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Sovereign Defence Industry Capabilities, Independent Operations and the Future of Australian Defence Strategy¹

Stephan Frühling

Executive Summary

- ✦ Sovereignty in defence industry is not absolute, but must balance effectiveness, cost, and reliance on allies. The 'Sovereign Defence Industry Assessment Framework' promised in the 2016 Defence Industry Policy Statement (DIPS) should be a crucial link between strategic policy and defence industry policy, and explain how we manage those trade-offs.
- ✦ DIPS hints at the logic of defence self-reliance, which arose from our concerns of not being able to rely on support from US combat forces in regional conflicts after the Vietnam War. The 2016 Defence White Paper is now framing Australian policy in terms of the ability to conduct independent operations, which are an important way of securing our interests in conflicts where we fight alongside the United States.
- ✦ Sovereign Defence Industry must not be a catch-all list of defence industry we want to maintain for a variety of legitimate reasons, but should comprise that industry support required in country for defending Australia in the most challenging circumstances in our own region.

Policy Recommendations

- ✦ 'Sovereign Defence Industry Requirements' must relate to the most challenging scenarios that we structure the ADF for as a whole. They must look to industry support to operations at the force structure level, not just consider industry as a collection of industry FICs.
- ✦ Australia needs to look beyond our peacetime industry dependence on the United States. While we used to avoid reliance on US combat forces under 'self-reliance', we must now also move to confront our dependence on US resupply in high-intensity operations, and seek ways in which we can increase US dependence on US operations from Australia.
- ✦ Industry will be crucial to enable ADF operations in the defence of Australia in the era of long-range precision strike. The loss of security from distance means we need to consider battle damage to Australian infrastructure and industry itself. Ensuring access to 'sovereign defence industry' capabilities may also require us to re-think arrangements for domestic base support.

Maintaining and using defence capability to safeguard a nation's security is a genuinely national effort. Defence strategy and defence preparations touch on many policy issues otherwise associated with other departments. One particularly vexed task is that of defence industry, where the needs of the Australian Defence Force (ADF) for acquisition and sustainment meet with corporations eager to highlight their own importance, as well as politicians keen to highlight benefits of the defence dollar.

In February 2016, it was the Turnbull Government's turn to elaborate its approach to defence industry, which it did in the Defence Industry Policy Statement (DIPS) accompanying the 2016 Defence White Paper. As with its predecessors, the DIPS was a combination of relabelled continuity and shuffled deckchairs, mixed with genuine change. It provided investment in new technologies and support to innovation, a new way for Defence to work with defence industry in the joint 'Centre for Defence Industry Capability', and formalized the consideration of industry in the capability life cycle by recognizing it as one of the 'Fundamental Inputs to Capability' (FIC).

Most elements of the DIPS are relatively self-contained and well underway to implementation. The promised 'Sovereign Defence Industry Assessment Framework' has yet to be released however, despite originally being promised for the second quarter of 2017.² 'Sovereign Industry Capabilities' are to replace the Rudd-era's 'priority' and 'strategic' industry capabilities (or 'PICs and SICs'). What however is a 'Sovereign Defence Industry Capability'? At one level, the new list that will replace the PICs and SICs will answer that question for us. But like the PICs and SICs, a mere list will do little to help us understand how it came to be, what Australia seeks to achieve by it, or how it should be amended over time.³ Ultimately, Sovereign Industry Capabilities cannot be defined without answers to broader questions about the shape and size of the future ADF, and how we plan to conduct future campaigns.



Sovereign Industry Capabilities cannot be defined without answers to broader questions about the shape and size of the future ADF.

Hence, this paper will approach the question of 'Sovereign Defence Industry' as a question of defence strategy and strategic policy. Which industry capabilities should be sovereign and why? How should we approach the question of how much is enough – and how much is too little? Insofar as the need for sovereign defence capabilities (and defence industry capabilities) becomes greatest in the situations most challenging to Australia's own security, deciding what should be a Sovereign Defence Industry Capability becomes a window into the future direction of Australia's defence policy itself.

