6. South Korea

*Jong Chul Choi**

I. Introduction

An examination of the arms procurement decision-making process of South Korea (the Republic of Korea) reveals certain idiosyncratic features stemming from the national and international security environments and from the institutional process within the Ministry of National Defense (MND).

Since the 1950 Korean War the security environment of South Korea has been characterized by the long-standing threat posed by North Korea (the Democratic People's Republic of Korea). US military policy towards South Korea—based on a military alliance relationship—and US arms transfer policy have been among the most salient factors influencing the arms procurement process. The domestic political system in operation since the 1970s—characterized by a strong presidency and an authoritarian tradition—has made the process less transparent and accountable to the public.

A key feature is the concentration of arms procurement decision-making authority in the MND and the President. Throughout the process the MND dominates other government agencies and institutions and even the National Assembly. It has the task of concluding the process and it receives interim reports at nearly every stage. The President has the final say regarding procurement programmes with budgets exceeding 5 billion won ($5.25 million).[1]

[1] At the 1997 average exchange rate of 951 won = $1. *International Financial Statistics,* Mar. 1998.

* The author wishes to thank J. Y. Ra, formerly Professor of Political Science, Kyung Hee University, and currently Vice-Director of the Agency for National Security Planning, for supervising the study in the ROK. He also thanks the experts who contributed the papers which formed the basis of the chapter. See annexe C for the biographical details of the contributors. In addition to these contributors, the following experts participated in the workshop held in Seoul on 20 June 1995: Yong Soon Yim, Sung Kyun Kwan University; In Young Eun, Korea National Defense University; Kyung Soo Ro, Seoul National University; Sun Ho Lee, Korea Association of Military Studies; Won Hee Lee, Ansung National University; Kwan Hee Hong, Korea Institute for National Unification; Swung Hee Lee, Korea National Defense University; Kun Choon Lee, Korea Institute for Maritime Strategy; Sam Sung Lee, Hanrim University; Suk Jung Lee, Ministry of National Defense (MND); Kyung Man Chun, Korea Institute for Defense Analyses (KIDA); Ki Hyun Chung, MND; Yong Hun Chun, Kyemyung University; Sung Dae Oh, Air University; Hong Kyu Park, Institute of Foreign Affairs and National Security; Ki Woong Son, Research Institute for National Unification; Nam Sung Han, KIDA; Chong Moon Kim, KIDA; Sang Ho Kim, Korean Research Institute for Military Affairs; and Chong Sik Moon, Navy Headquarters.

With the advent of a civilian, democratic government in the early 1990s, after 30 years of military–authoritarian rule, the arms procurement decision-making process changed dramatically through the reform of rules and regulations. In 1993 special inspection and auditing procedures were applied to the Yulgok Project—the force improvement plan launched in 1974.[2] More broadly, however, the changes can be attributed to the general process of political democratization which began in the late 1980s, as a result of which the Regulations on Weapon System Acquisition and Management (RWSAM) were formulated and rationalized in 1991. The gradual institutionalization of the arms procurement decision-making process has been complicated by a shift in civil–military relations and the more dynamic interplay of the determining factors since the end of the cold war.

This chapter describes the arms procurement decision-making process of South Korea, focusing on its idiosyncratic features. The process in developing countries differs in many ways from that of Western industrialized democracies, and in South Korea, a leader among 'third-tier' arms-producing countries in terms of defence industrial capabilities, it differs from that of many other developing countries.[3] Special attention is paid in this chapter to determining the level of institutionalization, transparency and public accountability of the process.

A number of questions about the decision-making process are addressed in section II. How is it organized? Who are the key actors? What external and internal factors influence the process? Section III explores problems in the current arms procurement decision-making process in the light of the need for public accountability and responsiveness to the objectives of national security, and presents some recommendations as to how these problems could be overcome. Section IV reviews short- and long-term developments and key findings.

The overall focus is on the decision-making processes with regard to the choice between: (*a*) domestic research and development (R&D) and production; (*b*) production using foreign technologies; and (*c*) off-the-shelf purchases from abroad. Multidimensional perspectives are taken into account, including threat perceptions, security concepts, the level of defence industrial capability, the motivations of the political and military élite which lie behind the choice of suppliers, alliance relationships, national policies of self-reliance and the characteristics of procurement procedures as expressed by the organizational structures involved.

[2] For a detailed account of the Yulgok Project, see South Korean Ministry of National Defense, [The Yulgok project: yesterday, today and tomorrow] (MND: Seoul, 1994).

[3] 'Third-tier' refers to those countries which cannot produce equipment across the full spectrum of military technology but which nevertheless have significant arms industries. For a detailed explanation see, e.g., Wulf, H. (ed.), SIPRI, *Arms Industry Limited* (Oxford University Press: Oxford, 1993), pp. 362–63.

II. The arms procurement decision-making process

Defence planning

The legal basis for arms procurement is the National Defense Planning and Management System (NDPMS), comprising five closely interrelated phases: planning, programming, budgeting, execution and evaluation (see figure 6.1).[4] The actual process is clearly laid out in the RWSAM.[5] Adopted and developed in line with the transformation of the security environment in the 1970s, the NDPMS is a comprehensive resource-management system in which MND efforts are integrated to ensure the efficient use of limited defence resources.

National defence goals, policies and military strategy are based on a threat assessment carried out in the planning phase. A statement of requirements is then prepared by each armed service stating its strategic needs for the implementation of defence policies and military strategy in accordance with the goals.

Two NDPMS documents regulate arms procurement in South Korea: the Joint Strategy Plan (JSP) and the Mid-Term National Defense Plan (MNDP).[6] Mission-specific military requirements stated in the JSP are submitted to the Joint Chiefs of Staff (JCS) according to the concept-based requirements of each service rather than on the basis of the available budget. Mission requirements under the MNDP are fashioned into specific defence programmes. Appropriations are then made for five years within the limits of the available budget to meet those requirements. After an annual review of the five-year programme, through which funding is reviewed and adjusted on a rolling basis,[7] some requirements are put off for later years or dropped altogether.

The institutional process for threat assessment[8]

Analysis of the security environment is an important preliminary stage of the procurement process. The security environment of South Korea is characterized by its relations with North Korea and the USA. The most serious and direct threat is posed by North Korea. It has also been suggested that potential or indirect security concerns stem from the interaction between the four great powers in the Asia–Pacific region—China, Japan, Russia and the USA.

[4] Initially drawn up by MND Directive no. 253 (7 June 1979), fully developed in 1983 and revised on 31 May 1995, the NDPMS was modelled on the US Planning, Programming and Budgeting System, with the addition of 2 steps: execution and evaluation. South Korean Ministry of National Defense, [Regulations on the National Defense Planning and Management System], MND Directive no. 500, 15 Apr. 1995.

[5] The RWSAM was established in 1991 by MND Directive no. 431, 8 Aug. 1991, and revised by MND Directive no. 531, 13 Jan. 1996 and MND Directive no. 559, 19 May 1997. The revisions emphasized increased effectiveness, accountability and transparency.

[6] The MNDP is a blueprint for MND national defence activities for the coming 5-year period. For a detailed explanation see Ministry of National Defence (note 2), pp. 71–75.

[7] On the arms procurement budgeting process, see Myung Kil Kang, 'Budget planning process in arms procurement', SIPRI Arms Procurement Decision Making Project, Working Paper no. 46 (1995).

[8] The explanation and analysis of threat assessment are based on a telephone interview of 25 Mar. 1996 with Dr Choon Il Jung, KIDA Senior Research Fellow and Lt-Col in the South Korean armed forces.

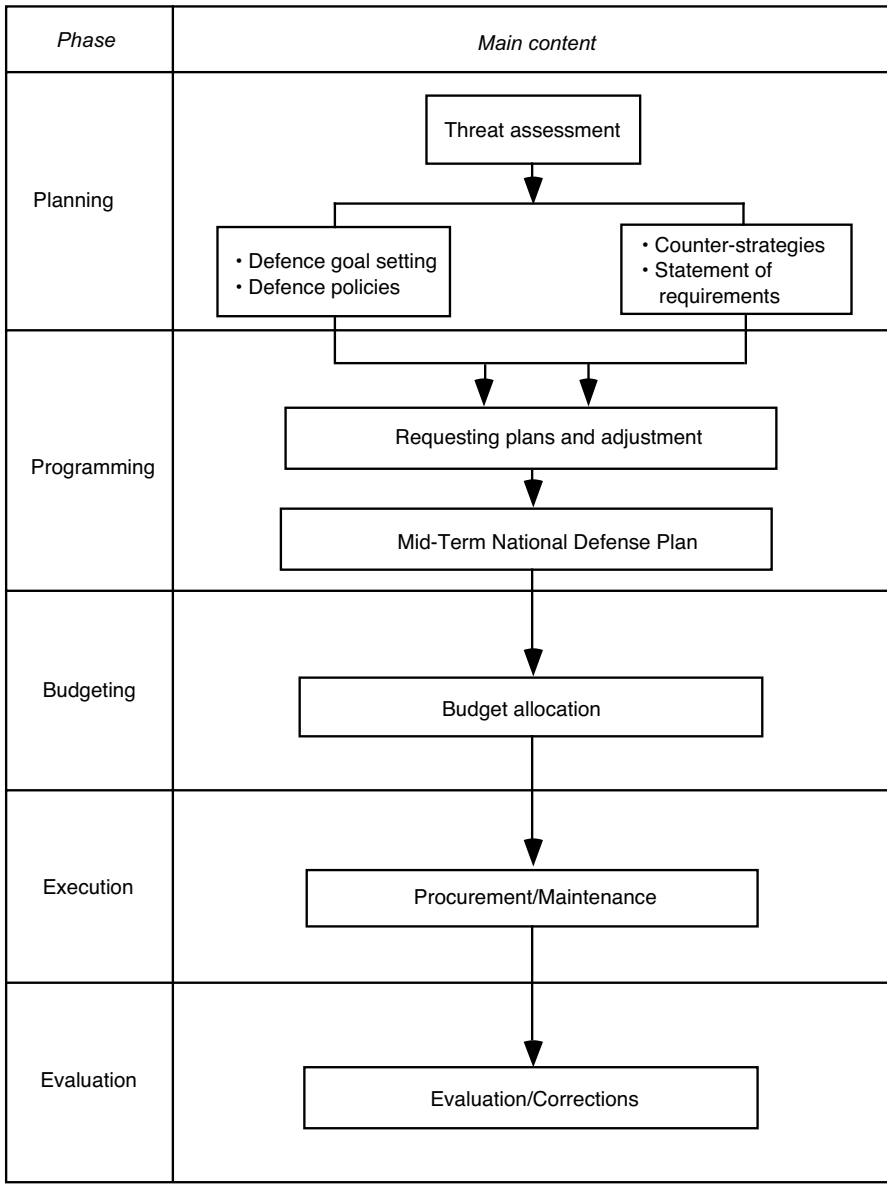

Figure 6.1. South Korea's National Defense Planning and Management System

Source: South Korean Ministry of National Defense [The Yulgok project: yesterday, today and tomorrow] (MND: Seoul, 1994), p. 69.

