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## 2. Chile

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### I. Introduction

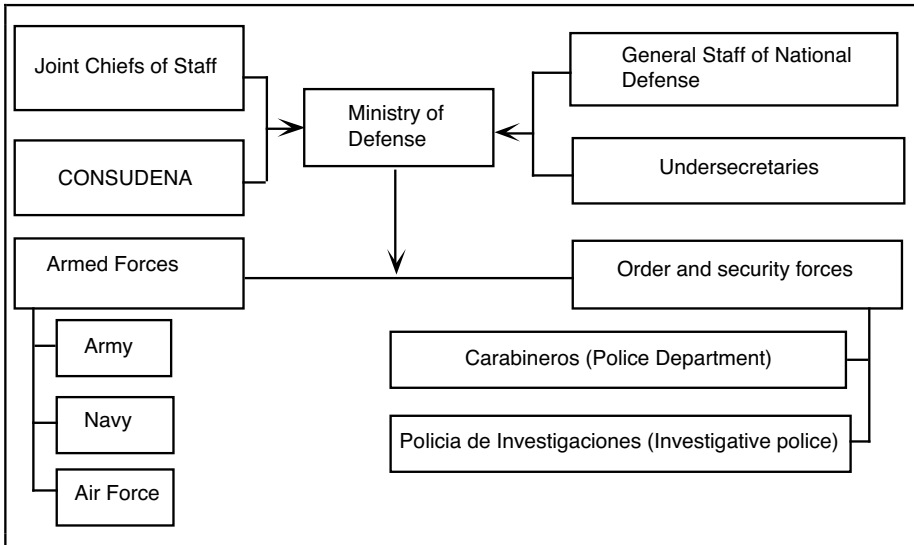
Latin America is a relatively stable region in terms of the relationships between the states and levels of interstate conflict. The level of sophistication of weapon systems in the region is low. Arms procurement decision-making processes are not very transparent, as they have traditionally been limited to a very closed group of persons. The introduction of democratic systems has made an important contribution in this area, but much remains to be done in most of the larger Latin American countries with regard to building public accountability in arms procurement and encouraging mutual trust and security through the development of a more transparent arms procurement information system.

Since the return to democratic rule in 1990, Chile has been going through a series of economic, social, political and military reforms. The armed forces are being modernized and civil–military relations transformed. However, the military and the individual branches of the armed services still enjoy considerable autonomy. The system of arms procurement decision making is closed and compact, decision-making power being concentrated in the military and the executive branch.

An explicit and transparent defence policy is a priority of the present government. One of the main problems in building a systematic framework for accountability in the arms procurement process is the lack of expertise among civilians to monitor and scrutinize the military's recommendations. Although a number of studies have been carried out, there is no critical systematic knowledge available to provide policy guidelines and facilitate monitoring of military security policies and processes.

This chapter examines Chile's arms procurement processes and priorities in the upper-level state institutions. Section II examines the framework of defence policy and the bodies involved, and section III the present arms procurement system. Section IV considers Chile's unique system for funding arms procurement, the defence budget process and socio-economic aspects, section V the Chilean defence industry and related research and development (R&D), and section VI the organizational and public-interest aspects. Section VII presents conclusions and two recommendations.

\* This study is based on a joint Facultad Latinoamericana de Ciencias Sociales (FLACSO)–SIPRI workshop held in Santiago in June 1997. Ten working papers were prepared by Chilean researchers in connection with the workshop. They are not published but are deposited in the SIPRI Library. Abstracts appear in annexe B in this volume.



**Figure 2.1.** The Chilean Ministry of Defense

*Note:* CONSUDENA = Consejo Superior de la Defensa Nacional (National Defense Superior Council).

*Source:* Chilean Ministry of Defense, *Book of the National Defense of Chile* (Ministry of Defence: [Santiago], Sep. 1998), p. 96 (in English).

## II. The background to arms procurement decision making

### The framework for decision making

Although the Ministry of Defense (MOD) is one of the oldest ministries in Chile, it is the only one not governed by a formal organic law.<sup>1</sup> All branches of the armed forces that are responsible for external defence and security are attached to the MOD, as are the agencies responsible for domestic law and order—the police force, both plain-clothes (the investigative force) and military (the Carabineros). Other organizations, including academic institutions and the Civil Aviation Board, also form part of the MOD (see figure 2.1).

According to the constitution the president, through the MOD, is formally responsible for control and administration of the defence institutions and establishment. The armed forces are therefore subject to the authority of the Minister of Defense for administrative and budget purposes. However, they enjoy a high degree of functional autonomy, in decisions on arms acquisition as well as in other matters.<sup>2</sup> Since the return to democratic rule in March 1990, the Minister

<sup>1</sup> In Chile here are 4 categories of legislation: (a) the constitution, (b) organic laws which describe the organization and the constitutional setting of a given ministry or agency, (c) qualified quorum laws and (d) simple laws.

<sup>2</sup> 'Ley no. 18.948 Orgánica constitucional de las fuerzas armadas' [Organic Law on the Armed Forces], *Diario Oficial* [Official gazette], 27 Feb. 1990. See, e.g., Robledo, M., 'Domestic considerations and

of Defense has been a civilian. The ministry has three undersecretaries, each responsible for one of the branches of service. There are also two undersecretaries responsible for the police force. All these appointed positions are held by civilians. The Minister of Defense has a cabinet of advisers, both civilian and military, for different functions. Most of the staff of the MOD come under the undersecretaries' offices.

### Defining defence policy

Since the mid-1990s, Chile has endeavoured to make its defence policy explicit and transparent. This has been the main priority of President Eduardo Frei's administration and the improvement of transparency remains a long-term objective.<sup>3</sup> The political platform of the second administration of the present ruling coalition, the Concertación de los Partidos por la Democracia (CPD), states that this policy should be explicit, coordinated and implemented consistently across the board in all state actions.<sup>4</sup>

Efforts have therefore been made to establish a national defence community to discuss, analyse and make proposals on the main aspects of national strategic development.<sup>5</sup> One of the main tasks undertaken was the publication in August 1997 of the *Libro de la Defensa Nacional de Chile*,<sup>6</sup> which stated the country's defence policy for and was the first attempt to bring a degree of coherence and transparency to it. Historically, such policies have been excluded from public debate and discussion because of the 'reserved' nature of this subject. The book is comparable to a White Paper on defence. Prepared under the direction of a former Minister of Defense and with contributions from academics,<sup>7</sup> state agencies and members of the Congress, it provides a common conceptual framework which both civilians and the military can use as a reference tool.<sup>8</sup>

The process of defining Chile's defence policy has run parallel to and been linked with another process—that of modernization of the armed forces and replacement of the weapon systems of the different branches of service. The links between the two processes have not, however, been strong enough and have essentially been limited to the upper levels of the political leadership.

actors involved in the decision-making process of arms acquisition in Chile, 1990–97', SIPRI Arms Procurement Decision Making Project, Working Paper no. 69 (1997).

<sup>3</sup> Frei Ruiz-Tagle, E. (President), 'Exordium', in Chilean Ministry of Defense, *Libro de la Defensa Nacional de Chile* [Chilean national defence book] (Ministerio de Defensa Nacional: [Santiago], 1997), p. 13.

<sup>4</sup> Concertación de los Partidos por la Democracia, 'Un gobierno para los nuevos tiempos: bases programáticas del segundo gobierno de la Concertación, 1994–2000' [A government for the new times: the programmes of the second government of the Concertación], Santiago, 1993.

<sup>5</sup> The concept of a 'defence community' was developed by former Minister of Defense Edmundo Pérez Yoma and is defined as the convergence of civil and military actors in a shared field of interest and cooperation with regard to defence issues. It gained importance through the elaboration of the *Libro de la Defensa Nacional*.

<sup>6</sup> *Libro de la Defensa Nacional de Chile* (note 3).

<sup>7</sup> Regular participants in the workshop that produced the *Libro de la Defensa Nacional* included 11 academic centres, 8 of which were civilian, 2 military and 1 civilian run by the state.

<sup>8</sup> Pérez Yoma, E., 'Presentación del Libro de la Defensa Nacional de Chile el 8 de enero de 1998 en Iquique', *Fuerzas Armadas y Sociedad*, vol. 12, no. 4 (Oct.–Dec. 1997).

Institutional mechanisms to foster transparency are therefore still in the early stages of a slow process of development. Progress has been made in enhancing interaction between the different branches of the armed forces: modern warfare and new weapon systems require enhanced interoperability. However, the autonomy which the armed forces enjoy in arms procurement has made it more difficult for the MOD to gain a broader perspective on the capability-building process.

Several decision-making channels were institutionalized again during Edmundo Pérez Yoma's period as Minister of Defense (1994–98), or, more precisely, a regular functioning of the existing institutional framework, such as the Board of Commanders-in-Chief, the Consejo Superior de Seguridad Nacional (National Security Superior Council, CONSUSENA) and the Consejo Superior de la Defensa Nacional (National Defense Superior Council, CONSUDENA), is being attempted. These bodies are discussed further below.

