6. South Africa

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I. Introduction

One of the few countries in the world to have had a mandatory United Nations arms embargo imposed on it, 1 South Africa developed a unique system of arms procurement 2 for which the Armaments Corporation of South Africa (Armscor) was created. During the apartheid era—especially after the mandatory UN arms embargo was imposed—arms procurement was necessarily a secretive, often covert, affair carried out with minimal democratic accountability and driven almost entirely by Armscor and the South African Defence Force (SADF).

During the transition from apartheid to democracy—between 1990 and the first non-racial national elections in April 1994—substantial changes occurred in the arms procurement process, which was increasingly subjected to multi-party political scrutiny. Many large defence procurement and development projects were scrapped or put on hold and the defence budget went into sharp decline, a trend which continued after the inauguration in May 1994 of the Government of National Unity, which was dominated by the African National Congress (ANC). 3

The ANC came to power on a platform which promised a democratically accountable and transparent government that would concentrate on social and economic advance rather than military security. Insofar as the ANC’s security policies were concerned the movement argued that ‘National security and personal security shall be sought primarily through efforts to meet the social, eco-

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1 The embargo imposed through UN Security Council Resolution 418 on 4 Nov. 1977.
2 It should be noted that Armscor makes a distinction between ‘procurement’, which is defined as ‘the process required to obtain goods and services from outside the organisation [Armscor]’ and ‘acquisition’, which is transforming ‘an operational capacity into a commissioned system’. Sparrius, A., ‘Quality in armaments procurement’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 110 (1997), pp. 3–4. In other words, procurement is ‘off the shelf’ purchase while acquisition entails project development. This chapter does not make this distinction except when referring to Armscor’s internal processes.

* This chapter draws extensively on 14 papers commissioned for the SIPRI Arms Procurement Decision Making Project which were written during the first half of 1997 by South African academics, senior Armscor employees, Department of Defence officials and representatives of the defence industry. Under the aegis of the Institute for Democracy in South Africa (IDASA)—SIPRI’s South African partner organization in this project—and in cooperation with Armscor, the papers were presented at a workshop in Pretoria on 6 May 1997. Many parts of this chapter are drawn directly from these papers, which represent a cross-section of informed views about the acquisition process. They are not published but are deposited in the SIPRI Library. Abstracts appear in annexe B in this volume.
nomic and cultural needs of the people’.\textsuperscript{4} This, combined with cuts in the defence budget, made it difficult for the new government to embark on any major arms procurement projects, despite the fact that it had inherited a defence force which faced obsolescence in many areas as a result of the years of isolation under apartheid and the UN arms embargo. Although a considerable domestic defence industrial capacity had been developed during the 1980s, the apartheid regime had been unable to develop or acquire some major weapon platforms, notably combat aircraft and naval vessels.

Procurement decisions were also made dependent on a coherent mission and force design for the defence force, which was only agreed on by the government in 1997 as the result of a protracted process of drawing up a White Paper on National Defence and a Defence Review. Major procurement decisions thus became the subject of heated political debate over national priorities, exemplified by the policy vacillations between 1994 and 1997 over a proposal to equip the navy with four corvettes.

The armaments policy debate also involved related arms export control issues and the role of the South African defence industry as an arms exporter. Two major policy initiatives were taken by the Cabinet in this regard: the appointment in late 1994 of the Cameron Commission of Inquiry into some South African arms transactions, and the establishment in August 1995 of a new system of arms controls under the Cabinet-level National Conventional Arms Control Committee (NCACC). During 1997 the NCACC began the process of developing a White Paper on the Defence Industry, the remit of which included acquisition procedures and processes.

There was thus some uncertainty about South Africa’s arms procurement processes in 1997–98, when this chapter was written, although the broad outlines of processes were becoming apparent and the Defence Review had established a force design which provided a basis for acquisition planning.

II. Arms procurement under apartheid and during the transition to democracy

This chapter concentrates on arms procurement during the post-apartheid period. However, since many of the institutional arrangements and processes were inherited from the apartheid system or were established during the negotiations to end apartheid, it is necessary briefly to examine the history of South African arms procurement decision making.\textsuperscript{5} Before it left what was then the British Commonwealth in 1960 and declared the Republic in 1961, the country had been closely integrated into the UK and Commonwealth defence systems, and its acquisition policies reflected its international alliance commitments.


### Table 6.1. Arms procurement decision making in South Africa, 1961–94

<table>
<thead>
<tr>
<th>Year</th>
<th>Procurement options</th>
<th>Determinants of procurement</th>
<th>Procurement institution</th>
<th>Government policy on procurement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary: licensed production, indigenous production</td>
<td>Secondary: strategic, military</td>
<td>Armaments Production Board (1964)</td>
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<td></td>
<td>Secondary: indigenous production</td>
<td>Secondary: military, industrial</td>
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<td></td>
<td>Secondary: illegal imports</td>
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* Dates in brackets are year of establishment.


Although a defence industry had been built up during World War II, it was dismantled after the war and South Africa imported the completed weapon systems it required principally from Britain.6

A schematic outline of arms procurement decision making in 1961–94 is shown in table 6.1.

The early 1960s saw the rapid isolation of South Africa and the imposition in 1963 of a non-mandatory UN arms embargo, which narrowed its procurement options, although many countries—notably France and Italy—were still willing to supply it.7

In 1964, partly in response to the embargo, the Armaments Production Board was established as an autonomous body within the Department of Defence (DOD) with the aim of handling all procurement as well as re-establishing a domestic defence industry, largely by supporting private-sector activities.8 Domestic procurement constituted only around 10 per cent of arms procurement in the 1960s, but after 1968 the government shifted towards licensed and indigenous production, with the aim of achieving strategic self-sufficiency in an increasingly hostile world, and to support the policy of import-substitution industrialization. In that year Armscor (until 1977 called the Armaments Development and Production Corporation) was established and domestic arms production was accelerated. After 1977 Armscor assumed sole authority for arms acquisition and military research and development (R&D). It also carried out around 80 per cent of domestic production, which increased rapidly after the imposition of the mandatory UN arms embargo in November that year. The 1977 embargo had profound effects on procurement policies and processes. South Africa, already severely constrained, now had either to develop domestic production capabilities (and even then it had to covertly import key technologies, components and machinery) or to establish covert supply channels. It often had to accept what it could get and pay a considerable premium to middlemen and others. Elaborate schemes were developed involving the establishment of front companies, deals with other ‘pariah’ states and smuggling networks. While the development of a domestic industry had some economic benefits, it was primarily driven by strategic concerns and often involved establishing production facilities with high set-up costs and short production runs.9 Evidence also suggests that the domestic arms industry ‘crowded out’ civilian R&D and had a negative effect on economic growth.10

In the 1970s and 1980s procurement decisions were based largely on a perceived need to build up defences against a possible attack from communist countries, possibly Cuba acting as the Soviet Union’s proxy, and from African countries to the north. This led to a relative neglect of the navy: by the end of the 1980s, 90 per cent of the defence budget was allocated to the army and air force, with the result that the navy was left in a position where it was arguably unable to carry out its assigned roles.11 Throughout this period there was very

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7 Cawthra (note 6), p. 91.
little room for public debate on defence posture, force design and acquisition. The defence force had promoted the concept of a ‘communist total onslaught’ against the country which demanded a ‘total strategy’ in response. This required the centralized coordination of state activities under the State Security Council, which was dominated by military and police officers and officials.

During the 1980s procurement was driven largely by pressing operational requirements, and especially by the war in Angola, and there was little linkage between the arms procurement process and technology development. The armed services would identify a requirement in general terms, which would be translated by Armscor into equipment specifications, which would then be covertly procured from abroad or developed and then industrialized in South Africa.\(^\text{12}\) Many of these initiatives involved Armscor and other officials in illegal activities and drew them into contact with pariah states such as Iraq and the Chile of General Augusto Pinochet.\(^\text{13}\)

**Arms procurement during the transition from apartheid**

The accession to the presidency of F. W. de Klerk led to a break with the militarization of the 1980s. In February 1990 de Klerk lifted the long-standing prohibitions on free political activity and announced his intention to free Nelson Mandela and other political prisoners and to negotiate an end to apartheid. This ushered in a period of negotiations which lasted until the first non-racial national elections in April 1994. During this period the defence budget went into free fall, a reassessment of the threat environment took place and multi-party (effectively ANC–National Party) negotiations and consultation began to take the place of the formerly monolithic decision-making process.