The issue with 'sovereignty'

What makes a defence industry capability 'sovereign'? 'Sovereignty' refers to both the recognized right, and the ability to exercise supreme, independent authority over a territory, country, or other asset. In practice, 'sovereignty' is often used in relation to control over cross-border flows, the monopoly on the use of force domestically, the ability and right to exclude foreign authority, and the legal status of states.⁴ Hence, 'sovereignty' relates to both the objectives, and the means of national defence. Sovereignty implies not having to ask for anyone else's permission—being able to decide, act and achieve one's own interests as defined by oneself.

But like so much in life, sovereignty isn't free. The legal and practical independence implied by sovereignty comes at the cost of efficiencies that could be achieved from making use of the resources of other sovereign entities. Interdependence sustains economic and technological progress in our interconnected world. Sovereign control is something that states, including Australia, routinely trade for efficiency and effectiveness. We do so in terms of international trade and investment, and even in defence preparations where our dependence on US (and, before that, British) support has been a longstanding element of our security. Despite rumours to the contrary, not even Britain can escape the underlying trade-offs.

In the sphere of defence policy, it is arguably only the major nuclear powers (US, Russia and China) that can be said to be truly sovereign, in that they control all the resources required for their own defence. For all others, defence sovereignty is a three-way trade off between the cost of developing and operating the ADF, the effectiveness of our defence of national sovereignty against coercion and attack by adversaries, and dependence on allies and other like minded countries' support. Our 'sovereign defence industry assessment framework' must explain where we will sit in relation to these trade-offs: Somewhere between the quest for North Korean autarky on the one hand, and the almost purely market-based solutions to national defence practiced by the Italian statelets of the Renaissance, or modern Gulf monarchies of today.

2016 DIPS and Self-Reliance

The 2016 Defence Industry Policy Statement gives a hint to how Australia might approach the trade-off between cost, effectiveness and reliance on allies, when it stated that

There are some capabilities that are so important to Australian Defence missions that they must be developed or supported by Australian industry because overseas sources do not provide the required security or assurances we need.⁵

There is a lot of history and Australian Defence policy lore in that statement that is worth unpacking. 'Because overseas sources do not provide the required security or assurances we need' seems to connect sovereign defence industry to one of the main elements of Australia's defence policy canon: defence 'self-reliance'.⁶

Defence self-reliance became a centrepiece of Australia's defence policy after the Vietnam War. It meant that Australia sought the ability of the ADF to achieve certain objectives without the need for combat or combat support forces of its allies – most notably the Defence of Australia itself. Importantly, defence self-reliance never meant defence self-sufficiency, and hence the phrase 'self-reliance in Alliance' was never contradictory. It is only because Australia has access to US technology, intelligence, and resupply that self-reliance in the use of combat forces was possible, at least at a cost Australian taxpayers are willing to bear.

However, the benefits of the Alliance also have their limits where strong US national interests in controlling access to sensitive technology come into play. Australia did not always receive access to the capabilities it desired, as the experience with source codes for F-18 radars, and radar warning receivers for the F-18 and F-111 shows. In his valedictory speech to Parliament in 2007, Kim Beazley described how as Defence Minister in the 1980s he "went to the United States and, for five years, it was up hill, down dale and one knock-down drag-out after another with Cap Weinberger, Dick Cheney and Paul Wolfowitz. I tried to get the codes of that blasted radar out of them".⁷

In the case of the radar warning receivers, Australia demurred and decided to develop its own, sovereign system. The development of the ALR-2002 was a sovereign defence industry capability if there ever was one. Unfortunately it was also an excellent illustration of the inevitable trade-off in sovereign defence industry, and quietly abandoned once the US changed its position on the export of this technology.⁸

It was ultimately the limits of the alliance that made self-reliance necessary. Self-reliance was based on the judgment that Australia would not want to be in a position of requiring a decision by a US President to commit US forces to operations on its behalf, with all the political and diplomatic cost and significance that entails for the United States. And that judgment didn't come from nowhere, but from repeated 'no's Canberra received from Washington when it had requested US political and military support in a series of crises with Indonesia: From the West Papua Crisis in 1958-59, over Confrontation in the 1960s, to East Timor in 1999.

The problem in linking 'self-reliance' to the 2016 Defence Industry Policy statement, however, is that self-reliance is a force structure concept. Self-reliance is about outcomes we seek, and relates to the shape, size, composition and attributes of the ADF as a whole. Hence, it is not one fit to make arguments for one particular capability over another, or between self-reliant and non-self-reliant capability, but rather one about the way and circumstances we want the ADF as a whole to be able to perform in.



