make long-term operational expenditure commitments or infrastructure investments outside its existing bases.

Defence also can't be expected to carry the northern Australia resilience and investment can alone.

In the absence of a national security strategy and a national security adviser, the government needs to consider establishing a strategic investment fund that is focused on supporting these kinds of entrepreneurial efforts and could underwrite Defence's contribution. A key priority for the fund should be identifying nation-building projects that have economic, social, resilience and national security benefits but have not yet been able to get off the ground.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/exmouth-base-needed-to-plug-naval-gap-between-perth-and-darwin>.

Defence must work with all levels of government to improve northern Australia's bases

Mick Reilly and John Caligari, 30 October 2020



Image: Department of Defence.

The Australian Defence Force and all three levels of government should work together to establish and maintain 'mounting' bases in Australia's north from which overseas operations could be launched.

The ADF has home bases, mounting bases and bare bases, which serve specific purposes. Home bases are used for force generation and maintaining preparedness. Bare bases are there to be activated when needed, and mounting bases are established for specific operations and contingencies.

Mounting base infrastructure required for operations to secure Australia and its interests could be enhanced throughout northern Australia by closer linkages to planners and decision-makers within the three levels of government.

While it seems that there have been some attempts by Defence to consider mounting base requirements, they appear to be based on existing infrastructure, with no plan to integrate ADF requirements into future developments.

By comparison, in each state and local government area, significant effort has gone into the infrastructure developments required to support and develop communities and regions.

Defence improves the home bases of the army, navy and air force, generally without much consultation with local or state and territory authorities. This is to be expected given the permanency and purpose of home bases in training forces.

Mounting bases are different. Real attention is generally only paid to them when their potential operational use is considered. As [highlighted in a previous post](#), mounting bases are employed, given operational security considerations, for their proximity to potential operations, accessibility by road, rail, sea and air, and the suitability of their infrastructure and logistics for the training, deployment and sustainment of the deployed force. Given Australia's geographic location, these bases are normally situated in the country's north.

The commander of a joint force with an assigned mission has a different perspective on the infrastructure at a mounting base than the base commander. The base commander seeks infrastructure improvements to support the training function and day to day barracks living, and is focused on preparing for possible future missions. The force commander has eyes on the mission at hand.

There are two good reasons to pay attention to this now—the rising instability in our region and the increasing realisation of the benefits of developing northern Australia.

The [recently released](#) defence strategic update and force structure plan address the heightened imperative to meet emerging national security threats. For Defence planners, these documents point to the contingencies that could require mounting bases for ADF operations. If there was ever a time to get this right, it's now.

There is also an increasing focus on the economic benefits of investing in northern Australia, especially since the 2015 [Northern Australia audit](#), and around \$12 billion has been allocated to the national Defence estate and infrastructure program over the next four years.

The Commonwealth guidelines are set out in [Our north, our future: White paper on developing northern Australia](#) and managed by the Northern Australia Infrastructure Fund and the Office of Northern Australia. The Queensland government has the North Queensland Regional Plan and the North Queensland regional office that has a dedicated defence hub. The Northern Territory and Western Australia have similar plans.

Local governments naturally pursue infrastructure that enhances economic development and liveability of their areas.

Informed decisions made at local and state government level could strongly support Australia's national security. Without knowledge of Defence's needs, however, uninformed state and local government decisions could, at best, fail to optimise the conduct of ADF mobilisation and sustainment missions. At worst, not collaborating effectively now could directly impact on future deployed operations.

Improved knowledge, linkages and coordination among the three levels of government about mounting base operational requirements and infrastructure, would make best use of the taxpayers' dollar in northern Australia, while enhancing national security and improving prosperity.

All three levels of government invest in infrastructure. Where their interests meet, the costs could be shared to realise a national security effect, provide economic prosperity and jobs, and enhance the liveability of communities. In some cases, making choices

that don't involve additional costs could make the difference in whether infrastructure that better supports ADF mobilisation operations is built or not.

A simple example of effective coordination could be a planned port redevelopment. With a more informed understanding of Defence's mobilisation requirements, a berth might need to be extended only slightly to maximise Defence's use, for little cost.

Similarly, knowing the weight load and surface material requirements for armoured vehicle movements in a port, might be easily and cheaply addressed at the development stage rather than at some later date in order to meet an urgent contingency.

Simple inputs by Defence could make a significant difference to ADF mobilisation capability with no material effect on the operations of a port and at minimal cost.

Places in northern Australia where mounting bases for operations offshore are likely to be established are constantly being developed by state and local governments. A keener interest by Defence in this development work would likely find that a few simple contributions to the local development plans could yield significant benefits.

Providing advice to state and local government on mobilisation support adjustments would improve ADF capability now and in the future. Bearing in mind the characteristics required of a mounting base, some engagement and attention paid now, could save time and money when we really need both.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/defence-must-work-with-all-levels-of-government-to-improve-northern-australias-bases>.

Filling the hollow middle in Australia's defence industry

Tyson Sara, 6 November 2020



Image: Department of Defence.

Ever since Covid-19 started cutting a swathe through global supply chains, countless column inches in Australia have been devoted to the need for sovereign manufacturing capabilities as a defence against future disruptions. To its credit, the federal government has heeded these calls and is supporting the development of Australian industry capability, particularly in the defence sector, with a heavy focus on small to medium-sized enterprises (SMEs).

This focus on domestic capability and the various forms of assistance from different levels of government are both welcome and necessary, particularly in the context of the economic downturn. However, a number of issues are working to hold back Australia's defence manufacturers and prevent them from making the leap from SME to major player.

At the top of the list—ironically—is the focus on SMEs, followed closely by the Defence Department's aversion to risk and the nature of the bidding process itself. Reforms in these areas will go a long way towards taking Australia's defence manufacturing sector to the next level.

Australia's defence manufacturing industry is shaped like an hourglass: there are a large number of small firms at the base, a smattering of mid-sized companies in the centre, and large foreign primary contractors at the top. The problem with this structure is that a collection of small supply chain companies doesn't constitute a sovereign defence industry capability. While these firms provide essential products, at best they can supply projects run by larger players from overseas. What we need is a number of local primes that can integrate and sustain complex capabilities. Unfortunately, our current arrangements work against such developments.

At the moment, we have a situation where incentives for defence companies dry up as they grow larger, which can leave them in a precarious position and have the perverse outcome of discouraging them from taking on workers or even bidding for contracts they would be capable of delivering if it meant hiring more staff. Too big to be small, but too small to be big, they are trapped in the middle of the hourglass. If these firms are going to achieve the economies of scale that will allow Australia to have a truly sovereign defence industry capability, they will need to be encouraged to grow to that next level.

Distorting incentives are just one factor holding back our defence manufacturers. Another is a culture of risk-aversion within Defence that predisposes decision-makers towards having foreign primes oversee programs, with a reluctance to appoint local companies to take on larger projects.

This can result in absurd situations where a foreign prime is imposed on top of Australian companies that already have the capability, equipment, knowledge and experience to deliver projects in their own right. Defence's efforts to mitigate any risk involved with having a smaller company deliver the product or service come at considerable cost to local firms and to taxpayers.

Examples abound of companies that have done everything the government has asked of them by investing in local jobs and local high-end technology and gearing their businesses for export. But in many cases they have found themselves ineligible for government incentives on the one hand, and untrusted to deliver by Defence on the other. Despite the difficult situation they find themselves in, companies are reluctant to complain publicly for fear of biting the hand that feeds them.

Finally, bidding for defence contracts isn't cheap, and firms can be left significantly out of pocket following an unsuccessful campaign. Again, this counts against mid-sized domestic companies that are fully able to deliver the proposed capability but lack the financial firepower to compete in the bidding process with large foreign primes. While writing off a million or so dollars on a failed bid might be uncomfortable for a foreign prime, it can be ruinous for a mid-sized local manufacturer. That's without taking into account the lost productivity as staff are taken away from their profit-making activities to work on the bid. Of course, on the flip side is the fact that winning a major program could be transformative to an Australian company, its workers and its supply chain.

The answer could be a subsidised bidding process, where the government underwrites the costs of qualified Australian companies and the funding is paid back by the successful bidder, while unsuccessful firms reimburse the government an amount that's calculated based on how far they progressed in the bid. This would decrease the financial risk of bidding for programs and increase the pool of Australian companies bidding for, and winning, work.

As has been pointed out ad nauseam over the past six months or so, Australia needs to boost its manufacturing capabilities as a hedge against future supply-chain disruptions. If we are to be successful in this endeavour, it's time for government policy to catch up with defence industry developments. We need to increase the width of the hourglass and create local primes that can partner with global industry and provide us with the best of global technology that can be built, integrated and sustained here.

That's what a sovereign defence manufacturing sector looks like.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/filling-the-hollow-middle-in-australias-defence-industry>.

Leveraging defence investment in post-pandemic nation-building

Gill Savage and John Coyne, 18 November 2020



Image: Department of Defence.

Nations aren't built in silos. Nation-building, especially in Australia's north, requires vision, leadership, cooperation and courage in spades.

The Department of Defence is a significant economic player in northern Australia, and its investments have intrinsic value to the whole nation.

Capitalising on Defence ventures is therefore crucial to successful nation-building, particularly in this region. Doing so, however, will require a change in the way defence industries are scaled.

After years of denial, policymakers are coming to grips with the challenges of achieving scalable and sustainable infrastructure investment. Defence planners, understanding that the warning time for a potential major conflict has shortened, know these investments are needed to mitigate vulnerabilities in global supply chains.

But our understanding of how to deliver infrastructure outcomes that respond to a more diverse range of needs is flawed. A more comprehensive view of the community benefit derived from national security and defence investment is required.

Much to the displeasure of a defence organisation focused on warfighting, the public, policymakers and the government are increasingly viewing it as a source for public good. While Defence has sought to position itself at the centre of government, the cost of doing so is increasing demands to perform non-traditional roles.

These demands hit a watershed moment during last year's bushfire season when around 6,500 defence personnel provided [support to emergency services](#) across the country. Over the past several months, more than 3,200 Defence personnel have [supported the government's response to Covid-19](#).

The community is greatly comforted by the now-familiar sight of defence personnel supporting civil society by making face masks, assisting at state borders and facilitating traveller movements through our airports. But there is a more enduring role for Defence in the economy of Australian communities.

The global pandemic has revealed the fragility of supply chains, highlighting the impacts of fuel security on food security and essential services. The [2020 defence strategic update](#) amplified this point further. The bushfires and Covid-19 have exposed painful lessons about the interconnectedness and vulnerabilities of supply chains, including the implications for sovereignty.

It has been clear for a long time that Australia needs a more holistic, joined-up view of nation-building that recognises the role of defence investment. But despite this being the mantra of the last few decades, there's been little progress on this approach.

Defence necessarily prioritises investments that support its own contingency planning. But it should consider where it sits relative to the supply chain needs of others in the community. This shouldn't be a matter of prioritising Defence's direct warfighting interests above others, or the interests of others above Defence.

As we approach the end of 2020, we have a heightened focus on nation-building as a means of accelerating the recovery from the economic effects of the pandemic. In today's context, nation-building appears to mean [fast-tracking infrastructure projects](#) by 'streamlining approvals, underwriting projects or the establishment of a special purpose vehicle with a capped Government contribution'.

But nation-building is about more than building roads. It's about improving our economic, social and environmental outcomes through strategic investment. This requires taking a broad, holistic view to not only identify the opportunities but make the connections. For example, to contribute fully to local regions, Defence must address procurement barriers for local small and medium-sized businesses and empower local commanders to engage more meaningfully with regional councils.

In this environment, more transparency is needed on the lines of policy responsibility for national security investments in resilience and infrastructure. Defence should be a collaborative partner in these investments, which will drive whole-of-government economic benefits, including more significant economies of scale and cost-sharing both within and across portfolios.

Defence needs to think bigger, not smaller, and leverage the investment of others in Australia's northern region in line with the emphasis on capability development in the 2020 update.

A more integrated focus on nation-building and enhancing national resilience would enable Australia to better leverage the combined infrastructure and capability investments of governments and the private sector.

In the past, long lead times meant that Defence could rely on market forces to build its infrastructure, but that is no longer the case. This is why an integrated approach with governments and the private sector is urgently needed. A further challenge for Defence is that its increased capital commitments for infrastructure spending are reducing its operational resources. At the same time, demand for operational facilities is rising.

As part of this effort, leveraging the full suite of Defence's northern Australia investments is essential. As is ensuring the benefits arising from Defence capabilities in the northern region integrate with the private sector and community outcomes. Bringing forward [\\$190 million](#) of investment in approved infrastructure projects in the Northern Territory is a good start.

However, leveraging investment to deliver national solutions that respond to multiple challenges is more important than local economic sugar hits. This was the case before the Covid-19 pandemic and is now more critical than ever.

Our Covid-19 experiences and responses have demonstrated that market forces alone aren't enough. We need to shift from reactive responses to pre-emptive solutions and preventive strategies. The pandemic has also shown that the public sector, industry and the community can resolve national challenges most effectively when they work closely together.

We need solutions that foster cross-sector, cross-government, multidisciplinary approaches that position us for an uncertain future of rolling and concurrent crises.

Of course, Defence cannot be the sole funder or the lead developer—a whole-of-region approach is needed. But it can drive the scalability of regional industry by improving alignment with regional infrastructure investment and engaging in longer-term planning in Australia's north.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/leveraging-defence-investment-in-post-pandemic-nation-building>.

