
China’s defence industry is in a state of transformation. The increased openness of the Chinese economy and a shift in strategic thinking have contributed to changes in military industrial capability and the refocusing of defence production to serve both the national defence and the national economy. Reform measures include the adoption of a contract-based system emphasizing risk-taking on the part of increasingly independent and self-reliant enterprises.


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Chinese national defence policy and arms procurement decision making are headed by the Central Military Commission of the Chinese Communist Party and the Central Military Commission of the People’s Republic of China. National military and economic development strategies and the international strategic situation, reflected in the complex process of threat assessment, are major factors influencing arms procurement and budgeting. The import of the means of production and technological know-how—both to upgrade existing systems and to develop new weapons and equipment—is a major component of China’s efforts to modernize its defence production.


Changes in the post-cold war security environment have involved increasing demands for greater military transparency in China. Although direct military threats have disappeared, the international separatist trend of the post-cold war period, as exemplified by the breakup of the Soviet Union and the threat of the breakup of otherwise stable federations, is of great concern to the Chinese leadership. China’s integration into the world economy and the increased emphasis on transparency in military affairs contribute to the creation of a peaceful environment for national economic development, which is a top priority for Chinese national security.

The near-term objective of Chinese defence research and development (R&D) is to develop the necessary weapons and equipment so as to increase the quality and quantity of China’s military capacity. The long-term objective is to conduct basic and applied research and to monitor developments. By a strategy of self-reliance combined with external assistance as required, it is hoped that defence R&D will contribute to the development of the national economy and of science and technology in general.


Chinese policy makers consider economic progress to be the foundation of national power and the best guarantee for the country’s security. Chinese arms procurement policies emphasize the import and assimilation of advanced technology into its weak technical base, and production supported by domestic defence R&D and the defence establishment in order to achieve greater self-sufficiency.


Faced with a limited defence budget and resources, China’s defence planners have come to understand the importance of improving arms procurement procedures and have implemented a series of reforms. Current procurement auditing practices aim to monitor the process through regular checks as to whether desired tactical–technical performance levels have been attained and the assigned budgets have been met.


China’s fundamental policy of defence industrial self-reliance does not mean that it has closed its door to outside assistance or cooperation when required. Decisions to import weapons and technologies involve a number of agencies before the proposals are submitted to the highest political level for approval. The factors considered include the availability of domestic production facilities, technical capacity, the supply of materials, the required level of technical performance, overall quality, sources of supply and training.


Despite a traditional lack of political interest in national security structures in India, there is a functional system of checks and balances on defence policy making. This has constrained military profligacy and kept India out of harm’s way. Through its military affiliation with the former Soviet Union, India has been able to maintain a competitive military capability at moderate cost.


India’s relatively dated ordnance factories and a highly dynamic but untapped civilian sector cannot presently match the technological levels achieved elsewhere in the region. Reactive responses to the induction of high-technology weapon systems sometimes make import the only viable solution. A greater infusion of funds into defence R&D, a clearly defined action plan and increased involvement of the private sector could provide the route to much-desired modernization and self-reliance.

Despite two major arms scandals in India—the cases with Bofors and Howaldtswerke Deutsche Werft (HDW)—there has been no change in the procedures for or organizational structure of arms procurement. Disquiet exists among the armed forces since no major arms purchases have been made in recent years. At the same time, threat perceptions, stability and the integrity of India are of major concern to the public. The interest in processes and procedures is thus outweighed by a desire to see a strong India in the 21st century.


Appropriate budget allocations for defence are necessary to ensure modernization and adequate preparedness in India. At the same time, competing demands on national resources from the social sector need to be considered. Defence expenditure can become more efficient by examining the need for existing equipment, establishments and procedures. Manpower costs and other mandatory expenditure need to be reviewed and resources used in new ways to maximize productivity and effectiveness.


