

When is offset not offset? When it's Australia's Defence Policy for Industry Participation

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Defence offset is a controversial subject, attracting heated debate by policymakers, industrialists, and academics alike. Offset forms part of an acquisition programme and occurs because of the leverage a customer country can exert on overseas defence contractors to transfer technology and skill-intensive work. The leverage arises due to the existence of what is termed a defence buyers' market, characterised by a paucity of high value sales opportunities and thus a preparedness by vendors to offer concessions to win orders. Such concessions include offset, whereby the procuring country literally seeks to 'offset' the high costs of acquisition through reciprocal vendor investment into the local economy. This offsetting investment may be directed towards commercial endeavour (civil or indirect offset) or defence work (direct offset), with the latter directed towards accelerating development of indigenous defence industrial capability. An example of defence offset is where Brazil purchases 36 Swedish JAS 39 Gripen fighters and as part of the deal 'demands' local capacity for in country assembly, and possibly also production capability of selected high-tech components and sub-systems.

In the early 2000s, well over 100 countries, rich and poor, had offset policies in place, but recently the popularity of offset has been declining. A major reason is that offset incurs additional cost, which translates as a cost premium embedded in the primary defence contract price. A good example of the added costs associated with offset is the UK licensed build of the Boeing AH-64D Apache Longbow attack helicopter. The MoD procured 67 of these rotary platforms, with the first eight produced in the US, and the remaining 59 locally assembled over 1998-2004. The programme cost around A\$4.75bn, meaning that the unit cost was about A\$70mn. By contrast, Israel ordered 24 similar Apaches off-the-shelf from the US in 1999, paying around A\$23mn per helicopter.

Other offset criticisms include the challenges associated with securing state-of-the-art technology and high-level skills. Moreover, there are limited opportunities for creating local supply chains, enhancing R&D capacity, and promoting exports through OEM partnerships. The US argues it has no offset policy (notwithstanding 'Buy American' legislation), and the 2009 EU Defence Procurement Directive severely limited the use of direct offset and banned altogether civil offset. Save for one or two exceptions, then, this suggests that offset is increasingly becoming a developing country phenomenon. Yet, discontent with offset is also evident among more advanced developing states. For example, Kuwait has suspended its offset policy, South Africa's offset programme has been bedevilled by alleged endemic corruption with the policy delivering limited economic benefits, and India's politicians have recently been calling for the abandonment of its 'failing' offset policy.

The apparent demise of offset poses a dilemma because defence procurement agencies view it as a means of accessing technology, while overseas vendors are principally interested in maximising shareholder value. This inevitable friction works against mutually beneficial offset outcomes. Stakeholder goal convergence is arguably the way ahead, resetting the offset model to ensure feasibility through flexibility. BAES calls this approach 'industrialisation strategy', defined as representing everything that formal offset is not. Industrialisation strategy incorporates foreign direct investment, joint ventures, subcontracting deals and other work packages. Agreements are intended to be long-term and partnership-based, with reciprocal investment forming part of the primary defence contract. There is no separate offset programme, and thus no specific % investment targets, no multipliers (enhanced reduction of liabilities through investment into priority strategic sectors) and no penalties. Industrialisation strategy has been implemented in the Middle East, and, post-Brexit, the UK MoD is actively considering reintroducing a flexible partnership-based industrial participation (offset) policy. South Korea, moreover, is rumoured to be considering adapting its formal prescriptive offset policy in part to emulate Australia's unique defence industrial participation framework.

