THE BRENTHURST FOUNDATION

Discussion Paper 2011/07

An Option of Difficulties?*

A 21st Century South African Defence Review



Strengthening Africa's economic performance

Contents

Executive Summary	3
The 1998 Review	6
Threats and Needs	9
People and Equipment	12
Shaping the South African Response	15
Conclusion: The Need for More than New Toys	21
Endnotes	24

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Executive Summary

The South African government is set to conduct a back-room Defence Review with a fourperson committee reporting to the Minister with their recommendations by November 2011. Such a Defence Review should, however, take place within the context of the establishment of a national security policy framework. It must also be consultative and public.

As a result of the previous Defence White Paper and Review conducted in 1996 and 1998 respectively, South Africa purchased a wide array of high-tech equipment. Ongoing experience with the SANDF illustrates however that good equipment and good quality people need good training to turn it all into genuine capability. Without meeting this formula, expensive kit is not worth having. Modest but well trained forces offer a much greater (and more influential) capability than high-tech equipment that is useless because insufficient people can be trained to use it.

Contemporary and future drivers of African conflict include high rates of urbanisation and population growth, GDP per capita and inequality, demographics, food production yields and access to nutrition and land, and climate change. Equally as important is understanding why these stresses might translate into organised violence. This Paper argues that the greatest danger today is in building two societies within one nation, where the opportunities for people are constrained at birth by class, ethnicity, religion, geography, or race – and where societies are consequently divided between those in secure employment and prospering and those in 'vulnerable' employment, simply scraping by.

The 15 years that have elapsed since the original drafting of the 1998 Defence Review have been a period of major change internationally and also for South Africa and Africa. Adapting to those changes and re-designing for the future means reorienting the defence force as an African peace-builder, enabler *primus inter pares*. Meeting future interlocking challenges of state-collapse, radicalisation, population growth, social inequality and hopelessness, requires a different posture – and skill-set – than the armed forces possess today. It is one less about high-tech equipment than troop densities and logistics, knowledge rather than higher-altitude intelligence and information, and small-steps rather than strategic diplomatic sweeps. Overall, ensuring the right force composition and posture for South Africa is fundamentally about putting people, not technology, first.

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

> President Dwight D. Eisenhower Farewell Address, 17 January 1961

RAG-TAG REBELS ZIG-ZAGGING armed pick-ups across the Libyan desert. Egyptian soldiers stone-facedly monitoring demonstrations on Tahrir Square from their tanks. A 150 000-strong guerrilla force forming the rump of the new state of South Sudan. The gumbooted infantry of the Rwanda Defence Force, their rudimentary equipment belying one of the continent's most effective and disciplined fighting forces. A militia forcing a president from office in the Ivory Coast; or keeping the state at bay in the Niger Delta. An army, only in name, preying on its people in the Congo, or standing between Zimbabwe's electorate and democracy.

Africa's militaries have been put to many tasks over the past 50 years, mostly with negative consequences for the continent's populations. These militaries have taken many shapes and forms, the trend however going from embryonic paramilitary police-units at independence to attempts to build up conventional capabilities and back once more to paramilitary functions. Against this backdrop, what sort of armed forces and equipment is South Africa likely to need – and be able to operate for the next generation? What utility can a high-tech, capital-intensive force have on the continent today – and can equipment be a short-cut to professionalism and fighting effectiveness?

South Africa's 1994 transition to democracy meant, among other changes, adopting a new approach to defence with the creation of the South African National Defence Force (SANDF). This process culminated in the 1996 White Paper and the Defence Review two years later. The White Paper's broad ambit made allowance

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What utility can a high-tech, capital-intensive force have on the continent today?

^{*} The title of this Paper is borrowed from Major General James Wolfe's (the 'conqueror of Canada', 1727-1759) remark, 'war is an option of difficulties'.

There is thus a need for an honest and transparent debate over what is required and what funds are available for addressing the requirements for greater detail through the Review to include 'comprehensive long-range planning on such matters as doctrine, posture, force design, force levels, logistic support, armaments, equipment, human resources and funding' and represented the completion of the policy development process.¹

The 1998 Defence Review was a widely-debated process, with the government actually sponsoring public consultative discussions countrywide. Fast forward to 2011, however, and the government is undertaking a Defence Review virtually in secret, with a four-person committee comprising unusual political bedfellows due to report to the minister with a document by November 2011.²

If the past is anything to go by, this document will endeavour to establish the direction of South African defence and foreign policy for the next 15 years. It will also outline equipment requirements, and all that this involves, as the opening quote from President Eisenhower illustrates. The relative absence of public or parliamentary input and consultation into what essentially is a back-room drafting process is of concern not only given its influence on the budget but also as it pertains to security capabilities and foreign policy. This reflects a deeper South African disquiet: First, a disregard for consultative and parliamentary processes; vested interests in procurement decisions; and the weakened and politically emasculated nature of civil society, at least compared to the heady 1990s. Second, that a Defence Review could be conducted in the absence of a national security policy framework, notwithstanding the deluge of ongoing 'visioning' papers from the 'South African Army Vision 2020' to the 'Defence Strategy'. Such a framework document is necessary since there is an ongoing tension between the primary function of the SANDF (territorial integrity) and its priority tasks (peace support operations, border security, assistance to the police and other government departments). Yet there have been insufficient funds to carry out both.

There is thus a need for an honest and transparent debate over what is required (the strategic environment matched with government expectations) and what funds are available. In this, there is an imperative to align these two drivers, because a force design will inevitably be budget-driven. Any Defence Review worthy of the name should examine three key issues on which this Paper makes comment:

- Strategic environment: What do threats look like over the next 20 years?
- **Capabilities**: Current and projected?
- Affordability: What can we afford in financial and manpower terms, not just to buy, but to operate?

The Constitution and the 1996 White Paper 'Defence in a Democracy' are quite unambiguous in defining the 'primary' function of the SANDF At the outset, however, a reflection of the 1998 Paper provides a useful point of departure, along with some observations from the United Kingdom's recently-completed review process. While some might dismiss the UK's findings – and its identification of security drivers – as 'too Eurocentric', the nature of its recent out-of-area operations are not that dissimilar to likely South African operational contexts.