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Taken to its logical conclusion, defence self-reliance would also eschew reliance on US nuclear, not just conventional forces. Hence, historically one of the most important industry capability requirements identified in Australia's defence strategic guidance, which was included in the 'Strategic Basis' papers from the 1960s to 1983, was the recommendation to keep under review Australia's lead-time to develop nuclear weapons in light of regional countries' capabilities. The ability to develop nuclear weapons in and by Australia is certainly a sovereign defence capability if there ever was one, and last discussed by the Hawke Cabinet.⁹ Admittedly, as long as the Australian Atomic Energy Commission still operated its experimental centrifuges in Lucas Heights, it was also not a very demanding standard.

Sovereign Defence Industry and Independent Operations

It's probably a safe assumption that this is not what the current government had in mind, not least since the 2016 Defence White Paper has largely dropped the term 'self-reliance'. The prominence of 'self-reliance' with its implication of Australia having to operate on its own, in a regional conflict without direct US support, was a product of the political and strategic realities of the post-Vietnam era, where we faced very limited threats from Southeast Asia and the United States expected us to look after ourselves as part of the Guam doctrine.

The ability to develop nuclear weapons in and by Australia is certainly a sovereign defence capability.



While these concerns have not disappeared, in the 2016 Defence White Paper they have been eclipsed by the return of an earlier concept – that of 'independent operations'. This term, too, has a long pedigree in Australian defence policy, going back at least to 1959. That year, Australia's senior military and civilian national security leadership famously recommended to government in the Strategic Basis paper that Australia should to develop the ability in our forces to operate without direct support from our allies.¹⁰

The difference between self-reliance and calling for independent operations has important consequences for the way Australia should look to define its defence industry requirements. 'Self-reliance' is about strategic priorities, in the sense that it implies Australia wants to prepare for a situation where our allies' interests aren't directly engaged, where abstention from direct support is due to different political priorities between the US and its allies. The US reluctance, from indifference more than anything else, to give us access to radar source codes and radar warning receiver technology is a good example of the defence industrial consequences of this situation.

In contrast, 'independent operations' are focused more on operational requirements, because independent operations are something Australia can also undertake as part of a broader alliance or coalition operation. In many ways, this takes us back to the years of 1942 to 1945, where Australia's preponderance of forces in the South West Pacific Theatre under Douglas MacArthur's command did not get us the political influence that Australia sought, and arguably could expect in its own neighbourhood. Instead, Australian forces were diffused under US command and reliant on US support, so that it was only in the last year of the war that Australia could mount operations that would reflect its own priorities, and strengthen

Australia's political influence on the conduct of the war and the peace that followed.¹¹ In that sense, independent operations are not in tension with being in alliance either – indeed they are an important way of managing relations with the ally, based on the promise that we will be able to take responsibility, and therefore expect a say, for operations that are of particular national importance for Australia.¹²

What then does Australia's ambition for independent operations mean for its sovereign defence industry requirements? If Australia wants to use the ADF to advance our political objectives and priorities in an alliance conflict, a main target of our influence remains the United States. At the same time, though, the United States will seek to impose its own priorities, much the same way MacArthur did in his campaign in our own region.

Here, the logic of independent operations starts to push requirements for sovereign defence industry in somewhat different directions from self-reliance. Outside some sensitive areas like stealth technologies, there are good reasons to be much less worried about access to US technology today than Australia was back in the 1980s. This is borne out by the increasing standardization of platforms between the two countries' air forces in particular.

But in the era of self-reliance, Australia generally assumed that it could draw on US resupply for all the consumables, such as spare parts, precision-guided munitions or sonobuoys, that a self-reliant campaign in our region, against say Indonesia or Fiji, would have required. Moreover, during the Cold War we could safely assume that such a campaign would make relatively small demands of such expendables relative to the Cold War stocks of our allies, and have little opportunity cost for them.