Change in the defence arena was relatively slow, however, as both the ANC and the National Party saw little advantage in politicizing defence issues. It was only in April 1993 that the first face-to-face meetings between members of the ANC’s armed wing, Umkhonto we Sizwe (MK), and the SADF took place. Later that year, when a multi-party transitional authority became a reality, the two forces together with the ‘independent’ homeland armies became part of the Joint Military Co-ordinating Council (JMCC). The JMCC was composed of senior military officers from the Transkei, Bophuthatswana, Venda and Ciskei (TBVC) states (homelands), the SADF and the MK. It was charged, *inter alia*, with drawing up a threat analysis and a force design for the immediate post-apartheid period and thus providing a basis for arms procurement decisions. In practice, the JMCC—which had only four months to complete this task and thus lacked preparation as well as resources—drew substantially on the SADF’s

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1994 Strategic Planning Process (SPP), a system which had been implemented in late 1992 in all the armed services in an attempt to develop an integrated force planning process. This meant that the force design which emerged was little changed from the previous one.\textsuperscript{14}

Nevertheless, the reality of a rapidly declining budget, the end of conflicts with neighbouring countries to the north, South Africa’s new international acceptability and the impending introduction of democratic accountability and transparency in governance had a significant impact on the arms procurement decision-making process. Some major procurement projects were terminated or put on hold while nuclear, chemical and biological warfare and putative space programmes were abandoned during this period. However, other procurement projects continued, despite the rapidly declining defence budget—for example the replacement of air force trainers, the upgrading of the Mirage combat aircraft and the acquisition process for corvettes for the navy. Although the UN arms embargo remained in place until after the inauguration of the new government (it was rescinded by the Security Council on 20 May 1994), the expectation that it would be lifted led to a new approach to procurement whereby competitive international tendering could take place. In the case of the new air force trainers, this resulted in a decision to purchase the Swiss Pilatus, even though a prototype trainer (known as Ovid) had been developed by the South African defence aviation industry in the expectation of a domestic contract.\textsuperscript{15}

While Armscor remained responsible for procurement during the transition period, in April 1992 it lost its production functions, which were transferred to a new state-owned company, Denel, which came under the Ministry of Public Enterprises. Denel inherited most of Armscor’s production and research facilities and over 15 000 employees were transferred to the new structure. Both Armscor and Denel made efforts to become more transparent, representative and accountable, publishing annual reports for the first time in 1993 and appointing new board members. The separation of production and procurement functions allowed Armscor to introduce a more flexible and competitive procurement process, emphasizing competition for contracts and value for money, and introducing fixed-price rather than cost-plus contracts. A new policy for counter-trade (offsets) was introduced: all contracts worth over 5 million rand would need to include at least 50 per cent counter-trade.\textsuperscript{16} Having lost its privileged and protected position and facing a dramatic drop in demand owing to the new strategic situation, the domestic industry was forced to shed more than half its jobs: employment fell from 150 000 in 1989 to just over 70 000 in 1993, while the share of defence R&D as a proportion of the country’s total R&D fell from 48 per cent to 18 per cent.\textsuperscript{17}

\textsuperscript{15} Mills and Edmonds (note 11).
\textsuperscript{16} Batchelor (note 5), p. 9. See also section III in this chapter.
III. The current arms procurement process

The reintegration of South Africa into the international community and the lifting of the UN arms embargo naturally had a profound effect on Armscor’s activities. South Africa’s good international standing means that it can now trawl the international market as it wishes as well as drawing on existing domestic capabilities. Previously, many market sectors were dominated or entirely controlled by one domestic company, whereas now procurement takes place in a multi-source environment within a much freer market. This has resulted in a number of policy changes which are examined later in this chapter.

The political and military context of the decision-making processes regarding arms procurement has changed substantially since the transition period and the establishment of the Government of National Unity, and the processes are still being revised.

Politico-military questions

In apartheid South Africa the military played a powerful role in politics and in the coordination of the overall strategy of the state: it was therefore a priority for the new government to stabilize civil–military relations and to ensure effective civilian control and oversight over defence policy, including procurement. The new government thus moved swiftly to draw up a defence White Paper, pointedly entitled *Defence in a Democracy*. The White Paper paid little attention to the size and shape (and hence procurement requirements) of the new defence force: instead, it went back to first principles, establishing a framework for civil–military relations and establishing the legal and normative context of defence. It also reiterated the government’s position that socio-economic issues were a greater challenge than defence and that resources needed to be allocated accordingly.

The White Paper included only a brief threat analysis, in effect concluding that there was no conceivable conventional military threat to the Republic of South Africa for the foreseeable future and that force planning therefore needed to take place in a ‘threat-independent’ manner—in other words, to prepare for generic rather than specific contingencies. This marked a fundamental departure from previous threat analyses, which were predicated on the concept of the ‘total onslaught’ which was deemed to be orchestrated by the communist bloc and to be manifest in violence emanating from other African countries. As there was no perceivable threat, the White Paper argued that the South African National Defence Force (SANDF) could be scaled down to a ‘core force’ which could be expanded to a ‘war force’ should this become necessary. In other

19 Although the threat analysis developed by the JMCC did not mention a communist threat, force planning was still predicated on the concept of a conventional attack from Africa, although implicitly from a non-African power which had established a base there.
words, it would seek to retain all its key capacities, which would be ‘balanced’, but not at sufficient levels to fight a war. It did not spell out what this might entail: this task was delegated to a Defence Review process which took place in 1996–97. The White Paper also stated that South Africa should have ‘a primarily defensive orientation and posture’ and would be committed to ‘the international goals of arms control and disarmament’—a fundamental departure from past policies.

Arms procurement decisions were effectively put on hold until the force design component of the Defence Review was completed in the first half of 1997 and approved by Parliament in July of that year. In any case, further cuts to the defence budget made any major procurement initiatives impossible as the SANDF, faced with a growing personnel bill as a result of the incorporation of former guerrilla and ‘homeland’ forces, was obliged to cut back severely on capital expenditure. By 1998 expenditure on weapon acquisition had fallen to less than 10 per cent of the defence budget.

The Defence Review was a remarkable consultative process, involving extensive discussions with non-governmental organizations (NGOs), other government departments and the general public: three large conferences were held where the document was discussed in public. The parliamentary Joint Standing Committee on Defence (JSCD), a multi-party committee involving members from both the National Assembly and the Council of Provinces (formerly the Senate), played a crucial role in the outcome of the process, as it did with the White Paper. The Defence Review drew up four options for force designs and spelt out to the level of items of main equipment. The first of these was described as the DOD’s ‘long-term vision’; the second as the ‘growth-core force design’ (effectively a scaled-down version of option 1); the third as a ‘demonstration option’ which would be the result of further budget cuts, obliging the SANDF to concentrate on secondary rather than conventional roles; and the fourth as a ‘defensive operational concept’ design, drawn up to illustrate how a commitment in the White Paper to a ‘primarily defensive’ posture might be operationalized.

All these force designs reflected the ‘threat-independent approach’, although the Defence Review did conclude that defence needed to be predicated on defence against possible attack from a middle-level power or another African country with support of a major or middle-level power. The models also drew on the ‘core force approach’ to varying degrees in that they sought to retain a balanced force which could be expanded through additional acquisition pro-

20 Cawthra (note 3).
25 See note 22.
grammes if a threat emerged. The models were generated in part through discussion between the various armed services, the SANDF, the Ministry of Defence (MOD) and other key stakeholders, and in part through a computer modelling process known as Project Optimum which, as its name suggests, was meant to optimize force design in the light of calculated risk (defined as a combination of probability and impact) and cost. It was much criticized by those who were not involved in its creation on the grounds that it was too technical and that its value-inputs were questionable, in that could have reflected a set of assumptions about the validity, for example, of offensive defence.26 It was claimed, however, that Project Optimum led to savings of 22 per cent, radically improved the cycle time for strategic planning and clearly showed what tasks could be prepared for within a given budget.27

Force Design 2, as it was then known, was recommended and duly approved by the JSCD and eventually by the Cabinet in May 1997. With its detailed breakdown of main equipment, it should have provided a firm basis for acquisition. However, it immediately became evident that the force design would be hostage to political decisions regarding the size of the defence budget. At around the same time as the force design was approved, the Cabinet also demanded an unexpected additional cut of 500 million rand in the 1997/98 defence budget. The force design itself was predicated on the assumption that by a transformation and rationalization process (involving downsizing from around 100 000 full-time personnel to around 70 000) the SANDF would be able to achieve a target of a 30 per cent share of defence expenditure for capital and equipment renewal. It was evident, therefore, that major procurement decisions would remain politically charged regardless of the apparent consensus over force design and the specifications for equipment in the Defence Review: trade-offs would need to take place, as it was unlikely that there would be enough money to pay for what was specified.

