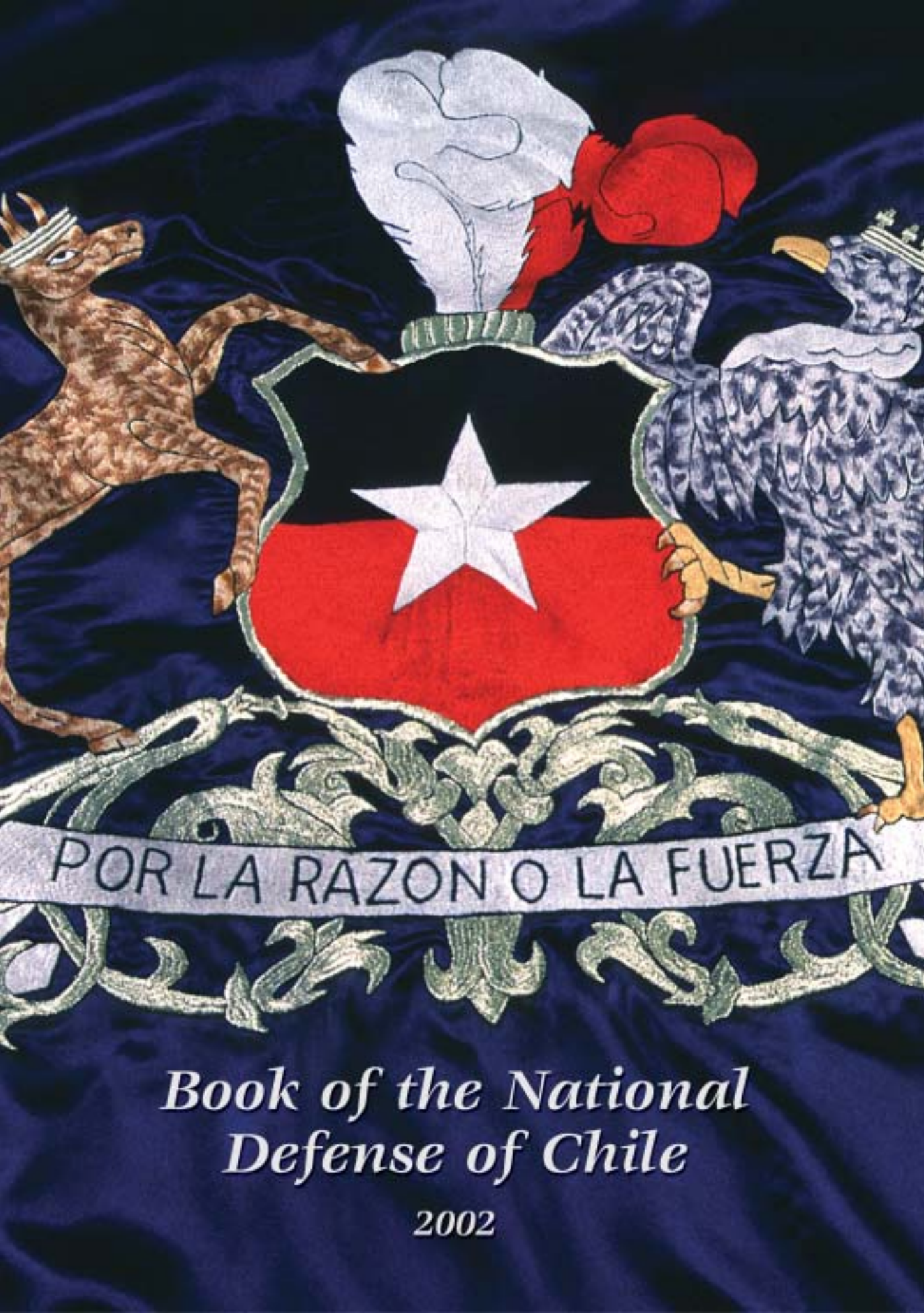


Book of the National Defense of Chile

2002

Managing Editor
Ministry of National Defense of Chile
www.defensa.cl

Telephone No.
(56-2) 222 12 02

Copyright N° 129.743 Ministry of National Defense of Chile.

ISBN: 956-7728-03-8

First edition
May 2003

Translated in April 2004

Book of the National Defense of Chile 2002

Table of Contents

Foreword
by the President of the Republic 7

Prologue
by the Minister of National Defense 9

PART I

The State of Chile 15

1. Foundations And Characteristics 16
1. Basic Principles of the State 16
1.1. Institutional Order: Democracy and the Constitutional State 17
1.2. National Objectives 17
2. Characteristics: State and Defense 17
2.1. Defense as a Function 18
2.2. Defense, Security and Development 18
2.3. Human Security 18
2.4. National Defense and the Internal Order of the Republic 19

2. The Territory and Population of Chile 20
1. The National Territory 20
2. Chilean Geography 23
2.1. The Land 23
2.2. The Sea 23
2.3. The Airspace 24
2.4. The Polar Territory 25
3. The Population of Chile 25
3.1. National Identity 27
3.2. Data and Background Information 28

PART II

Defense Environment 29

1. International Security Trends 30
1. Diversification of Actors involved in International Security 30
1.1 The Economic Agents 30
1.2 The Civil Society 31
2. Changes in International Security Concepts 31
3. The State as Coordinator and Regulator of the Globalization Process 31
4. Development of Global Governance Regimes 31
5. A Greater Demand on UN Peacekeeping Operations 32

2. International Settings that Influence Defense 33
1. The World Context 33
2. The Continental Context 34
2.1. America: A Region that Contributes to Strategic Stability 34
2.2. Threats to the Continent 34
2.3. A Governance In Security Issues 35
2.4. Interamerican Security Institutions 38
3. The Regional Context 38
4. The Neighboring Context 39
4.1. Chile and Argentina 39
4.2. Chile and Peru 41
4.3. Chile and Bolivia 41

3. International Conflicts 43
1. Risks And Threats 43
1.1. Conventional Threats 44
1.2. Non-Conventional Threats 44
2. Prevention and Reaction 45
2.1. Conventional Threats: Prevention and Reaction 45
2.2. Non-Conventional Threats: Prevention and reaction 46
3. Types of Conflicts 46
3.1. International Crisis 46
3.2. War 47

4. The Geostrategic Challenge 48
1. The Geostrategic Perspective 48
1.1. The terrestrial factor 48
1.2. The maritime factor 49
1.3. The Aerospace Factor 49
2. Conclusions of the Geostrategic Analysis of the National Territory 50

PART III

National Defense Policy 51

1. Concepts and Definitions 52
1. Objectives of National Defense 52
2. Characteristics of Chile's National Defense Policy 53
3. Reference Framework 53
4. Sources of the Defense Policy 54
4.1. National Security Policy 54
4.2. The Global Political-Strategic Assessment (AGPE) 56

2. Elements of the National Defense Policy 56
1. Elements of the Chilean Defense Policy: NDB 1997 56
1. 1. National Objectives 56
1.2. International Context 56
1.3. World and Regional Stability 57
1.4. Defense and Security 57
2. Crux of the National Defense Policy 57
3. Use of the Defense Means 57
3.1. Deterrence 57
3.2. Cooperation 58

Support Organizations 104
2.6. Branches and Services 106
3. Strategic Vision 106
3.1. Scopes of Action 106
4. The Modernization Process 107
4.1. Bases for Strategic Changes 107
4.2. Objectives of the Modernization Process 108
4.3. Stages of the Modernization Process 108
5. Planning 108
6. Women in the Army 109

2. Chilean Navy 110
1. The Navy's Mission 110
1.1. In Peacetime 110
1.2. In Wartime 110
2. Organization 111
2.1. High Command 111
2.2. High Level Organizations 111
2.3. Combat Forces 111
2.4. Special Support Organizations 112
3. Strategic Vision 112
3.1. Scopes of Action of the Navy 114
3.2. Objectives of the Navy for the Bicentennial 115
4. Planning 116
5. Management Control 117
6. Women in the Navy 117

3. The Chilean Air Force 118
1. The Mission of the Air Force 118
1.1. In Peacetime 118
1.2. In wartime 119
2. Organization 119
2.1. High Command 119
2.2. Combat Command 120
2.3. Support Units 120
2.4. Operational Units 120
2.5. Means and Capabilities 120
2.6. Support Organizations 122
3. Strategic Vision 123
3.1. Scopes of Action of the Air Force 123
4. The Modernization Process 124
5. Planning 124
6. Women in the Air Force 125

4. The Professional Education Process in the Armed Forces 126
1. Training Military Personnel 126
2. Chilean Army 126
2.1. Officers 126
2.2. Enlisted Personnel 127
3. Chilean Navy 128
3.1. Officers 128
3.2. Enlisted Personnel 128
4. Chilean Air Force 128
4.1. Officers 128
4.2. Enlisted Personnel 129

PART VI

Defense Resources 130

1. Analysis of Defense Spending 131
1. Defense Spending and its Relation to other Macroeconomic Variables 131
1.1. The Incidence of the Gross Domestic Product (GDP) 131
1.2. Level of Perceived Threats 133
2. Defense and Fiscal Expenditures 133
3. Defense Demand, GDP and Perceived Threats: Their Effects 133
4. The Armed Forces as a Purchasing Power 134

2. The Defense Budget 135
1. The Budget Structure of the Ministry of National Defense 135
2. Budget Procedures and the Allocation of Resources 136
3. Modernization of the Budget Systems 137
4. The Budgets of the Armed Forces: Distribution and Composition 137
4.1. Allocations by Use 139
4.2. The Trend in Personnel Expenditures 139

3. The Defense Procurement System 142
1. Description of the System 142
2. Economic Issues and Financial Effects 143
3. The Management Control System 143
4. Offsets 144

4. The Social Security System of the Armed Forces 146
1. Description of the System 146
2. Composition of the Social Security System Administered by Capredena 146
2.1. The Common Benefits Fund 146
2.2. The Severance Fund 147
2.3. The Curative Medicine Fund 147
2.4. The Social Help Fund 147
3. Beneficiaries and Basis of the System 148
3.1. Beneficiaries 148
3.2. The Bases for the Social Security Framework 148
4. Modernization Criteria 148
4.1. The Ongoing Situation 148
4.2. The Modernization Process 148

5. Standardized Measurement of Defense Spending 150
1. Problems of Comparative Estimates of Defense Spending 151
2. ECLAC Methodology 151

3.3. Coercive Use of Military Power 58

3. The Defense Sector and International Policies 63
1. United Nations Peacekeeping Operations (UNPKO) 63
1.1. General Considerations 63
1.2. Chile's Policy for Participation In UNPKOs 64
1.3. The Armed Forces in UNPKOs 65
1.4. Participation of Chile In UNPKOs since 1997 66
2. Mutual Confidence Measures 66
3. Instruments of Cooperation and Understanding 67
3.1. Cooperation Mechanisms 67
3.2. Cooperation Agreements 69
4. Policy on Humanitarian Demining 69
4.1. Humanitarian Demining under the Ottawa Convention 69
4.2. Humanitarian Demining and Human Security Policy 69
4.3. Implementation of the Ottawa Convention 69

4. The Defense Sector and National Policies 72
1. Territorial Policies 72
1.1. Development Policies in Border Zones 72
1.2. Development Policies in Isolated Zones 74
1.3. Policies Related to Maritime Interests 75
1.4. Antarctic Policy 76
1.5. Space Policy 77
2. Development Cooperation Policies 79
2.1. Environmental Policy 79
2.2. Military Industry 80
2.3. Science and Technology 81

PART IV

The Conduct and Organization of the National Defense 82

1. Conducting the National Defense 83
1. Conducting the National Defense 83
2. Superior Institutions of Defense 83
2.1. President of the Republic 84
2.2. Minister of National Defense 84
2.3. National Congress 84
2.4. National Security Council (COSENA) 85
2.5. Superior Council of National Security (CONSUSENA) 85
3. Conducting at the Political - Strategic Level 85
4. Conducting the Armed Forces at the Strategic Level 86
5. Military or Joint Strategic Conduct of the Armed Forces 87
6. Fields of Action 87

2. Ministry of National Defense 88
1. Organization of the Ministry of National Defense (MOD) 88
2. Offices of the Undersecretaries of the Ministry of National Defense 88
2.1. Office of the Undersecretary of War 88
2.2. Office of the Undersecretary of the Navy 89
2.3. Office of the Undersecretary of the Air Force 89
2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile) 90
2.5. Office of the Undersecretary of the Investigations Police 90
3. National Defense General Staff (EMDN) 91
4. Superior Council of National Defense (CONSUDENA) 91
5. National Academy of Political and Strategic Studies (ANEPE) 91
6. Head Office of National Mobilization (DGMN) 92

3. National Mobilization and Military Service 93
1. National Mobilization 93
1.1. Mobilization of Manpower 93
2. Compulsory Military Service 94
2.1. Modernization of Compulsory Military Service 95
3. Reserve Forces 96

4. The Armed Forces 96
1. Military Policy 96
2. Mission of the Armed Forces 97
3. Functions of the Armed Forces 97
3.1. Joint Functions 97
3.2. Common Functions 97
3.3. Specific Functions 97
4. Considerations Regarding Jointness 98
4.1. Introductory Concepts 98
4.2. The Conduct of Joint Operations 98
4.3. Joint Operations 98
4.4. Conclusions about Jointness 98
5. Interoperability 98

PART V

The Means for Defense 100

1. The Chilean Army 101
1. Mission of the Army 101
1.1. National 101
1.2. International 101
2. Organization 101
2.1. High Command 101
2.2. Operational Units 102
2.3. Means and Capabilities 102
2.4. Military Institutes Command (CIM) 104
2.5. Administrative, Logistical and Technical

Ricardo Lagos Escobar
President of the Republic of Chile

Foreword by the President of the Republic

As with all public assets, Defense must benefit everyone equally, but it is a service that can only be provided by the public sector.