The 1998 Review

The 1996 White Paper reflected the prevailing assumption that the new democratic era would ensure a period of peace, prosperity and stability. This would allow the defence budget to be significantly reduced to the benefit of social spending – that butter would be bought instead of guns.

How would this be achieved? The SANDF, comprising the old South African Defence Force (SADF) and the Bantustan armies of Transkei, Venda, Ciskei and Bophuthatswana along with the African National Congress' and Pan-Africanist Congress' military wings, would be downsized (from 105 000 uniformed personnel to 75 000): a small regular force (core force) with a large reserve force for *in extremis* mobilisation. The army would also withdraw from internal operations (border control and co-operation with the police); helping to release forces to the envisaged but relatively small contribution to African peace missions.



The Old and the New. SAAF Cheetah and Hawks in flight.³

There's no point in buying a luxury SUV if you can't afford to fill the tank or replace the tyres The Constitution and the 1996 White Paper 'Defence in a Democracy' are quite unambiguous in defining the 'primary' function of the SANDF as that of defending and protecting the state, its territorial integrity and its people. Generally interpreted to mean defence against an external military threat, this resulted in concentrating spending on conventional capabilities: hence the four corvettes (which are really functionally frigates in all but name, and Second World War light-cruisers in size) each equipped with a Lynx helicopter, 26 Gripen fourth-generation fighters, of which 9 are two-seaters (this order was reduced from 28 in order to finance a flight simulator), three Type-209 submarines, 30 Agusta A109 light-helicopters as the replacement for the Alouettes, and 24 Hawk fast jet-trainers. At the time of the deal's conclusion in 1999, the stated cost was US\$4.8 billion (or R30 billion in 1999 Rands). By the government's own admission, the cost has risen to R47.8 billion in 2011, but is estimated by private sources to be much higher if financing charges are included. Excluding the maintenance contracts, the overall cost is estimated to have risen to R70 billion for equipment by 2011 which the armed forces has until now struggled to find the skills and running costs to operate.⁴

Such capital outlay has been at the expense of providing for peace support operations, for which a combination of ground manoeuvrability, operational support over long distances, maritime and air transport, and a healthy dose of political will are required. The latter has been there in dollops, for which South Africa is to be applauded. Hence peacekeeping occupies the centre stage of SANDF operations – with recent missions in Sudan, Burundi and the DRC – and will probably continue to do so for the foreseeable future.

Yet the 1998 Defence Review clearly states that participation in international peace support missions is a secondary function for the SANDF, and its design should be influenced mainly by its primary role, one which has to be reviewed constantly to keep it aligned with the perceived threat.

Moreover, the requirement to participate in peace support missions; be capable of dealing with a range of small-scale; short-term contingencies; co-operate with the police; assist other state departments; provide help during natural emergencies; etc. is more easily said than executed. At the heart of any force design is the necessity of deciding which league you want to play in – and then fund at that level. Put differently, there's no point in buying a luxury SUV if you can't afford to fill the tank or replace the tyres.

South Africa's Order of Battle

Overall: 62 082 uniformed; 12 382 civilian; 15 071 reserves

Army: 37 141 (plus 6 452 civilians)

HQ-2 Brigade Tanks: 1 battalion (33 Olifant MBTs, 133 in store)
Armed Reconnaissance: 1 battalion (82 Rooikat wheeled armoured cars, 94 in store)
Mechanised Infantry: 2 battalions (534 Ratel APCs, 666 in store)
Special Forces: 2 battalions (second under-strength)
Motorised Infantry: 10 battalions (370 Casspir and 440 Mamba APCs)
Artillery: 1 battalion (2 G6 self-propelled 155mm, 41 in store; 75 G2 140mm in store; 6 G5 155mm, 66 in store; 21 127mm Valkiri Rocket-Launchers; 81mm and 120mm mortars; Milan anti-tank missiles)
Air Defence: 1 battalion (MANPATS and 23mm and 35mm guns)

Navy: 6 244 (plus 2 000 civilians)

Fleet HQ at Simon's Town; bases at Port Elizabeth and Durban
Submarines: 3 Type 209 Heroine class
Frigates: Four Valour-class A200, equipped with Lynx helicopters.
Other: 2 Warrior-class strike-craft; 2 River-class mine warfare vessels; 6 landing-craft; one support vessel (Drakensberg), one hydrographic vessel.

Air Force: 10 653 (plus 2 144 civilians)

squadron Gripen-forming
 VIP Squadron (Presidential 737 BB, plus Citation and Falcon aircraft)
 Squadrons transport (C130s, C212, Cessna '85; CN235)
 Squadron attack-helicopter (Rooivalk)
 Squadron Lead in Fighter Training (Hawk)
 Mixed Squadrons Transport Helicopters (Oryx/Puma, BK117 and A109)
 Training School (including PC7, PC12, King Air, Cessna Caravan)

Medical Services: 8 044 (plus 1 786 civilians)

Source: The Military Balance, 2011 (IISS)

Threats and Needs

In this regard, General Sir David Richards, the Chief of the Defence Staff of the United Kingdom, which underwent a hotly debated Strategic Defence and Security Review (SDSR) in 2010, has argued that '[to] ensure the fundamental safety of our nation, we must establish what we *need* before we establish what we can *afford*. If, as is likely, there is a gap, we can then have this recognised as a risk which the government is – or is not – prepared to carry.'⁵

What is the threat – and what then are the needs? Since the end of the Cold War until 2005, the number of armed conflicts dropped by 40 per cent. The number of major conflicts (involving battle-deaths of more than 1 000 people) dropped even more significantly, by 80 per cent. Wars between countries fell to just 5 per cent of all conflicts. Most conflict now takes place in the poorest countries of the world, and as income rises and democracy becomes more widespread, the risk of conflict declines. Eighty per cent of inter-state conflicts are initiated by autocracies; and 80 per cent are won by democracies.⁶

By the end of the 1990s, more people were being killed in sub-Saharan Africa than the rest of the world combined, though more recently the number of conflicts in Africa has been steadily falling.⁷ By 2010, only four (the insurgencies in Sudan, Somalia, DRC and Uganda) of 15 major conflicts world-wide (US 'War on Terror', Peru, Afghanistan, India/Kashmir, Myanmar/Karen insurgency, Pakistan, Philippines, Iraq, Israel/Palestine and Turkey/'Kurdistan') were in Africa.⁸ In this, indirect deaths, including disease and malnutrition, are estimated to account for more than 90 per cent of all war-related fatalities.

