Annexe B. Abstracts of the working papers*


Chile’s defence policy is formed at the highest political level. The National Defence High Command in the Ministry of Defense develops the Global Political Strategic Appreciation, which identifies possible external threats, analyses the capacities to face those threats and defines equipment requirements for the armed forces. The current doctrine of dissuasion—expressed in an approach that seeks to protect the regional status quo—requires that certain technological levels and combat efficiency are maintained.


The transition to democracy in Chile has not yet resulted in a fully democratic and participatory arms procurement decision-making process. The presidential regime and the non-confrontational system of party alliances have limited the influence of the Congress, especially in defence matters, where disagreements could hinder the transition process and threaten the position of the armed forces.


Public and political debate on arms procurement is minimal in Chile owing to the autonomy of the armed forces, the guaranteed military budget and the limited influence of Congress. Chile’s presidential system gives the Congress little power to control the military budget. The armed forces have no coordinated arms procurement decision-making process because of a lack of organizational and technical capabilities.


The preventive mechanisms designed by the armed forces during the transition to democracy in order to avoid civilian reprisals have limited the Congress’ influence over the defence budget. It does not receive details from the regular budget for personnel and operational costs, and has no say in the budget for arms. Its political composition has also limited opposition and debate since it is dominated by two main coalitions—the government coalition and the centre–right coalition, which traditionally supports the military.


The USA’s dominance as an arms supplier in the 1950s and 1960s and the 1976 arms embargo resulted in a policy of arms procurement diversification in Chile which is further enhanced by the independent role of the armed forces in arms procurement.


Formal coordination between the armed forces and the Foreign Ministry in defence policy and arms procurement is very limited owing to the considerable autonomy enjoyed by the armed forces and independent sources of funding for arms procurement. However, the armed forces do consider general trends in Chile’s foreign policy and international engagements when making procurement decisions. The current arms procurement policy aims at achieving a regional strategic balance in the Southern Cone and at finding reliable and diversified sources of procurement.

* This annexe presents abstracts of the 63 working papers on which the chapters of this book are based. It was prepared by SIPRI Research Assistants Eva Hagström and Oscar Schlyter.

Operating costs are covered in Chile’s national budget law, which stipulates that the government’s contribution must be at least equal in real terms to the funds received by defence agencies in the 1989 budget. Arms procurement is financed by a special tax that apportions 10 per cent of the net profit on exports of copper and copper by-products. This amount is divided equally between the three branches of the armed services. The system of funding has guaranteed a certain level of resources without political debate. However, it is inefficient since the three services do not all have the same needs.


Chile’s defence industry has been shaped by the needs of the armed forces. This gives the forces direct influence over strategic industrial developments and gives the industry easy access to defence contracts. The existence of government-owned defence firms and the small market have impeded the establishment of a private-sector defence industry.


During the ‘agreed’ transition to democracy in Chile the military was granted considerable autonomy—irremovable commanders-in-chief, a guaranteed minimum military budget and special funding for arms procurement. Vast powers were also given to the president, who has a veto over the military budget and arms procurement decisions. However, in order to safeguard civil–military consensus, the role of Congress has been limited to a right to be informed and to initiate new legislation.


Chilean arms procurement policies prioritize the international procurement of second-hand combat systems, which are adapted and modernized locally. There is no specific policy or substantial funding for R&D, which is focused on the transformation, modification and maintenance of equipment.


The 1996 Imia crisis between Greece and Turkey over control of islands and islets in the Aegean Sea brought forward the need for a restructuring of Greece’s defence policy and force structure. Turkey’s new strategy of provoking crises and low-intensity conflicts has been difficult to deal with through the traditional Greek military doctrine. The new situation calls for a change to a doctrine based on ‘flexible retaliation’, which entails responding to Turkish threats on an equal level of intensity, focusing on vulnerable political targets and raising the political costs for Turkey.


The current political system is designed to sustain civilian control over the armed forces. Nevertheless, the military plays a significant role in the arms procurement process through its influence on threat assessment. The other significant actor in the process is the government, through its ultimate responsibility for the preparation of national defence policy. The Parliament, the media and the general public have the least influence, although the former aims to play a greater role.