This is why the citizens must take responsibility for analyzing and determining the best defense policy, including its objectives and direction, as well as the most effective and efficient way to achieve these with the public funds allocated to this sector. This second edition of the Book of Defense contributes to this analysis and allows for a more transparent discussion of these issues, at both the national and the international level. Of special importance in this sense, is the standardized measuring of military expenses in Chile and Argentine, which both countries carried out in conjunction with the United Nations Economic Commission for Latin America and the Caribbean (ECLAC). This standardized measuring constitutes an open proposal to the region as a whole and to other developing countries.

The Armed Forces are a part of Chile, a country that is integrating rapidly into the world through an open and pluralistic democratic system, which aims to ensure growth with equity. They have regained their republican status, which was ensured to them shortly after Chile obtained its independence as a nation. Today, as along with the rest of the public sector, they are working towards modernization through democracy.

Consequently, the Armed Forces participate in the living history of the Chilean people. Far from being predetermined, this history marked by our quests and by our disagreements, by our successes and our mistakes. On the national level, in a democracy, this involves a search for institutions that serve all Chilean citizens. The purpose of National Security is to assure that this effort is not interrupted by external aggression.

The Ministry of National Defense directs this process, beginning with an appraisal of the regional and global security situation, which is flexible and must incorporate the political, economic and social dynamics of international relations. Modernization involves the incorporation of strategic systems of the future, including sustained development to achieve full interoperability among the Armed Forces services.

Chile's objectives are not aggressive; they are dissuasive. Chile and its Armed Forces are working towards peace in the region and in the world. It is therefore a cause of pride to us to see our flag in Peacekeeping Operations of the United Nations.

There are still important issues that need to be addressed: a modern defense requires updating the Armed Forces social security system and reorganizing the upper echelons of the Ministry of Defense. The integration of women into the Armed Forces will be an issue of growing importance. We have also opened a debate on how the annual Defense budget should be financed.

The progress compiled in this Book of National Defense and the definitions which we, as a country, will continue to adopt in this sphere, are and will be directed towards achieving our will to guarantee peace in a safer world for all of us.

Michelle Bachelet Jeria
Minister of National Defense of Chile

Prologue by the Minister of National Defense

The publication of a National Defense Book five years after a similar text appeared for the first time in Chile, is the Chilean State's response to the commitment it made at that time. At the core of this formal commitment lies the Government's political will to evaluate the international scene and ascertain which situations have remained unchanged and which have changed, to register the international commitments in Defense issues which the country may have made during this time, and to examine their contents accordingly.

It also reflects the will of the Government to endow Defense issues with a transparency that allows Chilean citizens and the community of nations to evaluate the actions of the Chilean State in this sphere in accordance with the intentions, objectives and capabilities we have publicly stated.

With respect to our society, the text strives to provide Chileans with a greater knowledge and understanding of the tasks performed by Defense. It aims at demonstrating that issues concerning this sector are not alien to our everyday life and it attempts to be another way through which citizens can give their support to the National Defense Policy and to the men and women who make up the different institutions in this sector. For these Chileans in particular, both military and civilians, this book constitutes a working tool and a set of general guidelines for the activities they must perform.

In addition to these objectives, the Book reflects Chile's commitment to transparency towards the international community. This statement of intentions, objectives and capabilities toward other countries, helps to generate a new trust from inside and to open new doors for strategic cooperation. The publication of a Defense Book also provides the community of nations with the possibility of requiring fulfillment of declared intentions and of observing declared capabilities. In other words, it has in its hands a tool for measuring the responsibility with which a country acts on the world scene and for verifying its compli-

ance with international commitments.
This new Book of National Defense also expresses the Government's will that the broad opportunity for dialogue and work between the representatives of the State, including the Armed Forces, and other academic, political and economic actors related to or relevant to Defense issues is kept active. All of these agencies contributed their thoughts on various matters concerning our Defense to the preparation of this text.

It was certainly an exercise in integrating legitimately different perspectives: those of the military itself (land, sea, air and combined forces) and those of academic, political and technical sources from other sectors of the State and society. And this interaction took place within the framework of the political guidelines set by the President of the Republic for the Defense sector within the Constitutional legal system.

An effort of such magnitude is essential for getting the citizenry to take part in formulating a public policy, but also for the renewal of ideas, concepts and approaches. This task required an effort to organize the discussion and the resulting documentation and then to prepare successive drafts before this final text could be made available to the reader.

In summary, transparency, trustfulness and participation were, in my opinion, three important reasons that are more than a formal commitment, that propelled the Government to make the effort to publish a new version of the Book of National Defense.

The Book of the National Defense 2002

Because the 1997 text was the first of its kind, it was mainly directed towards providing an explicit definition of National Defense of a more ideological nature and towards determining its basic concepts in a common language, which largely determined the structure of the debates that took place in Chile during these last five years. In this new Book we have wanted to include the programmatic dimension of Defense. Although this edition maintains the essential ideological aspects, we believe the new text provides a clearer, more complete and more systemat-

ic product. It is truly a Book of public policy. In broad outlines, the Book of National Defense describes Chile's Defense Policy.

Complementarily, the Book takes a dynamic approach to tackling the different areas of Defense. While concepts were once approached from the point of view of how they fit into a theory, now they are treated within the framework of analysis. Where the elements of a structure were once described in statistics, they are now described dynamically in terms of how they work within that structure. Therefore, in this book the emphasis is on describing processes rather than on explaining paradigms and organizational charts.

This Book also attempts to use an more current language in the analyses it includes and in the concept references it makes. We believe that by updating the language used in discussing Defense issues that may seem to be part of outdated conceptual frameworks, they will be treated in a modern fashion, that coincides with the language used in international circles as well as in other sectors of the same Chilean State.

In terms of its contents, the new Book addresses the changes taking place on the international stage, to which our Defense Policy must respond. Chile's international commitments in security matters have been updated and the book delineates the progress made on these issues. This is particularly true with regard to participation in Peace-Keeping Operations, reporting the evolution of definitions made by the Chilean State in this respect during the last five years; to the demining obligations incurred through the signing and ratification of the Ottawa Convention; and to the standardization with other countries of the methodology for measuring defense spending. The 2002 Book also deals with the modernization process of the Armed Forces, of the Compulsory Military Service, of the Ministry of Defense itself and of the economic management and Defense resource allocation institutions. Furthermore, it addresses matters which are being currently applied or developed in the field of Defense by countries with a greater development in this area, as with the case of joint military operations and its corresponding principles.

Contrary to the conventional image that exists in some sectors of society, Defense is a field of dynamic, continuing public activity. Together with elements of continuity there are also components of change. Several of the subjects covered in this text were in the process of change as the Book went to print; and there are also some issues still needing elaboration or reflection. It is the goal of the Ministry of Defense, as these issues come up for discussion at national and international levels, to update this book with specific annexes or through separate documents.

The Defense Agenda

Certainly, this edition of the Book marks a step forward in the fulfillment of the Government's Defense Agenda. This agenda has been designed around three large, interdependent areas: updating of the contexts in which the National Defense has been molded, modernization of the Defense sector, and development of the Defense international insertion.

Part of the first of these areas is precisely the text I am now presenting to my fellow citizens and to the international community. Since Chile published the 1997 Book, debate on the generation of Defense policies within the framework of democratic regimes, and its expression in Books of Defense, has been expanding throughout the continent. Several countries have already published documents of this kind, while others are at different stages of the process. The subject has also been incorporated in the agenda of the Hemisphere Security Commission of the Organization of American States (OAS), which has continually moved this initiative forward. It is my hope that this new version of the Chilean Book will serve as an incentive to the region's efforts to continue consolidating such processes, which find in this type of document a concrete measure of the trust that all American countries are pledged to promote.

The second challenge is to continue the processes of modernizing the different institutions that comprise the National Defense, already mentioned in this Book, including institutionalizing the progress made in civilian-military relations as a result of the general effort to modernize the Chilean State.

Lastly, our Agenda includes a strong thrust toward international cooperation in security and Defense issues, in accordance with the Foreign Policy objectives of the country. We face security problems that are becoming increasingly global, and therefore common, but we also have different responses that must be harmonized with the common objective of cooperating to maintain peaceful and safe international conditions so as to be able to work for the well being of the people, including ours.

One of the main expressions of this effort is the commitment to support actions undertaken by the United Nations Organization, specifically, through participation in Peace Operations carried out under its mandate. Chile decidedly adheres to this particular commitment, which is why it has been gradually increasing its collaboration with the UN in this matter. For identical reasons we have moved forward in emphasizing the humanitarian dimension of international security issues, by fulfilling the commitments we made through the Ottawa Convention concerning the banning of Anti-Personnel Mines within the given methods and timings.

With respect to the continental situation, Chile is aware that a flexible architecture of security is emerging in the region, formed by old collective security institutions and new cooperative regimes. This new architecture has provided the American region with a growing level of stability and governance within the sphere of security and Defense, in order to face both traditional threats and threats that have emerged as a result of the globalization process.

In addition to fostering confidence building measures and developing combined exercises and actions with the Armed Forces of the region, we have encouraged other countries of the continent to adopt the Common Standardized Methodology for Measuring Defense Spending, which we established in 2001 in full agreement with Argentina. In this sense, our new Book of National Defense confirms the consolidation attained during the five years covered by the text, through the strategic association process we have promoted with Argentina, as well as through the improvement of cooperation with Peru on the basis of developing mutual trust and transparency.

I would like to conclude by thanking the political authorities of the defense sector in office during the time the Book of National Defense 2002 was being prepared. I especially wish to thank my predecessor, Minister Mario Fernández Baeza, who initiated the project and directed it during the first phases of its preparation. During the entire time of preparation of this book, the Undersecretaries of the Ministry of National Defense effectively supported both him and me. I would like to mention in particular, the Undersecretary of War, Gabriel Gaspar Tapia, who headed the work involved in preparing the Book. I would also like to thank the military authorities, especially the Chief and Vice Chief of the National Defense General Staff during that period, for the outstanding role they played in this initiative. I conclude by thanking and congratulating all the teams that worked in formulating and executing this ministry project, and in the drafting, design and printing of the final text.

Table of Contents

Foreword
by the President of the Republic 7

Prologue
by the Minister of National Defense 9

PART I

The State of Chile 15

1. Foundations And Characteristics 16
1. Basic Principles of the State 16
1.1. Institutional Order: Democracy and the Constitutional State 17
1.2. National Objectives 17
2. Characteristics: State and Defense 17
2.1. Defense as a Function 18
2.2. Defense, Security and Development 18
2.3. Human Security 18
2.4. National Defense and the Internal Order of the Republic 19

2. The Territory and Population of Chile 20
1. The National Territory 20
2. Chilean Geography 23
2.1. The Land 23
2.2. The Sea 23
2.3. The Airspace 24
2.4. The Polar Territory 25
3. The Population of Chile 25
3.1. National Identity 27
3.2. Data and Background Information 28

PART II

Defense Environment 29

1. International Security Trends 30
1. Diversification of Actors involved in International Security 30
1.1 The Economic Agents 30
1.2 The Civil Society 31
2. Changes in International Security Concepts 31
3. The State as Coordinator and Regulator of the Globalization Process 31
4. Development of Global Governance Regimes 31
5. A Greater Demand on UN Peacekeeping Operations 32

2. International Settings that Influence Defense 33
1. The World Context 33
2. The Continental Context 34
2.1. America: A Region that Contributes to Strategic Stability 34
2.2. Threats to the Continent 34
2.3. A Governance In Security Issues 35
2.4. Interamerican Security Institutions 38
3. The Regional Context 38
4. The Neighboring Context 39
4.1. Chile and Argentina 39
4.2. Chile and Peru 41
4.3. Chile and Bolivia 41

3. International Conflicts 43
1. Risks And Threats 43
1.1. Conventional Threats 44
1.2. Non-Conventional Threats 44
2. Prevention and Reaction 45
2.1. Conventional Threats: Prevention and Reaction 45
2.2. Non-Conventional Threats: Prevention and reaction 46
3. Types of Conflicts 46
3.1. International Crisis 46
3.2. War 47

4. The Geostrategic Challenge 48
1. The Geostrategic Perspective 48
1.1. The terrestrial factor 48
1.2. The maritime factor 49
1.3. The Aerospace Factor 49
2. Conclusions of the Geostrategic Analysis of the National Territory 50

