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Editors’ Note

Mid-2012 is a time of great strategic uncertainty for many countries in the Asia-Pacific, and our authors in this edition engage with those concerns over a wide range of issues. At the regional level, Leszek Buszynski looks at the hot issue of the South China Sea, while Desmond Ball and Nicholas Farrelly go on the ground to examine violence in Thailand’s deep south, a threat driven by criminality, insurgency and politics.

Closer to home, several authors turn their heads to how to strengthen and adjust the Australian Defence Force in this time of upheaval. The contributions by Richard Brabin-Smith, Michael Evans and Will Clegg are of particular policy relevance given the Australian Government’s recent announcement of a new Defence White Paper, due in mid-2013. We will be covering the build up to the new paper in this journal over coming editions and, replicating the success of our 2009 project (vol. 5,2) will produce a special edition after the White Paper’s release examining it from a variety of angles. Finally, it is with regret that we announce the departure of Benjamin Schreer from the editorial team, who will focus on his many other responsibilities in the future. We wish him every success in these.

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Interpreting 10 Years of Violence in Thailand’s Deep South

Desmond Ball and Nicholas Farrelly

Around 5000 deaths and more than 8300 injuries are attributed to Thailand’s ongoing “southern fire” (fai tai). A range of explanations for this violence in the southernmost provinces of Thailand have been offered by academics, journalists and other analysts. Terrorism, insurgency and gangsterism have all been introduced as labels for components of the violence. This article is motivated by the need to re-examine the empirical foundations of these explanations. We focus on two case study districts that illustrate some of the key trends, ambiguities and inconsistencies. We are particularly concerned to illuminate interactions between criminal violence, violence generated by personal disputes, and violence motivated by retribution. Based on the available evidence, our estimation is that a relatively modest proportion of the violence in Thailand’s deep south over the past ten years can be directly linked to insurgent or terrorist activities. To conclude, we pose challenging questions about the nature of criminality, insurgency and politics not just in Thailand’s deep south but in the country as a whole.

Thai security officials face awkward choices when they are asked to assess the violence in the country’s three southernmost provinces—Yala, Pattani and Narathiwat. Some officials insist that Thailand is battling an insurgency, fuelled by Islamist and separatist sentiments, which is working to fracture the precious unity of the kingdom. Others suggest that Thailand is embroiled in a costly and messy war, partly inspired by separatists, partly the result of opportunism and incompetence, and partly the outcome of the deadly suggestion that violence will bring profit to those who dare pick up a gun, knife or bomb. Others still are inclined to offer explanations that apportion more of the blame to parts of the Thai security forces, and to particular Thai political interests. Certain police, paramilitary and military units are criticised for their contributions to fuelling the ongoing bloodshed.

Each of these general explanations for the conflict helps to clarify aspects of the complex and ambiguous character of Thailand’s “southern fire” (fai tai). But the conflation of these various explanations can also lead to confusion. In response to that potential confusion we want to know why the situation in southern Thailand is apparently different, in some key respects, to other civil...
wars. The challenge, for us, is to consider the conflict in southern Thailand on the basis of what has been learned over the past ten years, from 2001-2011. This leads to some robust judgements about Thailand’s security forces, and about the specific nexus of southern Thai criminal, political and commercial interests.

Figure 1. Southernmost Thailand

Our current, preliminary effort to determine the specific character of the decade-long conflict in southern Thailand is supported by various statistical summaries, by the analysis offered in earlier scholarly appraisals, and also
by a wide range of field-based and primary source qualitative evidence.\textsuperscript{3} From these sources we know that around 5000 deaths and more than 8300 injuries are attributed to the violence from January 2004 to January 2012.\textsuperscript{4} The categories of person affected by the violence are also well quantified. Through the efforts of Deep South Watch, which is based at Prince of Songkla University, it is possible to analyse many statistical aspects of the conflict and draw some striking conclusions. But in these numbers alone we do not find clear answers to questions about why the violence started or, far more importantly, why it continues on an almost daily basis. Questions about the spatial distribution of the violence, and its concentration in some areas, are also pertinent.

As Aurel Croissant argued back in 2005, “[t]he current wave of political violence in Thailand is not a general phenomenon of the south”.\textsuperscript{5} While comprehensive maps on exactly where violent incidents occur are difficult to generate there are overwhelming indications that only some provinces, districts, towns and villages are sites of significant violence.\textsuperscript{6} The question is: why? The answers that we introduce to explain this situation refine the general explanations of violence in southern Thailand offered by Thai security officials. We point to crime, personal disputes, retribution, electoral politics and commercial imperatives as more specific explanations for proportions of the violence, and for its spatial distribution. To interpret the violence, we are particularly enthusiastic about a comparative methodology grounded in case-studies. As such, our overall interpretation may have implications not just for the three southernmost provinces but for Thailand as a whole, and for any country that is faced with persistent conflict that appears immune to the usual levers of counter-insurgency, law enforcement or nation-building.

A Short History of Southern Thai Violence

The past decade is not the first time that Thailand’s three southernmost provinces have experienced a sustained period of violence. As one of the country’s distant peripheries, and as a region with a Malay-speaking Muslim majority population, it has never proven simple for Bangkok-based authorities to exercise their rule. Reflecting on this historical dimension,
Patrick Jory calls what we see today “a centuries-old conflict”. Differences in language, culture and religion, not to mention ties to Malaysia and the rest of Islamic Southeast Asia, are part of the challenge. These are historically potent ties. Back in 1975 M. Ladd Thomas noted that in southern Thailand “even where the Muslims have a command of the Thai language, a wide social gulf exists between them on the one hand and the Chinese and Thai Buddhists on the other”.

Throughout the 20th century the southernmost provinces were among Thailand’s most unstable and were the site of both a Malay-Muslim separatist movement and a large-scale communist rebellion. Notwithstanding that history, the impression developed from the 1980s was that the catalysts for conflict had been rendered less significant as economic growth and greater national integration saw rapid changes in southern Thai society. New government institutions are often credited with providing the political and economic foundations for those years of relative peace. But any peace began to be undermined from around 2001 when attacks on government personnel in southern Thailand began again. The violence escalated until 2004 when the new “southern fire” vaulted to national prominence.

It is since 2004, when this most recent period of conflict in southern Thailand received greater public attention, that scholars and other analysts have turned their attention to the precise character of the violence. Marc Askew, one of the most significant scholars of this region, has argued that “[t]he current multi-layered turbulence in the south represents one of the greatest challenges to be faced by the Thai state and society”. For Askew, that challenge is complicated by the fact that the evidence is often inadequate. He has suggested that:

Numbers have featured conspicuously in assessments of conditions in the south and in arguments confirming or denying progress by governments, security agencies and their critics. However, calculations of events and casualties vary … making unequivocal judgments problematic.

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This is a theme that has also been examined by Duncan McCargo in his prize-winning monograph, *Tearing Apart the Land: Islam and Legitimacy in Southern Thailand*. He argues that “[i]n the highly charged world of Thailand’s Malay-Muslim provinces, small details count”. Deep South Watch is a repository of such details and its 2010 report put matters in stark terms. That report argues that the “violence has brought about 12,126 victims within 7 years [which] inevitably makes Thailand’s southernmost region one of the hotspot … most sensitive areas in the world”.

**The Beginnings of the Wave, 2001-2004**

In the standard accounts the recent period of conflict in southern Thailand commenced on 4 January 2004 when a spectacular raid on a military arsenal in Narathiwat province saw perpetrators escape with ammunition and firearms. After the raid, violence increased dramatically. However, that is not when the violence started. As Aurel Croissant indicates:

> [a] total of 1,975 violent incidents were recorded between 1993 and the end of November 2004. Of these, 21 per cent occurred before 2001, and the other 79 per cent of violent incidents took place from 2001 onwards.

It is the spike in violence from 2001 onwards that we find particularly compelling. The most likely story is that it emerged from conflict between paramilitary Rangers and their counterparts in the police force. We must remember that on 6 January 2001 former Prime Minister Thaksin Shinawatra won his first electoral victory bringing the Thai Rak Thai party to power. Thaksin’s electoral revolution impacted politics the length and breadth of the kingdom and ended, of course, in Thailand’s 2006 coup. But in the meantime he sought to radically reshape Thai politics. In the deep south, Thaksin failed in many respects and it is under his watch that the killings of police and soldiers (especially paramilitary Rangers) recommenced. The level of violence then increased sharply again through 2002 and 2003, well before the re-ignition of the “southern fire” was given national-level attention.

In this period, there is no doubt that the official security organisations suffered from cumbersome organisational arrangements, blurred chains of command and the vagaries of bureaucratic politics. On the police side was Police Region 9 responsible for urban communities in the seven

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southernmost provinces; the Yala-based Southern Border Provinces
Administration Centre (SBPAC), responsible for policing the villages; and the
Border Patrol Police (BPP), whose 44th Division is based in Yala, with
companies in Pattani, Yala and Narathiwat Provinces looking after the
border areas. The Region 4 Internal Security Operations Command (ISOC)
was responsible for oversight and direction of counter-terrorist operations.
And the Yala-based Civilian-Police-Military (CPM) Command 43 was a
combined staff of civilian officials, police and military officers, which
controlled a force consisting, inter alia, of 800 Marines and the 900 Rangers
from the 41st and 43rd Regiments.  

Back then, as now, there was no consensus among the authorities on who
was responsible for the violence. McCargo summarises that “[t]he nature of
the militant movement behind most of the violence in Thailand’s deep South
remains a matter of dispute”. The military was alone among the Thai
security agencies in publicly attributing the violence to Muslim separatist
groups. The 4th Army Region Headquarters and ISOC 4 believed that the
Pattani Islamic Mujahideen Movement, a group with alleged links to Osama
bin Laden’s al-Qaeda, was responsible. However, a fifty-page report by
CPM 43 concluded that “local police were largely to blame for the troubles”,
that “some police were tied in with influential figures and involved in illegal
businesses such as drugs, contraband and prostitution”, and that police
killings “stemmed from personal conflicts between the slain officers and local
people”. Back in 2002, Police General Sant Sarutanont, then national
police chief, dismissed a suggestion that Patani United Liberation
Organisation separatists might have been involved.

In the same year the then Interior Minister, Purachai Piumsombun, warned
that so-called Muslim separatists should not be made scapegoats, and said
that the attacks were the work of “some groups of [dissatisfied] government
officials. These groups tried to make it look like the work of [Muslim]
separatists, but it’s not”. The Police Region 9 commander, Police
Lieutenant General Thawatchai Jongsukhon, argued that a military presence
was unnecessary in Yala, Pattani and Narathiwat provinces “since the
separatist movements were scattered and no longer posed a threat”. In
March 2002, it was reported that the deputy chief of the national police was

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16 Yuwadee Tunyasiri and Wassana Nanuam, ‘Violence in South: Police Challenged to Prove
17 McCargo, Tearing Apart the Land, p. 134.
18 Wassana Nanuam, ‘Violence in South: Group Linked to al-Qaeda Under Watch’, Bangkok
Post, 24 March 2002, p. 3; Wassana Nanuam and Waeda-o Harai, ‘South ISOC Links Unrest to
21 ‘Police Seek Transfers’, The Nation, 19 March 2002, p. 6A.
22 ‘Violence in South: Sanoh Wants Army Out, But Local MPs Say Police Need Help’, Bangkok
planning to ask Prime Minister Thaksin Shinawatra to abolish CPM 43, and
that he “would also seek the removal of two southern-based military ranger
units for alleged involvement in the murders of the [police] officers”.

While this all happened years ago, much of the underlying security situation
failed to improve. In this case, the Civilian-Police-Military Command 43 was
actually dissolved and its Combined Force disbanded on 1 May 2002, under
a direct order from the Prime Minister’s Office. The 41st and 43rd
Regiments were posted to another Army unit, Border Protection Unit 43,
which was responsible for guarding the Thailand-Malaysia border.
Some, such as Aurel Croissant, have suggested that this was a crucial period in the
evolution of the conflict and that it provided the political and economic
conditions for the escalation in later years.

Escalation, 2004-2007
Since 2004 the level of violence has increased with regular killings,
bombings and ambushes. Shadowy actors are blamed for portions of this
violence and the authorities are unclear on exactly how much can be
attributed to so-called “security related” (i.e. insurgent or terrorist) incidents.
The amorphous character of much that drives the violence in southernmost
Thailand guarantees that it can be very difficult for analysts to identify the
most important patterns. The absence of any effective rule of law only
further diminishes analytical clarity.

Nonetheless we suggest that there are four main patterns of violence. First,
there are those incidents that see locals, often teenagers and other young
men, attacking government installations and personnel. This is the violence
that is most readily attributed to the insurgency, to Islamists, or to
separatists. The cultural, religious and social differences between the Thai
Buddhists and the local Muslims, all reinforced by perceived economic and
social inequalities, are generally identified as the fundamental drivers of this
violence. It is the type of violence that fits, most neatly at least, into our
understanding of what an insurgency should look like. Of course there are
many reasons why young men might attack government forces. Perceived
slights or offences can be blown out of proportion in situations where
violence is relatively cheap. Both sides could be fighting over drugs or girls.
They could be motivated by payments from shadowy paymasters. They just
might be bored. Even after so many years, we do not know nearly enough
about what motivates young men in southern Thailand to attack government
forces.

23 Ibid.
24 ‘The South: NSC Takes Over Security of Five Provinces From Today’, Bangkok Post, 1 May
25 Tunyaari and Nanum, ‘Violence in South: Police Challenged to Prove Their Claim’, p. 1;
Second, violence in southern Thailand is, in part, based on retribution. In one common form this means that the young men and women of the Thai security forces who do the dangerous patrolling and who risk their lives trying to police the southern provinces may seek to avenge the deaths on their side. This is partly explained by lack of institutional authority within security agencies, but is also a product of institutional strength, memory and prestige. We have evidence for how these dynamics work in practice. We should bear in mind the impunities and ambiguities that go hand-in-hand with this violence. “Black clad” men are often blamed for the most deadly attacks.

Third, there is violence that is apparently generated among those in southern Thailand who benefit economically from ongoing conflict. A region that has been long deprived now sees monumental infusions of funding from Thai government coffers. Those seemingly limitless budgets are attractive prizes for the government agencies that control them but also for those among the local population who can best manipulate their disbursal. Road construction contractors, hotel builders, caterers, wholesalers, everyone, is likely to get some cut of the government spend. There are also those economic actors that do especially well under conditions of uncertainty and ambiguity. They may trade in the illegal gasoline or gambling markets, or make their money by trafficking the classic trio of guns, girls or ganja. According to Croissant, “given the ubiquity of organized and petty crime, small-arms trade, smuggling, and drug trafficking in the south, it would be naïve to assume criminals and terrorists can be clearly distinguished”. Adequately divorcing the conflated numbers of other dead and injured from the violence that goes with criminality has proven an impossible task.

Fourth, it is also impossible to ignore the reality that Thailand is a generally violent society where politics, and everything else, is sometimes accompanied by bloody settlements. In 2010 there were 3654 murders in the country, with a murder rate of 5.3 per 100,000 people. The southernmost provinces suffer from this same general affliction.

What is “Security Related”?

As explained by Marc Askew, most accounts, including this one, habitually introduce the violence in the deep south by citing the total number of deaths and casualties, giving the impression that all are due to insurgent violence. In a careful analysis of this issue Askew argues that there is a problem with this: the official figures do not, in any consistent or meaningful way,

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29 The lack of consistent province-by-province breakdowns of crime statistics currently makes it difficult to offer overall comparisons of regional variations in violent incidents across Thailand.
disaggregate the various types of killings. According to Askew, internal police estimates “for the period January 2004 to late 2008, though problematic, suggest that so-called private killings may account for one quarter to a third of all violent deaths in the deep south since 2004”.

Askew goes on to describe how, for these years, police tallied 4296 shooting incidents, of which 950 (22 percent) were judged to arise from “personal disputes”, while 2344 (54.5 percent) were assessed as “security related” (thus pertaining, at least generally, to terrorism or the insurgency). Askew suggests it is significant that in a further 998 shooting incidents (23 percent) the police failed to identify cause or culprit. This means that the percentage of personal attacks, based on Askew’s numbers, may be even higher. He argues, and we agree, that “some of these unattributable shootings no doubt include cases of clandestine assassination by police and army hit-squads”.

Askew goes on to make some other key observations. He argues that the proportion of what could be classified as personal killings may be even higher precisely “because official figures understate actual numbers for several reasons”. In his account, Askew states that local military and police officers—struggling to deal with the ambiguous political, criminal and security situation—may describe cases as “security-related” even though clear evidence is unavailable. Highlighting some of the incentives for proffering different official classifications, Askew suggests that shooting cases initially determined as ‘private’ by the police are sometimes switched to the ‘security-related’ category following appeals from victim’s relatives seeking government compensation payment.

Such payments are not available to those caught up in private killings. While it is only possible to make a tentative assessment, Askew reports that some officials suggest that the amorphous category of personal-political killings could account for 40 to 50 per cent of total civilian deaths during the years of “insurgency”. He goes on to argue that

Another official analysis suggests that only 11 percent of the 63,677 crimes reported in the south from 2004 to 2010 have been “insurgency-related”. According to Police General Adul Saengsingkaew, the security advisor to the Royal Thai Police, one of the reasons is that “imitation attacks” are designed

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33 Ibid., p. 123.
to look like terrorist acts but that “not every bombing or shooting is the work of insurgents”. 34

This complicates matters and may make all of the numbers appear somewhat suspect. What is even more interesting is that Askew further argues that

similar assessments on the role of local political conflict in providing momentum to local violence have been suggested … by insurgents, Patani United Liberation Organization (PULO) members in Malaysia, Muslim rights lawyers and local Muslim politicians: people who are hardly likely to have a vested interest in duplicating official representations. 35

In a Wikileaks cable published in May 2011 by the Malaysia Today website, The Honorary Thai Consul in Langkawi, Malaysian businessman Shazryl Eskay Abdullah, “estimated that criminal gangs and Thai security services were responsible for 70 percent of the recent violence”. 36 He went on to say that “Malay separatists accounted for only 30 percent of attacks in the south with Thai army, policy and intelligence agency factions, along with criminal gangs, responsible for the balance”.

The Royal Thai Army, for its part, has calculated at different times since 2009 that only 22-26 percent of the violence can be attributed to insurgent or separatist actions. As an example, in November 2009, the Royal Thai Army’s 4th Army commander, Lieutenant General Pichet Wisaijorn, who was the senior officer responsible for southern Thailand, said that only 26 percent of violent incidents were insurgency-related. According to a report in Asia Times Online “[i]f true, that means the majority of the nearly 4,000 murders committed over the past six years can be attributed to political disputes and criminal activity”. 37 In April 2011, 4th Army Area commander, Lieutenant General Udomchai Thammasarojrat, stated that “[v]iolence is based on the joint work of insurgents and rings running illegal businesses, including contraband petrol traders and drug dealers”. 38 He specifically suggested that gasoline smugglers have responded with violence to a clampdown on their illicit businesses. 39 On the same day, Deputy Interior Minister Thaworn Senneam stated that illicit businesses are funding the insurgency. 40

Furthermore, a close reading of Deep South Watch statistics suggests that there are much higher proportions of killings in certain sectors of the population. Around half of the attacks are described as targeting “civilians”. The military absorbs 16 percent of attacks, and police 11 percent. It is relevant that the category of person most likely to die in an attack is the “Islamic leader” (83.9 percent of the time) while military personnel are the least likely to die (17.7 percent).

Case Study Contradictions:
Bannang Sata and Betong Districts, Yala

To illustrate our fundamental point about how best to interpret violence in Thailand’s southernmost provinces we offer two district level case-studies. In Thailand’s system of political organisation the “district” (amphoe) is an intermediate level of bureaucratic organisation. The head of a district is a mid-ranking Interior Ministry official called a Nai Amphoe. They are often described in English as the “sheriff”. Below the district level there are sub-districts (tambon) and villages (mu baan). And above the district there are the provinces (changwat) which are overseen by governors (phuwa rajakan changwat). The two districts discussed here are Bannang Sata and Betong, both in the province of Yala.

Bannang Sata has seen some of the most significant violence over the past ten years. Deep South Watch reports that according to monthly data, Tambon Bannang Sata in Yala and Tambon Rueso in Narathiwat took alternate turns at being the first and second place in the area of unrest from 2004-2007. By a small margin Bannang Sata remains the most violence-prone district in southern Thailand. Betong has experienced some of the least violence. As examples of the contrasting dynamics that lead to violence, and its avoidance, these are important case-studies.

VIOLENCE IN BANNANG SATA: RETRIBUTION DYNAMICS

Bannang Sata is an almost constant security headache for Thai authorities. In the one district there are infantry, cavalry, Border Patrol Police, Police Aerial Reinforcement Unit, provincial police, paramilitary Rangers (tahan phran) and Volunteer Defence Corps personnel. In this discussion we focus on one of the most professional and disciplined units in the district: the Border Patrol Police who have deployed their elite Police Aerial Reinforcement Unit (PARU). We have also provided further details on their

41 Srisompob Jitpiromsri, ‘Sixth Year of the Southern Fire: Dynamics of Insurgency and Formation of the New Imagined Violence’ (Songkhla: Deep South Watch, Center for Conflict Studies and Cultural Diversity (CSCD), Prince of Songkhla University, 2010), p. 16.
42 The potential for comparisons with Satun province also merit close consideration for those hoping to follow the line of argument presented here.
43 Srisompob, ‘Sixth Year of the Southern Fire’, p. 9.
involvement in a range of violent incidents in Table 1. There is a stark pattern of retribution for anybody who cares to look closely.\textsuperscript{44}

Where to begin? On 1 February 2004, Sergeant Prawes Wongswuat, from the 445\textsuperscript{th} Company of the Border Patrol Police, was stabbed to death at Nikhom Pitak Rasadorn School in Tambon Ban Rae in Yala's Than To District, which lies between Bannang Sata and Betong districts. He was one of eight Border Patrol Police teachers at the school, and was alone on guard duty when he was attacked by four or five assailants, who took his 9-mm pistol. In an effort to catch the perpetrators, three men were arrested by police the next day. They were released after questioning, but were “abducted by men in black just hours after they were freed”, and were presumably murdered.\textsuperscript{45}

Later in 2004, on 28 April, eight people on motorcycles attacked the Border Patrol Police post at Ban Bacho in Bannang Sata District. All the attackers were shot dead, while four police were wounded. Then in November 2006, a Border Patrol Police unit was forced by a group of some 300 angry villagers to leave their temporary base in Ban Bacho. This unit caused popular consternation when some of the villagers believed that its officers might have been involved in the murder of a local named Isman Sama.\textsuperscript{46} In the same area on 29 September 2007, Border Patrol Police Captain Thoranit Srisuk from the elite PARU was shot dead. He was leading a fourteen-man patrol between Ban Sai Surat and Ban Phakdee in Tambon Bang Lang Dam in Yala’s Bannang Sata District.

A 9-mm pistol belonging to Captain Thoranit was taken by the assailants. In June 2009, when four militants who were said to have “committed a wave of violence in Yala” were killed in a clash with security authorities in Bannang Sata District, Captain Thoranit’s gun was found on one of the men.\textsuperscript{47} On 20 June 2008 Border Patrol Police Sub-Lieutenant Krittikhun Bunlue, also a PARU officer, was killed in Bannang Sata on his twenty-fourth birthday. Four others were wounded in that engagement. \textit{Thai Rath} reported seven days after his death that “six [local villagers] were extra-judicially executed, upon knowing that they have engaged in an ambush that killed [Krottikhun]”\textsuperscript{48}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{44} It has been suggested that responses by militants to anniversaries of major events (such as Tak Bai or Kru Se) offer scope to expand this argument about retribution. Such expansion is certainly a worthwhile research task.
\item \textsuperscript{46} ‘School Unit Withdrawn After Crowd Surrounds Yala School’, \textit{The Nation}, 6 November 2006; ‘Teachers Feel Unsafe After Officers Forced Out’, \textit{Bangkok Post}, 7 November 2006, p. 2.
\item \textsuperscript{47} ‘Lab Tests Clear Officials of Mosque Attack’, \textit{Bangkok Post}, 20 June 2009, p. 2.
\end{itemize}
\end{footnotesize}
patriotic blogs (at polize.diaryis.com) about working for the good of the nation. Some of his colleagues wrote on his blog after his killing that they would "get" those responsible. In June 2009, when four militants were killed in Bannang Sata District, the police said that they were involved in the killings of both Sub-Lieutenant Krittikhun and Captain Thoranit.49

Then on 22 April 2009, two PARU officers, Lieutenant Rungarun Klinklun and Sub-Lieutenant Surachai Chaisongkram, died after their pick-up truck was hit by a roadside bomb in Bannang Sata District. One died on the way to hospital and the other the next day. Sergeant Udom Pumpuang was badly wounded.50

On 4 August 2009 a Border Patrol Police officer was seriously injured in an ambush in Tambon Taling Chan in Bannang Sata District.51 Soon after, on 4 September 2009, a PARU trooper based in Bannang Sata was killed when a car bomb detonated next to his vehicle on the way to get supplies in Muang Yala.

Later, on 12 March 2010, Police Colonel Somphian Eksomya, chief superintendent Banang Sata District Police Station, was killed. On 23 June 2008, he had led forces which had killed two "insurgents" following the killing of Krittikhun Bunlue.52 The alleged killer of Colonel Somphian, a "militant" named Ma-ae Aphibaibae, was also killed in May 2011. One of the reports of his death noted that he was ranked number 43 on the blacklist of gunmen and was "wanted for many cases, including the murder of Colonel Somphien".53 Then in July, villagers in Bannang Sata complained to the Justice Ministry about the disappearance of two local men last seen entering a Border Patrol Police base.54 And so it continues.

The pattern of retribution is clear. It helps to explain why Bannang Sata is so violent compared to some other areas. It also helps to explain why, as Duncan McCargo suggests, "[s]ome officers insisted that after several months of working in a given area they were fully aware of the identities of the militants. Most militant activity was targeted and specific".55 Of one militant, McCargo writes that "[a]fter each operation he escaped into the

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51 'BPP Officer Injured in Yala Ambush', The Nation, 4 August 2009.
53 The Nation, 'Key "Militant" Among 4 Shot Dead in South', The Nation, 22 May 2011.
54 King-oua Laohong, 'Justice Gets Complaint of Missing Men', Bangkok Post, 26 July 2011.
55 McCargo, Tearing Apart the Land, p. 105.
jungle for a while to avoid arrest or extra-judicial killing". McCargo also describes how

[the sexual behaviour of soldiers was the focus of many rumors and considerable tension. Some prominent leaders consistently argued that Buddhist soldiers were becoming sexually involved with Muslim women, a serious moral, cultural, and religious violation.]

Sex is the subject of our next case-study.