North Korea, separated from the South with the outbreak of the Korean War in 1950, has never relinquished its dream of unifying the peninsula and imposing communism on South Korea. The USA, having saved the South from military attack by the North, has undertaken to maintain and develop the secur-

ity and prosperity of South Korea. While dependence upon US political, military and economic assistance has decreased since the early 1990s, the USA remains in a pivotal position to determine—both directly and indirectly—South Korea's defence policy in general and arms procurement decisions in particular.

Threat assessment is conducted largely by the JCS.[9] Their Central Directorate of Strategic Planning (CDSP) is in charge of the comprehensive assessment of threats to national security, which it includes in its JSP documents. The JSP provides key information guiding the arms procurement process.[10]

Other MND agencies and other MND-staffed and -financed institutions play a supporting role in threat analysis and assessment. These include the MND Central Directorate of Policy Planning (CDPP), the Korea National Defense University, the National Defense Staff College and the Korean Institute for Defense Analyses (KIDA). The CDPP, which draws up the National Defense Basic Policy document,[11] plays a particularly significant role in assessing existing and potential threats to national security.

The Ministry of Foreign Affairs, the National Security Planning Board and the National Unification Board also deal with national security issues. The National Security Planning Board is similar to the US Central Intelligence Agency (CIA), and the directorship is at ministerial level. The National Unification Board deals with North–South Korean unification matters and is headed by the Vice-Prime Minister. These bodies all have formal and informal contacts with the MND and contribute indirectly to the National Defense Basic Policy document by routinely exchanging information with the MND.[12]

The most important influence on the threat assessment process is the USA, which has long provided critical information and intelligence on the North Korean military and the security situation surrounding the Korean peninsula through a number of political and military channels, notably the Intelligence Office of the South Korean–US Combined Forces Command but also the annual South Korean–US Security Consultative Meeting between the South Korean Minister of National Defense and the US Secretary of Defense and the annual Military Committee Meeting between the JCS chairmen of both countries.

Because of the unchanging military threat from North Korea, the rather rigid JCS and MND assessments are incorporated into national security policy with little modification or adjustment. The threat has sometimes been exaggerated

[9] The JCS is organized into 4 Central Directorates of Intelligence, Operations, Strategic Planning and Force Evaluation and 3 Offices of Personnel and Logistics, Command, Control, Communication and Computer, and Civil Affairs and Psychological Warfare.

[10] Threat assessment is first carried out by the Defense Intelligence Agency (DIA) and included in its Intelligence Estimate document. The threat assessment most relevant to weapon systems acquisition is that in the JSP drawn up by the CDSP. Ministry of National Defense (note 4), p. 68.

[11] The National Defense Basic Policy is drawn up every 3 years and is one of the 4 major documents for national defence planning. It covers a 15-year period and provides guidance for long-term direction and mid-term policy goals of national security policy, defence policy, and defence planning and programming.

[12] Other major documents produced in the first phase of the NDPMS are the Intelligence Estimate, the JSP and the Joint Strategic Capability Plan.

for political reasons, for example, to preserve various military–authoritarian regimes over a 30-year period.

There has recently been a considerable change in South Korea's threat assessment.[13] The government perception is changing more slowly than that of the general public. Because of South Korea's democratization and global *détente,* more and more people consider that the threat of war with North Korea has decreased notably and would thus afford lower priority to a tight security posture.

The changing threat assessment has led to a reconfiguring of national security policies, especially with respect to defence. Defence goals were revised in March 1994 in response to the rapid changes in the domestic and international security environments following the end of the cold war.[14] In the new statement of defence goals, the terms 'external military threat and aggression' and 'regional stability and world peace' replaced 'armed aggression' and 'the security and peace of the region' in order to widen the range of threats to incorporate non-military as well as military threats. The revision of defence goals reflects the importance of military cooperation and defence diplomacy with foreign countries, and has led to active participation by South Korean armed forces in UN peacekeeping operations. However, the most serious threat still comes from North Korea and defence policies must emphasize military readiness and enhance the morale and unity of military personnel so as to counterbalance the military power of the immediate neighbour. A comprehensive plan has been put forward to convert the current manpower-intensive force structure into a technology-intensive one.[15]

The Yulgok long-term force improvement plan

South Korea has carried through an ambitious long-term plan, code-named the Yulgok Project, with the aim of qualitative improvements in its operational capability while accepting quantitative reductions. It was initiated by President Chung Hee Park in 1974 to redress the serious imbalance between North and South Korean defence capabilities. A number of events directly affected his determination to implement the plan, including armed assaults on the presidential residence by North Korean infiltrators in 1969, the capture of the US intelligence vessel *Pueblo* and the shooting-down of the US intelligence aircraft in 1969, the Nixon Doctrine, and the collapse of South Viet Nam in 1975.[16]

[13] Min Yong Lee, 'Security policies, defence planning and military capability', SIPRI Arms Procurement Decision Making Project, Working Paper no. 41 (1995).

[14] The previous defence goals were: 'to defend the nation from armed aggression by potential adversaries, support the nation's efforts for peaceful unification, and contribute to the security and peace of the region'. South Korean Ministry of National Defense, *Defense White Paper, 1994–1995* (MND: Seoul, 1995), p. 20.

[15] For a detailed explanation of defence policies, see Ministry of National Defense (note 2), pp. 19–25.

[16] Ministry of National Defense (note 4); Min Yong Lee (note 13); and Jin W. Mok, 'Organizational structures and characteristics of the South Korean weapon procurement process', SIPRI Arms Procurement Decision Making Project, Working Paper no. 50 (1995).

Table 6.1. Major activities of the force improvement plan, 1974–94
Figures are in current b. won.

Classification	1st stage (1974–81)	2nd stage (1982–86)	3rd stage (1987–94)
Investment expenditure	3 140.2	5 328.0	19 353.0
Percentage of total defence expenditure	*31.2*	*30.5*	*33.3*
Major activities	Replacement of old equipment	Development of self-propelled artillery[a]	Mass production of tanks, armoured vehicles, self-propelled artillery
	Construction of military bases in the front area	Joint development with the USA of tanks and armoured vehicles	
	Construction of fast attack craft	Construction of major surface combatant	Licensed production of helicopters, submarines, F-16 fighter aircraft
	Purchase of F-4 fighter aircraft	Licensed production of F-5 fighter aircraft	

[a] This project did not reach the production stage.

Source: South Korean Ministry of National Defense, *Defense White Paper, 1995–1996* (MND: Seoul, 1996), p. 94.

The fourth stage of the project has been under way since 1995, financed mainly by domestic taxes, notably a defence tax levied in 1975–90, and loans from the USA which have covered about 10 per cent of the total investment (*c*. 22 000 billion won).[17] The Yulgok Project has led to a marked improvement in South Korea's defence capability, as shown in table 6.1. However, the Government estimated South Korea's military power at 71 per cent of that of North Korea after the third stage.[18]

Assuming that the project continues, the long-term goal is to establish a basic foundation for a self-defence capability for the 21st century. Two specific objectives are stressed: (*a*) a defence capability robust enough to deter any armed provocation by North Korea; and (*b*) a capability to meet the security requirements of the 21st century and an eventual post-unification era.[19] Specific weapon and equipment requirements are suggested in the MNDP for 2001 (see table 6.2). If this is successfully implemented, the MND predicts that South Korea will achieve parity with North Korea and a mutual deterrence capability, and, more importantly, will much reduce its security dependence on the USA.[20]

[17] Ministry of National Defense (note 2), p. 33.
[18] Ministry of National Defense (note 4), p. 47.
[19] South Korean Ministry of National Defense, [Our defense expenditures: questions and answers] (MND: Seoul, 1994), p. 57.
[20] South Korean Ministry of National Defense, [South Korea's national defence towards the 21st century] (MND: Seoul, 1995), p. 102.

Table 6.2. Major arms to be procured under the Mid-Term National Defense Plan for 2001

Major capability/ purpose	Direction	Items to be procured
Information and command	Early warning and surveillance	Radar
	Self-command systems	
Strategic strike and high-speed mobile combat	Strategic strike and offensive mobility	
	Combat capability improvement	Quality improvement of tanks
		Self-propelled artillery
	Support of mobility	Computerization of fire control system
		Mobility-supporting equipment
Naval control	Strategic control of sea, early-warning system	Long-range surface patrol aircraft
	Amphibious combat capability	Landing assault armoured vehicles
		Landing ships
Air operations	Advanced air combat	Korean Fighter Programme
		Air-to-air missiles
Survivability	Countering biological and chemical warfare	Early-warning equipment
		Improvements of logistic facilities
		Military bases for navy and air force
R&D	Development of defence industry	Development of future models: tanks, missiles, radar
	Strategic weapons identified	
	R&D investments increased	Maintenance of a 3.6% share of R&D in total defence expenditure

Source: South Korean Ministry of National Defense [South Korea's national defence towards the 21st century] (MND: Seoul, 1995), pp. 100–102.

Strategic criteria for arms procurement decisions

In addition to threat assessment, the alliance with the USA and national defence policies, four more criteria are of particular strategic significance for arms procurement decisions.

1. The military significance of existing and prospective North Korean weapons and weapon systems is a major consideration. In particular, North Korea possesses ballistic missiles and is not a signatory to the 1993 Chemical Weapons Convention.
2. No arms procurement decision should risk unleashing an arms race between the two Koreas. The desire of the armed services for more advanced and powerful weapon systems, irrespective of cost, is not conducive to the

Table 6.3. Procurement by source: domestic, foreign and US, 1988–94

Figures are in current b. won. Figures in italics are percentages.