The nature of these changes is also reflected in the ongoing debate on an attempt by the South African Navy to procure corvettes. The navy viewed the transition from apartheid as an opportunity to redress the historic imbalance in spending between the arms of service and put forward a request for four corvettes. A frigate/corvette requirement had in fact been identified in the early 1970s but had fallen victim to the international embargoes, budget constraints and inter-service rivalry. A Naval Staff Requirement for four patrol corvettes was approved by the Defence Command Council in May 1993 and, after deciding to seek international bids, Armscor sent out a Request for Information (RFI) to ascertain what was available on the international market—despite the fact that the UN embargo was still in place. Fourteen proposals were selected, narrowed down by Armscor to five by the end of 1993, and then to two. By the end of March 1995 Armscor was ready to recommend one proposal—from Bazan in Spain—to the new ANC-dominated Cabinet.

26 Williams (note 14), pp. 16–18.
27 Truscott et al. (note 12), p. 47.
The corvette decision-making process had been conducted in virtual secrecy and little attempt had been made to consult with other government departments. It was only in August 1994 that the public became aware, through media leaks, of the decision to purchase corvettes, and not until February 1995 did the new Parliament, through the JSCD and the Joint Finance Committee, become actively involved in the issue. There was a widespread, and accurate, perception that the deal had been cooked up behind closed doors in the ‘old way’ and there was strong press and public opposition to the deal in the light of the new government’s commitment to social and economic issues. In this climate, the Minister of Defence withdrew the item from the Cabinet agenda on 17 May 1995, when the project should have been approved. However, the first report of the Defence Review, which was approved by all parties in Parliament in 1997, specified that the navy should be provided with four corvettes. This was approved by the Cabinet during the course of 1997, but it was still not clear where the money would come from.

**The structure of arms procurement decision making**

The current relationship between the MOD, the DOD, the SANDF and Armscor is set out in figure 6.1. The MOD includes the minister and his staff, the Defence Secretariat and the office of the Chairman of Armscor and the DOD; the DOD includes the offices of the Secretary for Defence, the Chief of the Defence Staff and the SANDF but excludes Armscor. The creation of the post of Secretary for Defence and the institution of an integrated civilian–military MOD operating through 18 divisions has limited the powers of Armscor and the SANDF in acquisition and institutionalized a system of civilian checks and balances.

The arms procurement function was investigated during the course of 1994 and 1995 by a specialized MOD Acquisition Project Team (MODAC) and a Ministerial Steering Committee. As a result, three reports were published, dealing with technology and armament acquisition management, defence industry policy and organizational structure of the defence acquisition programme management. These reports were incorporated into a wider study carried out into acquisition during the Defence Review process, which led to the publication of a final draft chapter on the acquisition management process in May 1997.

These reports established the institutional and other arrangements for acquisition decision making. The division of responsibility is broadly as follows:

1. The Minister of Defence is the highest authority and bears ultimate political responsibility for the acquisition function. He or she is accountable to the Cabinet, the President and Parliament.
2. The SANDF defines and prioritizes its acquisition needs, and is also responsible for management of the user system, including personnel and facilities.

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3. Armscor is responsible for programme management and contracting of industry during the execution of acquisition programmes, for ensuring the technical, financial and legal integrity of the process during contracting, and, with the DOD, for overseeing industrial development in support of acquisition programmes.

4. As Accounting Officer of the DOD, the Secretary for Defence is responsible for ensuring that all acquisition activities are executed within the framework of national objectives, policies and constraints.²⁹

The approval structure for project submissions is shown in figure 6.2. Projects are classified as cardinal or non-cardinal in order to decide the level of top management involvement. Criteria used for classification include political profile, national strategic interest, inherent risk, cost profile, urgent operational need and influence on existing capability and size.³⁰

²⁹ South African Department of Defence, ‘Defence Review chapter on the defence industry: the acquisition management process (sixth draft)’, 7 May 1997; and Buys (note 8), p. 12.

³⁰ Buys (note 8), p. 11.
Figure 6.2. The arms procurement decision-making process in South Africa


Cardinal projects need to be approved by the Armament Acquisition Council (AAC). It consists of members of the Council of Defence, which consists of the Minister of Defence, the Chief of the SANDF, the Secretary for Defence and the Executive Chairman of Armscor. Such projects also have to be presented to Parliament for approval. The AAC also makes the final decisions regarding the selection of successful contractors and available finances.

Non-cardinal projects are approved at the level of the Armament Acquisition Steering Board (AASB). Chaired by the Secretary for Defence, the AASB consists of senior SANDF, Defence Secretariat and Armscor officials and also screens cardinal projects. The third level of approval is the Armament Acquisition Control Board (AACB) which screens all projects and other routine programmes.31

Once projects are approved, contracts are placed with the industry for project execution. Tender adjudication is the responsibility of the Armscor Board of

31 Buys (note 8), p. 13; and South African Department of Defence (note 29), p. 15.
Figure 6.3. Strategic planning in South Africa

Note: SWOT = strength–weakness opportunity analysis.


Directors, which acts as the tender board for this purpose, although this may change as a new decentralized state tendering policy is developed. The Board is appointed by the Minister of Defence (usually from the business sector but more recently also from the professional sector) and includes the Secretary for Defence and the Chief of the SANDF as ex officio members.32

32 Buys (note 8), p. 13.
While the Minister of Defence bears ultimate responsibility for all acquisition, the process basically involves the SANDF determining requirements. These are translated into more specific requirements by Armscor, which is then responsible for the programme management and contracting processes. The DOD is responsible for strategic planning, high-level programming, budgeting, and control and auditing of expenditure.\footnote{Hatty, P., ‘The South African defence industry’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 106 (1997), p. 17.}

Figure 6.3 summarizes the strategic planning process. It is initiated by the Secretary for Defence and performed by a Joint Strategic Workshop of DOD, SANDF and Armscor representatives. (Input from the defence industry can also be incorporated.) All three organizations are involved through the various committees and are linked on a project and committee basis. A first cut of required resources in terms of functional allocations across arms of service may be estimated at this point.

The responsibility for conducting threat assessments, divided broadly into an external and an internal strategic analysis, leading to the development of a strategic profile, is driven by the SANDF and coordinated by the DOD and the MOD. The White Paper, the Defence Review, the constitution, other legislation and defence policies provide the policy context for this process. Key challenges are broken down into problems with various elements. A strategy is formulated which assesses objectives, ways of achieving the objectives, strategic gaps, contingencies and risks. This leads to an implementation planning phase resulting in plans, programmes and broad financial estimates. These outputs are then integrated and plans for resources, structures, capital, human resources, finances and so on are established.\footnote{Griffiths, B. N., ‘Arms procurement decision making’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 105 (1997), pp. 4–6.}

The stages of the procurement process

While there is some variation in the acquisition process depending on the size and nature of the project, implementation, which is managed by Armscor, generally follows three generic phases: project study, acquisition and contract. Each is divided into a number of different stages.\footnote{This section is based on van Dyk, J. J., ‘The influence of foreign and security policies on arms procurement and decision making’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 112 (1997), pp. 29–35.}

The project study phase consists of the following:

1. The client (usually the SANDF, although Armscor also carries out acquisition for the South African Police Services) defines a user staff requirement within the framework established by the policy, budget and strategy.
2. A programme manager is appointed by Armscor and a project officer by the MOD and, after a programme plan has been drawn up, a project team consisting of DOD and Armscor officials is appointed. This consists of pro-
fessionals qualified in the technical, financial and legal fields as well as in quality assurance, programme management and industrial participation (IP—offset or counter-trade). For cardinal programmes a formally constituted project steering committee will also be established to oversee the process.

3. The project team draws up a list of all possible contenders, locally and globally. An RFI is sent to the contenders, listing basic requirements.

4. The RFI responses are screened in terms of a Level 1 Value System which seeks to assess each contender’s experience, capacity and IP proposals.

5. The contenders selected for the next phase are sent a Request for Proposal (RFP) which contains further details of the project and more detailed IP requirements. The RFP requires contenders to respond with: (a) a comprehensive specification; (b) a certification and integration test plan; (c) a quality assurance plan; (d) a configuration management plan; (e) an integrated logistic support plan; (f) an acceptance test procedure; and (g) confirmation of IP compliance.

6. The RFP respondents are screened in terms of a Level 2 Value System which addresses issues such as risk, manufacturing and integration capability, facilities, quality assurance and configuration management expertise, logistic support capability, management experience, financial stability, compliance with the user staff requirement, cost, timescales and IP. Respondents may be visited by the project team for a technical inspection.

7. A project study report is then generated and a tenderer is nominated.

In the acquisition phase, the following steps take place:

1. Negotiations are held with the prospective tenderer to generate the main agreement, which should include a Release to Service Plan. Depending on the size of the project this plan is approved by the relevant level of authority in Armscor, the Industrial Participation Control Committee and where applicable by the various arms acquisition committees and boards and the JSCD.