Despite India’s organizational disabilities, the future of the country’s defence industrialization looks promising in the post-liberalization economic era. Whether the passage of the Indian defence technology and industrial base from the present state to a more developed level will be smooth will largely depend on the quality of decision making by the political leadership.


There is a lack of legislative and public control over the arms procurement process in India. Legislative control is exercised by the Consultative Committee and the Standing Committee on Defence, whose influence is limited to examination of the defence budget. The committees lack the authority to demand to see documents, hear witnesses or obtain expert reports and the Indian Parliament has hitherto never appointed a defence commission. The Official Secrets Act also weakens transparency and public accountability in arms procurement decision making.


The defence industrial base in India primarily consists of the state-owned ordnance factories. The private-sector industry plays a supportive role, supplying components and raw materials. India is seeking to reverse the high proportion of imports to indigenous production and the private-sector industry is increasingly demanding a larger share of defence production. The current resource limitation and inflationary pressures could thus lead to a diversion of defence production from the ordnance factories to the private sector.


Since the start of its cooperation with the Soviet Union India has insisted on technology transfers in order to develop a defence production base. The strong influence of the Department of Defence Production and the Defence R&D Organisation (DRDO) in arms procurement decision making has caused friction with the armed services, who consider imported weapons to be more suited to their operational requirements. Increased outside and parliamentary control over the decision-making process could lead to greater efficiency and fewer misjudgements.
Although the Indian Parliament has decision-making authority, the Prime Minister’s Office has become the supreme actor in strategic decision making through the dominance of charismatic leaders and a centralization of power. Personal relationships are of considerable importance in the decision-making process. However, recent developments have worked against the culture of relationship orientation and the centralization of power and increasing demands for transparency are being made.


It is difficult to assess cost-effectiveness in arms procurement in India since information on procurement and life-cycle costs for particular weapon programmes is not open to audit or parliamentary control. However, the independent statutory audit authority has access both to the annual defence budget and to evaluations of domestic and international weapon systems. Increased control and access to information should be given to the statutory audit authority but not to members of parliament, since this would only be misused in the domestic political battle.


Despite the extensive military cooperation arrangements between the Soviet Union/Russia and India, India is still free to shift its procurement sources at will between Eastern and Western arms manufacturers. Although there are serious difficulties with this relationship, especially with regard to finances, cooperation with Russia is likely to continue in the future since it is based on mutual interests.


Israeli state-owned defence companies are making losses. Increasing globalization requires that the government replace its support to the domestic defence industry and focus on infrastructure and support to adaptation of domestic industrial capabilities to global market forces.

Security is arguably the most prominent concern of the Israeli political culture. The public rarely question the basic tenets of the defence belief system and consider that decisions on security matters are best made by the military authorities. This has created a closed arms procurement decision-making process, which only involves the Israel Defense Forces, the Ministry of Defense and the defence industry, and excludes outside actors such as the cabinet, the Knesset Committee on Foreign Affairs and Security, the media and academia.


Secrecy was a major factor in Israeli efforts to procure weapons and technology between the late 1940s and the mid-1960s, and this has created a negative view of transparency with respect to arms transfers. In addition, Israel has, in the past, been able to use arms sales to gain freedom for Jews in various countries, including Ethiopia. However, recent political changes have led to increased public discussion and interest in global and regional arms limitation and transparency.


Israel’s unique security and military circumstances have necessitated a streamlining of the arms procurement decision-making process. Technology assessment is an essential parameter at all stages of evaluation, from threat analysis to the decision to prioritize technology investment to respond to a specific threat. Special attention has been given to methods which encompass the interdisciplinary input of many specialists in a short time-frame, such as Delphi surveys, decision tree analysis and brainstorming workshops.


Several factors influence the economic aspects of arms procurement in Israel, such as national priorities, resource allocation, high levels of uncertainty and the question what kind of conflict to be prepared for. These considerations affect not only the defence budget but also the structure of the military forces. Optimum utilization of the defence budget requires analyses of cost-effectiveness and a comparison of alternatives. A major problem of arms procurement decision making is the inherent lack of public accountability.