### **Security perceptions, concepts and doctrines**

From the late 1880s until 1911, Chile sought regional superiority. This was followed by a more cautious and less aggressive policy in the region, which continued until the end of World War II and the start of the cold war.<sup>9</sup> From 1947, defence policy began to be strongly influenced by Chile's role in the hemispheric security system. Like the other countries in the region, during the cold war Chile began to depend greatly on US military assistance. In the late 1970s democracy and human rights became increasingly important concerns and influenced the military assistance relationship between the USA and Latin America, leading to the US arms embargo of 1976 on several military regimes in Latin America.

For national defence assessments, a 'global political and strategic approach' was employed after 1990 in evaluating the foreign and domestic context and strategic risks, including diplomacy, military security, and political, social and economic aspects. The actors involved in the preparation of this analysis were the armed forces' staffs and the defence general staff. With democratization, the decision-making process began to involve civilians on the staff of the MOD, the ministers participating in CONSUSENA and the President, who has final responsibility.

Five factors affect threat perceptions in Chile: (a) history and tradition; (b) the subregional security environment; (c) a tradition of professionalism in the Chilean armed forces; (d) the influence of the historical powers, the USA and the UK, in the cycle of tension in the region; and (e) inertia in the bureaucratic procedures, which preserves the traditional threat perceptions. The national defence objectives are: 'to preserve the independence and sovereignty of the country; to maintain Chile's territorial integrity; to contribute to the preservation of institutionality and the Rule of Law; to safeguard, strengthen,

<sup>9</sup> Navarro, M., 'The influence of foreign and security policies on arms procurement decision making in Chile', SIPRI Arms Procurement Decision Making Project, Working Paper no. 66 (1997), p. 1.

and renew [the country's] historical and cultural identity; to create the critical external security conditions . . . ; to contribute, in a well-balanced and harmonious way, to the development of *National Power*; . . . [and] to contribute to the preservation and promotion of international peace and security, in accordance with national interests'.<sup>10</sup>

The Chilean political system, which has moved from authoritarianism to democracy, seeks to define national security on the basis of a strong non-offensive deterrence policy, respect for international law and the inviolable nature of treaties, a high degree of political, diplomatic and military credibility, and professionalism in the civilian and military bureaucracies. The current debate on civil–military relations centres on the scope and constitutional role of the armed forces. In a country like Chile, with great problems caused by the extreme geography, deterrence and strategic balance play a crucial role.<sup>11</sup> The legal framework clearly defines who can participate in decision making and how decisions are to be implemented. Chile has a long record of support, backing and respect for international law. Its security with regard to defining its national boundaries is based entirely on legally established treaties.

Security threats to Chile are perceived from a coalition of actors from neighbouring countries. With advances in technology, threats from the Pacific Ocean involving extra-continental powers are also being considered. The Latin American countries share common threats from poverty and underdevelopment, and economic issues are therefore also becoming important in defence and foreign policy. However, given Chile's size, resources, level of development and political inclinations, there is no tendency in the country towards the use of force. Indicators of perceived security threats to Chile show that, in contrast to other countries in the region, it is subject to a relatively limited number of threats and is thus able to implement a preventive policy.<sup>12</sup> Throughout the 20th century it has implemented a defensive–dissuasive policy expressed in an approach that seeks to protect the regional status quo.

Early-warning systems are essential to avoid the escalation of tensions when no major threats are perceived. For this reason, preventive security is essential in bilateral, regional and hemispheric relations.<sup>13</sup> In this regard Latin America

<sup>10</sup> Chilean Ministry of Defense, *Book of the National Defense of Chile* (Ministry of Defense: [Santiago], Sep. 1998), p. 29 (in English). See also Rojas Aravena, F. and Fuentes, C., 'Civil–military relations in Chile's geopolitical transition', ed. D. R. Mares, *Civil–Military Relations: Building Democracy and Regional Security in Latin America, Southern Asia and Central Europe* (Westview Press: Boulder, Colo., 1998), pp. 165–87.

<sup>11</sup> Chile's geography, population concentrations and lack of strategic depth in the east–west axis hamper operations along a north–south axis. Rojas Aravena, F., 'Chile y el gasto militar: un criterio histórico y jurídico de asignación' [Chile and military expenditure: historical and judicial criteria of allocation], ed. F. Rojas Aravena, *Gasto Militar en América Latina: Procesos de Decisiones y Actores Claves* [Military expenditure in Latin America: decision processes and the major actors] (FLACSO and CINDE: Santiago, 1994), pp. 239–78.

<sup>12</sup> Varas, A. and Fuentes, C., *Defensa Nacional, Chile 1990–1994: Modernización y Desarrollo* [National defence, Chile, 1920–1994: modernization and development] (FLACSO: Santiago, 1994).

<sup>13</sup> Paz y Seguridad en las Américas, *Políticas de Seguridad Hemisféricas Cooperativas: Recomendaciones de Políticas* [Politics of cooperative hemispheric security] (FLACSO and Wilson Center: Santiago), no. 1 (Mar. 1995).

<p><b>CONSUSENA</b> Consejo Superior de Seguridad Nacional (National Security Superior Council)</p> <ul style="list-style-type: none"> <li>– President</li> <li>– Minister of Internal Affairs</li> <li>– Minister of Defense</li> <li>– Minister of Foreign Affairs</li> <li>– Minister of Finance</li> <li>– Minister of Economic Affairs</li> <li>– Commander-in-Chief, Army</li> <li>– Commander-in-Chief, Navy</li> <li>– Commander-in-Chief, Air Force</li> <li>– Director of Frontier and Boundaries</li> <li>– Chief of National Defense Staff</li> </ul>	<p><b>CONSUDENA</b> Consejo Superior de la Defensa Nacional (National Defense Superior Council)</p> <ul style="list-style-type: none"> <li>– Minister of Defense</li> <li>– Minister of Finance</li> <li>– Minister of Foreign Affairs</li> <li>– Commander-in-Chief, Army</li> <li>– Commander-in-Chief, Navy</li> <li>– Commander-in-Chief, Air Force</li> <li>– Under-Secretary of War</li> <li>– Under-Secretary, Navy</li> <li>– Under-Secretary, Air Force</li> <li>– Chief of Army High Command</li> <li>– Chief of Navy High Command</li> <li>– Chief of Air Force High Command</li> <li>– Chief of National Defense Staff</li> </ul>
<p><b>COSENA</b> Consejo de Seguridad Nacional (National Security Council)</p> <ul style="list-style-type: none"> <li>– President</li> <li>– President of the Senate</li> <li>– President of the Supreme Court</li> <li>– Commander-in-Chief, Army</li> <li>– Commander-in-Chief, Navy</li> <li>– Commander-in-Chief, Air Force</li> <li>– Director General of Police</li> <li>– Comptroller General</li> </ul> <p>Consultative members</p> <ul style="list-style-type: none"> <li>– Minister of Internal Affairs</li> <li>– Minister of Foreign Affairs</li> <li>– Minister of Economic Affairs</li> <li>– Minister of Finance</li> </ul>	<p><b>CAPE</b> Comite Asesor Politica Exterior (Foreign Policy Advisory Committee)</p> <ul style="list-style-type: none"> <li>– Minister of Defense</li> <li>– Under-Secretary of Foreign Affairs</li> <li>– Chief of the National Defense Staff</li> <li>– Commander-in-Chief, Army</li> <li>– Commander-in-Chief, Navy</li> <li>– Commander-in-Chief, Air Force</li> <li>– Director of Frontier and Boundaries</li> <li>– Director of Planning</li> <li>– Director of Legal Affairs</li> <li>– Team of experts in international affairs and representatives of different political currents</li> </ul>

**Figure 2.2.** The defence advisory agencies in Chile

has embarked on a serious commitment as a result of two regional conferences on confidence-building measures, held in Santiago in 1995 and in El Salvador in 1998. At a bilateral level, in November 1995 Argentina and Chile established a formal and permanent mechanism of dialogue in defence issues, the Comité Permanente de Seguridad Chileno-Argentina, which is attended by officials from the Ministry of Foreign Affairs and the MOD as well as military and civilian advisers.

### **Coordination of foreign and defence policies**

In the elaboration of policy, a conceptual and operative framework is being developed to harmonize the main actors involved in the defence community. The drafting of the *Libro de la Defensa Nacional* also created the opportunity for different actors to meet personally, regardless of their backgrounds.

There has traditionally been no formal coordination between foreign and defence policy, although the CPD has indicated the need for it and it became an explicit goal in the political platform for the period 1994–2000.<sup>14</sup> When the new democratically elected government took office in 1990, it faced circumstances inherited from the previous regime which prevented it from bringing in new staff and forced it to keep the bureaucratic organization which had, in many cases, been designed and decreed by the military government. Significantly, the Chilean armed forces managed to maintain a measure of institutional independence from the political powers. Coordination is now done at the stage of the dialogue between the different ministers or within institutional structures dedicated to this purpose. A series of laws were enacted to create a legal framework to provide the basis for relationships between different agencies.<sup>15</sup> The agencies created are CONSUSENA, CONSUDENA, the Consejo de Seguridad Nacional (National Security Council, COSENA) and the Foreign Policy Advisory Committee (CAPE), which is linked to the Ministry of Foreign Affairs and in which different actors participate (see figure 2.2). CONSUSENA defines the long-term projects, assesses national security needs and is responsible for ensuring that necessary resources are provided. Its main role is in the management of crises more than strategic planning. CONSUDENA's main role is approving all procurement applications. COSENA is one of the legacies of the authoritarian regime, a purely political institution based on the constitution.

