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## 8. Comparative analysis

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### I. Introduction

This study examines the arms procurement decision-making processes of six countries which are dissimilar not only in their political organization and military industrial and technological potential but also in their perceived security threats. Considering these differences and the unique characteristics of national security decision-making structures, direct comparison would be misleading. The approach adopted by this analysis is to set out some common propositions which are directly relevant in all the countries to the development of public scrutiny and accountability in the arms procurement processes. The concept of accountability is a thread that runs through this whole study.

To the extent possible, this chapter also compares and contrasts those elements of the decision-making process which have similar roles and functions in the different countries. Because of the unevenness of the available information, some salient elements are selected to facilitate comparison of and judgement on the varying factors that either allow or obstruct public scrutiny and monitoring of the arms procurement processes. The variation in the information available about the methods for exercising oversight of the military in different countries should encourage the research community and decision makers to further explore the propositions presented here in order to understand the strengths and limitations of public-interest monitoring in their respective countries, and thereby arms procurement restraints.

This comparison is explored for the four major themes described in chapter 1: (a) military and politico-security issues; (b) defence budgets, financial planning and audit; (c) techno-industrial issues; and (d) organizational behaviour and public-interest issues. These themes are further discussed in sections II–V for each country. Within each section, a number of propositions are put forward which may be used by the reader to analyse the varying levels of public accountability embodied in the arms procurement processes of different countries. In this context the chapter examines the information in chapters 2–7 relevant to each theme and, in some cases, introduces information which the author of a particular country study was not able to provide. Section VI presents the conclusions of the study.

## II. Military and politico-security issues

This section highlights the characteristics of national security planning, threat assessment and arms procurement decision-making structures. The analysis is based on the following propositions, which are examined for each country in the sections which follow:

1. Arms procurement decisions must be shaped by well-defined threat assessment methods and long-term defence planning if the chosen national strategy and arms procurement policies are to be coherent. Clarity in policy-making processes reduces the probability of ad hoc and wasteful decisions because it facilitates public scrutiny and oversight.

2. Coordination between foreign and defence policy-making processes and between the armed services is a condition of coherent national security decision making.

3. A high level of military influence or autonomy in national security and arms procurement decision making constitutes a major obstacle to introducing public accountability norms and arms procurement restraints. Among the factors which contribute to the military's influence are: heightened national security concerns; the national political organization; the military's role in domestic politics; and in some cases the influence of a predominant arms-supplying country or military alliance.

### **Threat assessment and long-term planning**

In China national security threat assessments are broadly defined at the level of the Politburo and the Central Military Commission (CMC) and more closely defined at the level of the People's Liberation Army (PLA) by the Headquarters of the General Staff (HGS), which has formulated the five-year Weapons and Equipment Development and Procurement Plans since 1953. However, a long-term weapon and equipment development outline was formulated for the first time for the years 1987–2000. There is evidently good coordination between the drafting of China's defence budget and its arms procurement plans.

Instead of taking a comprehensive capacity-building approach, Indian arms procurement plans and decisions are based on threat scenarios which are primarily driven by the Chinese and Pakistani military potential. Consequently, arms procurement planning is primarily reactive. The fact that the 15-year perspective plans are formulated by the armed services and the 5-year defence plans by the Ministry of Defence, without concomitant budget allocations, hampers the development of coherent plans.<sup>1</sup> The lack of an overarching body for long-term planning and of any comprehensive security policy document

<sup>1</sup> India, Lok Sabha, Estimates Committee, *Ministry of Defence: Defence Force Levels, Manpower Management and Policy*, 19th Report (Lok Sabha Secretariat: New Delhi, Aug. 1992), pp. 15, 30. A further example is the mismatch between the military's perspective planning and the 10-year self-reliance plan (1996–2005) of the Defence Research and Development Organisation (DRDO).

impairs consistency between immediate and medium-term decisions, on the one hand, and broader long-term defence plans, on the other.<sup>2</sup>

Israeli force-building policies and arms procurement decisions are determined by the Annual Intelligence Assessment of the Israel Defence Forces (IDF), which provides a strategic threat assessment and a formal appraisal of the probability of war.<sup>3</sup> Arms procurement policies are based on the need to maintain technological superiority to offset the numerical advantages of the armed forces of the countries which are perceived as threats to Israel.

Japan's threat assessment includes broader perspectives of security and non-military threats, such as disruptions to international trade and the import of natural resources and regional instabilities, and is based on longer planning horizons.<sup>4</sup> Unlike the other countries examined in this study, Japan has developed a comprehensive national security approach, reflected at the highest levels by the Security Council. The process for long-term planning is relatively clear and institutionalized, and thus transparent. It is based on a three-tier framework: the National Defense Program Outline (NDPO); the Joint Long-Term Defense Estimate (JLTDE); and the Joint Mid-Term Defense Estimate (JMTDE)—which allows greater scope for legislative scrutiny.

South Korea's threat assessments concern above all the military potential of North Korea and are also heavily influenced by the US assessment of the security situation in the Korean peninsula. Consistency in planning is based on the National Defense Planning and Management System.

The autonomy of the military in Thailand has allowed the army to promote the narrow military view of national security and has probably militated against the development of a well-defined threat assessment method. Although arms procurement plans are formed on the basis of five-year defence plans, requirements are not based on a comprehensive threat assessment process.

### *Assessment*

In the case of Japan, this study found that the transparency resulting from debate on the NDPO in the Diet and the Standing Committee on Security probably contributes to a more thorough process in the Japan Defense Agency's (JDA) formulation of the JLTDE and the JMTDE. In South Korea the planning processes are well defined but the level of legislative scrutiny of the threat assessment is not as high as in Japan.

<sup>2</sup> Katoch, G. C., 'Defence expenditure: some issues', *Indian Defence Review*, Jan. 1992, p. 37; and Mookerjee, S. (Vice-Admiral, ret.), 'India's defence expenditure: a holistic approach', *USI Journal*, no. 522 (Oct.–Dec. 1995), p. 456.

<sup>3</sup> Pinkas, A., 'Domestic considerations, elite motivations, the bureaucracy and the political culture of arms acquisitions in Israel', SIPRI Arms Procurement Decision Making Project, Working Paper no. 23 (1995), p. 20.

<sup>4</sup> Hamada, Y., 'Building public competence and accountability in the national security arena', SIPRI Arms Procurement Decision Making Project, Working Paper no. 38 (1996), p. 6. 2

### Coordination between foreign policy and integrated defence policy

In China, national security policies are made by the CMC. Defence policy is executed by the PLA and foreign policy by the State Council, resulting in difficulties in creating close functional coordination between them. Unlike its counterparts in many other countries, the Chinese Ministry of National Defence (MND) does not have executive authority over defence policy making or arms procurement decisions. It reports to both the CMC and the State Council in matters of coordination between the PLA and the Ministry of Foreign Affairs, adding yet another step in the process. Since the PLA is an overarching body responsible for the PLA Navy and the PLA Air Force, the HGS coordinates the arms procurement plans of all the Chinese armed forces.<sup>5</sup>

Coordination between foreign and defence policies in India is limited by a lack of institutionalized interaction between the Ministry of Defence and the Ministry of External Affairs. Despite the existence of inter-ministerial security planning forums, such as Cabinet Committee of Political Affairs, the Defence Minister's Committee and the Committee on Defence Planning, comprehensive planning and inter-service coordination at the functional levels—particularly for weapon systems common to more than one user—is wanting.<sup>6</sup> The fact that there is only one representative from the Ministry of External Affairs on the small Defence Planning Staff (DPS) limits the scope and capacities for coordination between the foreign and defence policy-making processes. The DPS therefore merely provides secretarial functions to the Chiefs of Staff Committee (COSC) rather than a mechanism for making comprehensive threat assessments, carrying out long-term integrated inter-service planning and identifying arms procurement requirements based on operational priorities.

Israel has a higher level of coordination between its foreign and defence policy-making processes. Following the start of the Middle East peace process, arms control units were set up in the Ministry of Defense and in the Foreign Ministry and representatives of these units have participated in multilateral arms control negotiations. The military still has a strong influence on the implementation of both foreign and defence policies. The IDF General Staff processes and prioritizes equipment requirements on behalf of the three armed services on the basis of overall threat perceptions, financial resources and operational priorities. This integrated approach applies to both short-term arms procurement and long-term force-building requirements. The guiding principle is that the IDF determines what it needs, while the Ministry of Defense determines how and from where to get it.<sup>7</sup>

The facts that the JDA is not an autonomous ministry responsible for defence policy making and that Japanese security policy is strongly influenced by the 1960 Japan–US Treaty of Mutual Cooperation and Security administered by the

<sup>5</sup> This responsibility has since been taken over by the newly formed General Equipment Department.

<sup>6</sup> Jayal, B. D., 'Status of the Indian Air Force', *Indian Defence Review*, Nov. 1996, p. 56; and Cariappa, K. C., 'Inter-service weapons systems commonalty', *The Pioneer* (New Delhi), 22 Aug. 1996.

<sup>7</sup> Pinkas (note 3), pp. 12–13.

Ministry of Foreign Affairs (MoFA) have led to comparatively close coordination between Japan's foreign and security policies. Although the MoFA does not provide direct input into arms procurement decision making, which is primarily managed by the JDA Equipment Bureau, the coherence between foreign and security policy making has resulted in a greater sensitivity on the part of the military to arms procurement restraints as a part of international arms control. Cross-posting of diplomats and military officials in the JDA and the MoFA allows for close coordination between foreign and security policy-making processes and between the threat assessment and force planning processes.

Coordination of national security decision making between various bodies is carried out at three levels in South Korea: (a) within the framework of the annual South Korean–US Security Consultative Meetings between the defence ministers, with representatives from South Korea's Ministry of Foreign Affairs and the US State Department in attendance; (b) within the Ministry of National Defense, the National Security Planning Board and the National Unification Board; and (c) within the South Korean–US Combined Forces Command. Arms procurement requirements for the armed services are coordinated by the Joint Chiefs of Staff (JCS) to avoid duplication of mission requirements and to facilitate combined mission capabilities.<sup>8</sup> The process is institutionalized in the offices of the Defense Procurement Agency and in the Acquisition Deliberative Committee and governed by the Regulations for Weapon Systems Acquisition and Management and the Mid-Term National Defense Plan.

The Thai Ministry of Defence, which is staffed by senior military officials, is seen more as a part of the military establishment than as a part of the government. This makes functional coordination difficult between the officials of the Ministry of Foreign Affairs and the military. Coordination between foreign and security policies is carried out only at the level of the National Security Council, which is chaired by the Prime Minister. The planning processes of the three armed services are separate and the Supreme Command Headquarters merely coordinates their priorities.