After World War II and a civil war the USA appeared to be the only reliable source of foreign aid for Greece. Initially this support was welcomed but in time it created a situation of dependence and eventually became a constraint in three ways: financially, through hidden costs; politically, by constraining Greece’s activity in the world; and militarily, because of the consequent underdevelopment of the Greek defence industry. Today Greece needs to broaden its sources of supply, negotiate more favourable agreements and support its domestic defence industry.


Despite many similarities with Western democracies, Greece’s socio-political situation is significantly different. Its particular characteristics include a strong communal tradition, extensive patron–client relations between the elected and the electors, the influence of the Orthodox Church, Byzantine traditions and a tradition of rebellion. The result is that decisions are formed primarily by the personal preferences of politicians and their relations with the various actors in the decision-making process. Public opinion on foreign and defence policy is largely shaped by Greece’s relations with Turkey.


Hitherto Greece has allocated a limited share of its defence budget to local R&D. However, the Ministry of National Defence recognizes that indigenous R&D can have an important role in improving national defence and should be given higher priority. What is needed is not only a significant increase in the budget for defence R&D but also a well-balanced allocation of resources within the R&D budget. Increased defence industrial cooperation within NATO and the EU is equally important.


Membership of NATO and close security cooperation with the USA have enabled Greece’s defence industry to import technological know-how. This has not, however, led to defence industrial self-sufficiency, owing to the structure of the defence industry and unfavourable bilateral agreements with arms-supplying countries. The dependence on the USA in terms of equipment and technology limits Greece’s freedom in international relations, in particular at the regional level.


Pre-colonial indigenous culture in Malaysia centred around the concept of authority, which gave the political leadership final decision-making authority in arms procurement. The influence of civil society is limited because of secrecy regarding military issues and defence budgets, middle-class complacency and a general lack of interest in defence issues.


Arms procurement decision making begins with the armed forces defining their equipment requirements in a five-year perspective plan. The plan is then examined by the Economic Planning Unit of the Prime Minister’s Department, which determines the allocations for defence. Thereafter the Ministry of Defence prioritizes the requirements and submits the plan to the Cabinet for approval. Arms procurement deals below 5 million ringgits in value are implemented by the Ministry of Defence, others by the Treasury.

Although Malaysia has a well-developed democratic system there is still room for improvement, in particular with regard to laws on national security such as the Internal Security Act and the Official Secrets Act. These laws have reduced public awareness of national security issues by curbing the flow of information to the media. The situation has improved for the media, but the lack of public interest in national security issues is still an obstacle for accountability and transparency in government.


Malaysia’s financial planning for defence has been more influenced by economic than by other factors, although strategic factors such as threat perception and the changing security scenario play a vital role. In recent years the importance of offsets, in particular technology transfers, has increased in Malaysia’s arms procurement plans.


The battle against communist insurgents and the colonial legacy have created a political and military culture of secrecy in Malaysia. Transparency in arms procurement is limited by the Internal Security Act and the Official Secrets Act, and public accountability is practically non-existent owing to a lack of interest in defence issues, a weak civil society and the overwhelming dominance of the ruling coalition in Parliament.


Force restructuring in the 1990s began with a doctrinal shift from counter-insurgency warfare to conventional warfare in 1986. The aim is to strengthen conventional deterrence capability through reorganization of the armed forces, coordination of operations and substantial arms procurement. Priority areas are technology transfers and defence industrial cooperation.


Malaysia needs to strike a balance between defence spending and other socio-economic needs in order to avoid building up defence at the expense of development. At the same time, defence planning should be long-term and capability-driven since defence investments can contribute to national growth. Defence budgeting in Malaysia consists of five-year plans and an annual budget developed by the Ministry of Defence.


Arms procurement decisions are made by the Ministry of Defence as part of the formulation of defence policy and are accepted by the government in the Ministry of Defence annual budget. The Parliament also participates in the budget debate, but the dominance of the ruling coalition and the ignorance of senior ministers have reduced its importance. Furthermore, the notion of collective responsibility within the ruling party serves to reduce criticism.