In practice these agencies have operated as self-contained divisions and not as an integrated network designed for coordinated national decision making. The analyses carried out by the state bureaucracy are characterized by insularity and consequently lack of routine communication and integration.<sup>16</sup>

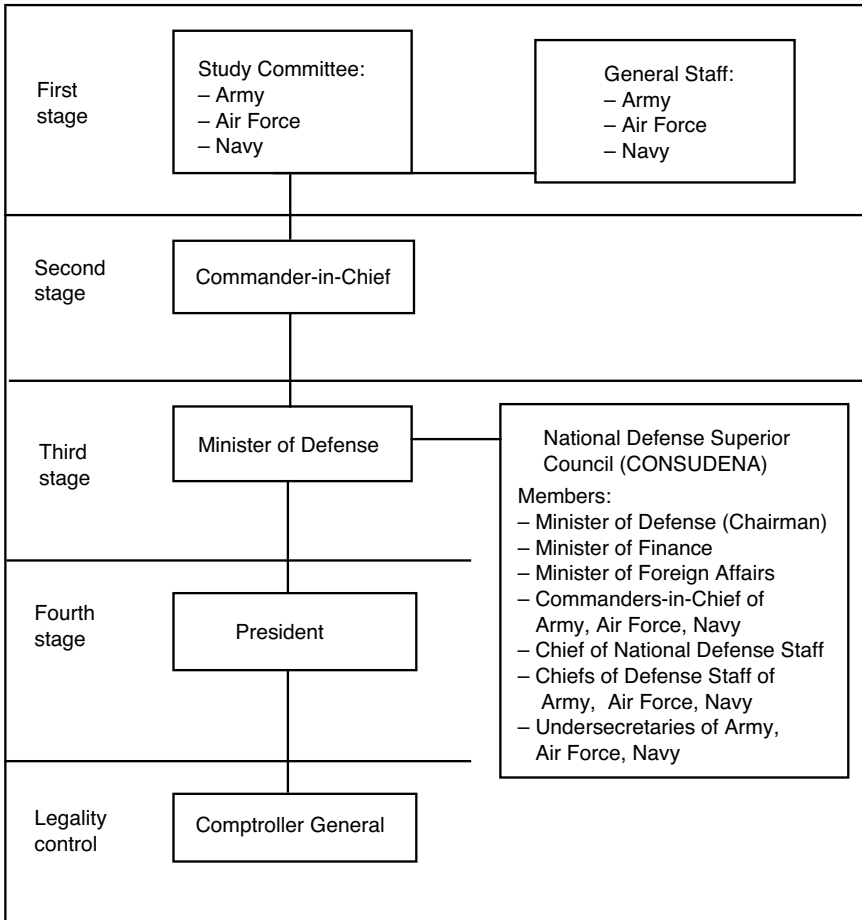
Coordination occurs in times of crisis and through a merger of posts and hierarchies during international crises. However, these decisions are restricted to the highest levels of the decision-making system. During the military regime the fact that the officials in charge of foreign policy were military officers led to a merger of policies but did not involve any exchange between the two sectors.<sup>17</sup> In the current dispensation lack of coordination is reinforced by the mistrust that still exists between the civilians who are in power and the military who ruled for 17 years. The different compositions of the ministries of defence and foreign affairs produce different perceptions and priorities in terms of goals, interests and approaches.

<sup>14</sup> Concertación de Partidos por la Democracia (note 4).

<sup>15</sup> Fuentes, C., 'Política exterior y de defensa: propuesta para su coordinación' [Foreign and defence policies: proposal for their coordination], Working paper, FLACSO, Santiago, 1995.

<sup>16</sup> Meneses, E., 'Percepciones de amenazas militares y agenda para la política de defensa' [Perceptions of military threats and the agenda for the defence policy], eds R. Cruz Johnson and A. Varas, *Percepciones de Amenaza y Políticas de Defensa en América Latina* [Perceptions of military threats and defence policies in Latin America] (FLACSO and Centro de Estudios Estratégicos de la Armada (CEEA): Santiago, 1993).

<sup>17</sup> Fuentes (note 15); and Durán, R., 'Política de defensa y política exterior: notas para una presentación temática' [Defence policy and foreign policy: notes for a thematic presentation], *Fuerzas Armadas y Sociedad*, vol. 6, no. 1 (Jan.–Mar. 1991).



**Figure 2.3.** The stages of the arms procurement process in Chile

No permanent channels have been established at different working levels to routinely link defence and foreign policy processes. There are no systematic assessments of decisions adopted in a particular area and their effects on areas of responsibility of different ministries, such as might form part of a working method used to generate comprehensive input for the government.

In order to enhance cooperation the Frei Administration assigned a Ministry of Foreign Affairs official to the National Defense Staff and a high official of the National Defense Staff to the Ministry of Foreign Affairs: both work as links facilitating coordination.

This situation changed slightly when CONSUSENA was revived by the CPD at the start of its second term in office in 1994. It began to meet regularly and thus to operate as a permanent consultative entity. It also established an inter-ministerial working group that studies international security issues. Regarding arms procurement, it continues to play a formal role.



### III. The present arms procurement system

The system has remained in force since 1990 and is not expected to change in the near future. Figure 2.3 shows the stages of the arms procurement process.

Arms procurement decision making in Chile takes place primarily in the individual armed services. Essential studies on technical development, strategic assessments and financial analyses are carried out by the service that intends to make a purchase. A Study Committee, whose composition depends entirely on the Commander-in-Chief, so that there is no standard composition, is appointed by the High Command of the military service that needs to procure weapon systems. The committee examines the options available on the market and interacts directly with the Commander-in-Chief of the armed service in question. The final decision is formally adopted by the respective Commander-in-Chief as part of his prerogative and no other military authority can intervene.

Civilian authorities formally begin to participate only after the process within the armed services is completed. However, in recent years they have been informed of the steps being taken in the decision-making sequences in the armed forces before their final decision is made.

CONSUDENA is the second actor in the process of purchasing weapons for the armed forces. It acts as an advisory body to the Minister of Defense and its duties include: (a) analysing and determining the needs of the armed forces and making proposals for arms procurement; (b) authorizing arms procurement from specially allocated funds and the necessary investments to cover these needs; and (c) monitoring compliance with the procurement and investment plans. It has played a mainly formal role in essential matters but an important function in administrative matters and can be defined as 'the missing agency' in the crucial stages of the procurement decision-making process.<sup>18</sup>

CONSUDENA's procedure is formal and the analysis focuses on the role of the individual armed service and its needs and not on the armed forces as a whole. Funds are allocated directly to each service of the armed forces and the sensible procedure is therefore for each service to prioritize the projects, analyse the financial options and present to CONSUDENA its own project in which no other institution has been involved. In this framework CONSUDENA is expected not to question proposals submitted by the different armed services.

The MOD must then approve the decisions.

Formally, the President has the right to veto those decisions, but a veto might generate a high level of tension, which should be avoided in the still maturing Chilean democracy. In effect, the final decision still lies with the relevant branch of service. Access to information has become easier than it was under the previous regime and a more fruitful dialogue has ensued between senior civilian and military decision makers that has made it easier to reach consensus. During the long period of military rule (1973–90) the military's decisions were never vetoed, since the offices of President and Commander-in-Chief were held

<sup>18</sup> Pattillo, G., 'The decision-making process in acquisition of arms systems: an approach', SIPRI Arms Procurement Decision Making Project, Working Paper no. 67 (1997), p. 11.

by one person, General Augusto Pinochet. After the return to democratic rule, the main focus was on restoring an institutional dialogue. However, analysis of the decision-making chain shows that the crucial aspects are still controlled by the military service that carries out the study and provides the relevant evaluation.

The most prominent non-participant throughout the process is the legislative branch. The law allocating funds to the armed forces for arms procurement—the ‘Copper Law’ of 1958, revised in 1985—does not allow the Congress to involve itself in the study and approval of arms purchases. Intervention by the Congress in arms procurement matters is legally precluded: it is allowed only limited participation in matters related to the regular administrative budget of each branch of the armed forces. The Copper Law is examined further in section IV below.

It can therefore be said that the arms procurement decision-making process is concentrated in the hands of a few players.

This is the established method, but no step of the procedure can be analysed in detail in the absence of publicly available information and detailed studies on the matter. Public analyses are limited to press reports and recurring patterns are difficult to identify, as the procurement procedures follow no regular cycles.

The order for two French–Spanish Scorpene submarines, for a total cost of approximately \$400 million, illustrates procurement decision making in the navy. After almost seven years of analysis, it was decided in 1997 to buy this new model, which was still in the prototype stage. The decision was criticized since the model, tailor-made for the Chilean Navy, had not been tested and would commit 35 per cent of the navy’s budget for long-term commitments for the next 25 years while adding only 15 per cent to the fleet’s overall fire-power.<sup>19</sup> The bids were studied by the navy and, although the Minister of Defense had a part in the process, his participation was limited. The final decision was taken by the navy’s newly appointed Commander-in-Chief.

The current administration aims to enhance coordination between the three armed services so that weapon systems are better integrated within the overall defence framework. This will require effective functioning of CONSUDENA in examining and determining the needs of the armed forces, making proposals for arms procurement, authorizing purchases, monitoring compliance with procurement plans and controlling purchases from special funds.