The competitiveness of the Israeli defence industry depends mainly on its ability to offer high-performance and high-quality equipment which is adapted to the customers’ requirements. This ability is jeopardized by the reduction of R&D budgets since the early 1980s, which has led to a bias towards shorter-term projects and to a decline of long-term R&D and core competencies. The present situation calls for a coordinated government policy to advance long-term strategic research and national technological infrastructure to the benefit of all users—civilian and military, academia and industry.


Owing to the complexities of the Israeli security environment, strict confidentiality is preferred in the parliamentary supervision of military activities in lieu of an open or partly open public debate. Within the Knesset Committee on Foreign Affairs and Security, a Subcommittee on Defense Policy and Israeli Defense Forces Build-up has been established, providing a forum for discussion on arms procurement. Although the subcommittee does not allocate funds, approve arms procurement or engage in public discussion, its most efficient instrument is its prestige.

Given its unique security situation, it is crucial that Israel acquires the right weapon systems. This calls for a well-formulated decision-making process. However, an analysis of specific arms acquisition cases, such as the Lavi project, the IMI-designed 120-mm artillery piece and the Dotan affair, indicates the absence of a rational policy-making process. Especially evident is the unprecedented autonomy of the defence establishment on issues of national security and the absence of effective control over their actions.


Since the late 1960s, the defence industry in Israel has grown rapidly. At the macro-economic level, it has been instrumental in accelerating high-technology and science-based economic growth. At the technoeconomic level, scientific and technical skills that have matured within the military sector have positively affected developments in other industries, in most cases indirectly through skilled personnel leaving for the civilian sector.


In recent years, the scope of auditing has expanded to include the Israeli arms procurement decision-making process. Auditing has a particularly important role to play in the various stages of basic and specific R&D. Recent developments in auditing include its increasing use parallel to implementation of specific stages of arms procurement, the employment of trained professionals in evaluation and the review of specific issues to ensure that failures have been corrected.


The $1.8 billion military assistance that Israel receives annually from the US Government has been a dominant factor in Israeli arms procurement decision making. The availability of $475 million out of this sum to the Israeli defence industry has enabled the government to make long-term procurement decisions. The decision to cancel the Lavi project was only taken once it was clear to the government that there would be no loss incurred to the defence industry and that the Lavi money would be made available to other projects.


The Japanese defence budget is unrelated to threat assessment owing to two factors: the Japan–US security treaty, which stipulates that Japan can rely on US military assistance in the case of large-scale aggression, and the decision that the defence budget should not exceed 1 per cent of GNP. Japan has mostly procured US weapon systems and only prioritizes domestic production in the case of weapons which need to be adapted to local conditions.


The basic policy of the Japan Defense Agency’s Equipment Bureau is to produce arms domestically in the case of equipment exclusively used in Japan or when the necessary technology for development and production is available in Japan. Decisions on how to procure—through domestic production or import—are based on life-cycle costs (i.e., a calculation of all costs from production to operation, maintenance and decommissioning) and on a comprehensive assessment of factors such as cost–benefit and operational requirements.

The process of drafting the five-year Mid-Term Defense Programs, as part of which the major arms procurement decisions are made, includes intense negotiations between officers and civilian bureaucrats. The media follow this process through the Japan Defense Agency (JDA) press club which gives its members the right to interview JDA officials at any time. However, this does not ensure openness in the media since the press club is somewhat of a ‘closed society’ and members often come to share the views of the officials.


The Japanese Mid-Term Defense Program defines the type and quantity of equipment deemed necessary for procurement for a five-year period. The figures for procurement costs and quantity are then based on the Annual Working Plan and the Annual Defence Plan, which are concluded in negotiations with the Ministry of Finance and approved by the Diet. The Board of Audit carries out a strict and fixed annual audit of the defence procurement budget, pointing out illegal or irrational expenditures.