Advancing digital sovereignty in northern Australia

Huon Curtis, 24 November 2020

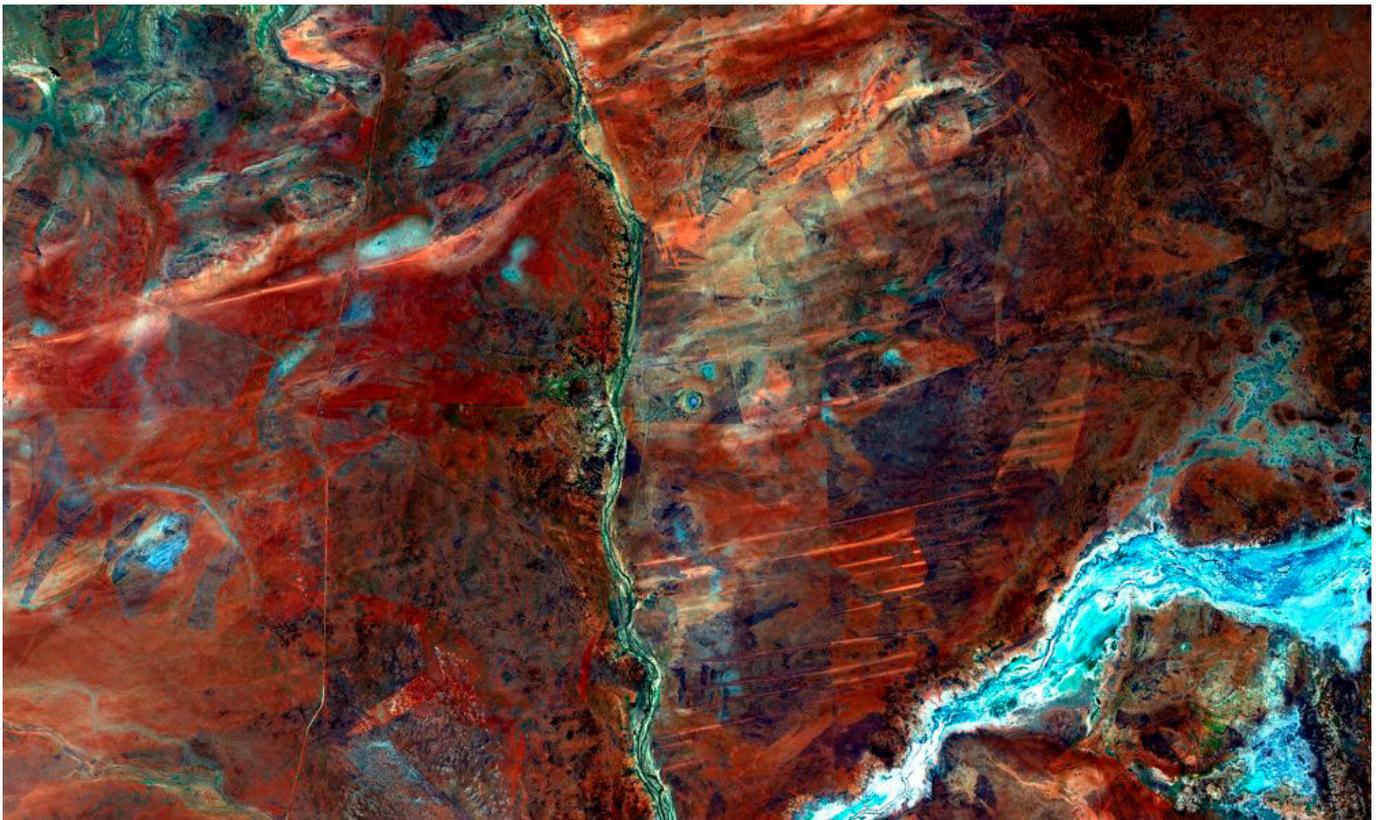


Image: European Space Agency.

To ensure the digital sovereignty of communities in northern Australia, intensive effort is needed to build greater digital capacity and the social infrastructure to enable it.

The region has long suffered from a digital deficit. Bridging the Rubicon of northern Australia's digital divide with the rest of the country requires significant investment in broadband and telecommunications access in remote areas.

Equally important is the development of digital literacy, programming skills and policy frameworks to make sure that digital technologies work in the best interest of communities.

But northern Australian jurisdictions aren't just sitting back waiting for the federal government to save the day. And there are big economic opportunities in the digital arena that the Northern Territory is keen to exploit.

For example, the [Darwin Data Centre](#) project is trying to leverage Darwin's proximity to Asia and the fact that Singapore currently has a moratorium on new data centres to reduce energy use. A major advantage of Darwin as a location is that construction costs there are relatively low.

The NT government is planning to leverage the data centre to advance further industrial clusters that will add a new dimension to the territory's traditional industrial profile of agriculture and mining.

Similarly, digitally dependent energy projects such as the [Australian ASEAN Power Link](#)—a massive solar farm between Darwin and Alice Springs connected to Singapore—will stabilise Darwin's power supply and potentially open up a new avenue of energy export revenue for the region.

While these initiatives are a great start, the federal government needs to invest more in the social infrastructure of the north. One area ripe for further development is skills and education in STEM (science, technology, engineering and mathematics). In doing so, the government could be making a long-term investment in digital sovereignty initiatives by Indigenous Australians.

The concept of digital sovereignty has been advanced in various contexts to capture the interplay between social and digital infrastructure.

Because of the dominant position of digital companies (for example, Google, Apple, Facebook, Amazon) and the increasing presence of Chinese companies internationally (ByteDance, Alibaba, Tencent), the idea first emerged as a way to describe control over various digital domains.

These domains include 'data, software (e.g. AI), standards and protocols (e.g. 5G, domain names), processes (e.g. cloud computing), hardware (e.g. mobile phones), services (e.g. social media, e-commerce), and infrastructures (e.g. cables, satellites, smart cities)'.

For consumers this means, most prominently, control over data. This does not necessarily entail individualised sovereignty over data, but looks to forms of collective ownership that can be put in place to ensure the collective wellbeing of a particular group.

In Indigenous Australia, this idea is playing out in [various initiatives](#) that act to ensure that data is controlled by communities, and is used to strengthen and advance the ability of Aboriginal and Torres Strait Islander communities to make their own decisions about their own development, justice and equality.

The [Indigenous Data Network](#), supported by the federal government, aims to improve access to data and information-sharing between government and Indigenous organisations by assisting them to identify local solutions for local issues. There is a crossover here with efforts to include Indigenous knowledge systems in the design and function of AI-enabled systems—such as traditional land management practices [in Kakadu](#)—and in projects that seek to combat the overpolicing of Indigenous communities.

But at the most basic level, digital sovereignty means access to digital infrastructure, like mobile phones and internet connectivity in general. As government services and commerce are increasingly app- and web-based, gaps in access prevent remote communities from participating in and contributing to society. The provision of access needs to be accommodated to the ways in which Indigenous people currently use technology. For example, many families in remote areas share phones.

Researchers from the Cooperative Research Centre for Developing Northern Australia recently [mapped](#) the priorities to encourage investment in digital connectivity infrastructure and social infrastructure across the north. They found that large parts of the region lacked service and that the high cost of digital access was hampering businesses and communities. The report highlighted an urgent 'need for digital knowledge and skills to be oriented towards, and taught in, local contexts as it is critical for workforce development'.

The study also identified the lack of an ‘overarching agenda for future-proofing northern Australia’s telecommunication and internet needs’. This is where the idea of digital sovereignty again comes into play. At the government level, access to, control over and regulation of critical digital infrastructure is a central issue, particularly when it comes to 5G and cloud computing.

Building the digital infrastructure of the north will play an important role in boosting the potential application of new technologies in the mineral, gas and agriculture sectors.

In the mineral and gas sectors, the [lack of access to skills](#) is one of the major impediments to take-up of new technologies. In agriculture, the National Farmers’ Federation has set an ambitious target of becoming a [\\$100 billion sector by 2030](#). However, big goals in these sectors can only be met by more [systematic approaches](#) to building digital social and physical infrastructure.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/advancing-digital-sovereignty-in-northern-australia>.

Thinking big about northern Australia’s national security posture

John Coyne, 2 December 2020



Image: Department of Defence.

What a difference a year can make, so the saying goes. In August 2019, ASPI published [Strong and free? The future security of Australia’s north](#). Since then, Australia has battled bushfires, wild storms and a global pandemic, and the [defence strategic update](#) has made fundamental changes to our strategic thinking. Today ASPI launches the North and Australia’s Security program’s latest report, [‘Thinking big!’ Resetting Northern Australia’s national security posture](#).

The 2019 report argued that more federal government policy attention was needed if northern Australia was to be ready to support future defence operations and contingencies. It also argued that there's a need to reconceptualise northern Australia—defined as those areas north of 26° south of the equator—as a single, scalable defence and national security ecosystem.

The report called the concept 'FOB (forward operating base) North' and outlined in broad brushstrokes the requirements for developing an ecosystem to deliver integrated support to current and future defence and national security operations. The FOB North concept focused on creating a vision of northern Australia and its defence infrastructure being in a state of readiness to support a range of defence contingencies with little warning.

By late 2019, Australia was already key political, military and economic terrain in a new era of major-power competition that spans security, technology, economics and politics.

At the same time, as highlighted by ASPI's [Robert Glasser](#), climate change has continued to drive increases in the frequency and intensity of extreme weather events and natural disasters domestically and regionally. We'll need to be prepared, on short notice, to provide disaster response and humanitarian assistance to support our neighbours. At the same time, we need to be ready to evacuate our citizens from across the region, if not the world, in the face of more frequent natural disasters and political turmoil.

Over the past seven months, the Covid-19 pandemic has rocked the world, with effects and implications that reinforce the strategic value of our north. Beyond the successes of our direct pandemic response and the rapid, large economic stimulus that has cushioned people and businesses from the worst of the economic damage, Covid-19 has brought some painful lessons for Australian policymakers.

In addition to its immediate health challenges, the virus's second-order social, economic and geopolitical impacts have exposed numerous fault lines in Australia's national security arrangements, across our economy, our infrastructure and the industry that we would need in future crises—health and natural disasters as well as military crises and conflicts.

While the full economic, health, social and geopolitical impacts of the pandemic (and indeed their duration) are yet to be realised, there are already many national resilience and security lessons. Australia's 30 years of economic growth have led to an almost religious belief in globalisation and good luck—a dangerous combination.

In the meantime, without a socially and economically prosperous northern Australia, there will be insufficient industry and infrastructure support for future defence operations, including regional engagement and power projection.

Alternatively, we can act to ensure that the north contributes to building the more regionally active, more offensively capable ADF that [Prime Minister Scott Morrison envisaged](#) when he launched the defence strategic update, and so use our strategic geography to help deter conflict and support regional prosperity and security.

While this latest report focuses primarily on the need to 'think big' about nation-building in northern Australia, it also engages with the reality of Covid-19 and the lessons that this pandemic has provided.

Defence's real and financial commitments to northern Australia are critical to Australia's broader national security and economic development, and an economically and socially prosperous northern Australia is essential for our national security. The second- and third-order impacts of defence spending serve to inoculate against the social implications of economic recession, reduce the possibility of foreign interference and contribute to social cohesion.

The report makes the case that while defence spending is vital to northern economies and nation-building, it's focused more on the defence organisation's more narrowly conceived portfolio of capital investments in bricks and mortar rather than on much-needed broader national security and economic decisions.

Northern Australia needs people, infrastructure and investment. It needs a critical population mass that will allow it to become sustainable and grow further. While defence spending has a place here, it ought not be considered the sole source of national security investment in the north.

Defence can't, of course, be the sole designer of the kind of nation-building investment that's needed. While Defence isn't the only answer, there is room for consideration of how defence spending can assist national security and nation-building. It should be part of a broader strategy, which shouldn't end up solely promoting sugar hits of economic investment that have little impact on underlying resilience and prosperity.

A paradigm shift in policy thinking on northern Australia is necessary to achieve the kind of national security and resilience we need.

The report argues that there's a need for the federal government and the Northern Territory, Queensland and West Australian governments to take a more holistic perspective on northern Australia's critical economic and national security role. The Australian government needs an integrated national and economic security strategy that encourages collaboration and synchronisation with state and territory governments.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/thinking-big-about-northern-australias-national-security-posture>.

Australia risks alienating friends and deterring no one

Breanna Gabbert, 8 December 2020



Image: General Angus Campbell/Twitter.

Contributors to *The Strategist's* 'North of 26° south' series have explored the continued importance of northern Australia to national security and defence strategy, propelling the argument for expanding air, naval and space bases in the Top End. This effort to prepare for an immediate hot-peace future doesn't come without risk. Without adept strategic communication, we risk damaging our resilient yet fluctuating relationships with our northern neighbours.

Dino Patti Djalal, a former Indonesian deputy foreign minister, spoke at ASPI's '2020 Strategic Vision' conference on the shortfalls and long-term harm of such tactical miscalculations. He recalled being dumbstruck in 2011 when journalists questioned both him and Indonesia's President Susilo Bambang Yudhoyono in Hawaii on the placement of a US Marines air-ground taskforce in Darwin. He reflected that neither the Americans nor the Australians had consulted or informed the president appropriately, creating embarrassment and spurring conspiracy theories that linger to this day in the Indonesian government about Australia's malintent. The proximity of the placement to West Papua and the Masela gas block was significant in the minds of Indonesian officials, and the unannounced development was a quiet setback to the relationship.

We urgently need to craft our strategic communication to be better positioned to fulfil our mission in the north. The 1998 letter from Australian Prime Minister John Howard to Indonesian President B.J. Habibie was indicative of communication lacking diplomatic nuance or strategic thought, ultimately backfiring and playing some role in prompting the snap referendum on independence for East Timor six months later.

While we've made improvements in our strategic communication since 1998, Australia at times still has a tin ear for how our neighbours will interpret our domestic policy.

If Australia sees itself as a burgeoning middle power with a responsibility to protect, or at least support, the Indo-Pacific region, we'll need to create a consistent message aligned with our strategic goals. Was it that oversight that developed an undercurrent of anti-Australian sentiment in Indonesia that sparked alight in 2017 when General Gatot Nurmantyo severed defence ties in a brief bilateral crisis? The general had spoken plainly and publicly of his concerns about the rotation of US Marines through Darwin, and accused Australia of recruiting Indonesian officers as spies.

Investment in Australian military facilities proximate to Indo-Pacific shores has increased during a downward trend in defence spending in Southeast Asia. This has the clear potential to inflame and escalate underlying anxieties. These developments, paired with the ongoing funding cuts to the Department of Foreign Affairs and Trade, have made the need for political nuance and tact not typically characteristic of Australian 'megaphone diplomacy' more urgent.

If Australia is to avoid mistrust and misunderstandings, we'll need sophisticated strategic communication to navigate a 'poorer and more dangerous world'. We'll need to understand what motivates the foreign policies of our northern neighbours and their indirect methods of balancing against China's incremental incursions into their exclusive economic zones. Indonesia and ASEAN wish to see themselves as independent of great-power contests. Whether that proves to be realistic or not, we'll need to craft our messaging to not alienate neighbours that don't appreciate a heavy-handed approach.

South Pacific states are beginning to deviate from their traditional security relationships and leverage their geostrategic value for greater aid and investment, even if risking debt-trap diplomacy. In July at the UN Human Rights Council, Papua New Guinea sided with China on its draconian Hong Kong national security law. It's unclear exactly why PNG voted that way, but its signature to the Chinese Belt and Road Initiative may have helped motivate the decision.

The reinvigoration behind recent military development of northern Australia hasn't been an effort solely to deter foreign aggressors from our doorstep, but to project a credible military presence ready to support our friends in the region and maintain a free and open Indo-Pacific.

Leveraging regional proximity, northern defence commitments promise to foster greater interoperability and the capacity to conduct surveillance against covert threats and ensure our preparedness to provide humanitarian and disaster responses. But, in failing to communicate the collective value of that investment to our security partners, we risk alienating our friends in the region and, in doing so, failing to hedge against escalating aggression from China.

The government's defence strategic update classifies the Indonesian defence partnership as of 'first order importance to Australia' and alleviates anxiety that Australia would consider Indonesia a potential threat. If that's the case, why hasn't Canberra done more to assure Jakarta, which has historically been suspicious of the US, of the intentions behind our defensive posturing and our strategic vision for northern Australia?