Correspondingly, the period since 1946 is the longest for hundreds of years of there being no war between the major powers. But Colin Gray may well be right in contending that the basics have not changed much, and that war will still be with us, driven by interests, personalities and politics today as ever before.⁹ The threat of conventional wars still remains, most notably in Asia, not least given the resource needs and politico-developmental ambitions of China, Japan and India. Russia, too, may be considered a resurgent power, maintaining a sophisticated defence industry to this end.

For all of the high-profile spending on aircraft carriers (by China) and development of fifth-generation fighters (by Russia in the form of the Sukhoi T-50), if the last 20 years are anything to go by, most conflict is likely to be so-called 'small' wars, between ill-defined often non-state opponents, fighting for complex sets of causes ranging from greed to deeply entrenched grievances, fought at a lowintensity, employing mostly small arms. These are most likely to be fought not over territory but over ideas and symbols, among rather than between peoples.¹⁰ For the

If the last 20 years are anything to go by, most conflict is likely to be so-called 'small' wars The first order responsibility of any defence force remains territorial integrity last 20 years, with the notable exception of Iraq (1991 and 2003) and possibly the Ethiopian–Eritrean border conflict, wars involving conventionally-equipped massive armies have virtually become a thing of the past.

The first order responsibility of any defence force remains, as is noted above, territorial integrity. But the reality is that no country can deter others desperate or ambitious enough to transgress such sovereign limits through military means alone. Assiduous diplomacy and development, which governments have perfected the rhetoric of, but less frequently the practice of, is a critical part of this defence. In the process, there is a need to guard against those who encourage a high-tech, capital- and military-intensive response to defence needs: For reasons of self-interest (the military-industrial complex, the beneficiaries of offsets or signature bonuses, the employment benefits for key political constituencies) or dogma.

Warfare today has largely gone back to being a task of the light-infantry and modern cavalry, where numbers (and getting them there) are the important aspect, along with critical enablers of intelligence, surveillance and local knowledge. Even state-on-state war is likely to look like something that the West is trying to do in Afghanistan rather than some hot version of the Cold War. Belligerent states, unless one makes the employment of mass manoeuvre an asymmetric attraction to them by doing away with the 'traditional' combat power available to alliances, will likely use proxies, guerrillas, terrorists, cyber-warfare *et al* to achieve their aims rather than mass air, sea and land manoeuvre.

The British armed forces' Development, Concepts and Doctrine Centre (DCDC) recognises the primacy of the modern insurgency in mapping global strategic trends to 2040. A combination of exclusion from the benefits of globalisation, climate change, political fragility, and a burgeoning population will create, the DCDC has highlighted, a volatile mix in parts of the developing world which will constitute around 85 per cent of the global population in 2040 (Europe will shrink to just 6 per cent), and especially in Africa. Whereas the global population will increase from 6.9 billion (2010) to almost 8.8 billion (2040), creating all sorts of social and resource pressures, in some areas these trends will be exacerbated by shifting demographics. For example, the median age in sub-Saharan Africa will be approximately 24, whereas in Europe it will be around 47. Such stresses are compounded by competition for resources driven by both external requirements (for minerals and hydro-carbons) and internal demand (for food, water, and energy). Nearly 70 per cent of the world's population will, by 2040, be located in areas of environmental stress, notably in sub-Saharan Africa, and South, Central and East Asia. Nearly 30 per cent of the world will face water scarcity in these areas.

The greatest danger today is in building two societies within one nation Resource scarcity, the DCDC observes,¹¹ will stunt development, and lead to poverty, instability, and conflict. Coupled with effects of climate change, there will be humanitarian crises and increasingly uncontrollable migration, along with rapid rates of urbanisation. By 2025 for example, Africa will be a largely urban continent, up from just 15 per cent in 1950. Critically, perceptions of inequality and associated grievances could, the DCDC notes, result in increased instability and societal tension. Of the 20 most unequal countries measured in terms of the Global Peace Index's Gini figures (Equatorial Guinea, Angola, Afghanistan, Gabon, Republic of Congo, Democratic Republic of Congo, Chad, Sudan, Belize, Lebanon, Iraq, Syria, Myanmar, Qatar, Bahrain, Libya, Bhutan, Oman, Saudi Arabia, and North Korea),¹² seven are in sub-Saharan Africa. Afghanistan is the third most unequal, just ahead of Angola and Equatorial Guinea. It's not poverty *per se* that is apparently problematic, but when dearth lives cheek by jowl with excess.

The graph below indicates the percentage of people in vulnerable employment by region:¹³



Much debate should thus centre on contemporary and future drivers of conflict – rates of urbanisation and population growth, GDP per capita, demographics, food production yields and access to nutrition and land, and climate change – and the reasons – notably in the nature of political systems and leadership – why

Vulnerable employment by region

The choice of weapons is determined by availability and practicality these stresses might translate into organised violence. The greatest danger today is in building two societies within one nation, where the opportunities for people are constrained at birth by class, ethnicity, religion, geography, or race – and where societies are consequently divided between those in secure employment and prospering and those in 'vulnerable' employment, simply scraping by. Fuelled by visions, not only perceptions, of inequality and injustice by today's chattering and twittering handsets and plasma-screen media world, political management is at a premium and often not up to the task.