		Domestic procurement		Foreign procurement				USA
Year	Total	Total	%	Total	%	FMS	Commercial	%
1988	2 424	1 433	*59*	991	*41*	290	702	. .
1989	3 225	2 430	*75*	794	*25*	311	484	. .
1990	4 252	3 092	*73*	1 160	*27*	311	850	. .
1991	3 540	2 950	*83*	590	*17*	354	236	. .
1992	4 090	2 590	*62*	1 500	*38*	1 050	450	. .
1993	4 240	3 680	*87*	560	*13*	342	218	. .
1994	4 700	3 850	*82*	850	*18*	. .	. .	*70*
1995	4 711	3 850	*79*	861	*18*	. .	. .	*70*

Note: FMS = Foreign Military Sales.

Sources: South Korean Ministry of National Defense, *Defense White Paper* (MND: Seoul), various years.

long-term goal of unification. Fortunately, however, such aspirations tend to be moderated by resource-saving defence management and there is likely to be slowdown in the growth of the defence budget.

3. An equally important criterion is to maintain the traditional military cooperation with the USA. While this might be seen to conflict with a reduction of dependence on the USA, it should receive high priority. If the MND decides on a foreign purchase, US weapon systems are favoured in the interests of interoperability between South Korean and US armed forces. As shown in table 6.3, purchases through the US Foreign Military Sales (FMS) programme and private companies accounted for about 70 per cent of total foreign procurement in 1994.[21]

4. South Korea has attached great importance to strengthening the linkage between military procurement and the defence industrial base, and this has significantly influenced the arms procurement decision-making process. Under the RWSAM, the MND Acquisition and Development Office prioritizes domestic R&D and production for weapon systems with a long life-cycle. In the case of foreign purchases, priority is given to types of weapon and weapon technology which can contribute to the development of indigenous arms production capabilities and offer spin-off benefits for civilian industry. This characterized President Tae Woo Roh's (1988–93) arms procurement policy, in which self-sufficiency through domestic R&D and production with imported technology was a major goal. In this way, the Government aimed both to increase self-reliance in arms procurement and to maintain an adequate defence industry

[21] South Korean Ministry of National Defense, [Regulations on weapon system acquisition and management], MND Directive no. 557, 19 May 1997, p. 187.

capability. The order of preference is for licensed production first, then joint venture, then assembly production.[22]

Stages and key actors in the arms procurement process

After the above preliminary steps, the next two stages involve the planning of requirements (see figure 6.2 for an overview of the arms procurement process). First, the armed services present force requirements, corresponding to defence policies as outlined in the National Defense Basic Policy document, and a long-term military strategy to the JCS. The statement of requirements includes a brief statement on the operational concept, the date of deployment and quantity of weapons, and the required operational capability (ROC).[23] Each service also submits mid- and long-term force requirements to the JCS and the MND by June each year. Second, the statement of requirements is reviewed and evaluated by the JCS Acquisition Deliberative Committee (ADC), which selects two or three weapon systems that meet the ROC. The JCS decides on the weapon system at the Joint Strategic Council after a comprehensive examination of the needs.

Once the force requirement is determined, the path of the arms procurement process divides into: (*a*) production using domestic R&D; (*b*) domestic production using imported technology; and (*c*) foreign purchase. This division is reflected in the Defense Acquisition and Development Program drawn up by the MND on the basis of the JSP and the Mid-Term National Defense Plan. The government aims to acquire weapon systems for mid- and long-term requirements through domestic R&D and production as far as possible. Production from domestic R&D is largely managed by the Agency for Defense Development (ADD) and the MND Director for Acquisition and Development.

The third stage, for procurement by methods (*b*) or (*c*), is testing and evaluation (T&E). This is the responsibility of the JCS, which first makes a Request for Proposal (RFP-1) in accordance with the Mid-Term National Defense Plan. The JCS can also authorize T&E for each service that has made statements of requirements. It can be conducted at home, by examining data, or by sending a team overseas. The basic criterion to be checked is whether the systems comply with the ROC and RFP-1. The JCS or the armed service implements (or authorizes) T&E and submits a report to the MND Director for Acquisition and Development.

The fourth stage of the arms procurement process involves negotiation on the weapon systems to be acquired by domestic production and production with imported technology (methods (*a*) and (*b*)), under the management and control of the Director for Acquisition and Development, who decides the method of procurement and the weapon types at the next two stages.[24]

[22] Ministry of National Defense (note 21), pp. 6, 17.
[23] Ministry of National Defense (note 21), p. 14.
[24] Ministry of National Defense (note 21), pp. 21–26.

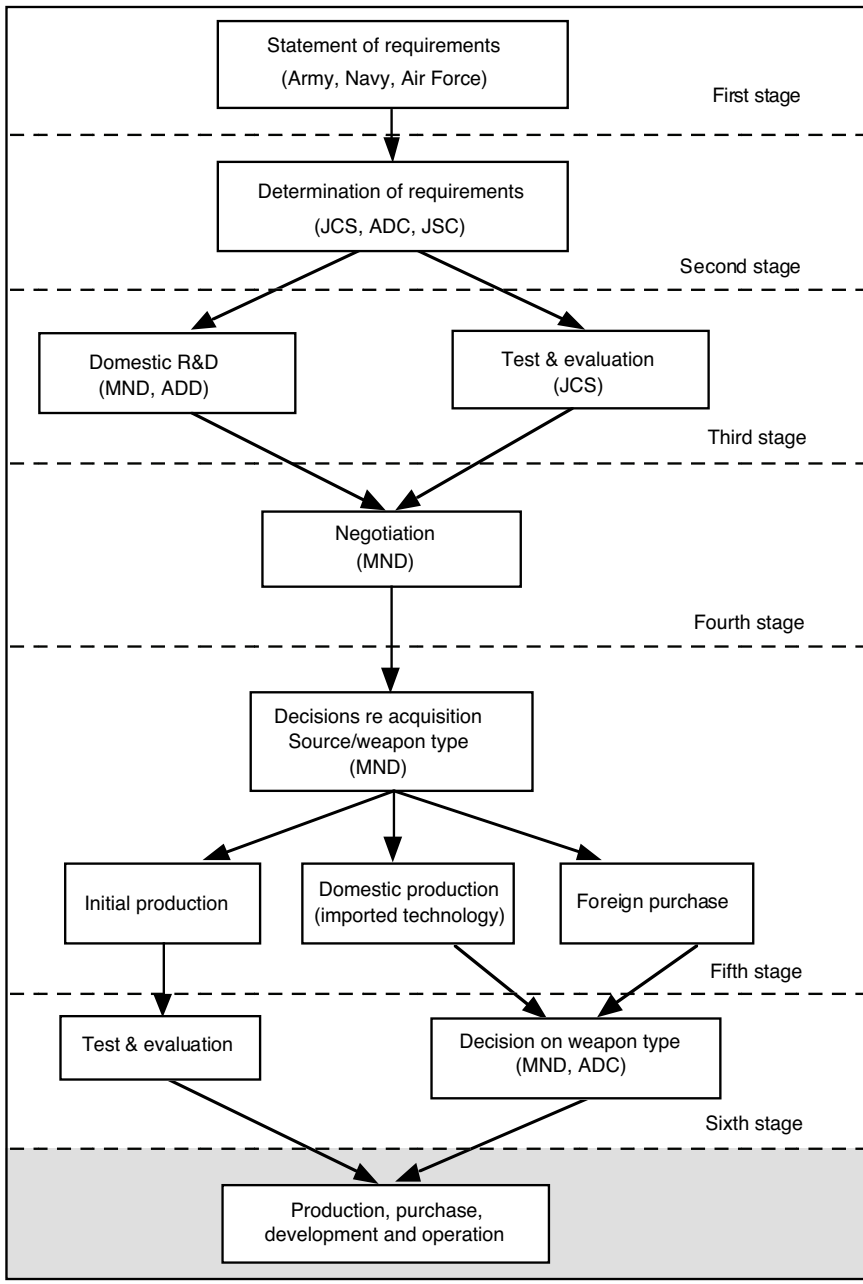

Figure 6.2. Main stages in South Korea's arms procurement process

Notes: JCS = Joint Chiefs of Staff; ADC = Acquisition Deliberative Committee; JSC = Joint Strategic Council; MND = Ministry of National Defense; ADD = Agency for Defense Development.

Source: South Korean Ministry of National Defense, [Regulations on weapon system acquisition and management], MND Directive no. 563, 1 July 1997.

The armed service negotiates with the Defense Procurement Agency (DPA), which is responsible for the procurement of all weapon systems and military construction for the MND, on the source and type of weapon systems to be authorized by the JCS. One principle is that more than two main contractors must be selected; another is that the DPA should prioritize commercial procurement. Procurement by government-to-government contract or under the FMS programme is the next best method.[25] Guidelines for negotiations are established by the Director for Acquisition and Development and delivered to the DPA.

In the case of domestic production with imported technology, the DPA directs the main contractor(s) to submit a plan to the Director for Acquisition and Development for the armed services. It should explain the project and give the details demanded by the MND (quantified ROC, the time for induction of the weapon, and numbers required), the contract for production by technology import, offsets, a schedule for the project, a production programme, a plan for indigenization of parts and a specification plan.[26] In the case of direct purchase, the DPA makes a provisional delivery contract for the Director for Acquisition and Development and the armed services, specifying the method of direct purchase (commercial or government-to-government), the time-frame for delivery, price information, offset details, product assurance, integrated logistics support, and so on.

In the fifth stage, the Director for Acquisition and Development evaluates weapon types on the basis of the T&E report, the review of the plan of production with imported technology and the provisional contract. The method of acquisition is decided by the ADC. The linkage between the improvement of defence science and technology and the development of the defence industry is considered, including the acquisition of essential technology, offset conditions, the expected cost of acquisition, the ratio of domestic technology to be used, inter-operability with allied forces, the effect on national security in general, and the available financial resources.[27]

In the sixth stage the weapon type is decided by the Director for Acquisition and Development or by the armed services in the case of weapon systems to be authorized by the JCS. The ADC also bases its decision on the T&E report, the economic efficiency of the investment and maintenance costs, spin-off effects, contract conditions, offset conditions and foreign policy considerations. The rule is that weapons and equipment that are judged most cost-effective should be chosen. This decision normally represents the end of the decision-making process. Mass production and purchase, deployment and operation follow automatically through a process of appropriation under the MNDP.