PART III

National Defense Policy 51

1. Concepts and Definitions 52
1. Objectives of National Defense 52
2. Characteristics of Chile's National Defense Policy 53
3. Reference Framework 53
4. Sources of the Defense Policy 54
4.1. National Security Policy 54
4.2. The Global Political-Strategic Assessment (AGPE) 56

2. Elements of the National Defense Policy 56
1. Elements of the Chilean Defense Policy: NDB 1997 56
1. 1. National Objectives 56
1.2. International Context 56
1.3. World and Regional Stability 57
1.4. Defense and Security 57
2. Crux of the National Defense Policy 57
3. Use of the Defense Means 57
3.1. Deterrence 57
3.2. Cooperation 58

3.3. Coercive Use of Military Power 58

3. The Defense Sector and International Policies 63
1. United Nations Peacekeeping Operations (UNPKO) 63
1.1. General Considerations 63
1.2. Chile's Policy for Participation In UNPKOs 64
1.3. The Armed Forces in UNPKOs 65
1.4. Participation of Chile In UNPKOs since 1997 66
2. Mutual Confidence Measures 66
3. Instruments of Cooperation and Understanding 67
3.1. Cooperation Mechanisms 67
3.2. Cooperation Agreements 69
4. Policy on Humanitarian Demining 69
4.1. Humanitarian Demining under the Ottawa Convention 69
4.2. Humanitarian Demining and Human Security Policy 69
4.3. Implementation of the Ottawa Convention 69

4. The Defense Sector and National Policies 72
1. Territorial Policies 72
1.1. Development Policies in Border Zones 72
1.2. Development Policies in Isolated Zones 74
1.3. Policies Related to Maritime Interests 75
1.4. Antarctic Policy 76
1.5. Space Policy 77
2. Development Cooperation Policies 79
2.1. Environmental Policy 79
2.2. Military Industry 80
2.3. Science and Technology 81

PART IV

The Conduct and Organization of the National Defense 82

1. Conducting the National Defense 83
1. Conducting the National Defense 83
2. Superior Institutions of Defense 83
2.1. President of the Republic 84
2.2. Minister of National Defense 84
2.3. National Congress 84
2.4. National Security Council (COSENA) 85
2.5. Superior Council of National Security (CONSUSENA) 85
3. Conducting at the Political - Strategic Level 85
4. Conducting the Armed Forces at the Strategic Level 86
5. Military or Joint Strategic Conduct of the Armed Forces 87
6. Fields of Action 87

2. Ministry of National Defense 88
1. Organization of the Ministry of National Defense (MOD) 88
2. Offices of the Undersecretaries of the Ministry of National Defense 88
2.1. Office of the Undersecretary of War 88
2.2. Office of the Undersecretary of the Navy 89
2.3. Office of the Undersecretary of the Air Force 89
2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile) 90
2.5. Office of the Undersecretary of the Investigations Police 90
3. National Defense General Staff (EMDN) 91
4. Superior Council of National Defense (CONSUDENA) 91
5. National Academy of Political and Strategic Studies (ANEPE) 91
6. Head Office of National Mobilization (DGMN) 92

3. National Mobilization and Military Service 93
1. National Mobilization 93
1.1. Mobilization of Manpower 93
2. Compulsory Military Service 94
2.1. Modernization of Compulsory Military Service 95
3. Reserve Forces 96

4. The Armed Forces 96
1. Military Policy 96
2. Mission of the Armed Forces 97
3. Functions of the Armed Forces 97
3.1. Joint Functions 97
3.2. Common Functions 97
3.3. Specific Functions 97
4. Considerations Regarding Jointness 98
4.1. Introductory Concepts 98
4.2. The Conduct of Joint Operations 98
4.3. Joint Operations 98
4.4. Conclusions about Jointness 98
5. Interoperability 98

PART V

The Means for Defense 100

1. The Chilean Army 101
1. Mission of the Army 101
1.1. National 101
1.2. International 101
2. Organization 101
2.1. High Command 101
2.2. Operational Units 102
2.3. Means and Capabilities 102
2.4. Military Institutes Command (CIM) 104
2.5. Administrative, Logistical and Technical

Support Organizations 104
2.6. Branches and Services 106
3. Strategic Vision 106
3.1. Scopes of Action 106
4. The Modernization Process 107
4.1. Bases for Strategic Changes 107
4.2. Objectives of the Modernization Process 108
4.3. Stages of the Modernization Process 108
5. Planning 108
6. Women in the Army 109

2. Chilean Navy 110
1. The Navy's Mission 110
1.1. In Peacetime 110
1.2. In Wartime 110
2. Organization 111
2.1. High Command 111
2.2. High Level Organizations 111
2.3. Combat Forces 111
2.4. Special Support Organizations 112
3. Strategic Vision 112
3.1. Scopes of Action of the Navy 114
3.2. Objectives of the Navy for the Bicentennial 115
4. Planning 116
5. Management Control 117
6. Women in the Navy 117

3. The Chilean Air Force 118
1. The Mission of the Air Force 118
1.1. In Peacetime 118
1.2. In wartime 119
2. Organization 119
2.1. High Command 119
2.2. Combat Command 120
2.3. Support Units 120
2.4. Operational Units 120
2.5. Means and Capabilities 120
2.6. Support Organizations 122
3. Strategic Vision 123
3.1. Scopes of Action of the Air Force 123
4. The Modernization Process 124
5. Planning 124
6. Women in the Air Force 125

4. The Professional Education Process in the Armed Forces 126
1. Training Military Personnel 126
2. Chilean Army 126
2.1. Officers 126
2.2. Enlisted Personnel 127
3. Chilean Navy 128
3.1. Officers 128
3.2. Enlisted Personnel 128
4. Chilean Air Force 128
4.1. Officers 128
4.2. Enlisted Personnel 129

PART VI

Defense Resources 130

1. Analysis of Defense Spending 131
1. Defense Spending and its Relation to other Macroeconomic Variables 131
1.1. The Incidence of the Gross Domestic Product (GDP) 131
1.2. Level of Perceived Threats 133
2. Defense and Fiscal Expenditures 133
3. Defense Demand, GDP and Perceived Threats: Their Effects 133
4. The Armed Forces as a Purchasing Power 134

2. The Defense Budget 135
1. The Budget Structure of the Ministry of National Defense 135
2. Budget Procedures and the Allocation of Resources 136
3. Modernization of the Budget Systems 137
4. The Budgets of the Armed Forces: Distribution and Composition 137
4.1. Allocations by Use 139
4.2. The Trend in Personnel Expenditures 139

3. The Defense Procurement System 142
1. Description of the System 142
2. Economic Issues and Financial Effects 143
3. The Management Control System 143
4. Offsets 144

4. The Social Security System of the Armed Forces 146
1. Description of the System 146
2. Composition of the Social Security System Administered by Capredena 146
2.1. The Common Benefits Fund 146
2.2. The Severance Fund 147
2.3. The Curative Medicine Fund 147
2.4. The Social Help Fund 147
3. Beneficiaries and Basis of the System 148
3.1. Beneficiaries 148
3.2. The Bases for the Social Security Framework 148
4. Modernization Criteria 148
4.1. The Ongoing Situation 148
4.2. The Modernization Process 148

5. Standardized Measurement of Defense Spending 150
1. Problems of Comparative Estimates of Defense Spending 151
2. ECLAC Methodology 151

PART I

The Conduct and Organization of the National Defense

Chile shares with many countries, especially with those located on the American continent, a number of institutional and cultural characteristics. However, it also possesses other characteristics which distinguish it not only from them, but from the whole community of nations in general. These distinctive features are the result of the Chilean people's historical experience, its cultural heritage, its traditions, and the evolution of its public institutions from the time in which national independence was forged.

As a State, Chile participates in the international system in the same way as other countries do, but it is precisely because of these distinctive features that the Chilean State must define the particular way in which Chile take part.

The country's population with its distinctive features, the national territory and the institutions of the Republic are the objectives of National Defense.

The State's responsibility to protect the elements which are vital to it, including the sovereignty to make the decisions that affect the future of the nation, entails the need to report what we are, who we are, where we are located, and what we want. This is a pre-requisite for laying the foundations of what we want to defend. Therefore, finding a clear answer to these issues and disseminating it to the people as a whole, through a tool such as this Book of National Defense, help to outline the type of defense we need.

Because subjects related to the characteristics of the State, of the population and of the national territory are important foundations of Defense Policy, this book begins with a section devoted to these topics.

1. Foundations and Characteristics

The principles of Chile's institutional republican and democratic order and its national objectives play a crucial role among the elements on which National Defense is based. They are the foundations of the Defense architecture and they guide the State's actions in pursuit of external security. Through them we can understand the importance of the security challenges the country faces in the international arena.

1. BASIC PRINCIPLES OF THE STATE

The Political Constitution of the Republic, in its First Chapter on "Foundations of an Institutional System" establishes the principles that guide the legal and political system in Chile and that express the continuity of the nation's republican tradition.

They are principles which are also recognized by other countries also guided by the premises of a democratic regime and of respect for human beings and their rights, but to which each country imprints its personal seal in the daily process of putting them into practice.

In Chile there is broad recognition of human beings, their dignity and rights, and the communities in which they live, starting with the family. Full respect of the rights of the people require that the State abide by the objectives set out in box 1 (See Box 1).

The equality and dignity inherent to every individual are the basis for the socio-economic objectives that are a priority for the country, such

BOX 1

OBJECTIVES OF THE STATE

- To be at the service of human beings and to promote the public welfare.
- To respect and promote the essential rights that emanate from the human nature.
- To protect the family as the core of society, and to work to strengthen it.
- To protect the population.
- To promote the harmonious integration of all sectors of the country.
- To contribute to the creation of the social conditions that will allow each and every member of the national community the best possible self-realization both spiritually and materially.

as cohesion, social integration and overcoming poverty.

1.1. Institutional Order: Democracy and the Constitutional State

Chile is a democratic republic, as established in Article 4 of its Political Constitution, governed by the rule of law and the principles of constitutional supremacy, of due process, of judicial protection and oversight of State administrative actions. Within this context of democracy and pluralism, the State ensures the right of individuals to participate with equal access in national life with full use of their individual freedoms.

The State of Chile is a unified state with sovereignty over its entire continental, island and Antarctic territories, as well as over air and sea space, in accordance with the respective international laws and treaties. It exercises its sovereignty through the people and the authorities that represent them in accordance with its Political Constitution, recognizing as a limit of its actions the essential rights that emanate from human nature.

In its international relations, Chile fully adheres to the principles of peaceful resolution of conflicts, of non-intervention in the domestic affairs of other states and of respect for international law.

1.2. National Objectives

The State of Chile pursues general objectives that are set forth in its constitution, which in turn is the result of the historical experience and political and cultural heritage of the Chilean people. These objectives give rise to goals that can therefore be considered as expectations of the Chilean people as a whole. These goals guide and give consistency to the overall activities of the State, including Defense. Within this specific sphere, where they are known as permanent national objectives, these goals are the basis for the planning function. (See Box 2).

In the form in which they are expressed in box 2, these permanent national objectives are in keeping with Chile's constitutional tradition and it is the duty of each government administration, from its own political positions, to promote a public agenda that implements them. In other words, the permanent national objectives are updated and carried out through decisions, instruments and actions that express the politic will of the Chilean democratic institutions.

Governments prepare these up-dated (or political) national objectives for a varying periods of time, but the time schedules they set don't generally end with their own terms of office.

Naturally, it is easier to get citizens to make a commitment to defense and security if there is a greater awareness and consensus concerning the final objectives to be attained.

2. CHARACTERISTICS: STATE AND DEFENSE

The primary functions of the Chilean State are domestic governance, foreign relations and administration of justice, gathering and allocation of financial resources and defense. Generally speaking, the functions of defense are to protect the population, to preserve the national territory and to safeguard the State's capability to exercise its sovereignty when faced with external threats to these fundamental elements of the country, as well as to support the achievement of national objectives in the international sphere.

Defense must be considered a public asset in an overall sense. It fulfills a basic social function for the existence of society that only the State can provide. As part of the security which the country needs, Defense helps to make society's development possible.

2.1. Defense as a Function

Defense is an asset available to all members of the national community; once it is produced no-

BOX 2

NATIONAL PERMANENT OBJECTIVES

- Preservation of the Chilean nation.
- Conservation and enrichment of its identity and cultural patrimony.
- Maintenance of its political independence.
- Maintenance of its sovereignty.
- Maintenance of its national territorial integrity.
- The achievement of high, sustained and sustainable economic development.
- The achievement of a social development that harmonizes with economic development and is based on individual capabilities and equal opportunity for all.
- Maintenance of a peaceful and cooperative coexistence among civilians.
- International projection.
- Maintenance of good international relations.

body enjoys it to the detriment of others. In order to guarantee this effect, it is necessary that the following conditions be met:

a) The monopoly of the legitimate force must belong to the State.
b) The State must organize it, endow it with resources and assign objectives of national significance.
c) The State must carry out this task continuously over time, whether in peace or war.
d) The exercise of this function must encompass all State entities needed for Defense since its sphere of action exceeds the limits of what is strictly military.

2.2. Defense, Security and Development

The relationship between defense and security and development is one of the most complex among those existing in the public sphere. This complexity is due to theoretical and political doctrines arisen after II World War, as well as to the tendency to use some concepts as interchangeable.