Indeed, the 2040 DCDC report concludes that the incidence of armed conflict is likely to increase, underpinned by an unstable transition to a multi-polar world, widespread global inequality heightening grievances, population increases, resource scarcity and the adverse consequences of climate change. While future conflict will remain unpredictable and violent, its character will continue to evolve and present new challenges. In an environment where the differences between state, state-sponsored and non-state adversaries *will* blur, while technology will remain important, people, the report argues, are likely to provide the asymmetric edge when responding to both expected and unexpected challenges.

People and Equipment

Robust peace support operations, South Africa's most likely operational commitment, look very similar to the counter-insurgency tasks faced in Afghanistan and elsewhere. As Afghanistan illustrates, and wars from the Congo to Liberia confirm, the modern insurgency is fought among the people even if it may be supported without. The choice of weapons is determined by availability and practicality: ammonium nitrate bombs, AK-47s, RPGs, mobile phones and the internet. As General Richards has put it,¹⁴

Defence must respond to the new strategic, and indeed economic, environment by ensuring much more ruthlessly that our armed forces are appropriate and relevant to the context in which they will operate rather than the one they might have expected to fight in previous eras. Too much emphasis is still placed on what Secretary Gates calls 'exquisite' and hugely expensive equipment. Our defence establishment has not yet fully adapted to the security realities of the post-Cold War world and this complex and dangerous new century. ... Operating among, understanding and effectively influencing people requires mass – numbers – whether this is 'boots on the ground', riverine and high speed littoral warships, or UAVs, transport aircraft and helicopters. They have to be able to fight but this is no longer sufficient.

While it undoubtedly has a kinetic dimension, dealing with the modern insurgency is a profoundly political and developmental task. It is as much about governance as guns, and providing jobs and economic security as military activity. It is also critically about getting the 'Information Operations' dimension of the campaign correct, one that the Taliban have wittingly or not played to maximum advantage through the global media.

In charting actions across this virtual battle-space, John Mackinlay has observed that 'the news footage and the endless refrain of occupation ... has turned individual members of migrant communities in Europe from spectators to activists.'¹⁵ 'Engaging and animating' populations in ways that are not easily militarily countered is a strategy of the insurgent in asymmetric warfare, one that demands the management of external expectations, guarding against and preparing for insurgent 'spectaculars' (so-called 'propaganda of the deed'), and sensitively both carrying out and portraying counter-insurgent actions. It is about much more than attack and defence, of guns and rockets, but about the aspirations, fears and faces of people.

Afghanistan is landlocked, hot, and high – features common, as noted above, to many potential global trouble-spots. Britain is not alone in struggling to adapt its equipment for this environment. The most effective troop-carrying helicopters remain the 1950s-designed Chinook CH-47 and the Sea King; intra-theatre troop-carrying missions are dominated by the turbo-prop C130 Hercules and C160 Transall, which first flew in 1954 and 1963 respectively; while the A10 Warthog is among the most formidable ground-attack assets, comparatively agricultural by modern jet standards. (The ongoing use of the C160 in such hot and high conditions illustrates once more the travesty of the early-1990s' decision to scrap the nine-strong SAAF fleet, pictured below.) In the absence of extensive and expensive upgrades, the more modern Lynx and Merlin helicopters have proven limited in their carrying capacity. While the CH-47 can handle as many as 40 fully-equipped troops in the summer heat of Kandahar and Helmand, the Merlin will manage few more than half a dozen and the Lynx Mk8 scarcely two. The extremes of Afghanistan are common to many African operating environments.

The helicopter answer lies in more heavy lift, which is already happening in Afghanistan, with more CH-47s arriving, less medium lift (it adds no additional value), and more light utility providing also a recce capability. For powerful transports, land and air, capable of moving large numbers of people and supplies reliably and quickly, and then sustaining them are the name of the counter-insurgency

It is about much more than attack and defence, of guns and rockets, but about the aspirations, fears and faces of people game. But this is still not a choice, at least not now. As one RAF officer put it in discussion in Kandahar, '[to] do Afghanistan, we need ten more C-17s now – and the A400M later.' This requirement has been recognised, too, by South Africa in its original (now cancelled) order for eight A400Ms.



The economic argument seldom factors in the longterm running-costs of these items, and nor does it consider the (alternative) opportunity costs of such spending

The Remnants of the SAAF's Transall Fleet, Waterfkloof AFB, 2009.¹⁶

During this insurgent ascendancy, Britain's big-ticket purchases of defence equipment have included the Trident submarine nuclear deterrent (between £15–20 billion in acquisition costs, but potentially as much as £76 billion¹⁷ in maintenance costs over the 30 year lifecycle), the Typhoon jet-interceptor (£20+ billion) and the two Queen Elizabeth Class (CVF) 65 000-tonne aircraft-carriers (£5 billion,¹⁸excluding the cost of the 40 Joint Strike Fighter aircraft needed for one at a cost of £90 million each), and a light-tank replacement (£9 billion).

The argument for most of these items was, until the UK's 2010 SDSR, either that they were too expensive to stop or that they would keep strategic industries alive – hence the 15 000 jobs that are supposedly linked to the 160-aircraft Typhoon project¹⁹ or the 10 000 for the carriers – or that deterrence against a range of threats is required today as much as yesterday. The economic argument seldom, however, factors in the long-term running-costs of these items, and nor does it consider the (alternative) opportunity costs of such spending, in Britain as in South Africa. It also seldom factors in the cost to the services in a finite budgetary world.

If they are to be successful, militaries will have to work more closely with their civilian developmental counterparts That Trident could suck up more than 5 per cent of the annual British defence budget in running costs is not only a cost to the exchequer but to the other services and will shape the nature of British external engagement for a generation or more.²⁰ While the British defence budget increased from £32.6 billion in 2007/08 to £36.9 billion in 2010/11, by 2011, there was a budget shortfall estimated to be somewhere between £6 and £36 billion over the next decade.²¹ The outcome of the 2010 SDSR was a reduction in all three arms of the service by 19 000, and 8 per cent shrinkage in expenditure over four years. More importantly, this restricts overseas deployments to a maximum of 30 000 troops, which compares to the 45 000 involved in the invasion of Iraq, for example.