### **Transparency of arms procurement decisions**

Once procurement of an item is approved, the only institutions authorized to have knowledge of it are the secretary of CONSUDENA, the undersecretaries of the respective military institutions who make the purchases, the Controlaria General de la Republica (Office of the Comptroller General), who processes the supreme decrees (but does not know of or have to approve expenditure of funds provided under the Copper Law), the Treasury, which receives the funds for

<sup>19</sup> Meneses, E., ‘El fin de una era’ [The end of an era], *El Mercurio de Santiago*, 18 Jan. 1998, p. D8.

procurement from the Central Bank and makes payments to each individual institution, and the Central Bank. These last three institutions receive authorized copies of the confidential supreme decrees.<sup>20</sup>

The purchase of the Scorpene submarines mentioned above has highlighted the present methods of the military institutions, which are surrounded by secrecy. Secrecy in decision making aims to preserve and safeguard the military's interests. It is argued that the military is the only institution with the necessary professional knowledge to decide on such matters. However, committees established by the Congress or the executive to investigate particular decisions have reported that: (a) in certain situations, other actors would have made the same decision; (b) major secrets are actually very few; (c) material is frequently classified as 'reserved' in order to hide mistakes and poor decisions or to protect the independence of certain groups; (d) military bureaucracies tend to confine knowledge to a closed group which frequently develops traits of 'group thinking'; and (e) knowledgeable external observers using open sources have found contradictions in the operational rationale used by these agencies and deficiencies which they were later forced to acknowledge.<sup>21</sup>

Consequently the present government intends to create a civilian bureaucracy to handle defence matters, including arms procurement. The purpose is to avoid errors of judgement, which involves industrial, strategic and political considerations. The existing process, which is more public than the process under the military regime, has led to a national debate involving Chilean experts, members of the Congress and military personnel. Although this does not change the main actors involved in decision making, the debate has given greater political legitimacy to the process and produced more information in the media.

### **The influence of foreign governments and weapon suppliers**

Chile's arms procurement policies were redefined in the context of the cold war. The air force and navy revived their tradition of cooperation with the UK, which had been disrupted since 1933. From 1947 and until the US embargo of 1976, procurement policies were strongly influenced by the relationship with the USA. The advent of the military government in 1973 cut off all links with the Soviet Union and its allies, and the US embargo was joined by the West European countries. This determined arms procurement policy during the 1980s and even influences present-day considerations. The Chilean Government promoted domestic industry in priority sectors such as munitions, equipment, maintenance and repairs. Crises in 1974–79 with neighbouring countries along Chile's northern borders (Bolivia and Peru) and with Argentina in 1978 underlined the military consequences of suppliers' failure because of the arms embargoes to comply with arms contracts.

In 1979 the British Government lifted its embargo and a year later the USA, headed by newly elected President Ronald Reagan, began to limit the scope of

<sup>20</sup> Robledo (note 2), p. 13.

<sup>21</sup> Meneses (note 19).

its embargo on Chile. Agreements with several foreign companies to upgrade existing military equipment allowed state-owned companies to survive.

As Chile is not self-sufficient in weapons and is unlikely to become so, it relies on maintaining a diversity of suppliers, which may not be the most cost-effective solution but avoids creating a dependence which could lead to strategic vulnerability. By the end of the cold war a bureaucratic procedure and practice of buying from different providers were well established. Moreover, the defence procurement system was strongly protected by the complex legislation enacted and amended by the military government (the constitution, the Organic Law on the Armed Forces and so on).

The three branches of service have had different policies on the purchase of US military equipment. The army virtually rejected outright the possibility of renewing the relationship with the USA during the 1990s. The navy agreed to consider US offers on a case-by-case basis, but procurement so far has been in the most part from the UK or other European countries because of the complexity of the US systems.

### **Changes in the processes for selection of weapon systems**

Chile is currently introducing a new process for the selection of arms to be procured. The policy adopted by the MOD under the second administration of the CPD requires all significant weapon purchases to be subject to a detailed study of the options available. Since there is currently no single superior entity responsible for coordination, the new policy also aims to centralize decisions on arms procurement through meetings between the officials in the executive branch responsible for authorizing arms procurement decisions and the military staff who formulate the proposals. Examples are the navy's decision to buy the two Scorpene submarines mentioned above, the air force's proposals for replacements for its obsolete A-37 combat aircraft,<sup>22</sup> the army's procurement in 1999 of 200 Leopard IV tanks from the Netherlands,<sup>23</sup> and the joint venture between the state-owned Fabricas y Maestranzas del Ejercito (FAMAE) and the British Royal Ordnance to manufacture the Rayo multiple rocket launcher.<sup>24</sup>

### **Choosing and testing the arms selected**

No established method exists for choosing arms and testing those selected. This is performed by the study committee responsible for examining available alternatives in each branch of service. Similarly, there is no central technology assessment team responsible for analysing the choices and evaluating them in general. The degree of institutionalization of aspects of evaluation of weapon technology is low and there is no permanent committee in charge of evaluation.

<sup>22</sup> Replacements for the A-37 combat aircraft are presently being considered from the USA, France and Sweden—F-16 from General Dynamics, the F/A-18 manufactured by McDonnell Douglas, the JAS 39 Gripen manufactured by Saab of Sweden and the French Mirage 2000-5 manufactured by Dassault.

<sup>23</sup> *Jane's Armour and Artillery 1999/2000* (Jane's Information Group: Coulsdon, 1999), p. 36.

<sup>24</sup> *Jane's Armour and Artillery 1999/2000* (Jane's Information Group: Coulsdon, 1999), p. 774.

An ad hoc committee is created, the members of which are chosen according to the type of armaments to be purchased and represent the branch of the armed forces that is to acquire the equipment.

The fact that the volume of arms purchased by the individual branches of the armed forces is small could be the reason for the failure to establish a special agency to evaluate and test the arms to be purchased. Because each branch is independent in procurement matters, a central organization responsible for this task is not really warranted. The absence of an independent authority or a central authority within the MOD makes the exercise of accountability difficult.

#### IV. The defence budget and socio-economic aspects

The Chilean armed forces rely on three direct sources of funding:<sup>25</sup> (a) government funding under the annual national budget law; (b) the funds allocated for purchase of armaments under the Copper Law, a reserved law providing financing from a tax on copper revenues through the Corporación del Cobre (CODELCO)<sup>26</sup>; and (c) other sources, which include the lease or sale of land and other property owned by the armed forces to the private sector, with certain restrictions. The first of these represents over 80 per cent of the funds available.

Funds for personnel and operations are covered in the national budget. The national budget law is subject to approval by the Congress and the defence budget benefits from one exclusive provision not granted to any other government agency: there is a minimum 'floor' that stipulates that the government's contribution must be at least equal to the funds received by defence agencies in the 1989 budget, adjusted for inflation according to the consumer price index (CPI).<sup>27</sup> Policies are therefore determined to some extent by the views prevailing at that time, which were based on the military's apprehensions regarding civilian decisions about military expenditure.<sup>28</sup>

The non-military forces mentioned above are included in the MOD budget.

#### The defence budget process

The *Libro de la Defensa Nacional*<sup>29</sup> explains how the state funds spent on defence are calculated.

Allocations to the three armed services in the 1990s followed the same distribution patterns employed since the late 1970s and are proportional to the 'historical share' which has characterized defence expenditure in Latin America.<sup>30</sup> In Chilean pesos, approximately 40 per cent of funds are allocated to

<sup>25</sup> Pattillo (note 18), p. 2.

<sup>26</sup> Law no. 13.196 of 29 Nov. 1958, revised by Reserved Law no. 18.445, 7 Oct. 1985. CODELCO is a state-owned company created when large-scale mining was nationalized in 1971. It owns most of the operating copper mines in Chile. See below in this section.

<sup>27</sup> Law no. 18.948 of 1990 (note 2).

<sup>28</sup> Rojas Aravena (note 11), p. 248.

<sup>29</sup> *Libro de la Defensa Nacional* (note 3), section VI, chapter 3, p. 200.

<sup>30</sup> Pattillo (note 18), p. 3; and Rojas Aravena (note 11), p. 6.

the army, 35 per cent to the navy, 17 per cent to the air force and 8 per cent to decentralized institutions (bodies which come under the armed forces but are responsible for civil activities, such as the Instituto Hydrográfico and the Dirección de Aviación Civil). In dollars the percentages are slightly different: 39 per cent to the navy, 27 per cent to the air force, 19 per cent to the army and 15 per cent to decentralized institutions.<sup>31</sup>

The defence part of the national budget is prepared in two distinct stages. It is drafted by the executive and then submitted to the Congress for approval. Budget preparation begins with a study by a special financial unit dedicated to this task in each defence agency. The proposal is sent for analysis to the relevant undersecretary (for the army, the navy or the air force) and then to the Minister of Defense, who submits the request to the Minister of Finance, who is responsible for the entire national budget. The MOD request is presented as a package, but this does not mean that it is coordinated or integrated.