The security of the nation cannot be defined as any State action directed towards preserving the nation's institutional legal system and ensuring the free exercise of its sovereignty both internally and externally. Rather, it is the result of a series of actions carried out by the State in order to make progress in achieving its objectives and safeguarding national interests when dealing with significant risks, threats or interference. Therefore, the establishment of security becomes desirable since it allows for the implementation of the objectives set forth by the nation and the State, particularly those of social and economic development.

National security is achieved through well-defined state functions. External security is basically achieved through diplomatic and defense functions. Internal security is achieved through the "Domestic Order" function and security against catastrophes is achieved through the "Civil and Environmental Protection" function. The implementation of each one of these functions requires an organic structure capable of planning and execution, a supporting legal framework, funding and a guiding policy.

Even though security and defense are closely related, the concept of defense is more specific than that of security. Defense does not inherently produce the security desired, but it is certainly one of the essential factors in achieving it.

Defense contributes to the security of the country, through both deterrence and international cooperation. One of the ways cooperation takes place is through the participation in peacekeeping operations, in military interchanges and in combined multinational training exercises, which are part of the array of mutual confidence measures.

Within the overall function of security and external security, and as part of security and development –which is, after all, the general objective of the State– a dynamic relationship is created, but one in which security cannot be understood as an end in itself. The State function of providing security is limited by the requirement of providing the nation's public welfare and of serving humanity. Therefore, it not ethically permissible to trample the permanent values of justice and human dignity in order to achieve the security of a nation.

2.3. Human Security

This is an emerging concept in the sphere of international policy which involves nations committing to act within the framework of International Humanitarian Law under international conflict scenarius; this commitment is similar to that which countries owe to their own citizens in matters concerning their rights and freedoms. The principal value of this concept lies in changing the concern for security issues by complementing the traditional concept which is centered on the State and shifting it to individuals, thus minimizing the negative effects produced by increasing insecurity and tensions. This introduces a new sensibility to the way security matters are handled, since it encourages an understanding approach and takes into account their multidimensional character.

This approach serves as a basis for handling problems typical of the globalization era. Many of these problems transcend the sphere of international conflicts and therefore cannot be approached through defense policies. Such is the case, for example, of efforts to reduce the existing technological gap between developed and poor countries, to reduce the impact of criminal violence in large cities or to address the consequences of a spreading pandemics such as AIDS. But the concept is applied in relation to United Nations Peacekeeping Operations and could be applied in actions taken to handle conflicts that

may give rise to crimes against humanity or cause regional crises and increase the level of insecurity among affected persons.

Although the human security approach still offers some aspects in need of a more precise definition, it represents progress in conceptualizing the notion of security and for this reason it has drawn growing international support. This is due to international law's acknowledgment of the individual and to the importance that observance of human rights has acquired in the international agenda. To help create mechanisms that truly permit safeguarding the life of each person against conventional and unconventional threats constitutes a political objective of Chile's international action.

2.4. National Defense and the Internal Order of the Republic

The functions of National Defense have to do with external security, which is defined by society's consensus of what differentiates external security from the tasks of internal order and public safety that the Political Constitution of the Republic delegates to the Police Force and the Investigations Bureau.

For certain emergency situations, Article 39 and following of the Constitution set up the rules for the use of the Armed Forces in tasks of internal order: internal war or internal disturbance, severe disruption of internal order or evident threat to national security of internal an origin, and public disaster.[1]

1 States of emergency defined in the Constitution are: a State of Siege (can be declared by the President of the Republic, with the approval of the National Congress, in the event of internal war or internal disturbance); a State of Emergency (can be declared by the President of the Republic, with the approval of the National Security Council, in the event of severe disruption of internal order, damages or threats to national security by a cause of internal origin), and a State of Catastrophe (can be declared by the President of the Republic, with the approval of the National Security Council, in the event of public disaster).

2. The Territory and Population of Chile

Protecting the territory and its population is, ultimately, the essential objective of Defense. For this reason, the distinctive features of the national territory and of the Chilean people constitute the basic references to be considered in drawing up a National Defense Policy. The following pages describe the most relevant characteristics of our territory, its geography and the people who inhabit it.

1. THE NATIONAL TERRITORY

The Chilean territory is defined and delimited by borders that are the result of existing treaties, freely and legitimately agreed upon, and by arbitral award. Of the 6,630 km comprising its borders, it shares 180 km with Peru, 850 km with Bolivia and 5,600 km with Argentina[2] (See Box 3). For administrative purposes, the land portion of the national territory is divided into thirteen regions (See Figure 1).

The area of Chile in the American continent makes it the longest and narrowest country in the world. Proportionally, it is also the country with the largest sea and air space, where international law allows the country to exercise varying degrees of sovereignty. In general, it has sovereignty over a trapezoid that borders on Peru (to the north), Bolivia and Argentina (to the east), includes Easter Island (to the west) and the South Pole. This large land space, with its corresponding sea and air space, but not including the high seas within it, is what we understand as "national territory".

The continental portion of the national territory covers a surface area of 756,626 km^2. Its peculiar geographical features have given it island characteristics: in the north, it has vast areas of desert and arid lands; in the south the Drake Pass; in the east of its territory the high Andes mountains rise, further south the mountains penetrate into the land stretching towards the ocean. The Strait of Magellan crosses the territory between the Pacific and the Atlantic Oceans.

In addition to the continental portion, the sea islands and the Chilean Antarctic Territory also form part of the Chilean territory.

The island portion of the national territory includes several islands in the South Pacific. The closest of these are the Robinson Crusoe Archi-

2 Figures are approximate.

BOX 1

EXISTING TREATIES AND BORDER AGREEMENTS

With Argentina

- Border Treaty of July 23, 1881.
- Protocol of May 1, 1893.
- Expert reports from Barros Arana and Moreno of August 29, September 3, and October 1, 1898; Minutes of Conferences between Chilean Ministry of Foreign Affairs and the Argentine Plenipotentiary Ambassador in Santiago, on September 15 and 22, 1898.
- Fourth Meeting of the Demarcation Commission (Puna de Atacama), of March 24, 1899.
- Award by His Britannic Majesty Edward VII, of November 20, 1902.
- Protocol on Reinstallation and Placement of Boundary Marks along the Chilean-Argentine Border of April 16, 1941
- Arbitration Award by Her Britannic Majesty, Elizabeth II of December 9, 1966 (Palena)
- Arbitration Award by Her Britannic Majesty, Elizabeth II of April 18, 1977 (Beagle Channel).
- Peace and Friendship Treaty of November 29, 1984.
- Presidential Statement about Boundaries between the Republic of Chile and the Republic of Argentina of August 2, 1991.
- Award by the International Arbitration Tribunal on the tracking of the borderline between Boundary Mark 62 and Fitz Roy Mount of October 21, 1994 (Laguna del Desierto).
- Agreement of December 16, 1998 to state precisely the tracking of the borderline between Fitz Roy Mount and Daudet Hill.

With Bolivia

- Peace and Friendship Treaty between Chile and Bolivia of October 20, 1904.
- Agreement relating to the Replacement of the Boundary Line along two Stretches of the Border, of May 1, 1907.
- Protocol on the Conservation of Boundary Marks and Additional Act of August 10, 1942.

With Peru

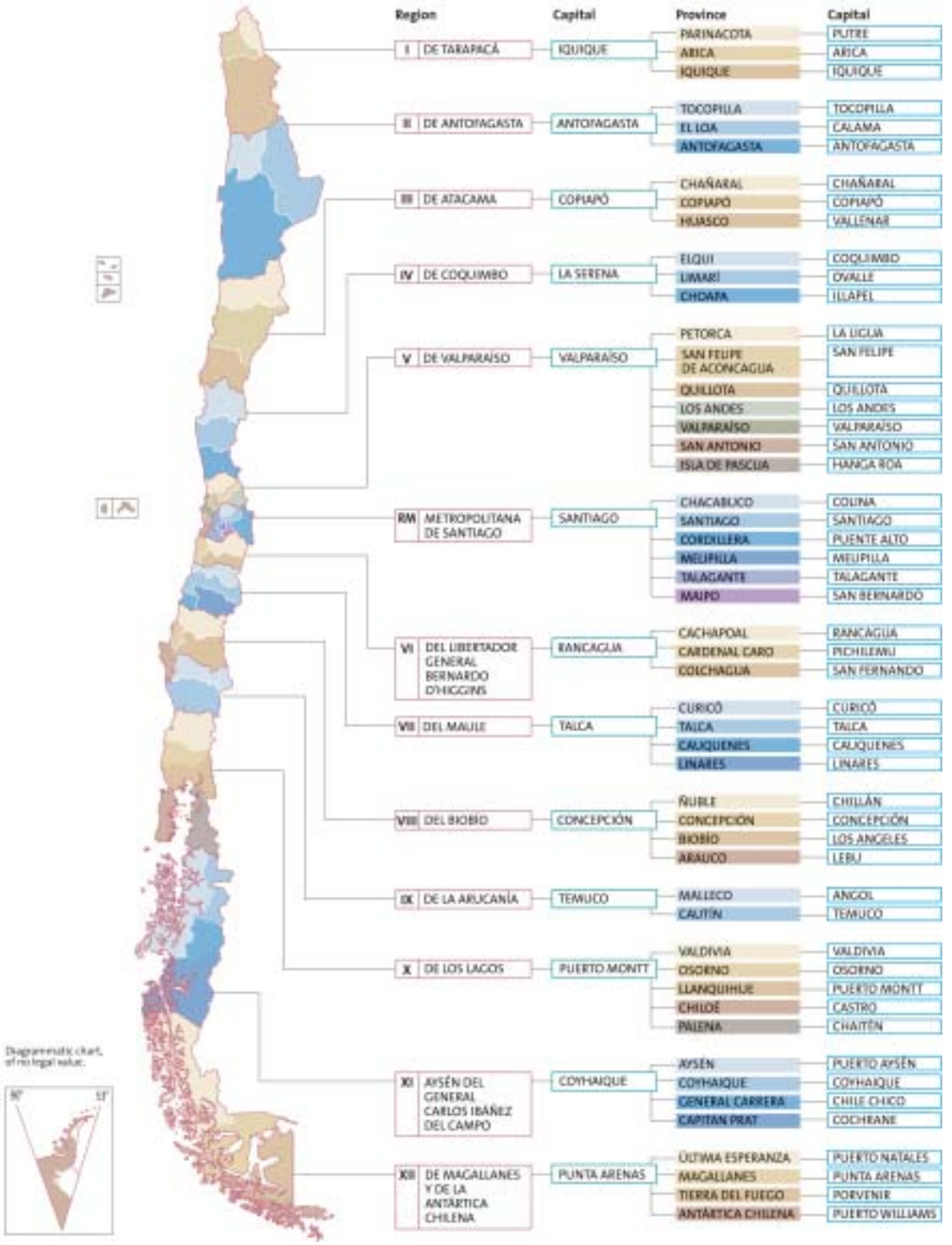
- Peace and Friendship Treaty of October 20, 1883.
- Ancillary Treaty and Protocol of June 3, 1929.
- Certificate determining the Border Line between Chile and Peru, of August 5, 1930.
- Statement about Maritime Zone of August 18, 1952 (Chile, Peru and Ecuador).
- Agreement on the Special Maritime Border Zone of December 4, 1954 (Chile, Peru and Ecuador).
- Certificate of the Chilean-Peruvian Commission for the field study for the installation of delimitation marks visible from the sea, to give form to the parallel of the maritime border originating in Boundary Mark N° 1, of 26th April 1968.
- Act of the Chilean-Peruvian Joint Commission in charge of verification of the position of Boundary Mark N° 1 and of marking up the maritime boundary, of 22nd August 1969.
- Agreement on the Conservation of Boundary Marks at the Common Border of 6th March 1997.

pelago, at 360 nautical miles (667 km) from the continent and the islands of San Félix and San Ambrosio at 500 nautical miles (926 km). The most distant ones are the Island of Sala y Gómez at 1,870 nautical miles (3,463 km) and Easter Island at 2,000 nautical miles (3,700 km) from the central coast. These latter islands enlarge the Chilean continental shelf from 200 to 350 nautical miles, which provides Chile with a total sea bed of 4,633,615 km^2, a little over six times the surface area of its South American continental territory.

The Chilean Antarctic Territory is located south of Drake Pass and beyond the South American continent, forming a rounded triangle stretching towards the South Pole between meridians 53° and 90° west, with an approximate surface area of 1,250,000 km^2. On the basis of valuable geographical, historical and juridical and administrative title deeds, these boundaries were stated precisely by Executive Decree N° 1,747, dated November 6, 1940. The area possesses potential fishing, mining and water resources, which are under investigation by several countries, includ-

FIGURE 1

Political-Administrative Map of Chile



ing ours. Chile has exploited part the marine resources; the development of potential mining resources has been banned for the next 50 years, as from February 18, 1998, when the Protocol for the Protection of the Antarctic Environment came into force. The potential of water resources from the ice represents an enormous wealth for the future, which has not been appraised.