Questions about the use of taxpayers' revenues aside, more important are the capabilities (or not) that such spending affords. It leaves armed forces badly placed to play a part in dealing with future wars in the places that they are most likely to occur – especially across the African continent.

Indeed, the main argument against high-tech weaponry (of which Typhoon and Trident are examples, as are Gripen and the Type 209s in an African context) is not their exorbitant price tag but their inappropriateness in meeting the modern threat, which is largely low-tech both at home and abroad. This requires wide-awake intelligence services, where experts can understand the roots of conflict and the intersecting network of personalities, ideology and tribe that often underpin them.

If they are to be successful, militaries will have to work more closely with their civilian developmental counterparts and gain more knowledge about the 'softer side' of war. Modern war is to be fought as much in the fourth estate and in the area of development, in remedying the conditions that gave rise to insecurity in the first instance, as on the battlefield. As Mackinlay contends, 'rather than confronting the dissident narrative head-on by challenging it in the same networks and news propagation systems ... future operations will have to engage disaffection on the ground at a very local level. The emerging theme would be that local beats global.'²² This emphasises a range of actions beyond military and stability operations to ensuring longer-term development needs in undergirding a modern society. While the military has, perhaps understandably, been focused on the sort of short-term, vectored actions that can provide stability, this may be detrimental to longer-term development needs.

Shaping the South African Response

Here there are three main aspects to consider: Threat, Affordability, and Gaps.

Spending on weaponry will be little more than a speed-bump for great-powers with sinister intentions

Threat

As the above suggests, events including 9/11 and 7/7 have, *inter alia*, highlighted the threat of international terrorism. Moreover, Iraq and Afghanistan illustrate how insurgencies have changed from the 1980s, from the two dimensional (national/ colonial government *versus* the insurgent) to three dimensional – where the insurgent faces a national government but with a complex range of multinational governmental and non-governmental actors involved in the security and development effort. And the globalised media savvy, networked nature of today's insurgencies contrasts with their bottom-up cellular organisational structure. The former allows it unparalleled, and virtually untrammelled, access to sources of succour, recruits and advertising, while its operational structure provides security and assists in it replicating itself and its actions without active leadership oversight and guidance. These lessons are sure to be learnt by insurgents worldwide. Thus domestic insurgencies have to be confronted internationally and, in many dimensions, with unprecedented demands for accurate intelligence, interoperability and flexibility, and cultural sensitivity and understanding.

This does not mean that development is the only answer to insurgencies, but it is a key part of the answer. Nor is intelligence a substitute for hard-edged resources, though knowledge of the opponent and, especially, their motives is critical and often sorely lacking. Some killing, to be blunt, will still be necessary to manage insurgencies.

No 'rocket-science' is required to sketch out a nightmare scenario for Africa, where a resource-driven scramble (over mineral resources, hydro-carbons and/or water) contrasts with weak governments and some new states stressing under burgeoning population numbers, inadequate governance capacity, creating a 'frontier of instability' at which the military should guard. But what can high-tech weaponry do to instil better governance conditions or prevent that from heading south-wards or even curbing corrosion from within? Moreover, no volume of equipment expenditure could adequately or, for that matter, even partly address the causes of such insecurities or their consequences. Spending on weaponry will be little more than a speed-bump for great-powers with sinister intentions; that is, even if they could be operated to their full parameters.

The security environment facing Africa has little to do with the world of main battle tanks and spending on conventional military equipment than potable water tanks with community policing. But there is less likelihood of Robert Mugabe invading his neighbours than of his forces running out of petrol. There is a much greater possibility of terrorist actions in African countries protesting international alliances or the presence of foreign tourists, though that is a secondary target given, Which enjoys priority, national expectations or the budget? frankly, it is Africa. As is intimated above, the threat to Africa is in weak and failing or failed states, where economies cannot accommodate and provide for the needs, let alone aspirations, of their people; where leaders care less and are out of touch with youthful media savvy and wired populations; and where the prospects of employment and social inclusion are severely if not fatally constrained by a combination of a lack of skills, poor avenues to the global economy, and weak agriculture and worsening climatic conditions. How to prevent these circumstances from turning violent, mitigating their worst effects, and managing the transition to different, more prosperous and inclusive societies is a core challenge for Africa. And as the North African and Middle Eastern spring has graphically shown, conventional militaries can serve to exacerbate not resolve their underlying problems.

Affordability

A stock-take of current SANDF capabilities is illustrative of the problems of having equipment wish-lists and limited ongoing financial capacity and political will.

With SANDF, expectations continue to rise, but the budget is not keeping pace. What is at issue here is not the costs of peace mission deployments, which are (mostly) covered by additional Treasury funding, but the cost of day-to-day main-tenance, of main equipment, infrastructure, training, administration, and force preparation. The concept of 'needs-driven but cost-constrained' must be given greater clarity. Which enjoys priority, national expectations or the budget? It must be clearly understood what capacity can be provided at that level of funding.

Take the South African Air Force. The SAAF is in a considerably better position operationally than it was at the end of 2009 (when it had only 12 helicopters of 39+ flying, and one of nine C130s), though it is still severely hamstrung by a lack of funding, and a shortage of pilots and maintenance personnel. This progress is partly down to a better working relationship between the SAAF and Denel and the maintenance improvements that go with that, plus the retention of key, skilled personnel under the 'technical dispensation'.

By the end of 2010, there were three C130s flying, at times simultaneously on African deployments. Some 13 (of 39) Oryxes were operational, and during the 2010 World Cup, up to 33 helicopters were flying daily. There remain problems of too few commanders and a relative surfeit of co-pilots. For the 26 Hawks, 30 pilots are trained; while half (15) of the Gripen order had been delivered, though this programme is under considerable pressure financially. In 2008, nearly 300 technicians left the service. During 2009 and 2010 this figure went down to 95. A similar decrease was recorded for pilots. This may reflect diminished opportunities outside, but also likely, improved pay and service conditions. In addition to training

The constitution puts peace support operations as secondary to territorial integrity requirement, SAAF clearly faces a major challenge in replacing its strategic airlift. Whether it goes the 'lease, hire, share' (possibly with Angola) or 'buy' route depends on many factors, not least finance. Until then, spares and upgrade assistance for the C130 fleet is important. In terms of maritime surveillance the Dakotas are well past their useful life, not least given their absence of electronic capabilities. Whether they are replaced by patrol or surveillance capability is moot, though the most likely candidates for this are the King Air 350 or Casa 235.