The defence budget covers basically four types of expense: (a) salaries and allowances for military personnel; (b) goods and consumer services—recurring expenses such as maintenance, fuel and minor munitions; (c) transfers including expenses such as health care for military personnel and their dependants; and (d) investment which involves the purchase of real estate and other property subject to inventory. Arms procurement is not included.<sup>32</sup> Arms procurement expenditure is thus not subject to congressional debate. The budget heads do not reflect programmes or projects to be carried out by the different agencies of the defence sector. It is therefore difficult to understand the rationale for these expenses, and because of the nature of the Chilean political system, the constitution and the national budget law, the legislature has little control over this matter.

The role of the Congress is limited to approving, cutting or rejecting items. It cannot make its own estimates and is not authorized to increase budget items. The ‘historical allocation criterion’ remains unchanged. Moreover, ‘permanent laws’—such as the Copper Law—cannot be modified by initiatives introduced by the Congress: according to the constitution, laws establishing a permanent revenue can only be modified by presidential initiative. Nor does the constitution give the Congress authority to monitor such expenses. The Office of the Comptroller General is responsible for examining budgetary expenses as part of the auditing of all government accounts.

### *The executive initiative*

Given the strongly presidential nature of the Chilean political system, the executive plays a very important role in preparing the laws. Article 62 of the constitution establishes that the President has the sole right of initiative to introduce

<sup>31</sup> In the national budget for different ministries there is a part set in the national currency and another part set in US dollars because certain activities require expenditures in a foreign currency.

<sup>32</sup> Gaspar, G., ‘Military expenditures and parliamentary control: the Chilean case’, SIPRI Arms Procurement Decision Making Project, Working Paper no. 64 (1997), p. 2.

any bills related to the financial or budgetary administration of the state, including any amendment to the national budget law. He also has the exclusive initiative in two other matters which have a direct bearing on defence—the sale of state-owned property and any determination regarding air, land and sea forces required—and only he can initiate any amendments to permanent laws which allocate funds to the state, such as the Copper Law, and to those that create, amend or suppress public services or gainful employment.

The Minister of Finance and the Director General of the National Budget Office are responsible for the budget operation. Different sectors compete for funds. Each year, in March, preparatory work for the next year's budget begins. The initial research work starts in the Budget Directorate, an agency under the Ministry of Industry. The National Budget Office prepares the overall budget framework, which includes defence, in compliance with the provisions of the Organic Law on the Armed Forces and other relevant regulations which tend to reaffirm the 'historical allocation criterion'.<sup>33</sup> Staffing decisions are clear evidence of the application of this criterion.

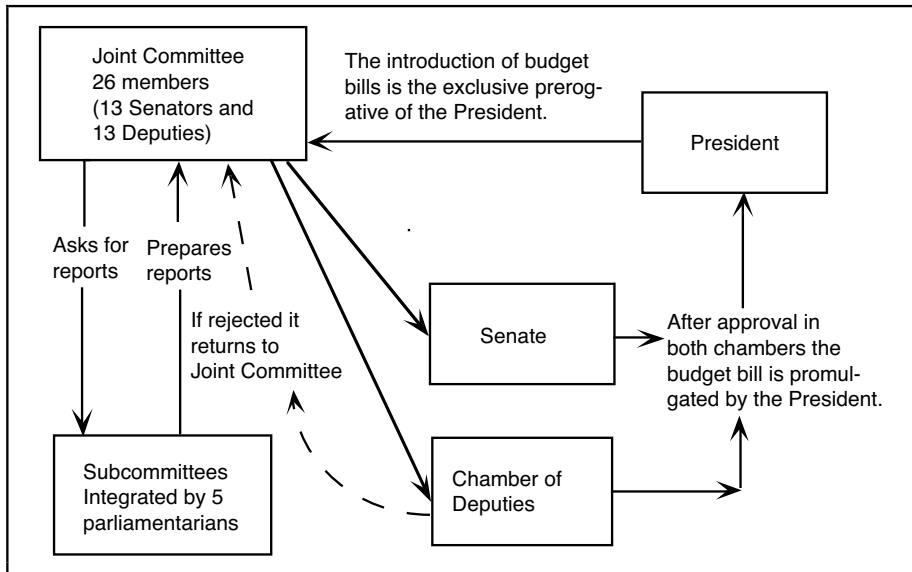
The Ministry of Finance sends its budget framework to the different ministries in mid-June. The Minister of Defense sends the framework to the armed forces and the budget is coordinated by the Undersecretary of the Army. Each branch of the armed forces examines the budget proposal and states its needs: this must be done within one month. Interaction between civilian and military authorities is carried out at this stage through the three relevant undersecretaries. The outcome of these meetings and the accompanying technical analyses are determining factors in the subsequent negotiations conducted by the Minister of Finance with the Minister of Defense.

Debate might arise at this point because of different interpretations of the budget needs. At the first level of decision making, in the upper echelons of the MOD, the minister and the undersecretaries decide on the suitability of, timeliness of and amount of information required to support requests for budget increases. Once the process in the MOD is complete, coordination with the National Budget Office and the Ministry of Finance begins to include new items not included in the original proposal. This operation, which lasts around two months, forces the MOD to rank according to priority any additional requests received. This is where the most important decisions as to budget allocations are made. Finally, the President and the Minister of Finance deliver a consolidated budget to the Congress for approval.

### *Congressional approval*

Article 64 of the constitution regulates the processing of the national budget law by the Congress: 'The National Budget Bill shall be submitted by the President of the Republic to the Congress at least three months prior to the date on which it must be in force. Should the Congress fail to approve the bill in a period of 60

<sup>33</sup> Rojas Aravena (note 11), p. 241.



**Figure 2.4.** The budget law process in the Chilean Congress

days after it was introduced, the Bill submitted by the President of the Republic shall apply'.<sup>34</sup> The Congress may reduce expenses that it judges excessive, as is the general rule in budget issues, but expenses like salaries cannot be reduced and the 'floor' fixed by the organic law has to be respected.

Although the Minister of Finance is responsible for submitting the budget to the Congress, in practice the relevant undersecretaries are responsible for arguing the case before the congressional committees. The Congress establishes a Joint Committee to study the budget, which consists of 13 Senators and 13 Deputies, presided over by a senator. The Joint Committee is divided into subcommittees which study the different ministries' budgets, plan hearings and prepare reports: subcommittee 2 is responsible for studying the budgets of the MOD, the armed forces and other decentralized institutions, and five other important ministries. Basic information is provided to the subcommittees but, if deemed necessary, they may request additional information. In practice they have relied on ad hoc studies requested from non-government agencies.<sup>35</sup> Independent information provided by academic centres is considered particularly valuable.

The Congress must approve the budget within a two-month period (during October and November). In fact, the budget is analysed during a three-week period by the Joint Committee and then for another three weeks by the Senate and the Chamber of Deputies. The effectiveness of the subcommittees is limited

<sup>34</sup> *Constitución Política de la República de Chile* [Political constitution of the Republic of Chile] (Editorial Jurídica de Chile: Santiago, 1994), art. 62.

<sup>35</sup> Gaspar (note 32), p. 3.



by several other factors. They are formed by five members of the Congress and chosen by agreement between the parties once a year, so that the representatives are usually new to the task. The extremely short time available makes accurate study of the budget difficult: in recent years the entire defence budget has been examined in an average of three to four days.<sup>36</sup> The breakdown of the defence budget does not go further than subtitles: several members of the Congress have requested that the information be broken down into programmes for action. Moreover, the defence budget by its nature is not likely to attract the interest of members of the Congress since it will not directly affect their own districts or electorates. Another disincentive to a more exhaustive analysis of defence issues is that, when the defence budget is debated, it is backed by the opposition as a way to support the work carried out by the armed forces and by the parties in government because they cannot radically oppose a directive issued by the executive.

The budget approved by the Congress is published in the official gazette, the *Diario Oficial*, in December and takes effect on 1 January of the following year. Monitoring and follow-up of budget implementation are the responsibility of the Office of the Comptroller General, a completely independent body. Its main function is to monitor administrative integrity, but its auditing is limited to finance and administration and it does not evaluate value for money in arms procurement. It has not been possible to find published information about the level of detail in its analysis or its evaluations of arms acquisitions. It has a multidisciplinary staff which includes lawyers and auditing and finance experts.

### **The Copper Law**

At present arms procurement is fully financed by the Copper Law.<sup>37</sup> Initially the law imposed a 15 per cent tax on the net profit on exports of copper and copper by-products, to be spent on the acquisition of military equipment. A 'floor' of \$90 million was also established. These revenues have always been placed at CONSUDENA's disposal, to be distributed between the three services, although originally the law contained no provisions on the allocation of funds between them. In 1973 changes were introduced, many of which are still in force: the tax rate was reduced from 15 per cent to 10 per cent of the income received by CODELCO from copper exports; and the three services were to allocate \$3.35 million each per year to CONSUDENA to finance projects involving more than one service. The current practice of allocating the funds to the services in three equal parts began in 1975. In 1985 Copper Law no. 18,445 increased the 'floor' to \$180 million, to be adjusted according to the US CPI. In

<sup>36</sup> E.g., in 1994/95. Chilean National Congress, *Boletín de Sesiones, 1994–1995* (Congress Printing Office: Valparaíso, 1996).