While Prime Minister Scott Morrison's embrace of the 'Pacific family' was arguably out of the 'Scotty from marketing' playbook, it did successfully reframe Australia's renewed interest in the region. The [Pacific step-up](#) needs to communicate with Australia's partners in our near region and lose the neo-colonial, paternalistic undertones that have existed since the term 'arc of instability' was coined.

Looking back on our past strategic communication failures, we need to focus on consulting with our regional partners in a whole-of-government sense so they have a deeper understanding of our strategic policy.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/australia-risks-alienating-friends-and-detering-no-one>.

Defence's responsibilities in an era of climate change

Hal Crichton-Standish, 11 December 2020



Image: Department of Defence.

Climate change is presenting Australia's Defence Department with new challenges on the domestic front. One of the more pressing is the need to safeguard defence installations across Australia as climate-driven natural disaster events become increasingly frequent and extreme.

This increasing severity of natural disasters, such as last summer's bushfires, means that Defence will continue to be required to step up as a [national disaster response force](#).

A framework for climate preparedness needs to be developed at all levels of Defence planning, especially in procurement procedures.

Defence has some policies and guidance in place for environmental management at its facilities, such as its [Smart infrastructure handbook](#); however, it hasn't yet developed a comprehensive long-term plan to manage environmental change.

The defence presence in the Northern Territory illustrates the range of issues that the organisation will need to focus on in the next decade and beyond. All defence activities, from basing to space programs, will be affected by extreme weather events.

Royal Australian Air Force Base Tindal, located close to the township of Katherine, has already had experience with such events. In 1998, one of the [worst floods in the Northern Territory](#) displaced nearly the entire population of Katherine. More than 5,000 residents were forced out of their homes in little over 24 hours. In the 22 years since that disaster, flooding has been a persistent issue for the town, which must remain on alert to deal with the threat of unexpected flooding.

The Tindal base [recently](#) received more than \$1 billion to upgrade its facilities, including a large, flat area of concrete and bitumen and a 2.7-kilometre asphalt runway. The majority of funds (\$737 million) will be allocated to extending the runway and creating new fuel storage facilities to improve accessibility for US Air Force aircraft.

Locals and environmental experts are [concerned](#) that run-off from the broad expanses of concrete and bitumen on the base will mean more overflow into Tindal Creek, which is the key source of floodwater in Katherine. The upgrades at Tindal will significantly increase the risk of flooding in the township.

If the expanded runways and tarmac exacerbate flood conditions, it won't just affect the people of Katherine, but will also put [millions of dollars of onsite defence assets](#) at risk. It also could contribute to chemical contamination of groundwater in the area.

Getting this sort of work wrong can be hugely expensive and has the potential to damage Defence's reputation in the communities in which it operates. Defence has already been in federal court over per- and poly-fluoroalkyl substances (PFAS) contamination of local groundwater, and agreed to [settle a class action](#) by Katherine residents for \$92.5 million in March.

Earlier this year, the proposed redevelopment of RAAF Base Tindal was examined by the Parliamentary Standing Committee on Public Works, which [recommended that the project be approved](#). In its original [statement of evidence](#) to the committee, Defence said that it would put measures in place to deal with the environmental impacts of the upgrade, including flooding and PFAS contamination.

These measures would extend existing [water retention measures](#) to the new facilities, such as the stormwater network in and around the airfield, built to divert run-off and reduce the extent of flooding. But nowhere in this document is there an acknowledgement of the greater risks to facilities posed in an era of climate change. Existing measures may not be enough.

This raises the broader question about Defence's role and responsibility in protecting the environment and local communities in this new era. As a Commonwealth agency, Defence has obligations under the *Environment Protection and Biodiversity Conservation Act 1999* to ensure that its activities do not have a significant adverse impact on the environment. This is supported by policies in the department's [Environment and heritage manual](#). But both the EPBC Act and Defence's environmental policies will likely need to be updated to cope with the realities of climate change.

These issues will be complicated by expectation, noted in the government's 2020 defence strategic update, that the Australian Defence Force will need to be ready to deploy to assist communities to deal with extreme weather events. But it's unclear how Defence will resource and manage this new dimension of its mission.

The nature of public security in Australia is changing, and our institutions must be ready to change with it.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/defences-responsibilities-in-an-era-of-climate-change>.

Cutting-edge simulation facility planned for Townsville

David Burke, 15 December 2020



Image: Department of Defence.

The impact of Covid-19 and Australia's rapidly evolving strategic environment have highlighted the requirement to invest in a sovereign defence industry. The Australian government clearly articulated its ambition for a strong and sustainable capability in the 2020 defence strategic update and, to its credit, also expressed the desire to maximise opportunities in regional Australia.

That's a sensible approach. The political and military realignment underway in the Indo-Pacific region is thrusting northern Australia into a position of strategic importance it hasn't had since World War II. The north is increasingly valued as a location for forward mounting bases and training areas for the Australian Defence Force and allied militaries but, as I highlighted in a [previous Strategist post](#), there's no point positioning ADF units forward if supporting industry and logistics are far removed in distance and time.

Most of Australia's people, industry and manufacturing are in the southern half of the country. Altering that distribution is no easy task. ASPI's John Coyne suggests that establishing a defence industry in regional Australia [will require coordination](#) across governments and agencies. Achieving cooperation between government, defence and industry is never easy, but the greatest challenge is to first understand which industries to encourage, where they're located and how to maximise outcomes for all involved.

Although the 2020 force structure plan details significant investment opportunities for defence industry, it isn't the Defence Department's responsibility to stimulate local economies or invest in infrastructure without some meaningful return. Accordingly,

Townsville in north Queensland has developed a [strategy for promoting defence industry](#) based on delivering mutually beneficial outcomes for Defence and the region through carefully targeted opportunities.

One example is the proposed North Queensland Simulation Park, or **NQ SPARK**. The defence organisation clearly understands the importance of live and simulation-enabled training, and Townsville is ideally placed as a regional location for the development of innovative training capabilities. Lavarack Barracks is home to the army's 3rd Brigade and the combat training centre. A new 4G/5G-enabled training range commissioned for the training centre near Townsville has been designed and delivered by Townsville-based Cubic Defence Australia. Cubic is a world-leading enterprise in blended live and synthetic collective training solutions and command and control systems.

NQ SPARK will consolidate and exploit a unique confluence of defence and health knowledge and simulation expertise to construct a multi-user simulation training facility. It will become foundation infrastructure for an advanced training and research and development precinct. The facility will be positioned on James Cook University land with a common boundary between Lavarack Barracks and the Townsville University Hospital, close by two world-class, instrumented military training areas (Townsville and Greenvale)—a location unrivalled in Australia.

The facility will be equipped with cutting-edge technology, including immersive visual systems, precision motion capture and, most importantly, a private 4G/5G-compliant LTE network for advanced simulation training and experimentation. The network capability is a key enabler for advanced operational test and evaluation activities in highly realistic operational scenarios exploiting advanced simulation technology. NQ SPARK will uniquely feature both public and private LTE networks—something that's much more difficult to achieve in major southern population centres.

Defence forces around the world are investing in autonomous technology. A key requirement for the operation and control of uncrewed systems is a secure and robust communications architecture. NQ SPARK will be centrally located between air, land and sea ranges and corridors for unmanned vehicles stretching from western Queensland to the Coral Sea. Sections of these ranges will be instrumented and networked to support integrated research and development across multiple domains in tropical conditions. This will enable the ADF to test and train in conditions replicating environments they may be called to fight in.

Townsville City Council led the initial coordination of the project, with cooperation from the Queensland government, health authorities, academia, emergency services and defence industry. The state government is preparing a business case, and federal funding for construction is under consideration through the [Townsville City Deal](#) agreement.

Defence won't contribute to the cost of the infrastructure but will indirectly support the operational viability of the proposal. Cubic and affiliated companies have significant contracts with Defence and will be major users of the facility when delivering training, simulation and other high-tech capabilities.

The Defence Science and Technology Group funds research in collaboration with James Cook University, presenting opportunities through NQ SPARK for industry and academia to access funding from the Next Generation Technologies Fund and the Defence Innovation Hub. Of interest is a potential requirement for industry-led cooperative research to improve the integration of soldier systems. NQ SPARK could be an ideal location to base a new defence cooperative research centre, linked through James Cook University to other national universities to focus on operational capabilities such as integrated soldier systems.

Not only will NQ SPARK link Townsville's defence, research and health capabilities with national and international defence industry and research organisations, but it will also facilitate significant industry investment within the precinct and provide employment for a highly skilled workforce including veterans and STEM graduates.

The NQ SPARK proposal is a model for collaboration among governments, agencies and defence industries to simultaneously deliver transformational projects for the economies of northern Australia and contribute to the security needs of the nation.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/cutting-edge-simulation-facility-planned-for-townsville>.

Covid-19 means live, virtual and constructive training's time has come

Tony McCormack, 10 February 2021



Image: Department of Defence.

The world has changed rapidly over the past 18 months and the way Australia's defence organisation trains its people needs to change with it, or skills and readiness will surely decline.

A combination of the Australian Defence Force's involvement in responding to natural disasters over the summer of 2019–20 and Covid-19 restrictions throughout 2020 resulted in the cancellation of major military exercises such as [Hamel](#), and the scope of those that did proceed was reduced. [Pitch Black 20](#), initially cancelled, was eventually held as a scaled-down virtual exercise. This pattern was consistent across the Five Eyes, with [RIMPAC](#) also drastically reduced in scale and scope.

Despite this reduction in activities, military personnel were still required to retain their individual skills and the ADF to maintain its readiness and preparedness levels. However, the lack of realistic training opportunities no doubt resulted in some atrophy of the ADF's operational ability.

Despite the availability of a vaccine, Covid restrictions are going to remain with us for a while yet, precluding a return to large-scale training activities and preventing international travel to exercise with allies and partners. Greater investment is needed in alternative approaches that leverage emerging trends in simulation to rectify the deficiencies that the reduction in training will produce.

Live, virtual and constructive training, or LVC, is a taxonomy used mainly for military training, where there's a mix between real people, simulated capabilities and environments, and computer-generated elements. Imagine a soldier in the field in the Northern

Territory, calling in a simulated airstrike from an F-35 pilot seated in a simulator at a Royal Australian Air Force base in New South Wales against a computer-generated threat.

The holy grail of LVC is the ability to integrate all the individual components to conduct complex multidimensional training at varying levels of complexity and security, with widely dispersed personnel and platforms. The ultimate goal is an event that links all components together, giving the participants the maximum training benefit in as realistic an environment as possible.

The ADF conducts LVC to a limited extent. During 2020, the ADF participated in virtual exercises such as [Coalition Virtual Flag](#), [Wirra Jaya](#) and [Fleet Synthetic Training](#), to name a few. While all were international, they were constrained to a narrow focus on elements in the air, land and sea environments.

Unfortunately, LVC hasn't yet reached its potential. The main obstacles are the cost of implementation and of service-specific training systems and, up until last year, the abundance of live training activities and exercises. The changed environment wrought by 2020 has provided the opportunity for a more considered approach to LVC for the ADF.

Covid-19 isn't the only catalyst for change; the complexities of contemporary military equipment necessitate and complicate the development and implementation of LVC. The combat systems and weapons on high-end platforms such as the F-35 joint strike fighter and air warfare destroyer operate on manufacturers' proprietary systems at high levels of classification and consume and create massive volumes of data. Stringent security protocols are required to protect both the source codes and the data that is carried, as well as access to a large amount of secure bandwidth.

These weapon systems are also expensive to operate. Combat aircraft cost tens of thousands of dollars per hour to fly, so every hour flown in a simulator means a flying hour saved, a longer period between maintenance cycles and a longer airframe life.

While increasing the scope, quantity and frequency of LVC activities would undoubtedly maximise training opportunities for the ADF and improve the skills and competencies of personnel, it will be difficult to achieve. However, there are some steps that could be taken to improve LVC opportunities.

To begin with, all relevant simulators and computer-based training systems need to be compatible with the LVC network. This will take a change to procurement processes, as current training systems often support only the needs of a particular weapon system, with little thought given to broader interoperability. Where appropriate, new and emerging systems should have LVC compatibility mandated. An extant system should be modified only if it will provide a proven return on investment.

Next, a stand-alone, multi-security, layered IT network should be established. This would remove the added bandwidth demands required to operate LVC from daily operating systems, reduce the chance of data spills and remove any possibility of a simulated scenario being mistaken for an actual event. A robust network may also help to assure manufacturers that their proprietary information won't be shared with a competitor.

Importantly, an LVC network must be easy to join. A system that's difficult to get into and navigate will be underutilised and likely provide no training benefit. The system needs to be built for the user and not the IT specialist.

Finally, LVC should not and cannot be pursued by Defence alone. LVC needs a balance of contributors: those who build and maintain the environment, those who provide the training expertise and those who use it. It must be a combination of military and civilian personnel with a broad mixture of qualifications and practical experience.

There's already a community of Australian companies providing expertise and services in this area. [Cubic Australia](#), for example, currently provides support to all three services across Australia and [Milskil](#), mainly focuses on supporting the fighter force at RAAF Williamstown. Teaming and agreements are already in place and non-defence investments are being made. The North Queensland Simulation Park, or [NQ SPARK](#), is a collaborative activity involving government, industry and academia that's aimed at providing a multi-user simulation facility.

A more nuanced approach to LVC is needed but it won't happen unless it is given a higher priority. Resources (particularly budgetary ones) and personnel need to be devoted to building the LVC enterprise. Importantly, LVC needs to be championed at the highest levels to ensure its implementation is promoted and enforced.

While the holy grail will likely never be achieved, circumstances have changed and the requirement to conduct more blended exercises creates opportunities to improve the quality and availability of LVC for the ADF. Training is about people and not just simulators or computers. Any LVC solution needs to be simple to use and provide a training benefit, not a burden.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/covid-19-means-live-virtual-and-constructive-trainings-time-has-come>.

Australian Army's new attack helicopters must be based and sustained in Darwin

Luke Gosling, 18 February 2021



Image: Department of Defence.

Now that the government has made the [decision](#) to purchase 29 of Boeing's AH-64E Apache helicopters by 2025 to replace the Australian Army's 22 Airbus Tigers, where does it leave us?

Surprisingly, it's with a great opportunity to increase Australia's defence capability. Using Darwin as the Apaches' basing and sustainment location will deepen the city's ability to support high-end technologies and train and work with our US ally, a partner that seems likely to visit more and more frequently as President Joe Biden [looks at](#) US global force posture changes—and Australia seeks to make that work in both its and America's interests.

Darwin sits right near the fulcrum of our region, the Indo-Pacific. And, as ever in world history, strategic geography matters. Being able to project force from Darwin, and support and sustain it out of Darwin, is a simple necessity that flows from this fact.

Maximising Australian industry involvement in defence capability, with the ‘potential opportunities for Australian industry in logistic support, warehousing services, training development, engineering services, and maintenance, repair and overhaul’ that Defence Minister Linda Reynolds has [referred](#) to, could all be very good news.