In the South African Navy, by mid-2011, one of the three submarines was at sea, serving as a platform for the common course, the other available, but on restricted duties due to a shortage of personnel. Two of the four frigates were operational, one undergoing diesel replacement, the other in a programmed maintenance cycle. There remain ongoing shortages of maintenance and other technical personnel, though again this haemorrhage has been arrested by the technical dispensation. A related challenge, however, is in the gap created between those left (usually above 50 years of age) and the influx of trainees (usually below 25).

Finally, the SA Army, as the largest component (37 000 of the 62 000 uniformed personnel), is the most challenged service by the impact of an ageing force and limits on the numbers of trained and available personnel.

It was not envisaged in the mid-1990s that South Africa would, by the end of the first decade of the 21st century, be deploying more than 3 000 soldiers in Africa – with the possibility that this could increase. Deployments of this magnitude are not easily sustained, particularly if the minimum international norms of a 1-in-4 rotation are applied: to sustain 3 000 troops you require another 12 000 in the cycle, without allowance for unscheduled interventions, unplanned emergency assistance operations, sickness, injuries, etc. Moreover, the distances currently undertaken in peacekeeping operations makes new demands on a force design that was influenced by a concept of mobile operations with relatively short lines of support, and geared to defending the territorial integrity of the country.

Critically, although the constitution puts peace support operations as secondary to territorial integrity, the large numbers of soldiers deployed indicates presumably that Pretoria is confident enough about territorial integrity to devote significant resources to this secondary task. This, then, should in turn raise a series of questions about defence posture.

To an extent, however, the age issue has been remedied by the Military Skills Development programme, which has brought in 18 000 young men and women into the army since 2007, by 2011 totalling 7 000 annually. This, however, reflects a wider problem concerning the division between Personnel, Operational and Capital expenditure. Ideally, this should be at 40-30-30. During the peak of the The excellence achieved by certain arms of the services, such as Special Forces, bodes well for the future arms acquisition process, this was in the margins of 60-10-30. Circa 2011, with most of the equipment paid for, it is around 72-19-09 for the Army; 55-31-14 for the Air Force; and 53-34-13 for SAN. Presuming the projected defence budget of R39.7 billion for 2013/14 figure,²³ this split is ideally thus: R15.9 billion (personnel) and R11.9 billion (each capital and operational expenses). The capital amount would have to include financing costs. Currently, however, the defence force is battling to come out, according to Defence Minister Lindiwe Sisulu on the current (approximate) 65-25-10 split, which equates (on a budget of R34.6 billion for 2011/12 to R22.5bn (personnel), R8.65bn (operational) and R3.5bn (capital). Yet Minister Sisulu has said her department had asked for an additional budget of R5 billion for 2011, with which, she said, 'we will then just scrape by'. It is unclear where the savings to afford new capital expenditure and, indeed, to operate the current equipment will come from.

Indeed, the ability of the SANDF to sustain operations in this budgetary environment is laudable and a credit to its leadership. The excellence achieved by certain arms of the services, such as Special Forces, bodes well for the future, not least given the important role to be played by such units within a likely operational environment.

However, if it has been South Africa's intention to purchase high-tech equipment to vie for a place at the top table, then it has not only to afford the initial purchase but, as noted earlier, the running costs. Good equipment and good quality people need good training to turn it all into genuine capability. Without meeting this formula, the kit is not worth having. Modest but well trained forces offer a much greater (and more influential) capability than high-tech, highly expensive equipment that is useless because insufficient people can be trained to use it.

Gaps

The 1998 Defence Review might have left South Africa technology rich, as intimated above, but the SANDF remains people and finance-poor. It also acquired items of equipment (notably fourth-generation fighters, and the submarines) which are unsuited to South Africa's threat environment, which is less about territorial incursions by external state forces than crime, unemployment and failing governance within and without the region leading to migration and a myriad of social impacts and pressures.

Serious gaps remain in South Africa's security arsenal for coastal patrol vessels (a process of procurement for which is already underway), replenishment/ supply vessels capable of carrying several helicopters for peacekeeping and humanitarian relief missions, and medium-range transports. But there is no reason why Why then did South Africa acquire the frigates if the OPV is much cheaper, can handle the seas, and is thus better suited to South Africa's needs and tasks? these items should, given the history of use and abuse of the current inventory, be procured. For example, the frigates were supposedly procured with the patrol capability in mind as a secondary task – it seems contradictory (not to say shock-ingly wasteful) that more equipment is to be obtained precisely for this role in the form of *Project Biro*, the Navy's requirement for offshore and inshore patrol vessels.

Under Project Biro three offshore patrol vessels (OPV) and six (60m) inshore patrol vessels (IPV) are to be acquired to replace the remaining strike craft and mine hunters. The six IPVs consist of three more than approved in 2007 and will likely carry the four *Project Mapantsula* mine countermeasure (MCM) systems required in terms of the 2030 blueprint, as and when required. The replacement hydro-graphic survey vessel (*Project Hotel*) may be included if the final specification is close enough to that of the OPV to allow it.²⁴



SAN Meko A-200 Valour-class²⁵ frigate.²⁶

When the frigates were procured for the Navy, the size of the vessel was deemed critical for the sea conditions and the ability of the vessel to carry a helicopter. Hence their length of 121m, beam of over 16m and tonnage of 3 700. The same criteria apply to the OPV/IPVs: The OPV must be around 80–85m waterline length, and the IPV, 53–55m. Herein lies the rub. The estimated acquisition cost is R400 million per OPV (R1.2 billion for three), versus R9.69bn for the four Valour-class frigates. The annualised life cycle cost for the OPVs – presuming 30 years of service – is R20 million, against R85 million for the frigates.²⁷ Why then, it has to be asked, did South Africa acquire the frigates if the OPV is much cheaper, can handle the seas, and is thus better suited to South Africa's needs and tasks?