The Malaysian Defence Science and Technology Centre was set up in 1968 to do defence R&D in Malaysia. It has not worked efficiently for a number of reasons. It has a human resources problem, having too few employees with not enough education; its funding has been inadequate; and there are bureaucratic obstacles in the way of its accessing the funds approved for it in the annual budget.


Defence investments can provide employment, provide new technology and stimulate growth. However, in the case of Malaysia none of these effects has been demonstrated. Statistics show that social and economic spending have maintained their proportionate shares and that defence spending has not stimulated growth.


The Polish defence doctrine recognizes that the main threat to the country stems from political instability in neighbouring countries, organized crime and uncontrolled population flows. However, Polish defence planning is perhaps more influenced by budgetary constraints and membership of NATO. NATO membership will be costly because it will require interoperability, but it may also limit the number of threats to Poland’s security.


During the cold war Poland’s defence industrial and disarmament policies were largely determined by the Soviet Union. With the end of the cold war Poland gained greater control over these issues but it is still dependent on Russia for spare parts and repairs. Its ambition to join the EU and NATO has limited its choices with regard to both procurement of equipment and foreign policy, and cuts in Polish defence have put the domestic defence industry in a difficult situation.


The Ministry of National Defence has the main responsibility for audit of arms procurement in Poland. However, when a foreign company is involved, procurement is carried out by institutions outside the Ministry and the auditing is limited. Another problem is that auditors often lack the competence to perform their tasks efficiently. Responsibility for audit should be transferred completely to the Ministry of National Defence and the levels of competence required should be formalized.


The dramatic changes brought by end of the cold war directly affected the Polish defence industry, including the transition to a market economy, NATO enlargement and defence industrial restructuring. In order to deal with these developments Poland plans to increase private ownership in the defence industrial sector, to increase international and civil–military cooperation, both in the arms industry and in the R&D sector, and to focus more on offsets. So far, restructuring has not been as extensive as planned because of economic difficulties, political instability and the lack of a clear strategy.

During the Warsaw Pact era technology assessment of defence equipment was limited to small-scale analyses mainly carried out to justify decisions already taken. The emergence of a more democratic society has improved the situation but there are still no standardized guidelines for technology assessment as part of the arms procurement process. Poland needs to increase levels of expertise among both civilian and military actors in the process and to improve and clarify legislation related to the arms procurement process.


Since the Public Procurement Act of 1994 was enacted, the Polish public procurement system has been in a state of development. The Ministry of Defence has drafted several documents regarding arms procurement and inter-ministerial coordination. However, the process is too complicated and lacks transparency. The main areas in the Public Procurement Act which need improvement are inter-ministerial coordination and the rules regarding procurement from foreign suppliers.


Civilian control over national defence has not been completely implemented despite being generally accepted. After several years of dispute a bill providing for civilian control over defence was passed, and since then the General Staff has gradually lost its authority. Parliamentary oversight of the military is mainly carried out by the Parliamentary Defence Commissions through their role in the budget process. Another important actor is the Highest Chamber of Control, or National Audit Office, which can investigate the activities of government-related institutions.


Poland has no tradition of organized lobbying or pressure groups. However, these forms of influence have gradually emerged since the fall of communism. The two most influential groups are the Polish Industrial Lobby and the trade unions. The period since 1989 has seen a significant growth in the mass media, which also shape decisions regarding defence issues. The most salient topic in the Polish defence debate is that of cooperation between domestic and foreign defence producers, in particular with regard to offset deals.


Since 1989 Poland has tried to improve the position of its defence industry. Defence industry restructuring has entailed changes in ownership with privatization, financial support to key companies, and efforts to concentrate the defence industry in fewer, larger companies. However, development has been slow, mainly because of resistance to privatization on the part of the labour unions and the political elite and a lack of financial resources.