2. CHILEAN GEOGRAPHY

The national territory is closely related to national defense, not only because its protection is one of the purposes of defense, but also because its distinctive geographical features require unique defense approaches, originating unique geostrategic problems, difficult to face and solve.

2.1. The Land

Chile's territory on the South American continent is formed by a long narrow belt which in part lies between the Andes Mountains and the Pacific Ocean, or incorporating the Andes into a vast area of its southern sector, with a profusion of islands and coastal archipelagos. Its total length is 4,300 km and its maximum width is 460 km. It is located between latitude 17°30' and 56°00' S and between longitude 66°30' and 74°40' W, not including the occasional sea islands or the Antarctic territory.

Seen from another perspective, the American territory of Chile is divided into three large geographical areas to which the sea islands and Antarctic territory must be added. The first area is located to the north of the country (regions I, II and III). It has a desert climate, a low population density, and is rich in mineral and marine resources. It is endowed with important, fully equipped ports that provide the necessary shipping services from and into Chile as well as from and into Bolivia, extending Chile's influence towards the center of the South American continent. The second area (regions IV through X) forms the large central zone. With a temperate climate, it houses more than 85% of the national population and the largest portion of industry. It is the main production and consumer sector of the country. Here are located the most important port and airport complexes of the country. They are responsible for the dispatch of 65% of national cargo. Finally, the third area, is the southern zone, (regions XI through XII). Its climate is cold, and it is characterized by the presence of a great number of islands and small coastal villages, which end at Region XII of Magallanes and the Chilean Antarctic. This latter region depends mainly on its sea and air routes to connect itself with the center of the country. Its main port, the city of Punta Arenas, also offers air and sea connections with the Antarctic continent. The interoceanic passages of the Strait of Magellan and the Drake Pass constitute salient features of the southern zone. The Beagle Channel also constitutes an important sea route in this area.

2.2. The Sea

The national sea territory is equivalent to the "Chilean Sea."[3] It comprises all the oceanic waters that bathe or encircle territories under or entitled to national sovereignty up to 200 nautical miles (370 km). Taking into account that Chile has a latitudinal coastline of 4.300 km, its sea surface area totals 3,464,462 kms^2, not including the maritime projection of the Antarctic territory, over which Chile has jurisdiction in accordance with existing international legal instruments applicable to this area. This sea area places our country in a privileged position on an ocean that is gaining in importance day by day, in addition to having, in proportion to its territory, one of the largest coastal surface areas in the world.

Within this sea territory it is necessary to keep in mind the following conceptual definitions:

a) Territorial Sea, of 12 nautical miles (22 km) of surface area, measured from the base lines, over which full sovereignty is exercised, acknowledging the right of innocent passage to foreign vessels pursuant to the terms of the United Nations Convention on the Law of the Sea.

b) Contiguous Zone, of 24 nautical miles (44 km), measured from the base lines where the width of the territorial sea is calculated. Inspections are carried out in this zone both to prevent as well as to penalize violations of customs, government, immigration or sanitary laws and regulations.

c) Exclusive Economic Zone (EEZ), understood as the sea area extending up to 200 nautical miles (370 km), measured from the

3 Defined in Executive Decree Nº 364, of May 30, 1974..

base lines, where the State exercises sovereign rights with respect to the exploitation, exploration, preservation, and administration of living and non-living natural resources that exist in the water mass, ocean floor and ocean subsoil, as well as jurisdiction with respect to the installation and use of artificial islands, facilities and structures, marine scientific research, protection and preservation of the environment and other rights recognized by the United Nations Convention on the Law of the Sea.

In addition, Chile conceives as "Presential Sea" the ocean space comprised between the border of our Exclusive Economic Zone and the meridian that going through the western side of the continental shelf of Easter Island stretches out from the parallel of Boundary Mark Nº 1 towards the Southern Pole. This concept expresses the will to have a presence in this area of high seas for the purpose of projecting maritime interests with respect to the rest of the international community, monitoring the environment and preserving marine resources, with unrestricted adherence to International Law.

The Convention on the Law of the Sea, on the drafting and approval of which Chile played an active and important role, the existence of other international agreements ratified by Chile and the existence of national legislation on the Environment, as well as the Fishing Law both currently in force and the current policy on the use of the Coastline4 are clear and intense expressions of Chile's maritime vocation. International legislation on the sea comprises a set of conventional and customary rules and regulating instruments for specialized issues that are at present under negotiation. It is essential for the country to maintain an active participation in the forums that address this issue, to express its continuing maritime vocation, to protect its sovereignty and rights on the basis of the treaties and international agreements that support them and to project its interests on this subject.

In addition to the opportunities offered to Chile to develop and exploit its maritime resources, the international law of the sea contains other important areas that our country must work on in the future to ensure essential resources. Among them, the study of the Antarctic continental shelf in the light of the principles and methods contained in the United Nations Convention on the Law of the Sea, the maritime delimitations of the Chilean Antarctic territory and the preservation of Antarctic living sea resources, in compliance with applicable regimes, need to be stressed.

With respect to trade, the sea provides a fast, safe and efficient communication route for the transportation of large volumes of cargo. The fast development of nations located at the other side of the Pacific basin, which has made them attractive markets for national and regional products, allow us to consider this ocean as an important sea faring route of fast growing activity which we must utilize and control properly. However, our export and import trade is not restricted to the Pacific basin area but also encompasses the east coast of the United States, Europe, the Middle East and all the trading centers of the world.

Statistical studies point out that approximately 90% of our foreign trade is carried by sea. Our main export product (copper) and our main import product (oil) are transported entirely by sea. Their protection, therefore, is of special importance. It is also important to safeguard live and mineral resources of our Exclusive Economic Zone, which requires permanent monitoring and means to stop depredation.

Within this context, Chile has acceded, since 1929, to the International Agreement for the Safety of Human Life at Sea, and has acquired specific responsibilities of sea rescue and salvage on the southeastern quadrant since 1953. It contributes to the General Oceanic Bathymetric Charter since 1962, acts as Coordinator of the Pacific Southeastern Maritime Area for the International Office of Hydrography since 1987 and for the Maritime Traffic Control since 1989. In addition, Chile is an active member of the Red Alert against Tsunamis on the Pacific Ocean Network. All of the above falls within the framework of a maritime zone of national responsibility exceeding the 30,000,000 kms2 measured from meridian 131º W, which the country must honor before the international community, and must have available the necessary navy and maritime means for proper fulfillment of its commitments (See Figure 2).

2.3. The Airspace

In accordance with international law, the sovereignty of the State of Chile also extends to the air space over its territory and territorial sea. This space is determined by the presence of gases, especially oxygen, which permit the flight of craft sustained on the aerodynamic resistance offered

by gases to moving objects at specific speeds. The upper limit of this space is located within a range of 80 to 100 kilometers in height which marks the border with outer space a universal heritage of humanity.

For air traffic control purposes, the International Civil Aviation Organization (ICAO) recognizes Chile's protection over an area which in general extends from the northern border (latitude 18º 21' N) to the South Pole, and from the international political boundary to the east as far as meridian 131º 00' W. As a total, the air space under Chile's control covers a surface of 26.8 millions of km2, which includes its continental and island territories, its jurisdictional waters and the high seas they contain (See Figure 3).

2.4. The Polar Territory

This cannot be confused with the land and sea territory, and least of all, with the air space.

The Chilean polar space delimited by meridians 53º y 90º West has an area of 1,250,000 kms^2.

Contemporary international law does not have universally accepted rules about the way to acquire and preserve sovereignty over polar space. It is for this reason that the Antarctic Treaty, in force since June 23, 1961, decided to restrict the use of the Antarctic to peaceful and scientific activities and placed a 30-year freeze on litigious claims without altering the positions of the signatories either in favor or against alleged sovereignties.

3. THE POPULATION OF CHILE

During the process of becoming a nation, its inhabitants developed a number of distinctive characteristics and a wide spectrum of specific features that would later differentiate it from other nations. Normally, through this same process a nation organizes itself politically into a State which it endows with the basic functions required for its development, including the function of defense. The population of a country is the most valuable asset that its defense must protect.

FIGURE 2

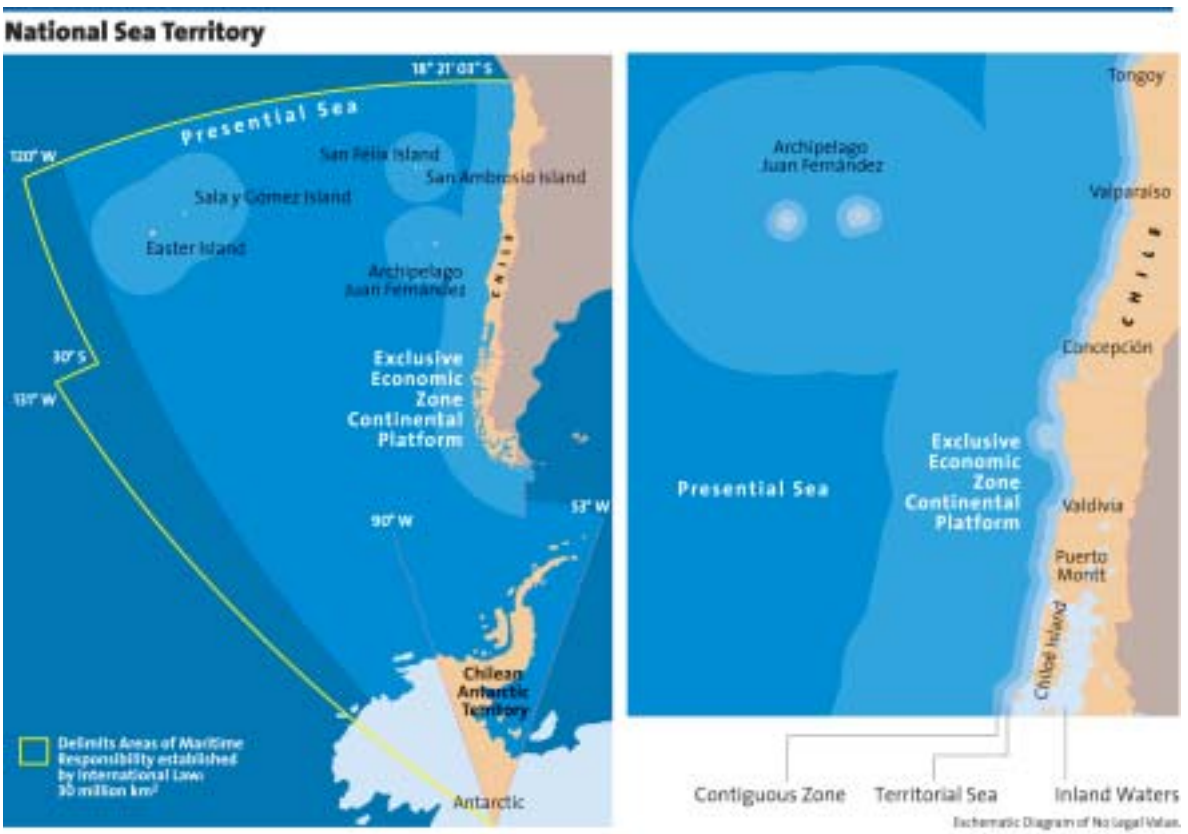


FIGURE 3

Territory under Chilean Aeronautical Control

3.1. National Identity

The defense as such is ultimately based on the most elementary parts of the national State. These parts —compiled or expressed in the Principles and Objectives of the State— correspond to elements that form part of the goods and purposes that Chile is decided to protect, since they are what give it life and provide it with an identity among the nations. Chilean society is the specific result of the combination of different ethnic groups, all of which have enriched the population of Chile5 through the mixing of races.

a) The Chilean People

From a historical perspective, the process of development of our national identity is associated with another long process: the culture mixing resulting from Spanish rule through the conquest of the territory. In Chile it began in 1535, with the arrival of the first Spanish expedition, which had traveled from Cuzco towards the southern lands. The collision of European civilization with the indigenous cultures reveals, as nothing else can, the painful and bloody process of initial syncretism in the construction of the sense and meaning of Chilean people. The imposition of the political authority of the Spanish King over the native people of the New World, and the latter's natural and legitimate rebellion, resulted in a disposition to resist adverse conditions, a legacy that would leave an imprint on both cultures and constitutes an integral part of our character.

As years went by, the shaping of language, traditions, values, customs, religion, the rules and structures, were slowly being integrated into the incipient social texture of the Capitanía General de Chile. This process denotes a feature of our identity which is already very much our own, because in no other place in America was that process so long and so hard. As a result, Spanish culture remained dominant and many elements, particularly those of a religious and cultural nature, were deeply ingrained in our ethos as a nation. Because of this, the mixing of races in Chile was very peculiar and quite different from what happened in other Spanish-American countries.