It is unclear whether the new vessels will be built in South Africa (which the Navy would like and which would make sense in terms of job-creation, encouraging technological developments, and the prospects of selling the finished product The relationship with international actors is a potential force multiplier in Africa to others in the region) or overseas (which has its own often less noble attractions). Again, if the OPVs/IPVs are to be constructed in South Africa, why were the frigates not built locally?

Furthermore, there are important items on the agenda which do not require new equipment, but rather better systems and funding to *operationalise* existing materiel. For example, the African Standby Force, one of the building blocks of the Common African Defence and Security Policy, is in turn based on five regional standby brigades. National commitments to the regional brigades will require planning, rotation of forces, multinational exercises and development of common doctrine. All of this will take time, cost money and affect force designs. The concept of a 'non-threatening posture' as a component of a policy supporting the continental approach of 'confidence-building defence' will also influence, in particular, the equipment inventory. Does the present inventory contain equipment appropriate to the threat faced, the need for joint operations with other African powers, and also sufficient for deterrence?

The relationship with international actors is another potential force multiplier in Africa. However, this has been hamstrung, to an extent, by the South African government's schizophrenic relationship with the United States: perceived as a major trade and investment partner on the one hand, and with paranoia about imperial intentions on the other, viz. the hullabaloo over the creation of AFRICOM (the US Africa Command). How this relationship – and others with European states (the same Europeans, mind you, that have been engaged in removing the king of kings, Muammar Ghadaffi, from his throne in Tripoli) and those further afield including India, Russia, Brazil and China – is ordered and managed will have much greater (positive or negative) impact for South Africans (as opposed to a few companies and middle-men) than will new equipment purchases. Finally, as is highlighted above, there is a medium-term gap in air transport. Not only might this be best filled by international collaboration and equipment sharing, but another alternative to consider, as others elsewhere are doing, is the contracted supply of airframe hours from private sector operators using, if possible, military pilots.

Conclusion: The Need for More than New Toys

Starting with a blank sheet of paper, a 21st century SANDF could be many things it is not today: Younger; computer literate; designed for peacekeeping and peacebuilding missions with easily transportable assets and the means to get them there by air and sea; capable of monitoring a border against illegal people movements and contraband by digital means; a leader in unmanned aerial vehicles in guarding The deal was supposed to create (in 1999 Rands) R110 billion in investments and about 65 000 direct and indirect jobs Africa's oceans against pollution; overfishing and piracy; and in the vanguard of Africa's contribution to global peace and security.

But the usefulness of such a 'new' defence force would, however, depend on there being a foreign policy in place which would permit their deployment, not least in the protection of civilian lives in Africa. Also, efficiency in the armed forces would have to be matched by that of other government departments; put differently, that guarding South Africa's borders were not let down by corruption in customs and the police.

In contrast, the extent to which the 1998 Defence Review and the subsequent arms package got things wrong is highlighted by a number of events:

- the events of 9/11 and the global shift in focus on countering insurgencies and peace-building;
- the requirement for 154 new main battle-tanks for the army in the original 1998 post-review arms request (which would have been the archetypal white Olifant);
- the challenge of operating not only new but even the extant technology and equipment, in terms of people and running costs;
- and the highly debatable benefit to the country of the offset deals which accompanied the 1999 arms package.

The deal was supposed to create (in 1999 Rands) R110 billion in investments and about 65 000 direct and indirect jobs. Although these deals are notoriously difficult to monitor and their effects equally so, the largest arms supplier, BAE-Saab, has a total offset obligation of US\$8.7bn by 2011.28 Included in this, BAE Systems incurred a R4.25bn obligation to support South Africa's defence and aerospace industry. By March 2007, the firm reported that it had delivered just over R4bn, comprising R789 million of 'technology transfers' and R17 million of direct investments which had generated a reported (by the company) nearly R3.2bn of local and export sales for local defence companies.²⁹ Yet reports commissioned by the Government's Department of Trade and Industry, responsible for managing the indirect offset programme, have highlighted performance irregularities.³⁰ Ironically the alleged bribes and consultancy fees paid to key political and connected individuals have served to overshadow an investigation into this area. This includes the R100 million reportedly paid to Fana Hlongwane, a special adviser to the late Defence Minister Joe Modise, and a key member, along with Shamim (Chippy) Shaik, of the Ministry of Defence's acquisition work group on deliberated preferred suppliers.³¹

If the most likely opponents to South Africa have fewer resources, conflict is unlikely, too, to be high-end, or forceon-force in the traditional sense Such venality does little to encourage a sceptical public that Defence Reviews are anything more than another opportunity for further snaffling at the feeding trough, or an orgasmic moment for militarists. Those, for example, scraping by in the Eastern Cape on a combination of child support grants, remittances or state pensions and the protein of bones, at R5 a bag, will take some convincing of the benefits to them of fighters and corvettes at R350m and R2.5bn each respectively. However the calculations are done, the absence of sufficient financing to run what South Africa already possesses should only add to their overall scepticism. And the absence of sufficient political will to act against the gravest of human rights violators in Africa, even in southern Africa, begs the question: What is all this capacity for if not the responsibility to protect individual liberties?

Of course, as is argued above, capability goes beyond just equipment and selfenrichment, no matter how egregious that might be. That, indeed, is the one key lesson of the 1990s' processes when equipment was obtained that cannot be utilised absent skills and running costs. But the level of skills requirement goes beyond, too, technical capacities, to a deeper understanding of the post-conflict environment, especially to the role of economic reconstruction as the key (and most misunderstood and neglected) area of such operations. Media operations that can penetrate more than jaded official statements and ubiquitous repetitive visioning documents would be welcome.