[25] Ministry of National Defense (note 21), p. 22.
[26] Ministry of National Defense (note 21), p. 24.
[27] Ministry of National Defense (note 21), pp. 16–18. See also Seok Soo Lee, 'The domestic dynamics of the decision-making process for arms procurement', SIPRI Arms Procurement Decision Making Project, Working Paper no. 43 (1995), p. 3.

In the case of the force improvement plan, however, the decision on weapon type is not the end of the process. Before elements of the Yulgok Project are implemented they must be approved by the Defense Force Improvement Committee (DFIC), chaired by the Vice-Minister of National Defense. This committee functions as an expanded or a regular DFIC depending on the participation of non-MND members with special technical and budgetary expertise.[28] For the Yulgok Project, the expanded DFIC deliberates those proposals that require interdepartmental cooperation and coordination. The regular DFIC, on the other hand, reviews those proposals that come under the MND. Arms procurement proposals are usually reviewed by the regular DFIC unless the defence budget requires adjustment.[29] Any final adjustments to proposals approved by the DFIC are made by the Minister of National Defense, with the President having the final word on projects costing more than 5 billion won. Subject to the approval of the Minister and/or the President, a procurement programme is concluded and funds automatically appropriated.

The main actors in the process outlined above are the MND, the JCS and the armed services. The President and the Minister of National Defense are the two major decision makers, all other officials playing relatively minor roles. There is a dynamic political power game between MND agencies and institutions, and between the MND and other government bodies.[30]

The National Assembly is legally and institutionally obliged to oversee the arms procurement process. Particularly through the Committee of National Defense or the Armed Forces Committee, the Assembly is a principal actor and can control arms procurement decisions by funding and auditing programmes, inspecting their implementation and so on. It is specifically entitled to audit the cost-efficiency and adaptability of the weapon systems to be imported or developed domestically. In 1993 it set up a committee for audit and inspection and revealed the abuse and wrongdoing connected with the Yulgok Project. This had an unusual outcome, in part leading to the Government's establishing the DFIC within the MND in 1994. However, the role of the National Assembly in arms procurement decision making is still insignificant and falls far short of public expectations.

The predominant power in arms procurement decisions lies with the President, as vividly revealed in the special inspection and audit of the Yulgok Project in general and of the Korean Fighter Programme (KFP) in particular in the early 1990s. The selection of the next-generation fighter shows that President Roh had the final say on the project. The air force initially decided to procure the F/A-18 and this decision was adopted by President Roh and his Minister of National Defense in 1989. However, the President's office came to favour the

[28] The DFIC was created by Presidential Directive no. 12019 (revised 26 Dec. 1986). Its main function is to deliberate project schedules, times for force integration, project budgeting and methods of contract purchase.

[29] Jin W. Mok (note 16).

[30] For a detailed description of the role and work of the major MND actors, see South Korean Ministry of National Defense, [Regulations on weapon system acquisition and management], MND Directive no. 531, 13 Jan. 1996, pp. 2–5.

F-16 and 18 months later this was the model to be acquired. The minister who had insisted on the F/A-18 was replaced.

Several other actors are involved: the DPA; the ADD, a government-financed agency for defence R&D; the Korean Institute for Defense Analyses (KIDA),[31] responsible for cost–benefit analyses of weapon systems, collection and management of information and data related to the arms trade, and documentation on offset deals; and the Defense Product Assurance Agency (DPAA), in charge of quality control of defence items in mass production and of configuration management, technological assistance to the armed services and work related to international agreements on defence product assurance. Three deliberative committees—the Joint Strategic Council (JSC), the ADC and the Expanded ADC (EADC)[32]—are appointed under the MND to gather data from organizations in the procurement process and make recommendations to the Minister.

Defence contractors and other government agencies have minor roles in the arms procurement decision-making process.

A number of factors combine to constrain the transparency of the arms procurement decision-making process, including the security environment, the alliance with the USA and the nature of the domestic political regime. Others, including the diversification of sources of weapon supply by increasing the number of arms producers and the democratization of the political regime, enhance transparency and the efficiency and accountability of the process.

The arms procurement process under changing regimes[33]

The political leadership and regime are a major factor in the arms procurement decision-making process. Power has twice been seized by former generals and military–authoritarian regimes—in 1961, by President Park through a military coup, and in 1980, by President Doo Hwan Chun (1980–87). The last former general to serve as President, Tae Woo Roh, handed over to Young Sam Kim, a civilian, in 1993.

[31] The KIDA is affiliated with the ADD. It has functional directorates for policy planning, force development, manpower management, weapon systems studies and arms control research. In addition it has institutes for defence information systems and defence policy development. Brochure on the Korean Institute for Defense Analyses, 1993–94, p. 7.

[32] The JSC is composed of the chief director of the JCS (Chairman), the directors of each service and staff members of the US–South Korean Combined Forces Command. Its functions include deliberation of the JSP and determination of new force requirements and necessary operational performance. The ADC is composed of the MND Deputy Minister for Acquisition and Technology (chairman), 5 standing members (the Directors-General of the Force Improvement Programming Office, of the Acquisition and Development Office and of the Project Coordination Office, and the Director of Force Planning of the JCS) and, as of 1997, 13 non-standing members. Its major function is to confirm the Defense Acquisition and Development Plan, decide weapon type and approve the R&D programme. The EADC is composed of the Vice-Minister of National Defense (chairman), 6 standing members (Deputy Ministers for Planning and Management, for Acquisition and Technology, for Defense Policy and for Human Resources, and the Chief Directors for Strategic Planning and Force Evaluation of the JCS) and, as of 1997, 6 non-standing members. Its major functions are confirmation of the RWSAM and weapon systems acquisition. Ministry of National Defense (note 21), pp. 32–33.

[33] The analysis which follows is based largely on Seok Soo Lee (note 27).

The military–authoritarian leaders all put military security at the top of their list of national concerns in order to ensure national survival and maintain their unstable and illegitimate regimes. They tended to overestimate the North Korean threat in order to justify sacrificing social, economic and political values for military–security ones, and national security decision making became concentrated in the hands of a small political élite including the President, the presidential staff and the Minister of National Defense. Security issues in general and defence budgets in particular enjoyed a privileged position without being subject to social and political pressures. The Yulgok Project was seen as 'sacred' and was exempted from the normal budgetary process, without even legislative checks and balances or public participation.

President Park sought to maximize the country's military potential to overwhelm North Korea and free South Korea from its security dependence on the USA, opting to improve forces and develop the defence industry. His ideological orientation was one of self-reliance or independence.[34] This defence policy was pursued in parallel with the promotion of heavy industry, with backward and forward linkages to the defence industry and with a firm emphasis on production through domestic R&D rather than import.

The advent of the Chun regime brought many changes in the procedures for arms procurement and acquisition, resulting primarily from the introduction of a new military strategy and policies for the defence industry and national science and technology, and a drive for economic stability. In the 1980s, the arms race between North and South became intense and US–South Korean military cooperation was strengthened. Responding to a changed security environment, the South Korean military adopted the US AirLand Battle strategy and the strategic concepts of mobile and fire-power warfare. During the entire period of Chun's rule, direct foreign purchase, especially from the USA, was preferred to the domestic R&D favoured by his predecessor, because rationalization, standardization and inter-operability of weapon systems had become priorities and Chun desperately needed US support for his regime.[35] At that time, the JCS had an increasing distrust of weapons made in South Korea.

The R&D share of the defence budget was brought down from 2.33 per cent in 1970–79 to 1.62 per cent in 1980–89, as shown in table 6.4. The ADD research staff was reduced from 1800 to 950 under President Chun.[36] The value of weapon imports increased fourfold between 1981 and 1988, as seen in table 6.5. Clearly the Chun Government had no master plan for the development of the defence industry and military dependence on the USA increased still further. When President Roh replaced Chun in 1987, defence R&D expenditure began to rise, increasing from less than 1.5 per cent of the defence budget

[34] Ho Jin Kim, [A comparison of political leadership of Tae Woo Roh, Doo Hwan Chun and Chung Hee Park], *Shindonga,* Aug. 1991, p. 286.

[35] Jung Ki Kim, [Creation and development of the Korean military–industrial complex in the post cold-war era: in search of a structurally different defence industry policy], MA thesis, Yonsei University, 1995, p. 65.

[36] Nam Tae Cho, [A study on the policy of science and technology development for national security], Research Report (Agency for Defense Development: Seoul, 1993), p. 161.

Table 6.4. Defence R&D investment in South Korea, 1970–95

Expenditures are given in current b. won. Figures in italics are percentages.

	1970–79	1980–89	1990–95
R&D investment (A)	145.9	620.9	1 375
Defence expenditure (B)	6 259.3	38 292.5	54 061.9
A/B (%)	*2.33*	*1.62*	*2.54*

Sources: Chul Whan Kim, 'A plan for expansion of defense R&D investment', eds Jong Chul Choi *et al*., *The Changing National Defense Policy in the Changing World* (Jin Young Sa: Seoul, 1996), p. 17. Figures for 1994 and 1995, South Korean Ministry of National Defense [Statistics on defence expenditure] (MND: Seoul, 1997).

in 1988 to 2.93 per cent in 1993. Roh apparently wanted to consolidate the basis for domestic production through the development of military technology.

As the process of democratization began to accelerate, President Roh displayed a new style of leadership in security policy decision making, reducing the rate of growth of defence spending and cutting government subsidies for the defence industrial sector. His arms procurement policy was characterized by a shift from direct foreign purchase to domestic production with foreign technology, taking a middle course between the preferences of Park and Chun.[37] The ADD was rehabilitated with the resumption of the short-range ballistic missile development which had been suspended by Chun under US pressure in the early 1980s.[38]

Under military–authoritarian rule, the National Assembly did little to reflect public opinion in the arms procurement decision-making process. Except for a handful of former military personnel, most of its members lacked military expertise and a knowledge of arms procurement. Their access to military policy making and the arms procurement process was checked by the Military Secrecy Law and the 'sacred domain' concept. Conditioned by the tradition of *force majeure*, by which government arms procurement proposals were passed by the ruling party with little or no amendment, they were unwilling to get involved, believing that the presence of US forces could compensate for the weak military capability of their country. They were discouraged from attempting to engage in responsible oversight.[39] In 1993 the civilian democratic regime of Kim Young Sam made renewed efforts to shake off traditional customs. Civil–military relations were reversed, civilians gained control and, while Kim did

[37] For details on the major projects of force improvement during President Roh's tenure, see Jung In Moon, 'Suggestions for the development of defense industry of South Korea', *Defense and Technology,* Oct. 1994, pp. 10–21.