### *Assessment*

A high level of inter-ministerial coordination generally results in greater transparency, since information is naturally exchanged during the process of coordination and not confined to a single organization. In this regard this study found that coordination between the Japanese MoFA and the JDA is broadly based and well institutionalized. Although this may not directly influence arms procurement decisions, it nevertheless reduces the military's autonomy and, at the same time, broadens the rationality of national defence decision making. In Israel, coordination between ministries is at an early stage of development, but the IDF's defence plans and arms procurement priorities are closely integrated. In South Korea, coordination is better developed between the country's military

<sup>8</sup> Myung Kil Kang, 'Budget planning process in arms procurement', SIPRI Arms Procurement Decision Making Project, Working Paper no. 46 (1995), pp. 1–3.

and the USA than between its military and the Government. In all other countries in this study, the absence of institutionalized coordination processes may handicap coherence in national security decision making as well as reduce the possibilities of greater accountability.

### **The political influence of the military and of predominant arms suppliers**

The level of political influence enjoyed by the Chinese PLA is indicated by the relatively high number of PLA members in the Communist Party of China (CPC) Central Committee.<sup>9</sup> The fundamental difference between civil–military relations in the West and party–military relations in China is that the CPC is not exclusively regarded as civilian, but as both civilian and military, and the PLA is seen as an intrinsic part of the political system. As the President is the General Secretary of the CPC and Chairman of the CMC, the PLA enjoys a greater influence in formulating national defence policies than do the militaries in the other countries examined in this study. In meeting the PLA’s need for advanced weapons or systems, China’s decision makers have been sensitive to the attendant political influences of the suppliers.

As the political leadership in India is responsible for making the final decisions on defence policy and arms procurement issues, the military’s influence remains low. However, increasing devolution of power to the individual Indian states and political uncertainties at the central government level are relegating defence policy making to lower levels of political priority. The unstable nature of relations between the individual states and the central government coupled with a limited awareness of defence matters among the civilian leadership may lead to the military gaining a greater role in national defence and arms procurement decisions, at the cost of public accountability. In addition to the recent Russian arms transfers to India, the massive existing inventory of weapon systems of Russian origin will prevent Indian decision makers from disregarding the Russian factor in their future decisions.

In Israel arms procurement decisions by the Minister of Defense depend heavily on the information provided by the IDF since it is the only body with systematic capacities for planning and data assessment.<sup>10</sup> The unique nature of

<sup>9</sup> At the 14th CPC National Congress, there were 45 members and 19 alternate members from the PLA in the Central Committee out of 188 members and 127 alternate members, and only 2 members represented the CMC in the Politburo, with the same 2 in the Standing Committee, one of them being Chairman Jiang Zemin. At the 15th CPC National Congress the PLA members and alternate members in the Central Committee had been reduced to 41 and 17 out of 191 members and 151 alternate members, respectively. This is based on proportional representation from the various services of the PLA. There are no PLA representatives in the Standing Committee other than CMC Chairman Jiang Zemin. *China Directory 1997* (Tokyo: Radiopress, 1996), pp. 151–89 (in English); *China Daily*, 19 Sep. 1997, p. 2; *Jiefangun Bao*, 19 Sep. 1997; *South China Morning Post*, 19 Sep. 1997; and *International Herald Tribune*, 29 Sep. 1997, p. 4.

<sup>10</sup> In the absence of an independent source of professional expertise to evaluate data provided by the IDF, the MoD lacks the technical capacity to assess the cost-efficiency of procurement decisions. According to Aryeh Naor, a former Cabinet Secretary, cabinet members function as mere ‘rubber stamps’ for the defence establishment. Pedatzur, R. and Weisblum, C., ‘The decision making process and public awareness’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 29 (1995), pp. 2–3.

the security threats to Israel has given the military a higher political profile and influence in security decision making than exists in other countries in this study, as is also evident from the participation of senior military officers in negotiations with foreign powers.<sup>11</sup> Its dependence on US military support is illustrated by the US re-supply in the course of the 1973 Yom Kippur War to make up for very high equipment attrition rates. However, because it has no treaty obligation with the USA (as well as an exceptionally large budget for procurement) Israel experiences fewer constraints in choosing sources of arms imports other than the USA than do Japan or South Korea, which are constrained by the requirements of inter-operability.<sup>12</sup> Joint-venture contracts between the US and the Israeli defence industries also have a heavy influence on Israel's arms procurement decisions.<sup>13</sup>

As Japan's security policy making is led by the MoFA and the JDA does not have the status of an autonomous ministry, the Self-Defense Forces' opinion is not the final word in making decisions on arms procurement. The military's opinion is expressed through lobbying by *Kokubo Zoku* ('defence tribe') parliamentarians, who primarily represent defence industrial interests, and through the JDA Press Club. Assertive civilian control of the military is facilitated by the low salience of the JDA. Its preference for buying weapons of US origin is influenced by requirements of inter-operability, access to state-of-the-art systems, and the desire of the MoFA to maintain cordial relations between the two security bureaucracies.

During the 30 years of military-authoritarian rule in South Korea, the military received political support by virtue of its absolute control over the assessment of the threat from North Korea and over the information available to the public, using the legal and institutional safeguards provided by the National Security Law and the Military Secrecy Act. The military's threat assessment chimed in with that of the USA.<sup>14</sup> Despite the advent of a civilian, democratic leadership and demands for public accountability, the military remains influential. Factors which have contributed to the influence of the USA as a predominant supplier to South Korea are the joint combat operations, the need for inter-operability of weapon systems and reliance on US operational doctrines. Furthermore, in the eventuality of a protracted conflict with North Korea,

<sup>11</sup> It is customary for the Chief of General Staff to participate in cabinet meetings and for high-ranking military officers to make public statements on defence policies. Etzioni-Halevy, E., 'Civil-military elite relations and democratization: the case of the connection between the military and political élites in Israel', Paper presented at the International Political Science Association World Congress, Berlin, Nov. 1994, pp. 15-16.

<sup>12</sup> According to Gen. Mendy Meron, Israel has access to the best that the USA has but not to everything. Israel has considerable freedom to choose other markets to buy or make locally basic military equipment. Meron, M., 'Threat perceptions in Israel's strategic environment and their impact on the decision process', SIPRI Arms Procurement Decision Making Project, Working Paper no. 21 (1995), p. 9.

<sup>13</sup> Klieman, A. and Pedatzur, R., Jaffee Center for Strategic Studies, Tel Aviv University, *Rearming Israel: Defense Procurement through the 1990s*, JCSS Studies no. 17 (Jerusalem Post/Westview Press: Jerusalem/Boulder, Colo., 1991), p. 63; and Bonen, Z., 'Parliamentary supervision of military procurement in Israel', SIPRI Arms Procurement Decision Making Project, Working Paper no. 27 (1994), p. 5.

<sup>14</sup> See chapter 6 in this volume; and Min Yong Lee, 'Security policies, defence planning and military capability', SIPRI Arms Procurement Decision Making Project, Working Paper no. 41 (1995), p. 5.

equipment attrition rates exceeding South Korea's own arms production would mean that the immediate deployment of weapons of US origin would be essential. On the other hand, there is some concern that reliance on weapons of US origin has restricted South Korea's options for diversification of its sources of military supply: since the mid-1990s efforts have been made to find other sources.<sup>15</sup>

Although the transition to an elected civilian government in Thailand occurred in 1992, at around the same time as in South Korea, its history of frequent coups has allowed the Thai military to maintain influence over the political processes. The autonomy of the military in national security policy making can also be attributed to the constitutional provisions allowing military leaders to stand for election to the National Assembly. The military's substantial presence in both houses of the assembly indicates not only its strong political influence but also a tenuous state of civil–military relations, which allows the military to avoid public accountability in arms procurement. Threats of communist insurgency in the 1970s and 1980s led to the development of close links between the Thai and the US militaries, and the availability of US arms at favourable prices led to the USA becoming the predominant supplier.<sup>16</sup> Although a strategy of the diversification after the end of the cold war began to include Chinese and other West European suppliers, Thailand remains dependent on the USA for sophisticated weapons, missiles and aircraft.

### *Assessment*

In China, the military is not publicly accountable because of the country's political organization. In India, despite the healthy state of civil–military relations, the military is somewhat insulated from public accountability norms. In all other countries in this study, the political organization and the influence of the predominant arms supplier—the USA—on national defence decision making combine to give their militaries varying degrees of influence.

This study found that, in cases where there is a predominant influence of an arms-supplying country, the arms-supplying organizations in that country are often better informed of the national arms procurement plans than the elected representatives in the recipient countries.

<sup>15</sup> US concerns that Russia is encroaching on a traditional US market in the context of the South Korean proposal to buy the Russian Su-300 air defence missile system are due to problems of inter-operability and difficulties in integrating a Russian weapon into the unified air defence environment. The procurement cost of the Patriot air defence system is estimated to be twice that of the Russian Su-300 system. [To buy or not? US-made Patriots], *Chosun Ilbo*, 3 Apr. 1997; and 'ROK prepared for question in possible Russian arms deal', *Korea Times*, 20 Mar. 1997.

<sup>16</sup> Brooke, M., 'Thailand's new Policy for ASEAN?', *Asian Defence Journal*, no. 2 (1996), p. 100; and Panitan, W., 'US–Thailand arms transfer dependence', SIPRI Arms Procurement Decision Making Project, Working Paper no. 60 (1995), pp. 3–4, 10–12.



### III. Defence budgets, financial planning and audit

This section examines aspects of accountability in arms procurement financial planning, the capacities of legislative oversight bodies to monitor and review budgeting, and the role of statutory audit authorities. The analysis is based on the following propositions:

1. Integrated defence budgets which are designed to indicate the costs of specific military functions, such as air defence, surveillance, logistics and so on, facilitate the evaluation of arms procurement decisions in relation to long-term priorities. On the other hand, defence budgets which divide up allocations by conventional cost heads such as pay and allowances, equipment, and operations and maintenance are less informative and inhibit cost–benefit evaluation.<sup>17</sup>

Public-interest oversight of defence financial planning should also include examination of other aspects of efficient financial planning such as life-cycle costs and offset policies.

2. While departmental audits check the probity of military expenditure, statutory audits should have the broader aim of evaluating the effectiveness of arms procurement decision making in relation to the attainment of stated objectives and of assessing the performance and utility of weapon systems. Effective statutory audits require multi-disciplinary capacities and close working cooperation with the armed services, the executive and the legislative oversight bodies responsible for monitoring waste, fraud and inefficiencies in the system.

#### **Defence budget planning and accountability**

China's defence budget is classified in terms of allocations both to the armed services and to different functions. However, arms procurement expenditure is not only governed by the national defence budget, since that is not the PLA's sole source of finance: the foreign exchange costs of imported equipment are largely met through arms exports.<sup>18</sup> Moreover, the military's indirect expenditure, such as that on academic research and construction, is not specified in the PLA's budget.<sup>19</sup>

Counter-trade arrangements are used as a part of offset policy. Although life-cycle cost models are recommended for calculating equipment costs, they are not yet being applied in Chinese arms procurement planning.<sup>20</sup>

The Indian defence budget is not integrated. It is based on separate allocations to the three armed services, which carry out parallel budgeting. It is therefore not feasible to analyse and compare budget allocations with military capability

<sup>17</sup> On the distinction, see chapter 3, note 37 in this volume.

<sup>18</sup> The PLA is also expected to earn much of its foreign exchange in competition with industry. For example, Polytechnologies Inc., which is an import–export arm of the HGS, can sell military equipment directly from the designated stocks to gain hard currency.