**Sexual Services in Betong**

One area that has avoided almost all of the violence experienced by Bannang Sata is Betong District, also in the province of Yala. It is a four-hour drive from the provincial capital, down a windy road, right through Bannang Sata, to the Malaysian border. Its security is managed by the provincial police from Region 9, augmented by Border Patrol Police units who guard the international frontier. There are no other security forces stationed there. So compared to Bannang Sata it is a relatively simple security situation with clear lines of command, and fewer opportunities for the complicated political-security-economic dynamics which appear to be so important elsewhere. But not everything else is so simple. The district has, to be clear, become a lucrative sexual services hub for tourists from Malaysia and Singapore, but also for all sides of the local conflict. According to Askew,

> [the sex-trade infrastructure of the lower south incorporates a range of inter-connected services including transport, accommodation, eating establishments, and entertainment venues centered in Sino-Thai dominated settlements.]

Right back in 2001-2002 Askew estimated that Betong had 71 “tourist-related commercial sex services” venues, making it one of the largest sites for sexual tourism in the deep south. It now has many more.

What is remarkable about Betong District is that there have, in stark contrast to Bannang Sata, been no killings of security authorities, including Border Patrol Police. The district has even been called an “[o]asis of peace and harmony”. One explanation is that Betong District welcomes more than a million, short-term male tourists each year. To illustrate, the recently opened Grand Mandarin Betong Hotel is a 25-floor, 500-room hotel, which towers above the rest of the town. This luxurious, new hotel is a special draw for the tourists who come from across the Malaysian border. The Mandarin and

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56 Ibid., p. 147.
57 Ibid., p. 104.
the 250-room Garden View, another new hotel, have boosted Betong’s hotel
room capacity to 3800. Our estimate of the income cross-border tourists
could bring in is around $1 billion per annum, much more than the annual
income Betong makes from its other money spinner, exporting agricultural
products from the plantations that cover the nearby hills. The sex workers
who cater to the visitors come from China, Russia and Indonesia, and from
northern Thai cities like Chiang Mai and Chiang Rai. It is a huge contrast to
Bannang Sata; but only a short drive away.

Notably, other districts in southern Thailand have also emerged as sexual
services hubs for visitors from Malaysia and Singapore. One town called
Ban Dan Nok has developed what has been called “an almost exclusively
sex trade-centered economy”. By the end of 2001 it hosted more than 140
sex-related establishments with more than 2000 sex workers. In 2012 Dan
Nok has more than 200 premises that provide sexual services and based on
well-informed local estimates there are now "more than 4,000 girls" working
in in the town. This number suggests that the commercial sex industry
continues to expand rapidly in parts of southern Thailand. Dan Nok is, like
Bannang Sata, one of the safest areas in southernmost Thailand.

Conclusions on Money, Sex and Power

What can we learn about violence in southern Thailand from the intimate,
sexual services economy of Betong and the retribution, “security related”
economy of Bannang Sata? Clearly the economic status of Betong means
that it offers substantial protection to its main businesses. Because it has
experienced far less violence it is also still under the sole control of the
provincial police. On a recent field visit to the town it was observed that
many police officers spend their time relaxing in the local coffee shops and
bars. They are able to keep an eye on the comings-and-goings, but also on
the status of any investments they, or their superiors, may have. Betong
illustrates the reason why violence in southern Thailand is inconsistently
distributed. It hard to determine the causation but violence has tended to
become correlated with those areas where the government forces are
heavily concentrated and where different government agencies are present.
This probably generates a significant level of competition among them and
also blurs any communication that particular security forces enjoy with local
gangsters or insurgents. One further issue that is definitely relevant is that
Betong, as an example, has significantly more Buddhist and Chinese
residents (around 48 percent) than Bannang Sata, which is predominately
(82.2 percent) Muslim. Such demographics cannot be ignored in analysis

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Askew, ‘Sex and the Sacred’, p. 194.
of conflict dynamics. There is no question that the two districts present very
different pictures.

But one factor they have in common is that Thailand’s illegal economy
amounts to about 20 percent of its Gross National Product. The proportion
in the south is higher. Some of the commodities that are most often traded
in this illegal market are narcotics, timber, guns, people, and fuel. A survey
in November 2010 found that residents of the southernmost provinces
regarded “the drug trade as the most urgent problem in the region”.62 Three
provinces in the deep south (Songkhla, Pattani and Narathiwat) are in the
top eight through which diesel oil is smuggled into Thailand.63 In terms of
proportion of households affected, levels of bribery are higher in the south
are higher than in any other region according to the report of a nation-wide
survey conducted in 2000 for the World Bank.64

So when solutions or approaches to the southern Thai conflict are proposed
we feel that they tend to miss the point of a large proportion of the violence.
Current proposals that privilege autonomy or self-determination are
misdirected at problems which may only be one small fraction of the much
wider story of southern violence. For a setting like Bannang Sata, impunity
and personal pride are far more significant drivers of violence. Think about it
this way. Could an elite unit, such as the Border Patrol Police Aerial
Reinforcement Unit, fail to take drastic action when attacked? Do we
consider their pride and their personal and unit reputation? And what about
the young Malay Muslim men who are caught up in the retribution dynamics?
What are their options, especially in terms of economic activity? Is there a
feasible alternative to gangsterism and its rewards? And can they feasibly
step away from a fight after so many of their friends and relatives have
already died?

This is a very sensitive set of issues but it requires significant attention from
Thai authorities before it is too late. According to one report, a

well-placed source alleged that profits are high enough that some police and
government officials lobby to get placements in Thailand’s southern-most
region. This has fostered a belief among many in the south that the
insurgency will not end because of the profit opportunities the lawlessness
and conflict provide.65

62 ‘Three Muslims Slain in Drive-by Shooting in Southern Thailand’, Deutsche Presse Agentur
[ＤＰＡ], 24 November 2010.
63 Pasuk Phongpaichit, Sungsidh Piriyaaghgsan and Nualnoi Treerat, Guns, Girls, Gambling,
64 Pasuk Phongpaichit, Nualnoi Treerat, Yongyuth Chaiyapong and Chris Baker, ‘Corruption in
the Public Sector in Thailand: Perceptions and Experience of Households’ (Bangkok: Political
Economy Centre, Chulalongkorn University, 2000), <http://info.worldbank.org/etools/docs/
65 Brian McCartan, ‘War Brings Profits to South Thailand’, Asia Times Online, 12 December
These are clearly conditions where, after ten years, many see no advantage in stopping the violence. Military, police and paramilitaries continue their deployments and budgetary allocations, and by doing so they become more deeply enmeshed in the problematic social, political and economic relations that exist in the deep south. There is no end in sight for as long as the Thai authorities continue to invest in this counter-insurgency while also, through the criminality of government forces, fuelling pockets of local violence and local dissatisfaction.

Table 1. Bannang Sata and Than To Districts—Border Patrol Police Retribution

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 February 2004</td>
<td>Sgt Prawes Wongsawat, BPP 445th Company, killed at Nikhom Pitak Rat School, Tambon Ban Rai, Than To District.</td>
</tr>
<tr>
<td>2 February 2004</td>
<td>Three suspects in Prawes killing 'disappeared'.</td>
</tr>
<tr>
<td>28 April 2004</td>
<td>Eight young men killed by Border Patrol Police (BPP) at Ban Bacho, Bannang Sata District.</td>
</tr>
<tr>
<td>3 May 2004</td>
<td>BPP base in Ban Lae, Than To District, attacked; no casualties.</td>
</tr>
<tr>
<td>7 July 2004</td>
<td>Former Sgt Tawil Keawwichit, former BPP NCO, killed in Ban Ha, Than To District.</td>
</tr>
<tr>
<td>3 July 2006</td>
<td>BPP base in Bannang Sata attacked, no fatalities.</td>
</tr>
<tr>
<td>3 October 2006</td>
<td>Female Lance Corporal Siriporn Sangkhaharat wounded at Nikhom Pitak School, Tambon Ban Rai, Than To District.</td>
</tr>
<tr>
<td>6 November 2006</td>
<td>BPP unit in Ban Bacho, Bannang Sata District, forced to leave their base by some 300 angry villagers.</td>
</tr>
<tr>
<td>29 September 2007</td>
<td>PARU Captain Thoranit Srisuk killed in Tambon Bang Lang, Bannang Sata District. (His 9-mm pistol taken, found on the body of a 'militant' killed in June 2009).</td>
</tr>
<tr>
<td>11 February 2008</td>
<td>Four BPP wounded, Than To District.</td>
</tr>
<tr>
<td>20 June 2008</td>
<td>PARU Sub-Lieutenant Krittikhun Bunlue killed, Ban Santi, Bannang Sata District.</td>
</tr>
<tr>
<td>5 September 2008</td>
<td>Sub-Lieutenant Arthit Intachai, head-master of BPP Nikhom Pitak Rat School, Tambon Ban Rai, Than To District, ambushed but survived.</td>
</tr>
<tr>
<td>22 April 2009</td>
<td>Two PARU officers, Lieutenant Rungarun Klinklun and Sub-Lieutenant Surachai Chaisongkram, killed by a road-side bomb in Bannang Sata District.</td>
</tr>
<tr>
<td>June 2009</td>
<td>Four 'militants' killed. Police said they had been involved in the killings of Thoranit Srisuk and Krittikhun Bunlue.</td>
</tr>
<tr>
<td>4 August 2009</td>
<td>A PARU officer was seriously injured in an ambush in Ban Hadsai, Tambon Taling Chan in Bannang Sata District.</td>
</tr>
<tr>
<td>4 September 2009</td>
<td>Police Lance Corporal Jarupong Lamjantuek, a PARU trooper from Kai Naesuan based in Bannang Sata district, was killed by a car bomb during a trip to Yala to buy supplies for his unit.</td>
</tr>
<tr>
<td>12 March 2010</td>
<td>Police Colonel Somphian Eksomya, chief of Bannang Sata District Police Station, was killed. He had led forces which killed two 'insurgents' on 23 June 2008 following the killing of Krittikhun Bunlue.</td>
</tr>
<tr>
<td>20 May 2011</td>
<td>Ma-Ae Aphibalbae killed. Suspected of leading the group which killed Colonel Somphian Eksomya.</td>
</tr>
<tr>
<td>26 July 2011</td>
<td>Complaint from Bannang Sata villagers that two men, Ibroheng Kahong and Dulhami Maraie, went missing after entering the local Border Patrol Police base.</td>
</tr>
<tr>
<td>2 November 2011</td>
<td>Six members of the 44th Border Patrol Police Division are wounded.</td>
</tr>
</tbody>
</table>
Desmond Ball and Nicholas Farrelly

by a bomb while escorting teachers in Bannang Sata District.

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Ad to be added by printers
The South China Sea has become a focal point for US-China rivalry which makes it such a critical issue today. China's naval strategy demands control over the South China Sea for the various missions the navy has set itself. It justifies China's assertive actions that have been intended to press the ASEAN claimants, Vietnam and the Philippines in particular, to recognise Chinese sovereignty. The United States cannot accept Chinese control over the South China Sea, it has reacted to China's assertiveness by repositioning its forces in the Asia Pacific and strengthening security ties with the ASEAN claimants. ASEAN itself becomes sidelined in this rivalry and struggles to maintain its relevance, the proposals it has promoted to resolve the South China Sea dispute such as the code of conduct lose importance. Rather than discussing a resolution of the issue it would be more realistic to negotiate an agreement preventing incidents at sea or similar measure which would reduce the likelihood of conflict.

Naval strategy has become a major determinant of Chinese policy over the South China Sea introducing new tensions in the dispute. Initially, China's interest in the South China Sea was primarily territorial, and a matter of reclaiming maritime territory and the islands within it from Vietnamese, Philippine and Malaysian occupation. Access to the oil and gas reserves of the area assumed greater importance subsequently as Chinese demand for energy rose, and as the ASEAN claimants involved international oil companies in exploration and drilling. China's rise, however, has given a new significance to naval strategy as a means of countering US regional dominance, for which control over the South China Sea is required. The result has been more assertive behaviour from the Chinese to enforce their claims to the area and to push the ASEAN claimants to recognise Chinese sovereignty. The United States cannot accept Chinese control over the South China Sea since it would undermine its position in the Western Pacific and it has responded to the Chinese challenge by rebalancing its forces in the Asia Pacific region, and strengthening security relations with claimants such as the Philippines and Vietnam. As the South China Sea dispute becomes integrated into the field of Sino-US rivalry ASEAN assumes a subordinate role and comes under increasing pressure to take sides. The proposals it fostered to resolve the dispute, such as the Code of Conduct, though promising at the time are effectively sidelined. While a resolution of the dispute is highly unlikely at this time, measures to prevent incidents at sea and to deal with harassment should be considered to prevent conflict and avoid escalation.
Off Shore Defence

Chinese naval strategy has shifted from the limited coastal defence of the 1980s to what is called “off shore defence”, which embraces areas contiguous to the Chinese mainland including the South China Sea. China’s 2008 National Defence White Paper noted the navy’s “strategic transformation to offshore defensive operations” which meant “integrated offshore operations” and “strategic deterrence and strategic counterattack”.¹ The 2010 National Defence White Paper discussed the off shore defence strategy in terms of the modernisation of integrated combat forces and enhancing the capability for “conducting operations in distant waters”.² The move to offshore defence as a naval strategy involves three major tasks or missions which have guided the development of Chinese capabilities over the past two decades. The first objective is to prevent Taiwan from declaring independence and to deter the US navy from supporting it in the event of a conflict. From the Chinese perspective the US naval presence in the Western Pacific prevents the reunification of Taiwan with the Mainland, prompting China to develop its naval power as a counter. The second is to protect China’s trade routes and energy supplies which run through the Malacca Straits through which an estimated 80 percent of its oil imports are shipped.³ The third objective is to deploy and defend a submarine-based second strike nuclear capability which would be able to target the mainland United States. Nuclear deterrence is part of China’s strategy to deal with the United States over the Taiwan issue and enhances Beijing’s confidence in negotiating with the United States over a range of related issues on the basis of equality. If the United States was vulnerable to a nuclear strike it would think twice about coming to the defence of Taiwan in any conflict with Beijing, and would avoid challenging China directly in the Western Pacific. For China, strategic equivalence with the United States of the kind that obsesses the Russians is unnecessary since the ability to strike the mainland United States would be sufficient to create the required deterrent effect.

New naval capabilities have been developed to implement these missions. In terms of surface vessels China has purchased four Sovremenny destroyers from Russia and another eight are on order.⁴ They carry the SS-

N-22 ‘Sunburn’ anti ship cruise missile [ASCM] which can target US surface vessels and carriers. Over the past fifteen years China has developed eight new destroyer and frigate designs, limited numbers have been produced in each class indicating considerable experimentation with design and weaponry; they include two Luhu class destroyers introduced in 1994 and 1996, one Luhai class introduced in 1999, one Luyang-1 class and one Luyang-2—both which were introduced in 2004, and two Luzhaoi class appeared in 2006.\(^5\) The Luyang 2 is a guided missile destroyer with an area defence capability against air attack similar to the US Aegis destroyers.\(^6\) China has been developing its submarine capability to counter the US navy around Taiwan and to challenge its movements in other areas. It has purchased twelve Russian Kilo class submarines which carry the SS-N-27 ‘Sizzler’ ASCM, which is of greater concern to the US navy than the ‘Sunburn’ ASCM. It has deployed two Shang nuclear attack submarines (SSNs), sixteen Song and four Yuan diesel electric submarines that were intended to replace the outdated Romeo and Ming classes.\(^7\) Most important for power projection into the open sea is China’s carrier development program. China purchased several Soviet-era carriers including the Kiev in 1996, the Minsk and the Varyag in 1998. After much speculation about China’s intentions the 67,500 ton Varyag was refitted and renovated and in August 2011 underwent sea trials. Renamed the Shi Lang it will be commissioned in 2012 as China’s first carrier. A carrier requires escorts and supporting vessels and two Luzhu destroyers were under construction in the same dockyard while the Varyag was being refitted.\(^8\) China has planned the construction of two or more indigenously designed carriers around 50,000 to 60,000 tons and a nuclear-powered carrier by 2020.\(^9\) China may by then overcome its deficiency in steam catapults and large capacity aircraft elevators which would enhance the striking power of its carriers. Indeed by that date China may be able to deploy several carrier groups which would signify its emergence as a major naval power with considerably expanded naval ambitions.

**Zonal Defence in Chinese Naval Strategy**

The idea of zonal defence in Chinese naval strategy was promoted by Liu Huaqing who was China’s naval chief over 1982-1988. Liu envisioned a global naval role for China and drew on Soviet concepts of sea defence

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\(^7\) Ronald O’Rourke, *China Naval Modernization*, pp. 14-5.


\(^9\) Ibid.
zones which would allow a smaller navy to develop a presence and protect
itself against a stronger naval power, in this case the United States. As a
student at the Voroshilov Naval Academy in Leningrad over 1954-58 Liu was
strongly influenced by his teacher Sergei Gorshkov who later presided over
the growth of the Soviet navy into a global force. Liu gave expression to a
Chinese version of zonal defence according to which China’s control of sea
territory was to extend from the mainland in two island chains. The first
island chain runs from Southern Japan and includes Taiwan and the South
China Sea and, according to Liu, control over this area was considered vital
for China’s national interest. China was to establish control over this sea
zone by 2000 in what was regarded as “near seas defence”. The second
island chain ran from Japan into the Pacific Ocean and included the
Philippines in what was called “far seas defence”. Control over this area was
to be established by the year 2020 and in Liu’s vision China would become a
global naval power by 2050. China, however, had to live with US
dominance of the seas and Liu who died in January 2011 did not live to see
his vision realised. The concept of island chains or sea zones continues to
influence Chinese naval thinking as a way of gradually expanding naval
power in an area dominated by a superior rival. The importance of a blue
water navy to defend China’s maritime interests which was promoted by Liu
continues to be advocated today in greater force as China’s maritime
interests have broadened and expanded. China’s Navy chief Admiral Wu
Shengli in April 2009 declared that China’s navy will develop a new
generation of warships and aircraft to give it much longer-range capabilities.
China will, he said “establish a maritime defence system that corresponds
with the need to protect China’s maritime security and economic
development”.

The South China Sea as a Sanctuary

The South China Sea is a prominent part of the Chinese concept of zonal
defence, one that has assumed a special significance within it as China’s
naval power has expanded. While Chinese naval capabilities are in the
development phase the navy requires protective sanctuaries against
preemptive attack and harassment by submarines or aircraft. As new naval
capabilities are developed and deployed in safe bases the surrounding
zones become subject to various degrees of control and become sanctuaries

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11 Cole, The Great Wall at Sea, pp. 177-178.
to be protected. Sanctuaries would allow protected access to the high seas to implement the wider missions of the Chinese navy. Without this protection aircraft carriers and nuclear ballistic missile carrying submarines (SSBNs) would be rendered useless in a confined area by a hostile naval or airforce. China has based the Xia class SSBN at Qingdao in Shandong province and Jin class SSBNs have been reported at Xiaopingdao near Dalian on the Liaodong Peninsula. Both are located on the East Sea which is relatively shallow thereby facilitating detection and enhancing vulnerability to US interdiction from the open sea. The Hainan area offers a relatively secure place for naval bases as well as access to the open sea through the South China Sea which for submarines has the advantage of depth to escape detection. In places the depth drops to 2000 metres. Proximity to the Malacca Straits which is critical for China’s oil imports from the Middle East is another advantage as is the ability to field a submarine presence in the Taiwan Straits from the South.

China has been constructing an underground base in Sanya on Hainan Island which would house not only SSBNs but also aircraft carriers and their escort vessels when they are deployed. In 2008 one Jin class SSBN was deployed there, China has two such SSBNs and is expected to construct four to six. The Jin SSBN carries 12 Julang-2 (JL-2) nuclear missiles (SLBMs) which have a range of 8000 km and can target the west coast of the United States. In October 2010 two Shang SSNs docked in Sanya. China’s first aircraft carrier the Shi Lang with its accompanying escorts is likely to be based there as well. As Hainan develops as a naval base the Paracel Islands, which are further south, assume an important role in providing air cover and sea protection in relation to US naval movements. The Chinese have been acutely sensitive to US surveillance of this zone and confronted the USNS Impeccable when it came too close to Sanya on 9 March 2009. Five Chinese vessels surrounded and harassed the Impeccable about 121 km off Hainan Island. This area would be off limits to US surveillance vessels and should any intrude here China would react swiftly and aggressively. China requires assured access to the open sea for its carriers and SSBNs through the South China Sea down to the Malacca Straits which means it should have the ability to prevent external powers from interfering with its naval movements. In this context China’s moves in the Spratly Islands have another purpose besides the defence of territorial claims. Former deputy Chief of the Peoples Liberation Army, General Zhang Li in 2009 called for an airport and seaport on Mischief Reef, a feature in the

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Philippine claim zone that was occupied by China, to conduct air patrols over the area.\textsuperscript{16}

The Chinese have increased the pressure upon the ASEAN claimants to recognise Chinese sovereignty over the South China Sea, but the use of direct military force would provoke an international backlash and could push ASEAN to the United States. As Beijing proclaims its “indisputable sovereignty” over the South China Sea and as military representatives declare it to be a “core interest” for China it emboldens various local and central agencies to act forcefully to enforce Chinese claims. The Hainan and Guangdong provincial governments have unveiled plans to develop the fishing resources of the area and have been responsible for assertive action against Vietnam, particularly around the Paracel Islands. Agencies such as the Marine Police under the Security Ministry, the Fisheries Law Enforcement Command under the Agriculture Ministry, the Maritime Safety Administration under the Transport Ministry and China Marine Surveillance under the State Oceanic Administration have been allowed by Beijing to press China’s claims and to harass the presence of ASEAN claimants in the area without the need to resort to military force.\textsuperscript{17} Over the past few years their activities have become more aggressive and confident as they have taken their cue from central government authorities. They have challenged ASEAN attempts at oil exploration and maritime surveying; arrested Vietnamese fishermen and confiscated their vessels; and have also harassed naval vessels from external powers in this area reminding them that the waters were contested, and that China’s claim should be respected. China’s ocean going naval capability is still nascent and not until aircraft carriers are fully deployed with their submarine and destroyer escorts would the navy be able to move into the Pacific and Indian oceans. When that capability is developed, however, China would be compelled to reduce the threat of attack from the US navy or from maritime allies of the United States. Diplomatic pressure on the littoral states to side with China would increase, as would the pressure upon the United States to withdraw from the area and to accept it as a Chinese sphere of influence.

\textbf{Spheres of Influence and the US Response}

Naval strategy has been supported by diplomacy as the Chinese have pressed for recognition of spheres of influence in the Western Pacific, with Taiwan and the South China Sea securely within the Chinese sphere. Chinese interest in spheres of influence was revealed in the idea of a “core interest” which was first applied to Taiwan and subsequently extended to the

\textsuperscript{16} Nong Hong and Wenran Jiang, ‘China’s Strategic Presence in the Southeast Asian Region’, in Andrew Forbes (ed.), Maritime Capacity Building in the Asia Pacific Region, Papers in Australian Maritime Affairs No. 30 (Canberra: Commonwealth of Australia, 2010), pp. 141-56.


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South China Sea by lower level officials and media commentary. In March 2010 Assistant Minister of Foreign Affairs Cui Tiankai told two senior US officials, NSC director Jeffrey Bader and Deputy Secretary of State James Steinberg, that China regards the South China Sea as its “core interest”, similar to Tibet and Taiwan.\(^\text{18}\) A Xinhua commentary declared that “by adding the South China Sea to its core interests, China has shown its determination to secure its maritime resources and strategic waters”.\(^\text{19}\) Similar expectations were raised in the preparations for the Hanoi ASEAN Regional Forum (ARF) in July 2010; China’s embassy in Washington requested the State Department not to raise the issue of the South China Sea in the expectation that the United States would agree.\(^\text{20}\) Until then the United States had shown little interest in the dispute and its representatives repeatedly declared that they had no position on the claims but would act to uphold freedom of navigation in the area. This occasion seemed no different to the Chinese who had expected that the the United States would go along with their request. However, the the United States unexpectedly made a stand at the 2010 ARF and rejected any notion of a division of the Western Pacific into separate spheres. Secretary of State Hillary Clinton rallied the ASEAN claimants who had been alarmed by Chinese pressure and who had turned to the United States for support. She affirmed US interest in the South China Sea and stressed the need for a “collaborative diplomatic process by all claimants” which clashed with China’s insistence on bilateral negotiations with the ASEAN claimants.\(^\text{21}\)

The United States was obligated to respond to Chinese pressure and to affirm its interest in the South China Sea to prevent its position in the Western Pacific from unravelling. If the United States had complied with Chinese expectations and had brushed off the ASEAN entreaties they would have confirmed to Asian audiences that it was truly and irreparably in decline before a rising China. The United States would have lost credibility before its Asian allies which would have been prompted to seek their own accommodation with China. The security system that the United States had been developing over past decades, which has included security partnerships with major regional states such as Vietnam and Indonesia, would have been undermined. To avoid this prospect the Obama administration reaffirmed the US presence in the Asia Pacific region which


Leszek Buszynski

1 was the result of the President’s trip to Bali and Australia in November 2011. In Canberra on 16 November President Obama announced the rotational
deployment of 2,500 marines in Darwin, and on the following day the
President addressed Australian parliament and declared that he had “made
a deliberate and strategic decision—as a Pacific nation, the United States
will play a larger and long-term role in shaping this region and its future, by
upholding core principles and in close partnership with our allies and
friends”.²² US Defence Secretary Leon Panetta explained that the United
States would engage in “rebalancing our global posture and presence,
emphasising the Pacific and the Middle East”, as the United States
withdraws from Iraq and Afghanistan.²³ As part of that rebalancing effort the
United States announced on 26 April 2012 that it would move 9,000 marines
from Okinawa and spread them around different locations, 5,000 would be
sent to Guam and others would go to Hawaii or Australia.²⁴ The rebalancing
of the US presence, however, comes at time of stringent budget cuts in the
Pentagon which compels the United States to rely more on partnerships with
regional powers, such as the Philippines and Vietnam, which share US
concerns about China.²⁵

The Philippines has been disturbed by China’s actions in its claim area since
the Chinese occupied Mischief Reef in 1995 and built permanent structures
there. More recently in 2011 the Philippines reported seven incidents
involving Chinese harassment; on 2 March two Chinese patrol boats
harassed an oil exploration ship in the Philippine claim zone 250 km west of
Palawan, they left the area after the Philippine air force was scrambled. On
5 April the Philippines lodged a formal protest at the UN and sought ASEAN
support in the forging of a common position over the issue.²⁶ The
Philippines again raised the alarm when it declared that on 11 and 12
December 2011 two Chinese vessels and a naval warship were spotted near
Sabina Shoal in its claim area. On 8 April 2012 a Philippine maritime vessel
responded to the presence of eight Chinese fishing boats around
Scarborough Shoal and tried to arrest one of them. Two Chinese maritime
surveillance vessels arrived which resulted in a continuing standoff. Hillary

²⁶ ‘Philippines protests China’s Spratly claim at UN’, AFP, 13 April 2011.