[38] Won Chul Oh, Second Chief Secretary for the Economy to President Park in 1971–79, played a significant role in developing missiles. Won Chul Oh, [Missile development, suspended by Chun Too Whan and the United States], *Shindonga,* Jan. 1996, pp. 388–411.

[39] The role of the National Assembly in the arms procurement process is discussed in 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).

Table 6.5. South Korean imports of major conventional weapons, 1980–96

Figures are SIPRI trend-indicator values as expressed in US $m. in constant 1990 prices.

Supplier	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Brazil	16	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
France	. .	. .	. .	. .	13	. .	13	. .	27	. .	. .	30	. .	28	28	28	28
Germany	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	100	90	90	180
Italy	4	4	4	4	. .	1	1	1	1	1	. .	. .	. .	. .	. .	. .	10
Netherlands	4	. .	4	12	8	12	16	8	8	. .	. .	. .	. .	. .	. .	. .	. .
Russia	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	45
Spain	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	25	125	. .	. .
UK	. .	. .	. .	. .	. .	. .	. .	117	117	8	118	118	91	90	. .	1	. .
USA	480	310	150	250	360	511	325	437	948	977	788	731	401	239	399	1434	1328
Total	**504**	**314**	**158**	**266**	**381**	**524**	**355**	**563**	**1101**	**986**	**906**	**879**	**492**	**482**	**642**	**1553**	**1591**

Note: The index produced using the SIPRI valuation system is not comparable to official economic statistics such as gross domestic product, public expenditure or export/import figures. To enable the aggregation of data on transfers of different types of weapon, SIPRI has created an index which gives similar values to similar weapon systems. The SIPRI system was designed as a *trend-measuring device* to permit the measurement of changes in the total flow of major weapons and its geographical pattern. For further explanation of the SIPRI trend-indicator value see the SIPRI Yearbook or the SIPRI Internet page, URL <http://www.sipri.se/projects/armstrade/atmethods.html>.

Source: SIPRI arms transfers database.

not opt for new arms procurement policies, he made the decision-making process more transparent and accountable to the public. This change was accelerated by the revival of a legislative audit system and the strengthening of the inspection rights of the National Board of Audit and Inspection over the force improvement plan and the military decision-making process, and of the military's self-reform efforts under the new leadership.

The influence of the USA

The goal of self-reliance in arms supply and of minimizing external constraints on policy and behaviour has been central to South Korea's arms procurement and national security policies.[40] Military and political autonomy is of critical concern to military planners. The initiation of an ambitious defence industrialization programme in South Korea in the 1970s led to conflict with the USA as predominant supplier.[41] With the officially declared MND policy of diversifying acquisition sources in the late 1980s, the conflict became more intense but not explosive.

While the Government uses every opportunity to get the USA to reduce control over its transfers of weapons and military technology, and is seeking to diversify weapon procurement sources and establish comprehensive defence cooperation with European countries,[42] defence planners are trying to increase the ratio of local production to import. US control over South Korea's arms import and export policy and, to a lesser degree, indigenization of weapon production is taken seriously by the Government; restrictions on the re-export of technologies of US origin are one of the main reasons for difficulties in exporting and low capacity utilization South Korea's defence industry.[43] In many cases the USA has visibly and invisibly put pressure on contracts for weapon and military technology deals with non-US arms manufacturers and exporters. A recent case involved the April 1995 bilateral accord allowing Russia to repay $450 million in debts to South Korea with Russian-made arms and raw mater-

[40] Ross, A. L., 'Arms acquisition and national security: the irony of military strength', eds E. E. Azar and Chung In Moon, *National Security in the Third World: The Management of Internal and External Threats* (Edward Elgar: Cheltenham, 1988), p. 154.

[41] Kwang Il Baek and Chung In Moon, 'Technological dependence, supplier control and strategies for recipient autonomy: the case of South Korea', eds Kwang Il Baek, R. D. McLaurin and Chung In Moon, *The Dilemma of Third World Defense Industries* (Westview Press: Boulder, Colo., 1989), pp. 153–83.

[42] In the 1980s South Korea made a considerable number of arms deals and established defence cooperation relationships with, among others, France, Germany, Italy and the UK.

[43] Tae Woo Kim, 'Impact of US arms export controls on South Korea's arms procurement', SIPRI Arms Procurement Decision Making Project, Working Paper no. 44 (1995), p. 10. In the early 1990s, the USA conspicuously tightened its fetters, shifting away from the 1980s policy of cooperation and control and ending the honeymoon era of the 1970s. In 1984–89, e.g., the USA approved 99 of 119 (83%) of South Korea's requests for export. In 1990–93, only 25 of 185 (14%) were approved. US representatives for the KFP aircraft contract in 1989 revealed a very parsimonious attitude when negotiating high-technology defence technology transfer, putting a 'Must Not List' on the table before their South Korean counterparts, listing military technology items that could never be given to South Korea on any condition. This was seen as severely discriminatory compared with the FS-X fighter aircraft deal with Japan agreed a year earlier.

ials.[44] At the beginning of the negotiations on this accord, senior US officials and President Bill Clinton publicly conveyed disappointment to the South Korean Government, worrying openly about the inter-operability of Korean and US forces in Korea.

A 1979 US–South Korean memorandum of understanding exchanged between the ADD and the Commander of the US Forces in Korea only allows South Korea to develop and produce missiles weighing below 453.5 kg and with a maximum range of 180 km—the direct distance between Seoul and Pyongyang.[45] So far the USA has shown no willingness to lift the restriction, despite growing North Korean superiority in missile capability. North Korea has increased its indigenous missile production capabilities and is developing medium- and long-range missiles such as the Daepodong 1 and 2. It is currently estimated to have a production capability of up to 100 Scud-B/C missiles per year and is reported to have successfully test-fired the Rodong-1 missile over a range of 1000 km.[46]

US controls have obstructed the consolidation of South Korea's military capabilities. South Korea should seek a policy that can reduce or eliminate the vulnerabilities inherent in a single- or predominant-supplier relation. The conventional wisdom on arms transfers and dependence holds true: 'Third World dependence associated with arms imports from industrial countries does not disappear . . . with the creation of local defense industries; the form of dependence is changed'.[47] The South Korean–US arms transfer relationship has developed from grants or imports of complete weapon systems, through the supply of technical data packages, to the supply of component parts and critical technology. What has changed is the form of dependence, not the dependence itself.

[44] Under the accord, Russia will provide an unspecified number of T-80U tanks, BMP-3 armoured vehicles, 9M115 (AT-7) anti-tank missiles, Igla-2 (SA-18) portable low-altitude surface-to-air missile systems, spare parts and other equipment. Zhigulsky, A., 'Russia moves to repay S. Korea: plans to retire overdue debt with arms, raw material', *Defense News*, 31 July–6 Aug. 1995; Jung Yong No, 'Korea, import Russian arms', *Segye Times* (Seoul), 22 Apr. 1995; and Tae San Joo, 'Diversification of weapon supply source', *Segye Times*, 23 Feb. 1995.

[45] The MND and the Minister of Foreign Affairs reconfirmed the memorandum in 1982 and 1990, respectively. Won Chul Oh (note 38), pp. 399, 410–11.

[46] Hayes, P., 'International missile trade and the two Koreas', *Korea Journal of Defense Analysis,* vol. 5, no. 1 (summer 1993), pp. 207–39; Bermudez, J. S. and Carus, W. S., 'The North Korean SCUD-B programme', *Jane's Soviet Intelligence Review*, Apr. 1989, pp. 177–81; Jehl, D., 'Iran said acquiring NK missiles', *Korea Herald*, 9 Apr. 1993; [The North Korean missile], *Chosun Ilbo*, 9 Sep. 1993; [NK's Rodong-1 and 2 missile, probably for export], *Hanguk Ilbo*, 17 Sep. 1993; and Jong Chul Choi, [North Korea's arms transfer policy], eds Jong Chul Choi *et al*., [North Korea's strategy for survival] (Boseung Munhwasa: Seoul, 1995), pp. 344–45.

[47] Moodie, M., 'Defense industries in the third world: problems and promises', eds S. G. Neuman and R. E. Harkavy, *Arms Transfers in the Modern World* (Praeger: New York, 1979), p. 301. Many scholars and commentators agree: see also Ross (note 40), pp. 168–69; Cahn, A. H. *et al*., *Controlling Future Arms Trade* (McGraw-Hill: New York, 1977), p. 87; and Neuman, S. G., 'Arms transfers, indigenous defense production and dependency: the case of Iran', ed. A. Hossein, *The Security of the Persian Gulf* (Croom Helm: London, 1980), p. 145.

Defence budgeting

Most recently, the arms procurement budget process has been conducted in specific programme terms. Force improvements are budgeted not for each service but for each functional military capability. The long-standing practice of pre-allocating national resources to the defence sector was abandoned in the early 1990s[48] because of the increasing demand for budget accountability by the Board of Finance and Economics. Each investment in force improvement is scrutinized, and the budget requirement is evaluated for cost-effectiveness. This should lead to increased responsibility for and transparency in budget management and the budget process. One important change introduced by the new civilian government in 1993 was to divide the defence budget delivered to the National Assembly into three categories: category A budget items are aggregated and are presented to the entire National Assembly; category B items are disaggregated and are revealed without restrictions to the members of the National Assembly Committee of National Defense; and category C items are further disaggregated and revealed to the Committee of National Defense with certain restrictions. The entire defence budget was previously deliberated as a lump sum.

Contract procedures and offsets

Contract procedures are managed by the DPA with negotiation guidance from the MND Acquisition and Development Office.[49] In the case of direct foreign purchase, the DPA asks the foreign supplier or its agencies in South Korea to submit a proposal containing a technology assessment, data on the performance, reliability, operability and maintainability of the weapon system, and the proposed price. Negotiations are then opened between the DPA, the foreign suppliers and their domestic agencies on price conditions, performance or functional alternatives and logistic support requirements.