<sup>19</sup> Ku Guisheng, 'National defence budgeting procedure and price reforms of military products', SIPRI Arms Procurement Decision Making Project, Working Paper no. 3 (1996), p. 6–7.

<sup>20</sup> Ku Guisheng (note 19), pp. 15–16.

levels. Although a study on alternative budget designs has been conducted by the Ministry of Defence,<sup>21</sup> its findings have not been tested. Lack of budget planning also results from the deficiencies in general long-term planning already mentioned.<sup>22</sup>

In the absence of information in India on the life-cycle costs of arms to be procured, the total financial burden of a procurement programme on society cannot be fully understood by the financial oversight bodies. India has not developed an offset policy because of the public-sector defence industry's difficulties in executing direct offsets; neither have the advantages of technology offsets been analysed because of the lack of interaction between the research and development (R&D) and financial planning bodies.<sup>23</sup> On the other hand, the experience of commodity barter in arms procurement contracts with the former Soviet Union continues to be applied in contracts from other sources.

In Israel, because the IDF's annual budget planning system was found to be detrimental to financial forecasting, a five-year budget framework was started in 1992. It divides the defence budget into two parts: the IDF budget, subdivided into the ground, naval and air forces; and the central budget, which is allocated for feasibility studies and exploratory development of major long-term projects.<sup>24</sup> The burden of life-cycle costs has been well analysed in the national public debate. Israel's offset policy has been significantly shaped by US military grants. Direct offsets are used to enhance the technical competence of Israeli defence companies. However, as they generally involve the production of components for weapon systems of US origin, a number of Israeli arms manufacturers have set up joint ventures in the USA.<sup>25</sup> These offsets are not transparent, for reasons of commercial confidentiality.<sup>26</sup>

In Japan the budget breakdown does not indicate functional costs, but it does give greater detail by user category than other countries' budgets. The Mid-Term Defense Program plays a part in reducing uncertainty in defence budget planning, but coordination of the defence budget is more of an informal process of *ringisei* (consensus building) and *nemawashi* (laying the groundwork). Such traditional attitudes militate against an institutionalized flow of information, which in turn undermines transparency and accountability. Cost-benefit evalua-

<sup>21</sup> Arora, G. K., former secretary, Ministry of Finance, Comments at the CPR-SIPRI Workshop, New Delhi, 1 July 1995. A. K. Ghosh, former Financial Adviser, MoD, says that a feasibility study was carried out on introducing the Planning, Programming and Budgeting System under the direction of the Defence Planning Staff in Mar. 1987. Ghosh, A. K., *India's Defence Budget and Expenditure Management* (Lancer Publications: New Delhi, 1996), p. 57.

<sup>22</sup> *Ministry of Defence: Defence Force Levels, Manpower, Management and Policy* (note 1).

<sup>23</sup> Santhanam, K., Adviser, DRDO, Comments at the CPR-SIPRI Workshop, New Delhi, 1 July 1995.

<sup>24</sup> Tropp, Z., 'Economic aspects in military procurement', SIPRI Arms Procurement Decision Making Project, Working Paper no. 26 (1995), pp. 7-8; and Bonen (note 13), p. 3.

<sup>25</sup> In the annual US military grant of \$1.8 billion approximately 20% (\$400-475 million) is allocated for procuring defence products from Israeli manufacturers and \$1325-1400 million according to the Buy American Act, which stipulates that final assembly is done in the USA and that over 55% of the product should be of US origin. Consequently, Israeli firms such as Tadiran, El-Op and Israel Aircraft Industries (IAI) have established subsidiaries in the USA, offering R&D and manufacturing services. Tropp (note 24), pp. 7-8; Bonen (note 13), p. 3; and Pinkas (note 3), p. 11.

<sup>26</sup> Pinkas (note 3), p. 10.

tion of arms procurement is carried out by three parts of the JDA: the Bureau of Finance, the Chiefs of Staff and the Central Procurement Office. Life-cycle costs are taken into consideration, as the official guidelines and financial planning procedures show. The large Japanese trade surplus with the USA dampens the motivation to develop offset policies and instead motivates decisions to purchase weapons from the USA. Relatively sophisticated information is available, but members of the Diet have only a perfunctory interest in scrutiny of the defence budget.<sup>27</sup>

Owing to the assertiveness of the South Korean Board of Finance and Economics in demanding budget accountability, the capital budget does indicate the costs of specific military functions. It is designed to generate mission-specific requirements for arms procurement and R&D planning. Estimates of life-cycle costs do not, however, figure in the public debate on arms procurement decisions. The offsets required by government rules are smaller than in most countries because political restrictions on arms procurement from sources other than the USA make it difficult for South Korean companies to bargain. The offset policy prioritizes a technological rather than a commercial approach—a strategy of seeking core technologies.

Although the Thai five-year defence plans are designed to shape the defence budget on the basis of functional cost indicators,<sup>28</sup> the allocations are made in a manner that does not allow evaluation of arms procurement decisions. For example, budget headings such as ‘other expenses’, ‘special programmes’ and ‘other programmes’ do not allow public scrutiny. The absence of detail from the defence budget is a major limitation to oversight by the elected representatives.

The Thai media also lack adequate details—such as the burden of life-cycle costs—to be able to comment meaningfully on arms procurement decisions. With a devaluation in the Thai currency of around 100 per cent in the period 1996–97, the burden of the life-cycle costs of imported sophisticated weapons will fall very heavily on future generations. Offset policy, which was previously left to the initiative of the armed services, was rationalized in the mid-1990s.<sup>29</sup> However, the revised policy is still primarily based on commodity barter, and a comprehensive approach for building industrial capacities in priority sectors is not evident.<sup>30</sup>

<sup>27</sup> Comments by H. Iwashima, Seminar at SIPRI, 17 Aug. 1995; and Matsumoto, M. and Iwashima, H., ‘Arms procurement budget planning process’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 36 (1995), p. 4.

<sup>28</sup> Surasak, B. (Col), ‘Arms procurement decision making’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 56 (1995), p. 4.

<sup>29</sup> ‘Barter trade not compulsory’, *Asian Defence Journal*, no. 2 (1994), p. 117. See also chapter 7, section II, in this volume.

<sup>30</sup> The counter-trade agreement for procurement of F/A-18 Hornets included the sale of agricultural products. Two conflicting reports indicate buy-back values of up to 50% of contract value (‘The military in Thailand’, *Asian Defence Journal*, no. 7 (1996), p. 25); and up to 25% (*Bangkok Post*, 3 May 1996, p. A3).

### *Assessment*

In the case of China, parliamentary oversight of the defence budget does not exist except insofar as it is part of the general state budget. In all the other countries oversight is carried out in a perfunctory manner either because of a lack of data or because of a lack of skilled staff to analyse the defence budget.<sup>31</sup> However, in the case of South Korea, a better budget design to facilitate oversight is beginning to take shape. There is some evidence of public understanding of the implications of life-cycle costs in Israel and in Japan. South Korean offset policies are consistent with its national technology priorities. In China, India and Thailand such questions are largely unaddressed still, indicating an under-informed public and, consequently, low levels of oversight of and accountability in defence financial planning.

### **Departmental and statutory audit**

Within the Chinese PLA audit is conducted at two levels: at the departmental level by the PLA's General Logistics Department; and at the CMC level by the Auditing Administration.<sup>32</sup> Other organizations which may have a role in this area are the Central Commission for Discipline Inspection at the level of the CPC Central Committee, and the Commission for Discipline Inspection at the CMC level. It is not certain whether these organizations are investigation agencies or 'working groups' to prevent corruption, or whether they are external agencies for audit of the PLA.<sup>33</sup> This study has not been able to identify a statutory audit organization which carries out overarching audit of the PLA and reports to the National People's Congress (NPC).

Although Indian defence expenditures are open to both departmental and statutory audit, the statutory audit agency—the Office of the Comptroller and Auditor General (CAG)—does not have the necessary multi-disciplinary expertise to conduct performance assessment of arms procurement or cost-benefit evaluations in relation to stated objectives. The audit reports are limited to the financial aspects of arms serviceability and maintenance and do not assess the quality of decisions or functional efficiencies. The reports are well documented and publicly available and provide exhaustive details of financial waste, neglect and misuse. However, they do not analyse systemic shortcomings in the decision-making processes and procedures. The composition of the statutory audit team and the formulation of audit schemes indicate a lack of multi-disciplinary skills and of understanding of the broader effects of arms procurement decisions. Other than use of CAG reports, this study has not been able to identify a close working relationship between the CAG and the parliamentary Standing Committee on Defence or the Public Accounts Committee.

<sup>31</sup> See section V below.

<sup>32</sup> Zhang Dongbo, [All army auditing brings about one billion yuan in economic benefits], *Beijing Xinhua*, 16 Dec. 1995.

<sup>33</sup> 'Modern weapons enter production: PLA better equipped', *Inside China Mainland*, Jan. 1996, pp. 37–38.

A high quality of professional auditing of the arms procurement process and evaluation of long-term R&D projects by the Israeli State Comptroller is evident from the report on the Lavi project, which made a crucial contribution to domestic opinion on the project and to its subsequent cancellation. The State Comptroller's audit teams are multi-disciplinary, including financial, technical, logistics and military experts with a broad range of experience, reflected in their formulation of the audit schemes.<sup>34</sup> Despite criticism of his interference in the arms procurement process, there have been recommendations that the auditor should develop methods for carrying out project auditing, build capacities for macro-planning of future force designs, and bring out the deficiencies in the military's cost analysis methods.<sup>35</sup> Although it has privileged access to information on arms procurement decisions, the State Comptroller's Office does not have legal powers to ensure implementation of its findings and its role is essentially advisory.<sup>36</sup> Scandals have still resulted from the relative autonomy of the IDF, the lack of administrative supervision of the arms procurement process by the Ministry of Defense, the accommodating approach of the Knesset Committee on Foreign Affairs and Security to the military's view of confidentiality, and the strong influence of the defence industry.

In Japan, besides the departmental audits within the JDA, statutory audit is carried out by the Board of Audit whose director is selected by vote of the audit commissioners and appointed with the agreement of the Diet, thereby reducing the direct influence of the government. This study has not been able to identify multi-disciplinary skills within the agency or its methods of management.

Since 1993 the civilian regime in South Korea has strengthened the statutory audit system and the discretion of the National Board of Audit and Inspection over the arms procurement process. The role of the audit authorities in highlighting armament pricing mechanisms and financial irregularities has been notable. In exercising oversight of the military's arms procurement decisions the Committee of National Defense in the National Assembly uses the audit reports on pricing and efficiency reports on weapon systems.

This study did not identify any statutory audit process in Thai arms procurement decision making or use of a statutory audit institution by the legislature. Anecdotal accounts indicate that arms procurement expenditure is subject to departmental rather than statutory audit. Even the 'ideal type' of process recommended in chapter 7 of this volume does not discuss the role of statutory audit in ensuring public accountability, indicating the low salience given to the audit

<sup>34</sup> Ya'ari, A., 'The role of the auditor in the purchase, production and development of arms', SIPRI Arms Procurement Decision Making Project, Working Paper no. 31 (1995), pp. 6, 8–9, 12–13.