That is an assumption we cannot make any more today. In a major conflict, US national demands on these supplies would spike at the same time as our own. However, the US ability to rapidly surge production of precision-guided munitions is limited.¹³ Our dependence on US supplies could seriously undercut our ability to influence the conduct of operations in our own back yard, as the allocation of essential consumables would reflect US, rather than our own, priorities. And we only have to look on a map to realize that US and Australian priorities in a major conflict in Asia, are unlikely to geographically align. Whereas horizontal escalation of a conflict into Southeast Asia would be an attractive option for the US and its Northeast Asian allies, it would be Australia that would carry the risk of physical damage and adverse post-war realignments such a strategy would bring with it.

At the same time, the strategic preoccupations of today mean that it is much more likely that in the most demanding credible circumstances – those arising north of Indonesia — we would be fighting alongside the United States. Self-reliance responded to fears that Australia might find itself in regional conflicts that the US would be reluctant to join, whereas today's concerns are about conflict with China where we might choose to support our US ally and other regional partners. Hence, our desire to be able to conduct independent operations is not a contradiction to also welcoming US long-range air and naval forces operating from Australia, much the same way we did between 1942 and 1945. In fact, the security of our continent would arguably be strengthened the greater its importance as a base area for US forces. This is the strategic judgment that underpins Australia's support for the US Force Posture Initiative. In this context, a sovereign Australian defence industry capable of supporting those US forces, including equipment only operated by US air force and navy in particular, would also open avenues for further Australian influence on the conduct of operations in our region.

Australia's Sovereign Defence Industry Requirements

What does all of this mean for the way we might think about sovereign defence industry?

First, sovereign defence industry requirements are one but not the only reason for the existence of defence industry in Australia, or why we might want to support industry here. The benefits of innovation for productivity are widely recognized, and insofar as defence industry can help bring innovation to Australia's wider industrial sector, that is an important consideration. Alas, it is also perhaps one best handled by the Department of Industry.



Efficiency considerations alone will make it worth our while to do a lot of defence industry work in-country, especially in the sustainment space. There certainly will be a sovereign requirement here, but in many cases one that will align with economic efficiency and not pose specific policy problems.

Some things we simply have to do ourselves because we have unique Australian requirements that we can't get elsewhere – JORN being a good example, but also equipment not shared by even our closest allies, such as anechoic tiles for submarines, or sonars optimized for tropical waters which have far greater relevance for us than countries primarily operating in the colder waters of the North Pacific and North Atlantic. And yet, if we could have bought these systems, we probably wouldn't have tried to re-invent them. And where by accident or design we do end up with a bit of unique IP of our own, such as the CEFAR radar, Nulka, or the Barra buoy, why wouldn't we want to make sure we can extract monopoly rents off that lucky strike, in the way other countries do to us?

But in the end, all of these perfectly good reasons relate to the particular functioning of the defence equipment market in their respective context – the market delivering the outcome we seek, the market not offering what we seek, or us seeking to twist the market to our own advantage.



Sovereign defence industry requirements must make reference to Australia's geostrategic situation.

None of them relate to the requirements placed on defence industry from its contribution to the defence of sovereignty, and the need for us to have control of industry, the fundamental inputs of capability – and the factors of production, to defend that sovereignty.¹⁴ If 'sovereign defence industry' becomes a catch-all phrase for all defence industry we seek to maintain in-country, in the way of the PICs and SICs of old, it is likely to mean little at all.

Second, if sovereign defence industry is about national sovereignty, we cannot really make decisions about priorities and requirements without also addressing what threats to our sovereignty we design the overall ADF to meet. Sovereignty may be an end in itself, but the need to defend it only arises if it is under threat. Hence, sovereign defence industry requirements must make reference to Australia's geostrategic situation and the main force structure drivers for our defence effort. The 2016 Defence White Paper was a step in the right direction. Still the coherence of that paper arises more from connecting the dots in the capability investment plan than from the essay at the front.

We are now in what we'd in the 1970s have called a situation of strategic warning, but any real force expansion remains limited to submarines and airborne electronic warfare, and expansion at glacial pace. Crucial elements for a strategic policy framework on how we can manage future risk remain underdeveloped, including in relation to force expansion, and preparedness for open-ended crises where we might have to operate a large part of the ADF, dispersed and at high tempo of operations. However, it is for when our sovereignty will come under serious threat that we need sovereign defence industry capabilities, not for peacetime steady-state.