2. An acquisition plan is generated by the client (usually the SANDF) and Armscor. The acquisition plan is phased, involving sequential and parallel processes, a systems engineering approach and management by project teams. Armscor’s acquisition services include the following: (a) feasibility studies to identify alternative system concepts and determine which will best implement the required operational capability; (b) specification of the selected system; (c) design, development, testing and evaluation of the selected system; (e) recruiting and training the operators and maintenance personnel for the system; (f) producing and commissioning the system in the required quantities; and (g) deploying and commissioning the system.

As part of this process, Armscor may buy in, usually from private companies: (a) services to perform concept and feasibility studies; (b) system engineering services to specify the system; (c) design, development, and test and evaluation services; and (d) manufacturing services to produce and deliver the system.36

36 Sparrius (note 2), p. 4.
The third phase, the contract phase, involves a comprehensive process of programme management, including technical and administrative liaison, cooperation, monitoring and reporting to ensure fulfilment of contractual obligations by both seller and buyer—delivery, training, integration, support, local manufacture, import and export, invoicing, payment and so on.

**Armscor**

MODAC confirmed the role of Armscor as the acquisition agency for the DOD. Armscor is now a shadow of its former self: in the late 1980s it employed 23,000 people, now (1998) reduced to fewer than 1,000. Most of its assets and staff were transferred to the newly created Denel in 1992 when it relinquished its manufacturing functions, but Armscor has since been further downsized and has lost some of its other functions—notably arms control, which was transferred to the Secretary for Defence in September 1995.

The Minister of Defence retains ultimate responsibility for Armscor, but control is exercised principally by a Board of Directors while day-to-day management is the responsibility of a Management Board (see figure 6.4).

Armscor’s principal function is the acquisition of arms, which is funded through the Special Defence Account (2,990 million rand in 1996). Armscor has very wide powers in relation to the acquisition function. In terms of the Armaments Development and Production Act (no. 57 of 1968) it is authorized to: (a) promote, coordinate and exercise control over the development, manufacture, acquisition or supply of arms; (b) sell or export arms or promote sales—in other words, act as a marketing agency for the South African defence industry (for example, through coordinating participation in international defence shows); (c) promote industrial development relating to armaments; and (d) render services to any agency which requires them as determined by the Minister of Defence (this has allowed Armscor to carry out limited non-military procurement functions for other government departments).37

Armscor also carries out technology development functions in relation to acquisition and controls the Elandsfontein Vehicle Test Facility and the Alkantpan Test Range for ballistics. In 1996 its assets amounted to 354 million rand and it received an allocation of 190 million rand for its activities from the state in financial year (FY) 1995/96. It carried out acquisition to the value of 3,653 million rand, 94 per cent of which was for the SANDF and 5 per cent for the South African Police Service.38

As a creation of the apartheid government, which functioned in virtually complete secrecy (the Special Defence Account was not publicly audited during the apartheid era), Armscor was treated with considerable suspicion by the incoming government. As a result, it has made an effort to transform itself, implementing an affirmative action programme to promote the advancement of the

Figure 6.4. The organizational structure of Armscor

black population, appointing new black members to its controlling board, and carrying out environmental and community projects to improve its public image. In February 1994 it adopted a new policy ‘of transparency and accountability aimed at empowering our ultimate client, the South Africa public, to assess our acquisition and marketing decisions as well as our human resources and technology development policies . . . ’.³⁹ The role and status of Armscor remain the subject of considerable debate, with some in government and the defence industry questioning whether it should continue to carry out such a diversity of roles related to acquisition. These issues are likely to be further discussed in the drafting of the White Paper on the Defence Industry.⁴⁰

The Department of Defence

While Armscor is the DOD’s acquisition agency, the department itself works alongside Armscor in ensuring that projects are implemented. The Secretary for Defence is the chief accounting officer for acquisition while the minister retains overall political responsibility. A secretariat was established in 1994 to support the Secretary and to carry out a number of tasks previously the responsibility of the defence force itself. The secretariat’s functions were to include policy formulation, parliamentary liaison, financial control and budgeting and some aspects of personnel and public relations.

It took some time to establish an effective secretariat as there were few civilians trained and experienced in defence management, resources were inadequate and there was resistance from some sections of the SANDF. In an effort to overcome some of these problems, an integrated head office structure was devised in 1997, with 18 functional divisions (including one for acquisition) controlled by both the Secretary for Defence and the Chief of the SANDF and employing both civilian and military personnel. This essentially brought the DOD into line with the British system. The division of responsibility between the DOD and Armscor for acquisition was set out in the MODAC 1 report⁴¹ and, as discussed above, in practice projects are managed by joint teams ensuring fairly efficient coordination between Armscor and the DOD.

Foreign policy

There has been considerable public debate in South Africa since 1994 on the role of arms exports in foreign policy, but virtually nothing has been said about the foreign policy implications of importing arms—whether it is appropriate for South Africa to procure from certain states or not, for example, or what the


long-term implications of seeking a strategic arms transfer relationship with one or more of the major powers might be.

The ANC-led government proclaimed a strongly normative foreign policy framework, built around principles of human rights and democracy, a commitment to international law and the redressing of global inequalities. However, the practice of South African foreign policy in the first three years of the Government of National Unity reflected a more flexible approach in which these principles were modified by realpolitik and the government’s perception of South Africa’s national interests. In relation to the arms trade, while South Africa remained publicly committed to global disarmament and to a policy in which arms should not be exported to countries with poor human rights records or which were involved in conflicts, its decisions sometimes seemed out of kilter with these criteria.42

Coordination between foreign policy, domestic security policy (policing and justice) and defence policy takes place at a number of levels. Ad hoc coordination is common. At the highest level this happens through the relevant Cabinet committee. For example, the Cabinet Committee for Security and Intelligence, which acts as the nodal point for security decisions in the Cabinet, includes ministers and deputy ministers of defence, foreign affairs, home affairs, security and intelligence. Police and military cooperation occurs around a number of issues, especially crime control, and security policy integration is reflected in the 1994 White Paper on Reconstruction and Development43 and the interdepartmental National Crime Prevention Strategy, but these are not sufficiently developed to result in an integrated or coordinated policy regarding arms acquisition.

In the absence of any foreign policy guidelines specifically aimed at arms procurement, it could be assumed that South Africa would be prepared to buy arms from those countries to which it would be willing to sell. However, no ‘blacklists’ are kept, each proposed sale is considered on an individual basis and there are few clear guidelines. South Africa enjoys a remarkable freedom in foreign policy terms, with good or potentially good relations with virtually all states. It is unlikely, however, that it would be prepared to procure from countries which were subject to international sanctions.

South Africa will have to consider the long-term foreign policy implications of the major procurement decisions it will soon need to make. In particular, the government will need to decide if it prefers to procure weapons from its main trading partners or whether it will seek to use arms purchases as means of making new alliances, for example in the Far East. It will also need to decide whether arms imports should be driven primarily by strategic and political considerations or by trade and industry-related issues. These decisions are likely to be brought to a head over the ‘package deals’ which began to be offered after the adoption of the Defence Review. By August 1997 Germany and the UK had

both put together packages built around South Africa’s equipment requirements as specified in the Defence Review, and other countries seemed likely to follow. In the case of the UK this consisted of corvettes, Upholder Class submarines, Gripen combat aircraft, Hawk jet trainers and possibly anti-aircraft missiles, while Germany was also reportedly linking a submarine deal to the sale of corvettes and possibly helicopters and jet trainers. In the event South Africa chose to diversity its sources.

**Arms control**

Arms control has been a major concern of the Government of National Unity, which has taken a number of steps to ensure political control and to bring South Africa, once an ‘outlaw’ in arms control terms, into line with international norms. While South Africa’s arms control system, like those of most countries, is mainly concerned with controlling the export or domestic production of weapons, it also affects procurement in two ways. First, the international conventions, treaties and regimes to which the new South Africa is party place restrictions on research into and the manufacture of certain types of weapon, notably those of mass destruction (although these provisions also affect a variety of potential dual-use equipment). Second, the manufacturing, acquisition and domestic sales are controlled by a complex set of permits administered by various government bodies. Commercially available arms are largely the responsibility of the South African Police Service.

The major international control mechanisms to which South Africa is now signatory are the 1968 Non-Proliferation Treaty (NPT), the 1972 Biological and Toxin Weapons Convention (BTWC), the 1981 Convention on the Prohibition and Restriction on the Use of Certain Conventional Weapons (CCW), the 1987 Missile Technology Control Regime (MTCR) and the 1993 Chemical Weapons Convention (CWC). South Africa is also a member of the Zangger Committee and Nuclear Suppliers Group but has not yet decided whether to participate in the Wassenaar Arrangement.44 These agreements are enforced in South Africa through a number of bodies, notably the Non-Proliferation Council.