In the case of co-production or licensed production by technology transfer, the prime contractor should be the domestic defence industry. Two types of contractor decision are used. In the first, a prime contractor (a Korean firm) is determined in advance, but a foreign one is selected through negotiation. The case of the KFP aircraft is an example.[50] In the second, the prime contractor is not determined *ex ante* and more than two Korean companies which already have a co-production contract with foreign suppliers enter into open bidding for the contract. Thus the prime contractor and the type of weapon system are determined by negotiation. Most of the co-production programmes conducted by the Government are of this second type. Recently, however, the MND has

[48] Until the mid-1980s, the defence budget was allocated 5–6% of gross national product (GNP).

[49] Ministry of National Defense (note 21), pp. 41–45.

[50] In the KFP, the Samsung Aviation Company was selected in advance as prime contractor by the government but General Dynamics was chosen as a foreign contractor, defeating McDonnell Douglas in the final competition.

Table 6.6. Rank of offset preferences based on technological merit

Rank	Technological merit
A	Acquisition of key technologies for R&D and production Depot maintenance capability Transfer of design technology
B	Middle-range technologies acquisition Cost–benefit analysis method for weapon system Free provision of equipment and tools for depot maintenance

Source: Sung Bum Hong, 'Procedures for technology assessment and the selection of equipment in South Korea', SIPRI Arms Procurement Decision Making Project, Working Paper no. 45 (1995), p. 5.

tended to favour the first type which, by permitting foreign companies to compete, produces much more favourable contract terms, including those for programme cost, technology transfers and offsets. Offset policy prioritizes the acquisition of advanced critical technologies. The Offset Trade Committee is responsible for deciding on target projects for offset trade, and the Technology Evaluation Committee reviews offset trade negotiations in terms of technological merit, as shown in table 6.6. Under the 1973 Special Act for the Defense Industry eight methods are legally available for contract price determination,[51] including fixed-price, cost-plus and incentive contracts. Fixed-price contracts have been used almost exclusively.[52]

Technology assessment and defence R&D[53]

Technology assessment (TA) is an important step in the arms procurement process, essential for offset programmes for acquiring advanced critical technologies. There are three grades of technologies to be acquired. Other elements of the assessment include the evaluation of logistics support requirements, of personnel management, and of costs for each stage of the arms procurement decision-making process. While the technologies and components comprising the weapon systems are forecast on the basis of work breakdown structures, the ADD leads the decision on key technologies for each field of science and tech-

[51] The Special Act for the Defense Industry, established in 1973, has been revised 8 times. It has contributed to the foundation of funds for the promotion of the defence industry, the development of a system for contract and cost accounting, the establishment of the Association of Defense Industry Promotion, the development of a system of defence products quality assurance, the formulation of a basic policy for the defence industry, the establishment of a system of specialization of defence contractors and the development of offsets.

[52] This applied to 96% of contracts in 1989–92. Chul Whan Kim, [A comparison of the USA's and South Korea's arms acquisition and management processes (Korea National Defense University: Seoul, Dec. 1993), p. 79.

[53] The discussions on TA below are largely based on Sung Bum Hong, 'Procedures for technology assessment and the selection of equipment in South Korea', SIPRI Arms Procurement Decision Making Project, Working Paper no. 45 (1995).

Table 6.7. Technology assessment for domestic R&D

Stage	Agency	Technology assessment activity
Planning	A, C	TA in making the R&D plan (outline)
	A, B	Test and evaluation plan (outline)
Exploratory development	C	System technology analysis according to ROC I, setting up work breakdown structures
	A, B, C	System requirement review and system design review for the weapon system derived through setting up system concept
Advanced exploratory development	C	Completion of work breakdown structures in exploratory development stage, system design review based on configuration identification, writing technology documentation and developing a prototype
	A, B, C	Technology review: system design review, preliminary design review and circumstantial design review
	A	Advanced test and evaluation
System development	C	Completion of work breakdown structures in advanced development stage, review system design based on configuration, identification, writing technology documentation, and production of prototype
	A, B, C	Technology review: system design review, preliminary design review and circumstantial design review
	B	Engineering tests and evaluation

Notes: TA = technology assessment; A = Agency for Defense Development; B = armed forces; C = major contractor company; ROC I = Required Operational Capability I.

Source: Sung Bum Hong, 'Procedures for technology assessment and the selection of equipment in South Korea', SIPRI Arms Procurement Decision Making Project, Working Paper no. 45 (1995), p. 3.

nology and the scope of component development. TA is applied to all arms acquisition methods: production from domestic R&D, production with imported technology and direct foreign purchase. It is carried out at each of the main stages of domestic R&D, as shown in table 6.7: (*a*) planning, which involves the examination of development alternatives and concept design; (*b*) exploratory development, which involves basic design, experimental modelling and a decision regarding development alternatives; and (*c*) system development, which involves detailed design, the production of engineering prototypes, testing and evaluation, and standardization.

For weapon systems purchased abroad or made with imported technologies, the T&E Task Force of the ADD and Army Training and Doctrine Command (or the Air and Naval Training Command) decides which tests are to be used. The military services and the ADD draw up the T&E plans. The offset ratio is set at more than 30 per cent of the contract price for military supplies costing over $10 million.[54] Several issues must be considered in deciding on offset

[54] MND Directive no. 559 (note 5), p. 14.

trade: (*a*) whether to use it to acquire advanced technologies; (*b*) whether the subsequent supply of munitions can be secured; and (*c*) whether it will contribute to other national interests.

In the case of joint ventures in the aeronautical industry, for example, TA is carried out to select the most appropriate methods among assembly production, licensed production and licensed production with domestic R&D. The technologies needed are classified and ranked. For each method and each classified technology the emphasis is on how much technology South Korea can acquire. As shown by the case of the KFP, licensed production with domestic R&D is preferred.

The defence industrial base

The defence industry emerged in the late 1960s in the wake of a series of shocks to national security, such as the armed entry by North Korean personnel to the presidential mansion and the Nixon Doctrine in 1969. The first and second US–South Korean Defense Minister Conferences in 1968 and 1969 provided an impetus for the Government to establish a plan to develop more self-reliant military forces. Because of these events and the strong leadership of President Park, who recognized that South Korea's defence should not depend solely on the USA, the defence industrial base began to be built up on legal and institutional arrangements as well as the Government's full financial support in the early 1970s.[55]

Under Park's leadership the defence industrial base was rapidly consolidated with the establishment of the ADD in 1970 as a cradle of defence R&D, the enactment of a special law to promote the defence industry in 1973, the introduction of a defence tax in 1975, and the establishment of an Association of Defense Industry Promotion (ADIP) to connect the MND and defence industry companies in 1976, among other initiatives. Park also ordered the development of a short-range ballistic missile.[56]

The defence industrial base has evolved in three stages: (*a*) the early 1970s to 1980, in which the groundwork was laid for basic equipment production; (*b*) 1981–92, which was characterized by a slowdown; and (*c*) 1993 to the present, a period of reorganization and revitalization. The ambitious government-

[55] For an account of the historical evolution, current status and other aspects of South Korea's defence industry, see Byung Rok Song, 'Building a national defence industrial base', SIPRI Arms Procurement Decision-Making Project, Working Paper no. 42 (1995); Yong Sup Han, 'South Korea's defence industrial base', Working Paper no. 51 (1995); Chung In Moon, 'Reviving the South Korean defense industry: challenges and strategies', Paper presented at the International Conference on Fifty Years of National Independence: Past, Present, and Future of National Security of the ROK, Korean Association of International Studies, Seoul, 16–17 June 1995; Young Sun Ha, 'South Korea', ed. J. E. Katz, *Arms Production in Developing Countries* (Heath and Company: Lexington, 1984); Kwang Il Baek and Chung In Moon (note 41); and Hyun-Kun Yoon, 'National security: defense, development and self-reliance through defense industrialization—the case of South Korea', Ph.D. dissertation, University of Maryland, College Park, Md., 1991.

[56] Won Chul Oh, [Arm 20 divisions], *Chosun, Monthly Magazine* (June 1994), pp. 477–81.

Table 6.8. Methods of arms acquisition in South Korea, 1970–

Period	Indigenous R&D and production	Joint R&D and production	Licensed production	Import
1970–80	Small naval craft	Small naval craft	Small arms Minor surface ships Helicopters Artillery Combat aircraft Small naval craft	Major surface ships Minor surface ships Combat aircraft Helicopters Missiles Artillery Tanks Armoured vehicles Radars Trainer aircraft Small arms
1980–90	Major surface ships Minor surface ships Midget submarines Armoured vehicles Small naval craft Small arms	Artillery	Helicopters Tanks Combat aircraft Artillery Armoured vehicles Radars	Missiles Submarines Tanks Radars Trainer aircraft Helicopters
1990–2000	Major surface ships Minor surface ships Armoured vehicles Small naval craft Small arms Trainer aircraft	Artillery	Tanks Submarines Radars	Missiles Helicopters Artillery Combat aircraft Radars Trainer aircraft
2000+	Major surface ships Minor surface ships Armoured vehicles Trainer aircraft Small naval craft Small arms	Combat aircraft Tanks Helicopters Artillery Trainer aircraft Submarines	Submarines Helicopters Combat aircraft Artillery Radars	Missiles Radars

Sources: Compiled by Siemon T. Wezeman from the SIPRI arms transfers database; based on data from several editions of *Jane's Fighting Ships*; *Jane's All the World's Aircraft*; *Jane's Armour and Artillery*; and *Jane's Defence Weekly* (Jane's Information Group: Coulsdon).

led strategy of developing the defence industrial base in the past three decades has made South Korea one of the leading arms producers among third-tier countries, able to satisfy most of its domestic needs for conventional weapon systems, including armoured vehicles, aircraft, missiles, and naval vessels (see table 6.8). By the early 1990s, about 60 per cent of the weapons needed by the Korean armed forces were being manufactured locally.[57] However, the defence industry still needs foreign technologies and components to produce a number of required systems.

[57] Sung Ki Min (Brig.-Gen., ret.), Lecture at the Korea National Defense University, Seoul, 1995.

Table 6.9. Designated defence products and contractors, 1996

Classification	Contractors	Products
Aircraft/guided	7	18
Ammunition	10	92
Communications/Electronics	13	78
Guns	14	41
Mobility	12	33
Vessels	5	18
Other	22	39
Total	**83**	**319**

Source: South Korean Ministry of National Defense, *Defense White Paper, 1996–1997* (MND: Seoul, 1997), p. 119.