For that to happen, though, the helicopter transition plan needs to build certain things in early, and it needs to connect to the bigger moves in our strategic environment, like the Biden administration’s thinking on US force posture and presence. It’s only four years to 2025, so decisions to guide transition planning need to be made now. And Defence must not keep those decisions to itself—they need to be understood by the industry and other stakeholders that have critical roles to play.

The defence industry in Darwin is ready to start the transition process and make sure that it has a sustainable workforce for maintaining capability.

The Covid-19 pandemic and disruptions to various supply chains have taught us two key things that are relevant here. First, we have to plan for vulnerabilities in extended supply chains by building in local resilience and capacity. Second, it’s shown how adaptable and capable Australian industry is, including in our smaller cities and the regions. It was a small, regionally based [mining technology company](#) that produced ventilators at light speed from a standing start when Covid-19 struck, for example.

It’s great to hear that the Apaches will be operated by the army’s Darwin-based 1st Aviation Regiment, but that’s well short of a commitment to basing the Apaches and their crews there. And it’s a long way from recognising that sustaining these high-technology platforms out of Darwin isn’t just feasible, but will grow foundations that enable Australia and our partners and allies to make Darwin even more useful in the challenging strategic environment we know is upon us.

It would be a somewhat ironic outcome if Defence was to move either the helicopters or their deeper sustainment and support away from Darwin, given that last year’s AUSMIN discussions showed the US making decisions to increase its investment and presence in the area through [fuel storage](#), and now in light of the Biden force posture review. From a US perspective, we could expect the question, ‘How is it that we see the strategic role of Darwin but you Aussies don’t seem to?’—unless, of course, the Americans are too polite to ask.

Darwin has always been vital ground in the Indo-Pacific. The defence industry in Darwin is doing an outstanding job of rising to the challenges of various Australian Defence Force units being redeployed south and east, as well as gearing up for more naval activity. Industry capacity in Darwin isn’t all about defence, of course—big oil and gas projects are enabled by our industrial base too, and there’s a growing commitment to and investment in enablers that allow data-hungry sectors and people to operate effectively here.

Darwin has the weapons and testing ranges, the allied presence, and the industrial capacity needed for Australia’s attack helicopter capability to transition and thrive.

It might be attractive for Defence to think that the Apaches can be forward-deployed to Darwin but sustained out of the east coast—and that might be initially simpler for Boeing, which has a hub in Brisbane. The Apache transition needs to get beyond these tactical industry and ADF posting incentives and instead put strategic value at the heart of the plan.

I look forward to these early decisions and to helping Defence and the Darwin industrial sector make the transition from Tiger to Apache a strategic and commercial success.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/australian-armys-new-attack-helicopters-must-be-based-and-sustained-in-darwin>.

Australia has a key role to play in reducing China's rare-earths dominance

Matthew Page and John Coyne, 25 February 2021



Image: blickpixel/Pixabay.

US President Joe Biden has just signed an [executive order](#) launching a comprehensive review of America's critical supply chains for strategically significant products and resources.

Among those are rare-earth elements, supplies of which the Biden administration says must not be 'dependent upon foreign sources or single points of failure in times of national emergency'. 'Foreign sources' points a clear finger at one country which has dominated the market for decades.

China has used its near-monopolistic control of the global supply chain for rare-earth elements to strategic advantage against both the United States and Japan. The two countries have attempted to break China's grip on rare-earth production over recent years using new green techniques.

As part of this effort, the US will [reportedly](#) accelerate efforts to work with Australia, Japan, South Korea and Taiwan to develop more resilient supply chains for semiconductor chips, electric vehicle batteries and other strategically significant products. However, there's room for more strategic responses involving cooperation among Japan, the US and Australia to assure the mining and processing of the rare earths that are used to manufacture these products.

[Rare earths](#) are a group of 17 metals—15 elements from the lanthanide series and two chemically similar elements, scandium and yttrium. Each has unique properties that are vital for a range of commercial and defence technologies, including batteries, high-powered magnets and electronic equipment. [An iPhone](#), for example, contains eight different rare-earth minerals, and there

are [probably](#) a couple in your refrigerator and washing machine. They also make up about [420 kilograms](#) of an F-35 fighter jet and are essential for [guided cruise missiles](#).

Despite their name, rare earths are not all that rare. They're present in abundance in the earth's crust. The challenge, however, is finding them in sufficient concentrations to justify commercial mining operations. Securing the upfront financing required to build a mine in a location that will tolerate the [substantial environmental impacts](#) of establishing a rare-earth processing facility is no easy task.

Fortunately for China, the commercial viability of its reserves, Chinese companies' access to state-backed financing and the country's lax environmental regulations have helped build its [dominance](#) of the global rare-earth market.

According to the [US Geological Survey](#), China accounted for at least 58% of global production of rare earths last year, and possibly up to 80% if you include [illegal and undocumented](#) production activity. China's rare-earth production exceeds that of the world's second-largest producer, the US, by more than 100,000 tonnes, and even then the US still relies on China for most of its rare-earth imports.

The Chinese state has realised that its control of the global market makes for a useful economic lever. In 2010, it effectively [restricted](#) rare-earth exports to Japan when a Chinese fishing trawler collided with a Japanese coastguard vessel near the disputed Senkaku Islands. More recently, it [threatened to limit](#) rare-earth supplies to US defence contractors, [including Lockheed Martin](#), over its involvement with US arms sales to Taiwan.

China routinely adjusts its domestic production quotas and subsidises rare-earth prices to strategically [flood the market](#) when it wants to drive out competitors and deter new market entrants.

The US, in turn, has realised the need to develop a secure supply of rare-earths and has looked to Australia to help make that happen.

Australia has the world's sixth-largest reserves of rare-earth minerals, though they remain largely untapped with only two mines producing them. The largest by far is the mine at Mt Weld in Western Australia, which is owned by Australia-based Lynas Corporation.

On 1 February, the Pentagon announced that it had awarded Lynas a second contract to develop a rare-earth processing facility in Texas.

The contract signed between Lynas and the US Department of Defence adds separation capacity for light rare-earth minerals to its planned heavy minerals processing facility in Hondo, Texas, announced last year. When the project is complete, Lynas—which is already the second-largest producer of separated rare earths globally—will operate two of the largest rare-earth processing plants outside of China. Not only is this a massive boon to Australia's rare-earth industry, but it also gives the US substantially more access to rare earths in a global market that Beijing has long controlled.

While Lynas's deal with the Pentagon is welcome news, the only new infrastructure being built under this agreement is in the US.

Compounding this challenge to China's rare-earth monopoly has been the coup in Myanmar. China is dependent on rare-earth imports from Myanmar, particularly [heavy rare earths](#). Imports of heavy minerals from Myanmar account for 60% of domestic Chinese consumption—and China is no stranger to restrictions imposed by the [Myanmar government](#).

A long-term suspension of Myanmar's rare-earth exports would be a shock to China's supply chain. Filling the gap would require a sizeable boost to domestic production or additional foreign investment in an alternative supplier.

Days after the Pentagon announced its second contract with Lynas, Shanghai-based rare-earth processor Shenghe Resources signed a [memorandum of understanding](#) with West Australian mining company RareX Limited. If the deal goes ahead, Shenghe will

hold a majority share of a new jointly owned rare-earth trading company that would likely source ore from RareX's [Cummins Range](#) rare-earth mining project in northern Western Australia to be processed at Shenghe's refineries in China.

The Cummins Range project will be a landmark project for northern Australia, bringing with it jobs and investment. The mine will likely transport rare-earth ores to either Wyndham or Darwin port to be shipped overseas for processing.

A Chinese state-owned company potentially investing in a new rare-earth mine in northern Australia should raise eyebrows in Canberra, Washington and Tokyo. The irony of [descriptions](#) of the project as a 'great leap forward' and RareX as 'delighted to be moving towards securing an alliance' ought not be lost on policymakers. There's clearly a disconnect with Australia's strategic policy settings when its partners have worked so hard to break China's monopoly only to have the absence of equity investment push other Australian miners towards a Shanghai-listed company.

Australia's [critical minerals strategy](#) of 2019 is largely focused on attracting foreign investment into new mining infrastructure. The renewed focus on the strategic and commercial importance of rare earths should be a stark reminder that, as the Northern Territory government's Luke Bowen has written in *The Strategist*, Australia needs to [back itself on rare earths](#) instead of letting great-power competition lead the way.

While Biden's executive order is a good start, the Australian government should establish a Japan–US–Australia dialogue to ensure a collaborative national policy response to rare-earth supply issues. Such a response needs to promote equity investments and green technologies for the mining and production of rare earths in Australia's north that will support a shift to greater global competition and diversification away from China.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/australia-has-a-key-role-to-play-in-reducing-chinas-rare-earths-dominance>.

ASPI broadens its focus on northern Australia

John Coyne, Teagan Westendorf, Gill Savage and Tony McCormack, 12 March 2021



Image: Department of Defence.

In January 2019, ASPI established its ‘North and Australia’s Security’ program to provide a sustained research focus on the security of northern Australia and its critical role in broader security—and for a good reason, as most of our thinking at that time had been set in the late 1980s with nary a revisit since.

Today, during its 20th anniversary year, ASPI is doubling down on this critical research focus by launching its [Northern Australia Strategic Policy Centre](#).

The centre’s establishment is the result of a process of evolutionary development.

When ASPI’s northern Australia program began, there was a shortage of foundational strategic thinking on the region. While consecutive federal governments had continued to make significant policy commitments to northern Australia, there was a widening gap between those policy settings and actual activity on the ground.

In the program’s first six months, our work focused on promoting more significant discourse by identifying the gaps between stated defence policy and action in northern Australia (see [here](#), [here](#) and [here](#))

In August 2019, ASPI released *Strong and free? The future security of Australia’s north*, which argued that there was ‘a need to reconceptualise northern Australia ... as a single scalable defence and national security ecosystem’. The report recommended

that such an ecosystem be developed ‘to plan and deliver integrated support to current and future ADF and national security operations’.

We explored this scalable ecosystem theme in the ‘North of 26° south’ *Strategist series* throughout 2020. The subsequent discourse made it clear that realising the strategic value of the north depended on having a scalable defence industry, which in turn was dependent on economically and socially prosperous communities. To achieve such prosperity required more significant and innovative policy thinking about northern Australia.

In December 2020, ASPI released *Thinking big! Resetting northern Australia’s national posture*. This report highlighted the vast economic opportunities in northern Australia and how they can contribute to national security.

The report made the case that, while defence spending is vital to northern economies and nation-building, it is focused more on the defence organisation’s narrowly conceived portfolio of capital investments in defence establishments and facilities than on much-needed broader national security and economic decisions.

We found that there’s a need for the federal government and the Northern Territory, Queensland and Western Australian governments to take a more holistic perspective on northern Australia’s critical economic and national security role. The cities of Townsville, Cairns, Darwin and Katherine are vital to our defence and our financial and national security. They’re much more than simply home bases for our defence forces.

Over the two years, the program developed a sustained research focus on the security of Australia’s north and the critical contributions it makes to Australia’s broader security. In doing so, it actively promoted public-policy discourse on the north’s role in national security. But now it’s time for ASPI itself to think bigger about this challenge.

The Northern Australia Strategic Policy Centre is being launched today to create a focal point for public policy discussion on nation-building in northern Australia and provide a catalyst for increasing the quantity and quality of discourse on the subject. The centre’s work will provide applied policy research that assists the private and public sectors to navigate increased strategic uncertainty.

With the support of the Northern Territory government, ASPI has established two work programs under the auspices of its Northern Australia Strategic Policy Centre: ‘The North and Australia’s Security’ and ‘Nation-building in the North’.

The centre’s North and Australia’s Security program will continue to focus on defence and national security to ensure that Australia leverages northern Australia’s strategic advantages. It will also explore how the defence organisation can do more with a broader set of domestic and international partners in northern Australia. A critical element of this work will be exploring the north’s crucial role in Australia’s broader security.

The nation-building program will provide a sustained research focus on the development and security of northern Australia. It will promote discussion on the importance of ensuring that northern Australia has the defence and security systems and support services that are fundamental to both national prosperity and security.

Through its work under these programs, the centre will concentrate on:

- maintaining a robust public-policy focus on the role of the north in the broader security of Australia at a time when strategic circumstances are driving new policy thinking in Canberra
- updating thinking about the north and security, including the strategic framework of the 1980s ‘Defence of Australia’ policy
- raising the profile of the north in broader discussions about the nation’s security beyond defence. This work will encompass home affairs, border security and customs, space, cybersecurity, humanitarian assistance and disaster response, biosecurity and energy security.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/aspi-broadens-its-focus-on-northern-australia>.

Northern Territory's digital infrastructure plans face big challenges

Gill Savage, 15 March 2021

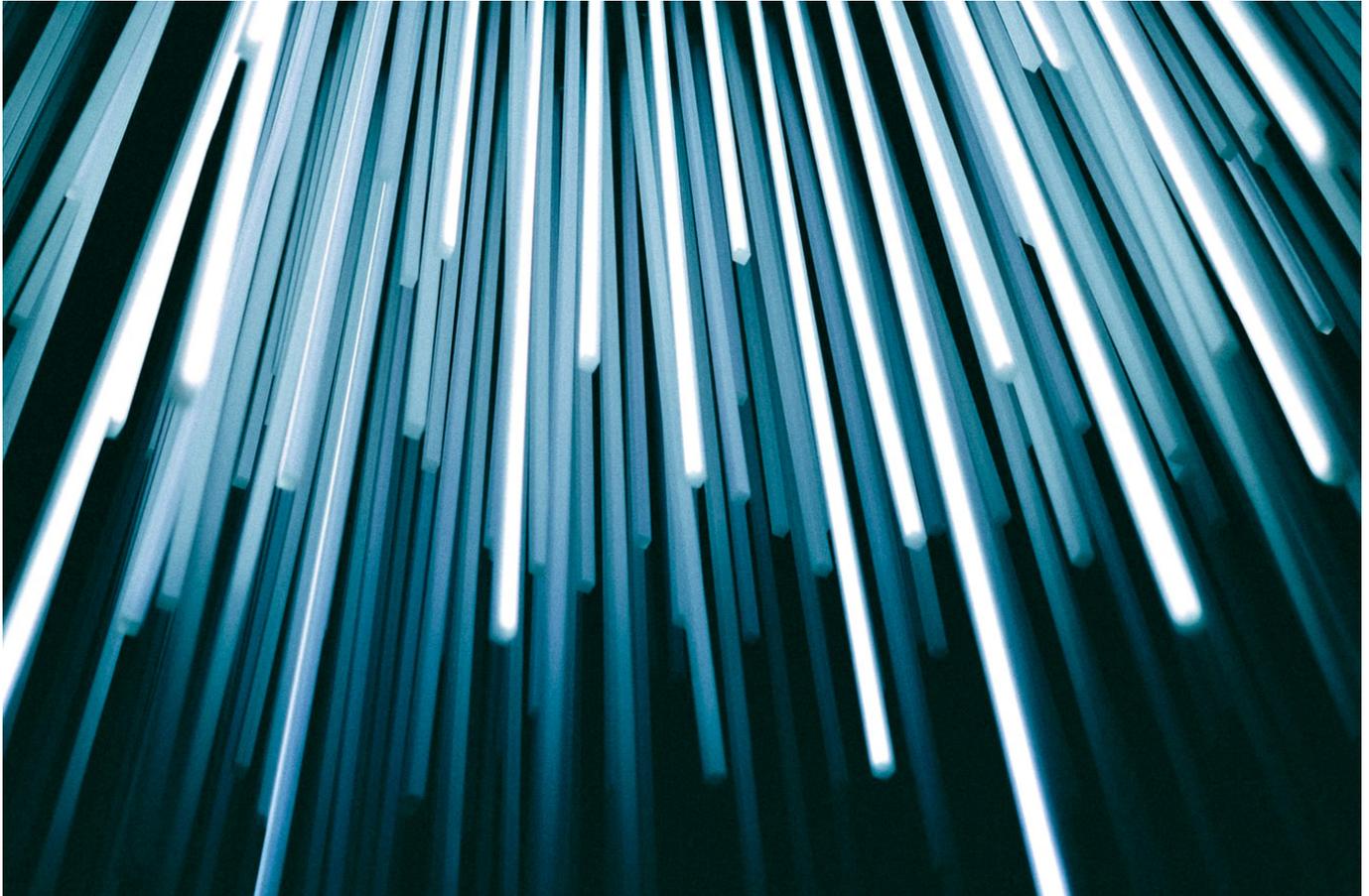


Image: Christopher Burns/Unsplash.