Finally, if the most likely opponents to South Africa have fewer resources, conflict is unlikely, too, to be high-end, or force-on-force in the traditional sense. Attrition will play a crucial role for both sides, but decisive manoeuvre will come in the political, economic and informational domains – because it's about people. Technical domination has its limits while, not being a Luddite, only relative technical dominance of your opposition is needed (and the right one too – Facebook, for example). Further, grievances will always find a cause; and solutions will require understanding and satisfying reasonable demands that will make the difference. Some sense of inequality or injustice is at the heart of every insurgency – the consequent causes all vary – whether this be Catholic/Protestant, Sunni/Shia, Marxist/ Capitalist, Black/White, Tutsi/Hutu, Urban/Rural, etc; and the global communications network that reaches into the heart of every community serves to fuel a sense of unfairness.

The 15 years that have elapsed since the original drafting of the 1998 Defence Review have been a period of major change internationally and also for South Africa and Africa. Adapting to those changes and re-designing for the future means reorienting the defence force as an African peace-builder, enabler *primus inter pares*. Meeting future interlocking challenges of state-collapse, radicalisation, population growth, social inequality and hopelessness, requires a different posture – and skillset – than the armed forces possess today. It is one less about high-tech equipment than troop densities and logistics; knowledge rather than higher-altitude intelligence and information; and small-steps rather than strategic diplomatic sweeps. Overall, ensuring the right force composition and posture in South Africa, as with others, is fundamentally about putting people, not technology, first.

Endnotes

- 1 For the 1998 Defence Review, go to www.dod.mil.za/documents/defencereview/ defence%20review1998.pdf; for the 1996 Defence White Paper see www.info.gov.za/ whitepapers/1996/defencwp.htm.
- 2 Comprising former National Party cabinet minister Roelf Meyer, serving naval officer Rear-Admiral Philip Schoultz, the Premier of the North-West Province Thandi Modise, and convicted (for his part in receiving a kickback to the 1999 arms deal in the form of a discounted vehicle) African National Congress politician and former Chief Whip, Tony Yengeni. This group, which will report to the Minister, is assisted by a 'committee of labourers' including members of the Defence Secretariat and the Defence Decision Support Institute. The various arms of service, staff divisions, the defence industry, etc., will each provide expertise for specific modules.
- 3 Go to http://www.af.mil.za/fpage_pics/archive.htm.
- 4 See http://www.fin24.com/Economy/SA-arms-deal-to-cost-R70bn-report-20110410.
- 5 See David Richards, 18 January 2010 at http://www.iiss.org/recent-key-addresses/ general-sir-david-richards-address/
- 6 See, for example, Halperin, Morton, Joseph Siegle, and Michael Weinstein, *The Democracy Advantage: How Democracies Promote Prosperity and Peace*. London: Routledge, 2008.
- 7 At http://www.humansecurityreport.info/press/Press_Release.pdf.
- 8 Athttp://www.defenceweb.co.za/index.php?option=com_content&view=article&id=16 090:just-four-of-15-major-conflicts-in-2010-in-africa-sipri-&catid=56:Diplomacy%20 &%20Peace&Itemid=111.
- 9 Colin S Gray, Another Bloody Century: Future Warfare. London: Phoenix, 2007.
- 10 See Rupert Smith, *The Utility of Force: The Art of War in the Modern World*. London: Vintage, 2008.
- 11 Published in February 2010, and available at www.mod.uk/DefenceInternet/MicroSite /DCDC/OurPublications/StrategicTrends+Programme/.
- 12 At www.visionofhumanity.org.

- 13 This is taken from ILO *Global Employment Trends, 2011*. Geneva: International Labour Office, 2001, p. 69.
- 14 Richards, op cit, 18 January 2010.
- 15 John Mackinlay, The Insurgent Archipelago. London: Hurst, 2010, p. 142.
- 16 At http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=7 61&catid=35:Aerospace&Itemid=107
- 17 At http://www.guardian.co.uk/uk/2006/sep/21/military.armstrade.
- 18 At http://www.telegraph.co.uk/finance/newsbysector/industry/7338842/Can-Britainafford-not-to-build-5bn-Royal-Navy-aircraft-carriers.html.
- 19 At http://www.timesonline.co.uk/tol/news/uk/article6734604.ece.
- 20 See 'Trident may cost other services', 21 April 2010 at http://www.defencemanagement .com/news_story.asp?id=12768.
- 21 At http://www.guardian.co.uk/politics/2010/mar/23/defence-spending-36-billion -blackhole.
- 22 *Op cit*, p. 231.
- 23 The budget is R34.6 billion in 2011/12. At http://www.defpro.com/news/details /22342/.
- 24 The Estimates of National Expenditure noted that the National Treasury will fund the acquisition of new ships for the SAN from the 2013/14 financial year. That budget boost will provide 'for the replacement of the offshore and inshore patrol vessels, procurement of new harbour tugs and the replacement of small boats.'
- 25 The *Amatola* arrived in South Africa in November 2004, the *Isandhlwana* in February 2005, the *Spioenkop* in May and the *Mendi* in September 2005.
- 26 At http://navy.org.za/articles/category/todays-ships/page/6.html.
- 27 An OPV projected annual operating cost is R5.3 million versus R25.4 million for a frigate; and personnel costs of around R5 million versus R21.75 million.
- 28 For a thorough exposition of the literature, go to http://www.ipocafrica.org/index.php? option=com_content&view=article&id=70&Itemid=67.
- 29 At http://www.baesystems.com/WorldwideLocations/SouthAfrica/BAESystemsGripen OverseasLtd/IndustrialParticipationOffsetProgramme/index.htm.
- 30 See http://www.politicsweb.co.za/politicsweb/view/politicsweb/en/page71654?oid=243 031&sn=Detail&pid=71654.
- 31 See 'Shame of the arms deal exposed', *Sunday Independent*, at http://www.iol.co.za/ sundayindependent/shame-of-the-arms-deal-exposed-1.1089146.