Domestic procurement, sales and production of various categories of weapon are all controlled through a variety of permit systems. Conventional weapons, whether produced domestically or externally, may not be exported, imported or marketed within or outside South Africa without a permit. While Armscor was previously responsible for issuing permits, these are now considered through a four-level process involving the departments of defence, foreign affairs, and trade and industry and, at the highest level, the NCACC, which was set up on 30 August 1995 in an effort to gain firmer political control over the process. Most of the processing work, however, is carried out by the Directorate for Conventional Arms Control (DCAC), which was set up in September 1995

under the Secretary for Defence. It is possible that the process will be streamlined as a result of the White Paper on the Defence Industry.

IV. Financial and budget questions

**Arms procurement budgeting**

Budgeting occurs within a well-established defence budget cycle, each phase of which lasts for two and a half years and which establishes a rolling operational budget for a five-year period and a capital budget of 10–20 years, a requirement necessitated by the long lead times associated with the military acquisition process. The strategic implementation guidelines developed in the strategic planning process described above are used to fashion a medium-term environmental analysis (usually understood as up to five years) which is then used by the armed services to develop requirement guidelines.

Each arm of service—in South Africa, as well as the air force, army and navy, the medical service constitutes a separate arm—determines its main activities and requirements in a bottom-up process. At the operational level budgeting is divided into three categories: personnel and administration, operational requirements and capital replacement. The latter is controlled by Force Development Steering Committees which consist at present mostly of military personnel but are due to be civilianized. Capital funds are allocated from the Special Defence Account, which is kept separate from the rest of the defence budget. The budget is approved by the highest defence staff councils, the Department of State Expenditure and the Cabinet: at the latter level final decisions regarding the allocation of funds are made on the basis of SANDF programme requirements, rather than the specific requirements of the various armed services.

**Cost assessment**

Armscor evaluates bids on the basis of value for money, not merely the lowest bid. This is assessed in terms of performance/cost and risk and of life-cycle costing (LCC). The evaluation model thus includes assessments of the bidding company’s qualification requirements, a critical performance analysis, and analyses of cost, risk and discriminating performance analysis. Factors such as affirmative procurement and industrial participation are also taken into account. Once a programme has been recommended, a political and economic impact analysis is carried out before a final choice is made (it is at this point that a domestic bid may be given preference over a foreign bid for reasons other than

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46 South African Government (note 40).
47 Griffiths (note 34), pp. 6–7.
48 Griffiths (note 34), p. 9.
the competitiveness of the bid itself). This process is primarily driven by Armscor, also using independent consultants, and is shown in figure 6.5.
The cost assessment, based on life-cycle costing, will include: (a) direct fixed costs; (b) cost ceilings; (c) costs associated with options; (d) indirect costs; (e) cost-plus items; (f) hidden or ignored costs; (g) duplication; (h) escalation, price increases and foreign exchange fluctuations; (i) affirmative procurement preference; and (j) IP costs and benefits.

The risk assessment aims at judging whether a contractor is likely to achieve what it has quoted for. Factors such as management capability, track record, quality of systems, possibility of indirect costs, infrastructure, geographic location, financial management, project management capability and other issues related to capacity and stability are taken into account. Risk is in any case somewhat reduced by the principle of maintaining a register of accredited contractors: only companies which have been previously assessed for financial, technical and security competence and registered with Armscor are allowed to bid. (Registration is for five years.)

The political and economic assessment takes into account ‘matters of overriding national interest’ (undefined) and the effect of the bid on national economic, technology and strategic policies as well as on foreign policy and military relations.49

**Industrial participation (counter-trade)**

South Africa has developed both a National Industrial Participation Policy and a specific policy for defence. Originally conceived as counter-trade or offset (in that the cost of a purchase abroad would be offset by requiring the selling country to purchase South African goods), this is now seen as a more complex process of mutual trade, investment and technology transfer—in part so as not to violate World Trade Organization agreements. Offsets are considered to be an essential tool for the development of a stable industrial base.

In the recent re-equipment of the South African defence forces, the Armscor Chairman, Ron Haywood, stated that the successful bids were chosen largely on the basis of their offset packages.50 Three different but interrelated contracts were set up; one regulating civilian IP, one for military IP and one for the purchase of the actual system, and all contracts were to be signed for the deal to go through.51 Defence IP policy is quite specific: all contracts with a value of between $2 million and $10 million require at least 50 per cent by value of counter-trade or IP, which can be in the defence or civilian area. Contracts over $10 million require 100 per cent IP, at least half of which must be in defence, with the aim of supporting the defence technology base and the export of value-added defence goods.

Detailed provisions for the management of IP—a complicated and often protracted process—have been drawn up. The Department of Trade and Industry has set up a list of 22 areas which are prioritized in the offset policy, for

49 Griffiths (note 34), pp. 10–12.
50 URL <http://area51.upsu.plym.ac.uk/dgdd/offsets/ofrsafr.htm#South africa>.
example, transport systems, software and solar power technology.\textsuperscript{52} A penalty system, of 5 per cent of the deal, has also been devised for cases of agreed IP failing to materialize, although it remains to be seen if this will work.\textsuperscript{53} As the process evolves, it is bound to prove even more difficult in implementation than in planning and to have some unforeseen consequences: this is particularly the case with major arms transactions with rich industrial countries (for example, the British or German package deals).

V. Techno-industrial questions

The domestic defence industry plays a crucial role in acquisition by providing about 70 per cent of all military matériel acquired by the SANDF (a total of 2685 million rand in FY 1995/96).\textsuperscript{54} While they are not involved directly in the decision-making process, the role South African defence companies play in R&D, manufacture, testing, maintenance, support and import of armaments makes them key actors in the acquisition process.

It is difficult to define exactly what constitutes the defence industry, given the extent of diversification and the overlaps between civilian and defence production. However, the companies which are members of the South African Aerospace, Maritime and Defence Industries Association (AMD) provide 94 per cent of the local defence equipment purchases of Armscor (and 76 per cent of turnover in these companies is defence equipment).\textsuperscript{55}

Four major groups of companies supplied 67 per cent of Armscor’s defence purchases during 1996, although hundreds of other companies and subcontractors are also involved. By far the biggest is Denel, Armscor’s former manufacturing arm, which consists of 18 major divisions and subsidiaries and accounts for about 80 per cent of Armscor’s defence acquisitions. Denel carries out a wide range of management, R&D, engineering and manufacturing activities: 74 per cent of its output is defence equipment or services, including missiles, armoured vehicles, aircraft and information technologies. Other large defence companies are Altech, Grintek and Reunert. All three are public companies with only a minor part of their turnover in the defence sector.\textsuperscript{56}

The post-apartheid government has shifted decisively away from the inward-looking import-substitution economics of the apartheid era towards an outward-oriented approach focused on the achievement of national competitiveness, encompassed in the national macroeconomic strategy for Growth, Employment and Redistribution (GEAR). Key issues which influence acquisition policy, particularly in relation to the domestic defence industry, include: (a) a commitment to fiscal and monetary discipline as well as reducing the budget deficit; (b) liberalization of the capital account of the balance of payments and possible

\textsuperscript{52} See note 51.
\textsuperscript{53} Griffiths (note 34), pp. 14–15.
\textsuperscript{54} Hatty (note 33), p. 2.
\textsuperscript{55} Hatty (note 33), pp. 1–3.
\textsuperscript{56} Hatty (note 33), pp. 2–3.
incremental abolition of exchange controls; (c) tariff reductions to facilitate industrial restructuring; (d) support for small and medium-sized enterprises; (e) strengthening of competition policy and the development of ‘cluster support programmes’; and (f) the restructuring of state assets (privatization) and the introduction of schemes to allow the wider population to become owners of these assets—an issue that could potentially affect Denel.

As part of its restructuring and its efforts to cut costs the government also intends to reform national procurement policy, with potentially important effects on defence procurement. In April 1997 the Ministry of Finance and the Ministry of Public Works issued a Green Paper on Public Sector Procurement Reform in South Africa,57 aiming to free up the tendering process and give easier access to the public sector for small, medium and ‘micro’ enterprises. The Green Paper proposed the abolition of existing state and provincial tender boards and their replacement by procurement centres at the departmental and provincial levels. If this were applied to defence, it would empower the Secretary for Defence, as Accounting Officer in the DOD, to carry out all procurement—a power presently invested in Armscor in its capacity as the State Tender Board for capital procurement.

Domestic arms production

One of the major issues in procurement decision making for any country with a domestic arms industry is whether and to what extent it should favour domestic procurement over imported equipment and what role, if any, the domestic industry should be allowed to play in the arms procurement decision-making process.