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Clinton has reassured the Filipinos of the United States’ commitment to them under the bilateral defence treaty and has stressed that the United States opposes the “threat or use of force by any party to advance its claim”.\(^27\) As a demonstration of commitment, beginning on 25 April the United States conducted the annual Balikatan exercise with the Philippines which staged a mock assault on an “occupied” island off Palawan in the South China Sea. Indeed, the Philippines may assume an important role in the United States’ rebalancing efforts in view of its proximity to the South China Sea and the willingness of its leaders to accommodate the Americans, despite the anti-American protesters who oppose their return. Permanent bases are not on the agenda but more marines are likely to be rotated through Philippine airports and US naval vessels will again be serviced and repaired in Subic Bay which was a US naval base until 1992.\(^28\) The difficulty is that the Philippines has a weak naval force and little ability to defend its maritime claims; it has relied upon second hand naval vessels from the United States, the pride of the fleet is the Rajah Humabon a former US frigate which was commissioned in 1943 and is the oldest naval vessel still operating. Since Cory Aquino in the late 1980s successive Philippine governments have declared naval modernisation programs but the outlay was consistently beyond their budgetary means. The Philippine Government expects US support in this area and obtained US agreement to triple Foreign Military Financing for the Philippines in 2012 to help build a “credible minimum defence posture” for the country.\(^29\) However, much more would be required to achieve that objective.\(^30\)

Vietnam has also come under pressure from China, and because it claims both the Paracels and the Spratly Islands has become China’s main target. On 26 May 2011 two Chinese maritime surveillance vessels cut the exploration cables of a Vietnamese survey ship which was towing a submerged seven kilometre seismic cable while searching for oil and gas deposits in Vietnam’s EEZ, some 120 km off Nha Trang; the Vietnamese Foreign Ministry released videos of a Chinese vessel actually breaking the cable attached to the Vietnamese vessel Binh Minh.\(^31\) A Chinese Foreign Ministry spokeswoman Jiang Yu declared that the Chinese vessels had engaged in “completely normal marine enforcement and surveillance activities in China’s jurisdictional area.”\(^32\) On 9 June a Chinese fishing boat


in similar fashion rammed the survey cables of another Vietnamese survey vessel. The Chinese regularly arrest Vietnamese fishermen around the Paracel Islands; they confiscate their vessels and equipment and demand a ransom for their release. The Vietnamese have been alarmed by Chinese behaviour and have hoped that a security relationship with the United States would provide support, though their anxieties about Chinese reactions act as a constraint. The United States has regarded Vietnam as a useful counter to China since President Bill Clinton made a well-publicised visit to Vietnam in November 2000, which was the first ever by a US president. The US concern with human rights imposes limits on the development of the relationship however, which has been promoted in a low profile way by the defence ministries in both countries. Three US defence secretaries have visited Vietnam, William Cohen in March 2000, Donald Rumsfeld in June 2006 and Robert Gates in 2010; Two Vietnamese defence ministers visited Washington, Pham Van Tra in 2003 and Phung Quang Thanh in December 2009. On 1 August 2011 the United States and Vietnam concluded what was lauded as their first military agreement since the Vietnam War; though it was limited to cooperation in health and research collaboration in military medicine it is likely to open the door to further agreements. On 23 April 2012 the United States began what were described as non combatant naval exchange activities in Danang which included the flagship of the seventh fleet the Blue Ridge, a guided missile destroyer, a rescue and salvage ship. The US navy had hopes of using Cam Ranh Bay which it had developed into a base during the Vietnam War but Hanoi had resisted, mindful of the Chinese response. It may be that as the Chinese continue to encroach on the Vietnamese claim area this resistance may be lifted.

**ASEAN’s Role**

As the United States reacts to Chinese assertiveness by strengthening relations with these claimants, ASEAN’s dilemma of managing both the United States and China intensifies. Though the ASEAN claimants may be alarmed by Chinese behaviour the regional body includes non claimants—Thailand, Cambodia, Myanmar and Laos—which have had historically good relations with China and would be unlikely to sacrifice them over the issue of the South China Sea. As Chinese pressure over the South China Sea increases ASEAN will face competing demands from claimants who want ASEAN support and non claimants who want to keep out of the dispute. ASEAN devised a common policy toward China over the issue which was intended to preserve its unity by ensuring that members would not be obliged to choose between China and the United States. It was based on the assumption that the Chinese claim to the South China Sea area was negotiable, and that China would settle for a resolution of the dispute in

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which territorial claims would be adjusted and the oil and gas reserves would be shared. ASEAN’s strategy over the South China Sea was to persuade China into accepting a regime of norms which would govern behaviour there and forestall any effort to resort to force. The first such attempt was made in the Declaration of the South China Sea of July 1992 which obliged China and ASEAN to resolve questions of sovereignty in the South China Sea “by peaceful means, without resort to force”. The Declaration on the Conduct of Parties in the South China Sea (DOC) signed with China on 2 November 2002 was regarded as a very promising development within ASEAN circles which could prevent conflict and keep the peace in the South China Sea.

China had previously insisted on bilateral negotiations with the claimants but this was the one occasion when it agreed to a multilateral document. This agreement was followed by China’s accession to the ASEAN Treaty of Amity and Cooperation (TAC) on 8 October 2003 according to which disputes are to be settled peacefully. Since 2004 ASEAN has been discussing the idea of a legally binding Code of Conduct and when Vietnam was ASEAN chair in 2010 it vigorously promoted the proposal. ASEAN at least managed to persuade China to agree to “guidelines for the implementation of the declaration of conduct” at the 18th ARF held in Bali in July 2011. The guidelines comprise eight short sentences calling for dialogue, consultations, and confidence building measures which would “lead to the eventual realization of a code of conduct”. Chinese Foreign Minister Yang Jiechi said that they encourage the resolution of disputes through cooperation and negotiation, and when conditions are “ripe” China would be willing to discuss a code of conduct with ASEAN. The document simply repeated phrases that had been circulating for years without committing anyone to anything. It was praised by Hillary Clinton and US officials for defusing tensions over the issue but whether the effect would be lasting is very much in doubt. Later, Philippine President Benigno Aquino met Hu Jintao in Beijing and claimed that China and the Philippines agreed on the need for a binding code and an “implementing agreement” for it: he called for a binding agreement on how each party should behave in the South China Sea.

Differences within ASEAN were revealed at the 20th Summit which was held in Phnom Penh in April 2012 and showed how the regional body could be divided over the issue. As a non claimant Cambodia has little interest in the issue and traditionally has maintained good relations with China to balance

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Vietnam. After Hu Jintao visited Phnom Penh and promised additional
economic support Cambodia openly sided with China and demanded that
the Chinese be allowed to take part in the drafting of the code of conduct.
The Philippines, Thailand and Vietnam opposed this proposal and wanted
the draft to be agreed by ASEAN first and then presented to China.\textsuperscript{38} Kao
Kim Houm, Cambodia’s Secretary of State for the Ministry of Foreign Affairs
told the press that the dispute should not be internationalised which was the
Chinese position.\textsuperscript{39} The Chairman’s statement from the summit affirmed the
significance of the DOC as a “milestone document” and mentioned that
ASEAN would move for the “eventual realization” of a regional code of
conduct.\textsuperscript{40} The issue of the code was simply postponed. One major
difficulty with the code is its extent and the area to which it would be applied
as Vietnam has pressed for its application to the Paracel Islands which the
Chinese side opposes. Another is more fundamental as China has
prevaricated over a proposal that could hinder its freedom of action against
the ASEAN claimants. Moreover, there is a tendency amongst the Chinese
to insist that any code of conduct so devised would not in any case apply to
the area they claim. This means that Chinese action against the Filipinos
and the Vietnamese is justified because it has taken place in Chinese waters
and does not breach the DOC, and would not become subject to a code.
This interpretation would make the code virtually irrelevant. ASEAN’s
approach to China made sense in the past when China placed a premium on
good relations with ASEAN to weaken US influence in the region. The
situation changed, however, when Beijing perceived that the balance of
forces had shifted, that the United States was in decline after the global
financial crisis and that China had less need of ASEAN to counter the United
States. A new confidence in China’s rise has stimulated Beijing’s ambitions
and its desire to challenge US regional dominance through naval expansion
in areas critical for China, such as the South China Sea and the Taiwan
straits. As the South China Sea becomes a focal point for Sino-US rivalry in
the Western Pacific ASEAN is relegated to a less important role and its
initiatives miss the mark. When the ASEAN claimants called upon the
United States for support during the 2010 ARF they implicitly recognised that
the issue was no longer in ASEAN hands, that ASEAN could not deal with it
alone, and it was an issue for the United States and China.

Conclusion

As China rises in power it unfolds an extended naval strategy that requires
control over the South China Sea as an outlet for its navy. Its SSBNs
require deployment zones which can be protected against US killer

\textsuperscript{39} ‘ASEAN Ready to Discuss Disputed Seas with China’, \textit{Asia News Network}, 3 April 2012.
submarines, its own submarine force requires access to Taiwan Straits to launch a naval blockade of the island, and its carriers when they are completed will require access to the open sea. As new carriers, SSBNs and surface vessels are deployed China would become more insistent on its maritime claims in the South China Sea, which it would turn into a sanctuary, and off limits for the naval vessels of external powers. China’s first carrier the Shi Lang would probably be deployed in this area and would give the Chinese the airpower to cover the Spratlys down to the Malacca Straits which they have lacked until now. This would be a demonstration of Chinese power that would signal to the region that China had come of age and that its historical claims should be recognised: in the South China Sea, in the East Sea and elsewhere. Rivalry with the United States would increase as the Americans resist the Chinese effort to impose separate spheres of influence in the Asia Pacific that would leave the South China Sea and surrounding areas to China. The United States would continue to strengthen security relations with the ASEAN claimants most concerned about China and would position its forces in the region to counter Chinese naval expansion and influence over the Western Pacific. These developments would polarise the region and could immobilise ASEAN as the claimants seek US support while the non claimants either avoid the issue or openly turn towards China. ASEAN had assumed that it was in the “driver’s seat” over this issue, and devised initiatives such as the DOC and the code of conduct to enhance diplomatic leverage within the region and to preserve its fragile unity. Whatever the merits of the code of conduct proposal its time has passed and China is less likely than ever to be interested in a regional resolution of the issue with ASEAN.

In view of these destabilising trends what is required is not a code of conduct but an agreement which would prevent incidents at sea and provide for procedures to deal with the harassment of vessels and stand offs between navies and maritime vessels. One such agreement was the US-Soviet Incidents at Sea Agreement of 25 May 1972 which was negotiated after several disturbing near clashes at sea in preceding years. On 19 January 1998 the United States concluded an agreement with China to establish a Consultation Mechanism to Strengthen Military Maritime Safety, but this is too vague and general to be effective. The United States, ASEAN and external powers such as India and Japan should explore an incidents at sea agreement which could be preliminary to a code of conduct but would differ from it in several ways. First, it would not be legally binding which is one major reason for Chinese procrastination. Secondly, it would include external powers such as the United States, India and Japan as well as the claimants to the area since serious incidents may arise from their involvement in the South China Sea. At one level there could be an agreement between ASEAN and China which would cover incidents at sea, oil exploration and fishery disputes and would lay down guidelines for their negotiation and resolution. It would also include procedures to resolve
clashes between fishing fleets and confrontations between naval and/or coast guard vessels. These procedures would facilitate speedy communication between the political leaders to ensure that incidents do not get out of hand. At another level there could be a similar agreement between the United States, China and external powers which would cover surveillance and exploration activities perceived as threatening by China while maintaining the principle of freedom of navigation in the South China Sea. China may oppose any measure that would deprive it of the means of exerting pressure on the other claimants, but it might be attracted to the restrictions upon US maritime surveillance that would be part of the agreement and to the conflict avoidance procedures which would prevent the United States from being drawn in. The attraction for China would increase if as a result of the United States’ effort to reposition its forces in the region it feels disadvantaged and constrained. A workable agreement has to build upon the self interest of all the parties which is what the code of conduct proposal failed to do. This kind of agreement would not be solution to the dispute but it would bring a temporary stability in the area which is the best that one can hope for at this time.

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Force Expansion and Warning Time

Richard Brabin-Smith

The twin notions of force expansion and warning time have been integral to Australia’s defence planning since the 1970s. Yet over the years the focus on these issues has been neither strong nor consistent—perhaps for good reason, given that the prospect of the need for major force expansion has been seen as remote. But with the new Age of Asia, Australia’s strategic environment is changing. This article reviews the treatment of force expansion and warning time in Australia’s five Defence White Papers, and discusses the extent to which the rise of China should be a catalyst for a review of force expansion policies. Finding a position between complacency and alarm, it concludes that Defence should conduct at least a preliminary view of how Australia should identify and respond to a more threatening posture by any potential major power adversary, and to present the conclusions in the 2013 Defence White Paper.

Since its initial expression in the 1970s, the foundations of Australia’s defence policy have included the twin notions of force expansion and warning time. These have been integral to the conceptual framework that has guided Australian defence planning. From the time they were first articulated, these ideas have reflected the special features of Australia’s unique geo-strategic circumstances.

Two particular considerations drove the initial—and subsequent—enunciation of the ideas. The first was the conclusion that the prospect of major assault on Australia was remote; and even if such a threat were to develop, it would take many years to do so (fifteen years or more). Australia as a consequence would be able to use this significant warning time to expand the defence force and more generally to prepare for adverse times. These conclusions derived in large part from Australia’s remoteness from the principal locus of international tensions—especially the Cold War and the North Atlantic—and the evident lack of capability, motivation and intent on the part of countries in Australia’s region to attempt such a major assault.

The second consideration derived from Australia’s geography as an island continent, in effect at a distance from other countries of significant military potential even within Australia’s closer region. In brief, government policy gave clear priority to the direct defence of Australia and the defence of the sea-air gap, especially to Australia’s north. This meant a focus on high-capability maritime forces, both naval and air. While there was also a role for land forces, this was in many ways subordinate—although the consequences for the Army were in practice contested and required several years to be resolved.
Yet for all the centrality of the concept, the focus on force expansion over the years has been neither strong nor consistent. It has become more neglected as an issue than actively pursued.

Perhaps some of the neglect in earlier years was understandable and a direct consequence of the framework in which it was conceived. That is, the likelihood of the need to contemplate force expansion was so remote that to have put much effort into analysis and planning would have been a distraction and a waste of effort. Any detailed plans would have been at risk of becoming quickly out of date. And in more recent years, there has been a greater need from time to time to plan for increasing the capacity of the force-in-being to handle shorter-term contingencies, that is to focus on preparedness, than to worry about force expansion for the longer term.

But Australia’s strategic environment is changing, not least with high rates of economic growth in China and India, and other Asian countries. We face the new Age of Asia. It is appropriate therefore to review the policies that have hitherto been built around the ideas of force expansion and warning time and to ask whether these concepts need to be re-examined.

1976 White Paper

Australia’s first Defence White Paper set out the conceptual foundations for much of what followed in the Australian thinking on defence policy, including force expansion, and many of its ideas have endured to this day.

With respect to warning time for major contingencies, the 1976 White Paper concluded that

Major threats (requiring both military capability and political motivation) [were] unlikely to develop without preceding and perceptible indicators. The final emergence of a major military threat to Australia would be a late stage in a series of developments.

It was this confident expectation of an extended period of warning which led to the associated conclusion that the defence force would be able to be expanded in time to meet to deteriorating circumstances.

Expansion, of course, would not be from a zero base. A force-in-being would evolve which would both meet shorter-term needs and be the base from which expansion would occur. It would be “adequate for timely expansion against a range of contingencies … as indicated by the strategic guidance from time to time”. Two other principles developed in parallel with these ideas: increased self-reliance, and a focus on those potential

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2 Ibid., p. 10.
3 Ibid., pp. 12, 13.
operations which would be in “areas closer to home … our adjacent maritime areas; the South West Pacific countries and territories; Papua New Guinea; Indonesia; and the South East Asian region”.  

But the 1976 White Paper also recognised, at least in principle, the challenges of warning time and expansion. It referred to the requirement for maximum warning time … for the expansion of the Defence Force. Constant and close watch must be maintained on whether this warning time is likely to fall short of the lead times—sometimes many years—necessary for expansion…

Further, “defence preparations could not be delayed until a definite threat finally emerged. Particularly in the case of more substantial situations, we should need to act well in advance”. And good intelligence would be vital: “there must be continuous review of assessments by an expert intelligence organisation to ensure prompt detection of any significant change in the developing strategic situation”.  

There was also a specific note of caution that preparatory planning and practical measures taken in advance … assume that the Government and Parliament of the day would be willing to respond to changes from time to time in the indicators for defence development.  

The 1976 White Paper’s discussion of force expansion continued in the chapter on Defence Manpower, stating that “timely expansion … demands that all the necessary skills be at hand or capable of timely development as the need is foreseen”. This section also introduced a level of differentiation between the three services. On the one hand, The manpower levels and range of skills within the RAN and RAAF are primarily determined by the equipment in service or planned to enter service. On the other hand, Army manpower must be at a level which permits development, within the concept of a force capable of expansion …, of the necessary range of skills, tactics, command and control and operational procedures…

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4 Ibid., pp. 6, 10.  
5 Ibid., p. 12.  
6 Ibid.  
7 Ibid.  
8 Ibid., p. 30.  
9 Ibid., p. 31. And on perhaps a defensive note, the 1976 White Paper explained that, across the permanent Defence Force, the “proportion of officers and warrant and senior non-commissioned officers to junior ranks increases the capability for expansion, should this be necessary.” Ibid., p. 32.
At that time, planning for the Army included consideration of the implications for the expansion base were there to be a need to expand to a million-man army for the defence of Australia against major attack.¹⁰

But in spite of the evident centrality of the concept of timely force expansion, it appears not to have attracted a high level of analytical or other effort. The author is aware of (and took part in) some analytical studies in the former Central Studies Establishment of what is now the Defence Science and Technology Organisation; these attempted to draw conclusions about the time it would take to expand to the force levels required for various hypothetical scenarios. This work was more theoretical than practical and had little impact on defence planning. There was also the attempt, sustained over several years, to update the “War Book”, an attempt at a detailed guide to mobilisation planning. But this too had little obvious impact and was later abandoned. Rather than examining options for expansion, the policy focus was instead more on refining the concept of the “core force and expansion base”, so that at a time of financial stringency, ways could be found to do more with less.¹¹

**1987 White Paper**

The 1987 Defence White Paper continued the same broad lines of argument as the 1976 White Paper, even to the extent of quoting directly from it on the centrality of self-reliance in the defence of Australia, and on warning time.¹² It went to some lengths to elaborate upon the concept of warning time and related issues, reflecting the more complete understanding of the core issues attained in the period between it and its predecessor. It emphasised that “higher levels of threat could emerge only after a longer period of time”, and that “the government requires a constant monitoring of international circumstances … to ensure that Australia makes the appropriate military preparations in good time.”¹³

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¹⁰ Some ten years later, the Dibb Review was to question the continuing relevance of the scenarios that had formed the basis in the 1970s of much of the Army’s planning. Department of Defence, *Review of Australia’s Defence Capabilities* (the “Dibb Review”) (Canberra: Australian Government Publishing Service, 1986), p. 78, including footnote 4.

¹¹ The author’s recollections about the absence of serious examination of force expansion are consistent with those of former members of the two central policy divisions at that time (Force Development and Analysis, and Strategic and International Policy) whom he consulted. John Moten, one of those consulted, recalled that Gordon Blakers (then Deputy Secretary) had developed the concept of the “core force and expansion base” to help provide an analytical foundation for defence planning, and therefore for arguments for defence funding, at a time when Australia faced minimal levels of threat and consequently strong pressures to reduce the defence budget. Blakers also emphasised the criticality of good intelligence to help ensure that decisions to expand would be timely.


¹³ Ibid., p 29.
Making an important differentiation, it stated that “The development of the concept of warning has been part of the process by which Australia has distinguished its unique strategic circumstances from those of its traditional friends and allies in the northern hemisphere”.\textsuperscript{14} And, as if to reassure any remaining doubters, it then explained further:

Any decision to embark upon hostilities as a deliberate act of state policy is a major one for any government to make. There would need to be some matter of sufficient weight in dispute. Tensions would need to develop to the point where one side decides to use force. Australia does not have that kind of dispute with any nation. Much would need to change, therefore, in our international position for the possibility of such conflict to arise. …

There would also be indicators of major physical preparation. Within our region no nation has the [capabilities] that would be necessary to launch and sustain an effective assault upon Australia. … [The] acquisition and introduction into full operational service [of the necessary capabilities] could not be concealed and the development of the operational expertise to use this technology effectively in an assault on Australia would take many years.\textsuperscript{15}

The 1987 White Paper thus repeated the message of the 1976 White Paper that the broad requirement was for a defence force able to meet the needs of peacetime and contingencies that might arise in the shorter term, and “to provide a suitable basis for timely expansion to meet higher levels of threat if our strategic circumstances deteriorate over the longer term”.\textsuperscript{16}

And the 1987 White Paper took further the differentiation between maritime forces and land forces mentioned briefly in the 1976 White Paper. It made it clear, in the discussion of “more substantial conflict”, that the priority was to develop “highly capable” maritime and strike forces. And while there was a need for “expansion base elements for conventional ground force conflict”, these should “not be at a high level of readiness”, and it would be “appropriate to make greater use of the Reserves” for this.\textsuperscript{17} Further, the Army Reserves would now have a role in contingencies that might arise in the shorter term, as well as providing a basis for expansion.\textsuperscript{18}

Nevertheless, as in the years following the 1976 White Paper and in spite of the reiterated emphasis on warning and expansion, little was subsequently done to take these ideas further, although some analysis was initiated in the Defence Intelligence Organisation (DIO) to add substance to the assessment that it would take a decade or more for a regional country to develop the capacity to attempt a major assault on Australia.\textsuperscript{19} Rather, much

\textsuperscript{14} Ibid., p. 30.
\textsuperscript{15} Ibid.
\textsuperscript{16} Ibid., p. 32.
\textsuperscript{17} Ibid., pp. 25-7.
\textsuperscript{18} Ibid., p. 59.
\textsuperscript{19} This important work was at the instigation of Paul Dibb, Director of the Defence Intelligence Organisation in the late 1980s.
management effort went instead into finding defence efficiencies (such as the corporatisation and privatisation of defence factories and dockyards) and into arguing that the “peace dividend”, which other nations were using as a headline to justify reduced defence budgets with the end of the Cold War, should not apply in Australia’s case, as Australia’s defence policies and expenditures had not been Cold-War-driven.

1994 White Paper

The 1994 White Paper was written some years after the end of the Cold War, and so reflected both the end of the strategic certainties and tensions of that era, and “the continuing rapid economic growth and political change in Asia”. Nevertheless, the new White Paper continued with the core concepts of its predecessors. The “three key tasks” of Australia’s Defence posture were:

- Ensuring timely warning of significant developments in our strategic environment;
- Maintaining a force able to defeat current or planned capabilities which could credibly be used against us in short-warning conflict; and
- Maintaining the adaptability to expand or redirect our defence and national effort in response to developments in regional capabilities and to more demanding forms of conflict which could emerge in the longer term.

On the matter of the prospect of major conflict, the 1994 White Paper repeated much of the argument of the previous White Papers. For example,

no country is currently acquiring the range and scale of forces necessary for [major conventional attack on Australia]. Nor does any country appear to have plans to develop such forces. …. We know from our own experience that the capabilities required could not be developed from the existing low base [in the region] in much under a decade.

Further, it said that

we are confident that we would have sufficient warning time to adapt and expand our own forces to defend Australia against major attack …. While Australia maintains the ability to adapt and expand our forces quickly enough to meet any development by others of forces for major attack on our continent, we do not need to maintain the actual force structure for such operations now.

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21 Ibid., p. 25.
22 Ibid., p. 23.
23 Ibid., pp. 23, 24.
The 1994 White Paper took further the change in focus of the Reserves. It emphasised that "Reserve elements no longer exist solely to assist rapid expansion" for mobilisation for war, but instead "now have specific roles in defending Australia in short warning conflict". And the subsequent discussion in the Reserves chapter tended to focus much more on the issues of planning for their use in short-warning conflict than on their value as part of the expansion base for more intense conflict.

Like its predecessors, this White Paper heralded a period in which studies of expansion were absent. Instead, there was a continued management focus on efficiencies and consolidation (for example, through the market testing program of non-core functions, and the Defence Efficiency Review).

**2000 White Paper**

In many respects, the 2000 White Paper drew conclusions comparable to its predecessors’. For example,

A full-scale invasion of Australia, aimed at the seizure of our country and the erasure of our national polity, is the least likely military contingency Australia might face. … It would take many years of major effort to develop [the necessary capabilities]. … Such developments are not credible unless there were to be major changes in the region’s security environment.

And it built on its predecessor’s observation on Asia: “the Asia Pacific is set to be the most dynamic region in the world over the next few decades”.

But one difference might be noted. On the one hand, the 2000 White Paper gave examples of the development of military capabilities in the Asia Pacific region, and concluded that

Our defence planning therefore needs to take account of the likelihood that capabilities in our region will continue to show substantial and sustained growth, in ways that are important to Australia’s military situation.

On the other hand, reference to the potential need one day for significant expansion of the defence force, and therefore to have a base from which to expand, was for the most part left implicit.

This implied change in focus was made more explicit in the discussion of the Reserves, which continued the trend towards a higher priority for shorter-term contingencies:

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24 Ibid., p. 73.
26 Ibid., p 17.
27 Ibid., pp. 24-6.
28 Ibid., p. 55. There is a passing reference here to major expansion during the warning time that would be associated with major attack on Australia.
Traditionally, the Reserves have been viewed as a mobilisation base for the ADF in time of major conflict. But recent military operations have highlighted the importance of the Reserves in meeting the requirements of contemporary military operations. As a result, the strategic role of the Reserves has now changed from mobilisation to meet remote threats to that of supporting and sustaining the types of contemporary military operation in which the ADF may be increasingly engaged.

The text later spelt this out for the land forces, where “it is no longer a priority to provide the basis for the rapid expansion of the Army to a size required for major continental-scale operations”.

Overall, and influenced at least in part by its decisions to use the Australian Defence Force (ADF) on operations in Australia’s region, such as in East Timor and the Solomon Islands, the government’s policies were now focussing much more on the capacity of the force-in-being for shorter-term contingencies than on warning time and force expansion for major conflict.

2009 White Paper

In contrast, the 2009 White Paper emphasised the centrality of the management of strategic risk, and the importance of warning and force expansion for this. It commented that “Strategic warning is a crucial element of defence planning” but that the warning we would get might not be sufficient to build the capabilities we would need.

It made a new and important differentiation between three types of strategic development. The first was where nearby states might “develop the capacity for sustained military operations against us”. We could be confident of getting at least a decade of warning of this, “in part because of our current level of military capability relative to our region”.

Second, Australia needed to pay attention to what might be called routine modernisation in the region. “Such changes … are going on all the time and we need to plan accordingly in our force development process”. Examples included the “increased prevalence of high-speed anti-ship cruise missiles and advanced torpedoes”.