Successive social and political changes brought with them the incorporation of new elements, which were to form part of the so-called "identifying deposits". For example, the process of emancipation from Spain was a significant milestone because it produced a national feeling within the population of Chilean-born Spaniards. Republican institutionalism, the common desire to strive for progress and to a community life ruled by freedom and growing participation are components which had already been incorporated by the 19th century, even though the task of perfecting them has fallen to successive generations of Chileans

Some essential aspects of the legacy of western culture that have contributed to these "deposits" that form our national identity, are expressed in the chapter on "Institutional Foundations" of the Political Constitution: for example: the dignity of human being, the protection of the fundamental rights which such dignity requires, the consideration of the family as the core of society and the consideration of the State as an entity at the service of humanity. In short, the elements compiled in those "Institutional Foundations" constitute substantive features that society as a whole must safeguard.

b) Contribution of Defense to National Identity

The effects associated with military activity in the different periods of our history were influential in the process of shaping the national identity described above. Historians, sociologists, anthropologists and, in general, people who have studied Chilean society agree that the conflict and the human tragedy it entailed explains some of the characteristics involved in the formation of Chile as a unique national unit.

Many episodes that took place during the 19th-century conflicts, starting with the battles for independence, helped shape the traditions and symbols of the Republic and the nation. These are the traditions and symbols that have nourished the Armed Forces, which have in turn helped to transmit and revive them within society.

It should also be noted that, on the whole, during those historical moments in which new elements were incorporated into the Spanish matrix of Chilean society, already distinguished by the heritage of the struggle between the Spanish and Mapuches, other events also left their imprint on the Armed Forces: the early settling of English immigrants in the Valparaiso area and the early Britannic influence on the Navy which had already started during the battles for independence; and the importance of French culture in Chilean society in the mid-1800s, which also influenced the army. The opening of the country to German immigration at a time when Germany enjoyed its greatest prestige in 19th-Century Eu-

rope and the Prussian influence on the Army of the late 1800s and early 1900s, among others.

It can be said that during this long process, the Armed Forces have found a double role to their existence. They formally emerged as organizations in a national sense, prepared to assume the defense of the Chilean people, their territory and their sovereignty expressed in the national State. At the same time, they emerged as institutions associated with the values in which this defense is founded. To the sovereignty and freedom of spirit that sprung up from independence from Spanish rule, the demands for harmonious coexistence, for organization, for development, and for equity and stability are to be added.

3.2. Data and Background Information [6]

The number of inhabitants and the different aspects of population distribution are both relevant data from the point of view of defense, given the conditions they impose on the use of human resources which the country must use to maintain external security.

In recent years, Chile has experienced a noticeable change in its quality of life. Nevertheless, the country has remained one of the countries with a lower population growth. The census carried out in April, 2002 has revealed the variations occurring in the last ten years and statistical figures indicate that Chile's current population is 15,116,435. In other words, it has risen by 13.2% over the figures from the previous census carried out in 1992, which reported 13,348,401 inhabitants. So then, in ten years, Chile's population has increased, in absolute figures, by 1,768,034 inhabitants.

In terms of gender distribution, the number of women and men is balanced; with women numbering 7,668,740 and men 7,447,695. With regard to the population as a whole, these figures reveal that women account for 50.7% of the population and men for 49.3%. These figures are similar to those obtained in 1992. With respect to population distribution, the recent census showed that the urban population had reached 13,044,221 inhabitants (86.6%) and that the rural population totals 2,006,120 (13.4%), which places Chilean society of the early 21st century among the other modern industrialized societies of the 20th century. In addition to this information is the fact that, during these ten years, the distribution of the population by regions has not experienced a significant change, since 40,1% of the total population is concentrated in the Metropolitan Region of Santiago, 12.3% in the Bío-Bío Region and, in third place, 10.2% in the Valparaiso Region, figures that are similar to those obtained in the previous census.

Population density is presently 19.9 inhabitants per km^2. In other words, there have not been any significant changes, which indicates that the population increased more slowly than in the first half of the 20th Century.[7]

6 National Institute of Statistics [Instituto Nacional de Estadísticas (INE)], Census of 2002, Preliminary Figures. June 2002.

7 This calculation does not include the 1.250.000 kms^2 of surface area of the Chilean Antarctic Territory, and the area encompassed by interior waters, in accordance with the census methodology of INE, Census of 2002.

Table of Contents

Foreword
by the President of the Republic 7

Prologue
by the Minister of National Defense 9

PART I

The State of Chile 15

1. Foundations And Characteristics 16
1. Basic Principles of the State 16
1.1. Institutional Order: Democracy and the Constitutional State 17
1.2. National Objectives 17
2. Characteristics: State and Defense 17
2.1. Defense as a Function 18
2.2. Defense, Security and Development 18
2.3. Human Security 18
2.4. National Defense and the Internal Order of the Republic 19

2. The Territory and Population of Chile 20
1. The National Territory 20
2. Chilean Geography 23
2.1. The Land 23
2.2. The Sea 23
2.3. The Airspace 24
2.4. The Polar Territory 25
3. The Population of Chile 25
3.1. National Identity 27
3.2. Data and Background Information 28

PART II

Defense Environment 29

1. International Security Trends 30
1. Diversification of Actors involved in International Security 30
1.1 The Economic Agents 30
1.2 The Civil Society 31
2. Changes in International Security Concepts 31
3. The State as Coordinator and Regulator of the Globalization Process 31
4. Development of Global Governance Regimes 31
5. A Greater Demand on UN Peacekeeping Operations 32

2. International Settings that Influence Defense 33
1. The World Context 33
2. The Continental Context 34
2.1. America: A Region that Contributes to Strategic Stability 34
2.2. Threats to the Continent 34
2.3. A Governance In Security Issues 35
2.4. Interamerican Security Institutions 38
3. The Regional Context 38
4. The Neighboring Context 39
4.1. Chile and Argentina 39
4.2. Chile and Peru 41
4.3. Chile and Bolivia 41

3. International Conflicts 43
1. Risks And Threats 43
1.1. Conventional Threats 44
1.2. Non-Conventional Threats 44
2. Prevention and Reaction 45
2.1. Conventional Threats: Prevention and Reaction 45
2.2. Non-Conventional Threats: Prevention and reaction 46
3. Types of Conflicts 46
3.1. International Crisis 46
3.2. War 47

4. The Geostrategic Challenge 48
1. The Geostrategic Perspective 48
1.1. The terrestrial factor 48
1.2. The maritime factor 49
1.3. The Aerospace Factor 49
2. Conclusions of the Geostrategic Analysis of the National Territory 50

PART III

National Defense Policy 51

1. Concepts and Definitions 52
1. Objectives of National Defense 52
2. Characteristics of Chile's National Defense Policy 53
3. Reference Framework 53
4. Sources of the Defense Policy 54
4.1. National Security Policy 54
4.2. The Global Political-Strategic Assessment (AGPE) 56

2. Elements of the National Defense Policy 56
1. Elements of the Chilean Defense Policy: NDB 1997 56
1. 1. National Objectives 56
1.2. International Context 56
1.3. World and Regional Stability 57
1.4. Defense and Security 57
2. Crux of the National Defense Policy 57
3. Use of the Defense Means 57
3.1. Deterrence 57
3.2. Cooperation 58

3.3. Coercive Use of Military Power 58

3. The Defense Sector and International Policies 63
1. United Nations Peacekeeping Operations (UNPKO) 63
1.1. General Considerations 63
1.2. Chile's Policy for Participation In UNPKOs 64
1.3. The Armed Forces in UNPKOs 65
1.4. Participation of Chile In UNPKOs since 1997 66
2. Mutual Confidence Measures 66
3. Instruments of Cooperation and Understanding 67
3.1. Cooperation Mechanisms 67
3.2. Cooperation Agreements 69
4. Policy on Humanitarian Demining 69
4.1. Humanitarian Demining under the Ottawa Convention 69
4.2. Humanitarian Demining and Human Security Policy 69
4.3. Implementation of the Ottawa Convention 69

4. The Defense Sector and National Policies 72
1. Territorial Policies 72
1.1. Development Policies in Border Zones 72
1.2. Development Policies in Isolated Zones 74
1.3. Policies Related to Maritime Interests 75
1.4. Antarctic Policy 76
1.5. Space Policy 77
2. Development Cooperation Policies 79
2.1. Environmental Policy 79
2.2. Military Industry 80
2.3. Science and Technology 81

PART IV

The Conduct and Organization of the National Defense 82

1. Conducting the National Defense 83
1. Conducting the National Defense 83
2. Superior Institutions of Defense 83
2.1. President of the Republic 84
2.2. Minister of National Defense 84
2.3. National Congress 84
2.4. National Security Council (COSENA) 85
2.5. Superior Council of National Security (CONSUSENA) 85
3. Conducting at the Political - Strategic Level 85
4. Conducting the Armed Forces at the Strategic Level 86
5. Military or Joint Strategic Conduct of the Armed Forces 87
6. Fields of Action 87

2. Ministry of National Defense 88
1. Organization of the Ministry of National Defense (MOD) 88
2. Offices of the Undersecretaries of the Ministry of National Defense 88
2.1. Office of the Undersecretary of War 88
2.2. Office of the Undersecretary of the Navy 89
2.3. Office of the Undersecretary of the Air Force 89
2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile) 90
2.5. Office of the Undersecretary of the Investigations Police 90
3. National Defense General Staff (EMDN) 91
4. Superior Council of National Defense (CONSUDENA) 91
5. National Academy of Political and Strategic Studies (ANEPE) 91
6. Head Office of National Mobilization (DGMN) 92

3. National Mobilization and Military Service 93
1. National Mobilization 93
1.1. Mobilization of Manpower 93
2. Compulsory Military Service 94
2.1. Modernization of Compulsory Military Service 95
3. Reserve Forces 96

4. The Armed Forces 96
1. Military Policy 96
2. Mission of the Armed Forces 97
3. Functions of the Armed Forces 97
3.1. Joint Functions 97
3.2. Common Functions 97
3.3. Specific Functions 97
4. Considerations Regarding Jointness 98
4.1. Introductory Concepts 98
4.2. The Conduct of Joint Operations 98
4.3. Joint Operations 98
4.4. Conclusions about Jointness 98
5. Interoperability 98

PART V

The Means for Defense 100

1. The Chilean Army 101
1. Mission of the Army 101
1.1. National 101
1.2. International 101
2. Organization 101
2.1. High Command 101
2.2. Operational Units 102
2.3. Means and Capabilities 102
2.4. Military Institutes Command (CIM) 104
2.5. Administrative, Logistical and Technical

Support Organizations 104
2.6. Branches and Services 106
3. Strategic Vision 106
3.1. Scopes of Action 106
4. The Modernization Process 107
4.1. Bases for Strategic Changes 107
4.2. Objectives of the Modernization Process 108
4.3. Stages of the Modernization Process 108
5. Planning 108
6. Women in the Army 109

2. Chilean Navy 110
1. The Navy's Mission 110
1.1. In Peacetime 110
1.2. In Wartime 110
2. Organization 111
2.1. High Command 111
2.2. High Level Organizations 111
2.3. Combat Forces 111
2.4. Special Support Organizations 112
3. Strategic Vision 112
3.1. Scopes of Action of the Navy 114
3.2. Objectives of the Navy for the Bicentennial 115
4. Planning 116
5. Management Control 117
6. Women in the Navy 117

3. The Chilean Air Force 118
1. The Mission of the Air Force 118
1.1. In Peacetime 118
1.2. In wartime 119
2. Organization 119
2.1. High Command 119
2.2. Combat Command 120
2.3. Support Units 120
2.4. Operational Units 120
2.5. Means and Capabilities 120
2.6. Support Organizations 122
3. Strategic Vision 123
3.1. Scopes of Action of the Air Force 123
4. The Modernization Process 124
5. Planning 124
6. Women in the Air Force 125

4. The Professional Education Process in the Armed Forces 126
1. Training Military Personnel 126
2. Chilean Army 126
2.1. Officers 126
2.2. Enlisted Personnel 127
3. Chilean Navy 128
3.1. Officers 128
3.2. Enlisted Personnel 128
4. Chilean Air Force 128
4.1. Officers 128
4.2. Enlisted Personnel 129

PART VI

Defense Resources 130

1. Analysis of Defense Spending 131
1. Defense Spending and its Relation to other Macroeconomic Variables 131
1.1. The Incidence of the Gross Domestic Product (GDP) 131
1.2. Level of Perceived Threats 133
2. Defense and Fiscal Expenditures 133
3. Defense Demand, GDP and Perceived Threats: Their Effects 133
4. The Armed Forces as a Purchasing Power 134

2. The Defense Budget 135
1. The Budget Structure of the Ministry of National Defense 135
2. Budget Procedures and the Allocation of Resources 136
3. Modernization of the Budget Systems 137
4. The Budgets of the Armed Forces: Distribution and Composition 137
4.1. Allocations by Use 139
4.2. The Trend in Personnel Expenditures 139

3. The Defense Procurement System 142
1. Description of the System 142
2. Economic Issues and Financial Effects 143
3. The Management Control System 143
4. Offsets 144

4. The Social Security System of the Armed Forces 146
1. Description of the System 146
2. Composition of the Social Security System Administered by Capredena 146
2.1. The Common Benefits Fund 146
2.2. The Severance Fund 147
2.3. The Curative Medicine Fund 147
2.4. The Social Help Fund 147
3. Beneficiaries and Basis of the System 148
3.1. Beneficiaries 148
3.2. The Bases for the Social Security Framework 148
4. Modernization Criteria 148
4.1. The Ongoing Situation 148
4.2. The Modernization Process 148

5. Standardized Measurement of Defense Spending 150
1. Problems of Comparative Estimates of Defense Spending 151
2. ECLAC Methodology 151

PART II

Defense Environment

Never before has the world been so interconnected and so interdependent. Long distances have been surpassed by the speed of communications. Problems emerging in far away countries affect ours, and this forces us to be constantly monitoring and analyzing the different scenarios that have a bearing in the political and economic decisions that Chile feels are appropriate for ensuring its development.