<sup>35</sup> Ya'ari (note 34), pp. 9–11. See also chapter 4 in this volume.

<sup>36</sup> In Mar. 1991 the Flomin Committee was appointed to investigate the Dotan corruption scandal. In 1993 the Comptroller General reviewed the implementation of the Flomin report and found that, owing to the influence of the IDF, some of its basic recommendations had not been implemented. Pedatzur and Weisblum (note 10), p. 9.

functions in Thai defence planning.<sup>37</sup> The extent to which such checks and balances need to be developed and institutionalized merits further research.

### *Assessment*

While departmental audit agencies exist in all the countries, their purview does not extend to major arms procurement decisions. In China and Thailand, the study did not identify any statutory audit processes for the assessment of arms procurement decisions. The statutory audit processes in other countries indicated varying levels of competence, which improved with increasing democratization, as observed in the case of South Korea. Of all the countries in this study, Israel appears to have the highest standards of multi-disciplinary competence in the Office of the State Comptroller, enabling arms procurement decisions to be evaluated and reviewed in a timely manner.

## IV. Techno-industrial issues

This section focuses on the organizational capacities for defence R&D, arms manufacturing in the public and private sectors, and the obstacles to public scrutiny of military technology and industrial issues. The comparison is based on two propositions.

1. Because costs and risks in the defence business are high, the defence industry and defence R&D organizations tend to seek autonomy and public money in order to build themselves up, using the arguments of defence industrial self-reliance or efficiency in meeting military requirements. However, for defence R&D to be competitive, independent technical evaluation and professional monitoring capacities are essential.

2. An internationally competitive engineering industry is an essential condition for a country's building up a defence industry. Successful defence industrial programmes also require advanced management skills, such as technology assessment (TA) and systems integration, and technology diffusion between the defence industry and engineering industry in general. In the absence of such capacities the defence industry will tend to go its own way.

### **The defence industry, self-reliance and defence R&D**

China has achieved a relatively high level of self-reliance in terms of ground weapon systems and naval combatants. Defence R&D is conducted both in the research institutes under the Committee for Science, Technology and Industry for National Defence (COSTIND) and in those that come under the defence industrial corporations under the State Council. R&D testing and quality evalu-

<sup>37</sup> The formation of a special counter-corruption commission in the case of the F-18 aircraft contract does indicate an element of checks in the process. 'Minister orders prompt investigation of F-18 purchase', *Thailand Times*, 8 Nov. 1996, p. A2.

ation are carried out by the State Test and Evaluation Committee (STEC), which comes under the CMC and is independent of the R&D and defence manufacturing agencies.

All defence R&D in India is conducted in the state-controlled laboratories of the Defence Research and Development Organisation (DRDO). The DRDO is also responsible for R&D budget monitoring as well as three functions of defence R&D—technology assessment, development and evaluation. The result is low levels of monitoring by the executive branch and of public accountability. All R&D-related functions are controlled by the Secretary of the Department of Defence R&D in the Ministry of Defence, who is also the Scientific Adviser to the Minister of Defence, so that there is no independent system of external checks and technology evaluation.

As regards efficiencies in defence R&D in India, a comparison of the DRDO and the Japanese Technology Research and Development Institute (TRDI) in terms of ratios of research to administrative staff and personnel costs is illustrative (see table 8.1). The comparison suggests that additional allocations to defence R&D in India would be disproportionately used on personnel costs. Defence public sector undertakings (DPSUs) are similarly characterized by overstaffing and weak executive monitoring.<sup>38</sup>

A major part of Israel's defence R&D and production is under the state-controlled industrial corporations. The domestic arms development process is characterized by a close network of ties between the military, the defence industry and the Ministry of Defense, thus allowing end-user involvement in the R&D and production of weapon systems<sup>39</sup> and a preference for certain technologically competent companies in both the public and the private sectors for developing weapon systems from the concept formulation stage onwards. This discourages competition at the feasibility study, operational development and production stages. Although the Agency for Research and Development (MAPHAT)—a Ministry of Defense agency—conducts external review, the mutuality of interests of the staff of the IDF, the Ministry of Defense and the defence company selected leads to high approval rates and extension of projects beyond the original time and cost estimates.

With the ban on Japanese arms exports and limited demand from the JDA, Japanese companies have a very low dependence on defence contracts and primarily respond to the R&D requests of the JDA. As a result there is no technology push to urge the production of new weapon systems. To prevent an erosion of the defence production capacities, the Ministry of International Trade and Industry (MITI) offers tax incentives to promote modernization and introduce advanced technological equipment into the production process. Defence R&D is conducted both in the private-sector industry and in the TRDI, which con-

<sup>38</sup> *Ministry of Defence: Defence Force Levels, Manpower Management and Policy* (note 1), pp. 73–77, 81. Retrenchments or relocations are difficult to implement under prevailing regulations and the defence production factories remain encumbered with surplus labour forces. Ahuja, G. S., Comments at the CPR–SIPRI Workshop, New Delhi, 1 July 1995.

<sup>39</sup> It is not uncommon for engineers from El-Op and production managers from Ta'as to find themselves in the reserve services with tank and artillery battery commanders. Pinkas (note 3), p. 15.

**Table 8.1.** Manpower ratios and personnel costs at India's and Japan's R&D institutes

	DRDO (India)	TRDI (Japan)
Ratio of engineers to administrative and auxiliary staff	1 : 3.48	1 : 0.42
Percentage of personnel-related costs to the total R&D budget	24.4 <sup>a</sup>	5.5 <sup>b</sup>

<sup>a</sup> Budget estimate for fiscal year 1994/95.

<sup>b</sup> Budget estimate for 1997.

Sources: Government of India, Ministry of Science and Technology, *R&D Statistics 1992/93* (Government of India Press: New Delhi, 1993), p. 14; Government of India, *Defence Services Estimates 1994/95* (Government of India Press: New Delhi, 1995), p. 22; Brochure from the Technology Research and Development Institute (TRDI: Tokyo, 1997); and T. Suzuki, Private communication with the author, 7 July 1997.

ducts research only on major projects. The relative openness of the defence R&D system allows review and evaluation of the projects to be undertaken, thereby contributing to greater efficiency.

As in the case of Japan, South Korea's applied defence R&D and arms production are done mainly in the private sector, but are only a small element of the output of the large industrial conglomerates (*chaebols*). They prefer to divest this share because of limited demand, high risk, the need for heavy initial investment for weapon development and difficulties with arms exports, particularly in the case of weapons using technologies of US origin. Consequently defence companies are subsidized, helped by tax reductions and exemptions, and encouraged to specialize in high-technology and precision systems. Problems in building military technology competitiveness include the ADD's monopoly of defence R&D decisions, low levels of technological skills on the part of the military who draw up statements of requirements, and the preference of South Korean military leaders for US equipment and technologies. As a result of the latter, defence R&D was cut down during President Doo Hwan Chun's regime (1980–87, which also coincided with low levels of accountability, high levels of corruption, financial scandals and irregularities in arms procurement), but since the advent of the civilian leadership in 1993 the government's relationship with the engineering industry has been broadened and the National Assembly has begun to have a say in the formulation of defence industrial policy.<sup>40</sup>

Most of South Korea's basic defence R&D and testing and evaluation for indigenous weapons, in the private as well as the public sector, is carried out by the Agency for Defense Development (ADD) which functions under the Ministry of National Defense.

<sup>40</sup> Yong Sup Han, 'South Korea's defence industrial base', SIPRI Arms Procurement Decision Making Project, Working Paper no. 51 (1995), p. 5.



Although the Thai military maintains that defence industrial self-reliance is among its objectives, considerable effort will be required to indigenize major weapon systems. Most key defence equipment is imported<sup>41</sup> and the armed forces have strong relationships with foreign suppliers. The defence R&D establishment is small<sup>42</sup> and underdeveloped and technical expertise lacking. The Ministry of Defence<sup>43</sup> has an R&D Coordination Committee but its role is restricted to coordination between the three armed services. Reports of various cooperative initiatives being taken up by different parts of the army with research institutes in the public and private sectors indicate the absence of an effective central organization responsible for integrated defence R&D work.<sup>43</sup> These are further constraints on the development of public accountability.

### *Assessment*

In all countries except India and Thailand (where information on the subject was not available), the agencies for R&D testing, monitoring and evaluation are independent of those which carry out R&D. Separation of these functions enhances the quality of both executive and legislative accountability. In China the STEC evaluates projects developed by COSTIND and defence technology corporations under the State Council. In Israel, Japan and South Korea, where applied R&D is conducted in the private sector, technology testing, validation and evaluation are carried out by agencies of their defence ministries (MAPHAT, the TRDI and the ADD).

### **The engineering industry, technology assessment and technology diffusion**

In order to make optimum use of R&D outputs it is vital that science and technology (S&T) levels in the user organizations are correspondingly developed. This involves building up adequate skills and capacities for the absorption, adaptation and diffusion of advanced technologies, and developing a certain level of technology intensity.<sup>44</sup> Defence R&D budgets *per se* may not accurately indicate a country's military technological potential. Relevant aspects are the ability to use equipment developed by R&D laboratories other than those of the user organizations; the availability of technology management skills based on multi-disciplinary applied research; institutionalized processes for information flow; coordination and cross-fertilization between different sectors of civilian R&D and military technology; and manpower trained to advanced levels in engineering, the sciences and technology.

<sup>41</sup> The RTA, which is least dependent on foreign technology, procures up to 83% of its equipment from foreign sources. Surasak (note 28), pp. 3–4.

<sup>42</sup> In 1995 it had a staff of 246. Surasak (note 28), p. 6.

<sup>43</sup> Surasak, B. (Col), 'National arms procurement policies and decision making', SIPRI Arms Procurement Decision Making Project, Working Paper no. 55 (1995), p. 4; and 'The military in Thailand' (note 30), p. 22.

<sup>44</sup> 'Playing godmother to invention', *The Economist*, 24 May 1997. Many countries spend heavily to foster R&D, but inventing new technology is less important than using it effectively.

The corporatization of China's former Ministries for Machine Building Industries which began in the late 1970s aimed to increase defence industrial competitiveness and has led to greater coordination and integration of civilian and military R&D and manufacturing between establishments under the CMC and those under the State Council, including laboratories under the Academy of Sciences. Corporatization of defence companies was intended to improve their interaction with the user services. Similar objectives—the improvement of TA and of the management of defence R&D—led to the creation of the PLA's General Equipment Department in April 1998. A number of reports have advocated advanced engineering training and training in information technology for the PLA, the development of technology spin-ons from the civil to the military sectors, especially in micro-electronics, communications and computer software, and technology diffusion to improve the PLA's human resources and combat capabilities.<sup>45</sup>

With priority being given by China to foreign investment for conversion of military R&D enterprises into high-technology market-oriented corporations, in order to keep pace with technological change the development of TA and applied technology management skills is being emphasized, particularly in the Academy of Military Science, the subordinate organizations of the PLA and the research institutes under the State Council.<sup>46</sup>

Primarily because of the lack of an advanced engineering industry, both China and India have found that their abilities to develop completely indigenous design, R&D and manufacturing capabilities for high-performance weapons and equipment are limited. Deficiencies are also found in designing and prototyping, systems engineering and integration, and project management. It is one thing to assemble weapon systems from semi- or completely knocked-down kits, but for indigenous design and development of sophisticated weapon systems an internationally competitive engineering industry and a well-developed R&D management capacity are required. China, however, has a comparative advantage in its advanced engineering sector, discernible from its exports to a technologically competitive market such as the USA (see table 8.2).