Third was the prospect of fundamental change in Australia’s strategic circumstances—“circumstances of a more dramatic and, in defence planning terms, sudden deterioration in our strategic outlook”. A “transformation of major power relations in the Asia-Pacific region” would be of profound consequence, especially if there were reasons to doubt the “weight and
reach of US strategic primacy”, and its “willingness or capacity to act as a
stabilising force”. Such a deterioration was “currently unlikely”, but “would
likely require a more powerful force than the one presently contemplated”.  

The possible consequences of severe strategic deterioration were
addressed also under the heading of Mobilisation.

In some circumstances … deterioration [of our strategic environment] could
be so significant that the currently available full-time and part-time forces
would be insufficient to meet Australia’s defence needs, even if we surged
latent capabilities within Defence. In such circumstances, we might need to
draw on significantly greater contributions from the national economy and
society.

Under circumstances of “national peril”, the government would pursue
mobilisation, but “only a very substantial deterioration of our strategic
environment that placed Australia under grave threat would justify such a
course.” The focus in the text at this point was on transport and health
support, for example, rather than on, say, more fighter squadrons. Major
force expansion was thus more implied than explicit, but it is reasonable to
assume that this omission was merely drafter’s licence.

The discussion of the Reserves in the 2009 White Paper focused on their
use to provide a potential surge capacity. The value of the High Readiness
Reserve got special mention in this respect. There was also a revived
interest—but at a lesser level—in examining

how part-time force elements might act as a ‘repository’ of some high-end,
longer lead time capabilities related to the defence of Australia, as a hedge
against strategic risk, and an expansion base should we require it.

In many important respects, therefore, the 2009 White Paper set out an
orthodox approach to the issues of warning time and the potential need for
major expansion of the ADF in the event of adverse developments. While it
offered reassurance that “Australia will most likely remain … a secure
country over the period to 2030”, it also drew the conclusion that the ADF
proposed in the White Paper would “represent a sound basis for building [a
more powerful] force, particularly in relation to our strike, maritime, air
combat and special forces capabilities”. And it reinforced its commitment to

34 Ibid. Some of these concerns would have been assuaged, at least for the shorter term, when,
in addressing the Australian parliament on 17 November 2011, President Obama said “as a
Pacific nation, the United States will play a larger and long-term role in shaping this region and
its future”.
36 Ibid., pp. 90, 91.
37 Ibid., p. 75.
38 Ibid., p. 49.
keep under comprehensive review the “emerging challenges in our strategic outlook” and the consequences for the force structure.  

Yet there was also a distinct sense of ambiguity in its discussion of Australia’s strategic outlook and its consequences. It commented that “Risks resulting from escalating strategic competition could emerge quite unpredictably”, and that the intended force structure (even without major expansion, one infers) would give “an acceptable margin of confidence” that hostile military operations conducted by a major power adversary could be “contested effectively by the ADF”.  

A New Need for Force Expansion?

In summary, there has been a more-or-less consistent pattern since the 1970s in the treatment of force expansion and warning time (explicit for the most part but perhaps more implied in the 2000 White Paper): these ideas have maintained their centrality within the conceptual framework used for defence planning; Australia has remained secure, and developments in strategic circumstances have not led to the need to contemplate major expansion of the defence force; and consideration of the force-in-being as the expansion base has become neglected, including with respect to the role of the reserves.  

Will this benign neglect continue to be justified? There are two related factors that need to be kept in mind: the secular move of relative economic strength from the North Atlantic to the Asia-Pacific, and more specifically the growth of China’s economic and military power.  

With this shift, Australia is now less remote from the global locus of economic and military growth than in previous decades. But it is also true that the North Pacific, with its tensions, potential flash-points and contested maritime boundaries, remains a considerable distance from Australia. Even the South China Sea, with its competing claims for sovereignty, can hardly be said to be proximate to Australia.  

There are nevertheless some potential policy dilemmas here. Australia has a strong interest in the peaceful management and resolution of these tensions, not least because of the disruption to trade and investment that threatened or actual military operations would entail—especially to Australia’s economic linkages to China. But the risk remains that military...
confrontation could still occur, especially if diplomatic efforts (or commitment) to finding agreed and peaceful ways forward were to prove insufficient.

Any potential Australian involvement would however represent a policy choice, and for the most part would be discretionary. As argued above, any such consideration would need to recognise that the areas concerned are at a considerable distance from Australia and that the issues are complex, not least because of trade and economic considerations. And the impact of Australia’s involvement, though politically potent and perhaps militarily important in some respects, would not be decisive. Australia’s Defence White Papers have usually made it quite clear that there are limits to Australia’s defence capacity and influence (although this recognition is not conspicuous in the 2009 Defence White Paper), and to date, Australian governments have been consistent in concluding that the development of capability specifically for such operations is not a priority.\textsuperscript{43}

Because of their distance from Australia, such operations would have little direct effect on the country’s security against major assault, although it could be imagined that they might well prove to be a harbinger of a more general deterioration in the relationships between nations in the region and beyond.

On the other hand, we can expect that, as China’s economic strength grows, so too will its military strength and its ambition for international influence (although the internal problems that China faces mean that sustained and uninterrupted growth is not inevitable). There is a real sense, therefore, in which one of the pillars of Australia’s confidence in its security against major assault will become less secure; that is, while motivation and intent might well remain absent, China’s ability to conduct operations against Australia will increase, as over time its military capacity expands. It is easy to judge that such a prospect needs to be taken more seriously than the possibility during the Cold War that the former Soviet Union would have attempted major assault on Australia, although China’s military capabilities are still a long way from being as formidable as those of Cold-War Russia.

The challenges of major attack would of course be formidable, and much as was argued in earlier decades: the equipment, doctrine and skills required for contested amphibious assault are specialist, expensive, and difficult and time-consuming to attain; and the distances over which power would need to be projected and resupplied would remain a major defensive asset, especially if the assaulting power did not have forward bases in a more proximate country such as Indonesia. Australia would defend itself with tenacity, and it is barely conceivable that an operation on this scale would

\textsuperscript{43} There would in addition in some circumstances be the question of the readiness of elements of the ADF for combat operations against a potentially capable adversary, including in such demanding areas as electronic warfare and anti-submarine warfare.
not be part of a wider deterioration in relationships that would involve other
nations, especially the United States.

Further, even if China’s levels of offensive capability were to increase in
relevant ways, there would still be a need to establish motivation and intent.
Received wisdom tells us that these can change much more rapidly than
defence capability can be developed, and this is an important point to be
kept in mind in defence planning and intelligence priorities. Nevertheless, it
is also important to recognise the potential for foreign policy initiatives and
economic interdependencies to keep relationships in good repair and to
keep nations away from the serious step of military conflict. Australia must
avoid any predisposition automatically to pre-suppose aggressive intent on
China’s part.

**Force Expansion in the 2009 Defence White Paper?**

Given this line of argument and the perhaps ambiguous sense of strategic
alarm in the 2009 White Paper, what did that document say about force
expansion? For the most part, its plans for force structure development
amounted more to modernisation than to force expansion—least of all major
expansion. The exceptions included some modest hedging against future
risk,\(^4^4\) the development of the whole-of-government Cyber Security
Operations Centre, and the acquisition of maritime-based land-attack cruise
missiles for future platforms. Most significant, however, was the ambitious
decision to double the number of submarines to twelve.

Thus the government’s current plans in many ways perpetuate the same
kind of force structure that existed or was planned at the time of the 1976
White Paper, some thirty-six years ago. There has of course been some
important increase in capability over this period. Examples include the
development of new bases in Australia’s west and north, the acquisition of
airborne early warning and control aircraft, the development of the Jindalee
Operational Radar Network, the acquisition of armed battlefield helicopters,
an increase in the number of infantry battalions, and several other examples,
such as the large amphibious ships now under construction.\(^4^5\)

But overall, the focus over this period, and now planned until 2030, has been
more on modernisation or enhancement, with such force expansion that has
occurred being incremental rather than on a grand scale. This *implies* a
continued level of confidence that timescales for significant strategic

\(^4^4\) Ibid., pp. 84, 85. This hedging is in the areas of space warfare, ballistic missile defence, and
some aspects of defence against weapons of mass destruction.

\(^4^5\) There have also been some force reductions, such as the non-replacement of the former
aircraft carrier *HMAS Melbourne* (and before that the carrier *HMAS Sydney*), fewer Abrams
tanks than Leopards, a smaller full-time defence force (achieved through various efficiency
measures and out-sourcing initiatives), and fewer F/A-18 fighter aircraft than Mirages (the figure
up to 100 new combat aircraft, as set out in the 2000 White Paper (p. 87), was based on the
approximate sum of the numbers of F-111C and F/A-18 aircraft then in RAAF service).
deterioration continue to be longer than those that would be needed for major expansion to meet the more demanding circumstances—and that, in effect, a period of strategic warning has not yet commenced. It also encourages the perhaps surprising conclusion that the force structure judged appropriate for Australia at the height of the Cold War is similarly being judged appropriate, when modernised and expanded at the margins, for this new Age of Asia.

The outstanding exception is the decision to double the number of submarines. The White Paper does not reveal the argument that has led to this conclusion, citing reasons of national security, other than to say that it is based on analysis of defence planning contingencies. Similarly, there is little public information on the timescales that will apply to the new submarines, perhaps because the way ahead for this project is unclear. An optimistic estimate would be that the first six new boats will have replaced the six Collins Class by 2030, with the force building up to twelve new boats by the mid-2030s, but it is also credible that the force will not reach twelve boats until the early 2040s (some thirty years from now). This illustrates well the extended time needed to expand this capability, at least under conditions of peacetime decision-making and procurement.

It is possible that the argument for the expansion is based on contingencies that would be credible in the shorter term. But this would be far from convincing. The expansion timescales are too long to make sense as a response to concerns about the shorter term. And the primary roles of submarines—the sinking of an enemy’s vessels—are too unambiguously aggressive for more nuanced or limited types of operation.

This expansion would make better sense, however, if it were a hedge against significant strategic deterioration over the longer term, or a belief that by the period 2030-40 the potential warning time for such deterioration will be much shorter than it has been until now.

It implies—but does not address—the conclusion that other force elements would not need to be expanded, or that their timely expansion would be far easier than for the submarines. There is, however, no suggestion of this line

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46 Ibid., p. 62.
47 For a more extended discussion of the range of timescales that might apply to the timing of the Future Submarines, see Andrew Davies and Mark Thomson, ‘Mind the Gap: getting serious about submarines’ (Canberra: Australian Strategic Policy Institute, 2012).
48 The author is grateful to Andrew Davies for pointing out the contents of the State Department cable (State 030049 of 28 March 2009, classified Confidential, made public by Wikileaks) which reported the meeting between Secretary of State Hilary Clinton and the-then Australian Prime Minister Kevin Rudd. This cable states that Rudd described himself as “a brutal realist on China”, and said that the 2009 Defence White Paper’s “focus on naval capability is a response to China’s growing ability to project force”. In some respects, this is a useful confirmation, but it does not advance the argument very far.
of argument in the 2009 White Paper—or even from Canberra’s more
informal “company town” sources of communication. (And the argument that
there would be no need to expand other force elements would in any case
not be credible.) This omission does little to encourage confidence that the
consequences of strategic deterioration have been thought through, or why it
is appropriate to move now to expand the submarine force but not other
elements of the force structure.

Policy Conclusions

Where, then, should the balance be struck between strategic complacency
and alarm? The issue is not clear cut. On the one hand, it would seem too
evry to start worrying about taking steps towards major force expansion as,
at this stage, a major adversary’s capability, motivation and intent are all
absent, and could well remain so for the foreseeable future. And it would be
a mistake automatically to ascribe aggressive intent to rising powers, even
those with political systems different from ours.

On the other hand, the concept of warning and force expansion remains an
integral (if neglected) part of the conceptual foundations of Australian
defence planning, and the economic strength and military capacity of many
Asian nations continue to grow.

The balance of the argument seems to favour the development of at least a
preliminary view of how Australia would identify and respond to a more
threatening posture by China—or by any other potential major power
adversary. Such analysis would include views on warning time and modes
of expansion, leading to judgements on the characteristics that should be
retained or enhanced in the force-in-being so that it would remain effective
as an expansion base. And to avoid being just an exercise in alarmism, this
work should also include consideration of the factors and indicators that
would argue against a need for major force expansion.

The role for the Reserves would merit specific consideration. It would be
difficult to argue that the Reserves should not have a role in the expansion
base for higher levels of contingency. The extent to which this should be
done would depend at least in part on conclusions about warning time and
strategic deterioration. In the probably unlikely event that warning time were
assessed as being even longer than hitherto, more capabilities could be
entrusted to the Reserves. Were warning time assessed as being shorter
but not too short, there would be an argument for increasing the level of
resources allocated to the Reserves and generally taking them more
seriously. If the assessment were that Australia had now entered a period of
serious strategic deterioration (on balance not a likely conclusion), the
Reserves and permanent forces alike would need to be expanded and
moved to higher levels of preparedness.
There would also be a need to think about the possible consequences for industry policy. The decades since the initial articulation and analysis of the concept of force expansion have seen quite radical changes in defence technologies, and in defence industry both overseas and in Australia itself—and therefore changes in the potential supply of and support for an expanded defence capability. And over the years, the study of Australian industry as an expansion base has been conspicuously absent—if for understandable reasons, given the difficulties of developing and implementing defence industry policy even for peacetime, and the remoteness hitherto of any need to expand. As argued elsewhere, defence policy for industry should be driven primarily from the perspective of strategic policy, not industry policy, and the same principle should apply to any consideration of expansion base aspects.

The next Defence White Paper is now announced for 2013. Governments usually take White Papers seriously, and there are many indicators of the extent to which such documents are successful—internal consistency being a principal criterion, including consistency between strategic ambition, likely costs, and likely funding levels (an achievement often honoured in the breach). Comprehensiveness is another important benchmark. The preparation of the next White Paper, therefore, will represent an important opportunity to the government and Defence to examine the force expansion and warning time issues set out in this article and to present the conclusions to the public. The time is ripe for this important set of issues to be revisited.

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49 The 1976 White Paper refers briefly to “the progressive development of a range of basic technologies and capacities which would facilitate an intensification and diversification of present activities to match force expansion, should the need arise”, while cautioning that the establishment of “large scale production facilities appropriate to only major expansions … take a lower priority”, Department of Defence, Australian Defence, p. 51, emphasis in the original. The 1987 White Paper reiterates the low priority to be given to “production facilities appropriate only for a major expansion”, and adds words of explanation, for example the speculative nature of the requirement, high cost, and lack of peacetime workload. Department of Defence, The Defence of Australia, p. 77. There is no obvious mention of the subject in any of the subsequent White Papers.

50 See, for example, Richard Brabin-Smith, ‘Defence and the Need for Independent Policy Advice’, Security Challenges, vol. 6, no. 2 (Winter 2010), pp. 9-17.
Don’t Get Smart with Me!
Sustaining the ADF in the Age of the Strategic Reform Program

Will Clegg

In light of the Strategic Reform Program (SRP) being implemented by Defence, this article discusses risks inherent to Defence’s the planned approach to Smart Sustainment reforms. It also suggests an alternative more likely to deliver cost-effective sustainment outcomes, now and into the future. Defence’s planned approach to Smart Sustainment is likely to damage the defence sustainment system and betray the national interest, but the SRP provides an opportunity to potentially fix the system’s long-standing structural weaknesses. This article recommends that Defence should move away from input-led matrix management and the status quo model of prescriptive regulatory contracting by adopting two reforms. First, Defence should institute an output-led management framework, empowering the Service Chiefs to manage capabilities and drive innovation throughout the sustainment system. Second, Defence should expand strategic partnerships between Defence and Australian defence industry, encouraging both to focus on efficiency and productivity, not just inputs and price.

Concern about the efficiency of Australia’s Department of Defence came to the fore when the Rudd Government pinned a Strategic Reform Program (SRP) to the 2009 Defence White Paper.¹ Aimed at defending Australia in the ‘Asia Pacific Century’, Force 2030 is an ambitious plan to modernise the Australian Defence Force (ADF). The problem is that Force 2030 is beyond Australia’s financial reach unless Defence secures efficiency dividends worth approximately $20 billion between 2009 and 2019. As the then Defence Minister, Senator John Faulkner, stated, “while we have already started to build Force 2030 through decisions over the past year, achieving it in its full potential will not be possible without achieving the SRP in all its dimensions.”²

Defence is now implementing the SRP, which comprises around 300 initiatives grouped into fifteen major reform streams.³ All pale in comparison to ‘Smart Sustainment’, an ambitious plan to shave between $5 and $6 billion off the cost of sustaining the ADF over a decade (2009-2019). Smart Sustainment aims to “deliver … improved levels of capability at less cost by

³ Department of Defence, The Strategic Reform Program: Making it Happen (Canberra: Commonwealth of Australia, 2010), p. 3.
improving productivity and eliminating waste".\textsuperscript{4} The goal is laudable, but the risk is that the attempt to squeeze savings from the defence sustainment system will save a little money but cause a lot of harm. Although Defence pledged that Smart Sustainment “is not about compromising capability to save costs”,\textsuperscript{5} it has yet to indicate it is alert to the risks attendant on its planned Smart Sustainment reforms. This article outlines those risks before suggesting an alternative approach to sustainment reform more likely to promote the cost-effective delivery of self-reliant preparedness now and into the future.

Although rarely given the attention it deserves, the defence sustainment system is critical to Australia’s national security. In the short-term, failure to meet sustainment targets has a direct impact on the ADF’s preparedness for operations. In the long-term, neglect of the defence sustainment system will leave Australia dependent on allies because it cannot sustain equipment needed for autonomous operations in its immediate region. The SRP is an opportunity to fix long-standing structural problems but the officials implementing Smart Sustainment appear to be most focused on tightening the sustainment system’s belt. Central budgets have been cut, and contract managers have been told to stay within budget. All eyes are focused on the short-term cost of sustainment, the hope being that savings can be squeezed from Australian defence industry. The problem is that belt-tightening cannot substitute for proper diet and exercise. Indeed, by creating a false impression of good-health, it is likely belt-tightening will do more harm than good.

The defence sustainment system is already damaged. Recent independent reviews make clear that at least some significant sections of the Australian defence sustainment system are underfunded in the present and underfunded for the future. They also point to longstanding institutional weaknesses. Prompted by the unexpected collapse of the ADF’s amphibious-lift capability in early-2011, the Minister for Defence asked Paul Rizzo to conduct an independent review of the repair and maintenance of the Royal Australian Navy’s (RAN’s) fleet of support ships. Rizzo’s conclusions were startling. Noting “on-going systematic failure” in the support ship sustainment system, Rizzo suggested that the SRP’s saving objectives might be incompatible with essential reforms.\textsuperscript{6} Emphasising the interdependency of the armed services, the Defence Materiel Organisation (DMO), and Australian defence industry, Rizzo reported that “the means to bring these relationships to best practice are either not well understood or poorly practiced”.\textsuperscript{7} Aware that cooperation between the armed services and

\textsuperscript{4} Department of Defence, \textit{The Strategic Reform Program: Delivering Force 2030} (Canberra: Commonwealth of Australia, 2009), p.15.
\textsuperscript{5} Ibid.
\textsuperscript{7} Ibid., p. 8.
Don't Get Smart with Me! Sustaining the ADF in the Age of the SRP

the DMO must be “of the highest order” Rizzo found that “there is an ‘us and them’ feel to this relationship”. Most alarmingly, Rizzo argued that both the armed services and the DMO tended to treat capability sustainment as if it were of secondary importance, neglecting to maintain the technical integrity of the ADF’s materiel systems over their operational life. Thus, the ADF suffers from “inadequate logistics support products and increased sustainment requirements, often to the detriment of whole-of-life capability and cost”.

Rizzo’s findings were echoed in the recently released ‘Phase 1 Report’ of the independent Collins Class Sustainment Review led by John Cole. Not only were “sustainment activities still being treated as a ‘poor relation’ compared to the generally higher-profile acquisition work”, Cole reported that the relationship between the armed services, the DMO, and industry was “highly-charged, difficult, and often-hostile”. Cole’s findings were damning: “we found the disparate organisation to be unfit for purpose. Recovery will demand a very serious and concentrated effort to change the relationship for the better”. Rufus Black’s recent Review of the Defence Accountability Framework also expressed concern about the weak institutional links between the armed services and the DMO, and, as Rizzo noted, the findings of several prior enquiries had “little practical effect”. The reviews shed light on a strategic debacle, casting doubt on Defence’s assertion that it can squeeze between $5 and $6 billion worth of savings from the sustainment system without causing harm.

The architects of Smart Sustainment should use the SRP as an opportunity to fix the sustainment system’s structural weaknesses. They should move away from input-led matrix management and the status quo model of prescriptive regulatory contracting by adopting two principal reforms. First, institute an output-led management framework that empowers the Service Chiefs to manage capabilities and drive innovation throughout the sustainment system. Second, expand strategic partnerships between Defence and Australian defence industry that encourage both to focus on efficiency and productivity, not just inputs and price. The reforms would ensure the cost-effective delivery of the self-reliant operational capability demanded by government. They would also help improve the poisonous relationships between the armed forces, the DMO, and industry that inhibit

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8 Ibid.
9 Ibid.
10 Ibid.
12 Ibid., p. 10.
13 Ibid., p. 9.
14 Ibid., p. 21.
the efficient ‘Enterprise’ culture Rizzo and Cole identified as essential to reform.\textsuperscript{17}

Defence should be able to secure an efficiency dividend from the sustainment system, but it remains an open question whether or not the dividend will be large enough to meet the SRP’s objectives for Smart Sustainment reform. The question cannot be answered on the basis of public information, and it is likely that Defence has a poor understanding of both the scope and nature of whatever inefficiencies affect the sustainment system. Smart Sustainment’s goal is to save between $5 and $6 billion over a decade, the method being to offer industry less work by ‘managing’ demand for sustainment services while also using competition for short-term contracts to drive down the cost of residual work deemed to be essential. The strategy is dangerous because it provides government’s agents with strong incentives to increase the government’s total cost of ownership (TCO), neglect the ADF’s short-term preparedness requirements, and defer investments in Australia’s future defence self-reliance whenever doing so leads to a short-term cut to costs.

As a monopsonist, Defence has more than enough power to drive down the cost of contracting for sustainment outcomes. It should use that power responsibly. If the sustainment system is squeezed too hard, Australian defence industry will conform to Defence’s priorities by focusing on short-term costs even if doing so detracts from the ADF’s preparedness, Australia’s long-term defence self-reliance, and the government’s TCO. The likelihood that Australia’s damaged defence sustainment system cannot safely generate the savings demanded by the SRP should be borne in mind. Just as there is no point acquiring Force 2030 if, due to a lack of investment, Australia cannot sustain it, there is no point saving money if it means the ADF cannot deploy when the government commands it to do so. Productivity reforms are desirable and possible but scrimping and saving must be avoided.

The Defence Sustainment System

In the arcane jargon of Defence, sustainment refers to the in-service materiel support requirements of the ADF. Stated simply, having acquired a materiel system (or platform, the terms are used interchangeably in this article), the system needs to be repaired, maintained, updated, upgraded—‘sustained’—before being disposed at the end of its service life. Together with acquisition, operation, and disposal, sustainment activities determine the Government’s TCO. Globally, the cost of sustaining defence equipment is now often well in excess of two-thirds of the TCO.\textsuperscript{18} As a British subsidiary

\textsuperscript{17} Cole, \textit{Collins Class Sustainment Review}, p.10.

of BAE Systems argued in a recent White Paper, sustainment costs mean that “[e]very item of equipment acquired for the Armed Forces … carries with it a mortgage on the taxpayer equivalent to twice its original purchasing cost”.\(^\text{19}\) In the Australian context, Defence spends around $5.5 billion each year sustaining the materiel systems operated by the ADF,\(^\text{20}\) the aim being “cost-effectively” to generate “self-reliant operational capability”.

Defence defines capability as the “power to achieve a desired operational effect for a designated period”.\(^\text{21}\) To generate ‘operational effects’, the ADF requires materiel systems and operators (submarines and submariners, rifles and infantrymen, jets and pilots) ready for combat deployment and supported for fighting fitness by repair, maintenance, and other engineering capabilities. Neither training nor Anzac Spirit can compensate for submarines that flounder, rifles that jam, or planes that cannot take-off. The defence sustainment system aids delivery of potential operational capability by ensuring the ‘preparedness’ of materiel systems.

Since the 1970s, the preparedness of the ADF has been set within the broader context of “self-reliance in the direct defence of Australia and in relation to Australia’s unique strategic interests”. Self-reliance means that the ADF should be able to “act independently where we have unique strategic interests at stake, and in relation to which we would not wish to be reliant on the combat forces of any foreign power”.\(^\text{22}\) The policy of self-reliance hinges on Australia’s capacity and willingness to employ military power when required to deter and defeat an armed attack on Australia or its core national interests “without relying on foreign combat or combat support forces”.\(^\text{23}\) Self-reliance does not, therefore, imply self-sufficiency. Instead, it means operational sovereignty with regards to “the direct defence of Australia” and Australia’s “unique strategic interests”, particularly those in Australia’s near abroad. Self-reliance does not preclude the option of relying on global supply chains to support the ADF,\(^\text{24}\) but it has important implications for Australian defence industry policy. As was argued in the 2007 defence industry policy:

The underlying reasons for Australia to maintain a capable in-country defence industry have not changed. The ADF needs ready access to repair and maintenance services that, for practical reasons, can only be delivered by in-country providers. The ADF also needs in-country industry to adapt,


\(^{20}\) The figure is a rounded up to the closest half-million, see M. Thomson, The Cost of Defence: ASPI Defence Budget Brief 2011-2012 (Canberra: Australian Strategic Policy Institute, 2011), p. 91.


\(^{22}\) Department of Defence, Defending Australia in the Asia-Pacific Century, p. 48.

\(^{23}\) Ibid.