In many ways these scenarios have a particular effect on the decisions our country must make on Defense issues. Thus is the State that must respond by drawing up a policy, which while preserving its most stable elements has the necessary flexibility to adjust to the constant changes that these scenarios experience over time. This is particularly true in present times, when these changes are faster and more comprehensive than in the past.

New technologies, new international actors and new types of threats are some of the factors influencing these changes. As a result, a new world order has emerged that forces States to look, through new international systems, for new ways of reducing the level of uncertainty in which they evolve. Finally, uncertainty remains as a component of the conditions in which the world develops.

Today, the different segments of the world scenario, the peculiarities of our regional environment, the type of relationships we keep with our neighbors, the type of threats that surround us and the geostrategic characteristics of our territory, are elements that shape our defense.

In summary, the subjects contained in the second part of the Book and issues addressed in Part I constitute the bases for Chile's National Defense Policy.

1. International Security Trends

The nation's defense policy requires a systematic analysis of the evolution of trends and in particular of international conflicts, from both a conceptual and empirical perspective. Even though the period of time from 1997 (the year in which the first Book appeared) to today is relatively short, the international system has undergone substantive changes whose influence on the sphere of defense need to be appraised.

The international analysis performed in 1997 was done using the end of the Cold War as a framework of reference and globalization as the emerging phenomenon. However, at the beginning of the 21st century, the most important characteristic of the international system is the consolidation of the globalization process which, in recent years has begun to introduce political and strategic changes of a qualitative character. Some of these transformations are the following:

1. DIVERSIFICATION OF THE ACTORS INVOLVED IN INTERNATIONAL SECURITY

Globalization has diversified the type of actors that take part in the international system which was formerly restricted to States. Transnationalization and the globalization of the economy with the consequent increase in the movement of goods, information and people, have created the necessary conditions for enterprises, non-governmental organizations inspired by the most diverse objectives, and even individuals, have all gained a greater capacity for action within international spheres, a situation that has consequences to Security and Defense.

1.1 The Economic Agents

The consolidation of globally operating markets has allowed several economic agents, particularly enterprises, to make decisions that directly affect the international system in a relatively autonomous manner and in real time. Among other effects, economic globalization has stimulated the deregulation of international economic relations, which has triggered integration processes. These processes, in turn, have encouraged the growth of cooperation among states involved in different spheres of activities –including Defense– and have brought changes in the political relationships between them. We can see this trend in several places of the world, such as Northern America, the European Union, Southern Africa, Central and South America.

1.2 The Civil Society

Diverse civil society groups, with varying degrees of organizational development, have also become international actors. Non-Governmental Organizations (NGOs) concerned about a variety of issues have developed the capacity to create international political agendas and to influence decision-making of States, either formally, through participation in international institutions, or informally through direct action. The activities of NGOs can also have direct or indirect effects on the international security sphere, and on Defense, either at the global level or at the regional and national levels. For example, the role played by NGOs was decisive for the 1997 approval of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction.

2. CHANGES IN INTERNATIONAL SECURITY CONCEPTS

The concepts of international security were formed on the basis of the fact –which was true until a few years ago– that the only actor able to exercise real political action in the international sphere was the State. With the consolidation of globalization and the emergence of new international actors, the concept of state-centered international security has undergone changes in some of its basic assumptions: the State is no longer the exclusive objective of security; there are now other claimants of security which are not the State. This is why, for some time now, the international community has been making efforts to review the concepts of international security and develop notions that take into account the new realities. These were the lines followed, for example, by the debate regarding human security - a concept first formulated by the United Nations Development Program (UNDP) in 1994.[8]

3. THE STATE AS COORDINATOR AND REGULATOR OF THE GLOBALIZATION PROCESS

It is particularly important to re-establish and define the importance of the State in the context of globalization. Even though it no longer has a monopoly on international policy and its relative power has lessened and the use of force as a mean of resolving certain types of conflicts has decreased within the framework of growing interdependence, the State still retains essential characteristics:

- It is still the only agent with the capacity to organize the democratic representation of society.
- It is still the only agent with the power to establish rules of law, either directly or indirectly, through international organizations. The effectiveness of these rules also rests ultimately with the State.
- It is still the only international actor that has the capacity for legitimate use of force during international conflicts, whether between states or within a single state.
- It is still the only actor empowered to put the lives of some of its members in jeopardy, in pursuing some of its essential objectives.
- Lastly, it is still the actor endowed with the greatest and most complex resources of power.

4. DEVELOPMENT OF GLOBAL GOVERNANCE REGIMES

Faced with the new international scenario, which has been taking shape in recent years, governments have responded by redefining concepts and practices applied in international policies, particularly within the field of security. However, as this process intensifies, some common responses have emerged. Examples are the tendency to favor a greater international cooperation, especially within the scope of the United Nations and regional organizations. If this trend is adequately supported by countries it can contribute to international security, even in cases where disparities observed in the capacities of states interested in cooperation make it difficult. International agencies for cooperation are becoming more and more effective instruments for addressing international conflict between states (the 'traditional agenda'). There are many examples of this trend, particularly the strategic agreements between Russia, the United States and the North Atlantic Treaty Organization (NATO).[9]

8 See the United Nations Development Program (UNDP) 1994 Report on Human Development. The Chilean position on matters of human security appears in Part I, Chapter II, of this report.

9 On May 14, 2002, the United States and Russia signed a treaty on the disarmament of the strategic nuclear stockpiling. On May 28, 2002, Russia was accepted as a member of NATO.

A similar development has arisen in the case of the 'new security agenda', generally comprised of elements derived from the globalization process. In effect, even though they face problems of a different nature (generally threats of a non-state character and with a transnational dimension), the most efficient responses are those based in intensifying international cooperation, which has been particularly evident in the case of the international struggle against terrorism.

In summary, the globalization process has had, until now, an apparently paradoxical result: while it has reduced the State's monopoly on international politics, it has also strengthened the State's role in those issues in which is still the sole irreplaceable actor. In addition, although globalization sets conditions for the appearance of "asymmetrical threats", it has also reinforced the importance of international regimes of cooperation in those areas where cooperation is of interest to states. During this time, an important portion of international politics remains in the hands of state management, but international regimes have expanded in proportion to the expansion of globalization and a more complex and diversified international agenda that requires coordination among governments. In this manner, international regimes have began to interrelate as institutions through which countries attempt, with varying degrees of success, to bring some governability to the process of changes taking place in the international sphere.

5. A GREATER DEMAND ON UN PEACE-KEEPING OPERATIONS

The need for international cooperation has created growing demands on the United Nations to perform its essential mission of world peacekeeping established in its founding Charter signed in the city of San Francisco (USA), in 1945, by different countries, among them, Chile.

For half a century, the structure of the UN consisted basically of reacting to situations that required peacekeeping efforts. Over time, particularly beginning in the 1990s, the United Nations has reformed its structure to make it able to respond to the increasing demands for operations aimed at establishing or imposing peace, an issue that requires different political and military capabilities clearly superior to the current ones. This reorganization requires reaffirming the legitimacy of the United Nations as the only institution accepted by the international community to use force in resolving international security problems under the regulations described in its founding Charter.

The new requests for UN peace operations require organic solutions and more elaborate objectives since they involve changing from military operations to intervene between fighting parties who have reached a peace or cease-fire agreement, or verifying cease-fires, which are relatively simple tasks, to peace imposition operations with different rules of engagement and which often involve the objective of organizing a government. The UN agency for maintaining peace and security has become more complex and has changed into a huge, sophisticated network of political and strategic decision-making, as well as crisis management. These are the kind of decisions and actions that require more efficient political and military coordination within the UN and between it and participating countries and taking into account the participation and coordination of other actors from international institutions, transnational civil organizations and even the mass media.[10]

10 For more information about Chile's state policy on issues of participation in UN peacekeeping operations, please see Part III, Chapter 2.

2. International Settings that Influence Defense

The classification of settings adopted here must be understood in the following way: the world context is the whole international sphere; the continental context is the entire American continent; the regional context refers to South America; the subregional context refers to areas or zones within this region, and the neighboring context consists of Chile's bordering countries.

1. THE WORLD CONTEXT

During the last decade, after the end of the Cold War, a kind of global governing system has been taking shape. As mentioned in the previous chapter, this concept describes a phenomenon still in its developing stages. Although its nature is still in flux, the term is used for a number of procedures and institutions linked to each other on the basis of shared values: among them the promotion of democracy, mandatory observance of human rights, growing deregulation of the international economy and a preference for cooperation as the political option to address a sophisticated international agenda of a global and transnational nature.

Countries with differing degrees of power and influence participate in this system, which is also comprised of other international actors, including blocs of countries and non-state actors. It should be noted that not all actors participating in this system share identical approaches to these values or adopt each and every one of the international mechanisms through which they are expressed.

The existence of this system of cooperation does not mean that countries are prevented from taking unilateral action when they consider it necessary. Moreover, the international security framework that this system has created is not incompatible with the creation of bilateral alliances (United States-Japan, for example) or of multilateral alliances of a regional scope (collective security of NATO). However, it has opened a space for the establishment of a concept of "democratic peace",[11] as well as a propensity to limit and inhibit the use of force as a means of resolving conflicts in the geographical areas where its influence is greater.

11 "Democratic peace" is understood as possibility of an armed conflict between democratic countries being low in comparison to other types of political regimes.

The United States continues to maintain its supremacy on the world map, particularly on military issues. However, the European Union, Russia, China and Southeast Asia share the economic and political power.

The propensity to establish large political or commercial-political blocs (NAFTA, EU, APEC, MERCOSUR) has increased, placing new demands and projecting new responsibilities on the exercise of state sovereignty, which is acquiring different dimensions in the decision-making sphere at the international level.

With regard to perceived threats, terrorism in its various manifestations and associations, ethnic struggles, drug trafficking, corruption, depletion of natural resources and trends toward religious fundamentalism, are the issues that determine the current international agenda. In some cases this leads to the polarization of some states and in others to their alignment with one pole or the other. The US interest in keeping the international struggle against terrorism at the forefront and making it the common denominator of the different national priorities on matters concerning security and Defense should be noted.

2. THE CONTINENTAL CONTEXT[12]

From a general perspective, the region's development has revolved around globalization and regional development activities. Globalization has had positive and negative effects on the continent and governments and companies of the American countries, are searching for appropriate policies to optimize their insertion into the globalization process.

Even though it still has significant features of its own, the American continent is not immune to the impact that the global tendencies are displaying on the international security agenda. In general, the countries of the continent are participating in the globalization process and largely share values and interests with the powers that give shape to the international systems engaged in making the globalization process governable. In fact, some of the most important principles that have directed the Americas Summit process have been: promotion of democracy and, in particular, democratic consolidation in the Latin American and Caribbean countries; respect for human rights; development of an international system based on the law and capable of distributing the risks and benefits of globalization more fairly; in short, the search for a more stable and safe international environment.

The analysis of the most important trends that influence the security of the continent must then consider the following elements:

2.1. America: a Region that Contributes to Strategic Stability

With the exception of the United States and Canada, the American continent is, in general, a region that remains on the fringe of the more significant international conflicts and, taken as a geographic unit, it is also an area free from intra-regional conflicts of importance. The relative strategic stability of the continent is reflected in the fact that its indicators on inter- and intra-state conflicts are the lowest in the world in spite of current potential conflicts. In accordance with information issued by the SIPRI (Stockholm International Peace Research Institute), with the exception of the Colombian conflict, America has not registered any serious conflict on its soil for over a decade. Even the conflict between Peru and Ecuador, which culminated in 1998, was not serious enough to be classified as a significant conflict.

2.2. Threats to the Continent

The American continent faces security problems of varying intensity, both conventional and unconventional. The overview provided here is a relative evaluation of the situation, based in a comparison with security conditions in other regions of the world.

a) Conventional Threats

These last few years have seen the consolidation of a decline in conflicts between nations on the American continent. However, it would be premature to state that conflicts between countries have disappeared. Some territorial issues remain between some countries, both in Central and South America, which eventually could give rise to a crisis, and therefore the policies directed toward preventing conflicts and cooperation will continue to be of major importance.

12 Part III, Chapter I: National Defense Policy gives information about continental security policies promoted by Chile.

b) Unconventional Risks and Threats

As stated previously, the unconventional risks and threats which have emerged during the globalization process affect states in different ways, and therefore each country should define perceived threats for itself, as well as the policies and instruments it will use to contend with them (See Box 4).

It is important to point out however that even if traditional and emerging problems of security can turn into threats and eventually require of the use of force on the part of the government –especially military force—, they largely originate in the difficulties the states and societies of the region face in implementing sustainable development processes that would reinforce the legitimacy of political, economic and social institutions. The solution to many of the security problems of the region is, therefore, strongly linked to the success of economic policies and to the legitimization of democracy as an efficient political regime.