Defence equipment remains one of South Africa’s most significant manufacturing outputs, although production has declined rapidly since the collapse of domestic demand following the end of the Angolan and Namibian wars in 1989. The opening up of South Africa to international trade has provided the South African arms industry with considerable opportunities, but it has also meant more open competition for domestic contracts: as a result the industry has been forced to downsize and diversify into civilian production. The estimated number of employees involved in one way or another in the industry has fallen from 160 000 in 1989 to less than 50 000 in 1997. Direct employment in the industry, in the sense of employees of companies which are members of the AMD and employed on defence work, is even lower, at around 17 000. Defence sales of companies which are members of the AMD increased between 1992 and 1995, from 3452 million to 3638 million rand, but this increase disappears if inflation is taken into account and is entirely attributable to improved exports.58

58 Hatty (note 33), pp. 1–12.
The South African defence industry has often argued that it is ‘world class’ and represents a source of considerable scientific and technological skill and innovation. In part this is true. During the 1970s and 1980s the government ploughed R&D and other funds into defence, with the result that the industry developed a cutting-edge technological advantage over other sectors. Since 1990, however, there has been a rapid decline in defence R&D funding (see table 6.2). With a declining domestic market the industry is often unable to achieve the economies of scale needed to make it competitive on the international market. As time passes, without injections of further R&D, the South African industry is likely to atrophy further. It is possible that whole sub-sectors will collapse. The key to survival for industries unable to export will be to seek commercialization and diversification opportunities, or even full-scale conversion to civilian production, although this would probably require government assistance.

The local defence industry argues that there are many advantages in domestic procurement, including the following:

1. Maintenance, modifications and performance enhancement can be carried out locally, saving costs and making it possible to keep systems in service for longer.
2. Surprise in battle can be achieved, as capability is not known to the enemy.
3. The defence industry provides technological support to the defence force, which, due to high staff turnover, cannot develop the same capacities.
4. The existence of a domestic industry makes it easier to gear up the ‘core force’ to deal with a potential threat.
5. Equipment can be provided which has been designed for local conditions and needs.
6. The industry is a national asset that generates taxes for the state and saves foreign exchange (3500 million rand in 1994/95).59

Some of these points are disputed. Few commentators doubt the military and strategic benefits of domestic procurement, but economists are not in agreement about the economic effects. It has been argued, for example, that when domestic industries are small, domestic procurement is costly as economies of scale cannot be made. Furthermore, when developing countries like South Africa seek to maintain domestic defence industries, the effect on economic growth tends to be negative and the economy becomes skewed.60 The evidence points to this having been the case in apartheid South Africa: it would be far better to reallocate resources to the development of more internationally competitive industries, especially those which are more labour-intensive. There are also important opportunity costs.61

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59 Hatty (note 33), pp. 10–12.
60 See, e.g., Batchelor and Willett (note 17), pp. 9–19.
61 Batchelor (note 5), p. 2.
A broad policy framework for domestic acquisition was set out in the Defence Review, although often in vague terms. The government was committed to achieving ‘limited self-sufficiency in key areas’ in which technology development would be concentrated. The Defence Review also stated that ‘preference should be given to the procurement of defence products and services from local suppliers, providing such procurement represents good value for money’, although ‘fair and open competition will be used as far as is practicable . . . this will include the invitation of foreign tenders’. It also stated that adjudication of tenders would not necessarily be based on the lowest price but on ‘value for money and industrial development goals’ and that ‘life-cycle costs, DOD requirements, local industrial development goals, social responsibility (economic empowerment of previously disadvantaged persons), and subcontracting’ will be taken into consideration. It is not clear, however, how these various factors will be weighted. In the case of single-source offers (previously the norm), ‘bench-marking’ against comparable foreign systems or products should be employed to ensure value for money.

Another factor which needs to be taken into account is the pressure placed on Armscor to procure local products which have already been developed, even if the SANDF does not really require them, on the grounds that if they are not purchased locally they may be impossible to sell abroad and the development costs may be squandered. Some commentators believed that this was the rationale behind the DOD’s decision in mid-1996 to purchase 12 indigenously developed Rooivalk attack helicopters at a cost of 876 million rand, although the Chief of the Air Force had opposed the project and the purchase was not approved or even discussed by the JSCD. Armscor was at the time trying to sell the Rooivalk to the UK (the bid was rejected) and Malaysia (the contract was apparently still being negotiated a year later) and subsequently attempted to sell it to Turkey. (The sale was vetoed by the NCACC on the grounds of Turkey’s human rights record).

The government is also committed to creating a more predictable environment for the domestic defence industry, for example by setting out medium- and long-term acquisition requirements and by introducing a more stable budgeting system. The DOD has undertaken to publish an annual acquisition master plan to indicate all projects required for political approval from the Minister, as well as a medium- to long-term Defence Requirements Statement to guide technology development and industrial planning, although it is not clear exactly how much detail these documents will contain.

Affirmative procurement

A peculiar aspect of South African procurement policy is ‘affirmative procurement’, introduced by the government in an effort to address the reality that the

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63 South African Department of Defence (note 29), p. 18.
64 Crawford-Browne (note 13), p. 13.
The domestic defence industry is overwhelmingly dominated by whites and thus unrepresentative of the demographics of the country. This is seen as a medium-term (10-year) requirement to assist in ‘levelling the playing field’. The policy provides for up to 22 per cent preference for bidding companies split between equity (10 per cent) and added value (12 per cent) if this will benefit previously disadvantaged groups of people. However, there are many difficulties in the application of this policy, not least of which is deciding whether bidding companies genuinely represent the interests of previously disadvantaged groups—both equity ownership and employee profile need to be taken into account.

Armscor has adopted the following principles with regard to affirmative procurement: (a) the defence industry should be committed to redressing previous imbalances; (b) the industry should support government initiatives to encourage previously disadvantaged people to become entrepreneurs and owners of productive wealth; (c) an organizational climate conducive to the management of diversity should be established within the defence industry; and (d) affirmative procurement will be guided, monitored and controlled by the Secretary for Defence.

The national technology base and R&D

A key consideration in arms procurement is the extent to which procurement and R&D decisions will affect the national technology base. In South Africa this consideration is sharpened by the fact that, as a result of apartheid security priorities, defence R&D was far more advanced than civilian R&D. In addition, the concept of a ‘core force’ entails the retention of capacities to develop and manufacture arms, rather than the retention of a full complement of major weapon systems. Furthermore, even if armaments are mostly procured abroad, some domestic technological capacity is required in order to evaluate such procurements.

Before 1994 defence R&D decisions were taken largely on military and strategic grounds and with little attempt to integrate with civil R&D. Funds were allocated in isolation from the national R&D account through the Special Defence Account and were administered by Armscor. While Armscor still coordinates the DOD’s R&D, the White Paper on Science and Technology published in 1996 recommended that defence R&D spending should also be reflected in the national R&D budget to allow ‘government and the public to evaluate total R&D spending in an unfragmented way’ and to provide for the integration of defence R&D with national R&D and the proposed National Science and Technology Council.


Figure 6.6. The interweaving of defence and civilian technology in South Africa


System of Innovation. This may lead to a further leaching of defence R&D as civilian priorities take precedence—a process likely to be accelerated by the increasing global tendency for civil R&D to lead defence R&D, rather than vice versa (the international norm during the cold war). The DOD is likely, as a result, to make far more use of off-the-shelf civilian technology. The defence industry will continue to seek to leverage spin-offs in the civilian sector and to develop relationships with civilian institutions in the National System of Innovation to promote spin-offs. There are many civilian–military counterpart technologies, most notably computers, but also medical equipment, surveillance and intelligence systems, navigation systems, and clothing and food technologies. The relationship between defence and civilian technology has been conceptualized by Armscor as seen in figure 6.6.

There has been a rapid and significant decline in defence R&D spending in the 1990s (see table 6.2). As a result, only approximately 15 per cent of the acquisition budget of the SANDF—572 million rand in 1996—is spent on R&D

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Table 6.2. Defence R&D expenditure in South Africa, 1987–96
Figures are in million rand and current prices.

<table>
<thead>
<tr>
<th>Year</th>
<th>Technology development</th>
<th>Full-scale development projects</th>
<th>Total</th>
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<tbody>
<tr>
<td>1987</td>
<td>249</td>
<td>1 546</td>
<td>1 795</td>
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<tr>
<td>1988</td>
<td>295</td>
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<td>1989</td>
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<td>1991</td>
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<td>376</td>
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<td>1992</td>
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<td>1993</td>
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<td>1994</td>
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<td>225</td>
<td>525</td>
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<tr>
<td>1996</td>
<td>312</td>
<td>260</td>
<td>572</td>
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</tbody>
</table>


and this is unlikely to improve significantly. Additional small amounts—perhaps 5–10 per cent of this figure—are spent on R&D by private-sector defence companies and by Denel.69 Despite this, the White Paper on Science and Technology noted that the defence sector ‘is a repository of considerable skills in instrumentation, controls and advanced materials handling. Extending or converting these skills to civil use could broaden our industrial skills base considerably’.70

The White Paper also argued that the core force concept adopted by the SANDF required a greater reliance on technology to increase the flexibility and responsiveness of a smaller military establishment. It set out a broad policy framework for defence technology retention and R&D.