The Northern Territory government has set ambitious plans for economic and social prosperity. Its catchily named ‘[Terabit Territory](#)’ initiative, which aims to position the NT to become a leader in telecommunications across Southeast Asia, is just one example. In the face of the Covid-19 pandemic, increased economic competition, a changing climate and strategic uncertainty, we need ambitious initiatives. But will our national policy settings encourage success?

As ASPI’s John Coyne [argued last year](#), Australian policymakers ‘have struggled to develop a cohesive northern Australia strategy’ and ‘development of a scalable industry base in northern Australia has been left more to chance than strategy.’

A major hindrance is Australia’s longstanding fixation on investing in rail and road infrastructure. The Australian government’s [\\$110 billion investment](#) in transport projects reflects this obsession and represents a missed opportunity.

Nation-building is about more than constructing highways and railways to connect our major cities. The long-term economic, social and environmental benefits of projects need to be assessed and multiple challenges must be solved along the way.

The territory’s data centre initiative is the type of nation-building project needed to drive Australia’s post-Covid recovery. Now is the time for [thinking big](#). However, our national policy settings will have to be adjusted to enable big thinking and innovative approaches.

A telecommunications project focused on Southeast Asia represents very big thinking.

The initiative's central feature is a [data centre](#) that brings together Darwin-based infrastructure, clean power and fibre-optic links to deliver high-speed, low-latency digital networks. Importantly, the system will connect Darwin and Port Hedland to Kupang, Dili, Singapore and the west coast of the United States. Using a patchwork of existing and new investment, the territory will create critical capability that will help Australia navigate the [new era](#) of major-power competition spanning security, technology, economics and politics. The project will also contribute to strengthening Australia's technology ties with Southeast Asia.

From a technical and logistical perspective, building a data centre ecosystem is doable. The territory's [expression of interest](#) for proponents to develop and operate data centres in Darwin closed in September 2020. Land is available, and it can be supplied with up to 1,000 megawatts of solar and gas power, or more if needed. It will be essential to select technology that can accommodate the full range of cloud providers. Narrowing the scope would be the technology equivalent of putting all of the territory's eggs in one basket.

There's also [no shortage of investors](#), ranging from the traditional telecommunications providers to managed funds. While managers of established data centres will need to keep a close eye on their operating costs as the Covid crisis eases, the continued generation of data is expected to boost [global data centre investment](#) by around 6%.

Putting aside the risk of 'build it and they will come' thinking, the challenges to realising the territory's vision are significant. The goal isn't merely to establish Darwin as a data hub; the project aims to make the territory a strategic player in the region and elevate data to the status of a key strategic resource. Subsea cable connectivity, [the enabler](#) for a new era of hyperscale services, would also emphasise Darwin's closeness with (not simply proximity to) Southeast Asia and would lessen its isolation within Australia. This would position Darwin as the enhanced digital pathway between Australia and Southeast Asia.

How a data centre ecosystem with links to multiple countries sits with the Australian government's [focus](#) on addressing the risks to data sovereignty, data centre ownership and the supply chain is yet to be understood. Under the NT government's initiative, data from several countries would be stored and managed under potentially quite different legislative frameworks. Add in the likelihood of classified data from foreign governments finding its way into a Southeast Asia data centre and the challenges soon multiply.

Australia's concerns about data sovereignty have centred on the requirement in China's 2017 national security law for Chinese businesses to provide access to their systems and data to Chinese intelligence agencies. However, the 2018 US CLOUD Act also facilitates access by US intelligence agencies to data of foreign governments held by US companies. A non-US country needs to agree to be a 'qualified foreign government' for its data to be exempt. This requirement came to the public's attention last year when the Australian government awarded the Covid-19 app [data-storage contract](#) to an Amazon cloud subsidiary. At the time, the government [said](#), 'This is the way of the future between like-minded countries.'

What constitutes like-mindedness is being continually redefined. It's not clear how the question of data sovereignty will affect the territory's data centre project in practice or how many, if any, agreements will be needed. And data sovereignty is just one of the potential policy challenges the NT will face.

Achieving the vision of a Southeast Asia data centre ecosystem requires more nuanced legislative framing by the Australian government. But the more significant point is that post-Covid nation-building requires proactive policies that anticipate and enable, rather than restrict or simply respond to, innovative initiatives and solutions.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/northern-territorys-digital-infrastructure-plans-face-big-challenges>.

Why Darwin should be the crossroads of the Quad

Tony McCormack, 17 March 2021



Image: Michael Coghlan/Flickr.

The Quad is back in action. Australia, India, Japan and the US formed the Quadrilateral Security Dialogue in 2007 in the aftermath of the Indian Ocean tsunami, but it foundered in 2008 due to lack of support from its members. Its resurgence began in 2017, when the changing strategic circumstances in the Indo-Pacific led to a desire for the four democracies to once again work together. The face-to-face meeting of the [Quad](#) foreign ministers mid-Covid-19 pandemic in Tokyo in October saw that desire become reality.

The meeting signalled greater security cooperation among the members. A month later, all four nations participated in Malabar 2020, a high-end maritime warfare exercise hosted by India. Importantly, Malabar 2020 was the first time since 2007 that [Australia](#) had been invited to participate in what had evolved from a 1992 bilateral US–India exercise, then with the inclusion of Japan, to a premier trilateral activity.

A further foreign ministers' meeting was held in February and the inaugural Quad leaders' summit was held virtually on 12 March, where in a [joint statement](#) the leaders stressed their commitment to a free and open Indo-Pacific. While not explicitly stating any security initiatives, the underlying message was clear: Quad members will work together to counter threats.

As Quad security cooperation further evolves, it's in Australia's interests to assume a figurative and literal role at the centre of the security partnership and drive an enhanced engagement program among all four members.

Geography matters. For ships and aircraft, transiting between India and Japan takes both time and money. With overfull domestic exercise programs and pressing national commitments, Quad members already find it hard to participate in the current schedule of multinational activities. The likelihood of its members supporting an enhanced Quad exercise program in the Indian Ocean or the Pacific is remote unless alternative arrangements can reduce both time and cost for the participants.

Geographically, Darwin sits at the centre of the Indo-Pacific and therefore of the Quad. It's roughly equidistant between India and Japan (and US forces in Korea and Japan), providing a central location for forces to meet and exercise with minimal transit time.

For the Indian, Japanese and US militaries, northern Australia allows access to key Australian Defence Force bases, vast air, land and maritime training ranges, and essential logistic support and maintenance facilities. Importantly, the north has a proven track record of hosting and supporting large multinational activities and exercises.

In addition to the US Marine Corps rotation and regular deployments of US Air Force and Navy units, Darwin and the Northern Territory have previously hosted Japanese and Indian forces. The Japan Maritime Self-Defense Force and Indian Navy participated in Exercise Kakadu in 2018 with the Royal Australian Air Force and Royal Australian Navy. In the same year, the Indian Air Force took part in Exercise Pitch Black alongside the RAAF. Both nations were set to return for exercises in 2020, but all activities were cancelled because of Covid-19. Despite the arrival of vaccines, Covid will continue to affect the world, and Australia needs to act quickly to ensure that the pause in activities is not prolonged and momentum is not lost.

To make this opportunity a reality will require Defence and DFAT to develop a proactive and coordinated engagement strategy to convince the other Quad partners of the value of the proposition. It will take large amounts of civilian and military diplomacy that must be underpinned by a well-developed and coherent multilateral combined exercise framework with Indo-Pacific issues at the core. There also needs to be a greater investment in infrastructure to bring the defence facilities and training areas up to contemporary standards.

The upgraded port facilities at HMAS Coonawarra (including an improved fuel storage and delivery system) and the significant infrastructure upgrades at RAAF Tindal (more ramp space for aircraft parking and greater fuel and armament storage capacity) are vital for the future. However, other facilities, such as accommodation and working areas, are dated, don't meet requirements and require upgrading. Investment in more ship maintenance and repair facilities would also negate the need for time-consuming transits to Singapore or Perth.

The defence training areas, including the Delamere Air Weapons Range, the Bradshaw Field Training Area and the maritime North Australia Exercise Area, provide large, electromagnetically clean ranges over sparsely populated areas, allowing for the conduct of a broad spectrum of training activities. While they have many advantages, they're rudimentary in a number of areas and need upgrades to become truly world-class facilities where modern weapons systems can be operated to their full extent and the training can closely replicate real-world conditions.

Attracting Indian, Japanese and US forces to northern Australia is but one part of the equation. Australia also needs to enhance its own presence in the north. There can be no perception that we're outsourcing our security to our Quad partners.

Our air force and naval presence in the north is assured. F-35A Lightning II aircraft will be based at RAAF Tindal, there are regular rotations of P-8A Poseidon, F/A-18F Super Hornet and EA-18G Growler aircraft through the Northern Territory, the RAN's offshore patrol vessel fleet is based there, and major surface combatants make regular visits. The Australian Army presence in the north is not as robust, and that must be addressed, although replacing the Tiger helicopter with the Apache will boost capability. When it arrives, the Apache will be able to be networked with RAAF, RAN and visiting Quad forces to make it a true multidomain weapons system.

Establishing Darwin and the Northern Territory as the 'crossroads of the Quad' would come with many tangible and intangible benefits. It would strengthen the security relationship between the members, with and have Australia at its core. It would provide the ADF with more high-end combined training opportunities and, as security cooperation within the Quad expands and matures, so too does the chance to further develop and improve the capabilities of northern Australia. Importantly, a direct result of working and mixing together would be an improved professional and cultural understanding and respect between the members—the value of which is beyond calculation.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/why-darwin-should-be-the-crossroads-of-the-quad>.

Increasing northern Australia's fuel reserves is about more than storage

Tony McCormack, 18 March 2021



Image: Department of Defence.

The past year has seen major progress in increasing the Northern Territory's fuel storage capacity and fuel stockholdings—and there's more to come. The expansion is spread across airfields and ports and comprises different fuel types, and, notably, the majority of the increase has come from projects to support both Australian and US military operations.

The fuel storage capacity at Royal Australian Air Force Base Darwin has been augmented by [two new fuel tanks](#) built as part of US Force Posture Initiatives. The recently completed project provided two 'cut and cover' tanks with a capacity of 8 million litres each.

Across the city at [HMAS Coonawarra](#), planned infrastructure improvements include a new ready-use fuel facility providing a storage capacity of 6 million litres of diesel. Importantly, the associated distribution system includes connection to existing wharves, allowing for the efficient refuelling of the Royal Australian Navy's patrol boat fleet.

As part of the upgrades announced by [Prime Minister Scott Morrison at RAAF Base Tindal](#), an aviation fuel farm will be constructed providing a total storage capacity of [6 million litres](#). The distribution system supporting the farm will enable parked aircraft to be refuelled via trucks or directly using a hydrant system. The supporting infrastructure is designed to be integrated with another planned fuel farm that will be built to support the US Force Posture Initiatives.

The most significant construction will take place at the port of Darwin. In the wake of the joint announcement at the [2020 AUSMIN](#) meeting of the establishment of a US-funded, commercially operated military fuel reserve in Darwin, the US Defense Logistics Agency has released a [request for information](#) for fuel operations support at the Port of Darwin.

The request seeks information from industry for capabilities, interest and potential sources for the receipt, storage and delivery of fuel from a facility that could hold 190 million litres of JP5-grade aviation turbine fuel (the primary jet fuel for the US Navy) and 110 million litres of commercial jet fuel. It also states that the expected throughput of fuel is around 64 million litres per year. While this would be enough to refuel more than 2,000 737s, it's more likely the fuel will be used to resupply US Navy Military Sealift Command oilers to refuel US Navy ships at sea.

The Australian government's \$200 million [diesel storage program](#), launched in January, provides another opportunity for increasing the fuel storage capacity in the north. The funding will support the construction of multiple diesel storage facilities across the country to hold an expected total of 780 million litres. The extra storage will assist Australia in meeting its minimum International Energy Agency [stockholding obligations](#).

The [NT Land Development Corporation](#) has identified available land at Darwin's East Arm port industrial estate, where both the US strategic fuel reserve facility and a new diesel storage facility could be constructed. However, the site is adjacent to the established Vopak terminal, the largest fuel storage facility in the Northern Territory.

While sensible from a cost and efficiency perspective, co-location increases risk and reduces resilience. If constructed at East Arm, both new facilities would be reliant on the current road and rail infrastructure to transport fuel to customers. In addition, offloading from ships would be dependent on access to the wharf leased by Chinese-owned company Landbridge and the single existing pipeline.

It would be better to construct a new port facility at another location, such as the [previously identified Glyde Point site](#). While it would be more expensive, a new deep-water port co-located with the US strategic fuel reserve and national diesel storage facility would provide redundancy in the event the East Arm area was out of action for any reason. It would also increase Darwin's overall port capacity, enabling a greater number of visits from military and commercial ships.

Despite the new projects, there's still work to do. Increased storage capacity is all for nothing without fuel to fill the tanks. The key vulnerabilities for fuel supply in Australia continue to be the lack of domestic production and the fragility of logistics supply chains. Little of Australia's fuel is produced in northern Australia, so it must come in either by ship from the north or by road and rail from the south. No aviation fuel is produced in Australia, so it all needs to be shipped in from overseas.

An increase storage capacity will also increase the demand on transport infrastructure. Darwin is serviced by a single road and a single rail route from the south, both of which are subject to temporary closures in the wet season. For RAAF Tindal, road delivery is the only option—a planned rail spur to the base was cancelled in 2020. Adding to the fragility is the limited availability of road trains and railway rolling stock.