Indian defence technological capacities are also handicapped by low levels of technology intensity in the military, as in the country as a whole: an increase in R&D outputs would not automatically improve the country's military capabilities. Although the DRDO has started a programme to facilitate post-graduate engineering courses in the universities, the military only trains graduate engineers as officers for the technical corps.

<sup>45</sup> Over the 6 years 1991–96, close to 100 000 officers and soldiers attended courses in technology. Fan Yinhua, 'Contemporary military revolution and new thinking modes', *Beijing Jingfangjun Bao*, 24 Mar. 1998, in Foreign Broadcast Information Service, *Daily Report—China (FBIS-CHI)*, FBIS-CHI-98-105; 'Do great things with new ways of thinking', *Beijing Jingfangjun Bao*, 2 May 1998 (in Chinese), in FBIS-CHI-98-133; and Chen Wanjun and Li Chaogui, 'China: Navy makes advances in equipment modernization', *Beijing Xinhua Domestic Service*, 13 May 1998 (in Chinese), in FBIS-CHI-98-137.

<sup>46</sup> *China Directory 1997* (note 9), pp. 153–54 (in English); and Information brochure about the Academy of Military Science, 1994.

**Table 8.2.** High-technology engineering exports to the USA from China and India, 1991

Figures are in US \$m.

	China	India
Opto-electronics	17.38	0.09
Computers and telecommunications	293.00	5.96
Electronics	2.22	2.16
Computer-integrated manufacturing	1.19	0.41
Material design	0.54	2.30
Aerospace	25.55	2.92

Source: Rausch, L. M., *Asia's New High-Tech Competitors* (National Science Foundation: Arlington, Va., 1995), pp. 57–60.

As neither the military nor the R&D organizations are subject to independent technological audit and evaluation, their productivity is impossible to judge. The absence of a framework for using broader engineering capacities in the civilian industry or for comprehensive TA may also be among the reasons why monitoring and oversight of defence R&D remain perfunctory. This observation is supported by five indicators. First, long-term technology forecasts are too general and there are no guidelines on long-term military technology policy. Second, in the absence of close user–developer interaction, some of the R&D projects initiated by the DRDO on the assumption that they may have operational use in the future are based on educated guesswork. Third, in the absence of skills in the armed services for conducting operational research, systems analysis or advanced technological research, rationalization of weapon system requirements tends to follow acquisition.<sup>47</sup> Fourth, although there is a Directorate-General of Quality Assurance independent of the producers and users of weapons, no independent, autonomous agency for quality assurance of R&D projects exists. Fifth, the DRDO does not always carry out comprehensive studies of life-cycle costs of major weapon systems.<sup>48</sup>

The absence of specialized technical and financial expertise to assist the parliamentary oversight and statutory audit bodies in evaluating major R&D projects means that generalists from think-tanks, the universities and military institutions conduct defence technology policy analyses—in most cases retired civil servants or retired military officers with expertise in strategic analyses.<sup>49</sup>

<sup>47</sup> Ghosh (note 21), p. 147. Development of the Agni and Prithvi missile systems was evidently a DRDO decision taken in order to acquire autonomy in missile technology. There is no evidence that these missile systems were developed either because of the emergence of new threats or through systematic development of new operational doctrines. The army has difficulties with field storage, battlefield mobility and the detectability of the liquid-fuelled Prithvi missile and the air force has never expressed any interest in the Agni. Joshi, M., 'Agni missile: operation defreeze', *India Today*, 11 Aug. 1997, p. 68.

<sup>48</sup> Santhanam, K., Comments at the CPR–SIPRI Workshop, New Delhi, 1 July 1995.

<sup>49</sup> Karim, A. (Maj.-Gen., ret.) and Malhotra, I., Comments at the CPR–SIPRI Workshop, New Delhi, 1 July 1995.

Israel has demonstrated considerable capability in producing advanced sub-systems and modifying equipment. This has been greatly helped by a system for technological cooperation between ministries, other national bodies in the field of technology development, universities and the defence industry, developed in order to build national technological capacities and infrastructure.<sup>50</sup> From the mid-1960s the entry of retired military officers into industry reinforced the network of ties between the military, the industry and the Government. In the early 1980s investments were made to generate spin-offs to the civilian industry, and joint ventures were created between civilian industries and subsidiaries of major defence companies for selecting technologies for spin-offs, but these initiatives ran into difficulties which were overcome only marginally.<sup>51</sup> The experience also showed that shared use of facilities and a smooth flow of human skills between the defence and civilian technology sectors promoted the effective use of military or civilian components and sub-systems and, interestingly, that cross-fertilization of skills and ideas may be achieved by combining civilian and military research in the same laboratory, but that development, production and marketing should remain separate.<sup>52</sup>

Israel has also developed expertise and methods for systematic and scientific monitoring by developing TA skills in the academic world.<sup>53</sup> The availability of these skills facilitates public scrutiny of arms procurement decision making. Finally, an unprecedented number of Israeli troops have professional training in mechanics, engineering, medicine and computing.<sup>54</sup>

Advanced engineering companies in the private sector play a predominant role in the Japanese defence industry. Production lines are usually flexibly shared by defence- and civilian-sector workers for the production of defence equipment and civilian products, except in cases requiring secrecy.

The Japanese approach to gaining technological competitiveness is to access foreign technologies for adaptation and rapid diffusion throughout the economy. This capability is considered to be more important in enhancing technological autonomy than integrating military and civilian technologies.<sup>55</sup> Despite

<sup>50</sup> The Ministries of Defense, Industry and Trade, and Science and Technology as well as the Council of Higher Education have started to cooperate with other national-level bodies and universities. Bonen (note 13), pp. 7–8; and Klieman and Pedatzur (note 13), pp. 211–13.

<sup>51</sup> Lifshitz, Y., 'Budgeting for defence and development of the domestic military industrial base', SIPRI Arms Procurement Decision Making Project, Working Paper no. 30 (1995), pp. 16–18.

<sup>52</sup> Bonen (note 13), p. 7.

<sup>53</sup> The Systematic Evaluation Procedure developed by the Inter-disciplinary Centre for Technology Analysis and Forecasting (ICTAF) for making arms procurement decisions has also been used to conceptualize the development of the unarmed airborne vehicle and to study future communication systems and smart munitions. Sharan, Y. and Naaman, D., 'Technology assessment and methods in procurement procedures', SIPRI Arms Procurement Decision Making Project, Working Paper no. 25 (1995).

<sup>54</sup> Cohen, A. S., 'The changing face of civil–military relations in Israel', unpublished thesis, Bar-Ilan University, Oct. 1994. Israel as a whole has a higher proportion of scientists and engineers with advanced degrees than have Germany, Japan, the UK or the USA. British Council/British Department of Trade and Industry, *Israel: a Science Profile* (British Council/Department of Trade and Industry: [London], 1996), p. 39.

<sup>55</sup> The Defense Technology Foundation is composed primarily of former TRDI engineers and aims to encourage defence technology R&D and promote interchange between the government and industrial corporations. T. Suzuki, former director of the TRDI, private communication with the author, 7 July 1997; and Freidman, D. and Samuels, R. J., *How to Succeed Without Really Flying: The Japanese Aircraft*

the forums set up by the JDA and the defence industry for technology diffusion, experts in fact aver a lack of a well-developed process for the diffusion of technologies between the civilian and the defence sectors.<sup>56</sup> The TRDI has also been innovative in using retired engineers to carry out testing, evaluation and other technical experiments.

Research collaboration between the JDA and academic institutions has not developed owing to the JDA's policy of maintaining a low profile in society and avoiding arousing anti-militarist sentiment. A similar attitude exists among the major industrial corporations, which also avoid drawing attention to their arms production activities for fear of developing a negative public image. Legislative oversight of Japanese defence industrial policy is underdeveloped because in the large Japanese industrial corporations defence production is a fairly minor part of their total output.<sup>57</sup>

In order to reduce its dependence on technologies of US origin and improve its defence R&D capacities, South Korea is contemplating a number of initiatives such as fostering inter-ministerial cooperation to promote industry–university–laboratory programmes, cooperating with universities that specialize in key technologies, linking defence S&T with national S&T policy, using offset programmes to acquire core technologies, raising the R&D budget to 5–10 per cent of the defence budget and expanding capacities for developing defence-related information technologies.<sup>58</sup> Academic institutions, such as the Science and Technology Policy Institute, often provide analyses for S&T policy management and R&D coordination required for decision making in the defence sector. Such resources are also available to the legislative oversight bodies, but the extent of their use by members of the National Assembly requires investigation.

Thailand's engineering industry is small, and private industry is reluctant to venture into the defence field because of the uncertainties of requirements in Thai military contracts.

### *Assessment*

The competitiveness of the engineering industries in Israel, Japan and South Korea is complemented by capacities to manage and integrate technologies developed in the defence and the civilian sectors in these countries. While Japan has institutionalized organizations for diffusing technologies between

*Industry and the Japanese Technology Ideology* (Massachusetts Institute of Technology, Centre for International Affairs, Japan Program: Cambridge, Mass., 1992), pp. 4–5.

<sup>56</sup> These forums include the Japan Association for Defence Industry, the Society for Defence Equipment Manufacturers, the Firearms and Ammunition Technology Liaison Council, and the Society of Japanese Aerospace Companies. Suzuki, T., 'Defence R&D in Japan', SIPRI Arms Procurement Decision Making Project, Working Paper no. 37 (1995), p. 2. Suzuki believes that the existing processes for technology diffusion between the industrial and the military R&D sectors are inadequate. Private communication with the author, 7 July 1997.

<sup>57</sup> Taoka, S., 'Domestic considerations and élite motivation in arms procurement decision making', SIPRI Arms Procurement Decision Making Project, Working Paper no. 35 (1995), p. 6.

<sup>58</sup> Chul Whan Kim, 'The perspectives of changes for national defence research and development', SIPRI Arms Procurement Decision Making Project, Working Paper no. 48 (1995), pp. 10–14.

these two sectors, TA processes in Israel and South Korea are well developed in academic research institutes. Consequently, public debate and legislative oversight of military technology and industrial decisions in these countries are more focused than in India or in Thailand.

## V. Organizational behaviour and public-interest issues

Organizational behaviour and public-interest issues have been the most challenging of the four themes of this analysis. The focus is on the limitations on and opportunities for the improvement of public scrutiny and oversight of defence policies and arms procurement decision making. The analysis is based on two propositions:

1. Public scrutiny of arms procurement decision making requires constitutional provisions, assertiveness on the part of the legislature and the availability to the public of sufficient information. In some cases, the Government's resistance to legislative oversight is indicated by its reluctance even to issue White Papers or policy documents to identify defence policies or arms procurement guidelines. In such circumstances, the military's autonomy in arms procurement decision making develops at the cost of the broader priorities of society.