Australia's transition from its hitherto prescriptive offset policy to the present partnership-based model is both interesting and instructive. Canberra launched its defence and civil offset policy in the early 1970s under the broad rubric of the Australian Industry Participation program (AIPP). Overseas defence and aerospace vendors and later a wide array of technology suppliers were 'encouraged' to support development of local manufacturing and support services. Yet, offset policy was little understood at the time, loosely formulated, and lacked guidance on offset targets. Thus, while the policy was used for major acquisitions, such as the 1973 FFG warship project and the 1977 New Tactical Fighter programme, it was applied in an *ad hoc* and inconsistent way. After sustained criticism, a 'mandatory' offset policy came into force in 1986 and applied to all government procurements exceeding A\$2.5mn with an import content of at least 30%. The offset target was 30%, and multipliers were offered on investment channelled into local R&D capacity. The revised policy made clear that an offset premium must not be added to the primary defence contract price. These reforms improved policy clarity, but positive offset outcomes remained elusive. An Australian academic, Stefan Markowski *et al*, has published data showing that at the start of the 1990s, only 37% of obligations in a sample of 254 offset projects had been fully discharged. Overall, the judgement was that offset had done little to enhance Australia's export potential or improve defence self-reliance or add substantial value via technology transfer.

In 1991, Canberra wound down its civil offset programme. It abolished automobile offset, replaced aerospace offset with MoUs and introduced partnership for development arrangements for IT and telecommunications offset projects. In 1992, the government announced that industry involvement through focused provisions 'within' contracts would be prioritised over defence offset. Yet, incorporating industrial participation agreements into the primary defence contract failed to remove concerns over cost premiums. Indeed, there was a reluctant recognition that cost premiums were an immutable by-product of progress towards indigenous defence industrialisation. 'Australianisation' does not come cheap, even when the diluted goal is self-reliance in selected capabilities rather than full spectrum self-sufficiency.

In the new Millennium, Canberra began to introduce a succession of interventionist policies, such as the 2007 Priority Industrial Capabilities (PICs) and the 2009 Australian Industrial Capability policy, aimed at achieving essential national security through local in-country involvement. These were the policy foundations of later policies aimed at deepening Australian sovereign defence industrial capability, and included the 2016 Defence Industrial Policy Statement, Integrated Investment Programme (IIP), the 2018 Sovereign Industrial Capability Priorities (SICP) policy and the updated 2019 Defence Policy for Industry Participation (DPIP). The policy thematic emphasising local industrial involvement is common across all these diffuse policies, albeit that the nuanced focus may differ. For instance, the IIP identifies six high-level capability streams, including: ISR, electronic warfare, space and cyber; maritime and anti-submarine warfare; and strike and air combat capabilities. Within these broad domains, 10 capability priority fields were identified in the 2018 SICP policy, including Collins-class submarine maintenance and technology upgrades, and aerospace platform deep maintenance. In 2021, four additional priority fields were added, comprising 1) robotics, autonomous systems and artificial intelligence; 2) precision guided munitions and hypersonics; 3) space; and 4) information warfare and cyber.

The DPIP acts to support these strategic policy objectives by providing tailored Australian industrial involvement solutions. Canberra offers neither official guidelines nor parameters regarding reciprocal vendor investment, but bids must incorporate opportunities to maximise local industrial involvement, and where appropriate, eventual export opportunity. To this end, policy has been strengthened through the application of more stringent 'value for money' requirements linked to all material and non-material procurements exceeding A\$4mn and construction services greater than A\$7.5mn. Tenderers will be required to articulate how they intend to utilise and develop Australian industry. These commitments will carry weightings in the bid evaluation process, and in the event of successful bids will become contracted deliverables. Industrial participation is presently undergoing several audits to compare the performance of suppliers against their obligations.