<sup>37</sup> See note 26. Between 1974 and 1985, the funds provided for arms procurement under the Copper Law averaged US\$128 million per year, varying from \$90 million in 1975 to \$184 million in 1980 (in current prices). Pattillo (note 18), p. 5. Since the return to democracy in 1990 they have averaged \$200 million per year. Fuentes, C., 'Arms supplying and transparency: the case of Chile', SIPRI Arms Procurement Decision Making Project, Working Paper no. 63 (1997), p. [6].

the event of tax to be paid amounting to less than the floor, the government would be required to make up the difference.

Although these changes implied an increase in the funds available to the armed forces, they reinforced the very partial method of analysis of procurement investment. Because resources were allocated individually to each branch, the potential effects of projects on Chile's overall defence system were not considered. Inter-service coordination is not a high priority. CONSUDENA continues to be responsible for approving individual projects, but its proceedings and decisions are secret.

The law ensured a certain amount of funding for arms procurement but by eliminating congressional approval it prevented the elected representatives of the Chilean people from understanding the needs of arms procurement and excluded civilian politicians from consideration of an issue which is essential to national stability. Thus, key decisions pertaining to Chile's strategic military capacities were based on the revenues produced by its copper exports. A considerable gap has been created between the process of automatic allocations for arms procurement and its rationale, since the price of weapon systems is unrelated to the price of copper or to production decisions of the state-owned CODELCO.

The importance of the Copper Law for the armed forces can be judged in several ways. Those who believe that it plays a crucial role in maintaining peace and stability are not entirely wrong, but it is also true that the law was adopted at a very different point in time and requirements are bound to change further in the future. Despite the advent of a democratically elected government, a change to the Copper Law, introducing a different arms procurement method, more neutral in terms of resource allocation and more appropriate to circumstances, is not imminent because of the still transitional character of Chilean politics. Two of the major faults for which the system is criticized are: (a) that the method used for making allocations does not reflect the objectives of specific projects; and (b) that it does not make it possible to increase programme coordination, rank goals according to priorities, evaluate the cost-effectiveness of each option and optimize investments.

The method of disbursing funds without any coordination between the services is a major problem. It means that defence policy is not conceived on the basis of shared strategic considerations. Although limited coordination exists at the level of the defence general staff (for example, with communication systems,) there is no coordination process for joint projects between the services.

### **Offsets**

No explicit offset policy exists, but in most recent procurement operations offsets have become significant. The goal is not only to purchase specific weaponry but also to ensure that after-sales service, spare parts and other supplies are guaranteed and that a significant part of these functions is reinvested in projects in Chile.

## **Cost assessment**

The primary consideration in deciding on a purchase is the contribution a particular weapon system will make to the capabilities of the purchasing agency.

Assessments are carried out before procurement of the life-cycle costs of systems, their service life and different alternatives. The problem with this assessment is that objective variables other than the concerns of the agency involved are not considered. Procurement projects are therefore not analysed in terms of their overall role in the defence system. Moreover, given that the cost of any major weapon system is substantially larger than the funds allocated annually under the Copper Law, major purchases must be financed on a long-term basis. Interest payments therefore represent a significant share of the total cost of the equipment.

Although initial estimates are made regarding the cost of subsequent operations, according to some analysts<sup>38</sup> projects are usually not assessed after procurement and actual total cost is therefore not determined. They base this judgement on the fact that, since arms purchases are not funded by the normal defence budget, cross-subsidies exist in each military agency which could hide the real cost of any weapon system. There are no pricing systems for internal transfers and no cost determination or follow-up of projects to obtain precise data on actual costs at a given point in time or upon completion of service life.<sup>39</sup>

The first cost analysis is conducted in each branch of the armed forces in study committees, the results being analysed with the highest authorities in the MOD, particularly the minister. Because there are large areas of ambiguity in costing, in this process resources are probably not being used optimally. Since each institution implements its own procurement system and a general defence policy is lacking, resources are wasted which might have been put to better use if there had been an integrated assessment. In particular, if the requirement to allocate identical amounts to each branch of service did not exist, a major allocation to one service would be possible as and when required: the cost of interest payments could in this way be avoided and an efficient utilization of funds could be ensured.

## **Balancing arms procurement with national socio-economic problems**

Arms procurement decisions are completely unrelated to the socio-economic problems that affect Chile. Since the funds are provided by a special law from copper export revenues and not subject to congressional debate, there is no forum for public discussion of the priorities or of investing such funds for other, socially pressing programmes in Chile.

The state is obliged to maintain a minimum level of arms procurement, and laws would have to be amended before these funds could be allocated to other areas. The balance of political power and the quorum required in the Congress

<sup>38</sup> Meneses (note 19).

<sup>39</sup> Pattillo (note 18), p. 12.

for an amendment to the Copper Law mean that this would not be feasible, even if the government were to attempt it. The same applies to the floor established by the Organic Law on the Armed Forces:<sup>40</sup> for political reasons, the executive and the Congress have little freedom of action.

## V. Technical and industrial problems

### **The Chilean arms industry**

Since the mid-19th century Chile's slow economic development has been a determining factor in the development of an arms industry and the modernization of military equipment. Domestic industry generally has operated at a level lower than that of the developed countries and the gap has been increasing. This meant that a capability for military R&D was virtually non-existent.

The Chilean defence industry developed to address the military needs as a result of the US embargo on sales to Chile of new weapons and spare parts. In addition to the embargo, tension with two neighbouring countries (Peru in 1974 and Argentina in 1978) encouraged the private sector to invest in repairing and even manufacturing weapons in Chile to supply low-cost arms to the Chilean armed forces. Because of the region's political dependence, lack of strategic involvement and low levels of conflict, the demand for weapons and equipment systems has been irregular and low.

Major differences in policy in arms procurement between the three armed services, which are due to historical reasons<sup>41</sup> but persist to this day, are also reflected in the development of the arms industry.

The Chilean Army continued with its own autarchic supply policy, manufacturing military supplies under licence, through FAMAE, the other military manufacturing facilities or the private sector (mostly civilian industry). In preserving its logistical independence, however, it incurred the cost of relative technological backwardness.

FAMAE has dedicated itself to manufacturing light weapons, munitions and light army vehicles, and to making advances in specific technological sectors rather than all-round industrial modernization. As a consequence it invested in rocket production, the result of this decision being the Rayo. Long-term considerations which influenced the decision included: (a) the adoption of internationally competitive standards in engineering and work practices in the defence industry; (b) developments in systems and logistic engineering skills, as well as integration of different engineering specializations; (c) access to training opportunities, creating a cadre of high-quality professionals, which constitutes the core FAMAE skills for the next century; and (d) the identification of technological areas for future development of FAMAE, in human

<sup>40</sup> See note 2.

<sup>41</sup> Traditionally the army was based on the Prussian model and the navy on the British Navy, and the air force drew its standards from the USA.

resources as well as in engineering standards. Key factors are the skills needed to interact efficiently with the industrial and technological centres in Chile.

FAMAE, an important complex of military industries, is geared for the production of arms, munitions and vehicles. A mixed organization was adopted in 1992 as a solution for a better integration of the company's functional capabilities—divisions by product, structured according to specialization in the human resources and plant needed in production. This organizational structure is consistent with international trends, and is at the heart of the new industrial model currently being formulated.

The situation in the Chilean Air Force and Navy is more complex. Both were compelled to accept international technological and logistical dependence because their main systems require considerable technological capacities, which Chile lacks. Maintenance problems were solved by sending military personnel to the United States and to European supplying countries for training. The dependence created by such programmes did not encourage domestic development and discouraged the Chilean private sector from undertaking R&D projects relating to sub-assemblies.

The navy's arms company is ASMAR (Astilleros y Maestranzas de la Armada) and the air force's is ENAER (Empresa Nacional del Aeronautica). ASMAR carries out repair and modernization of ships from different nations. It has delivered the offshore patrol vessel (OPV) *Vigilant* to the Government of Mauritius and its experience in the export of naval vessels opens new possibilities in the future. Its delivery to the navy of the Taitao patrol ships, *Corneta Cabrales* and *Piloto Sibbald*, also indicates the scale of its work in shipbuilding. ASMAR's socio-economic contribution to the regions where its shipyards are located and to the maintenance of the Chilean Navy confirms it as a strategic industry. ENAER's activities are exclusively in the aeronautical sector. It cannot engage in other areas of industrial production, except in special circumstances. In the national and international market it is engaged in: (a) the design and fabrication of airships; (b) the fabrication of parts and pieces for aeronautical use; (c) maintenance and modernization of airships; and (d) maintenance and repair of aero-engines and aeronautical components.

The private-sector arms industry in Chile is limited to servicing certain types of systems which have low utility in the military. In 1978, when tensions with Argentina were high, the Chilean Army asked Carlos Cardoen, a businessman and engineer, to develop an arms industry along with other industrialists. Cardoen's industries manufactured landmines and prototypes for armoured cars which were never mass-produced and exported cluster bombs to Iraq during its conflicts with Iran. Cardoen has stopped manufacturing arms in Chile for the time being, but in the event of an increase in demand it would be able to recommence production of military items for which it has the know-how.