The construction of additional fuel storage in the Northern Territory is a good first step in building national resilience. Follow-on projects that address Australia's fuel-production and fuel-refining capacity and that strengthen supply chains will be required to truly deliver the fuel security the nation needs.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/increasing-northern-australias-fuel-reserves-is-about-more-than-storage>.

Boosting regional cooperation and training in maritime law enforcement

Anthony Bergin, 22 March 2021



Image: Department of Defence.

Maritime law enforcement (MLE) vessels are non-naval vessels employed on maritime law enforcement duties, primarily coastguard vessels, but also vessels of other MLE agencies, such as marine police and fisheries protection services.

The growth of coastguards and other MLE forces has been [particularly evident in Southeast Asia](#). There have been several reasons for this development.

There's the general increase in maritime activity, especially shipping and the exploration and exploitation of offshore oil and gas, which require monitoring and possible policing for safety, security and environmental protection reasons. The regulatory environment for these activities has become more complex over the years, necessitating a higher level of training for the officers of MLE agencies.

There's also been the continuation of a high level of illegal activity at sea, be it piracy, armed robbery against ships, acts of terrorism in the vicinity of the Sulu Sea, or trafficking in drugs, arms and people.

The third reason is the number of boundary and sovereignty disputes in the region, notably in the South China Sea. MLE forces are now regarded as preferable for sovereignty protection and their presence in disputed areas is preferred over navies, which carry a higher level of political risk, especially where there are pre-existing tensions between neighbouring countries.

Regional countries recognise that cooperation is necessary for most forms of MLE and safety, even though there may be no agreed maritime boundary. Again, MLE forces are preferable to navies for these operations.

MLE forces, ships and aircraft are generally cheaper to acquire than their military equivalents. They are also cheaper to operate, invariably requiring smaller crews and less sophisticated equipment.

MLE is also becoming more complex with the increased number of international conventions and regulations dealing with illegal activity at sea. It's more difficult for navies to undertake MLE on an ad hoc basis. Meanwhile, regional navies are focusing more on war-fighting capabilities. Most are reluctant to be too heavily involved in policing tasks.

The development of MLE forces has provided increased opportunities for more advanced allies and partner countries to assist in building the capacity of less advanced countries to handle MLE and maritime safety tasks.

Pacific island countries are now [facing increasing maritime security challenges](#). Much of the transnational crime reported in the region has a maritime dimension.

The tasks of MLE in the Pacific islands' ocean domains have never been more difficult. There are operational gaps in maritime patrolling by many islands. Aerial surveillance of remote areas, offshore zones and adjacent areas of high seas is only conducted on a limited basis.

In the Indian Ocean, maritime safety and security have been [identified as priorities](#) for the Indian Ocean Rim Association, with specific reference made to piracy, sustainable fisheries management, and the need for preparations to deal with the natural disasters. The association has established a working group on maritime safety and security that may sponsor some training courses.

MLE training around the Indo-Pacific is available in a variety of forms, ranging from online delivery to in-country delivery of capacity-building assistance to residential programs extending over weeks or even months.

Most regional coastguard academies are focused on providing basic training for coastguard officers, but some, such as the Japan Coastguard Academy, also offer advanced training programs for middle-ranking officers both national and international.

The US Coast Guard has helped in hands-on exercises to train Southeast Asian coastguards in conducting boarding procedures and vessel inspections. The United Nations Office on Drugs and Crime in Thailand has a global maritime crime program that conducts capacity-building.

But overall, there's no regional institution focused on providing professional training and education for middle-ranking officers from regional MLE agencies that enhances their knowledge and skills to enable them to exercise command within their organisations.

By careful analysis, engagement and intelligent program design, an Indo-Pacific maritime law enforcement centre (IMLEC) would effectively identify strategic interventions that leverage the respective strengths of existing MLE programs and institutions in the Indo-Pacific.

The IMLEC would reflect the position that MLE and maritime safety are common interests of all regional countries and necessary tasks, regardless of any discord or disagreement. The centre would deliver modular training and focus on MLE, but with some attention also to maritime safety and marine environmental protection.

Once established, IMLEC might also offer bespoke courses and workshops that might be agency- or country-specific, or multi-agency, multi-sector and/or multilateral in nature.

IMLEC should have a research function that would enable it to keep abreast of technological developments and how they might be employed by regional countries to assist them with MLE and providing maritime safety in their waters.

The main role of IMLEC would be to promote a combined, joint, intragovernmental, interagency and multinational approach to the conduct of regional MLE operations drawing on the very best expertise and skills.

It should host high-level regional MLE gatherings that foster links between partner-nation MLE leaders as well as host track 1.5 dialogues on sensitive topics.

Critical to the success of the centre as a facilitator for integrating MLE training across the Indo-Pacific would be sponsors ranging from national MLE authorities, national governments and various regional and international bodies—such as Interpol, UNODC and the International Maritime Organization—that are committed to better MLE and stronger maritime security and safety in the Indo-Pacific.

In terms of location, given Australia's regional reputation as a country with a strong civil maritime law enforcement regime, there's a strong case for IMLEC to be based in northern Australia.

Darwin has deep links to the region. It's a [rapidly growing centre](#) of maritime activity supporting the Australian Defence Force, the Australian Border Force, the offshore oil and gas industry, commercial fishing, ship repair and maintenance, and marine tourism.

The range and depth of civil maritime security efforts in Darwin would provide participants with opportunities to engage with operational commanders and senior executives from a diverse array of agencies. This would be invaluable for generating a shared understanding of regional civil MLE challenges.

For Australian Border Force staff, there's the possibility that some of the training that's now conducted at the ABF College in Sydney might be undertaken in Darwin.

By maintaining engagements with all MLE authorities in the Indo-Pacific, IMLEC would be able to nimbly shift to develop programs on emerging policy issues at the request of key stakeholders. It would operate innovative MLE programs to build partner capacity, promote professionalism in MLE agencies and strengthen regional cooperation to better meet civil MLE challenges.

This post draws on the author's recent [article](#) in the Australian Journal of Maritime & Ocean Affairs.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/boosting-regional-cooperation-and-training-in-maritime-law-enforcement>.

Building an education and training link between northern Australia and eastern Indonesia

Hillary Mansour, 24 March 2021



Image: Northern Territory Government.

In 2018, the Australia–Indonesia Comprehensive Strategic Partnership recognised a ‘proximity advantage’ between eastern Indonesia and northern Australia offering ripe opportunities for development, growth and cooperation. Yet, despite the Australian government’s reported enthusiasm over decades to increase our involvement with Indonesia’s traditionally poorer and less developed eastern region, our [partnerships and aid investments](#) have demonstrated broad rather than targeted commitments. Translating high-level policy and diplomatic commitments into action has been difficult.

The education sector is one area in which this geographical advantage can and should be used much more effectively. Australia is Indonesia’s [top tertiary education destination](#), receiving 24.4% of Indonesia’s 49,900 mobile students in 2019.

Australian higher education is more than an export industry. It can serve a bilateral trust-building function, strengthening people-to-people links and creating ‘[bridges of cooperation](#)’ between our communities. Unfortunately, the Australian education system (from primary school to university) has drastically [reduced its Indonesian language](#) and cultural content at a time when our collective Asia literacy is vital.

The flow of Indonesia’s elite tertiary students is the most critical—if not the only—soft power card in Australia’s hand when it comes to the bilateral relationship. The tendency for these students to study at Australia’s top universities should not distract from other opportunities in higher education and vocational training.

Darwin has enormous potential as a hub of higher education and vocational training. It already delivers top-tier research through Charles Darwin University and, though it lacks the repute of Sydney or Melbourne, its lower living costs, strong multiculturalism and accessible location at the edge of the Indonesian archipelago could make the city an attractive destination for more Indonesian students—if we promote it.

Darwin is strategically positioned as a centre for collaborative bilateral problem-solving. Its distance from other Australian cities, its innovative and pragmatic developmental ethos, and its experience with natural disasters make Darwin and the surrounding region a natural and empathetic counterpart to eastern Indonesia. It's no coincidence that Darwin's sister city is Indonesia's Ambon. And as the only northern Australian city with its own Indonesian consulate, Darwin is firmly positioned on Indonesia's strategic radar. This was **demonstrated** by Indonesia's strong reaction when Darwin first hosted US troops in 2011.

As two relatively underdeveloped regions that have historically received inadequate policy attention from their central governments, northern Australia and eastern Indonesia share common challenges in infrastructure, sustainability and workforce shortages in key industries.

In the long term, turning Darwin into a committed centre for multi-institutional and multidisciplinary education, with collaborative programs and, potentially, sister institutions in eastern Indonesia, could produce the next generation of capable industry workers and facilitate joint research to address these common strategic issues. It's a case of two birds, one stone.

For Australia, there are also manifold short-term and long-term benefits. Stronger institutional ties with Indonesian universities would give Australian students opportunities to engage with and understand our strategically critical neighbour, and to build friendships, research links and business connections. It might encourage more Australians to take up Indonesian studies and tertiary institutions to reconsider **cuts** to their Indonesian language programs.

For Australia's **struggling research community**, which is facing rising unemployment across disciplines, research positions in Darwin would be a chance to jump at. Larger student populations might also lead to stronger communities to fill jobs both within and outside of Darwin's traditionally defence-focused industries.

These aspirations are ambitious but not unrealistic. It would take policy incentives and funding to encourage more universities and vocational institutions to establish campuses in Darwin, but future research links could draw on strong **existing networks** between Indonesian and Australian institutions. The Australia–Indonesia Centre is a good example. Funded by the governments of both countries, the centre researches and evaluates bilateral collaborative potential across industries, including agribusiness, education, retail and hospitality. Its Partnership for Australia–Indonesia Research, or PAIR, is already on the ground in South Sulawesi, researching aspirations of **young people** in the rural east of the archipelago. The findings from this research could direct and improve efforts to engage with this community.

The time to act is now. President Joko Widodo's commitment to enhancing inter- and intra-island transport links have seen an **'infrastructure bonanza'**, including a new port in Makassar. This growth will result in an increased demand for skilled and semi-skilled labour and provide a window of opportunity to establish program linkages in a way that benefits both nations. Directing policy towards the region would complement Widodo's aspirations to build up the eastern provinces and help show Australia's commitment to Indonesia.

Indonesia has made no secret of its demand for Australia's world-class research institutions. Last year, Monash University was approved as **Indonesia's first foreign university**, a **'glittering showpiece'** of our bilateral relationship. While this and other top universities in Melbourne and Sydney will always attract their share of privileged students, Darwin could offer a different experience to a wider audience, with unique and specialised practical programs that address challenges shared by Australia's north and the nation to our northwest.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/building-an-education-and-training-link-between-northern-australia-and-eastern-indonesia>.

People-to-people links crucial to building resilience in the Indo-Pacific

Guy Boekenstein, 9 April 2021



Image: Northern Territory Cattlemen's Association.

'Good fences make good neighbours.' This line from Robert Frost's famous poem '[Mending Wall](#)' is often misunderstood. Some take it to mean that having hard barriers in place will keep neighbours apart and therefore prevent problems. However, in the poem the very action of rebuilding the fence together every year is what brings the neighbours closer. By spending time together, talking and repairing the fence, they become better neighbours.

Australia's future is deeply intertwined with that of its Indo-Pacific neighbours and we have an enduring interest in the sovereignty, stability, security and prosperity of the region. This benefits all who live in it. Building national resilience in Australia shouldn't be seen only through the lens of strengthening domestic systems, economic settings, critical infrastructure and other programs. It is also about ensuring we have a resilient neighbourhood.

The Australian government has a long history of supporting capacity-building initiatives across the region with this objective in mind. The initiatives are delivered through aid programs, defence cooperation programs, medical and health projects, academic and professional exchange programs, and so on. They seek to help build stronger communities and more stable governments so that Australia can improve its own economic and security interests, and therefore become more resilient.

However, this policy approach, while well intentioned, is not always matched with well-designed, practical initiatives and engagement. Sometimes that's due to a lack of country-specific literacy, which leads to programs being designed and delivered in an Australian-centric manner. We need to build a deeper understanding of the region among our policymakers, business leaders and academic institutions (secondary and tertiary). Anyone who understands the region will know that success is underpinned by personal connections and networks. These take time to develop, along with patience and a strong understanding of local drivers and conditions.

To explore how simple, well-designed programs can succeed, let's look to one of our largest, most important, diverse and dynamic neighbours, the Republic of Indonesia.

Australian politicians of both persuasions regularly state that Indonesia is one of Australia's most important strategic partners. What this actually means in terms of Australia's foreign-policy priorities and practices is, however, often contested. While there have been some excellent achievements—most recently with the finalisation of the Indonesia–Australia Comprehensive Economic Partnership Agreement, for which the two governments should be applauded—misperceptions and misunderstandings remain on both sides.

Looking back a decade, in his historic 2010 speech to the Australian parliament, Indonesian President Susilo Bambang Yudhoyono highlighted the dangers posed by the perceptions that Indonesians and Australians have of one another. He said, 'I was taken aback when I learned that in a recent Lowy Institute survey ... there are Australians who still see Indonesia as an authoritarian country, as a military dictatorship, as a hotbed of Islamic extremism or even as an expansionist power.' The president highlighted that a key to overcoming these barriers is better people-to-people linkages.

Progress has been made, but we need to continue to strengthen these people-to-people linkages. Below are two small, but important, practical models that could be followed.

In 2011, the Australian Department of Defence launched the Indonesia–Australia Defence Alumni Association, or *IKAHAN*. The purpose of *IKAHAN* is to foster relationships across the large, diverse, and sometimes misunderstood, bilateral defence relationship. It provides a platform to exchange ideas, interact in new ways, build relationships among future leaders on both sides, dispel myths and encourage dialogue between the senior leadership.

Notable Australian members include former and current governors-general of Australia, former senior Australian Defence Force leaders, leading academics and thought leaders. There's a similarly impressive membership on the Indonesian side. Senior leadership is important, but so is future leadership, and *IKAHAN* boasts a large cohort of junior members. The simple act of establishing a vehicle to better promote understanding and engagement that resonates for both sides has added a depth to the bilateral relationship not imagined before.

Coincidentally, in 2011 the Northern Territory Cattlemen's Association established an exchange program to bring Indonesian animal husbandry students to northern Australia to learn about Australian cattle-production systems and foster greater cross-industry understanding of the unique challenges faced by producers in both countries. The Indonesian students typically spend eight weeks in Australia gaining practical hands-on training working alongside Australian stockmen and -women on northern cattle properties. Several of the Australian host families then visit Indonesia to reunite with the students they hosted in Australia and to learn more about Indonesian agriculture and its requirements as a market.

Many of these Indonesian students go on to become leaders in their field. These relationships can't be valued in dollar terms but hold an immeasurable value in one of Australia's most important live-export markets.