Under the Kim Government large private corporate conglomerates known as *chaebols* had a certain amount of influence on the arms procurement decision-making process through their formal channel, the Association of ADIP. The ADIP is an independent organization through which *chaebols* with subsidiaries manufacturing defence products seek government subsidies and assistance in making deals with overseas suppliers and in formulating a defence industrial policy favourable to them.

In 1996, over 80 defence contractors were producing 319 kinds of defence product (see table 6.9). The capital of the major defence firms (*c.* 39 per cent of all defence firms) amounts to more than $65 million. Capacity utilization in the industry as a whole is less than 50 per cent, and in such sectors as ammunition and guns even lower—36 per cent in 1993.[58] Although defence production capabilities and technologies have developed greatly through experience gained as subcontractors and part suppliers since the 1960s, many firms still engage in licensed production and indigenization of defence products of US origin.

Although data on the domestic R&D capability indicate remarkable progress in a quantitative sense, the South Korean defence industry is largely engaged in the production of basic conventional weapons. The low rate of defence indigenization is directly connected with the heavy dependence on the USA for sohpisticated weapon systems, the degree of which varies from item to item. The army's dependence is relatively low (34 per cent). However, the navy and air force rely heavily on imported parts and components, for 83 and 91 per cent, respectively.[59] This degree of dependence for high-performance systems contradicts the assumption that the defence industry has achieved a significant level of indigenous production. Military officers, MND officials and even local

[58] Sung Bin Choi and Nam Sung Han, [The roles and paths of the Korean defence industry in the transition period], *Kukbangnonjip*, spring 1993, p. 103. According to Sung Ki Min (note 57), the capacity utilization rate is 59.8%. See also Yong Sup Han (note 55), pp. 6–7.

[59] Byung Rok Song (note 55), p. 13.

defence contractors favour foreign components because they are reliable, cheaper and delivered faster. In the MND, the higher-ranking officials favour foreign weapons, particularly those made in the USA.[60]

The official emphasis in the MND is on greater self-reliance in R&D and production of indigenous weapon systems. Accordingly, the ADD is being upgraded to an advanced institute whose 'primary task will be to develop core technologies and parts for weapon systems requirements in the 21st Century',[61] and the MND is promoting production using dual-use technology acquired through civilian–military cooperation.

In 1995, 27 weapon system R&D projects were under way—15 being run by the Government and 12 by defence industries. The MND expects the number of defence industrial R&D projects to increase as research capability improves. A cooperative system of private firms, university research institutes and government-funded research institutes has already been set up to enhance national science and technology by developing dual-use technologies,[62] and 112 core parts are under development.

III. Problems with the arms procurement process and recommendations

Seen from the outside the arms procurement decision-making process of South Korea is not yet able to implement defence objectives, military strategy or public accountability.

1. Operational procedures are not satisfactorily specialized, scientifically systematic, objectively fair and transparent, or efficient. A primary consideration is how procurement decisions respond to the fast-changing security environment. During the cold war there was only one enemy and the whole national security power was directed at deterring and defending against military provocation from North Korea. The US commitment to its long-standing ally was invariably firm. The new global order that has developed in the past decade means that South Korea must change almost all aspects of its national defence policy, and the arms procurement decision-making process must become more responsive to the new internal and external environments.

Internally, the change to a civilian democratic government in the early 1990s led to growing popular pressure for participation in the national policy decision-making process, public information, civilian control of the military, strengthening of National Assembly oversight of government activities, and so

[60] Chung In Moon (note 55), pp. 24–25.

[61] South Korean Ministry of National Defense, *Defense White Paper, 1995–1996* (MND: Seoul, 1996), p. 102.

[62] The Subcommittee for Defense Science and Technology comprises 'relevant experts and directors from the Board of Finance and Economy and the Ministries of National Defense, Education, Trade, Industry and Energy, and Science and Technology. Its mission is to provide a link between science and technology policies, to establish industry–academic institution–research institute cooperation plans and to analyse the results of cooperative activities for research and development'. MND (note 61), p. 101.

on. Externally, the US commitment to the national defence of South Korea has declined. There is increasing competition between the great powers in North-East Asia for regional leadership. North Korea is not expected to start to abide by international norms, rules and principles in the near future. South Korea has to revise and consolidate its defence posture not only towards threats from North Korea but also towards other neighbours, including China, Japan and Russia, seen as potential future adversaries.

2. One of the most serious problems is the concentration of decision-making power in the hands of the Minister of National Defense and the relative exclusion of the National Assembly, defence specialists, and civilian and military officials. The minister routinely receives many interim reports on the arms procurement programme while it moves along the line of signatures, and it is difficult for officers in charge to go against policy directions and guidelines formulated by the minister at the outset. This means that the agencies and committees involved in arms procurement decisions are not given autonomy in decision making commensurate to their position. The National Assembly's oversight is still superficial, and its participation in arms procurement decisions is visible only at the time of defence budget allocation. As a result, the arms procurement process fails to arouse public concern.

3. The process itself is cumbersome. For instance, final acceptance of an arms procurement proposal requires more than 60 approvals by the heads of every division, office, directorate, committee, and so on, of the organization in authority and signatures by the President and/or the Minister of National Defense.

4. The supremacy of national security, foreign dependence and the predisposition to organizational closeness in MND policy making combine to create further structural barriers to transparency and accountability. These attitudes have long characterized the mind-sets of military planners and of decision makers generally. Within the MND, decision makers are reluctant to disclose information to other government agencies, to encourage civilian participation or to share decision-making power.

The excessive and deeply rooted confidentiality of the decision-making process has led to public suspicion of and irregularities in arms procurement. In turn this has contributed to decreased transparency, thereby diluting accountability and isolating the public from the decision-making process. Under the long-held traditions of the military regime, the government tightly controlled and even manipulated the flow of information on national security affairs, and the National Security Law and the Military Secrecy Act permitted military and closely associated agencies to carry out most of the arms procurement programmes exclusively, with minimal and superficial legislative oversight.

The Yulgok Project has been conducted in such a way as to prevent public legislative review. Although its budget reached 40 per cent of the total defence budget at some points, legislators could not examine whether the amount budgeted was sufficient or appropriate for individual projects since they were given an unitemized budget, a practice stemming from the fear that an itemized

Table 6.10. Time span of the arms procurement decision-making process

Acquisition method	Average time span
Direct foreign purchase	4 years 10 months
Domestic production with foreign technology	5 years 5 months
Production through domestic R&D	7 years 1 month
Average time span	6 years 9 months

Source: South Korean Ministry of National Defense, [The Yulgok Project: yesterday, today, and tomorrow] (MND: Seoul, 1994), p. 95.

budget in enemy hands could jeopardize national security. There was thus no mechanism outside the military that would allow any wrongdoing in the process to be spotted, and it is not surprising that former President Roh and some of his officials are suspected of having received kick-backs from arms dealers in connection with this and other military projects.[63]

5. At the stage of submitting force requirements, those in charge of proposing weapon systems are not always capable of identifying what is appropriate. They tend to be mid-level active officers (at the rank of lieutenant-colonel or above) whose backgrounds are limited to field command and who lack not only a strategic knowledge of overall defence policy and the defence policy-making system but also technical knowledge of the weapons and weapon systems. Moreover, as they only hold the position for one to two years, in accordance with the rotation principle, they are not acquisition professionals.

As a result, the ROCs are largely based on magazines, arms manufacturers' handbooks, suggestions by agents who work for the arms manufacturers and are registered in the MND, past experience or organizational directives. For example, the Korean K-1 tank was developed and produced on the basis of models of the US M-1A1.[64] Emerging technological developments do not feature in the early stages of initiating procurement. The best quality weapons which they recommend are then selected with no serious consideration of such vital factors as cost, performance and suitability for Korean conditions. The weapons to be bought or developed are often too expensive or take too long to prepare for field use.[65]

At the review stage of the process, the ADC committee members often have a low level of technical expertise. They bring little understanding of the content of or problems associated with the statement of requirements under consideration. They are therefore unable to carry out their primary function—to collect, coordinate and integrate separate requirements into one suitable for the overall defence posture. Consequently the committee reviews the statements of require-

[63] 'Foreign arms to be purchased through open bid', *Korea Herald,* 25 Jan. 1996.
[64] Chul Whan Kim (note 52), p. 17.
[65] Man Won Jee, *Segye Times*, 30 June 1993.

Table 6.11. Offset rates provided by the 50 largest US arms exporting companies, 1980–87

Figures are in US $m. in constant 1989 prices.

Recipient countries	Export value	Offset value	Offset rate (%)
Britain	1 800.8	1 896.5	*105.3*
Canada	3 874.1	3 024.2	*78.1*
Egypt	383.0	87.8	*22.9*
Israel	6 083.7	1 384.2	*22.8*
NATO	667.4	320.4	*48.0*
South Korea	1 055.8	488.0	*46.2*
Spain	2 151.3	2 851.1	*132.5*
Sweden	381.7	663.3	*173.8*
Switzerland	370.9	248.5	*67.0*

Source: Dong Ah Ilbo, 27 Apr. 1990.

ments in terms of the budget already allocated, and the major criterion for the review becomes whether the cost is less than the amount allocated.

6. In the light of the legal and institutionalized decision-making process prescribed in the RWSAM, a major problem is the difficulty of formulating an arms procurement plan that fully considers long-term strategic elements. Since the average time span for arms procurement plans for major weapon systems (including the six stages shown in figure 6.2) is generally more than five years, they cannot usefully be included in the Mid-Term National Defense Plan (see table 6.10). Consequently, strategic elements in the long-term defence planning cannot have any meaningful effect on the drawing up of the Mid-Term National Defense Plan. This is particularly the case for domestic R&D. Although there are difficulties in achieving congruence between the long-term military strategy and mid-term defence plans, annual reviews provide a certain degree of coordination between the plans.

7. At the stage of determining the acquisition method, the problem of offset agreements with foreign arms suppliers arises. Government regulations require the rate of offset trade to be 30 per cent or more of the contract price of deals over $10 million. This rate is low when compared to major offset agreements between the USA and many other countries, as shown in tables 6.11 and 6.12,[66] and clearly inadequate to meet the policy of defence indigenization. While South Korea seeks a policy that emphasizes securing arms technologies in order to accelerate the rate of indigenization of defence production, the USA is most reluctant to offer a high ratio of offset trade to South Korea.