During the cold war Polish national defence was governed by the Communist Party and the Supreme Command of the Warsaw Pact. At the end of communist rule the old elite managed to transfer its political influence to economic power. It thus remains a powerful force. Another factor influencing defence decision making in Poland is the lack of laws governing the control of the armed forces, which has led to strains and conflicts between civilian and military decision makers.

The current structure of the Polish defence industry is based on traditions from the 1930s. Since the end of the cold war, however, it has undergone significant restructuring because of changes in the political situation in Europe and the subsequent drop in demand for armaments. It is undergoing privatization, conversion and downsizing. International cooperation through joint ventures is also increasing.


During the cold war Poland was almost exclusively dependent on arms supplies from the Soviet Union. This had negative effects on the defence industry, in particular with regard to R&D and competitiveness. Currently, the main countermeasure against import dependence is interdependence, rather than diversification of supply. In order to acquire defence technology and facilitate arms exports Poland must cooperate with foreign partners, which will improve the economic situation of the defence industry and keep down the costs of modernization.


Since the ending of apartheid and the lifting of the UN embargo in May 1994, procurement decision making in South Africa has been transformed. Decision-making processes have been restructured and there is a much greater degree of transparency and public accountability. With budget constraints and changing priorities, procurement decision making is now largely determined by socio-economic and financial considerations rather than by the imperatives of national security. The choice of sources for procurement has also widened to include foreign sources.


According to the 1996 White Paper on Science and Technology, the essence of the new strategy of the South African armed forces is to convert the current force into a smaller but technologically more capable one. The Ministry of Defence policy is to support and contract the national defence industry and to run a limited number of long-term core programmes to enable it to maintain its engineering and production skills. Local suppliers receive a price preference, but the decline in defence expenditure and especially in the budget for arms procurement has been a major constraint in building a national defence industry.


On paper South Africa’s arms procurement decision-making process is the most transparent and controlled in the world. However, the ability to hold the government accountable for its actions is limited by the institutional weakness of the Joint Standing Committee on Defence, which lacks research support, comprehensive records of meetings and a system of dissent. The fusion of the executive and the legislature which is the result of the strength and party discipline of the African National Congress (ANC) also weakens the Parliament in general.


Recent reductions in the defence budget and the decline of the defence industry make defence R&D a strategic resource in South Africa. A defence technology base is needed to enable informed decisions on prospective defence procurement. Although Armscor, the Ministry of Defence and the Department of Arts, Science and Technology recognize the crucial importance of defence R&D, they are unable to sustain adequate levels of funding.
During the Defence Review and at the Cameron Commission, the Anglican Church called for a total prohibition of arms exports from South Africa and the disbanding of Armscor and Denel. It has argued that the arms industry is heavily subsidized and thus diverts public resources from socio-economic priorities such as housing, education and health services.

The process of arms procurement budgeting allocates resources to programmes which meet the broad strategic goals of the South African National Defence Forces rather than directly to the armed forces as in the past. It begins with a top-down environmental analysis, which forms the basis for the bottom-up establishment of requirements by the armed forces. The process of contracting has changed to include aspects of life-cycle costing, multi-sourcing, accreditation of suppliers, affirmative procurement and industrial participation (offset).

Its defence industry is a strategic and operational asset as well as a significant technological and industrial asset for South Africa. It has developed advanced technological capabilities which enable it to compete effectively in the international market. Partnership and joint ventures with industries in other countries are providing valuable transfer of technology and expanded marketing opportunities.

South Africa’s defence policy is guided by a foreign policy which emphasizes human rights, regional development and security. Facing the Southern African region, which is still wracked by internal instability and economic underdevelopment, the South African National Defence Forces need several capabilities. The great transparency of and outside involvement in the process of developing the defence policy will enhance the prospects for regional confidence-building measures, which the Inter-State Defence and Security Committee of the Southern African Development Community (SADC) has begun to examine.
Audit of arms procurement should focus on the quality of the procurement process, in which bid evaluation and source selection are the critical elements, rather than on the weapon systems delivered. In exercising oversight, the Joint Standing Committee on Defence first needs to review the military budget and thereafter, with the help of technical experts, audit selected procurement decisions.