Australia's Industrial Participation model is certainly an improvement on its erstwhile offset policy, but it needs to be if it is to exploit the opportunities arising from Australia's exponential future growth in defence spending and foreign defence acquisition. The 2021-22 defence budget is A\$44.6bn (around 2% of GDP), and is forecast to cumulatively exceed A\$575bn over the present decade to 2029-30. Some A\$270bn of this sum will be allocated to upgrading military capability, primarily through acquisition of advanced foreign systems, including maritime (A\$75bn), aerospace (A\$65bn), land (A\$55bn), cyber (A\$15bn) and space (A\$7bn). The policy logic of local industrial participation is intended to promote prosperity through investment in Australian industry, but begs the question as to what is 'Australian' industry, especially in relation to defence? In 2018, 27 of the top 40 defence companies were overseas owned. For years, there have been waves of government-sanctioned takeovers by foreign defence primes, mirroring a process of defence globalisation that similarly impacted the UK's defence industry. Aside from BAES, 'footloose' foreign defence multinationals dominate now dominate UK defence production. Privatisation and globalisation were lauded as the optimal medium for maximising job creation and commercial efficiency, but this has now given way to fears of potential erosion of defence industrial sovereignty.

Similar fears exist in Australia, especially given the Canberra's apparent preference for what economists term the 'international demonstration' effect; in other words, the perception that west is best, when compared with indigenous Australian companies. In a February 2020 speech (*Australia Defense Magazine*), Graeme Dunk argued ... "Australian companies are those where control rests within Australia. Thales Australia, BAE Australia, are not Australian companies in this context as the control is held in offshore locations, profits are returned offshore, and the really important decisions are made offshore". Dunk further argued that local industrial involvement in defence programmes is declining, but that the rate of decline is faster for truly Australian companies. He stated that only about... "10 percent of the contracts placed by the Department of Defence is with Australian-controlled companies – while almost 40 per cent of the expenditure and the profits on another 50 per cent flows overseas". Indeed, in 2019, there were reports that not a single Australian company had been signed up to participate in the giant joint Command and Control (C2) information environment programme under JP9111. The Australian Industry & Defence Network (AIDN) voices broader industrial concerns over the implementation of industrial participation, indicating that its members are reporting 'significant frustration' at the lack of Australian industry involvement across the major new defence programmes.

The problem for Australia is that working with overseas prime contractors has become a *sine qua non* due to the economic infeasibility of cradle-to-grave major national programmes. International industrial collaboration is also a non-starter, because regionally there is nothing to compare with, for example, Europe's (three-partner) Tornado, (four-partner) Typhoon and (three-partner) Tempest fighter programmes. Thus, the only realistic acquisition option has regard to what might be termed the hybrid approach, of which there are two principal types. The first is military-off-the-shelf, involving local component and subsystems production. There is limited risk, and it represents the most cost-effective acquisition model. The relatively trouble-free acquisition of the Super Hornet fighter and C-17 freighter via this method demonstrates its value. By contrast, Australia's acquisition of 72 fighters through the F-35 global consortium has been problematical. Project risk has been dramatically reduced through final assembly in the US. While Australian industry simply operates as part of the F-35 supply chain, Canberra nevertheless finds it impossible to insulate against cost escalation, delivery delay and performance shortfall. Industrial participation is progressing, but there remains room for concern. An impressive A\$1.3bn of F-35 related contracts has been achieved, which is expected to rise to A\$2bn by 2023, but as a proportion of the reported A\$16bn F-35 acquisition cost, these contracts amount to just 6% and 12%, respectively.

The second procurement option is the higher risk and more expensive foreign procurement - local build model. Australia uses local build for several of its high cost, high technology procurement programmes, driven by the need to generate domestic defence industrial capability, promote economic multipliers and reduce its vulnerability on internationally extended supply chains. An example of local build is the A\$35bn Hunter Class FFG programme, involving the local build of nine anti-submarine warfare frigates, and representing the biggest surface ship project in the history of the Royal Australian Navy. The prime contractor, BAE Systems Australia, anticipates that the Hunter programme will create and sustain 5,000 local jobs over its life cycle, and at its peak in 2028 will contribute around \$1 bn to the Australian economy. Five of the Hunter class vessels will be built at ASC's Osborne Naval Shipyard in South Australia. The problem, however, is that Australian industrial participation has

reportedly declined from 90% to 60% before finally hitting 50% (the same proportion that applied to the Air Warfare Destroyer programme). Although still early days, Australian businesses have been invited to bid for contracts supplying equipment and materials for the prototyping blocks, like scaffolding, pipes, steel, deck coverings, cables, and insulation, as well as services, like outfitting and painting. These labour-intensive, low skill activities, fail to resonate with the aim of high value complex technology industrial participation.