2. The degree to which demands are made for security-related information by the legislative bodies is conditioned by a society's attitudes towards military security, traditional elite behaviour, and the nature of the country's political organization. Since attitudes which encourage military autonomy and excessive confidentiality create barriers to public accountability, they can also allow inefficiencies to creep into arms procurement processes, permitting waste, fraud and abuse.

### **Content and quality of legislative oversight**

In China the NPC has eight committees for legislative oversight of the various ministries under the State Council. However, there is no evidence of oversight by the NPC of the PLA or of the MND. The absence of public debate on security issues in the media is indicative of the military's relative autonomy in defence policy making.

The 1995 Chinese White Paper on defence presents a broad outline of the policies on military manpower reductions, defence spending, military industrial conversion, technology export controls and arms control obligations. However, it does not identify China's security concerns or the long-term objectives of arms procurement—areas where official statements could significantly contribute to regional confidence and security building.

India neither publishes a White Paper on defence policy nor formally issues details of its arms procurement process. The government argument that information on defence policy can be derived from the Ministry of Defence's annual

reports, the parliamentary debate on defence and the defence budget<sup>59</sup> overlooks the fact that these are defence management documents, focusing on the functions, activities, allocations and efficiency levels achieved during the year of the report. A defence policy document, on the other hand, would provide guidelines for the formulation of long- and medium-term defence capability-building programmes, identify joint roles, force structures and arms procurement programmes, and facilitate the drawing up of coherent guidelines by each department and armed service for their arms procurement and logistics programmes. The absence of a national defence policy document allows misinterpretations to creep into the public assessment of official policies—a weakness which remains unaddressed by the Indian Parliament. The parliamentary committees have failed to build up the means to access independent, specialized expertise to enable them to judge the military's threat assessment, financial planning or TA.

There are several possible reasons for the passivity of Indian Members of Parliament in failing to enact laws to give Parliament the right to information from the Government, among them the heavy demands of electoral politics on their time, their lack of knowledge of defence matters, and the fact that they have no opportunity to develop this knowledge within the one-year period they serve on the Standing Committee on Defence. This committee is large and unwieldy and has not been organized into specialized subcommittees, as is the case in Israel, or developed an institutionalized process for accessing outside expert opinion, as in South Korea. Consequently, the defence debate and oversight by the Indian Parliament are marked by low participation and perfunctory interest.

Although the military-political élite poses no tangible threat to Israeli democracy, parliamentary oversight of the military through the Knesset Committee on Foreign Affairs and Security is formal rather than actual. The committee's decisions are not binding on the armed forces and, although it is constitutionally empowered to oversee the military's decision-making process, its members rarely question decisions since they lack the capacity to scientifically evaluate defence-related decisions, in particular the more technical aspects. Notwithstanding the assumption that legislative oversight of the executive branch is essential for it to function efficiently, the budget does not provide funds for the development of research expertise to serve the committee. Its information is provided exclusively by the organizations under scrutiny.<sup>60</sup>

The influence of the Knesset on the military is also weak because it lacks institutional tools of control,<sup>61</sup> despite the fact that several members of the Knesset are knowledgeable former military leaders. None the less, the existence of a number of subcommittees allows for efficient, detailed and focused deliberations in a small forum of five to seven members, promoting a better quality of oversight of arms procurement decisions than in any other country in this

<sup>59</sup> *Ministry of Defence: Defence Force Levels, Manpower Management and Policy* (note 1), pp. 1–3.

<sup>60</sup> Klieman and Pedatzur (note 13), p. 104. The Knesset members are co-opted into the system and hence rarely question the military's decisions. Pinkas (note 3), pp. 18–19.

<sup>61</sup> Halperin, D., 'The impact of American aid on decision making in Israel', SIPRI Arms Procurement Decision Making Project, Working Paper no. 32 (1995), p. 7; Meron (note 12), p. 15; and Etzioni-Halevy (note 11), p. 10.

study.<sup>62</sup> The influence of the Israeli State Comptroller is substantial and, having the benefit of multi-disciplinary expertise, his reports are insightful. The Israeli Government does not publish a White Paper on defence policy.

In Japan the controversial nature of national defence and military capability issues has led the JDA to adopt a defensive posture and a low profile, building a cocoon of confidentiality around itself. Until the Standing Committee on Security was established in 1991 in the House of Representatives, conflict on security issues between the Liberal Democratic Party (LDP) Government and the opposition parties deprived the Japanese Diet of a forum in which to deliberate security issues. Japan's White Paper on defence, which is published annually, contains enough detail to enable public assessment of national security policies and the military's long-term priorities. However, arms procurement expenditure is not considered to be a very important part of the JDA budget, so that the political parties avoid confrontation with the government on such issues and generally resolve their differences in the Defense Coordination Committee.

Although a limited level of independent expertise is available to members of the Diet through its library and through the research organizations of the party, expert capacities and access to broader expertise have not been developed in a systematic manner. The Budget Committee relies heavily on JDA officials for clarifications and expert advice.<sup>63</sup> According to members of the Standing Committee on Security, hardly any contentious issues relating to arms procurement decisions come up for discussion.<sup>64</sup> Differences are apparently resolved informally between the members.

In the South Korean National Assembly, members of the Committee of National Defense share the view that, as national security questions belong to a secret domain, they should avoid raising concerns about the arms procurement process. Other limitations on legislative oversight include: (a) the sharp polarization between the ruling party and the parties in opposition; (b) the absence of specialized subcommittees; (c) the fact that legislative hearings are confidential; and (d) the lack of staff with multi-disciplinary specializations to access information and provide technical advice for the Committee of National Defense.<sup>65</sup> To address these shortcomings, a security division is being developed in the Legislative Research Office, staffed by middle-level military officials with advanced academic degrees and experts from various specialized disciplines.

<sup>62</sup> Hearings by the subcommittees are conducted in a professional manner: defence officials are required to report and minutes are taken and compared with previous reports. The committee's professionalism is shown by the serious nature of discussions and the insightful quality of its questions. Begin, Z. B., 'Parliamentary supervision of military procurement in Israel', SIPRI Arms Procurement Decision Making Project, Working Paper no. 28 (1995), pp. 1-3.

<sup>63</sup> Interview by Ian Anthony, SIPRI, with Yoshinori Oono, Chairman of the LDP National Defense Committee and Director of the Standing Committee on Security, House of Representatives, Dec. 1995.

<sup>64</sup> Interviews by the author with Akira Fukida, Chairman, and Tsutomu Kawara, member of the Standing Committee on Security, Jan. 1996.

<sup>65</sup> Noh Soon Chang, 'The role of the National Assembly in the process of arms procurement', SIPRI Arms Procurement Decision Making Project, Working Paper no. 49 (1995), pp. 9-12. Specialists from the ADD and the Korean Institute for Defense Analyses are not available to the National Assembly members.



Despite the distorting effect of the perception of the military threat from North Korea and of the relationship with the USA, legislative monitoring and audit of defence expenditure have apparently improved with the advent of a civilian elected government in 1993, as is revealed by the report on the misuse of resources in the Yulgok Project. The South Korean Government has issued a White Paper on defence annually since 1988. It is a comprehensive and informative document on defence policy, defence posture and priorities, and defence management.

In the Thai National Assembly the Military Affairs Committees in the Senate and in the House of Representatives, being made up primarily of former high-ranking military leaders, have neither encouraged accountability of the military nor influenced the level of detail in the defence White Paper. It is quite likely that the members of the Military Affairs Committees are predisposed to represent the interests of the military in the National Assembly rather than those of the public. The constitutional provisions enabling the military to stand for election provide incentive and opportunity for them to try to gain political power. As the key positions in the Ministry of Defence are held by serving or former military officials, including the Minister of Defence,<sup>66</sup> the influence of the military in the executive and the legislative branches can be compared to that of the PLA in China. This study has not been able to identify any evidence of legislative scrutiny of the defence planning process.

As public accountability in the arms procurement process is new in Thai society, building public opinion in favour of scrutiny of the military processes will require considerable effort.<sup>67</sup> Arms acquisitions in Thailand are still confidential and are known only to those who 'need to know'. As the elected representatives do not belong to that privileged group and have no expertise on security affairs, the situation is likely to continue. The first Thai White Paper was issued in 1994, followed by a second in 1996. They give some details of military expenditure and define security policy and the role of the Thai armed forces in very broad terms.<sup>68</sup> The level of detail is inadequate if compared with the Japanese and South Korean White Papers and, although it started as a confidence-building exercise, the Thai White Paper does not describe the arms procurement decision-making process.

<sup>66</sup> The Permanent Secretary of Defence and the 3 Deputy Permanent Secretaries of Defence designated for each of the armed services in the MoD are all from the armed forces. Brooke, M., 'Thai reshuffle', *Asian Defence Journal*, no. 10 (1997), pp. 18–19.

<sup>67</sup> Chumphol, S. (Capt.), 'Perspectives on national security, military security and military capability', SIPRI Arms Procurement Decision Making Project, Working Paper no. 58 (1995), pp. 5–6.

<sup>68</sup> The first White Paper developed from an unprecedented debate organized by the military seeking input from about 100 civilian experts, including some from industry. Kang Choi and Panitan, W., 'Development of defence white papers in the Asia-Pacific region', ed. B. Gill and J. N. Mak, *Arms, Transparency and Security in South-East Asia*, SIPRI Research Report no. 13 (Oxford University Press: Oxford, 1997), p. 87.

### *Assessment*

More often than not, parliamentary opinion on security policies is given low priority by the Government and the military on the assumption that they know what is best for the security of the country. On the whole, a lack of availability of experts to the legislative oversight processes impedes the creation of capacities for monitoring the Government. Legal provisions for assertive public scrutiny of defence policy decisions are inadequate. As military priorities in these countries are primarily debated within the executive branch of government, public accountability norms and practices do not grow within the decision-making system. Legislative oversight is relatively well organized in Israel, although its military retains an influential position in the national decision-making apparatus owing to the country's strong security concerns. On the other hand, a vibrant public debate on Israeli national security decisions acts as a check on the military's autonomy.

### **Societal and élite attitudes and exclusivity of defence policy making**

The Chinese traditionally regarded security policy and decision making as the exclusive responsibility of the emperor, while society's role was to respect confidentiality with unquestioning obedience. Public accountability and oversight of national security decisions are seen as Western ideas. Having replaced the emperor as the traditional guardian of Chinese society, the CPC is similarly regarded by the public, and the leader of the CPC is given complete autonomy in national security matters.<sup>69</sup> A similar attitude is found in several other East Asian societies and has contributed to an acceptance of secrecy and the absence of public debate on national security issues. As this study could not examine the sociological dimensions of the relationship between the security élite and the public, it is difficult to assess the reasons for the reluctance of the Chinese public to participate in the national security debate.