Focused technology assessment can only be performed if the future long-term equipment requirements are known, since technology development must be directed towards a future equipment requirement goal. The force structure plan of the SANDF and a strategic long-term vision of defence policy, which has been discussed in the White Paper and in the process of the Defence Review, must be the basis for scientific technology assessment and equipment selection.

Through the process of the Defence Review, public opinion has influenced South African arms procurement. It is performed by the Ministry of Defence, the Defence Secretariat, the SANDF, Armscor and the Parliamentary Joint Standing Committee on Defence. However, foreign policy does not influence the arms procurement process because there is no officially accepted foreign policy concept.

Arms procurement in Taiwan has been shaped and driven by the security interests of the USA and also to a great extent by the government’s political priorities rather than the objective requirements of national defence. An attempt was made to reform the procurement process by setting up a Procurement Bureau in 1995, but the continuing need for greater accountability and transparency was highlighted in 1998 by several scandals connected to arms contracts.

The locus of Taiwanese security and defence policy making is the National Security Council, a constitutional advisory body under the presidency. Security policy is almost completely aimed at repelling an armed assault from the People’s Republic of China (PRC). Since the end of the cold war Taiwan has changed to a defensive rather than offensive posture. Despite striving for self-sufficiency, it remains dependent on the USA if the PRC should start an offensive.

Before the late 1980s there was no public debate regarding defence policy in Taiwan. The situation has improved with increased democratization but is not satisfactory in terms of accountability and transparency. The Ministry of National Defense enjoys much greater authority in deciding which information should be kept secret than other state agencies. Attempts to increase the transparency and accountability of defence policy making have been resisted by the military.


Taiwan’s arms procurement process is based on a model known as the integrated strategy analysis framework, which seeks to combine relevant variables such as security and defence industrial considerations, budget aspects, resources and technology. The budget is governed by the planning, programming and budgeting system, which tries to combine military strategies, force structures and financial allocations in order to make efficient use of national resources.


Since the early 1970s Taiwan has striven to create a credible and independent defence capable of resisting attacks from the PRC. It has focused on quality rather than quantity. To ensure power and independence, Taiwan has promoted R&D and the domestic arms industry. In order to achieve a more efficient arms procurement process, reforms such as increased coordination of the three branches of the armed forces and improved oversight and review mechanisms have been introduced.


Taiwan has received a large part of its defence equipment from the USA. To counter the threat from the PRC it has emphasized the need to develop an indigenous defence industry, setting up a R&D institute, the Chung Shan Institute of Science of Technology (CSIST), in 1969. When the USA changed its arms export policy towards Taiwan in the early 1980s the CSIST was given an enhanced role. Although the USA has begun to export arms to Taiwan again, the CSIST remains an essential element in the national defence.


Taiwan strives for self-sufficiency in defence R&D but also seeks to diversify its sources of weapon supply. The domestic defence industry still lags behind and pressure from the PRC has made Taiwan heavily dependent on the USA for arms supplies. This has led not only to Taiwan being very vulnerable to changes in the relations between the USA and China but also to the USA having major influence on Taiwanese domestic and foreign policy.


Since the end of the cold war, Taiwan’s arms procurement has focused on economic survival and development. Other important considerations in arms procurement decision making are relations with the USA and Taiwan’s geographical position. Arms procurement policy seeks to establish independence by prioritizing domestic procurement and diversifying sources of arms supplies.
Problems in arms procurement procedures in Taiwan have led to corruption in connection with arms deals. The main reasons are a serious lack of effective supervision mechanisms, an excessively hierarchical military organizational structure and the involvement of organized crime. Since 1995 a number of actions have been taken by the Taiwanese Government to increase transparency and efficiency in the arms procurement procedures by limiting the power of the military.

Lack of adequate domestic R&D and arms production capabilities has made Taiwan dependent on imported weapon systems, in particular from the USA. To counter this, attempts have been made to strengthen domestic R&D and production through technology transfer and offset agreements. The problem of US influence on threat assessment and the structure of the Taiwanese defence have led to a government decision to diversify the sources of supply of weapon systems.