Third, when deciding priorities we need to think about allies as well as adversaries. Some countries that today place greatest value on sovereign defence industry learned this the hard way, such as Israel after France abruptly cut all support after 1967, or South Africa under Apartheid. There is little reason to think Australia is in any danger of such dramatic loss of support, but anyone who has read their Churchill, examined the NATO strategy debates of the 1960s, or followed the history of Middle East conflicts, will realize that the US are not above using allied dependence on US resupply to further their own political goals. When deciding on sovereign defence industry requirements, we need to think about the nature of our dependence on the United States, as well as ways in which we can increase US dependence on Australia.

Fourth, we need to confront the realities of strategic deterioration in our region. If one combines Russian cruise missile capabilities demonstrated in Syria, China's increased air and naval reach and presence in the Indian Ocean and Pacific, and put them onto a map of Australia and its approaches, one gets glimpses of our future strategic preoccupations. The safety of Australia's major defence, industry and government facilities in the Southern parts of our continent is eroded by the proliferation of long-range precision strike capabilities, especially those carried by nuclear submarine.

The future purpose of the ADF will be the Defence of Australia as a base for long-range allied air and naval operations. In 20 years' time, the 'Defence of Australia' will bear no resemblance to the way we thought about it in 1987, when the White Paper of that title defined ADF force structure for its time. So far, it's hard enough to find much serious thinking in Australia about battle damage repair for major air and naval platforms – let alone to infrastructure at Darwin-Tindal, Exmouth, Fremantle and Sydney or indeed at HMAS Harmon, Bungendore or Russell Hill.

Fifth, industry we depend on to defend national sovereignty goes beyond defence industry itself. We can't have a coherent set of sovereign defence industry requirements without a coherent approach to mobilization and the national support infrastructure. In an era of long-range precision strike, dispersed air operations in the North may well depend on companies like Air Services Australia, which we're not yet even considering as an essential part of our defence effort.

The old set of Strategic Industry Capabilities included some transport infrastructure in Australia's north, but nothing of the scale we will have to consider in coming decades. Indeed, it would be somewhat concerning if we focused on sovereign defence industry requirements in relation to this radar or that, a shipyard here and a ceremonial hat factory there, while our national fuel reserve remains non-existent.¹⁵ In that sense, Sovereign Defence Industry is something that is located at the overall force structure, national support base level rather than at the capability or program level – and a reminder that we must not become too focused on defence industry as a FIC alone.

Overall these considerations would lead to sovereign defence industry priorities that would include

- the ability to significantly increase and speed up production of major naval vessels;
- the ability to support forces on enduring high-tempo operations in the region, including across the north of Australia, including transport, dispersed base facilities, fuel etc.
- Battle damage repair for the ADF and for allied long-range forces, as well as to domestic bases, C2 infrastructure and to industry itself;
- Understanding of crucial technologies, such as electronic warfare or signature reduction, that even allies will remain reluctant to share;
- As well as a sovereign supply of munitions, sonobuoys, fuel and other consumables required for high-intensity operations in our region.

In ensuring these priorities, industry in the sense of private and public corporations is just one way to fulfil our requirements. Ultimately, Australia may well need sovereign control over the relevant factors of production. There has been a longstanding focus on Intellectual Property in this regard, and in that regard it is DSTG rather than industry itself which can often provide what we need. More recently, there has also been greater discussion of government-owned-commercially-operated (GOCO) arrangements for major infrastructure, esp. the ASC yard in Osborne – but current debates of GOCO still are dominated by the view that monopoly suppliers are Defence's real adversary.

For industry whose functioning is truly essential for our defence effort, the need for direct sovereign control may well become much more direct and even physical, if one considers the loss of safety from remoteness in the era of long-range precision strike. How much can we expect, and might we have to be able to compel, a non-uniformed industry workforce to put itself into harm's way? The way we control industry

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capabilities must be appropriate for the strategic circumstances of national mobilization, not just peacetime commercial relations. In the end, requirements for sovereign defence industry may well lead us to revisit our arrangements for domestic basic defence support, for example in the operation of ADF bases in the North: while contractors' willingness to operate under fire may have been demonstrated in the Middle East, would relying on such arrangements, even if feasible, really be acceptable politically in the defence of Australia?