Both programs continue today and both are in important sectors that have been tested in the past and will likely be tested in the future. The philosophy and approach taken to weatherproof these sectors can be applied across the Indo-Pacific region. By adding ballast to our bilateral relationships through people-to-people linkages, we can better manage future shocks and therefore add resilience to Australia and our neighbourhood.

Practical first steps that we can take to help build this ballast include increasing the capacity and depth of Asian studies programs in our schools and universities, designing genuine collaborative government programs and projects (which will often require doing things differently to the Canberra norm and mindset), and building Asia-capable business leaders who better understand our northern neighbourhood—which equates to almost 60% of the global population.

As we move out of the pandemic, Australia has the opportunity as a middle power to match our rhetoric with practical action. We have the opportunity to become a good neighbour. Let's not let it pass us by.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/people-to-people-links-crucial-to-building-resilience-in-the-indo-pacific>.

Defence needs to rethink its disaster-relief strategy

Matthew Page, 12 April 2021



Image: Department of Defence.

Scientists have long predicted that climate change will increase the frequency and intensity of extreme weather events, like tropical cyclones, in the Asia–Pacific region. Now, with [four decades of observable data](#), it's clear that the problem is no longer a hypothetical but a formidable challenge requiring a complex array of strategic policy decisions to support national and regional resilience.

If the 2019–20 bushfire and cyclone seasons and Covid-19 are anything to go by, the Australian Defence Force is going to be central to many, if not all, of the government's national disaster response and resilience policies. This increased domestic response will have implications for the ADF's ability to meet future demands for humanitarian assistance and disaster relief (HADR). Collectively, these increasing domestic and international disaster response responsibilities will inevitably divert ADF capability from its core task of protecting Australia and its national interests.

More intense and destructive cyclones will hit the country, endangering lives, causing damage across northern Australia and [spreading progressively further south](#). Just last night, category 3 ex-Tropical Cyclone Seroja [made landfall](#) on Western Australia's mid-west coast, quickly travelling southeast and leaving a [trail of destruction](#). WA Premier Mark McGowan warned it would be '[like nothing we have seen before in decades](#)'.

Then there's the risk of more destructive cyclones hitting the South Pacific more frequently. A [study](#) by scientists from the US government's National Oceanic and Atmospheric Administration found that from 1979 to 2017, the proportion of major cyclones to all recorded cyclones in the South Pacific had increased by more than 30% and, globally, the probability of a cyclone reaching wind

speeds greater than 185 kilometres per hour rose by 15%. Australia has historically provided extensive HADR in the Pacific, and more frequent and more intense cyclones will bring greater demands for these resources.

The ADF's HADR responses have become integral to regional governments' resilience and recovery calculus. Understandably, then, the ADF's HADR role plays an important part in building diplomatic relationships with our Pacific neighbours.

This was demonstrated recently when, just as HMAS *Adelaide* returned from Operation Fiji Assist, a three-week recovery mission following Tropical Cyclone Yasa, Tropical Cyclone Ana [wreaked havoc](#), and a third, albeit more minor, cyclone followed just days later. HADR missions are costly and resource-intensive. Operation Fiji Assist, for example, delivered \$4.5 million of humanitarian relief supplies and involved more than 600 ADF personnel, who helped rebuild and repair 32 schools and distributed a total of 165 tonnes of aid and 918,000 litres of clean drinking water.

More significant, though, was the operation's extensive use of key ADF capabilities. It involved two P-8A Poseidon aerial surveillance missions, five C-17 flights delivering humanitarian supplies, and a weeks-long deployment of HMAS *Adelaide*, one of Australia's two Canberra-class landing helicopter dock ships (the other has only just completed a months-long [maintenance period in Sydney](#)).

Yet Australia should not refrain from conducting HADR missions. The ADF has always responded to HADR calls from the Pacific and now has increased capability in this area, with HADR preparedness a key consideration in several major ADF acquisitions in recent years.

However, the problem for the ADF is one of capacity not capability.

What happens when a particularly intense cyclone hits one of our Pacific island neighbours and key elements of our navy and air force are deployed in the South China Sea or are weeks away engaged in multilateral exercises? Or what happens when cyclones strike Australia and our neighbours simultaneously or in quick succession?

The ADF has surely considered scenarios like these, and when faced with concurrent competing priorities would weigh the risks and commitments of any number of proposed actions and make a decision. But these decisions are set to become more difficult, more resource-intensive and more high-stakes.

A strategic rethink is needed in how Australia supports our Pacific neighbours to prepare for and recover from cyclones before they occur, and this should happen before HADR demand outpaces the ADF's capacity to assist.

Following the final report of the [Royal Commission into National Disaster Arrangements](#) and the government's [response](#) last year, Australia needs to extend this thinking to its international disaster-management strategies, specifically those focused on regional aid and assistance. The government should start by developing a capacity within the Department of the Prime Minister and Cabinet to independently assess the threats posed by climate-related disasters to Australia and the region. This information should be used to better guide Australia's aid priorities towards disaster preparedness and resilience for our Pacific partners, and form an initial assessment of the ADF's current and future HADR demands.

Defence also needs to re-evaluate how it prioritises HADR operations and consider a few strategic investments to support a likely increase in operational demand, both domestically and regionally.

In the short term, we need to increase our strategic reserves of food, water, fuel, emergency shelter, medical resources and other critical HADR supplies. These reserves should be held in hubs where they can be readily available for both domestic and international disaster relief. Darwin would be well placed to distribute supplies to Asia, while Townsville would complement Brisbane well in supplying the Pacific.

In the medium term, Defence needs to invest in the ADF's HADR preparedness. The ADF has a history of being caught with limited options during domestic and international disasters, like having [just one](#) or [none](#) of its amphibious ships available during cyclone seasons. To avoid these pressures on capabilities and personnel, Defence should consider [expanding the ADF's amphibious fleet](#)

by investing in an [additional](#) landing helicopter dock and assigning a dedicated part of the reserve or regular forces to respond to HADR requests, as recommended by a [2018 Senate inquiry](#).

Whatever changes are made, they need to be made soon. If the ADF doesn't invest now to meet future demand for HADR operations, it could be caught short, with potentially disastrous consequences for Australian lives and Australian interests.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/defence-needs-to-rethink-its-disaster-relief-strategy>.

Export possibilities mean Australia's clean-energy future can also be the world's

Fanny Boulaire, 21 April 2021



Image: © Sun Cable.

Global energy demand and associated greenhouse gas emissions have been [increasing steadily](#) since the middle of the 20th century. With power generation accounting for 41% of energy-related [carbon emissions](#), the power sector is critical to a clean-energy transition, especially since electricity consumption is projected to increase by around 50% by 2040 compared to [2020 levels](#). The expected growth in electricity demand is mainly due to increased population and access to electricity, as well as electrification of the transport sector. The share of renewables in the energy mix needs to increase dramatically if we are to meet emissions-reduction targets.

Australia's electricity contribution from renewables increased from [8%](#) in 2008 to [21%](#) in 2019 with generation from hydro, wind and solar. [Solar capacity](#) increased from 1.4 gigawatts in 2012 to about 20.2 gigawatts in 2020, initially due to rooftop solar installations. However, large-scale solar installations have been ramping up steadily since 2013, with many more planned. Two solar megaprojects were announced recently, the [Asian Renewable Energy Hub](#) in Western Australia and the [Australia-ASEAN Power Link](#) (AAPL) in the Northern Territory, which together will more than double Australia's solar capacity.

Harnessing the NT's abundant solar irradiance, the AAPL is planned to integrate a 14-gigawatt solar farm near Elliot, multiplying the NT's current solar capacity by 88. It will be 42 times bigger than the current largest operational and registered solar farm in Australia, the [Darlington Point Solar Farm](#) in New South Wales, and the largest in the world. The solar panels deployed at the AAPL are expected to be produced locally. This aligns with a [proposal](#) for a solar array manufacturing assembly facility in Darwin that will bring economic benefits to regional manufacturing firms as well as those that build and operate the infrastructure.

The AAPL will integrate 33 gigawatts hours of battery energy storage at the solar farm to manage generation peaks and provide capacity reserve and frequency-control services. The electricity will be linked via a 750-kilometre transmission line to voltage source converters and a battery in Darwin. Electricity will be converted to high-voltage alternating current and connected to the network that powers the Darwin region, and then to a second voltage source converter for transmission to Singapore via subsea cables.

Through battery installations at the farm and at the voltage source converters, the new infrastructure will provide the type of flexibility that legacy networks currently lack and will enable the future deployment of large renewable-energy farms within the region as well as prospective small, decentralised energy systems.

The AAPL has significant potential to export green electricity to countries in the Asia-Pacific region that have little capacity for solar installations due to relatively high population densities. In the first instance, the project aims to supply 15–20% of Singapore's electricity needs. However, it opens possibilities for other countries in Southeast Asia to access renewable electricity and reduce their greenhouse gas emissions. This will be especially important given that the region is experiencing rapid growth in electricity demand, which is currently met mainly by burning fossil fuels.

While more megaprojects will be required to meet increasing electricity demand over the next few decades, alternative developments still need to be pursued, especially those of medium- and small-scale capacity where supply is closer to demand. While high-voltage direct current transmission lines and cables, such as those proposed in the AAPL, have considerably less power losses than high-voltage alternating current lines, long distances like the more than 4,500 kilometres needed for the AAPL will still mean power losses. Covering these losses will require a larger footprint for an installation to answer the same demand.

With small- and medium-scale systems installed close to demand centres, not only are losses reduced but the footprint of renewable-energy installations is also reduced, because solar panels can be installed over existing structures. With proven enthusiasm from the Australian population in participating in the clean-energy transition (more than 25% of dwellings have a [solar system](#)), the industry has an opportunity to further encourage such behaviour. However, to enable higher rates of solar take-up, network flexibility through increased storage capacity is required.

Storage capacity can be supplied through batteries as well as hydrogen and can be of a medium size with community- or network-based storage systems, or a small size at the individual household level. Hydrogen produced through electrolysis using renewable energy and sustainable water sources, also labelled as green hydrogen, can act as both a short-term (daily to weekly) and a long-term (over seasons) storage option. In addition, both electricity and hydrogen can be provided locally for transportation with electric vehicles.

While the AAPL doesn't currently consider hydrogen production as either energy storage or an energy vector, providing small- to large-scale hydrogen production plants would bring additional flexibility to a clean-energy system as well as assist the energy transition for the transport industry in the Darwin region.

In the race to decrease greenhouse gas emissions and limit the impacts of climate change, both mega and small-scale renewable-energy installations will play an important role. Given a favourable natural environment and especially high solar irradiance, Australia's opportunity to deploy renewable-energy technologies at high rates cannot be missed, not only for the country's benefit but also for the world's.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/export-possibilities-mean-australias-clean-energy-future-can-also-be-the-worlds>.

Where's the combined joint headquarters in northern Australia?

John Powers and John Coyne, 30 April 2021



Image: Department of Defence.

Have you ever heard of Combined Joint Headquarters (CJHQ) Top End? Before you go racing to Google, it doesn't exist! Yet Australia and its partners need such an arrangement. It's time to leverage our strategic geography and make a bold commitment to maritime security and multilateral military cooperation by establishing just this kind of headquarters. At the very least, a CJHQ in northern Australia could help to coordinate humanitarian assistance and disaster responses in a region facing more frequent and intense weather events.

In the [2020 defence strategic update](#), the government committed to invest 'approximately \$270 billion over the coming decade in new and upgraded Defence capabilities' in order to 'project military power and deter actions against us'. Unfortunately, there's little mention of how the Australian Defence Force will command and control all these new capabilities.

The strategic update also says that 'defence planning will focus on our immediate region: ranging from the north-eastern Indian Ocean, through maritime and mainland South East Asia to Papua New Guinea and the South-West Pacific'.

As one would expect, there's scant detail in the update on the command-and-control structures to coordinate and synchronise these defence planning activities with our non-Five Eyes partners. Hard-won experience reveals that this sort of cooperation doesn't just occur and is a perishable commodity requiring continuous long-term commitments.

Technology permits command and control to be done remotely, so some will argue there's no need to create a new headquarters in the Top End—be it the Northern Territory or northern Queensland. This perspective does have a ring of truth, but strategic geography and proximity still matter, and so does people-to-people cooperation.

Establishing a combined headquarters with joint capabilities across the armed services would afford Australia an all-new opportunity to help meet one of the strategic update's primary aims: shaping our strategic environment by being an 'assertive advocate for stability, security and sovereignty in our immediate region'.

Placing a coalition headquarters in the north would be a firm step towards 'strengthening international engagement, particularly with the United States, Japan, India, ASEAN and other allies and partners in our region'.

A northern CJHQ would lend itself to the disaster-response operations that Australia and its partners have routinely found themselves conducting in the past eight years: Super Typhoon Haiyan in the Philippines in November 2013; the loss of Malaysia Airlines flight 370 in March 2014; the Nepal earthquake in April 2015; and the Sulawesi earthquake and tsunami in Indonesia in September 2018. These operations were civil-military, involving whole-of-government efforts by the nations engaged. Still, the combined defence components provided the planning and command-and-control expertise that led to their success.

A CJHQ in the north could become the focal point, not just for Australia, but for our coalition partners, for combined and joint operations that would support humanitarian assistance and disaster relief missions, as well as the planning and execution of operations in support of police and coastguard forces to counter human and drug trafficking.

It would allow Australia to host this combined effort with India, Indonesia, Japan and other partners in an area of interest common to all. In doing so, those involved would develop and practise the kind of planning and communications protocols that support humanitarian assistance and disaster relief operations.

A CJHQ would also relieve some of the burden on the ADF's Joint Operations Command, whose primary focus is defence and combat operations.

There can be no doubt that establishing this kind of arrangement will be a monumental undertaking involving several countries, from our near neighbour Indonesia to our ANZUS and Quad partners.

One of the first challenges, though, will be far closer to home.

Getting agreement on this from Defence will be no easy task. The headquarters once responsible for all the planning and conduct of operations in northern Australia during peacetime and wartime, Northern Command, has been in a steady state of decline for years. Most of its functions now sit with Joint Operations Command in Bungendore, near Canberra. So, a commitment to returning at least some command-and-control arrangements to Australia's north will involve revisiting some planning assumptions.

Interestingly, while the ADF's command and primary headquarters lie beneath 26° south, the United States' Indo-Pacific Command maps tend to show only the north of Australia.

Regardless of type and composition, all headquarters are challenged with anticipating and determining viable command-and-control structures that accomplish specific operations while retaining the agility to plan and execute other ongoing or new missions.

A CJHQ in the north would provide Australia and its partners with a responsive, agile and inclusive headquarters that answers an operational need and sends a powerful signal to potential adversaries and criminal groups operating in one of the most contested areas in the world.

As most military leaders, regardless of nationality, know, if you get the command-and-control right, the rest of the mission is straightforward. A combined joint headquarters in the Top End of Australia will not only get us and our allies on the right foot, but will place us on our front foot too.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/wheres-the-combined-joint-headquarters-in-northern-australia>.