In Japan, most defence-related research is conducted within the civilian sector. Defence R&D is constrained by the small scale of production, owing to the country’s banning of arms exports. Consequently, technological spin-ons from civilian research to defence technology are more common than spin-offs from defence research to the civilian sector. Despite the importance afforded to long-term basic R&D, the current budgeting system is based on single fiscal-year allocations, making long-term R&D planning difficult.


Several of the key actors in the Japanese national security arena need to rethink their roles if they are to build public competence and accountability: the government needs to disclose the necessary information in order to enable the public to understand the security situation correctly; the media and academia must seek to promote a public debate on security issues; and politicians have to start a constructive and frank debate in the Diet, leaving futile ideological confrontation behind.


The interaction between the Japan Defense Agency (JDA), the Self-Defense Forces, the Ministry of Finance and the defence industry in the arms procurement decision-making process has resulted in balanced procurement. In a similar way, the checks and balances within the JDA, and between the Bureau of Finance, each Chief of Staff of the SDF and the Central Procurement Office, have avoided concentration of competence and ensured balance in carrying out procurement tasks.


Certain sociological traits undermine public accountability in defence-related decision making in Japan. Senior bureaucrats tend to take the autonomy of security decision making for granted and monopolize information. Collectivism and factionalism make their decisions conservative and less responsive to new and changing situations. The low profile of the Japan Defense Agency also means that defence-related decision making is open to the influence of external actors.
Public support for force build-up programmes has been strong in South Korea, but competing demands have also been made in the interests of social welfare and economic development. The budget for force improvement has faced severe constraints from both internal and external sources. However, the Ministry of National Defense is willing to develop projects for force improvement on a mid-term basis in order to confront perceived military threats from North Korea.

The policy guidelines established by the South Korean Ministry of National Defense in 1993 state that domestic models of weapon systems are to be developed, even if they are more expensive and of lower quality than imported systems. However, the South Korean defence industry faces serious managerial difficulties because of saturation of the domestic market, the under-utilization of defence production capacities and the rapid decline in defence exports. Furthermore, the government has gradually withdrawn subsidies from defence contractors.

Under the military dictatorships, South Korea’s arms procurement process was largely dominated by a small group of power holders. Military security was a top priority and was justified by an overestimation of the threat posed by North Korea. The recent democratization will not lead to immediate reforms in security management since the conservative ideology is deep-rooted, threats continue to be posed by North Korea and civilian control over the military has not been achieved.

South Korea’s defence industry is endangered by a shortage of capital, the small size of the domestic market, the lack of government strategy and US control over arms exports to third countries. In the 1990s the USA has recognized South Korea as a competitor and has restricted the transfer of military technologies. This challenges South Korea’s long-term arms procurement policies. With regard to future cooperation, it is important for both countries to understand each other’s national interests.

The Defense Acquisition Agency in the Ministry of National Defense decides the methods for arms procurement in South Korea. These include domestic R&D and production, technology licensing and imports. In the case of domestic R&D, technology assessment is carried out at each R&D stage. In the case of technology licensing or imports, the Weapon Systems Examination Committee decides the method of tests, which are then carried out by the armed forces and the Agency for Defense Development.

South Korea’s arms procurement is based on a planning system comprising five closely interrelated phases: planning, programming, budgeting, execution and evaluation. This system takes between one and five years to complete and enables a review of defence projects but obstructs prompt responses to urgent requirements because of its long time-frame. Offset policies prioritize the acquisition of advanced critical technologies and are linked to R&D policies.

In the past, the low level of transparency and public accountability in South Korea’s arms procurement process resulted in delays, performance dilution and cost overruns. However, the process has become increasingly transparent since the special inspection of the Yulgok Plan (the long-term force improvement plan) in 1993. The degree of transparency in arms procurement should increase gradually, for example by revealing non-classified projects to the public, until North and South Korea’s military capabilities are equal.