The maintenance of a strong technology base is therefore a prerequisite of the new SANDF strategy and must serve a number of purposes: (a) maintaining the capability to detect threats; (b) creating an awareness of trends in military technology and their implications for the SANDF; (c) maintaining the ability to produce technology demonstrators that can be turned into military technology quickly; (d) maintaining the ability to provide expert advice for procurement purposes; (e) providing test and evaluation services; and (f) supporting upgrade and maintenance activities.71

In the procurement context this entails the retention of technology to support, upgrade and evaluate systems, to monitor technology trends and to produce technology demonstrators—the development and upgrading of prototypes of new weapon systems, without going into full-scale development or production (current or previous programmes include tanks, helicopters, artillery, advanced

69 Batchelor (note 5), p. 15.
70 White Paper on Science and Technology (note 67), p. 34.
71 White Paper on Science and Technology (note 67), p. 34.
avionics, stealth technology, fighting vehicles and multi-purpose stand-off weapon demonstrators). The coordination of technology development within the defence sector takes place through the Defence Research and Development Board, supported by an Armament Technology Acquisition Secretariat.

Research institutions, both public and private, also play an important role in military R&D, the Council for Scientific and Industrial Research (CSIR) being the most important. One of its divisions, Aerotek, is extensively involved in defence research (in 1994/95, 74 per cent of its work was defence-related) and has an agreement with the SANDF to carry out research on a variety of technical issues related to military air capacity, many of which have an impact on procurement decisions.

While the government is clearly committed to trying to retain some defence technological and R&D capability, it has recognized that independent local development of major weapons is no longer possible in a climate of budget constraints and reduced demand. Although relative latecomers to the international trend for partnerships and joint development, South African defence companies have moved swiftly into this arena. By the end of 1996, 12 companies were reported to have entered into a total of 93 ventures with companies in 20 other countries, notably in France, Germany, Malaysia and the UK. While this has potential advantages, such as economies of scale and utilization of synergies, in most cases the source of the technology in co-development ventures appeared to be South African, giving rise to concerns about technology outflows. The DOD has also expressed its concern about the possibility of international companies buying out not merely South African technology but also South African companies, especially if Denel were to be privatized in line with government restructuring initiatives. The DOD has indicated its intention of protecting immaterial property rights to state-funded technology. Beyond this, however, it is unclear what steps could be taken to prevent technology outflows or foreign ownership given the growing internationalization of defence industries and the fact that South Africa is such a small player on the world arms market, accounting for less than one-half of 1 per cent of global sales.

VI. Organizational and behavioural issues

The division of responsibilities for acquisition within and between government departments and agencies is outlined above. This section examines the composition and roles of some of the institutions involved as well as the role played by non-government actors.

72 Buys (note 8), pp. 21–22.
73 Truscott et al. (note 12), pp. 38–39.
74 Cilliers (note 66), pp. 11–12.
75 Cilliers (note 66), p. 7.
76 Buys (note 8), p. 21.
Parliament and the executive

Control by elected civilian representatives is ensured by the fact that Parliament and the Cabinet have to approve cardinal projects. However, it is not always clear exactly how this takes place, and the division of responsibility between the executive and the legislature remains a contested issue. South Africa inherited a Westminster-type system with a powerful executive and a fusion between executive and legislative functions (with the exception of the President, all Cabinet ministers sit in the legislature). Under the Government of National Unity, parliamentary committees have gained greater power.

Under the interim (1993) constitution the JSCD was vested with considerable powers, including the competence to investigate and make recommendations regarding the defence budget and armaments. In practice, the extent to which the JSCD has asserted itself in regard to procurement issues has depended on the interest and strength of the personalities of its members. Its functioning has also been hampered by a lack of expertise among its members on procurement issues. It has no secretariat or research support and verbatim records of its proceedings are not kept. Many decisions can be taken in the Cabinet or cabinet committees (such as the NCACC or the Cabinet Committee on Security) without reference to the JSCD. After early enthusiasm over the White Paper process, attendance at JSCD meetings dropped and some parliamentary commentators expressed disappointment at its performance.

Other parliamentary committees are also entitled to deal with defence acquisition issues. The National Assembly includes a Portfolio Committee on Defence with powers to consider legislation and make recommendations, while the National Council of Provinces has established a Defence Committee with advisory and legislative roles. The powerful Finance Committee can have and has had a say in acquisition. The distinction in roles, powers and mandates between the three defence committees is not always clear, although in practice the JSCD is the main locus of parliamentary oversight on defence.78

Historically, civilian organizations played little role in arms procurement decision making, while the media were severely constrained by the Armscor Act and other legislation, so that reporting was based largely if not entirely on official DOD information. There was virtually no public scrutiny or discussion around armaments acquisition. While the situation has changed dramatically since 1994, disclosure is still not complete and the capacity of the media is limited (see below). There has been considerable public debate over major issues, notably the corvette proposal, and a number of civil society organizations, especially peace or pacifist organizations, questioned the wisdom of spending such large sums of money on defence acquisitions or openly opposed the proposal. Many of these were small NGOs, such as the Ceasefire Campaign, but others

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were mass-membership organizations such as the Congress of South African Trade Unions and the Anglican Church.79

Academics and experts outside the relevant government departments have played a minor role in influencing arms procurement decisions. A small group of defence policy analysts and a few NGOs specifically interested in defence matters have written articles in the press and contributed to policy development through White Papers and advisory roles to cabinet ministers. A number of academics and advisers also act as consultants to Armscor in a technical capacity.80

Accountability and transparency

The move towards greater accountability and transparency in arms procurement since 1990, and particularly since 1994, has been uneven and fraught with disagreements and difficulties. Principles of transparency are outlined in the Open Democracy Bill which was tabled for parliamentary and public debate during 1997. However, the bill aimed to introduce important limitations which would have an impact on arms procurement transparency. Information could be restricted on the grounds of protecting third-party commercial information, the defence and security of the Republic, South Africa’s ability to conduct international relations, its economic interests and the commercial activities of government bodies. In particular, the bill states that information may be restricted if it jeopardizes the effectiveness of arms and equipment (including communication and cartographic equipment) used, intended to be used or being developed by disclosing its capabilities, quantity or deployment.81

In June 1997 the Cabinet approved a policy on transparency in defence issues which sought to integrate the letter and spirit of the Open Democracy Bill with the peculiarities of the arms trade. In particular it specified that transparency with regard to procurement was important because public funds were involved. However, commercial confidentiality clauses would need to be respected and technical specifications could remain secret. Major (cardinal) procurement programmes, it reiterated, would have to be approved by the Cabinet while the JSCD retained an oversight function which included guidance to the DOD regarding timing of tenders, submission of RFPs, IP obligations and so on. The policy also noted that international espionage on defence industrial and technology issues needed to be taken into account. One of the most visible steps towards transparency with regard to procurement has been the establishment of a monthly Tender Bulletin by Armscor, in which all tenders it adjudicates are listed and which is published both electronically and through the printed media.

80 The main NGOs involved in debates over procurement are the Institute for Security Studies, the Centre for Conflict Resolution, Ceasefire, and the Group for Environmental Monitoring.
In July 1997, Kader Asmal, Chairman of the NCACC, clarified the government’s policy on the arms trade in general, although his statements were made specifically in response to a public dispute over the disclosure by some South African newspapers of the name of a country with which Denel was negotiating a multi-billion rand arms export deal subject to a commercial confidentiality agreement. Asmal claimed that the government would disclose ‘an unprecedented amount of information on arms transfers’ that would be ‘unique internationally’ (this was disputed by some analysts) but that there would nevertheless be limitations, particularly with regard to commercial confidentiality.82

VII. Towards an ‘ideal type’ of arms procurement decision-making process for South Africa

This chapter identifies some of the key concerns and issues in the arms procurement process in South Africa on the basis of the research papers commissioned by SIPRI. In some of these, specific recommendations were made as to how procurement decision making could be improved. While it is impossible to reconcile or incorporate all of these views, this section draws on some of these proposals as well as the discussion above.

First, it must be stated that the process of governance never is and never can be ‘ideal’. It is always the product of political compromise, historical inheritance, institutional and cultural character, and a host of other social, political and economic determinants. South Africa has undergone a remarkable transition and is self-consciously seeking ‘best practice’ in managing a democracy in a developing world context. At the same time, the legacy of the traumatic recent history of the country remains a heavy burden, while the institutional inadequacies and inequities which flowed from the distortions of apartheid remain. A centralized, secretive decision-making process was the norm both for the apartheid regime and for its opponents, who were hounded and driven underground or into exile.83 In general terms, an ‘ideal type’ process in any realm of governance will be constrained by these realities. This is particularly the case with regard to any aspect of defence and the international arms trade, which is subject to many national security-related abnormalities and specificities (for example, in relation to transparency).