Time to end China's lease on the Port of Darwin

Peter Jennings, 4 May 2021



Image: Darwin Port Operations/Facebook.

Defence Minister Peter Dutton has asked his department 'to come back with some advice' about the future of the 99-year lease by Chinese company Landbridge of the Port of Darwin. Hopefully Defence takes this shot at redemption, correcting a dreadful policy error when it concluded in 2015 that the lease wasn't a problem.

Leave to one side that policy snafu and ask instead what has happened since 2015 that should force a rethink of the lease. The answer is that strategic change is reshaping our region, raising serious risks to stability and forcing fundamental shifts in our defence planning.

First and most obviously, Xi Jinping's China has set on an aggressive course to dominate the Indo-Pacific, supplant the United States as the region's leading military power, weaken America's allies and brook no dissent against Beijing's wishes.

In 2017, Australia's foreign policy white paper said: 'The Government is committed to strong and constructive ties with China. We welcome China's greater capacity to share responsibility for supporting regional and global security.'

That line could not believably be written today. The truth of the matter is that Beijing has no interest in sharing responsibility for regional security. In the South China Sea, over Taiwan, at the border with India and in its dealing with Australia, Beijing shows that its aim is to destroy the international order and replace it with its own authoritarian control.

A second change is that the economic relationship Australia once welcomed with China is being used by Beijing as an instrument of coercion and punishment. In the view of the Chinese embassy, Australia is responsible for everything that is negative in the relationship.

China's deputy ambassador [told](#) a Canberra audience recently that those who 'sabotage the friendship between our two countries ... will be casted [sic] aside in history. Their children will be ashamed of mentioning their names in the history.'

In this state of mind, any Australian point of difference with China will be treated as 'sabotage' to be punished.

Third, Xi is consolidating communist party control over Chinese and Hong Kong businesses to ensure that they advance the party's priorities. In 2017 Beijing adopted a 'national intelligence law' that says: 'Any organisation and citizen shall, in accordance with the law, support, provide assistance, and cooperate in national intelligence work, and guard the secrecy of any national intelligence work that they are aware of.'

The June 2020 national security law for Hong Kong claims to apply the same coercive powers over Hong Kong citizens and businesses. Beijing asserts in Article 38 of the law that it can apply to anyone, anywhere in the world.

At the time of the Port of Darwin lease, some Australian commentators dismissed concerns about Landbridge's connections to the Chinese Communist Party as 'paranoia'. China Matters director Linda Jakobson [wrote](#) in *The Australian* in November 2015, 'The existence of armed militias and connections to the party are integral to the way society functions in China.' We just need to have 'a higher degree of comprehension of the way China functions' and stop 'fearmongering', she advised.

What has become clearer since is that the CCP under Xi has significantly reasserted party control of the business sector. As Alibaba's Jack Ma has found, displeasing the party can lead to public disappearance and hefty fines.

Not surprisingly, Chinese businesses will go to considerable lengths to please the CCP. Within China, Landbridge markets itself as the 'Nation's brand, world's Landbridge' focused on 'actively responding to the call of the state'. And contributing 'to the realisation of the Chinese dream'.

A Landbridge corporate video of August 2019, [available on YouTube](#), makes it clear that the company's head office in Rizhao sees the Port of Darwin as 'building an important maritime cooperation pivot for the One Belt and One Road ... to contribute to China a more powerful port strength'.

It would be wrong to dismiss such language as just what Chinese businesses do to curry favour with the CCP. Delivering on Xi's key objectives results in favourable attention from party leaders and access to financing.

The only sensible national response is to ask what Chinese business support for CCP objectives might mean for Chinese-owned and -controlled Australian critical infrastructure—ports, the electricity grid, gas pipelines, information technology, agricultural businesses—at a time when the CCP is 'punishing' Australia.

Fourth, American strategy is changing. Under President Donald Trump and continuing under Joe Biden, the US military is reshaping its strategy for dealing with China, recognising that the risk of conflict in the Indo-Pacific is sharply rising.

Washington is rapidly shaping a strategy of 'dispersal' of US forces in times of crisis, to reduce the likelihood of successful attacks on places like Guam and Japan.

In these scenarios, northern Australia takes on added strategic importance to the security of our entire region. This explains in part why the government added an additional \$200 million to reach a total of \$747 million in spending on defence training ranges in the north.

Remember, just about every litre of fuel, every round of ammunition and every piece of military equipment used at those training ranges will be offloaded at the Port of Darwin.

Defence's 2015 response to the 99-year Landbridge lease was that it was of no concern because it didn't impact on the small navy base, HMAS Coonawarra. The then Defence secretary, Dennis Richardson, [told a parliamentary committee](#) in October 2015: 'We can only look at this in terms of our interests. Does it raise national security concerns for us as a department? It does not. If other

people have other issues about foreign ownership of whatever, that is not an issue that concerns us unless it impinges on our interests and responsibilities.’

Today, Defence must look at Australia’s national security interests in the Port of Darwin, not just how many days patrol boats need to access a wharf. Darwin is emerging as a strategic location not just for Australia, but also for our allies and partners. Control of the port matters even more now than it did in 2015.

Because the People’s Republic of China has launched on a path of regional domination, all Indo-Pacific countries must assess critical infrastructure vulnerabilities inherent in the presence of large Chinese businesses with their obligations to the CCP. This forces an uncomfortable break with past hopes for mutually beneficial business relations, but hard strategic reality must shape what happens from now.

A version of this article was published in The Australian.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/time-to-end-chinas-lease-on-the-port-of-darwin>.

The myths and realities of youth crime in northern Australia

Teagan Westendorf, 7 May 2021



Image: Sarah Camm/Flickr.

Northern Territory Chief Minister Michael Gunner recently [highlighted](#) an overarching challenge for the territory, and arguably for all of northern Australia—to break the social and economic cycles of severe disadvantage that perpetuate problems for generations.

As with many entrenched cycles of disadvantage, it’s easy to dream up policy solutions that rely on bottomless government coffers, and to call for cross-portfolio responses.

Creating stable, meaningful economic opportunities for northern Australian youth would surely reduce crime rates, and that's rightly an agenda of the NT and Queensland governments. But it will take time to implement and to produce results. And for Aboriginal and Torres Strait Islander Australians living in remote communities, economic opportunities are often not sustainable if they prevent them living on Country.

Youth crime is a consequence of these cycles of disadvantage and disrupting them must be central to policies that reduce crime and restore community confidence in police. The NT and Queensland governments have responded to this [crisis](#) from a law enforcement perspective with announcements of a new 'tough on crime [crackdown](#)' and a youth crime [taskforce](#).

Two policy issues are at play here. Is there actually a surge in youth crime in Australia's northern cities and towns, and, if so, what can be done now to address it?

Can we apply a circuit-breaker to this cycle of disadvantage and crime, without having to wait for the long-term economic stability and prosperity we know is needed to alleviate the broader socioeconomic disadvantages and precarity facing northern communities?

The reality is that Australian Bureau of Statistics [data](#) records a decline in youth offenders rather than a surge in the NT and Queensland. But there's still a very real crisis that isn't being addressed because it's not well understood.

Legislative and law enforcement responses to youth crime need to happen in tandem and to be integrated with radical rethinking and reform of the child protection system in northern Australia.

[ABS data](#) for the decade from 2009 to 2020 show a 51% drop in annual youth offenders proceeded against by NT police, from 15% to 7% of total offenders. In Queensland, there was a 34% drop in the number of youth offenders proceeded against by police, from 18% to 12% of total offenders.

But the rate of recidivism by young offenders is significant.

In 2019–20, NT police proceeded against 54% of offenders aged 10–14 more than once. They acted against 37% of offenders aged 15–19 more than once, and this older cohort made up 82% of total offenders. In Queensland in 2019–20, police proceeded against 40% of offenders aged 10–14 more than once and against 36% of offenders aged 15–19 more than once.

Most youth crime in the north is committed by people on bail ([50% in the NT last year](#)).

There's been much discussion in both jurisdictions about what policy measures will reduce crime and incarceration rates of youth in general and of Indigenous youth who are over-represented in the justice system. Options being considered include mandatory [refusal of bail](#) and [GPS monitoring](#) of recidivist youth while on bail.

Both [Queensland](#) and the [NT](#) have made moves to amend their bail laws to address the significant over-representation of recidivist youth in crime statistics by keeping more offenders in custody while on remand due to high rates of reoffending while on bail. This is consistent with evidence-based [best practice](#) internationally of targeting criminals not crime. Data suggests that most crime is committed by a small cohort of recidivists. If you lock them up, crime rates go down.

But we know that time locked up increases the likelihood of young offenders reoffending and being repeatedly incarcerated in the youth and then adult prison systems. So, incarcerating youth [doesn't](#) reduce crime, and [neither does](#) not incarcerating them. For incarceration to work as a standalone strategy, they would have to be locked up for life.

That's not to say offenders should get off scot-free, but in terms of outcomes it's clear the problem needs to be addressed at its root causes as much as in its symptoms. The starting point must be to fix the profoundly broken child protection system.

[Most recidivist youth offenders](#) experienced significant abuse, neglect and/or trauma during childhood and interacted with the [child protection system](#). Both the NT and Queensland need to pursue law enforcement options in tandem with significant reform of the child protection system as a preventive measure to have any significant impact on youth crime rates.

Otherwise, police forces in both states will keep putting band-aids on a wound that's fundamentally about children who have been profoundly injured, traumatised and abandoned by their communities. They have 'nowhere safe to go' when they're discharged from youth detention, so they end up back in the crowds and cycles of crime that put them there the first time.

While there's no single comprehensive formula for child protection, there's a large body of international evidence on protective factors that should be at the forefront of policy solutions for northern Australia.

We need only look as far as [New Zealand](#) to see the significant positive impact of the 1980s shift to use courts less, emphasise community-based alternative action, and reserve criminal charges 'for the absolute smallest group possible'.

For the NT and Queensland, this will require meaningful engagement with the established Aboriginal and Torres Strait Islander community-controlled sector and communities to identify local solutions given the [significant over-representation](#) of Indigenous youth in out-of-home or foster care and in youth justice facilities.

Policymakers may well be going to the wrong places for this advice. The recent [evaluation](#) commissioned by the Commonwealth Department of Social Services of the previous decade of child protection policies did not consult a single Aboriginal community-controlled organisation, and spoke to just one, Melbourne-based, non-government [organisation](#) representing Aboriginal children and families.

Youth crime, and especially recidivism, is fundamentally a child protection policy issue. Until state and territory governments address it with a coordinated policy response from the justice and child protection sectors, it will remain a festering wound for northern Australian communities that will drive people away from the north.

For print readers, the original piece with live links is at <https://www.aspistrategist.org.au/the-myths-and-realities-of-youth-crime-in-northern-australia>.

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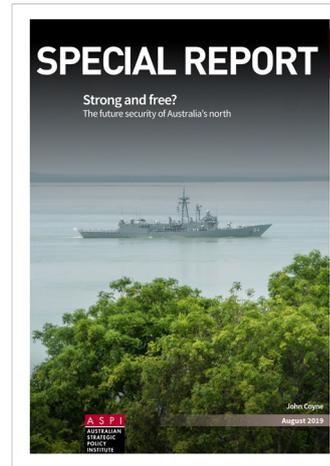
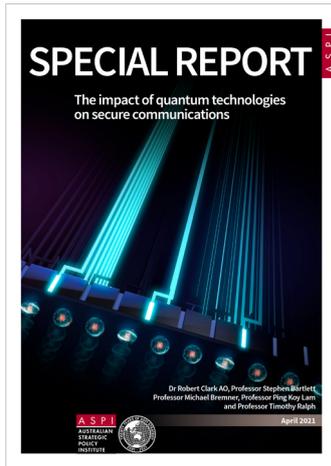
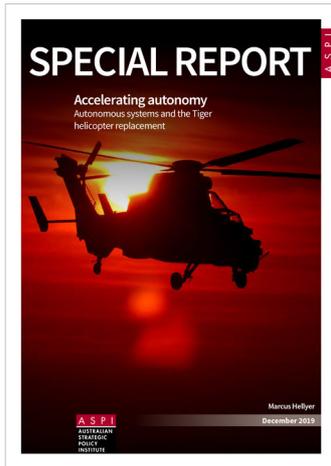
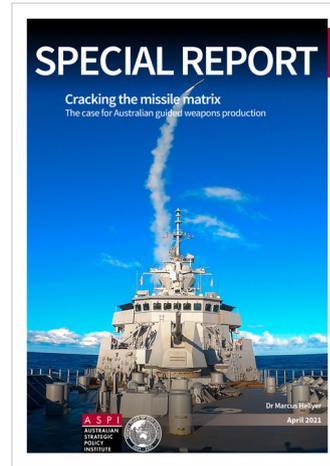
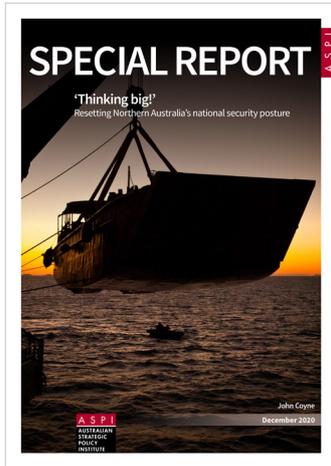
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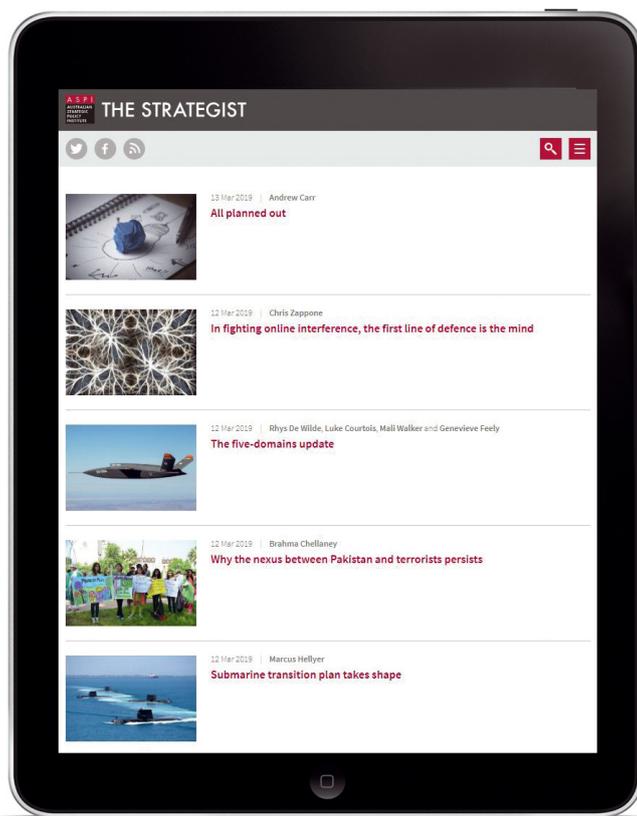


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