The modernization of South Korea’s defence aims to boost R&D through two approaches. First, defence research capabilities should be enhanced in the form of industry–university–laboratory cooperation. Basic research at the universities should be encouraged in order to upgrade key technologies and to support the defence industry with highly trained staff. Second, technological cooperation with other countries should be increased for co-development of weapon systems.


The South Korean National Assembly is responsible for budgeting and auditing in arms procurement. Faced with the threat from communist North Korea, South Korean leaders have, until recently, preferred to maintain a high level of secrecy in military affairs. Under military–authoritarian rule the Ministry of National Defense was not adequately monitored owing to the National Assembly’s lack of information and a lack of staff with security specializations. However, the situation has improved slightly with the end of the military regimes.


The force improvement plan (the Yulgok Plan), initiated by the late President Park in 1974, has only had limited success owing to the difficulty of coordinating procurement plans with long-term strategic considerations; ignorance of procedural rules; significant role conflicts between civilian and military agencies; dispersed and overlapping project responsibilities; excessive secrecy; and the more than necessary involvement of the president.


South Korea’s defence industrial base underwent significant changes during the early 1990s. In 1991–92, it shrank drastically owing to the government policy of increased imports of advanced weapons from abroad. In 1993, the government significantly revised its defence industrial policy and it is now promoting a modernization of defence technology and aiming to diversify its acquisition sources.


Changes in the nature of its relationship with the USA have increased South Korea’s vulnerability to US control. Arms transfers from the USA to South Korea are granted on the condition that South Korea acquiesces to US foreign policy objectives and abandons the development of certain weapon systems. The USA has also restricted the export of Korean weapons made with US technical assistance. South Korea has sought to counter this vulnerability, with limited success.
The Thai defence strategy is drawn up by a group of high-ranking officers and the general staff of the three armed services. It is then sent to the Ministry of Defence Auditorium, composed of the top military élite, for consideration and is finally approved by the cabinet. The National Assembly has no influence over the process. The armed services’ policy of total defence is to maintain an adequate level of deterrence by establishing a multi-dimensional land–sea–air capability.

For the past two decades considerable effort has been made to establish a defence industry to support the Thai armed forces’ policy of self-reliance. However, this has not been successful owing to the uncertainty of the government’s joint venture policies and a lack of effective management of defence R&D. Thailand has only succeeded in building capacities for small arms and other light equipment, which are insufficient for the armed forces’ needs in terms of quantity and quality.

The Thai arms procurement process is coordinated within the three armed services with a horizontal flow of information to avoid inter-organizational conflicts. The most serious questioning of the military’s proposals comes from the parliamentary Committee on Public Accounts and from the media. The military are facing increasing difficulties in persuading the parliament to approve their procurement proposals.

The Thai defence budget is prepared by the Bureau of the Budget and needs the approval of the parliament. If the House of Representatives does not accept the bill, the government must resign or the House be dissolved. If the bill is accepted, parliamentary debates follow. In practice, not many MPs express opinions on the budget and those who do are careful not to criticize the military.

Public insight into arms procurement and defence budgeting in Thailand is still limited. The bureaucracy has a stronger influence than the House of Representatives and the political parties, who rarely question the military’s budget proposals. With steady economic growth and increasing international trade Thailand is increasingly aiming to achieve greater regional cooperation, confidence-building and stability.

While real-life decision making rarely follows the rational textbook model, national culture complicates it even further. The decision-making behaviour of the Thai bureaucratic élite is affected by the Thai value-system and its behavioural patterns, in which personal relationships dominate over principles and systems.

As a result of external threats in the early years of the cold war, Thailand sought security commitments from and became dependent on the USA as a primary source of weaponry. Since the late 1970s Thailand has sought to counter this arms dependence by import substitution and by diversifying its sources of imports.