Nevertheless, it is possible to make some general observations which arise from this study and which may assist in moving towards an ideal type of arms procurement decision making in the South African context.

1. Parliamentary oversight in relation to acquisition could be further strengthened. The days when Armscor and the Cabinet (or more usually the State Security Council) were free to make and implement acquisition decisions (even including those relating to nuclear weapons) secretly and without public


accountability are over. The establishment of the various defence oversight committees has been a significant step forward. However, the committees have had to find their way with few resources, both in terms of developing expertise and in working out an appropriate relationship with the civil service, the public, the military and the executive. The establishment of the NCACC also indicated a government commitment to take political control over the arms trade and defence industrial issues. (Although it is mostly focused on arms exports the NCACC has taken on broader responsibilities, including some aspects of acquisition policy, as is evidenced by its commissioning of the White Paper on the Defence Industry.) However, there is no formalized link between the NCACC and the parliamentary committees, although the NCACC is obliged to submit an annual report to Parliament. Nor has the principle of an independent inspectorate for arms trade issues, called for by the Cabinet in August 1995 when the NCACC was set up, led to any institutional arrangements. The Cabinet authorized an inspectorate to ‘ensure that all levels of the [arms control] process are subjected to independent scrutiny and oversight and are conducted strictly in accordance with the policies and guidelines of the NCACC’. It also called for the inspectorate to make reports to the parliamentary committees.

2. Transparency and public accountability in regard to acquisition could be substantially improved, building on the basis of the constitution, which in Section 32(1)(a) states that ‘everyone has the right of access to any information held by the State’. One way to strengthen this would be to formalize the processes of parliamentary oversight and approval and clarify the reporting relationship between the various committees and the executive, in particular the NCACC. The principle of obtaining parliamentary approval for cardinal acquisitions should in practice lead to the establishment of a mechanism for ensuring that these decisions are put before the National Assembly and the National Council of Provinces, as they involve substantial public moneys and may have foreign and other policy implications. The functioning of the JSCD with regard to acquisitions would be greatly enhanced by the provision of expert technical advice, possibly administered by a secretariat. It is also not clear at what stage in the acquisition cycle the JSCD and Parliament as a whole are expected to be informed and provide oversight. To do its job properly, Parliament would probably need to consider cardinal acquisitions at the specifications stage, the tendering stage and when the tenders are evaluated.

3. The Defence Review process and the subsequent realization that there was insufficient money to pay for the force design arrived at indicated the unsound relationship between the defence planning process and the budget cycle, and more generally between the internal processes of the DOD and the political process. It is clearly unsatisfactory (not to mention a waste of time and money)

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84 The JSCD has oversight over the DOD: this anomaly needs to be addressed so that it also has oversight over Armscor.
87 Calland (note 78), p. 33.
when a two-year force planning exercise which finally gives rise to a force design proves to be inappropriate in that the money is not available. The introduction of medium-term budget planning over three years may improve such planning, but the DOD evidently needs to pay more attention to budget realities when it undertakes its planning exercises. This means that there should be much closer coordination between the political process and defence strategic management, which could be instituted through the JSCD.

The disjunction between the Defence Review’s envisaged force levels and the realities of funding may also eventually give rise to a reassessment of the appropriateness of the SANDF’s roles and functions, and hence a reassessment of procurement needs. While the core force concept is one of a scaled-down SANDF, it nevertheless calls for a balanced all-round capability for conventional defence. This may not be affordable in the long run, and the DOD may start to configure the defence forces for their actual tasks, now regarded as secondary—border protection, assistance to the police and peacekeeping. As the SANDF becomes more involved in peacekeeping, as it is certain to do, procurement for peacekeeping operations is likely to become a more important issue. The SANDF has indicated that it sees its role in African peacekeeping operations in terms more of providing equipment and logistical and communications support than of providing troops. Even without SANDF involvement, with its considerable acquisition experience, Armscor could provide a useful service for UN peacekeeping operations in Africa or more widely.

4. One issue which has not been considered in any detail, but which is essential for the evolution of common security in Southern Africa, is the question of relations with the other 13 members of the Southern African Development Community (SADC) with regard to arms procurement. The SADC member states are committed to a wide-ranging set of regional confidence- and security-building measures as well as a more ambitious programme to coordinate peacekeeping, carry out conflict resolution and build mutual defence structures. Transparency is an essential aspect of such confidence building. The MOD does not appear to have given much thought to the effect of South Africa’s arms procurement or the process it follows on its neighbours’ perceptions: while corvettes are unlikely to be regarded with any alarm, jet strike aircraft or tanks may be a different matter. The reaction of some SADC states to orders placed by Botswana for Leopard main battle tanks and F-5 aircraft in 1996 illustrates how unexpected or unexplained acquisitions can be regarded with alarm by neighbours, even in the context of a common security regime. Armscor has, however, mooted the idea of putting its resources at the disposal of other SADC states and of the South African defence industry becoming the primary supplier to the SADC, in part by donating some of its outdated and redundant equipment. This may be seen as hegemonic behaviour, but it is evident that South

89 The members of the SADC are Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania, Zambia and Zimbabwe.
90 Buys (note 8), p. 20; and Omar (note 39), p. 20.
Africa would be well served by beginning a dialogue with its neighbours around arms procurement and by consulting within the SADC security structures about its procurement intentions as a confidence-building measure.

5. Improvements in the formal decision-making process around South African arms procurement should be accompanied by enhancements in the public’s understanding of and information about acquisition decisions. The capacity of the South African media to deal with these issues is limited as a result of the distortions of the past. In particular, expertise and capacity on defence matters are lacking in the black-oriented press, especially since the demise of some of the ‘alternative’ or community newspapers of the anti-apartheid struggle.91 While a few NGOs have established a niche in the defence arena, the interest of civil society in arms procurement issues remains limited, although, as with the case of the corvettes, this can change when large amounts of public money are involved and stark choices appear to be on the agenda. Armscor has made efforts to seek partnerships with NGOs, at one stage hoping to formalize an Armscor–NGO forum,92 but some NGOs feared being co-opted while others had few resources and were able to focus on arms procurement issues only for limited periods. It is probably unrealistic to expect them to be subjected to ongoing analysis and attention from NGOs and civil society as they are in the USA, for example; nevertheless, capacity-building initiatives, for example by international aid donors, could assist.93

6. In the public service, a process of institutional rearrangement of responsibilities has been initiated with regard to procurement. The powers of Armscor, which was once both player and referee in the arms procurement process, have been substantially reduced and the Defence Secretariat, the MOD and the NCACC have taken over most of its powers of authorization and approval. The White Paper on the Defence Industry may make further recommendations in this regard in order to enhance public accountability and transparency and ensure cost-effectiveness.

7. Integration of procurement decisions with national economic, industrial, science and technology priorities could also be improved. Major capital expenditures, particularly if placed outside the country, could provide an opportunity for leveraging strategic and trade advantages. The implementation of the National Industrial Participation Policy is contributing substantially to this process, but, as the White Paper on Science and Technology has identified, there is greater scope to seek synergies between the military and civil technology sectors. This is particularly true with regard to IP policy and international partnerships, which the government, through agreements with other governments, can influence in order to ensure an appropriate exchange of technologies.94 Under

91 Liebenberg (note 83), p. 16.
92 Omar (note 39), p. 17.
93 E.g., the Group for Environmental Monitoring has managed to sustain public interest in defence industrial issues by holding public workshops to seek inputs into the White Paper on the Defence Industry and, with the Defence Management Programme at the University of the Witwatersrand, organizing a course in Defence and Development which focused on defence industrial conversion issues.
94 Hatty (note 33), p. 29.
apartheid there was no effective link between arms procurement, which was driven by strategic military considerations, and the technology development process, and there is still considerable room for improvement.\(^\text{95}\)

In a broader context, affirmative procurement and the restructuring of the defence industry can contribute to the realization of socio-economic objectives. It is therefore essential that in the pursuit of value for money procurement decisions continue to take into account wider political, economic and social implications. The exact way in which the government supports the domestic industry, and which sections of it it supports, needs to be determined, but it is clear that there cannot be an absolutely ‘free market’ in defence procurement, if only because other governments are subsidizing their industries. The thriving process of diversification and commercialization in the South African defence industry plays an important role in this as it makes the domestic industry less dependent on public money and leads to greater integration with civil technology and industrial development.

\(^{95}\) Truscott \textit{et al.} (note 12), p. 43.