The survival of the arms industry has depended on arms exports. Since the mid-1990s it has sought to enhance its export potential by forming partnerships with third parties to produce goods for the civilian and military markets.<sup>42</sup>

Transnational corporations hold a considerable share of the Chilean arms market but do not operate directly in Chile. Chilean state-owned companies continue to dominate as military suppliers and in the maintenance and repair of existing systems. FAMAE, ENAER and ASMAR are the most important arms companies in the country but, with the end of the weapons embargo, they had to adapt their production in order to manufacture dual-purpose goods. They have formed partnerships with other companies in the region and internationally to manufacture spare parts.

### **R&D and international technical collaboration**

The influence of economic considerations on strategic philosophy in Chile led to the maintenance of a large army at levels of technology comparable with those of other countries in the region and a relatively small technology-intensive navy and air force.

The armed forces made significant efforts to attain limited degrees of technological excellence in order to retain operational effectiveness in the region. Policy on military technology was based on adapting military strategies to financial and technological constraints (selection of imported equipment was based on Chile's capacity to maintain the equipment) and on optimizing the capabilities and maintenance of the weapon systems purchased.

Even though R&D policies were never formally defined, they have recognizably existed from 1974 onwards, in two different phases.

First, from 1974 to 1990, R&D in Chile was determined by market-based policies of selection according to the dual criteria of 'product market' and 'product need'. As technical and scientific military capabilities were considerably reduced in 1974, policy at the time was to maintain and if possible improve the weapon systems in operation. The criteria set were cost and quality competitiveness, without discrimination between Chilean and foreign companies. Domestic suppliers were invited to manufacture goods which could not be purchased abroad. Items which private enterprise had no interest in would have to be manufactured by military facilities.

The crises with Peru in 1974 and Argentina in 1978 gave rise to intensive activity in military R&D. This was based on the need to copy and produce spare parts that could not be bought abroad and which were essential to keep defence systems operational. Projects to refurbish existing equipment were developed along the same lines. Throughout this period technology for military use was obtained as a by-product of the process of operating, maintaining and repairing existing systems. This began with the task of specifying the technical parameters for arms procurement and continued with increasing capacity for repairs up to the total reassembling of weapons.

<sup>42</sup> Varas and Fuentes (note 12).

After the early 1980s, development focused on hardware and software in the private-sector electronics industry. An example is SETAC—Sistema de Entrenamiento Tactico Computacional (the Tactical Training Computer System), a joint project initiated in 1982 by the Chilean Army and engineers from the Catholic University of Chile. A program for military decision-making simulation at brigade and division level involving planning, execution and control began to be used in the Academy of War in 1994. It has been sold to other armies in the region, such as Mexico's and El Salvador's. The main components of the projects were manufactured mostly by private-sector industry, both domestic and foreign.

Contrary to expectations, no joint ventures were established with companies from the developed countries to manufacture weapons. The main reasons were Chile's poor economic situation and the experience that these companies had had with investments in defence in other developing countries. Both factors made private companies reluctant to enter into partnerships.

The period after 1991 was marked by the return to democracy and the re-opening of the international arms market to Chile. Although the civilian authorities legitimized the national defence industry,<sup>43</sup> no official guidelines were provided for its subsequent development or for military R&D. Consequently, efforts have been made to maximize domestic advantages to competitively develop technological niches that will eventually become areas of specialization. Technical and economic criteria are being considered, together with strategic and military factors, for developing self-financing, dual-application technologies. The technology sector aims at a balance between the private- and public-sector industry in order to preserve industries seen as essential to national defence. However, there is no independent R&D authority responsible for testing and monitoring the military industry.

The parameters which guide the selection of weapon technology emerge from four different types of agency: (a) armed forces logistic support agencies; (b) the Armed Forces Defense Staff and technical divisions; (c) private enterprise; and (d) state and private-sector science and technology research institutes. Communication between these actors is usually informal but well developed because of the small size of the science and technology community. Several technical experts who formerly served in the military are now working either for private industry or in institutions of higher technical education.

To modernize or upgrade weapon systems, foreign companies are involved for the sake of their technological skills. Such involvement usually begins with a collaborative effort for systems integration and frequently extends to the logistical functions of supply, maintenance and repairs. The state-owned defence companies acquire technology by three different methods: (a) through their own developments; (b) by means of transfers from foreign companies in joint-venture partnerships; and (c) by direct purchase. Technological collabora-

<sup>43</sup> This statement was made by the then Minister of Economic Affairs, Carlos Ominami, in a speech on 'Guidelines for a development policy for the military goods industry in Chile' at the Simposio de Industria de Defensa, organized by ASMAR, Valparaíso, 14–16 Nov. 1991.

tion with France, Israel, South Africa, Switzerland and the UK between 1990 and 1994<sup>44</sup> was concentrated almost exclusively in the state-owned companies.

## VI. Behavioural and organizational issues

### **The influence of elite motivations and the legislature**

Decision making in Chile is organized along traditional lines, that is, the political elite that controls the state steers opinion and interest groups in the political parties. The recent trend in Chilean politics towards consensual politics actually indicates lack of formal dissent.

The Chilean political regime is characterized by a strong presidency. The 1980 Constitution grants the President broad powers considerably in excess of those of the legislative branch. For this reason, the traditional elite has concentrated its efforts on decision-making processes in the executive branch.

The Congress is essential to the political elite because it facilitates the highest levels of institutional dialogue between them. It is also an important step in the development of their political careers. The power of the Congress has been curtailed, in comparison to the power wielded by the executive branch, because the constitution reaffirmed the power of the President to co-legislate (as he has the right to rule by decrees). It limited the ability of the Congress to introduce bills and the control that could be exercised over government actions.

Although there is no doubt that decision making in defence matters is concentrated in the executive branch, there is an interest in and obligation to discuss defence issues in the Congress, and this led to the creation of the Defense Committees of the Chamber of Deputies and the Senate. Both are permanent (their composition used to change each year, although a representative could remain on the same committee). There are also a few permanent staff members to support their administrative work. They are recruited by the Congress.

The Chamber of Deputies' Defense Committee is made up of 11 deputies, and the Senate's of five senators. According to regulations, the functions of the two committees are basically the same: (a) to study all projects related to national defence and security matters; (b) to examine all bills and issues in the first or second constitutional stages as well as all remarks made by the President about projects approved by the Congress and other issues which have to be examined by the committee as defined by the regulation; and (c) to collect antecedents and study facts of which the Defense Committee judges that the Senate and or the Chamber needs to be informed. It can request the participation of officials to explain elements in the security debates, seek advice of specialists in the subject of study and hear the institutions and persons it thinks relevant. These are typical parliamentary hearings similar to those held in other democracies by their parliaments. The committees can move to any place within the country to exercise their authority if this is agreed by three-quarters of their

<sup>44</sup> Varas and Fuentes (note 12).



members and approved by the Chamber. They are not allowed to represent the Congress or to adopt agreements during these visits.

The responsibility for implementing decisions belongs with the executive. However, in decisions relating to defence matters, particularly arms procurement, the Ministry of Defense does not have much freedom of action. The military recommends and the Ministry concurs. Decisions on the type of weapon systems to be purchased are made basically by the user service of the armed forces.

This situation is changing. The Minister of Defense participates increasingly in arms procurement decisions as a result of a policy of enhancing civilian participation in defence matters. In turn, civil–military relations are being normalized with the departure of General Pinochet as Commander-in-Chief in March 1998. During Edmundo Pérez Yoma’s tenure as Minister of Defense, the defence community began to take shape and facilitated a dialogue between the leaders in the executive branch to develop an explicit defence policy. With this change, arms acquisitions became a part of the decision agenda of the Minister of Defense. At the same time, the process of coordination between the MOD and the three armed services that is described in section III above began to emerge, since the executive branch had to authorize specific purchases by issuing corresponding executive orders.

Historically, in Chile the decision-making elite is a group that has led the country from the political, economic and cultural points of view—in essence the leaders of political parties, the military, businessmen and intellectuals. In the case of arms procurement decisions, however, the position has been rather different, for three major reasons.

First, the degree of autonomy the armed forces enjoy and access to procurement funds under the Copper Law allow them to implement their own decisions as to the armaments they need and to remove arms procurement decisions from the political arena.<sup>45</sup> Under the legal system in force, they have ample room for action. The most important decision-making levels are those within the individual armed services. As mentioned above, to change decisions that have been made by the armed forces is politically difficult.

Second, it is difficult for the elites to participate more actively in arms procurement decision making because of the technical nature of the matters involved. This has also prevented active participation by civilians in general, a situation which dates back to the time of the enactment of the Copper Law in 1958 when it was decided to exclude this issue from congressional debate. The issue has only recently begun to be analysed again as an integral part of public policy. This accounts for the establishment of agencies such as the Academia Nacional de Estudios Políticos y Estratégicos (ANEPE, the National Academy for Strategic and Political Studies), attached to the MOD. Other agencies (like FLACSO, the Facultad Latinoamericana de Ciencias Sociales, research units in

<sup>45</sup> Pattillo (note 18), p. 6.

the universities and colleges, and specialized centres in each of the armed services) have also started studying defence issues.

Third, the secret or 'reserved' nature of this field results in a lack of civilian involvement. The current administration is trying to change this without losing sight of the strategic element involved in arms procurement and to make the process more transparent. The *Libro de la Defensa Nacional* is evidence of this.

Furthermore, the political elite has historically paid no real attention to military issues or arms procurement decision making. Under the military government analysis of such issues was restricted to the military so that the new generation of the political elite is not familiar with the subject; the democratic governments have given priority to other issues, such as health and education.