Plans to locally build submarines have also proved controversial. In March 2021, the Morrison government confirmed that 60% of the A\$90bn procurement of 12 French Barracuda-class submarines would be spent in Australia, prompting criticism of the low level of local industrial participation. The programme also proved contentious because the original estimate for the boats was A\$50bn, with the resultant near doubling of cost forcing economy measures to be introduced, such as the relocation of strategic complex hull fabrication capability from Australia to France. Moreover, the programme's sudden cancellation September 2021 put at risk the A\$396bn Canberra has already spent on the project's design phase, accounting for almost half the total cost to date. The Barracuda programme was replaced by an enhanced trilateral security partnership between Australia, the UK, and the US (AUKUS). At the heart of this partnership is Canberra's acquisition of at least eight conventionally armed nuclear-powered submarines.

The AUKUS submarine project will involve local build, with construction planned at Adelaide. However, much uncertainty surrounds the build programme, leading to the danger of rising risk and cost. An 18-month trilateral assessment effort has begun to identify an optimal pathway to deliver the intended capability, but local build will entail a high level of complexity, requiring evaluation of the full suite of requirements associated with nuclear propulsion, such as safety, design, construction, operation, maintenance, disposal, regulation, training, and environmental protection. While concerns have been raised that this assessment period is excessively lengthy in the absence of clarity on the submarine's design specifics, the major benefit of local build is that it will maximise industrial participation opportunities. The planned spectrum of opportunities for Australian industry participation ranges from capability design to complex project management, to construction and sustainment activities.

Yet, at what cost? The planned acquisition of eight nuclear powered submarines is estimated to reach A\$70bn at an 'absolute minimum' but is 'highly likely' to be much greater than that figure. Indeed, an Australian Strategic Policy Institute Report argues that with inflation the cost could be as high as A\$171bn. Moreover, it will be 18-years before the boats become operational, creating the possibility of a capability gap as Australia's existing six Collins-class submarines may be forced to retire before the new nuclear submarines are available. Keeping the Collins-Class submarines in service beyond their decommissioning date will add considerably to cost. Moreover, the eventual responsible disposal of the nuclear submarines' radioactive waste once the reactors reach the end of their operational lives must also be factored into the overall cost equation.

In sum, then, Australia's offset policy is dead, but lives on through the DPIP. Yet, aside from the demand for reciprocal investment, the policy is far removed from the prescription of formal offset. Flexibility is the dominant characteristic, both in terms of initial contractual negotiation and the nature of the IP projects undertaken. The policy rejects a 'one-size-fits-

all' approach, and within the boundaries of identifiable sovereign industrial capability priorities no distinction is drawn between commercial and defence industry. This 'light-touch' institutional interventionism is wholly appropriate, given that contemporary defence supply chains comprise mostly high-tech commercial SMEs producing innovative dual-use technologies. In an era when Australian defence acquisition funding is dramatically rising, the DPIP policy aims to ensure that substantial levels of expenditure do not leak out of the domestic defence economy to create skilled jobs and high-tech investment in vendor economies. Moreover, while a 60% level of industrial participation has been criticised in Australia, this is high by present international standards. Yet, Canberra needs to exercise caution. From a strategic level, it needs to identify the principal purpose of industrial participation: is it for economic benefit or for development of defence capability? Moreover, from a tactical level, there is, firstly, a need to ensure that local build of foreign weapons platforms and systems does not lead to unacceptable levels of cost escalation, and, secondly, that anticipated transfers of technology are technologically equivalent to the sophisticated foreign weapons acquired. This will be no easy task, given the obvious reluctance of overseas vendors to give away their technological inheritance.

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