\(^{24}\) Ibid.
modify and, where necessary, manufacture equipment that is suited to Australia’s unique operating environment and military doctrine.\textsuperscript{25}

That the costs of designing or manufacturing materiel systems in Australia, or even ‘Australianising’ systems acquired overseas, outweigh the benefits, is generally accepted. Thus, Defence displays a strong predilection for military-off-the-shelf (MOTS) and commercial-off-the-shelf (COTS) systems. The result is that Australian defence industry policy is considered in the context of the global defence market, an approach that is sensible so long as it is emphasised that the ADF remains dependent on Australian industry when it comes to sustainment. As Mark Thomson and Simon Harrington argued:

There is a high priority to be able to repair, maintain, and upgrade vessels [and, presumably, other defence system] in-country because it would be simply impractical to do otherwise. The transit times to foreign maintenance locations would be prohibitive in peacetime and operationally compromising in wartime.\textsuperscript{26}

Theoretically, Defence could mitigate the tyranny of distance by purchasing larger equipment fleets and thereby reducing the significance of the time required to transport platforms to and from Australia and either Europe or the United States. In practice, the strategy rarely makes sense because defence systems tend to have a relatively high unit cost. Even if that were not the case, the strategy would leave government dependent on foreign firms that cannot be relied upon to place a high-priority on Australian sustainment contracts and have the potential to be either unwilling or unable to conform to the ADF’s demands in the event of a national security crisis. Thus: “Almost every platform in the ADF is repaired and maintained in Australia”.\textsuperscript{27}

More than twenty years of privatising defence industry, ‘contracting-out’ technically demanding sustainment tasks previously conducted by service members, and intense competition for technically skilled labour has generated what Bob Wylie termed “an irreversible dependence by the ADF on commercial suppliers of mission-critical goods and services”.\textsuperscript{28} In

\textsuperscript{26} M. Thomson and S. Harrington, 	extit{Setting a Course for Australia’s Naval Shipbuilding and Repair Industry} (Canberra: Australian Strategic Policy Institute, 2002), p. 11.
\textsuperscript{27} Department of Defence, 	extit{Building Defence Capability: A Policy for a Smarter and More Agile Defence Industry Base} (Canberra: Commonwealth of Australia, 2010), p. 28. The notable exception being Australia’s strategic airlift capability—a particularly mobile system that benefits from the economies of scale afforded by a global sustainment network and that is in any case principally used to support coalition operations far from Australia, for example, in Afghanistan, see Boeing, "The Global C-17 Globemaster III Sustainment Partnership", 2012, <http://www.boeing.com/defense-space/support/integrated_logistics/af/c17gsp.html> [Accessed 24 April 2012].
\textsuperscript{28} R. Wylie, 'Defence Industry Policy 2010: The Combat Iteration', 	extit{Security Challenges}, vol. 6, no. 3 (Spring, 2010), pp. 59-77, quote on p. 61.
particular, the ADF depends on private industry to sustain virtually its entire fleet of material systems. Apart from ASC, the prime contractors in Australian defence industry are all owned by foreign multinationals: BAE Systems, EADS, Boeing, Raytheon, Saab AB, Lockheed Martin, and Thales. The business decisions of these firms have a direct bearing on Australia’s defence self-reliance because they more or less determine Australia’s capacity and capability to sustain the ADF. As a monopsonist acting on behalf of the Australian Government, Defence is responsible for the state of Australian defence industry. If it neglects industrial development, industrial capabilities will stagnate and deteriorate. Defence should therefore adopt a long-term strategic perspective when engaging industry, recognising that the latter is motivated by profit and making sure it has a compelling incentive to invest in maintain and develop Australia’s defence self-reliance.

Just as the ADF has to be prepared to operate Force 2030, the Australian defence industry has to be prepared to sustain it. The principal constraints on the capacity and capability of Australian defence industry are the quantity and quality of its infrastructure and workforce. The latter tends to be the most significant, and takes the most time to develop. Defence will confront enduring difficulties recruiting and retaining skilled labour during a resources boom. Reverting to in-house sustainment, as in the recent past, would be costly for either the ADF or Defence. Australia’s defence industry is better able to overcome market constraints than Defence because of the former’s relative flexibility when it comes to remuneration and employment conditions. Training a skilled workforce is slow and expensive, taking ten years to produce a systems engineer able to deal with complex defence projects. The privately owned foreign multinationals that dominate Australian defence industry require a compelling incentive to make significant investments in their Australian operations.

Past Australian governments have never been willing to spend the large sums required to develop a robust Australian defence industrial base capable of designing and manufacturing a wide-range of cutting-edge defence systems. Yet, all else being equal, it is relatively difficult to repair, maintain, update, and upgrade cutting-edge defence equipment without having been involved in its design and manufacture. In the United States and the United Kingdom, self-reliant sustainment capability tends to emerge from their domestic defence manufacturing bases. That does not occur in Australia, where the vast majority of Defence’s in-country expenditure on materiel systems goes towards sustaining the force-in-being. Defence cannot assume Australian defence industry will develop the technical

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30 The difficulties have been analysed in Department of Defence, Defence Personnel Environment Scan 2025 (Canberra: Commonwealth of Australia, 2006), [http://www.defence.gov.au/dpe/dpe_site/publications/DPES2025/index.htm] [Accessed 30 August 2011].
expertise required to sustain the future-force as a result of ordinary ‘market’ transactions. In fact, recent experience with the Collins Class submarine suggests that it can be challenging to sustain a materiel system even if it is built in Australia; sustainment requires a conscious and deliberate policy of investing in appropriate skills and infrastructure above and beyond those required for construction. Unless Defence is willing to either contract for skills directly or issue through-life-support contracts to local subsidiaries of original equipment manufacturers (OEM) in return for their investment in Australian skills and infrastructure, contracts to sustain the force-in-being must cover the indirect cost of developing the capability and capacity to sustain the future-force.

Defence should not write industry a blank cheque, and industry should not expect one. As Thomson and Harrington argued, prudent spending on defence is “not just important as a matter of fiscal rectitude; it is strategically important to Australia that we squeeze as much capability as possible out of the money we have available for defence”. The government expects Defence to generate self-reliant operational capability as efficiently—or ‘cost-effectively’—as possible. Being cost-effective is not the same as being ‘cheap’. Instead, the government’s cost-effectiveness requirement means officials have to make complex trade-offs between cost and performance to arrive at optimal decisions, or, if optimal decisions are impossible, decisions that are least bad.

The Challenge for Defence’s Senior Leadership

For Defence, Smart Sustainment’s success means a “better prepared ADF, delivered at lower cost”. To this end, Smart Sustainment reforms are supposed to focus on “instituting deep and ongoing reforms that better sustain ADF capability at a lower cost while ensuring that capability is safe, effective, and affordable.” Hence, the challenge for Defence’s senior leadership is to secure some $6 billion worth of savings while also fulfilling the ADF’s preparedness requirements, driving down the Government’s TCO, and ensuring investments sufficient to self-reliantly sustain Force 2030.

Officially, Smart Sustainment is intended to save $5.5 billion over a ten-year period, approximately 25 per cent of the $20.6 billion worth of savings demanded by the government when the SRP was launched in 2009. In fact, the official figures are misleading. First, they downplay the extent of savings the architects of the SRP plan to squeeze from the defence...

31 Thomson and Harrington, Setting a Course for Australia’s Naval Shipbuilding and Repair Industry, p. 10.
33 Department of Defence, The Strategic Reform Program: Making it Happen, p. 15.
34 An additional $3.9 billion worth of savings were announced by the current Defence Minister, Stephen Smith, earlier this year, see Thomson, The Cost of Defence: ASPI Defence Budget Brief, 2011-2012, p. ix.
sustainment system. As Thomson explained, it is necessary to add a large chunk of the $586 million that Defence intends to save through adjustments to the budget’s Net Personnel and Operating Cost (NPOC) category to the declared Smart Sustainment figure because most of the NPOC reduction will be achieved by reducing the cost of sustaining new capabilities expected to come online before 2019. Second, they exaggerate the value of Defence’s planned overall savings because approximately $4.6 billion of planned ‘savings’ are disingenuous accounting tricks. The implication is that around 40 per cent of the SRP’s real savings are to be reaped from the sustainment system.

All else being equal, failure to secure savings means equivalent cost-pressures threatening delivery of Force 2030. The risk is that Defence will neglect or degrade requirements, undermining preparedness and defence self-reliance. It is possible to save money in the short-term by, for example, delaying repairs on a submarine, rifle, or jet, but decisions such as these reduce the amount of capability delivered as much as they reduce cost. Effectiveness falls and, all else being equal, efficiency stays where it was. In the best case, costs are deferred to the future. More likely, delayed repair and maintenance schedules inflate future costs, short-term ‘savings’ coming at the expense of long-term reductions in the Government’s TCO. These strategies represent a false economy but, as is argued below, both have been used routinely in the recent past. They are obviously counter to Defence’s depiction of Smart Sustainment as a deep and ongoing reform program.

In practical terms, achieving Smart Sustainment requires a division of labour between the Service Chiefs (who, as Capability Managers, are responsible for achieving 50 percent of the savings through demand management), Australian defence industry (who, as suppliers of sustainment goods and services, are responsible for achieving 30 percent of the savings through enhanced supplier productivity), and the DMO (which, as the agency contracting-out sustainment tasks to industry on behalf of the Service Chiefs, is responsible for achieving 20 percent of the savings through enhanced internal efficiency and better contracting). As this division of labour acknowledges, the defence sustainment system depends upon a partnership between the Defence sustainment function and Australian defence industry. It follows that Smart Sustainment’s success depends on enduring reform within each party.

36 Ibid., p. ix.
Reforming the Defence Sustainment Function

Australia’s defence sustainment system comprises a web of contractual and quasi-contractual relationships intended to ensure that three disparate organisations—the armed services, the DMO, and Australian defence industry—cooperate to deliver the sustainment outcomes valued by government. Within Defence, the senior leadership depends on the Service Chiefs (the ‘Capability Managers’) to sustain their respective armed services. The Service Chiefs, in turn, depend on the DMO (the ‘buying organisation’) to arrange sustainment inputs by providing commercial advice and managing commercial relationships. The DMO is accountable to the Minister through the Defence Diarchy, but it is a Prescribed Agency, formally and financially independent of the Service Chiefs. The arrangement is problematic because the DMO is supposed to work on behalf of the armed services. In theory, the Service Chiefs use quasi-contractual Materiel Sustainment Agreements (MSAs) to hold to account the System Program Offices (SPOs) responsible for sustaining specific types of equipment within the DMO. In fact, the Service Chiefs have only “poorly defined and weak” control over the SPOs. The DMO therefore plays a lead role in managing, not just administering, the sustainment system.

At the pinnacle of the defence sustainment system, government outlines valued sustainment outcomes through and with advice from Defence’s strategy group. Government’s self-reliance and preparedness requirements are translated into specific Readiness and Sustainability postures for each element of the ADF by means of the Australian Military Strategy, the Chief of Defence Force (CDF) Preparedness Directive, and the Joint Operations Command (JOC) Operational Preparedness Requirement. Having been provided with the government’s big-picture SRP targets, Defence establishes specific savings and reform targets, appointing additional senior managers to design and drive reforms as well as a Program Management Office (PMO) for each of the SRP’s reform streams. The key question is whether or not the Defence sustainment function can coordinate the cost-effective delivery of self-reliant preparedness with the delivery of savings demanded by the SRP.

The Pappas review identified two basic models for delivery of Defence’s sustainment function. On the one-hand, Defence could rely on the agents responsible for the sustainment system’s outputs, thereby empowering the Service Chiefs to drive change throughout the DMO and Australian defence industry. On the other hand, Defence could rely on the agents responsible for managing the sustainment system’s inputs, using the SPOs within the DMO to drive change forward into the armed services as well as backwards.

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38 This section is based on Chapter 14 of the Pappas Review, see G. Pappas, 2008 Audit of the Defence Budget (Canberra: Commonwealth of Australia, 2009), pp. 261-70.
into Australian defence industry. The key difference between the models is one of budgetary authority. Adopting the output-led model, the Service Chiefs would be granted control of the resources necessary to deliver the capabilities that they are nominally responsible for and, within a capped budget, they would be granted wide-ranging discretion to manage their business and vary arrangements with the DMO and industry. Adopting the input-led model, the Service Chiefs would provide the DMO with their sustainment requirements, but sustainment budgets would remain under the control of the DMO.

The output-led reform model provides clear accountability for outputs because the Service Chiefs, responsible for output delivery, would be able to control and shape their inputs. Failure to deliver directed outputs within budget would draw attention to managerial failure, providing a focal point for remedial and/or disciplinary measures. The output-led model also motivates the Service Chiefs to deliver outputs as efficiently as possible. Within a given budgeting period, savings could be channelled into other sustainment projects, and budgets could be re-negotiated year-on-year in order to generate an efficiency dividend that Defence’s central planners could re-direct to higher priority areas (such as acquisition). Neither responsibility for cost overruns or capability shortfalls could be palmed off elsewhere. Recognising these benefits, the independent 2008 Audit of the Defence Budget (the Pappas Review) recommended that Defence adopt an output-led model.39

The input-led reform model has two pronounced weaknesses that mirror precisely the strengths of the output-led model. Unless Defence’s administrative-tail is empowered to wag the war-fighting dog, it provides few incentives for the Service Chiefs to think cost-effectively. Moreover, it entrenches an ambiguous accountability framework, wherein responsibility for the sustainment system’s outputs are split. The input-led model’s strength is that it can be relied upon to cut the cost but not the cost-effectiveness of the sustainment system. By issuing the DMO a tight budget, Defence can guarantee against cost overruns, and by cutting the budget year-on-year, Defence can guarantee a pool of savings. The issue is that cost cutting occurs despite an inadequate accountability framework, meaning productivity will likely fall by the wayside. The input-led model cannot, therefore, produce a cost-effective defence sustainment system any more than belt tightening can improve one’s health. Tightening the belt might make it look as if one is lean but, actually, it just adds to discomfort.

In the commercial sector, businesses tend to use input-led models to promote temporary cost cutting and output-led models to promote the type of managerial innovation necessary to achieve enduring change in organisational behaviour. Given Smart Sustainment’s aim of "instituting

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39 Ibid., p. 263.
deep and ongoing reform that better sustains ADF capability at a lower cost; it would have made good sense for Defence to adopt an output-led reform model. Yet, for the output-led model to work, the Defence budgeting and planning framework would have had to be transformed because, under the status quo arrangement, “the service chiefs control only a limited share of the resource necessary for the delivery of the capabilities that they’re nominally responsible for”. Hence, one can understand Defence’s decisions to ignore the Pappas Review and adopt an input-led reform model.

The Pappas Review acknowledged the difficulties involved in switching to an output-led management model, noting that it “would be a very substantial … change from today’s operation of Defence and a substantial shift from the standard public service management model”. The Rudd Government supported the shift, heralding it in the 2009 Defence White Paper and promising in Defence’s introduction to the SRP to grant the Service Chiefs “greater authority to manage their budgets and non-financial inputs”. By instituting an ‘outputs-driven budget’ it was argued Defence could ensure the “visibility, incentives, and authority” required to “change the way Defence operates, … achieve reforms, and put downward pressure on costs.” The argument was correct but the reform was delayed in the 2010-11 financial year and has now fallen off the agenda. Rather than empowering the Service Chiefs to drive reform, Smart Sustainment has been implemented by cutting centrally planned budgets and telling the DMO to live within its means.

Although the Service Chiefs are nominally responsible for the Defence sustainment function, real authority rests with the DMO. As Thomson concluded in his review of control and administration in Defence, “there’s no sense of an explicit commercial relationship between the DMO and the services for sustainment”. The armed services drive the cost of sustainment by using capabilities but only affect sustainment strategies “at the margins”. The problem is that the DMO is not assessed on its ability to deliver self-reliant operational capability so much as its ability to stick within budgets. The situation is exacerbated by the DMO’s inability to enforce cost-conscious behaviour within the armed services. In fact, even if the Service Chiefs were motivated to make cost-effective decisions they probably lack the capacity to do so under status quo arrangements. Within each budgeting period, approximately $5.5 billion is handed to the DMO by Defence’s senior leadership so that it can undertake sustainment work on behalf of the Service Chiefs. The Service Chiefs are meant to manage funds

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41 Pappas, 2008 Audit of the Defence Budget, p. 263.
42 Department of Defence, Defending Australia in the Asia Pacific Century, p. 109.
45 Thomson, Serving Australia, p. 23.
by means of the quasi-contractual MSAs but the system has only been in place for two years. The Chiefs have not been equipped with the managerial infrastructure required to manage sustainment budgets, and they are not in the practice of doing so. They rely on the DMO, which is well placed to advise on the relative cost of sustainment options but “is poorly placed to advise on their relative value, taking into account ADF preparedness requirements”.  

The Rizzo Review demonstrated that Defence’s status quo sustainment arrangements are insufficient to reconcile the disjuncture between the DMO’s incentive to minimise sustainment expenditure and the Service Chiefs’ obligation to deliver self-reliant operational capability in accordance with the CDF’s preparedness requirements. Arguing that it is “essential that the Chief of Navy, as the Capability Manager, has clear accountability for Navy through-life capability and has the corresponding resources”, Rizzo concluded that MSAs “are currently poorly defined and weak”, providing the Service Chiefs little or no control or visibility vis-à-vis the DMO. Rizzo recommended the MSA be transformed so that it clearly defines the obligations of both Navy and the DMO and supported by “business like performance measures” in an “active ‘contract’”. For that arrangement to work, Rizzo noted, “Navy should substantially increase the resources committed to the capability management role”, while communication between the Service Chiefs, the armed services, and the DMO need to improve dramatically.

Rizzo’s recommendations are sound, but they beg the question: should Defence attempt to squeeze significant savings from the defence sustainment system in the absence of an adequate accountability framework? Prudence suggests not. Presently, there is little incentive for executives within the DMO’s SPOs to focus on criteria other than short-term cost. They are not held responsible for securing preparedness requirements, and, so long as they stay within budget, have no fear of punishment when the sustainment system goes wrong. Operational flexibility is a significant cost driver within the defence sustainment system because it makes the rate of effort required from contractors uncertain. The majority of Smart Sustainment’s planned savings are related to better management of demand for sustainment services, implying a decline in operational flexibility. That might be an appropriate trade-off, but it is a trade-off the Service Chiefs should make in meeting the CDF’s preparedness requirements. The DMO is neither responsible for securing preparedness requirements nor technically competent to make decisions impacting directly on operational questions.

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48 Ibid.
So what role should the DMO play in the defence sustainment system? There is no easy answer. As a Prescribed Agency, the DMO has little incentive to take a broad view of value. Instead, it focuses on narrow cost, schedule, and performance criteria. To secure the SRP’s objectives, decision-makers within the DMO are to be rewarded for generating savings. Given the frequency of staff-rotations and pervasive information asymmetries, it will be rational for them to play cost-shifting games by skimping on maintenance that does not have a short-term impact on preparedness and/or permitting the degradation of a system’s capabilities in ways that are hard to measure. Unless carefully managed, the agents within the DMO will tend to do less, take longer, and otherwise manage budget cuts by neglecting longer-term considerations and output delivery. The problem will become acute as pressure mounts to shave the cost of sustainment, freeing up funds with which to acquire Force 2030.

Although the Service Chiefs have retained formal responsibility for the Defence sustainment function, direct control over sustainment has been centralised within the DMO so that Defence can benefit from the integration of sustainment and acquisition activities. The benefits ought to be extensive because the vast majority of sustainment costs are determined by decisions made in the design, development, production, and acquisition phase of a capability’s life cycle. Additionally, one of the best ways to develop Australian sustainment capabilities is the use of competition for capital equipment contracts to encourage OEMs to establish in-country through-life support capabilities for the equipment thus procured. Yet, in practice, officials within the DMO have tended to respond to institutional incentives by focusing on the easily measured, short-term, and politically sensitive challenge of acquiring capital equipment. As Rizzo points out, this leads the DMO to focus disproportionately “on acquisition over sustainment” resulting “in ineffective outcomes”.49 For example, the DMO continues to sacrifice integrated logistics support products (including training, spares, technical documentation, etc.) when making acquisition decisions, the aim being to save a little on short-term costs and thus keep within tight budgets. The economy is false. Decisions such as these detract from whole-of-life capability, adding to the government’s TCO. They result in the unexpected collapse of capabilities, meaning the sustainment system is “unfit for purpose”.50

Given DMO’s failure to integrate sustainment and acquisition and the Service Chiefs’ responsibility for preparedness, it is tempting to conclude that Defence should return full responsibility for sustainment to the armed services or specific ‘force elements’ with the armed services, probably a sub-

49 Ibid., p. 44. Cole confirmed the argument, concluding that “sustainment is still being treated as a ‘poor relation’ compared to the generally higher-profile acquisition work”, see: Cole, Collins Class Sustainment Review, p. 10.
optimal policy solution. It would foreclose the option of exploiting synergies between acquisition and sustainment, and it would merely strengthen the institutional incentive that already encourages the DMO to transfer costs from acquisition to sustainment. So what should be done if we are to accept that it is a step too far to strip the DMO of all responsibilities related to sustainment?

Three reforms are essential. First, Defence should revisit its 2009 commitment to implement an output-led budgeting and planning model. Capped sustainment budgets and a reduced contingency provision increase the risk attendant to poor management. As a high-stakes savings program demanding year-on-year cost cutting, the SRP will make short sighted decision making more, not less, attractive. The Rizzo and Cole reports show that Defence’s pledge that Smart Sustainment “must not compromise quality and safety” or “transfer costs to other areas” is insufficient because quality is routinely compromised and costs are routinely transferred under status quo arrangements. Second, Defence needs to reverse the recidivist tendency to publish less and less meaningful information about annual preparedness targets in the annual Defence Portfolio Budget Statements and annual preparedness outcomes in the annual Defence Reports to Parliament. As Wylie has suggested, the Defence portfolio should advise Parliament what its expenditure on sustainment actually achieves in terms of ADF preparedness. To this end DMO reporting to Parliament on sustainment expenditure needs to be explicitly linked to Defence reporting on preparedness outcomes in the annual Defence Report. Third, as Wylie has also pointed out, the Defence Portfolio has yet to implement Parliament’s requirement, set out by the Joint Committee of Public Accounts and Audit, that Defence’s Annual Report to Parliament include information on purchaser-provider arrangements like the MSAs between the Service Chiefs and the CEO DMO. Conforming to this long-standing requirement would not only enhance Defence accountability: Parliamentary and public scrutiny would also provide the Service Chiefs and the CEO DMO a compelling incentive to ensure the MSAs serve their intended purpose.

Reforming the Defence-Industry Partnership

It is now appropriate to turn attention away from the demand side of the defence sustainment system and to address the question of supply. Thus, this section of the article focuses on the Defence-Industry partnership, asking how Defence should engage with industry to secure Smart Sustainment’s savings while meeting preparedness requirements, driving

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51 Department of Defence, The Strategic Reform Program: Making it Happen, p. 16.
52 See Thomson, Serving Australia, p. 43.
54 Department of Prime Minister and Cabinet, Requirements for Annual Reports for Departments, Executive Agencies, and FMA Act Bodies (Canberra: Commonwealth of Australia, 23 June 2010), p. 7.
down the Government’s TCO, and ensuring investments sufficient to self-
reliantly sustain Force 2030.

Australia’s Defence-Industry partnership is vexed because relationships
between the DMO and industry are often adversarial and ridden with
suspicion. On the one hand, industry suspects that decision makers within
Defence fail to act on the basis of robust cost/benefit assessments, in part
because they are guided by ill-informed prejudices and ideological
predilections that detract from the perceived significance of Australian
defence industry. On the other hand, officials within Defence and analysts
within Australia’s leading strategic policy institutes allege that the Australian
defence industry is a rent-seeking vested interest, the implication being that
industry’s views can be safely ignored. The relationship is obviously more
complicated than this but the caricatures contain elements of truth. Time
and again, independent reviews have highlighted bad decision-making
throughout the Defence sustainment function and bad habits have so far
proved impervious to (admittedly weak) reform initiatives. Equally, it would
be naïve to assume Australian defence industry is motivated by anything
other than profit. So long as profits are ethical, the motivation is legitimate.
Indeed, Defence depends on Australian defence industry’s profitability to
attract and retain skilled labourers needed to sustain the ADF.

Although the Service Chiefs are responsible for sustaining their respective
forces, the DMO has assumed the lead role in designing and implementing
Smart Sustainment reform. Despite Defence’s pledge that Smart
Sustainment reforms would be “tailored to fit specific circumstances”, the
DMO is developing a standardised ‘Sustainment Management Model’.55 The
centrepiece is a new approach to ‘Productivity and Performance Based
Contracting’ (PPBC). As Shireane McKinnie, a senior DMO official, stated in
February 2011, the DMO is developing “a standardised approach to
Productivity and Performance-Based Contracts for use in DMO support
contracts” that will become “a key enabler for the Smart Sustainment reform
stream”.56 While the DMO has yet to settle on a final design for its
standardised approach to sustainment contracting, detailed publications and
public comments indicate the trajectory of policy development.

According to the Exposure Draft of the PPBC Handbook released by the
DMO in mid-2011, a Performance-Based Contract (PBC) is “a contract that
is structured to motivate the contractor to achieve particular outcomes, rather

55 Department of Defence, The Strategic Reform Program: Making it Happen, p. 16.
56 Shireane McKinnie, General Manager Systems, DMO, ‘The SRP and the Future Challenges
in Sustainment’, a paper presented to the 8th Annual Australian Defence Magazine (ADM)
than the performance of individual activities".\textsuperscript{57} The DMO is not new to PBCs, and they have been used very successfully to support the Aerospace Systems Division’s sustainment business for nearly six years. But the Aerospace Systems Division’s PBC regime has focused on the cost-effective delivery of self-reliant preparedness, not cost-cutting. The DMO has therefore unveiled a ‘Next-Generation Performance-Based Contract’—a Productivity and Performance Based Contract (PPBC)—which it hopes will combine “the performance-related benefits of a PBC with further initiatives to improve productivity and reduce the TCO over the longer term".\textsuperscript{58} According to the DMO, the PPBC framework has been “derived from traditional … PBCs, which have been found to provide sound performance management but have not resulted in cost reductions to Defence".\textsuperscript{59} As such, the PPBC is the mutant child of the SRP.

The DMO distinguishes its ‘Next-Generation’ model of PPBC from the ‘transaction-based’ or ‘regulatory’ contracting model it has traditionally used to procure sustainment outcomes. It is generally accepted that performance contracting is preferable to regulatory or transaction contracting when an organisation wishes to promote enduring managerial innovations and lean processes. Simply put, performance contracts promote the characteristics typical of an output-led management model. The devil is in the detail. Briefly comparing three approaches to contracting—regulatory, transactional, and performance—to the DMO’s model of ‘Next Generation’ PPBC highlights the latter’s concerning features.

Traditionally, Defence has procured sustainment outcomes using contracting models that focus on short-term price competition and rule compliance, specifying, for example, how many people with what kinds of skills need to be hired by a contractor; what techniques, technologies, and materials the contractor should use, and when particular activities prescribed in the contract need to be completed. Such a transactional or regulatory approach to contracting is based on three assumptions: (i) that there is one best way to fulfil the purpose of a contract; (ii) that officials know exactly what that best way is; (iii) that officials are able to specify all relevant details of that best way through the medium of a contract. It also reflects a belief that government-business relations are inevitably adversarial, that contractors attempt to cheat the government in every possible way at every possible time, and that officials exploit any opportunity to collude with contractors in

\textsuperscript{57} Department of Defence, Managing Contractor Performance under Productivity and Performance Based Contracts (The PPBC Handbook) (Canberra: Commonwealth of Australia, 2011), p. 3.

\textsuperscript{58} Ibid., p. 4.

\textsuperscript{59} Ibid., p. iv.
pursuit of private gain. As Steven Kelman argued, regulatory contracting rests on a “fear of discretion.”