### **Monitoring processes**

Chile is a country with a low level of corruption in the government. Cases of corruption are occasional and there are no major networks of state corruption. To date, the problem has been limited to isolated cases. Instances of corruption in arms procurement have not come to light, probably because access to information is restricted and the arms suppliers are the only actors who can report on corrupt practices. Historically, there has been almost no corruption in the military generally.

There are no constitutional or other provisions to compel the government to provide information on the purchase of weapons or any other related matter to the public or the media. The latter are therefore forced to obtain information directly from the armed forces and depend on the willingness of the agency involved to make information available. The Defense Committees of the Congress have the right to information but in general their meetings are secret. Moreover, if the Congress is to be able to ask the right questions, it needs a permanent advisory expert staff which would constantly monitor national defence and arms procurement issues.

There are no established accounting practices in Chile to scrutinize military matters. The constitution and the law have not established any special agency to monitor expenses incurred specifically by the armed forces differentiated from other state agencies.

The Office of the Comptroller General is responsible for monitoring all accounting aspects of the implementation of the state budget. It can audit the accounts for arms procurement but is not authorized to examine the choice of arms to be procured or whether value for money has been obtained. Nor is the Congress empowered to conduct this type of monitoring. Its only authority, as part of its responsibility for inspecting and monitoring public activities, is to establish a committee to determine whether any corrupt or illegal act has been committed. In early 1999, for example, a deputy asked specific questions about the legitimacy of some payments for 20 Mirage-5 combat aircraft purchased from Belgium in 1995–96. Within the established legal limits, no agency has authority to reject or criticize expenses incurred by the military.

It would not be accurate to suggest that there is ongoing coordination between the Comptroller General and the Congress. Both deal with the inspection of the state powers, but the Comptroller monitors public spending in advance, usually in relation to the budget, while the Congress is limited to intervening *ex post facto* if it suspects for any reason that there have been shortcomings in budget implementation. If this happens it can ask the Comptroller General for all the antecedents it judges to be relevant, which the Comptroller has to supply, or it can ask the Comptroller to carry out a specific investigation.

The armed forces are subject to the same procedures and controls as any other public-sector agency. The use of any funds allocated under the Copper Law must be authorized by an executive order. That is how the executive branch holds the ultimate right to veto the purchase of weaponry. Control over the movement of funds allocated by the law is exercised by the Office of the Comptroller General, but this supervision is purely administrative in nature. Funds from the Copper Law are not included in the general accounting to which the rest of the public sector is subject. Instead, they fall within a parallel system that is never consolidated. Therefore no data on the flows of funds originating from the law are available, nor is information on the commitments undertaken by the armed forces in advance of purchase. However, the final amount allocated each year is published in the CODELCO annual report.

Before 1990 the military government prohibited any examination of arms procurement decisions, and it is almost impossible to conduct a meaningful audit of these expenses as there are no parameters on which to base it. The development of a national defence policy and attempts to define a framework to ensure transparency may make it easier to analyse these matters. However, civil society has not been actively involved in this process.

### **Developing good governance through monitoring of public spending**

Although the concept of good governance is accepted in the legal framework, in terms of military expenditure and particularly in the purchase of weaponry it has not been possible to apply it because of the constraints inherited from the military regime. A prerequisite for the proper allocation of public spending is to reinforce the evaluation system of public investment, placing emphasis on programme budgeting and on linking spending to proposed goals in order to ensure efficiency.<sup>46</sup> At present, these methods are not developed in Chile. There is no possibility to create an agency to formulate a coherent defence policy or coordinate weapons purchasing. The current system is rooted in the unique professional cultures of the three branches of the armed forces, which are compartmentalized in a bureaucratic, centralized decision process that is more suited to the past than to the goals to be achieved.

<sup>46</sup> Lahera, E., 'Políticas públicas: un enfoque integral' [Public policy: an integrated approach], ed. E. Lahera, *Cómo Mejorar la Gestión Pública* [How to improve public administration] (Corporación de Investigaciones Económicas para Latinoamérica (CIEPLAN) and FLACSO: Santiago, 1993).

External control of military expenditures is minimal. Although there are some indicators of control being exercised by agencies external to the military, for instance, by the Office of the Comptroller General on actual budget spending, no specific mechanism is currently in place to control and evaluate how the armed forces spend the funds allocated by the Copper Law. Control is limited to a form of negotiation between the armed forces and the executive branch, represented by the Minister of Defense and the President's authorization of all arms procurement. Since the start of the second administration of the CPD, such executive control as exists has been exercised prior to decision on a purchase by the Minister of Defense and CONSUDENA. The role of the Congress is perfunctory.

### **Sociology of national decision-making behaviour**

Even after Chile became a republic, the decision-making processes were controlled by the political elite, a carry-over from the original landowners who made all the political decisions. In the mid-19th century new political and social groups and in the 20th century the professional middle classes and the state bureaucracy began to participate in national politics.

The return to democracy allowed the development of a system of cooperative alliances of political parties which adopted non-confrontational approaches. The parties are not attempting to change society radically but rather to manage and control the economy in order to reduce social inequality. These political coalitions are a distinct feature that has emerged recently. The political platforms of the first two administrations of the CPD have been similar, the first emphasizing the transition to democracy, the second the modernization of the state and its agencies.

In the current decision-making process, two groups have emerged among the political elite—the traditionalists and the technocrats. The first is made up of politicians who base their actions on political negotiation and the second of professional experts who are also members of a political party. The technocrats first appeared on the scene under the military government and continued to be influential, particularly in economic issues. In the field of defence policy making their influence felt is limited, although their participation is increasing.

There is a public perception that the political parties have distanced themselves from civil society, which increasingly feels less represented. New points of reference will have to be considered in planning policies in the future.<sup>47</sup> A campaign to raise citizens' awareness of their role in managing the affairs of the state will indirectly increase the need to know about national defence issues.

<sup>47</sup> The decrease in active political participation, particularly among younger people, became evident when almost 1 million young people failed to register to vote in the last congressional elections. Navia, P., 'Tendencias de participación electoral en Chile en 1997' [Tendencies in electoral participation in Chile in 1997], *Chile 97: Análisis y Opiniones* (FLACSO: Santiago, 1998), pp. 61–86. In 1993, with a population eligible to vote of 8 925 000, only 8 044 163 were registered. In 1997, with an eligible electoral population of 9 425 000, only 8 069 163 were registered to vote. In the elections of deputies in Dec. 1997, only 5 733 714 voters voted, considerably fewer than in 1993, when 6 738 889 voted.

## VII. Conclusions: the ideal decision-making process for arms procurement in Chile

Two related areas can be identified as the basis of the 'ideal type' arms procurement decision-making process for Chile. First, it is necessary to determine the most suitable process for resource allocation, monitoring and evaluation. Second, the current lack of a systematic approach to national defence will have to be addressed.

The current system of resource allocation in Chile needs to be modified. It is not reasonable that the funds for arms procurement are not closely linked to any coherent national strategic plan developed by the national security apparatus but relate to exogenous events, such as the expected exports of CODELCO or the international price of copper, which have no bearing on the price of weapons. The current arms procurement system based on export income from CODELCO should be changed to a consistent method of harmonizing resource allocation priorities with national security perceptions. The amount allocated to procurement should also not be determined by arithmetical proportions but according to objective criteria of national defence priorities.

Funding for arms procurement should be included in the national budget. The funding criteria should be based on medium- and long-term defence policies. If these issues are to be taken into account in the budget, the legislature will need to participate in examining the appropriateness of allocations. Thus, the issue will no longer be subject to confidentiality. However, the Congress will need to build capacities to conduct independent analysis for national strategic assessment and build up data as well as experience.

In order to establish an efficient decision-making process, threat analyses should be based on a comprehensive approach to national defence, in which the three branches of service should participate to coordinate their requirements in a coherent manner. Their decisions and resource allocation methods should be monitored according to objective criteria applied by a higher-level executive entity responsible for coordinating different national security options with overall foreign and security policies. Such overall goals must be included in all analysis conducted by the different branches of service and integrated into the subsequent evaluation made by the senior entity when funding is being sought.

A higher-level agency responsible for analysing and evaluating the different projects from a broad perspective is also required. Such an agency should include experts who are qualified to conduct studies according to the different perspectives and time horizons required by national defence.

General guidelines for arms procurement are currently defined at ministerial level where likely medium- and long-term strategic scenarios are analysed.<sup>48</sup> This demands knowledge of techniques beyond the scope of the training provided to military officers or their professional experience. Since the mid-1960s the armed forces have made considerable efforts to train groups of offi-

<sup>48</sup> These guidelines are restricted documents and are not published.

cers in different aspects of management at both Chilean and foreign universities. At present all three branches of service have large teams for project analysis that are capable of evaluating projects according to the different approaches required. One product of this experience is the development of institutional manuals for project evaluation that are now available in the three branches of the military.

In short, the 'ideal' process requires a global approach to security to include long-term technical and strategic studies; effective coordination between the different agencies involved; and financial forecasting to invest in the best alternatives. Such a process requires specialized skills in the society, which would increase civilian participation and legislative oversight of the decision-making process. The responsibility for final decisions would, of course, remain with the President of the Republic.