That's a bleak future to behold, but one we cannot easily escape given trends in the region. And who knows, maybe one day even those boxes of files and paper drawings, all fully owned, sovereign Commonwealth IP, that gather dust at Lucas Heights might come in handy once more. Then, really no one could say any more that the outlook for sovereign defence industry in Australia is not bright indeed.

Policy Recommendations

- ✦ 'Sovereign Defence Industry Requirements' must relate to the most challenging scenarios that we structure the ADF for as a whole. They must look to industry support to operations at the force structure level, not just consider industry as a collection of industry FICs.
- ✦ Australia needs to look beyond our peacetime industry dependence on the United States. While we used to avoid reliance on US combat forces under 'self-reliance', we must now also move to confront our dependence on US resupply in high-intensity operations, and seek ways in which we can increase US dependence on US operations from Australia.
- ✦ Industry will be crucial to enable ADF operations in the defence of Australia in the era of long-range precision strike. The loss of security from distance means we need to consider battle damage to Australian infrastructure and industry itself. Ensuring access to 'sovereign defence industry' capabilities may also require us to re-think arrangements for domestic base support.

Endnotes

- 1 This paper is based on a presentation to the 'Sovereign Industry Capabilities Seminar', Canberra, 27 July, organized by the Australian Business Defence Industry (ABDI) of the New South Wales Chamber of Commerce.
- 2 Department of Defence, *2016 Defence Industry Policy Statement* (Canberra: Commonwealth of Australia, 2016), p. 23.
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- 4 Stephen D. Krasner, 'Rethinking the sovereign state model', *Review of International Studies*, 27(5), 2001, pp. 17-42.
- 5 Department of Defence, *2016 Defence Industry Policy Statement* (Canberra: Commonwealth of Australia, 2016), p. 23.
- 6 Stephan Frühling, 'Australian defence policy and the concept of self-reliance', *Australian Journal of International Affairs* 68(5), 2014, pp. 531-547.
- 7 Hansard, House of Representatives, 20 September 2007, p. 44.
- 8 Peter Hall and Robert Wylie, 'Arms export controls and the proliferation of military technology', in Benjamin Goldsmith and Jürgen Brauer (eds.), *Economics of War and Peace* (Bingley: Emerald, 2010), pp. 53-70.
- 9 Michael Clarke, Stephan Frühling and Andrew O'Neil, *Australia's Nuclear Policy: Reconciling Strategic, Economic and Normative Interests* (Farnham: Ashgate, 2015), pp. 95-99.
- 10 Stephan Frühling, *A History of Australian Strategic Policy Since 1945* (Canberra: Department of Defence, 2009).
- 11 David Horner, *High Command* (Sydney: Allen & Unwin, 1992), pp. 92-128.
- 12 These are not problems, choices and strategies that are specific to Australia. The importance Australia places on the ability to conduct independent operations in the Alliance is quite similar to the choices made by de Gaulle's France, after he took it out of NATO's integrated military structure. France remained in the alliance, and a staunch ally at that. But its refusal to make commitment of its forces an automatism, and its insistence on setting its own operational priorities, meant that its alliance relationship and operational integration with its alliance partners different fundamentally from that of the other NATO allies.
- 13 See for example Geoff Adams et.al., *Spring 2016 Industry Study: Final Report Weapons: Fragility in the United States Weapons Industry* (Washington DC: Eisenhower School for National Security and Resource Strategy, National Defense University, 2016), pp. 18-19. Because for most of the Cold War, war plans assumed a relatively rapid escalation to nuclear conflict, the surge and mobilization requirements for prolonged high-intensity conflict received relatively little attention until the 1980s. For a good discussion of the concepts and problems of surging production of precision-guided munitions from that time, see Martin C. Libicki, *Industrial Strength Defense: A Disquisition on Manufacturing, Surge and War* (Washington DC: National Defense University, 1990), <http://www.dtic.mil/dtic/tr/fulltext/u2/a228966.pdf>.
- 14 Alas, the DIPS mentions both Nuka and CEA's phased array radar technology in in the context of 'sovereign industry requirements'. Things that seem obvious often aren't.
- 15 John Blackburn, *Australia's Liquid Fuel Security, Part 2*, February 2014, https://www.aspo-australia.org.au/References/Bruce/NRMA/Fuel_Security_Report_Pt2.pdf.



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