The problem with regulatory contracting is that contractors are neither rewarded for producing an outcome that helps achieve the public purpose nor punished for failing to do so. Instead, contractors are rewarded for complying assiduously with all details of the contract and are punished for any failure to observe regulations, even if failure has no significant effect on the relevant public purpose. In fact, under a regulatory contracting regime contractors can be rewarded for finding loopholes, taking short cuts that were not expressly forbidden, even if doing so undercut the contract’s purpose. Transaction contracts suffer from many of the same weaknesses as regulatory contracts, but they also reward the contractor for each unit of work performed, creating a perverse incentive to maximise contract cost. For example, in a transaction-based maintenance contract for an aerospace component, a contractor is paid for each repair carried out. With a degree of profit built into each repair, the more repairs performed, the greater the overall profit made by the contractor. The problem is that more transactions mean more maintenance downtime and a decline in preparedness for the ADF. In the worst-case scenario, a contractor could rationally develop and/or modify capital equipment in order to increase the demand for preventative maintenance and/or the rate of failure.

Regulatory contracts afford a high degree of certainty about what will be done, but they provide very little certainty about what will be delivered. Transaction contracts afford a high degree of certainty about what will be done, but they promote inefficient behaviour. Thus, it is now widely acknowledged that regulatory contracts maximised probity, rigidity, and ‘top-down’ control at the expense of collaboration, flexibility, and ‘bottom-up’ initiative. It is also recognised that the assumptions underpinning regulatory contracting are unduly optimistic about the government’s knowledge and capabilities, blind to the uncertainty that afflicts all but the simplest of projects, and self-fulfilling in so far as they promote adversarial relations and a litigation culture.

Theoretically, performance contracting provides a high degree of certainty about what will be delivered as well as the cost of delivery, the trade-off being that the government abandons control over the delivery of contract outcomes. Performance contracting rejects the assumption that there is one best way to perform a task, let alone that there is one best way appropriate in every circumstance. It also recognises that people far removed from service delivery (such as contract managers within a government agency)

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are unlikely to work it out. Rather, performance contracting aligns risk and responsibility, the assumption being that the best way to motivate agents is to provide them with key performance indicators (KPIs) and then let them manage themselves. The assumption radically alters the role of the contract and the expectations of the contracting parties. To continue the aerospace maintenance example, performance contracts focus on outcomes such as the availability of serviceable spares, not the transaction that occurs when an item is returned to serviceable stock. Thus, contractors are paid for a specific level of spares availability rather than conforming to a particular maintenance process or performing a given number of repairs. Guided only by performance requirements, contractors are free to determine how spares are sustained, efficiency being promoted by an incentive structure tied to performance measurements. Government’s buying agency are also evaluated on the basis of whether or not the contractor provided the outcome contracted for, not whether or not the contractor conforms to labyrinthine regulatory frameworks. In theory, performance contracts promote cooperation because all parties have a direct interest in producing valued outcomes.

The DMO pledges that performance contracting will benefit both sides of the Defence-Industry partnership. By instituting performance contracting, the DMO claims it can enhance the cost-effectiveness of sustainment while driving down costs. It also claims that Defence’s “better performing suppliers” will benefit through “higher rates of profitability” and “greater continuity of workload”, assuming that short-term performance-contracts are accompanied by extensions to work based on “award terms”. The DMO counters concerns that Australian defence industry might be at risk of shrinking along with the Defence sustainment budget by arguing Defence plans to redirect savings from Smart Sustainment towards the acquisition of capital equipment that Australian defence industry might help to deliver.62

The DMO’s standardised approach to performance contracting is intended to be scalable (to the maximum extent practicable) across a wide range of sustainment contracts (i.e. whole of system, sub-system, components, common items, etc.) and also applicable (to the maximum extent practicable) across all environments (i.e. land, sea, and aerospace).63 In order to promote the cost-effective delivery of self-reliant operational capability, the DMO intends to rely on KPIs linked to monetary and non-monetary contractual rewards and remedies (such as ‘incentive payments’, ‘at risk’ amounts, and ‘target cost incentive models’) that vary in response to performance and motivate contractors to achieve required outcomes. Thus

established, a PBC (based on a firm-priced or target-price contract) offers
the contractor the possibility of increased profitability if the contractor can
improve the efficiency of work within the contracted price. The problem is
that ordinary PBC framework provides no mechanism to claw back the
savings required by the SRP’s architects. Provisions enabling Defence to
claim a share of the savings reaped by defence industry therefore distinguish
the DMO’s ‘Next-Generation’ PPBC from the frameworks used overseas.64

To claw back savings, the DMO has developed a set of contract
mechanisms it refers to as ‘off-ramps’ and ‘reward terms’. Off-ramps will
allow the DMO to jettison contractors failing to contribute to the SRP’s
savings objectives, whereas award terms will allow the DMO to retain
contractors meeting or exceeding expectations and sever relations with all
others.65 Together, these mechanisms provide the DMO with a unilateral
right to threaten contract termination and thereby force contractors to
renegotiate terms once investments have already been made and work is
underway. The DMO hopes to squeeze Australian defence industry, the
argument being that, in light of the SRP’s savings objectives, an
award term enables some of the limitations of firm-priced contracts to be
overcome by enabling price extensions below the initial firm price to be
incorporated into a contract extension.66

As the DMO stated elsewhere,

when seeking to achieve ongoing cost reductions ... the Government may
require unilateral authority to reset the productivity parameters [governing
the PPBC] [so as] to ensure further improvements.67

That policy directly contradicts one of the seven principles agreed by the
DMO and the Australian Industry Group (AIG) in November 2007, namely
that “contract terms should not allow a party to undermine fundamentally the
essential bargain between the parties through the exercise of unilateral
discretion”.68 Nevertheless, as the then CEO DMO put it in 2009, “that’s the
way we’re heading and ... everyone can gear themselves up for that now”.69

Off-ramps and award terms are intended to maximise ‘competitive tension’
over a materiel system’s life of type (LOT), thus providing the DMO with a
whip to spur thrift in industry. The DMO hopes to offer sustainment contracts
for an initial four-year period, including two or three years of guaranteed

64 Department of Defence, The PPBC Handbook, pp. 3-4.
65 The policy was revealed in Department of Defence, Building Defence Capability, pp. 47-8.
For a more up-to-date discussion of the DMO’s views, see Department of Defence, The PPBC
66 Department of Defence, Next Generation Performance-Based Support Contracts, p. 112.
67 Ibid., p. 82.
68 Ibid., p. 81.
69 CEO DMO speech at the 2009 Australian Defence Magazine Congress Meeting, Hyatt Hotel,
(17 February 2009), cited in Ibid., p. 112.
work and the one or two years that might be required to push a contractor down the off-ramp. For that reason, the DMO's approach to performance contracting can best be characterised as 'short-term'. The DMO plans to measure contractor performance throughout the first two or three years of work, undertaking an 'award term review' at the end of the period. If successful, the contractor will be retained for another year, followed by another 'award term review'. Each review provides the DMO an opportunity to rake back savings, and the theory is that the process can be repeated until a materiel system reaches the end of its life of type or until a contractor fails to meet the DMO's expectations. If a contractor fails to receive an award term, the contract will enter a one or two-year off-ramp period, wherein the DMO will rely on the original contractor to maintain capability while searching for a replacement.\(^{70}\) Put simply, the DMO plans to drive down the cost of sustainment by benchmarking, assessing, rewarding, punishing, and opening for competition sustainment contracts, thus forcing contractors to adopt the most efficient work processes and to be honest about their underlying costs.

The DMO's vision has not been properly thought through. According to Rizzo, it has been developed "largely ... in isolation from the Services",\(^{71}\) a fact revealed by the 'Next-Generation' PPBC framework's myopic focus on short-term commercial risk. It is unlikely the DMO's planned approach to performance contracting will provide a compelling incentive for Australian defence industry to make the investments necessary to sustain Force 2030. Instead, it will create perverse incentives for industry to scrimp and save by, for example, transferring costs to other elements of the defence sustainment system, neglecting work that is difficult to measure, and dodging responsibility. The result will be inflation in the Government's TCO, decline in the ADF's preparedness, and collapse of the nation's defence self-reliance, which, as is argued above, depends on the investment strategies of Australian defence industry. Most problems relate to the short-term focus of the 'Next-Generation' PPBC framework. Performance contracting is wise, but it should not be structured in a manner that promotes counterproductive short-term decision-making.

The most obvious problem with short-term contracting is that it creates an over-riding incentive to cut costs even if doing so is detrimental to the government. Having secured a contract and having been alerted to the fact that future work depends on whether or not a firm manages to cut costs within a two-year window, contractors have a strong incentive to play cost-shifting games, deferring expenditure and neglecting tasks so that costs fall outside of a contracting window. In particular, short-term contracts create perverse incentives to take short cuts on those elements of sustainment that are intended to provide mid- to long-term benefits. Industry will respond to

\(^{70}\) Ibid.

these incentives, shirking responsibilities in ways that are difficult to discern but no less real. It will not be in the interest of the SPOs within the DMO to police this sort of behaviour particularly fiercely, because short staff rotations and the incentive to secure the SRP’s savings targets provide a good reason to turn a blind eye. In fact, experience in other fields, such as construction, suggests that the widespread use of short-term performance contracting encourages the selection of ‘cheap’ tenders, representing poor ‘value-for-money’ over a long-term perspective and which tend to become more expensive because of poor quality work and contractual contingencies inserted by the contractor to defend profitability. As the economist Henry Ergas argued in an essay on efficiency in Defence, taking an organisation-wide perspective, an outcome in which work takes slightly longer and costs slightly more over the short term might be superior to one in which decision makers benefit by shifting costs onto future users. It is significant that long-term performance contracts counteract the incentive to transfer costs to future users because the future user is oneself.

Under a regime of short-term performance contracting there is also the risk that industry will shirk by neglecting responsibilities that are difficult to measure. For a performance contract to work, it must have clearly defined and measurable outcomes directly traceable to the public purpose the contract is supposed to support. The DMO hopes to use short-term PBCs to spur productivity, but it is often exceptionally difficult to measure the efficiency of the sustainment system. According to the independent Helmsman Sustainment Complexity Review conducted in mid-2010, the ADF uses systems with sophisticated combat and mission systems that are “more complex than most Australian commercial systems”. As Ergas argued, sustaining advanced weapons systems is often,

an undertaking of exceptional difficulty, beset by uncertainties and risks.

Contemporary weapons systems are among the largest and most technologically sophisticated engineering projects our societies undertake, involving millions of interdependent parts, each technically demanding in its own right and then needing to inter-operate effectively and reliably under combat conditions.

Complex systems have many interdependent and often hidden dimensions, meaning that attempts to sustain one element of the system impact other elements of the system, generating a dilemma economists refer to as the ‘multi-tasking’ problem. Where multi-tasking matters, Ergas explained, it is ‘hazardous’ to provide “strong performance-based incentives to decision-

makers” because doing so leads to incoherent and/or sub-optimal decisions.

In fact, Ergas argued that it is often better to “allow agents to shirk on work effort than to have them under-produce dimensions of output that though difficult to contract for are highly valued.” That means the DMO might be better off issuing long-term performance contracts that provide an incentive to perform work even if it is hard to measure because the consequences of neglect at $t_1$ have an impact on profitability at $t_2$, making neglect irrational.

The DMO’s short-term focus will also stifle innovations that are likely to reduce the Government’s TCO. As the DMO acknowledged, the American approach to sustainment “recognises that long-term gains and reductions in TCO can be made by encouraging Materiel System and support process improvements”. The US program of ‘reliability-based logistics’, for example, encourages contractors to invest in the modification of components for reliability improvements, the effect being reduced failure rates, reduced maintenance costs, and improved availability within a firm contract price. It also promotes significant efficiencies by improving materiel systems through modifications and replacements to manage obsolescence. Changes such as these are difficult under a system of short-term contracts because systems modifications and process innovations are often expensive to implement. Companies will not pursue them unless they are certain they can reap a long-term gain. Although the US system of Performance Based Logistics (PBL) relies on a system of ‘off-ramps’ and ‘award terms’, these are used to promote the cost-effective delivery of capability, not year-on-year cost-cutting that bites into income and profitability. Thus, contracts are issued for a period of five years, after which point ‘award terms’ signify a contractor’s right to retain a contract except in the event of underperformance. The assumption is that contractors will only make productivity enhancing investments if they are awarded contracts long enough to ensure a reasonable return on investment.

The DMO cannot expect industry-led investments likely to yield long-term productivity gains if it intends to use short-term contracts to undermine industry’s profitability every two years. The DMO might claim the government can cover these sorts of investments, but it is far from clear that the DMO has the expertise or willingness to invest on industry’s behalf. Even if it did, the solution blurs accountability. Better to provide industry with a longer-term contract structure that provides a compelling incentive to make productivity enhancing investments, and supplement that approach with government-led ‘spend to save’ initiatives only where absolutely necessary.

The assumption that Defence can easily create ‘competitive tension’ in markets dominated by monopolies and pseudo-monopolies is also problematic. Although there are many Australian firms that can undertake

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76 Ibid., p. 125.
simple sustainment tasks, such as those required to maintain the Army’s fleet of trucks and trailers, monopolies dominate the market for the technologically advanced systems that the ADF relies upon to maintain its military advantage. Supplier diversity is thus inversely related to the complexity of the system that needs to be sustained. Barriers to market entry include intellectual property, directed support arrangements, system knowledge, and the sort of tacit expertise that can only be gained on-the-job. Monopolies preclude ‘competitive tension’, and when monopolies are ‘natural’ it is expensive to fight against them. Most of the monopolies in the Australian defence industry are natural monopolies resulting from emerging as a result of high barriers to entry and the limited demand for their services. To create significant ‘competitive tension’ in markets dominated by monopolies, the government would have to subsidise new players, supporting market entry. That policy would be expensive, especially in the short-term, and it is unlikely to be cost-effective.

Competition cannot simply be spurred by threatening to ‘terminate’ contracts. Termination is a remedy that is best used infrequently. Important considerations include the lead-time required to replace contractors, the disruption to services caused by termination, and the cost of acquiring relevant intellectual property from the original equipment manufacturer (OEM) or whoever was hitherto responsible for sustainment. The DMO hopes that the threat of termination is sufficient to force Australian defence industry to hand over savings reaped through productivity, but it is likely that the threat will simply add to friction in the Defence-Industry relationship by encouraging a dangerous game of commercial brinksmanship. Although the DMO recently used termination to address some particularly egregious incidents of industry failure, taking, for example, the contract to sustain the F/A-18 away from Boeing and handing it to BAE, unilateral termination is a strategy rarely appropriate except as a remedy to the worst kind of performance-management situations. If used too often, termination corrodes trust, undermining the Defence-Industry partnership. Monopoly market structures mean that the DMO will also undermine the government’s credibility if it relies on the threat of termination too frequently. As a DMO analyst acknowledged,

the award term process remains sensitive to the degree of available competition. The contract-management framework would be severely undermined if the Government Representative had to grant an award term extension, even if the contractor did not meet the required criteria, because there was no other party that could perform the required work. Likewise, the process would be undermined if the award terms were not granted and only the incumbent contractor was in a position to bid for the replacement contract. Where there is very limited competition … then other contract rewards and remedies may be more appropriate than reward terms.”

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78 Ibid., p. 125.
If the DMO insists on attempting to maximise competitive tension in markets dominated by monopolies or pseudo-monopolies it will likely fail to achieve its savings and performance objectives. When dealing with natural monopolies, productivity is best promoted through structures that reward the monopoly for productivity improvements over the long-term and therefore make the most of the monopolist’s strengths, including economies of scale, intellectual property, deep experience, financial stability, and technical expertise.

The DMO also believes it can dodge the monopolies that dominate Australian defence industry by slicing and dicing contracts. “For example”, a 2010 discussion paper argues,

> there may only be limited competition for the support of a complete platform, but there may be significantly increased competition at the lower levels of the product breakdown structure for that system. ⁷⁹

It is true that the use of lower-level contracts would reduce the government’s exposure to monopoly rent seeking and enhance diversity of supply, but the strategy would also blur accountability. The DMO lacks the experience, skills, or resources necessary to perform the Product Support Integration (PSI) function effectively, and, as Rizzo demonstrated, it struggles to manage a large number of contractors engaged on a short-term basis. ⁸⁰ Slicing and dicing contracts reduces the coherence of decision-making, and by placing financial barriers between teams working on the same sustainment projects it adds to the risk attendant on poor communication, organisational, and technical complexity. Slicing and dicing coupled to a system of short-term contracting would lead to the worst of all possible worlds. Not only would projects be left in a state of flux, each contract team would have a strong incentive to try and transfer costs to one another, thus maximising their individual prospects of securing award terms to the detriment of cost-effective preparedness. It might make sense to slice and dice contracts in specific circumstances, separating, for example, the maintenance of aircraft engines from aircraft platforms, but there is often a trade-off between a focus on cost-effective preparedness and short-term savings.

Recent experience suggests that failure to estimate the scope of work accurately when soliciting bids for contracts has prevented the DMO from driving down the cost of sustainment throughout a system’s LOT. So-called scope uncertainty is sometimes the result of contractors underbidding to ‘buy into’ a market, the aim being to expand business once a foothold has been established. The shift towards short-term contracts would promote precisely that business strategy because it would increase the stakes for prime contractors and reduce barriers to entering sustainment markets. Putting to

⁷⁹ Ibid., p. 114.
one-side contractor misconduct, it is evident that different sustainment tasks
have different scope drivers, including variations in system usage, variation
in the system’s maturity, engineering failures, and variation in the demand
for training services. These factors are all beyond the control of the DMO
and industry. Scope uncertainty is also a product of system complexity.
Advanced defence systems typically have thousands of interdependent
products that need to be sustained independently and as part of a system-of-
systems. Interdependence of a materiel system’s components and sub-
systems means that entire sustainment projects are often interdependent,
and complexity means that interdependencies are difficult to predict. The
demand for engineering changes is also determined by a set of factors
(operational requirements, threat perceptions, and obsolescence) beyond
the control of either the DMO or industry. In fact, as the DMO
acknowledged, “the number of engineering changes required over LOT and
the scope of each change are virtually impossible to define upfront”. Software support is another facet of sustainment that “can be difficult to
determine upfront”. Factors such as these make the sustainment system
unpredictable, but the DMO nevertheless assumes it can issue contracts that
have firm scope boundaries.

To come up with anything like a ‘firm’ contract scope, necessary to hold a
contractor’s feet close to the fire, the DMO needs to be able to strictly limit
the range of products and services included in each contract as well as the
rate of effort required to support them. Each prospective contractor also
needs to be able to scope the work associated with each product. That is
difficult when contractors lack experience working with particular systems, as
is the case in markets dominated by natural monopolies. The factors
mentioned in the previous paragraph mean that scope uncertainties tend to
be pervasive. When work is omitted from a contract’s initial scope the DMO
has to negotiate the risk attendant on unexpected requirements for Survey
and Quote (S&Q) services. Within a performance-based framework, S&Q
services create an opportunity for contractors to earn additional profit and
serve as a source of performance relief. Frequent recourse to S&Q work
has the potential to undermine whatever benefits might derive from
‘competitive tension’ because, assuming significant competition for a
sustainment contract and a good chance that S&Q work will emerge during a
given contracting period, it is rational for firms to under-bid when tendering
their offers in the hope that profits can be recaptured through ad hoc work
they will either secure automatically or be well positioned to compete for.
Shifting to another supplier is almost always out of the question once a
sustainment contract is underway, and for that reason S&Q work tends to be
sole-sourced to the primary support contract. That strategy maximises
accountability for outcomes yet minimises the DMO’s leverage when
negotiating price. It provides an opportunity for contractors to ‘rebalance’ the

81 Department of Defence, Next Generation Performance-Based Support Contracts, p. 23.
terms of a relationship, undermining the efficacy of a short-term performance contracting. The DMO might be eager to create independent performance frameworks for S&Q work, competing them on the ‘open’ marketplace, but it would be naïve to assume that the government could switch frequently between contractors without undermining accountability and the Defence- Industry partnership. The DMO cannot afford to work its way through defence contractors as if it were a film star working its way through partners. The strategy prevents high-performing relationships and will scare off the small batch of eligible suitors. As is now widely accepted in the private sector, to get the most from contractors performing complex tasks a vendor has to build strong, cooperative, symbiotic relationships. Focusing on the defence sustainment system, it is better to offer long-term whole-of-system support contracts that include the majority of sustainment tasks within a fixed-price contract, especially when dealing with mature systems that contractors know well. Contracts such as these transfer risk away from the government on to the contractor, reducing the need for S&Q work while promoting the search for profitability through materiel system and work process improvements that enhance productivity and reduce the TCO.

The DMO’s public comments rarely mention the challenge of developing the industrial capabilities required to meet the government’s self-reliance targets. Generally, the DMO tries to divert attention away from the question by suggesting that the government will benefit from ‘better value for money’ and ‘lower contract prices’ and that Defence’s ‘better performing suppliers’ will benefit through ‘higher rates of profitability’ and “greater continuity of workload if a contract is accompanied by extensions to work based on so-called award terms”. Taken as a whole, the DMO claims that improved competitiveness will benefit Australian defence industry.

The DMO’s claims do not hold up. Although short-term performance contracting might allow the DMO to squeeze savings from industry sufficient to meet Smart Sustainment’s objective, the quest for savings has been planned in a manner likely to cause a lot of harm. The arguments highlighted in this section of the article suggest that short-term performance contracting is unlikely to promote ‘better value for money’ or reductions in the Government’s TCO. It is not good enough for the DMO to assert that year-on-year cost cutting is the route to efficiency when the defence sustainment system already suffers from scrimping, saving, and bad management. Although ‘better performing suppliers’ might benefit from brief spurts of heightened profitability, profits will be nevertheless be depressed as the DMO claws back efficiency dividends, restricts the demand for sustainment services, and maximises competitive tension in order to drive down costs. Although a small number of firms are likely to rest easy in the confidence that they can secure year-on-year contract extensions from the DMO, they are likely to be firms that have extraordinarily secure monopoly positions. Secure monopolists will be able to resist the DMO’s attempts to cut back on their profitability. Other firms will fear being underbid by competitors, and
their investment strategies will become increasingly conservative. Contractors will simply resist productivity enhancing measures if the DMO aggressively harvests savings because they will expect that any period of heightened profitability will be brief.

The irony of Smart Sustainment is that the more successful the DMO is at spreading fear of losing contracts and clawing back industry’s profits, the less successful industry will be when it comes to hiring and retaining the skilled personnel required to sustain the ADF. The DMO must recognise the fact that Australian defence industry needs to compete for the skills required to support the ADF and cannot therefore be taken for granted. As the 2010 defence industry policy stated: “Industrial capacity needs to be planned, built, managed, and continually re-shaped—industry must plan, and must be able to plan, to ensure it can play its part”. The DMO pledges that short-term performance contracting will boost productivity and therefore create opportunities to benefit from Australia’s expanding defence budget. The assurance is misleading. Although 60 percent of the DMO’s budget is spent in Australia, most is spent on sustainment. A declining proportion is spent on in-country capital acquisition, but it is that sort of expenditure that has tended to encourage the local subsidiaries of the foreign multinationals that dominate Australian defence industry to make major investments in infrastructure and skills. So long as Defence continues to spend most of its acquisition budget overseas, it needs to provide industry with a compelling reason to invest in the skills and facilities required to sustain the ADF. Defence already struggles to maintain Australian industrial capability because of the small size of the Australian defence market and the cyclical ‘boom and bust’ characterising defence procurement. Short-term contracting will increase uncertainty and reduce profitability, making a bad situation worse.

Defence’s extant approach to fostering Australian industrial capability is explained in the ‘Toolkit’ for the Australian Industry Capability (AIC) program which applies to all Defence procurements of $50 million or above as well as projects with a Defence mandated industry requirement. Generally, the plan has been to establish through-life support capabilities when acquiring capital equipment. The problem is that the DMO has tended to trade-off investment in long-term in-country sustainment capability for reduced acquisition cost. Recognising the difficulty of building Australian defence industry, the 2009 White Paper once again envisaged “encouraging international prime contractors to take up opportunities for local industry participation in international global supply chains”. Whatever its short-term

82 Department of Defence, Building Defence Capability, p. 15.
83 Department of Defence, Force 2030, p. 129.
85 Department of Defence, Force 2030, p. 129.
commercial benefits, this strategy seems inadequate to ensure Australia has the industrial capability required to sustain the future-force. That Australian firms have helped design and manufacture components for the Joint Strike Fighter Project does not guarantee that Australian defence industry will be able to sustain the aircraft throughout its life-of-type.\textsuperscript{86} There is in any case an unacknowledged tension between sustainment-oriented local industry involvement in capital equipment acquisition contracts and the kind of short-term performance contracting envisaged by the DMO. It is possible to pursue one policy or the other, but not both policies simultaneously.

The government should abandon short-term contracts when it comes to sustaining complex materiel systems. Instead, attention should focus on improving the management framework for through-life-support and the re-integration of acquisition and sustainment. Structured as long-term performance contracts, a framework such as this would provide industry with a strong incentive to invest in the skills, system modifications, and workplace processes necessary to cost-effectively sustain the ADF. Five years would be an appropriate minimum initial contract period, providing sufficient time for contractors to learn about cost-drivers and accurately measure performance, a recovery period if performance is marginal and the government wishes to give extra time to provide the opportunity for the contractor to improve, and, if necessary, time to implement a replacement contract. As a DMO analyst advised in 2010:

> A minimum initial contract period of five years is suggested because this represents the best balance between Defence's goal to reduce TCO, informed decision-making, resource utilisation, and tender costs.\textsuperscript{87}

Administrative costs are important. If the DMO issues contracts based on an initial term of two or three years it will have to commence a new request for tenders (RFT) only 12-18 months after having signed a contract. Given “the costs and personnel involved in a typical tendering activity” a DMO analyst assessed that the strategy “would seem to be an inappropriate use of resources”, burdening both the DMO and industry, both of whom ultimately rely on the government to recover costs.\textsuperscript{88} That same resource constraint suggests that award terms should be awarded for more than one year, as does the fact that the length of award terms has a direct impact on the timeframe within which contractors calculate the return on any upfront investments they might consider making in materiel systems, people, or workplace processes. All else being equal, longer award terms mean larger investments. The one-year award terms that have been heralded by the


\textsuperscript{87} Department of Defence, \textit{Next Generation Performance-Based Support Contracts}, p. 123.

\textsuperscript{88} Ibid., p. 123.
DMO will provide little incentive to invest. The DMO needs to reconsider the balance between the price and performance of the sustainment system and accept that savings are best reaped gradually, over the long-term.