In the same context the rigidity of contract procedures also causes problems. The DPA, which is in charge of making contracts, is often placed at a disadvantage in negotiating with foreign suppliers or their domestic agencies by the

[66] Tae Woo Kim (note 43); and Jong Chul Choi (note 46), p. 339.

Table 6.12. Comparison of offset rates and directed buy-back requirement in the F/A-18 co-production programmes

Recipient countries	Offset rate (%)	Buy-back requirement
Canada	*100*	Yes
Spain	*100*	Yes
Australia	*30*	Yes
South Korea[a]	*30*	No

[a] The deal between South Korea and the USA for the co-production of the F/A-18 did not materialize.

Source: Jong Chul Choi, 'US arms transfers and global hegemony: an analysis of their global scale and the regional context of Japan and Korea', Ph.D. dissertation, Pennsylvania State University, May 1992, p. 339.

annual revisions of the defence budget: foreign contractors are well aware that the DPA must finalize the negotiation, execute the contract and pay the supplier within the fiscal year. Under such pressure, the DPA accepts unfavourable or even unacceptable terms proposed by the contractor. If the ROC is decided and the contract is under a time constraint, the DPA has little flexibility at the negotiating table.

8. Finally, concerning the efficiency of the process, contract forms and cost management systems are not developed so as to improve the productivity of defence companies and reduce unit costs. Defence contractors, for example, have no incentive to reduce costs in the case of fixed-price contracts since the military deducts the difference between the prime cost on the contract and the real prime cost after production.

Recommendations for improvement

Taking these factors into account, the following recommendations could help to achieve a more efficient, transparent and objective process.

1. To achieve a more efficient arms procurement process the South Korean Government needs to 'simplif[y] and integrat[e] . . . various stages in arms procurement decision-making'.[67] Needless to say, the Government must acquire the right weapons at the right time and at the right price. The process must be streamlined. Working-group meetings of the officers in charge and specialists are needed to guide the work of the acquisition deliberative committees.

2. To make the process of procuring foreign arms more transparent, the involvement of the National Assembly, government agencies and even the taxpayers must be strengthened and expanded. Their minimal role hitherto stems from the tacit agreement that arms programmes should remain mostly

[67] Ministry of National Defense (note 19), p. 89.

confidential. Major defence projects (those exceeding 5 billion won) already have to be approved by the National Assembly Committee of National Defense as well as the President. To increase transparency the public should be briefed about some of these, and direct foreign purchase should be based on open and competitive bids rather than free contracts. This could eliminate suspicion over irregularities in arms build-up programmes.

3. The objectivity of the arms procurement process should be strengthened in the related institutions and legal mechanisms as South Korean society moves rapidly towards a Western-style democracy. Clearly divided roles should be given to the participating agencies and institutions of the Government, the National Assembly, the ADD and the individual defence companies, so that they provide checks on each other and in order to ensure that arms procurement decisions are valid and transparent. Above all, the centralization of decision-making power in the MND must be reduced and balanced with the power of the National Assembly and other government agencies.

Despite their access to technology, defence companies have almost no opportunities to participate in drawing up the statements of requirements. Their participation would contribute to strengthening the nation's defence industrial base. The ADD monopoly over defence R&D leaves much to be desired in exploiting industrial–academic–research institute cooperation.

4. The current dominance of the army in the arms procurement decision-making process should be ended. Since the Korean War, the South Korean military has gradually come to place an absolute emphasis on its ground forces, largely because of the US military strategy.[68] With the end of the cold war, the significance of naval and air power is being recognized by military leaders and civilian experts. Much more should be spent on building up these forces. A visible improvement of naval and air forces is essential to prepare for unification of the Korean peninsula—widely expected to occur within the life cycle of existing weapon systems—and for a marginal presence or complete withdrawal of US troops, which might be expected in the first decade of the 21st century.

5. Those dealing with arms procurement in the armed services, the JCS, the National Defense Staff College, the ADD and other bodies should be qualified professionals able to prepare a high-quality ROC and capable of analysing strategic and tactical concepts and implementing them with the appropriate weapon system. A concept-based requirements system should be established.[69] To improve impartiality and transparency, civilian and military specialists in national security policy, science, technology and weapon systems should be given time to examine and discuss the requirement planning and acquisition

[68] Through its post-World War II defence planning tradition and specific strategic interest in the Korean peninsula, the USA has forced South Korea to concentrate on building up ground forces while depending on US air and naval assistance.

[69] US Army War College, 'Army command and management: theory and practice', Reference text for the Department of Command, Leadership and Management, Carlisle Barracks, Va., 1991, pp. 11–12. It is more desirable that legislation similar to the US Defense Acquisition Workforce Improvement Act be introduced.

programming before the official deliberative committees such as the ADC and Defense Force Improvement Committee begin their work.

6. Tools such as computer-aided acquisition and logistic support should be used to integrate and automate data and information exchange between government and defence contractors and in the areas of acquisition, design, production and logistical support of weapon systems. The type of contract needs to be improved to boost productivity and reduce unit costs in defence companies. This could be done by increasing the proportion of fixed-price contracts and using cost-plus contracts to cushion the contractors' potential losses.[70]

At the same time, South Korea needs to review aspects of its defence policy in order to meet the challenges of a future-oriented defence policy, the changing security environment and demands on military capability.

First, the chosen weapon systems should be comparable with those of neighbouring countries, not just those of North Korea. The fact that main and potential enemies must be taken into consideration in a new military strategy has recently been recognized by some military leaders.[71]

Second, those involved in the arms procurement process must also take account of regional confidence building and the degree of transparency regarding armaments in North-East Asia. The Government supports the UN General Assembly resolution on transparency in armaments[72] and the UN Register of Conventional Arms, insisting that the register achieve universality and credibility as soon as possible. It started to issue an annual defence White Paper in 1988 and maintains strict control over the import and export of conventional arms in accordance with domestic arms transfer regulations and various agreements with other nations. It thereby hopes to build confidence between the two Koreas, which is essential for disarmament.

Third, the counter-dependence strategy must be accelerated. South Korea should emphasize the final stage of military import substitution or the production of indigenously designed arms, preferably based on local R&D but still incorporating foreign components. Such a strategy would not mean an end to its long-standing heavy dependence on the USA in the immediate future; it would merely substitute import dependence with technological dependence.

Finally, in tune with the import substitution strategy, the diversification of suppliers should be accelerated. The need for inter-operability with US weapon systems has severely constrained South Korea's freedom in selecting other suppliers. The MND should re-examine its preferential policy towards US weapons but in such a way as to cause minimum damage to US–South Korean military cooperation. It is generally understood in South Korea that security cooperation with the USA should be maintained until unification of the Korean peninsula is achieved, but the preference given to US weapons is widely

[70] Chul Whan Kim (note 52), pp. 77–83.

[71] A Commander of the Air Force Combat Unit said in a private communication to the author that the Korean Air Force is assigning about 10% of its surveillance capabilities to neighbouring countries other than North Korea.

[72] 'Transparency in armaments', UN General Assembly Resolution 46/36/L, 9 Dec. 1991.

criticized by the National Assembly, defence analysts and other commentators. One rationale for this criticism is that the returns from this preference are not adequate in cost–benefit terms.

IV. Conclusions: short- and long-term developments

South Korea has some well-organized mechanisms for arms procurement decision making, including the RWSAM and the planning, programming, budgeting, execution and evaluation system which, while not perfect, provide satisfactory legal and institutional arrangements. The introduction of special auditing and inspection routines in the Yulgok Project in 1993 was a watershed in the history of the force improvement plan and opened up a new era with a more democratic and rational system of arms procurement decisions.

In 1996 special inspection and auditing provisions were included in the revised RWSAM. While prioritizing R&D or licensed production over imports of ready-made equipment, the MND issued new or amended guidelines for the defence R&D managed by the Government and initiated by defence contractors, for cooperation between industry and the academic and research institute communities, and for the management of major projects. The 1996 version also aims specifically to change the methods of functioning of the Director for Acquisition and Development. By introducing open competitive bidding instead of free contracts and making the process efficient, it will also accelerate the development of future-oriented defence science and technology.[73] It also prioritizes increased defence industrial cooperation with foreign countries. Such cooperation is currently under way with nine countries: Canada, France, Germany, Italy, Malaysia, Spain, Switzerland, the UK and the USA.[74] In addition, the MND has tried to save time and resources by integrating and simplifying the arms procurement process, and has taken steps to improve transparency and public accountability by selectively releasing as much information as possible about the process, including expenditures. The 1996 RWSAM introduces the intention to regularly brief journalists and legislators about most arms procurement programmes and to invite non-military officials and experts to participate in the decision-making process in the case of major procurement projects.[75] This would ensure a more rational and institutionalized decision-making process, one that will become more responsive to public concerns and interests as well as the objectives of national security.

However, a number of problems remain in achieving an advanced system of arms procurement that will enable a self-reliant defence posture. These include: centralized decision making; the lack of professionalism among those responsible for procurement; and the continuing heavy dependence on US arms and

[73] 'Foreign arms to be purchased through open bid' (note 63); and *Gukbang Ilbo*, 6 Feb. 1996.
[74] Sung Ki Min (note 57).
[75] 'Foreign arms to be purchased through open bid' (note 63).

arms-manufacturing technology. It will take some time to eliminate inherited customs and iron out the distorted procedures deeply embedded in the military and government institutions. Arms procurement decision making has been largely dominated by the military, the President and the presidential staffs, with no political or social constraints. The public interest has been ignored and public debate severely restricted. The USA has been indirectly involved in almost every aspect of the process and, faced with US Government pressure, arms acquisition in South Korea will only slowly establish a pattern of security-based, autonomous decision making.

The South Korean defence industry is now at a crossroads. There are some major reasons for this: industry is uninterested in becoming heavily involved in arms production; the military drag their feet in supporting indigenous R&D; and the defence industry suffers from a number of structural weaknesses such as the lack of long-term R&D planning by the Government, a low rate of defence R&D investment and huge idle capacity.

The democratic transition which began in the early 1990s presents new opportunities for overhauling the foundations of the national security decision-making process. The MND has opened its door wider than ever before to the public, allowing closer, more balanced civil–military relations. These developments are likely to facilitate further legislative oversight, active public participation in the decision-making process and civilian control of the national security machinery. This will enhance accountability and responsiveness to the public and lead to a more rational arms procurement decision-making process and better choices.