Although publications on the subject of security are issued by state-controlled organizations and are available in Mandarin, these reports tend to be repetitive and laudatory rather than descriptive or analytical. Notwithstanding the existence of forums for discussion, in which senior scholars from think-tanks interact with officials from various ministries,<sup>70</sup> Chinese scholars experience difficulties in analysing national security issues. This is due to lack of information and (where information is available) to their own reluctance to make objective assessments that could go against established opinion. Chinese military and civilian official agencies are hierarchical and disciplined; the security debate is characterized by a repetition of established ideological viewpoints. This attitude not only restricts the flow of new ideas between officials at similar levels in different organizations, but also deprives China's leaders of alternative points

<sup>69</sup> Interview by the author with Pei Jiangfeng, *China Daily*, 13 Mar. 1995.

<sup>70</sup> E.g., the National Defence University, Academy of Military Science, Military Science Institute and China Institute for International Strategic Studies. *Jiefangun Bao*, 8 Jan. 1996.

of view. As opinions which differ from those of the government engender uncertainty, ideas from Chinese scholars and intellectuals, which could benefit the security decision-making processes, are suppressed.<sup>71</sup>

Despite public and parliamentary demands in India for the institutionalization of accountability in the security policy-making processes, because of bureaucratic inertia and a traditional guarded attitude towards accountability to the public the government has turned a deaf ear.<sup>72</sup> It refers to the Official Secrets Act when withholding official information on defence processes and procedures. Such rationalizations are not convincing. Barriers to information have been described as the single largest factor behind the prevailing corruption in the society, which facilitates clandestine deals, arbitrary decisions, manipulation and embezzlement.<sup>73</sup> Despite public support for a Freedom of Information Act, the proposed bill excludes information on matters relating to national security and foreign relations. However, India's democratic processes do allow security issues to be openly debated, and criticism in both the media and the public is vigorous because the corrective measures taken are ineffectual.

Public acceptance of military secrecy in Israel is a consequence of the dominant culture of security: the public willingly gives up its 'right to know'.<sup>74</sup> Secrecy has become legitimized in security decision-making, creating a 'no questions asked' atmosphere. As the legal powers of the Government over the armed forces are ambiguous, the authority exercised by the Minister of Defense over the IDF depends to a large extent on the personality of the minister. The relationship orientation in Israeli decision-making behaviour has influenced a number of important arms procurement programmes.<sup>75</sup> Even the Cabinet is usually informed of major arms deals only after they have been decided upon by the Minister of Defense or when the Prime Minister deems it appropriate to report. Secrecy has also been important in arms procurement and arms exports from the perspective of commercial and diplomatic sensitivity. From the military security perspective, secrecy is further justified by the need to maintain 'technological surprise', as demonstrated in the 1982 Lebanon War,<sup>76</sup> and high levels of secrecy are maintained with respect to the suspected nuclear weapon programme.

<sup>71</sup> 'Military academies suffer brain drain', *Inside China Mainland*, May 1994, pp. 50–52.

<sup>72</sup> Bureaucratic inertia in security policy making is also indicated by the failure to debate or progress recommendations of the Estimates Committee of the Indian Parliament that budget allocations should match the 5-year defence plans. *Ministry of Defence: Defence Force Levels, Manpower Management and Policy* (note 1), p. 30.

<sup>73</sup> 'Information control is power. India's administrative processes are surrounded by needless and excessive secrecy bordering on farcical.' Soli Sorabjee, Comments at a workshop on Freedom of Information and Official Secrecy in New Delhi in July 1996. See also 'Will the new government let the sunshine in?', *Times of India*, 6 July 1996, p. 11.

<sup>74</sup> Pinkas (note 3), p. 4.

<sup>75</sup> The decision to cancel the Lavi project was influenced by a number of personalities—Yitzhak Rabin as Defence Minister, Avihu Bin-Nun as Chief of the Air Force and Dan Shomron as Chief of Staff. Meron (note 12), p. 6.

<sup>76</sup> Steinberg, G., 'The influence of foreign policy and international agreements on arms procurement decision making', SIPRI Arms Procurement Decision Making Project, Working Paper no. 24 (1995), pp. 4–5.

The secrecy ethos has undergone some change since the public disillusionment with the military's handling of the 1973 Yom Kippur War and its intervention in Lebanon. Despite increased demands in the media for discussion of security issues and the defence budget, public interest is limited to general staff politics, corruption and mismanagement.<sup>77</sup> However, the media show some professionalism in that they do not merely resort to coverage of matters of immediate public interest, and the national security debate is relatively open compared with that of other countries in the region.

In Japan national security analysis has remained exclusively within the domain of the bureaucracy. This is because of the authority of hierarchical structures in the society and a Confucian legacy which gives the bureaucracy high social status. Tradition, precedence and organizational collectivism reinforce each other.<sup>78</sup> Senior bureaucrats have reinforced this dominant position by joining the long-ruling LDP. In some ways this resembles the situation in Israel, where senior military leaders generally join the leading political parties, which adds to their influence in security decision making.<sup>79</sup> There has been muted public criticism in Japan of the strengthening of corrupt relationships between the bureaucracy, industry and politicians, creating what is described as the 'iron triangle'.<sup>80</sup>

The tendency in the Japanese bureaucracy to withhold information from the public builds habits of behaviour that undermine transparency. The concerns of each ministry are with its 'territory'. This promotes factionalism, reduces inter-ministerial communication and makes cooperation difficult. To reduce these effects, the JDA has seconded officials from the MoFA, MITI and the Ministry of Finance to its Bureaux of Defence Policy, Equipment and Finance, respectively. Anti-militarist sentiment also contributes to the low salience given to national security analyses. Japanese scholars tend to avoid specializing in security studies, and the field has been neglected by research foundations. A large number of specialists in national security issues are MoFA officials seconded to various think-tanks—which largely excludes academics and independent experts from specializing in national security affairs.

The JDA Press Club facilitates the dissemination of information through accredited defence reporters specializing in defence matters but its exclusivity makes its members semi-insiders. Sharing similar backgrounds and perceptions with the officials, they are prone to reflect the viewpoints of the JDA and the military rather than broader public opinion. Such informal channels are also used by senior JDA and military officials to build information networks and

<sup>77</sup> Very few defence analysts criticize the culture of secrecy and lack of debate on 'macro' issues, such as national security concepts, defence policy options, threat analysis, weapon system procurement processes and so on. Pinkas (note 3), p. 5.

<sup>78</sup> Individuals have a very low profile in Japanese society. The organization, group or company always comes before an individual. Taoka (note 57), pp. 5–6; and Ikegami-Andersson, M., 'Sociology of national decision-making behaviour in Japan', SIPRI Arms Procurement Decision Making Project, Working Paper no. 40 (1995), pp. 2, 6.

<sup>79</sup> Etzioni-Halevy (note 11), pp. 7–9.

<sup>80</sup> Ikegami-Andersson (note 78), pp. 5, 6.

promote their views as the official perspective of the JDA. However, the press club can also exert collective pressure on the government to disclose certain information.

South Korea demonstrates a unique combination of cultural, political and commercial factors. Deep-rooted Confucian values emphasizing status and hierarchical control tend to promote a tradition of élite authoritarianism. Regional parochialism has contributed to political faction and the adversarial nature of oversight in the National Assembly, resulting in a situation where only those in the opposition demand transparency and accountability.<sup>81</sup> Various military regimes have interpreted the National Security Law and the Military Secrecy Act as requiring tight control of security-related information. Finally, the influences of the defence industrial lobbies and foreign arms dealers work against demands for administrative transparency. As a large number of former senior military officers are involved in arms deals,<sup>82</sup> illicit relationships between the arms dealers and serving senior military are reported to be developing.<sup>83</sup>

Despite improvements in public scrutiny and arms procurement audit processes in South Korea, the interest groups which oppose accountability in arms procurement decision making are broadly based, influential and well entrenched for various reasons. Lack of transparency in arms procurement decision making consequently allows elements of arbitrariness in decision making.

In Thailand, the restrictive attitude towards defence-related information is shaped by close social and professional connections among the military élite, who are a cohesive group, ensuring information control.<sup>84</sup> Given the influence of family connections, networks and respect for seniority in the Thai value system,<sup>85</sup> the military élite in the legislature and the executive resists institutionalization of public accountability by asserting the need for military autonomy in security decision making. The question of selectively releasing information to the public, the Parliament or members of the Military Affairs Committees has not been addressed. If any initiative is seen by influential officials as threatening to their personal benefits or power base, it is obstructed in all possible ways, from the subtle and indirect to the explicit and unreasonable. In a society where a norm of conflict avoidance and the influence of personal

<sup>81</sup> Sang Joon Kim, 'Characteristic features of Korean democratisation', *Asian Perspective*, vol. 18, no. 2 (fall/winter 1994), pp. 182, 184, 192.

<sup>82</sup> *Korea Times*, 22 Oct. 1996, p. 3.

<sup>83</sup> About 90% of the arms dealers are former senior military officers who thrive because of the lack of transparency in arms procurement procedures and even influence the promotions of their favourite officers in service. 'Arms procurement culture', *Korea Times*, 22 Oct. 1996, p. 3. A former minister of defence has been charged with leaking information to an arms dealer in return for favours. In another case a senior officer in the Logistics Bureau of the Ministry of National Defense has been charged with passing on the details of the draft Mid-Term Force Improvement Plan to an arms dealer. Yong-chin, O., 'Korean military procurement systems remain vulnerable to leaks of secret information', *Korea Times*, 25 Apr. 1997, p. 3.

<sup>84</sup> At a seminar held in Thailand in Mar. 1997, attended by military leaders and defence ministry officials from 18 countries, most delegates were opposed to transparency or revealing military-related information. Some stated that their countries do not even have constitutional provisions allowing them to reveal military information. Snitwongse, K., 'The Asia-Pacific security dialogue', *Asian Defence Journal*, no. 4 (1996), p. 158.

<sup>85</sup> Suntaree, K., 'National decision-making behavior in Thailand', SIPRI Arms Procurement Decision Making Project, Working Paper no. 59 (1995), pp. 9, 13, 25.

relationships are strong, public institutions remain comparatively weak in creating objective checks and balances. Military accountability to the elected representatives would go against the society's traditional perceptions and is opposed by the military's vested interests. It will be difficult for civilian elected representatives to demand public accountability on the floor of the National Assembly. The deference they display towards the military while debating the defence budget<sup>86</sup> shows that any public assertions that the military should be accountable, in a country which has had the largest number of military coups in South-East Asia, will require creative approaches.

Some demands for public accountability are being made by the growing urban, educated middle class<sup>87</sup> which supports democratization in Thailand. As the growing influence of the mass media makes officials cautious about public exposure and brings government decisions under sharper public scrutiny, permitting journalists to attend parliamentary defence budget committee meetings is a positive step.<sup>88</sup> The level of information available publicly on Thai arms procurement decision making needs to be enhanced and, towards that end, the participation in this study of a number of Thai military officials is laudable.

### *Assessment*

Official information and statements of civilian and military officials in China, India, Japan, South Korea and Thailand are traditionally treated with deference, even if they are not substantiated by scientific evidence. Despite a tendency among Indian officials to keep information close as a source of power, the press is active in prising it out. In Israel the relationship between the military bureaucracy and the public is less formal and more trusting. Consequently, the defence debate in India and Israel is comparatively more developed. However, as processes for transmitting official information are not institutionalized, criticism of arms procurement decisions lacks focus, substance and evidence.