The Rizzo Review suggests that concerns about the DMO’s vision for sustainment contracting is well grounded in recent experience. Rizzo reported that the DMO’s attempt to slice and dice sustainment contracts for maritime systems increased the resource burden within the DMO and industry, proved “inefficient when applied to frequently recurring maintenance work”, and “create[d] a short-term approach from Industry” that failed to “encourage investment”. Rizzo argued: “Ship maintenance is a long-term need and warrants long-term partnerships with Industry, ideally for the life of a ship”. As a general rule, Rizzo suggested that “ship maintenance contracts should be in place for five years, with a rolling extension option for successful delivery”. Longer contracts would not only encourage “Industry to build a knowledge-base of the ships”, it would also encourage investments in “workforce skills and infrastructure” and, due to incentives to innovate and greater certainty, “assist with lowering the cost of ownership”. Rizzo suggested that enhancing industrial productivity would enhance efficiency of the entire sustainment system, the implication being that the government does not need to aggressively claw back profits from industry to benefit from industry’s improved productivity. Rizzo also assessed that the model of long-term system-level performance contracting used by the DMO’s Aerospace Systems Division required much less ‘administrative effort’ than the model of short-term contracting used by their colleagues responsible for the Maritime Systems Division. Recalling that 20 percent of Smart Sustainment’s planned savings are intended to come from improving administration, this is significant.

Revising Smart Sustainment and the SRP

So far, Smart Sustainment has reaped a small crop of savings. But the “first two years of work have been about the ‘low-hanging fruit’”. Much more is required to secure the SRP’s savings target. As such, there will be a “sharp increase in the Smart Sustainment savings curve … in the next couple of years”. The DMO insists that there is no trade-off between the cost and performance of the defence sustainment system; that productivity reforms have the potential to increase the ADF’s preparedness while costing the government less. That may or may not be the case. It is impossible to determine the scope or nature of inefficiencies in the defence sustainment...
system on the basis of publicly available data,\textsuperscript{93} and it is unlikely Defence has any firm foundation for its hope that it can reap between $5 and $6 billion dollars worth of savings from that system between now and 2019.

Even if it does, there is no guarantee that ‘savings’ will actually represent ‘efficiency dividends’. As has been argued throughout this article, the current approach to Smart Sustainment is likely to promote scrimping and saving but unlikely to promote the enduring managerial innovations necessary to boost productivity.

Instead of presiding over a general belt tightening exercise, the architects of Smart Sustainment should use the SRP as an opportunity to fix the defence sustainment system. They should move away from input-led matrix management and the status quo model of prescriptive, regulatory contracting by adopting two principal reforms. First, the defence sustainment function should be improved by instituting an output-led management framework that empowers the Service Chiefs to manage capabilities and drive innovation throughout the sustainment system. Second, the Defence-Industry partnership should be improved by entering into strategic partnerships with Australian defence industry focused on the cost-effective performance of the sustainment system, not just inputs and price. Whereas short-term contracting promotes shirking and cost-shifting the main path to profit in a firm-priced long-term contracting regime leads to process innovations that reduce input costs for a fixed (or gradually diminishing) level of total revenue.

The DMO would therefore be well advised to place more emphasis on long-term performance contracts that align industry’s interests to the government’s. Part of this package of reforms might include a greater reliance on prime-contractors serving as PSI, the DMO playing a diminished yet nevertheless important role in the defence sustainment system focused on protecting the Service Chiefs from commercial and legal risk. Whatever happens to the DMO, it is essential for Defence to reintegrate acquisition and sustainment.

The SRP’s pre-history suggests that Defence should take seriously the risk of getting reform wrong.\textsuperscript{94} The Defence Reform Program (DRP) of the late-1990s was nothing if not ambitious, the aim being to generate a mix of

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\textsuperscript{93} Although Defence produces data about the cost of sustaining either fleet items and/or bundles of fleet items, it has failed to provide a data set that can be compared over time. Figures within the annual Defence Portfolio Budget Statement (DPBS), for example, are distorted by fluctuations related to: (i) one-off costs that vary year-on-year (e.g. major engineering work); (ii) the frequency of payments to contractors; (iii) year-on-year variation in the ADF’s rate of usage and accuracy of demand forecasting; (iv) year-on-year variation in the cost of sustainment activities contracted-out to industry and performed ‘organically’ by members of the ADF; (v) the effect of operational supplementations; (vi) foreign exchange and commodity price volatility. Moreover, figures are provided for bundles of fleet items rather than individual fleet items. There is no way of being certain what is included in each bundle year-on-year. Finally, Defence’s accounting practices have changed throughout the period for which data is available, meaning inter-temporal trend analysis is extraordinarily difficult.

recurrent and one-off savings worth approximately 10 percent of the defence budget without undermining the nation’s self-reliant operational capability. Defence’s poor budgeting and planning processes make it impossible to calculate precisely the DRP’s consequences but the program is remembered as short sighted and damaging. Rather than enhancing efficiency, the DRP cut the cost of defence by eroding the ADF’s support services and military career paths. Although it was designed to free up funds to reinvest in expanded operational capabilities, “no new battalions were raised, not a single additional vessel set to sea, and no extra aircraft took to the air”.

When Australia was caught off guard by events in East Timor, Defence was found lacking. The ADF depended on support from distant allies to conduct operations in Australia’s immediate operating environment, exposing self-reliance as lacking. The Lowy Institute’s Graeme Dobell argued, “the chant in the barnyard must be ‘DRP bad, SRP good’”, but the chant is not reassuring. The SRP suffers from the DRP’s principal flaws: it is being driven by Defence support agencies, not the Service Chiefs, and depends upon a model of contracting that promotes short-term cost-cutting and threatens to poison the Defence-Industry partnership. The lesson of the DRP is that the sustainment system is a strategic asset requiring careful management. It should not be treated as if were a piñata, there to be beaten until sufficient ‘savings’ have fallen to fund acquisitions.

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95 Ibid., p. 133.
Centre of Gravity Analysis in Joint Military Planning and Design: Implications and Recommendations for the Australian Defence Force

Michael Evans

This article provides an overview for Australian Defence Force (ADF) planners on the use of centre of gravity analysis for joint military planning in an era in which traditional operational art has been joined by notions of operational design. It examines the dominant role that the centre of gravity has played in the development of Western joint planning doctrine since the 1990s. The article then assesses the impact of the contemporary debate in the United States between traditionalists, complex systems advocates and integrationists concerning the centre of gravity’s status in the military art. The article goes on to analyse the influence of the integrationists in transforming the centre of gravity into an ‘element of design’ in recent American joint planning doctrine. The article considers the implications for the ADF of the evolving relationship in military theory between the centre of gravity, complex systems science and operational design. Finally, four recommendations are made on how the ADF might use a combination of centre of gravity analysis and operational design to improve its future joint planning doctrine.

The importance of centre of gravity analysis in Australian Defence Force (ADF) joint planning is captured in doctrine by the statement that: the essence of operational art lies in being able to produce the right combination of effects in time and space, and purpose to neutralise, weaken, defeat or destroy an enemy’s centre of gravity.1

By disrupting or dislocating the enemy’s centre of gravity, commanders ensure that all military effort contributes “to achieving the objective and end-state whether that is tactical, operational or strategic”.2 In ADF operational art, the four-step Joint Military Appreciation Process (JMAP) used by the ADF defines a centre of gravity as: A characteristic, capability or locality from which a military force, nation, alliance or other grouping derives its freedom of action, strength or will to fight. Note: A centre of gravity consists of a number of critical factors.3

The current Australian concept of a centre of gravity helps military planners define a relationship between ends (strategic objectives), ways (operational

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2 Ibid., pp. 5.0, 3-10.
3 Australian Defence Force Publication (ADFP) 5.0.1, Joint Military Appreciation Process (Canberra: Department of Defence, April 2009), p. 4-7.
concepts), *means* (available resources) and *risk* (likely cost) in military activity. The construct also facilitates a course of action analysis that culminates in the development of a concept of operations for use in the field.

Yet despite its doctrinal eminence, the centre of gravity, drawn from Carl von Clausewitz’s *On War*, remains controversial as a practical tool of operational planning and has become a subject of theoretical dispute amongst Australian military theorists. Many ADF officers would agree with the American analyst, John Saxman, who wrote in 1992, “the term center of gravity means something to everyone, but not the same to anyone”. Twenty years on and in given the rise of operational design in Western military doctrine, centre of gravity analysis has, if anything, become more, not less, controversial. Indeed, the evolution of design has served to exacerbate the central question about ‘COG analysis’: can a nineteenth century approach to warfare be applied beyond large-scale conventional military operations to embrace twenty-first century irregular conflicts with all their attendant civil-military complexities?

This article is an attempt to try to make the centre of gravity ‘clearer to everyone’. Its aim is to try to assist today’s ADF planners to grasp how the construct has evolved and, to explore its present and future significance against a background of operational design theories drawn from the world of complex systems science. Four areas are analysed. First, a snapshot of the centre of gravity concept as formulated by Carl von Clausewitz in his book, *On War* is presented, with consideration given to its subsequent interpretation by contemporary Western military theorists. Second, the way in which centre of gravity analysis as a methodology for operational planning has evolved—particularly in American military theory—is explored briefly. A focus on American military doctrine is important because much of the ADF’s baseline thinking on campaigning is drawn from the US armed forces. Third, the future of centre of gravity analysis is considered against the background of conflicts where there has been an intermingling of military and civil elements and a consequent broadening of operational art to encompass the methodology of operational design. Finally, the doctrinal implications for centre of gravity analysis for the ADF in an era of operational design are analysed. Several recommendations are made that may assist Australian military practitioners to use the construct more effectively for future joint campaign planning.

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Interpreting the Centre of Gravity

The concept of the centre of gravity is derived from Clausewitz’s notion in *On War* that, in every military encounter between adversaries, there emerges a unity and cohesion which if attacked causes a loss of overall balance. Clausewitz derived the idea of the centre of gravity from nineteenth century physics and he believed that it was the key factor in military planning. As the Prussian thinker writes “the first task in military planning for a war is to identify the enemy’s centers of gravity, and if possible, trace them back to a single one.”\(^6\) In Book Six of *On War*, Clausewitz notes:

> Where there is cohesion the analogy of a center of gravity can be applied. Thus, those forces will possess certain centers of gravity, which by their movement and direction govern the rest and those centres are found wherever the forces are most concentrated.\(^7\)

Clausewitz believed that the idea of a cohesion which, if dislocated or destroyed, unhinged a military force was an enduring feature of the history of war. He attempted to codify the phenomenon in the context of the complexity of armed conflict. In Book Eight, he observes:

> One must keep the dominant characteristics of both belligerents in mind. Out of these a certain center of gravity develops the hub of all power and movement on which everything depends. *This is the point against which all our energies should be directed.*\(^8\)

It is important to note that, although Clausewitz’s language may suggest a linear approach to war, the appearance is deceptive. As Alan Beyerchen demonstrated almost two decades ago, Clausewitz’s methodological approach in *On War* is not that of a Euclidean thinker but that of a non-linear theorist writing at the time of the German Romantic Counter-Enlightenment.\(^9\) Beyerchen notes, “*On War* is suffused with the understanding that every war is inherently a nonlinear phenomenon, the conduct of which changes its character in ways that cannot be analytically predicted.”\(^10\) For Clausewitz, military action is an unpredictable collision of living forces decisively shaped by politics—in which infinite variables merge and interact—so making war “more than a true chameleon”. Interactivity in war is pervasive and “circumstances vary so enormously in war, and are so indefinable, that a vast array of factors has to be appreciated—mostly in the light of probabilities alone.”\(^11\)

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\(^7\) Ibid., pp. 485-6.

\(^8\) Ibid., pp. 595-6. Emphasis added.


\(^10\) Ibid., pp. 61, 87.

In Beyerchen’s view, the centre of gravity masquerades as “the best-known and most popular of the linearities identified by Clausewitz”, when it is really a nonlinear phenomenon reflecting politico-military interaction. Thus, in On War, Clausewitz distinguishes between different types of centres of gravity. In Book Six of On War, he identifies what can be described as an ‘operational’ centre of gravity in the form of an enemy army. As he puts it, a centre of gravity in the field “is always found where the mass is concentrated most densely [the enemy army]. It presents the most effective target for a blow”. Yet, in Book Eight, Clausewitz broadens his analysis of war to suggest that, depending on the political character of the armed struggle one confronts, there may in fact be several centres of gravity that are likely to be strategically located. Such strategic centres may both transcend, and withstand, the trial of operational battle between contending armies. Thus, centres of gravity differ according to their political context:

In countries subject to domestic strife, the center of gravity is generally the capital; in small states supported by a more powerful one, it lies in the army of the stronger state. Among alliances it lies in the community of interest and in popular uprisings it is the personalities of the leaders and of public opinion. It is against these that our energies should be directed.

At no point in On War, does Clausewitz provide a prescriptive methodology for how best to determine centres of gravity in war. He believed that, in the conduct of war, it is impossible for operational variables to be isolated from strategic and political parameters. As Clausewitz puts it:

[we wish] to reiterate emphatically that here, as elsewhere, our definitions are aimed only at the centers of certain concepts; we neither wish [to] nor can give them sharp outlines.

The result is, as Beyerchen suggests, that “even this most Newtonian-sounding analogy of a ‘center of gravity’ becomes swamped in qualifications and caveats intended to convey the complexity of real war”.

A major consequence of Clausewitz’s preference for theoretical description over analytical prescription is that contemporary Western military theorists differ widely in the manner in which they interpret the centre of gravity. There are divisions as to whether the construct refers to linear or nonlinear warfare; whether it is concerned with capabilities or effects; and whether it can be used effectively in an age of information networks. As British scholar, Stuart Kinross, notes:

There is no consensus [in the Western profession of arms] as to whether the centre of gravity is a source of strength or a source of vulnerability; nor

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12 Beyerchen, ‘Clausewitz, Nonlinearity, and the Unpredictability of War’, p. 84.
13 Clausewitz, On War, pp. 485-6.
14 Ibid., pp. 595-6. Emphases added.
15 Ibid., p. 486.
16 Beyerchen, ‘Clausewitz, Nonlinearity, and the Unpredictability of War’, p. 84.
is there any agreement on whether the centre of gravity is singular or whether it resides in several sources; nor is there any realisation as to whether it is applicable across the spectrum of conflict or only applies to wars designed to overthrow the enemy completely.\textsuperscript{17}

A few examples illustrate this lack of consensus. Some military theorists view the centre of gravity as synonymous with a decisive point, “whose attack or capture would imperil or seriously weaken the enemy”.\textsuperscript{18} On this basis, the Israeli military theorist Shimon Naveh—an advocate of postmodern systems theory in warfare—dismisses much of On War as linear and obsolete, indicative only “of a destructive trend aimed toward the main body of the army”.\textsuperscript{19} Another interpretation, advanced by the American soldier-scholar, Antulio J. Echevarria, suggests that the concept of a centre of gravity is closer in meaning to ‘a focal point’ at which both physical and psychological forces unite and condition human behaviour in war. In twenty-first century terms, the centre of gravity resembles an ‘effects-based’ rather than a ‘capabilities-based’ approach to war. “In one sense”, wrote Echevarria in 2007,

Clausewitz’s effects-based center of gravity resembles an emerging concept called Effects-Based Operations (EBO) more than it does the current capabilities-based notion, with the exception that only one particular effect is sought—total collapse of the enemy.\textsuperscript{20}

Echevarria’s interpretation has, in turn, been contested by the Naval War College scholar, Milan Vego. He argues that the centre of gravity concept is relatively simple to grasp since it refers to the direction of friendly strength against enemy strength, both tangible and intangible, in a quest for superiority.\textsuperscript{21} Vego dismisses Echevarria’s notion of a ‘focal point’ as representative of a Jominian geometric approach to warfare that “equates center of gravity with a decisive point” implying an attack on enemy parts rather than the whole. Since centre of gravity analysis is an ‘objectives-based’ rather than an ‘effects-based’ approach to military activity it “must [always] be directly related to the objective to be accomplished”.\textsuperscript{22}

Vego is correct to highlight how an effects-based approach to war has often been translated into a myopic quest for geometrical exactitude through the agency of precision targeting. In 2008, the difficulty in translating Effects-
Based Operations (EBO) to the human complexities of conflict, led to the concept’s official demise in American joint doctrine. The then US Joint Forces Commander, General James N. Mattis, declared EBO to be contrary to the nature of war and abolished the very use of the term in the American joint planning community. Mattis appears to have been influenced in his decision by the experience of the Israeli Defence Force in employing effects-based operations and notions during the Second Lebanon War of 2006.\(^23\)

The contending views outlined by such theorists as Kinross, Naveh, Echevarria and Vego demonstrate the contentious character of the centre of gravity debate since the early 1990s. They also illustrate the supreme paradox of contemporary Western military doctrine: namely that the more the ‘COG construct’ is contested, the greater its importance seems to be in military planning. A fuller understanding of this paradoxical situation requires a brief excursion into the way in which Clausewitzian thought came to dominate Western military theory from the late Cold War onwards.

The Centre of Gravity Concept in Western Military Theory

The renaissance in Clausewitzian thought began in the United States in 1982 with the publication of Colonel Harry Summers' influential book, *On Strategy: A Critical Analysis of the Vietnam War*.\(^24\) By exploring America's defeat in Vietnam with reference to Clausewitz’s *On War*, Summers highlighted how, in seeing the Viet Cong as a separate enemy as opposed to an instrument of North Vietnam, “we [America] chose a center of gravity which did not exist”.\(^25\) In contrast, the North Vietnamese correctly selected the centre of gravity in the war as the alliance between the US and South Vietnam—particularly Clausewitz’s notion of “the community of interest [and] personalities of the leaders and public opinion”.\(^26\)

The impact of Summers' work, coinciding as it did with the dissemination of the new 1976 translation of *On War* by Michael Howard and Peter Paret, helped to spark a Clausewitzian revolution in American military theory. Indeed, interest in Clausewitz and the formal adoption of operational art by the US military proceeded in parallel fashion. This, in turn, led to the elevation of the centre of gravity as the main element in American, and later, Western English-speaking, operational planning. In the words of one American officer, from the mid-1980s onward, the idea of the centre of gravity was converted into “a giant lens for focusing military effort to achieve

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\(^25\) Ibid., p. 129.

\(^26\) Ibid., pp. 129-30, 132, 135-6.
decisive results in major operations".\textsuperscript{27} From the outset, the concept was 
defined in terms of capabilities as

that source of massed strength—physical or moral, or a source of 
leverage—whose serious degradation, dislocation, neutralization or 
destruction would have the most decisive impact on the enemy's or one's 
own ability to accomplish a given military objective.\textsuperscript{28}

Despite single service variations, it was this approach that underpinned the 
success of American joint forces during the First Gulf War of 1990-91 
particularly in executing an air-land strategy against Iraq. The Gulf conflict:

illustrated the importance of Clausewitz's centre of gravity at the strategic 
level, as modified by [John] Warden and his notion of concentric rings [aerial 
warfare against the layers of Iraq's command and control system], though it 
was also applied to the operational level through the plan to nullify 
Saddam's most effective military asset, the Republican Guard.\textsuperscript{29}

In the wake of the success of the First Gulf War, the centre of gravity 
construct was soon adopted by the US joint military community. In 1993, US 
JP 3-0, \textit{Doctrine for Joint Operations}, defined the centre of gravity as “that 
characteristic, capability or location from which alliances, nations and military 
forces derive their will to fight, their physical strength, or freedom of action”.\textsuperscript{30}

This was followed in 1996, by Marine Corps scholar Joseph Strange's 
development of centre of gravity analysis from the realm of abstract theory 
into that of practical methodology.\textsuperscript{31} The Strange Model (as it became 
known) was, and remains the most successful attempt to date, to offer an 
operational means of using the centre of gravity as a key element in military 
planning. Strange initially defined Clausewitzian centres of gravity as 
“primary sources of moral or physical strength, power and resistance” and, in 
later refinements as, “dynamic and powerful physical and moral agents of 
action and influence with certain qualities and capabilities that derive their 
benefit from a given location or terrain”.\textsuperscript{32}

Strange's methodology teaches military planners that any centre of gravity 
contains a nest of critical factors which empower an enemy. Such critical 
factors, in turn, comprise three subsets: \textit{critical capabilities}, \textit{critical 
requirements} and \textit{critical vulnerabilities}. Critical capabilities are those

\textsuperscript{27} Rudolph M. Janiczek, \textit{A Concept at the Crossroads: Rethinking the Center of Gravity} 
634.
\textsuperscript{29} Kinross, \textit{Clausewitz and America}, p. 156.
\textsuperscript{30} US Department of Defence, \textit{Doctrine for Joint Operations}, Joint Publication 3-0 (Washington 
\textsuperscript{31} Joseph Strange, \textit{Centers of Gravity and Critical Vulnerabilities: Building on the Clausewitzian 
Foundation So We Can All Speak the Same Language}, 2nd edition (Quantico, VA: USMC 
Association, 1996).
\textsuperscript{32} Ibid., pp. 27-42; Joseph L. Strange and Richard Iron, ‘Center of Gravity: What Clausewitz 
primary abilities or military instruments whose presence allows a centre of
gavity to function and to be identified. Critical requirements are those
essential conditions, resources and means that sustain effective critical
capabilities. Finally, critical vulnerabilities can be deduced from recognising
which of the enemy’s enemy requirements can be converted into
vulnerabilities by an attacking force using means of interdiction,
neutralisation or destruction.35

From the late 1990s onward, the Strange Model, and its lexicon came to
provide an acceptable methodology for joint campaign planning within both
English-speaking Western militaries such as Australia and the countries of
the North Atlantic Treaty Organisation (NATO). By employing Strange’s
methods, military planners can proceed by focusing their attention on those
critical capabilities that give the centre of gravity its source of power in terms
of leadership, will, armed might and resources. When dealing with an
enemy force, the latter’s centre of gravity—the requirements that nourish its
capabilities—can be identified and probed for weaknesses and these can be
converted by an attacker into vulnerabiliites.34 The swift success of the
conventional first-phases of the regime-change operations in Afghanistan
and Iraq between 2001 and 2003 seemed a continuing vindication of
Strange’s centre of gravity methodology and the model continues to
dominate both US and Western joint doctrine into the second decade of the
new millennium.

Nonetheless, although Strange’s methodology operationalised Clausewitz’s
centre of gravity, several of its key ideas have always been controversial.
Some critics believe Strange’s Model simply converts centres of gravity into
‘centres of critical capabilities’ and does so in a way that facilitates systems-
based attrition doctrine. In Rudolph M. Janiczek’s words, “this [Strange’s]
capabilities-based model amounts to an insightful but self-limiting form of
systems analysis for targeting.”35 Moreover, it is important to note that while
Strange’s original methodology has been retained for twenty-first century
doctrine, the actual structure surrounding US joint military planning has been
altered by the adoption of new concepts. The latter have been absorbed into
joint military planning regimes to deal with the globalised and interconnected
irregular challenges of twenty-first century warfare. Over the past decade,
several of these new concepts have been drawn from the world of complex
systems science pioneered by such figures as the Austrian biologist, Ludwig
von Bertalanffy.36

The rise of a systems-approach to military doctrine is governed by the logic
that twenty-first century enemies are networked actors and represent

35 Strange, Centres of Gravity and Critical Vulnerabilities, pp. 27-42.
34 Ibid.
35 Janiczek, A Concept at the Crossroads, p. 10.
36 Ludwig von Bertalanffy, General Systems Theory: Foundations, Development, Applications
complex adaptive systems (CAS) regulated by interaction or interdependence. Such systems are composed of nodes (tangible elements such as people, materiel and facilities) and links (intangible elements such as ideology, political behaviour and command relationships) that tend to be resistant to Strange’s centre of gravity methodology. A good example of the injection of the philosophy of systemic interaction into the world of military doctrine is the notion that contemporary enemies are composed of political, military, economic, social, informational and infrastructural (PMSEII) nodes and links—as outlined in the 2006, US Joint Chiefs of Staff publication, JP 5-0, *Joint Operation Planning*. In order to deal with a PMSEII enemy, modern warfare would require the application of all elements of national power—diplomatic, informational, military, economic (DIME elements). Accordingly, aspects of systems analysis—aimed at determining the full range of networked environmental conditions based on interacting nodes and links—were introduced in the 2006 version of JP 5-0 as an important additive to Strange’s capabilities-based centre of gravity methodology. As *Joint Operation Planning* states, “a center of gravity can be viewed as a set of characteristics, capabilities, and sources of power from which a system derives its moral or physical strength, freedom of action and will to act.”

Through a union between capability-based and systems-based approaches, a joint force can, in theory at least, harness new and old concepts to attack enemy nodes (using precision targeting) and cutting links (excising the behavioural or functional relationship between nodes) and increasing overall military effectiveness. However, reconciling the two approaches doctrinally has proved challenging. Indeed, the process has been described as a ‘shotgun marriage’ in which the merger of:

Clausewitz’s ‘center-of-gravity’ theory and the ‘enemy-as-a-system’ concept seeks to permit joint doctrine to leverage the best aspects of old and new theory but has yet to confront the consequent intellectual contradictions and ambiguities that arise.1

**APPROACHES TO TWENTY-FIRST CENTURY JOINT MILITARY PLANNING: TRADITIONALISTS, COMPLEX SYSTEMS ADVOCATES AND INTEGRATIONISTS**

Given the intractable character of irregular conflicts in Iraq and Afghanistan—the ‘intellectual contradictions and ambiguities’ arising from US attempts to harmonise a capabilities-approach with systems theory in joint military planning—have come to the foreground over the past decade. The joint planning process has become the subject of heated debate and

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controversy with three strands of military thinking emerging in the United States: the traditionalists; the complex systems advocates; and the integrationists. Not surprisingly, the arguments of these three strands have tended to revolve around the alleged relevance or irrelevance of the centre of gravity construct.

Traditionalists such as Milan Vego and Dale C. Eikmeier argue that the rise of systems theory in joint military doctrine risks confusing a rash of decisive points, nodes and links with identified centres of gravity based on clearly-stated objectives. For Vego, centre of gravity analysis remains applicable across the spectrum of warfare. It is a concentrated process in joint doctrine—and one that is not permanently fixed on simple destruction in the field—but which moves in a chameleon-like way as a ‘relational phenomenon’ covering such factors as political interests, leadership and public opinion. However, the caveat is, that when using ‘COG analysis’, all planning activity must be carefully focused and “directly related to the objective to be accomplished; otherwise, the entire concept has little, if any, utility.” The notion that complex systems science can act as a viable alternative to classical operational art is deeply flawed simply because:

as the Israeli failure in the Lebanon conflict of 2006 conclusively shows …

diffused warfare cannot replace the traditional focus on the enemy center of gravity.

For his part, Dale Eikmeier concentrates on redefining “how we want to use the COG concept in the 21st century”. He proposes that the centre of gravity is best seen as “the primary entity that possesses the inherent capability to achieve the objective”. Such a definition concentrates on ‘hard’ traditional objectives-based warfare. It seeks to confine the ‘soft’ intangibles of warfare (such as moral strength, socio-cultural issues and public opinion) to the realm of Strange’s critical requirements, so avoiding the vagaries of complex systems theory. Eikmeier believes that the clarity of classical “ends, ways, and means” assessment is superior to “a system’s networked forest of nodes and links”.

Other traditionalists have noted that, in contemporary irregular conflicts, a contest for the allegiance of the population automatically becomes Clausewitz’s ‘hub of all power and movement’. As two American writers, Peter Mansoor and Mark Ulrich, observed in 2007,

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44 Ibid., pp. 157-8.
[in COIN], all energies should be directed at gaining and maintaining control over the population … Without their support, neither the insurgent nor the counterinsurgent can win.\textsuperscript{45}

By linking intelligence preparation of an operational environment to a centre of gravity firmly located in the population, “an insurgent organisation’s various lines of operation [can] be exposed and made subject to interdiction by the counterinsurgent force”.\textsuperscript{46} Finally, some traditionalists argue that even globally networked insurgent movement such as Al Qaeda possesses both a strategic centre of gravity (often viewed as Islamism ideology) and an operational one (the organisation’s ability to interact with local insurgents and host populations).\textsuperscript{47}

In contrast to the traditionalists, complex systems advocates question the retention in military doctrine of what they see as linear-based centre of gravity analysis for fighting new, globally connected conflicts. For this strand of American operational thought, the idea of “Clausewitz in the Caliphate” is an oxymoron.\textsuperscript{48} From 2001 onward, the US Command and Staff College’s School of Advanced Military Studies (SAMS) became the leading centre advocating the adoption of complex systems science in general, and of operational design in particular, into US military planning doctrine. In 2002, James K. Greer, the then Director of SAMS, dismissed what he called the “Newtonian [linear] principles and physics of Clausewitzian thought” by writing:

Review of the planning of [current] campaigns and major operations reveals the difficulty of trying to apply current operational-design doctrine. Centers of gravity, lines of operations, and decisive points are difficult to discern in a complex mix of political, economic, and military peacekeeping efforts in the Balkans or when attacking a worldwide, weblike, self-organizing, transnational terrorist organization such as al-Qaeda.\textsuperscript{49}

Military theorists such as Huba Wass de Czege and Richard Swain followed Greer in recommending the adoption of complex systems science to improve the practice of contemporary operational art by a process of “learning in

\begin{itemize}
 \item \textsuperscript{45} Peter Mansoor and Mark S. Ulrich, ‘Linking Doctrine to a New COIN Center-of-Gravity Analysis’, \textit{Military Review}, vol. LXXXVII, no. 5 (September-October 2007), p. 46.
 \item \textsuperscript{46} Ibid., pp. 47-51.
\end{itemize}
De Czege, an advocate of systemic operational design derived from the writings of the Israeli military theorist, Shimon Naveh, wrote in 2008 that “conceptual aids derived from old, industrial age analogies are not up to the mental gymnastics demanded by 21st-century missions.” He called for the US military to adopt a postmodern ‘systemic cognitive methodology’ employing operational design principles. Such an approach was essential to deal effectively with PMSEII environments that defied the linear constructs of traditional operational art.

Richard Swain echoed De Czege’s views, arguing that the adoption of postmodern operational design required the use of collaborative, interdisciplinary design groups to cognitively ‘system frame’ and ‘problem formulate’ campaign dynamics. Swain argues that by using continuous ‘discourse and dialectics’ an operational design process can frame and visualise a conflict environment and so “constitutes the essential preamble to the practice of operational art”. Noting that the original ‘Key Concepts of Operational Design’ from the 1980s were based on a neo-Clausewitzian view of centre of gravity analysis, lines of operation and culmination, Swain concludes that “the practice of [postmodern] design, translating strategic guidance into tactical acts, is operational art for the 21st century.”

Between the traditionalists and the complex systems advocates stand the integrationists who favour continuing the evolutionary process of trying to convert the ‘shotgun marriage’ between capabilities and systems into a respectable union based on reconciling doctrinal contradictions and resolving methodological ambiguities. Perhaps the clearest statement of this position has come from two research professors at the US Army War College in Carlisle. In 2010, Charles D. Allen and Glenn K. Cunningham identified those aspects of a systems approach that they considered “most helpful for strategic thinking and campaign design”. In terms of their approach to systems thinking, the duo view operational and campaign design as one and the same and seek to avoid the use of impenetrable and confusing postmodern jargon. Moreover, they situate much of their argument in the context of traditional operational art in general, and of

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51 De Czege, ‘Systemic Operational Design’, p. 2.
52 Ibid., pp. 6-12.
Clausewitz, in particular. For example, they uphold the Prussian thinker as a strikingly modern non-linear military theorist and ‘systems thinker’ whose great virtue is the subordination of theory to the trial of practice. Allen and Cunningham go on to point out that a key aspect of both systems thinking and of campaign design is actually Clausewitz’s centre of gravity. Indeed, the selection of a centre of gravity serves to “solidify the commander’s understanding of the operational environment and provides insights about the system and where and how operations should be executed.”\(^{55}\) Allen and Cunningham also state:

Centers of gravity may be transitory, shift over time or between operational phases, and may be largely intangible at the strategic level. That is, a center of gravity is a design tool, not a magic talisman. There may be more than one, but for campaign design and planning purposes it would be wise to limit proliferation, as that dilutes both planning focus and operational concentration of effort.\(^{56}\)

The two Army War College professors believe that, for all the claims made about the novelty of systems design, centre of gravity analysis still remains a vital ‘mental model’ for use in understanding any operational environment. A ‘COG’ need not be identified with certitude, but it does need to serve as the essential intellectual construct upon which to predicate the main effort in analysis and planning. As Allen and Cunningham put it, “without the identification of a reasonable center of gravity as the foundation of campaign design, there is no place to enter the system and begin credible planning”.\(^{57}\)

Other examples of the integrationist approach include attempts to try to ‘broaden COG analysis’. Some theorists argue in favour of identifying ‘supplementary’ and ‘complementary’ civil-military centres of gravity and applying these with aspects of systems theory to develop ‘interagency operational art’.\(^{58}\) Although differing on points of detail and emphasis, these theorists seek the common aim of reconciling conflict destruction with post-conflict reconstruction by orchestrating unity of civil-military effort in intractable campaigns. As Christopher Schnaubelt observes, these approaches to campaigning seek to “bridge the gap between traditional ‘military’ and ‘civilian’ activities in counterinsurgency and stability operations”.\(^{59}\)

The traditionalist, complex systems and integrationist strands of thought in US military planning began to converge officially in joint doctrine in 2008.

\(^{55}\) Ibid., pp. 258-9.
\(^{56}\) Ibid., p. 259. Emphasis added.
\(^{57}\) Ibid., pp. 259-60. Emphasis added.
Traditional operational art was not overturned but joint doctrine did begin to take into account some of the thinking promoted by systems advocates—suitably tempered by the work of integrationists. As a result, centre of gravity analysis is now intimately connected not just to the verities of operational art, but also to new notions of operational design using systems science. It is to an analysis of this relationship that this article now turns.

**The Future of Centre of Gravity Analysis: Operational Design and the Question of Strategy**

In January 2008, the US Army’s Training and Doctrine Command (TRADOC) issued a *Commander’s Appreciation and Campaign Design* (CACD) aimed at introducing a ‘cognitive process’ to guide design efforts in planning. This Army publication was an important milestone in that it articulated to the US joint doctrine community the notion that “war amongst the people” was a systemic challenge containing “dynamics more complex than those of traditional nation state wars”. The CACD introduced a four-stage conceptual framework based on complexity, problem structure, operational art and campaigning to deal with what it called “warfare [that] represents a clash between societies or cultures [in which] most operational problems are both structurally and interactively complex”. The CACD recommended the use of “the discourse of operational design” as a new problem-solving tool to reinforce traditional operational art in dealing with the ‘ill-structured’ or ‘wicked problems’ of irregular warfare. The overall aim was to provide commanders with ‘learning in action’ design tools that improve the capacity of operational art to interrogate and translate strategy for tactical execution in the field.

The influence of the 2008 CACD can clearly be seen in the US Joint Forces Command (JFCOM) approach to operational design between 2009 and 2011. The JFCOM Commander, General James N. Mattis’ views on the subject were outlined in late 2009 in an important memorandum entitled, *Vision for a Joint Approach to Operational Design*. Although Mattis possessed a reputation as both a military traditionalist and a doctrinal pragmatist—wasting no time in dispensing with EBO when he found it to be dysfunctional—he embraced the potential of operational design as a way of achieving more effective planning. Recognising that ‘commander’s design’ and ‘command intent’ possessed clear historical roots and had been part of joint doctrine since the early 1990s, Mattis sought to develop a more coherent approach to the subject. Accordingly, he described operational design as “the conception and construction of the framework that underpins...”

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61 Ibid., p. 4.
62 Ibid., pp. 7, 8-16, 26.
a campaign or major operation plan and its subsequent execution”. The JFCOM Commander was careful to qualify his meaning by stating that “design does not replace planning, but planning is incomplete without design”. Finally, and perhaps with the failure of EBO in mind, he went on to caution against any attempt to doctrinally separate the practice of design from that of planning:

The balance between the two [design and planning] varies from operation to operation as well as within each operation. Operational design must help the commander provide enough structure to an ill-structured problem so that planning can lead to effective action toward strategic objectives. Executed correctly, the two processes always are complementary, overlapping, synergistic, and continuous.

In late 2011, operational design based on selected aspects of complex systems science formally entered US joint doctrine as a means for improving campaign planning in general, and for reconstituting the role of the centre of gravity in particular. The two publication vehicles for imparting design methodology into the US joint community are the August 2011 JP 5-0, Joint Operation Planning and its unofficial companion volume, the October 2011 Joint Staff Planner’s Handbook for Operational Design.

From the perspective of centre of gravity analysis, the most significant innovation in the new edition of JP 5-0 is the integration of operational design with operational art and the US military’s joint operation planning process (JOPP) as “complementary elements of the overall planning process”. In a real sense, the 2011 Joint Operation Planning reflects an integrationist approach toward joint military planning and avoids the more abstract language of systemic operational design promoted by purists such as Naveh and De Czege. The aim of JP 5-0 is to promote conceptual unity of thought and action to refine ‘ends-ways-means-risk’ issues and so build a stronger bridge to higher strategy. Accordingly, operational design is defined as:

a process of iterative understanding and problem framing that supports commanders and staffs in their application of operational art with tools and a methodology to conceive of and construct viable approaches to operations and campaigns.

By combining operational design methods with the verities of operational art and the rigour of JOPP techniques, a commander is given greater flexibility

64 Ibid., pp. 7-8.
65 US Department of Defense, Joint Operation Planning, Joint Publication 5-0 (Washington DC: Joint Chiefs of Staff, August 2011); Joint Staff, (J-7), Planner’s Handbook for Operational Design: Version 1.0 (Suffolk, VA: Joint and Coalition Warfighting Staff, October 2011)
67 Ibid., p. III-1, III-6-III-18, IV-2.
to execute or revise his campaign course of action according to real-world strategic requirements. The aim is to learn in action, to be abreast of strategy and to "reconcile the reality of time-oriented deployment of forces and sustainment with the event-driven phasing of operations." As JP 5-0 puts it, the integration of design and planning keeps the commander's "[operational-strategic] aperture as wide as possible [and allows him] to always question the mission's continuing relevance and suitability". 

Under the newly integrated 'operational approach' framework of JP 5-0, the centre of gravity—along with other operational art concepts such as lines of operation and decisive points—is transformed into 'an element of design'. However, despite this apparently novel role, the 'COG construct' continues to retain most of its traditional character and is defined as "a source of power that provides moral or physical strength, freedom of action, or will to act. An objective is always linked to a COG". In transferring the centre of gravity construct from detailed mission analysis to the initial 'systems framing' realm of conceptual design activity, JP 5-0 tries to further integrate the capabilities and systems approaches to planning. The premise seems to be that, the earlier a centre, or centres of gravity, can be determined through design learning, the more focused the resulting operational process will become. Conceptual design activity to determine the interactive dynamics of an operational environment is seen as facilitating a more precise approach toward the overlapping task of mission analysis. Finally, design 'systems framing' can also be used to inform the detailed campaign planning required for course of action development. 

Through the use of operational design as an adaptive problem-solving methodology, campaign planners can be made fully aware of the conceptual relationship that exists between a centre of gravity and the roles played by lines of operation (primarily for military effort), lines of effort (primarily for civil-military effort), decisive points (keys to attacking or protecting centres of gravity) and links and nodes (for understanding PMSEII). Through the agency of operational design the full range of potential interactions between all of these elements can be measured and weighed from the very outset of campaign development. Ultimately, then, despite the injection of systems-based operational design into US joint military planning, capabilities-based centre of gravity analysis endures and continues to span the joint planning spectrum. JP 5-0 describes the centre of gravity construct as "a linchpin in the planning effort" for use at the strategic and operational levels of both regular warfare (direct military confrontation) and irregular warfare (a contest for the population). "Understanding the relationship between COGs", 

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68 Ibid., pp. III-6, 18-39, IV-2.  
69 Ibid., p. IV-2.  
70 Ibid., p. IV-2.  
71 Ibid., pp. xvi, III-22-23.  
73 Ibid.  
74 Ibid., pp. III-22-23.
states *Joint Operation Planning*, “not only permits but compels greater precision in thought and expression in operational design”.74

**Centre of Gravity, Operational Design and Military Planning: Some Implications and Recommendations for the ADF**

As noted earlier, centre of gravity analysis is central to the theory and practice of Australian operational art. However, some ADF military theorists view the way it is conceived as overly-rigid and unrelated to new doctrinal trends evident in the United States, Australia’s indispensable military ally. For example, Trent Scott’s review of Australian operational art argues strongly that ADF’s particular use of the centre of gravity in the JMAP is invalidated by “the reductive [Clausewitzian linear] hypothesis that underlies the practical application of the concept”. He believes the ADF must update its approach to the COG construct with “intellectual capital … invested into incorporating an appropriate operational design methodology into the JMAP and our planning doctrine”.75 Scott’s work serves to highlight the superficial treatment of operational design in doctrine publications such as the ADF’s 2008 edition of ADDP 3.0, *Operations*. In the latter publication, there is no credible methodology linking the science of operational design to operational art in order to underpin the conceptual framework of campaign planning.76

C. R. Smith echoes many of Scott’s views. In particular, he criticises the Australian JMAP as an overly-formulaic process which “has become a form of [planning] dogma; its prescriptions slavishly followed”.77 Smith suggests that the ADF’s approach to joint military planning is hamstrung by the conflation of strategy, policy and operations with campaign imperatives. The result is an intellectual confusion between all of these elements—a confusion that may make campaign planning using centre of gravity analysis as a design element difficult, if not impossible, to accomplish. Like Scott, Smith sees the solution to this confusion as lying in the adoption of rigorous and creative systemic design teams using ‘divergent thinking’ to revitalise the practice of Australian operational art.78

In recent official planning documents, the ADF’s approach toward centre of gravity analysis tends to support Smith’s assertion that there is a conflation of operations, policy and strategy with a corresponding lack of clarity in campaign planning. For example, both the ADF’s 2007 *Joint Operations for the 21st Century* and the 2008 ADDP 3.0, *Operations*, espouse a national effects-based approach (EBA) philosophy towards warfare. In the 2007

74 Ibid., p. III-24.
75 Scott, *The Lost Operational Art*, pp. 44-5, 122.
76 See Australian Defence Doctrine Publication (ADPP 3.0), *Operations (Provisional)*, (Canberra: Australian Defence Headquarters, February 2008), chap. 4.
78 Ibid., pp. 58-87.
A more intellectually refined example of Australian warfighting doctrine is the Army’s 2009 document, *Adaptive Campaigning: Army’s Future Land Operating Concept* (AC-FLOC). This publication is the closest the ADF has to a document that integrates capability-based and systems approaches to contemporary conflicts based on the influence of operational design. The AC-FLOC reflects a clear tension between what the document calls “traditional notions of operational art” and the introduction of a systems framework. For example, while accepting that “the Centre of Gravity construct remains valid” in dealing with identified critical vulnerabilities, the document proceeds to elevate lines of operation and decisive points to meet what it describes as strategic-level “accepted enduring conditions”. The latter construct is unrefined and seems to be an attempt to replace centres of gravity with a series of interacting lines of operation. The latter are seen as providing a “philosophical conceptual framework” that allow the employment of decisive points to achieve strategic objectives. The difficulty with AC-FLOC is that, in seeking integration between old and new operational concepts, it underrates the verities of operational art and lacks a supporting design framework. As a result, description is stronger than analysis and a practical synthesis proves elusive.

Given the weaknesses of joint doctrine, the rigidity of the JMAP and some of the conceptual contradictions inherent in AC-FLOC, the ADF will have to develop a more rigorous approach to campaign planning in the future. Any new Australian approach will almost certainly have to confront the ongoing task of integrating traditional capabilities and systems-thinking through the agency of design methodologies. In seeking to reinvigorate joint planning


doctrine, the ADF needs to consider four areas—all of which have implications for the central task of using centre of gravity analysis. The first area is the need for Australian military planners to understand that employing operational design does not invalidate centre of gravity analysis in campaigning—particularly in an age of vulnerable information networks. Second, the requirement for an integrationist approach to design and planning must be understood by all Australian military practitioners. Third, the importance of ensuring that strategy guides design and planning needs to be ensured by the ADF. Finally, Australian planners must accept that design and planning will always be conditioned by command-led priorities.

RECOMMENDATION ONE:
The ADF must appreciate that the Centre of Gravity construct will continue to remain vital in Cyber Security and Networked Operations.

Centre of gravity analysis will remain vital to any future form of Australian design and planning simply because the construct is likely to become increasingly linked to issues of cyber security and information operations. For example, in 2009, the Defence White Paper announced the creation of a Cyber Security Operations Centre in the Defence Signals Directorate to serve Australian national security goals. A feature of Future Joint Operating Concept 2030 is a focus on cyber warfare to generate strategic effects and to maintain an Australian capability edge. Indeed, FJOC 2030 recommends that joint force commanders “incorporate the cyberspace domain in their planning, including the cognitive and physical effects desired”.

Like the population in irregular warfare, the information and communications (ICT) architecture of advanced militaries and their parent societies represent simultaneous ‘friendly and enemy COGs’. Since information networks lack firepower and manoeuvre capabilities, as centres of gravity they will become increasingly vulnerable to disabling attack at both the strategic and operational levels of a national security infrastructure. As Milan Vego explains:

This evolution in the [cyber] characteristics of the strategic center of gravity will create quite an anomalous situation, in which one’s center of gravity will be the single greatest source of both critical strength and critical weakness, simultaneously. Thus, protection of one’s strategic center of gravity will be a much more difficult task than it is today. At the same time, computer networks … do not have the ability to physically destroy or neutralize the enemy’s strategic center of gravity.

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84 Future Joint Operating Concept 2030, p. 18, 24.
85 Vego, Joint Operational Warfare, p. XIV-12.
For the above reasons, centre of gravity analysis for the cyber domain—suitably situated in the continuum of operational design, operational art and the joint planning process—needs to remain fundamental in any revised ADF JMAP as well as in future versions of ADDP 5.0, Joint Planning.

**RECOMMENDATION TWO:**

The ADF must understand that in devising any integrationist approach to Design and Planning, the Centre of Gravity construct will be of fundamental importance.

In the future, if the ADF is to undertake the task of integrating capabilities and systems-based approaches to planning effectively it must think in integrationist terms along the lines described earlier by Allen and Cunningham. In particular, the ADF needs to avoid any tendency to try to segregate design functions from planning processes. The attraction of separate J5-led design teams is that they may seem to avoid “paralysis through hyper-analysis” and so facilitate “learning in action” during the operational process.⁸⁶ Yet in the real world of warfare, any separation between design and planning is simply a prescription for lack of operational coherence. A notorious example of separating systems design from planning realities in the field occurred in October 2009 in the form of the ‘Afghan COIN System Dynamics’ slide graph briefed by a SAMS graduate to General Stanley McChrystal at International Security Assistance Force (ISAF) Headquarters in Kabul. On observing this systems model—which resembled a plate of spaghetti—McChrystal quipped, “when we understand that slide, we’ll have won the war.”⁸⁷ In all efforts to improve joint planning doctrine, ADF writers need to think in terms of ensuring that objectives in the form of centre of gravity analysis span integrated design and planning in operational activity along the lines recommended by such writers as Allen and Cunningham. At all costs, the lexicon that is adopted for an integrated operational approach must avoid Foucaultian-style postmodern gibberish such as ‘ontological ecology’, ‘problematisation’ and ‘metacognition’. This was the unintelligible ‘language of discourse’ that repelled Israeli brigade commanders and impaired their military performance during the Second Lebanon War in 2006.⁸⁸ If it is to be effective, operational design must be simple and comprehensible to those military practitioners who have the responsibility for devising campaigns. In

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short, any form of Australian operational design must avoid becoming as one American writer has put it, “EBO repackaged”. 89

**RECOMMENDATION THREE:**
The ADF must consider strategic-level Centre of Gravity Analysis and issues of jurisdiction when introducing Operational Design.

The ADF must recognise that, as one military practitioner has noted, “design with its foundation squarely derived from the concept of ill-structured problems, is most appropriately applied in the strategic context”. 90 Indeed, as Harry S. Yarger points out, designing strategy “is systemic thinking at its most complex level”. Yet in recent conflicts, the classic equation of *ends* (objectives), *ways* (concepts) and *means* (resources) and *risk* (assessing potential mission cost) in strategy formulation has lacked clarity and purpose. 91

This reality, combined with the criticism made by C. R. Smith of the ADF’s tendency to conflate strategy, policy and operations, means that an acceptance of jurisdictional guidelines in future Australian joint planning doctrine becomes important. ADF planners need to be aware that, ideally, there must be some kind of higher-level ‘strategic COG analysis’ that provides boundaries for operational design and directs activity. In an era in which media cycles drive decision-making and the political language is one of surges and ‘end-dates’ rather than of decisive battle and ‘end-states’, it is relatively easy for military officers to succumb to the temptation to use operational design to give meaning to what Hew Strachan aptly calls “the lost meaning of strategy”. 92 A useful example how operational design can become a kind of ‘ersatz COG strategy’ in contemporary warfare comes from former British operational practitioner, Steven Jermy, who writes:

Visiting the various Regional Headquarters of NATO’s International Security Assistance Force (ISAF) in mid-2007, I asked the military planners in the Regional Command (West) and Regional Command (East) HQs the same question: “What strategy are you using for guidance to help you shape your operational designs?” The response … was essentially the same. Paraphrased: “There’s nothing, Sir. We’re just getting on with it. We’re just

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doing what we think is best” ... There was no sense in these regional HQs of a strategy to guide the campaign.\textsuperscript{93}

In other words, in the West, strategy-making is running well behind operational innovations in design and planning. In this respect, Milan Vego has a case when he criticises current design theory as:

\begin{quote}

an artificial bridge between policy and strategy on the one hand and operational warfare on the other. It [operational design] includes many elements normally in the domain of policy and strategy.\textsuperscript{94}
\end{quote}

In developing a coherent operational approach that seeks to integrate centre of gravity analysis as a ‘design element’ with operational art and planning, the ADF needs to be fully aware that no amount of military skill in these areas can compensate for flawed higher strategy. Neither design nor operational art can ever be autonomous activities and the activities of ‘problem reframing’ and ‘learning in action’ will always be the servants of strategy.\textsuperscript{95}

\textbf{RECOMMENDATION FOUR:}

\begin{quote}
The ADF must understand that effective Operational Design ultimately depends on a Commander’s Judgment.
\end{quote}

Operational design is a tool in a campaign work box. It is not and, can never be, a panacea for weak operational art based on a historical ignorance of the character of war. As we have seen, in recent US joint doctrine, centre of gravity analysis has become ‘an element of design’. The aim is to ensure that, as soon as possible, planners are aware of both the conceptual relationships and interactions between centre of gravity identification, lines of operation, lines of effort, decisive points and PMSEII nodes and links.

However, the ADF needs to appreciate that operational design is ultimately a tool to assist a commander to understand the operational environment, frame its problems and develop a flexible approach to planning. The way in which design is employed will always be conditioned by command priorities. Ultimately, it is the commander who, in developing his operational approach, will decide where the ‘discourse’ of design framing ‘as a journey’ ends and mission analysis and detailed planning begins ‘as a destination’. Operational design will be ineffective without active involvement by higher commanders and a wise commander will, as Allen and Cunningham suggest, use centre of gravity analysis as his means of ‘entering the operational design system’. It also needs to be appreciated by ADF planners that, problems in using...
operational design can be exacerbated by the related dilemma that commanders may often confront a lack of cross-disciplinary expertise on their staff—particularly in areas such as sociology, anthropology and languages. As the 2011 US Planner’s Handbook for Operational Design notes,

understanding the current system [the current operational environment] and visualizing a transition to the desired system [future operational environment] requires expertise typically not available in the joint force, particularly for complex operational environments and ill-defined problems.\(^{96}\)

In short, operational design in campaign planning is not some sort of postmodern panacea for dealing with the uncomfortable realities of irregular and hybrid conflict. As a parallel activity, it is an approach that a future ADF commander may use at his discretion to improve his operational capacity and to change his concentration of effort. In some cases, a commander may find that the boundaries between cognitive design and mission analysis may simply be unclear. Command decision, not complex systems science, will decide where, and when, operational design is employed as a form of ‘mission analysis on steroids’—and whether its problem framing methodology can be considered as constantly relevant for detailed campaign planning.

**Conclusion**

In his book, *The German Genius*, the British writer, Peter Watson describes Clausewitz’s concept of the centre of gravity as the most significant method yet devised for confirming that strategy “require[s] some link between military activity and political objectives”.\(^{97}\) The aim of this article has been to try to make the evolution and application of that link ‘clearer to everyone’ and to do so against the background of the rise of operational design and complex systems science in the Western profession of arms. Although some design advocates view Clausewitz as a relic of a past era, it is striking how his theory of war applies to both non-linearity and to contemporary systems thinking. In the ongoing 21\(^{st}\) century doctrinal debate between traditionalists, systems advocates and integrationists, the concept of the centre of gravity emerges as a theoretical constant. To be sure, the applied meaning of Clausewitz’s construct continues to be disputed by adherents of these three strands of thought. Yet, like the great boulder in the mythical labour of Sisyphus the centre of gravity is never abandoned; whether it is being metaphorically rolled up or down the hill in arguments for or against, it still tends to form the essential basis for intellectual discussion in planning for the art of war.

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It is significant that centre of gravity analysis has defied its many critics with its chameleon-like capacity to adapt and reinvent itself—not least in its transition from traditional mission planning into an ‘element of design’ in a systems framework—in recent US joint planning doctrine. As a result, the construct remains vital in any attempt to create an integrated operational approach using design, operational art and planning. The ‘COG’, then, is one of what General Mattis calls “the time-honored principles [that] are tested in the crucible of battle and that are well grounded in the theory and nature of war”.98 Thus, even in an era of cyber networks, operational design and complex systems science, Clausewitz’s centre of gravity endures—supported by some, contested by others—but a verity nonetheless. Ultimately, the concept is more about practice than theory and embodies the Prussian master’s wisest of all teachings that “everything in war is simple, but the simplest thing is difficult” for:

Action in war is like movement in a resistant element. Just as the simplest and most natural of movements, walking, cannot easily be performed in water, so in war it is difficult for normal efforts to achieve even modest results … Theorists who have never swum … are impractical … they teach only what is common knowledge: how to walk.99

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Notes for Contributors

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