## VI. Conclusions

Not all the ambitions of this study have been met. It set out to examine a broad range of questions requiring information on sensitive issues for countries that did not have a tradition of sharing such information. The fact that not all the questions set out in the project (see Annexe A) have been addressed by all the countries provides some useful insights into research gaps in the field. In examining arms procurement decision-making processes in terms of public accountability and the broader goals of security, the study finds that these processes are

<sup>86</sup> Chaiwat, S.-A., 'Defence budgeting', SIPRI Arms Procurement Decision Making Project, Working Paper no. 57 (1995), pp. 7-9.

<sup>87</sup> Stier, K. and Bao Anyou, 'The bitter truth behind Thailand's khaki commerce', *Asia Inc.*, Oct. 1992, pp. 30-32; Panitan (note 16), p. 3; and Suntaree (note 85), pp. 27, 31.

<sup>88</sup> 'Military budget hearing to be attended by the press', *The Nation* (Bangkok), 20 Jan. 1997, p. A1.

severely handicapped by a lack of public information on and understanding of defence policy making.

### **General findings**

1. A key finding of this study is that the barriers to developing public accountability norms in national security decision making are reinforced by: (a) societal indifference, which allows the military greater autonomy in security policy making; (b) the inadequacy in a qualitative sense of the information needed to facilitate public-interest oversight of defence policy making, for example, by parliamentary defence committees, statutory audit authorities and think-tanks; and (c) legislative oversight bodies' lack of access to professional expertise and advice.

In spite of the general assumption that a democratic system encourages pluralistic security perspectives, the military view in several of these countries is the opposite—that some institutions are better qualified to understand security requirements than others. Although the military has an important role to play in the decision-making process, elected representatives enjoy a greater legitimacy in representing public interests in all dimensions of security policy than do military technical experts. Parliamentary oversight is one way to broaden the choice of national security alternatives, validate the decisions made and exercise checks to prevent a bad decision from becoming worse. Public debate on national security issues provides an arena for harmonizing dissent and alternative perspectives of national security and conflict resolution.

In none of the countries in this study is the domestic debate on legislative oversight of defence decision making sufficiently engaged to improve the representative quality of the decision and review processes. This study reveals unevenness in the quality of public knowledge of the ways in which national security concerns are addressed and decisions are made. Where the lack of such understanding is ignored and debate is discouraged, the democratization processes are slow and security dilemmas remain unresolved. However, considering the complexity of security policy making, it is necessary to strike a balance between the role of the military and independent experts, on the one hand, and that of the elected representatives, on the other.

In a democracy the elected representatives in the legislative assembly are supposed to monitor the Government. However, while the Government has all the resources of the state available for making policy assessments and decisions, the members of the legislative assembly often lack the capacity to monitor it. The questions what kinds of arms procurement-related information should be available to the legislative oversight bodies and how it should be made available have not yet been satisfactorily resolved. Since arms procurement decision-making processes legitimately require a certain degree of confidentiality, these bodies are often under-informed of the basis of their country's security rationale. The building up of professional advisory capacities for the legislative

oversight bodies in areas such as finance, TA and threat assessment would help to harmonize arms procurement decisions with public-interest priorities.

2. A further constraint on the institutionalization of public accountability norms in national security decision-making processes is the enduring influence of personal relationships. In several of the countries under study, it was found that working relationships centre around factions and groups inspired by individuals using influence rather than institutions and professional organizations. This attitude subordinates public interests to the political priorities of the ruling élite. Public institutions are often used to promote the position of influential individuals and interest groups rather than to serve public interests.

3. Two main approaches are taken in national assessments of arms procurement needs. The first is the 'threat scenario' approach—a reactive approach spawned by a need to offset the effects of arms procurement by other countries in the region. Here the military perceives arms procurement as a solution to threat assessment, equipment replacement or modernization problems. The second is a comprehensive national security problem-solving approach, which integrates the perspectives of diverse agencies in a coherent manner. Arms procurement decisions are made as incremental components of security-building solutions. This approach places a greater emphasis on exploration of national security alternatives through dialogue between various actors and agencies.

4. Structures and processes for coordinating and developing coherent foreign and defence policies are lacking. Only in the case of Japan are the coordination processes between the JDA and the MoFA institutionalized at functional levels; in other countries this coordination is limited to inter-ministerial communication. The shaping of foreign and defence policies in separate processes or arenas leads to bureaucratic tribalism and discourages cross-fertilization of ideas. This can result in the military disregarding larger regional or global developments when it makes its arms procurement plans.

Excessive military autonomy in security policy making and arms procurement decision making can lead to apprehension among neighbouring countries, resulting in a reactive spiral of arms procurement—an arms race. Better coordination would lead to a more balanced view and facilitate an examination of alternative approaches to security rather than military capability and deterrence strategies. Developing organizational compatibility between the foreign policy and defence policy-making structures would help in shaping preventive security measures, military confidence-and security-building measures, regional force reduction initiatives and regional arms procurement restraints.

5. The examination of arms procurement budget and auditing processes reveals serious gaps in the public understanding of the entire financial burden of arms procurement on society. The R&D community and arms producers often understate weapon system costs in order to obtain approval. Public debate on arms procurement decisions tends to focus on issues such as threats to national security, the size of the defence budget or the effects of weapon procurement costs, indicating an incomplete understanding of the true ownership costs of weapons to future generations. With the purchase costs of weapon systems



escalating, the life-cycle costs rise correspondingly, but public debate does not pay adequate attention to this aspect of the military burden.<sup>89</sup> Public understanding needs to be broadened to include life-cycle costs if arms procurement programmes are to be understood in the context of other public priorities. The elected representatives would then be able to assess more accurately the financial burden on society.

6. The lack of transparency in defence budgeting is often connected to obsolete budget designs, the absence of multi-disciplinary expertise in the national statutory audit organizations, weak constitutional provisions for the provision of information for public scrutiny of decisions, and a typical bureaucratic attitude which prefers confidentiality to accountability. The statutory audit authorities and the legislators need to identify and address these broader systemic weaknesses.

7. In several cases in newly industrializing countries the arguments for large public-sector investments in order to achieve military industrial self-reliance are questionable. With the exception of Japan, none of the countries in this study has advanced engineering and technological capabilities in its civilian industrial sectors—a prerequisite for achieving military technological self-reliance. The general faith in the value of spin-offs from the defence industrial sector to the civilian economy and industry also remains unsubstantiated. Given the limited oversight of the defence R&D and industrial sectors, the escalating pace of change in technology and the monopolization of information, public accountability is avoided. The process not only fails in independent evaluation and monitoring of defence R&D and defence industry, but also allows oversized organizations to be created. Ironically, opportunities for waste, fraud and abuse abound in the defence R&D and industrial sectors.<sup>90</sup>

## Key propositions

In the context of these findings, several points are important to keep in mind.

1. Arms procurement decisions understandably require a certain degree of confidentiality. The elected representatives need to devise criteria and methods to harmonize those valid requirements with their demands for information for the purposes of oversight.

2. The potential contribution of a cadre of inter-disciplinary experts independent of the Government in advising legislative oversight bodies in their work to create checks and balances on national arms procurement decision making cannot be overemphasized.

<sup>89</sup> Estimates of the life-cycle costs indicate that these are often greater than the procurement costs. Jafa, V. S., 'Arms procurement budget planning process', SIPRI Arms Procurement Decision Making Project, Working Paper no. 12 (1995), p. 14.

<sup>90</sup> Zeev Bonen states that, although it is difficult to measure R&D productivity, it is possible to evaluate it after completion of a project on the basis of criteria such as fulfilment of objectives and contributions to the user, the developer and national infrastructure. Similarly, the aggregate of projects from an R&D organization or other laboratories can be used to evaluate the organization. Bonen (note 13), p. 6.

3. Public accountability of security policies and arms procurement decision making could also encourage accountability in other aspects of public policy.

4. Major arms-recipient countries with relatively transparent public scrutiny methods have a responsibility to show other countries in their respective regions how accountability norms can be developed to encourage balanced arms procurement decision and national security making.

5. Broader public participation in the national security debate has a stabilizing influence and can contribute to regional confidence and security building. There is a need to investigate the possibilities of developing regional dialogues to design a code of conduct for arms procurement restraints as a confidence-building initiative. As security threat perceptions are woven through regional or subregional security webs, more often than not arms procurement needs are rationalized to the public with claims that other countries in the region have acquired superior weapon systems.<sup>91</sup> If developed by an inter-disciplinary group of national experts, region-specific codes of conduct would have better acceptability and an enduring quality.

This study examines ideas for resolving the tension between the security establishments' perspective of the 'need to know' and the public perspective of 'the right to know' from the viewpoint of national experts from diverse backgrounds. It demonstrates that, even in established democracies, military institutions, security bureaucracies, and defence R&D and production organizations tend to emphasize their autonomy in defence decision making by controlling information, encouraging deference to the military and resisting accountability to the public. Public debate is stifled by promoting the belief that military strength is the only instrument for advancing national security and examination of defence institutions amounts to a lack of patriotism. More often than not, defence decision makers overemphasize the need for secrecy by failing to distinguish between the demands for public accountability and the competing requirements of military confidentiality. In order to marginalize dissenting opinion that suggests subjecting the military's decision making to public scrutiny, they evoke apprehensions of foreign interference.

As long as the public sees military capability as the final recourse in ensuring a society's security when other means, such as diplomacy, fail, the military will continue to play a dominant role in the national security decision-making processes and in making defence budget allocations. This will impede the advancement of alternative security paradigms for a number of reasons. First, the military favours incremental improvements in its power potential or accretions of

<sup>91</sup> In this context Surachart Bamrungsuk's observations are noteworthy. First, if Thailand were to pursue an effective diplomatic policy with neighbouring states it could prevent the generation of an arms race and, in the process, could avoid tensions. Second, the argument of the Thai military that possession of powerful modern weapons gives the country an edge in its foreign relations or has increased its bargaining power in border negotiations is contestable. Third, the difficulties in creating a system of checks and balances are compounded by the weaknesses in the Thai Parliament. Bamrungsuk, S., 'Peace dividend bites into military plans', *The Nation* (Bangkok), 31 Oct. 1997, p. A5; and 'Get debate back on top of the table', *The Nation* (Bangkok), 1 Nov. 1997.

equipment and technologies in use. Second, decisions on arms procurement and military technological competence building are made in the context of specific military threats and emerging military systems, and tend to disregard wider politico-security, economic and technological ramifications. Third, military training and culture are given to tradition, obedience and control—attributes which do not encourage the examination of alternative perspectives.

If the national security policy- and decision-making processes are not made adequately accountable, if governments fail to provide direction to security policies with the help of wider professional expertise in society, and if the military fails to harmonize public priorities with its own security policies, then intrinsic weaknesses in national security decision making will remain.

Good decisions are the products of good policies; good policies flow out of good policy-making processes; and good policy-making processes can develop only if there are good oversight mechanisms. In other words, good decision making should not only be viewed from the perspective of technical and functional advantages but also from the perspective of broader national and societal goals.