2.3. A Governance in Security issues

The American institutional framework related to security and defense issues is changing from the framework of collective security, which was created during the Cold War towards a more varied and extensive system. The model combines institutions already in existence with an ever increasing number of cooperative regimes of international nature with different intended goals (continental, regional, subregional and neighboring). The different kinds of systems, as a whole,

BOX 4

THE MOST SIGNIFICANT UNCONVENTIONAL THREATS

Terrorism

Among the risks and threats that have emerged with globalization, the irruption of new forms of terrorism has been particularly severe, such as those on United States territory in September of 2001. With these attacks terrorism has become the most important threat to international security. Reactions to this type of action have varied in accordance with the intensity with which the phenomenon threatens each particular country and its capacity for response, but the general trend is to resort to greater international cooperation, a method that has also appeared among American countries.[15] In fact, the new forms of terrorism have had equivalent versions in other countries of the continent. Argentina suffered a terrorist attack on her own territory which destroyed the Jewish community building, massively affecting Argentine citizens during the 90s.

Drug Trafficking

Until the terrorist attacks against the United States in 2001, drug trafficking was the most severe threat to the continent in the globalization era. However, the illegal drug trafficking and drug use continues to grow and its importance, as a security problem for all the countries of the continent –and a defense problem for some of them– has not disappeared; especially in those countries where coca and poppy production, and drug preparation is concentrated (Andean region), those who have the main distribution routes (Central America and the Caribbean), and main consumption (United States).

Mass Migration

Generally speaking, the migratory phenomenon has acquired world relevance, and constitutes one of the most important changes associated with globalization during the 1990s. Although this process can have different manifestations (migration as a result of conflicts —displaced persons— or migration as a result of societal changes) it has challenged the capacity of receiving states to exercise effective jurisdiction over their territories and to carry out the internal and external policies they have defined for themselves as sovereign nations, thus generating a heavy political impact. At the same time, it has become an important factor in the generation of international crises among affected countries. In addition to diplomatic actions and internal measures, receiving states have sometimes been forced to use armed force, military and/or the police, to control this situation.

On the continent, beginning in the 1990s, numerous security problems have occurred which originated in illegal mass migrations, mainly to the United States, but also to other Latin American countries, and therefore this migratory issue has been included in the continental agenda.

are leading to a de-facto system that provides new solutions to new problems and strives to attain greater levels of governance for the continent, within the security context .

From a conceptual perspective, the main elements that form this developing system are the following:

a) Democracy

Democracy has been adopted as political system by nearly all the countries of the American continent. Within this context and in spite of the existing differences in the degree of progress towards the consolidation of democratic regimes, the countries of the region have developed numerous initiatives within the framework of the Organization of American States (OAS) and, later, within the wider context of the America Summits Process, directed towards the promotion and strengthening of democracy and human rights observance as the political bases that favor stability and security in the continent. This process has had several salient points during later years, of which the approval of the Santiago Commitment and OAS Democratic Charter are worthy of mention.

The existence of democracy does not inherently eliminate the risk of conflict or guarantee predictability in the international performance of states. However the international historical records indicate that democracy offers better conditions for achieving peace and stability than other political regimes, as well as greater assurance that countries will bind their mutual relations to more predictable patterns of behavior. This is due to the characteristics of the democratic system. Through the division of the powers of the State, control mechanisms and their balance, submission of authority to public scrutiny and the regulations of the Constitutional State, democracy reduces the possibilities that decisions will be left to the discretion of a one-person government.

In accordance with the Summit process, the OAS has achieved important agreements on the control of drug trafficking, especially through the multilateral certification mechanism and the set of agreements whose supervision was established at the Interamerican Commission for Drug Abuse Control (ICDAC), after the Santiago Summit. The same can be said with respect to the agreements achieved that encompass a wide spectrum of issues related to transparency in the acquisition of conventional weapons(1999) and control of light arms trafficking (1997).

With the coming of the 21st Century, the experience accumulated on the American continent during the past decade tends to confirm the above. Despite the economic and institutional difficulties that began to affect several countries by the end of the 1990s, democratic regimes have continued to exist on the continent, favoring a relatively more stable continental environment. Also contributing to this purpose is the idea that the maintenance of a stable international and continental setting is a factor that works in favor of achieving the internal stability necessary for the consolidation of democracy and which is a requisite for insertion into an unavoidable globalization process; particularly in order to be able to participate in regional and subregional integration processes that can improve each country's possibilities for taking part in globalization where competition among the different economies of the world has not disappeared.

The effectiveness of democracy has thus been acquiring a growing strategic importance and has been institutionalized through the incorporation of democratic clauses in Inter-American institutions, as well as in integration agreements including bilateral agreements.

b) Cooperative Regimes of Security

The decline in conflict situations among countries of the continent, which became clear during the 1990s, has created an opportunity for a significant increase in the will to cooperate among states and to advance towards an environment of security for all, i.e., founded on the basis of shared perception instead of on the concept of a security associated with a specific global strategy.

Within the scope of the inter-state security agenda, there are at least two principles that enjoy a growing consensus and are perceived as the driving force behind the evolution of cooperative relations: the will to make intentions and capabilities transparent and the will to reduce the perception of mutual threat through initiatives that facilitate development in bordering areas, mutual confidence measures (MCM) and armament control agreements (See Box 5).

BOX 5

PRINCIPLES OF CONTINENTAL COOPERATION

Transparency

Within the scope of transparency, it has already been mentioned that countries are making important progress with the publication or preparation of their books of defense.

Another effort to this end has been the development of common standard methodologies for measuring defense spending among the countries of the continent. Some of them, like the USA and Canada apply a methodology in use within NATO (i.e., an extra-continental alliance). However, no standard method accepted by two or more countries of the continent for comparing their respective defense spending existed until 2001. In 1997, after discussing the possibility of promoting such an initiative, Chile and Argentina approved a Common Standardized Methodology for Measuring Defense Spending, designed by the Economic Commission for Latin America and the Caribbean (ECLAC) in 2001. Subsequently, during the first half of 2002, Chile initiated similar efforts with Peru for the same purpose.

There is also a transparency system with respect to conventional arms acquired or owned. Even though its regulations are not compulsory, Chile sends annual reports to the conventional arms registers that are kept by the UN and OAS.

Mutual Confidence Measures (MCM)

In the strictly military sphere the continent has seen an increase in the application of Mutual Confidence Measures (MCM), with the objective of attenuating the perception of mutual threats, as well as of avoiding situations that could generate crises due to unexpectedness or error, thus favoring the political stability of the countries that establish them.

In broad outlines, MCMs are conditions that may or may not generate an international system. Taking into account that MCMs are not suppletory measures of defense, they cannot be conceived in such a way as to undermine the dissuasive effect of the defensive system itself, which would weaken the Defense system's capability to safeguard national possessions.

In order to produce a useful effect, they must be conceived as a means and not as an end in themselves. In addition, their special nature should be reinforced: the fact that they are applicable to concrete cases aimed at addressing "new destabilizing factors", such as unconventional threats. After analyzing and evaluating results, these measures should form part of the preparation of an international system of security through which countries would bind themselves to universal and interrelated regulations to deal with conflicts.

Arms Control

Arms control is a mechanism that helps to eliminate the possibility of conflicts thus facilitating the stability of the region.

The international community has negotiated only one multilateral instrument dealing with conventional weapons, called the "Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects". The Convention was opened for signature in 1981 and entered in force at the end of 1983. To date Chile is not a party to the convention but its signing of the convention is under legislative discussion.

It should be noted that other weapons of mass destruction are not only nuclear in nature, but also bacteriological and chemical. Even though it is a country which does not produce these types of weapons, Chile has signed the following conventions which regulate their use: the "Convention on Chemical Weapons" signed in 1993 and ratified in 1996, and the "Convention on Bacteriological (Biological) Weapons", signed in 1972 and ratified in 1980.

In addition, Latin America has benefited indirectly from the "Treaty on the Non-Proliferation of Nuclear Weapons" (TNP), which made it a nuclear-weapon-free zone. Chile ratified this treaty in May of 1995.

Chile consolidated its condition as a nuclear-weapon-free zone through the Tlatelolco Treaty. This treaty not only bans nuclear weapons but also freezes atomic development for military use at the level that each country had reached at the moment the treaty took effect. In this way it reduces the effects of disparity of military atomic development. Nevertheless, scientific development and the peaceful use of atomic energy do not oppose these treaties to which Chile is a party.

2.4. Interamerican Security Institutions

A very important feature of the evolution of security on the American continent has been the emergence, since the 1980s, of a greater variety of institutional forms than existed earlier. These forms have in fact been shaping a new architecture of cooperative security that provides a greater relative degree of governance to the continent. Today it is clear that the security institutions of the continent are not restricted to those established in the Río Agreement, in particular the Interamerican Treaty of Mutual Assistance (TIAR). In this sense the collective security system is only a portion of a wider, growing and interrelated network of collective security regimes.

This provides a more functional system to deal with the array of security problems faced by the continent: those linked to the perception of conventional threats as well as those related to unconventional risks.

The shaping of this new security architecture has been guided by two criteria: the type of security problems to which it responds (conventional or unconventional) and their scope.

Thus, for example, during the 1990s a significant number of the countries of the continent have signed and/or ratified the most relevant international instruments of the United Nations System on matters such as nonproliferation and limitation of weapons of mass destruction. Likewise, many countries of the continent have signed other international instruments, such as the Convention on Antipersonnel Mines or the treaty on Missile Technology Control, and many have coincided with the growing interest in increasing their contributions to peacekeeping operations of the United Nations.

With respect to the traditional security agenda, on the initiative of Chile and other countries, the OAS organized two regional conferences to foster Mutual Confidence Measures, one in 1995 and the other in 1999. Based on these, a monitoring mechanism has followed, which is added to the conflict prevention instruments established within the Interamerican system and the United Nations.

3. THE REGIONAL CONTEXT

The difficulties that emerged on the continent in the late 1990s, particularly in some of its regions, are associated with serious economic uncertainties and the perception of the electorate that many public and private institutions were not adequately addressing their demands in social issues or dealing with phenomena, such as corruption, that pervert the use of goods of special sensitiveness to society. Even though these difficulties do not affect all American countries, some of them could reach a situation of social anomaly and institutional uncertainty that impairs the stability that all countries need to develop sustainable political, economic and social models.

However, such difficulties have not been transferred to the sphere of security and, in fact, the decline in conflict situations between states has been of particular relevance in the South American region. A first stage was to surmount si-tuations of rivalry or conflict that affected relations on the Southern Cone area or subregion, particularly between Argentina and Brazil, as well as between Argentina and Chile. This process started in the mid 1980s and continued during the 1990s.[13] The conclusion of the Peru-Ecuador dispute was added to the change in strategic relations between Argentina, Brazil and Chile. Furthermore, in 1999 some outstanding clauses of the 1929 Treaty and its Complementary Protocol, between Chile and Peru, were finally met.

A set of agreements of regional scope has also helped to strengthen the inter-state security framework in South America. The Río Group, acting as a consensus mechanism, has held relevant dialogues on matters such as nonproliferation, disarmament, military spending, the environment, humanitarian operations and drug trafficking.

On the other hand, the experience acquired during these last two decades has demonstrated that security policies must encompass the diversity and specific rationale of the different regions of the continent. Accepting the fact that these regions have their own distinctive driving forces, it has been possible to develop, within the field of security, some particularly effective policies for

13 Chile and Argentina signed a Peace and Friendship Treaty in 1984, and Argentina and Brazil agreed, in 1991, on a control policy for nuclear substances, which comes into effect through the Brazil-Argentine Agency for Accounting and Control of Nuclear Material (ABACC).

conflict resolution or to expand cooperation at regional or subregional levels. The momentum of integration processes can be seen in different regions of the continent.

Important advances can also be seen in the subregional sphere, as is the case of the Andean Community and of the MERCOSUR zone. In this latter case, of special relevance to us, Chile expressed its political will to contribute to the subregional cooperative effort when it decided to join MERCOSUR in 1996, in spite of the fact that it has propitiated a policy of openness to foreign trade with the region and in spite of having an economic policy with features that distinguish it from the economic principles of the bloc.

Although the context of the present difficulties affecting some member countries makes progress towards newer forms of inter-state relations more complex, the truth is that MERCOSUR has acquired the characteristics of a subregional opportunity for convergence that can be useful in addressing security issues, such as the case of the issuance in 1998, of the "MERCOSUR, Bolivia and Chile Statement as a Zone of Peace". The challenge is to develop opportunities for coordination and political cooperation for the achievement of common objectives.

It is indisputable that cooperation at the bilateral level has been important to the positive changes in the subregional context, in some cases even influencing the entire region, as were the cases of the Argentina-Brazil agreement on nuclear matters and the Chile-Argentina cooperation in the field of mutual trust and transparency.

4. THE NEIGHBORING CONTEXT

From the late 1980s and during the 1990s the American countries of the Southern Cone strove to achieve political changes and to renew their development policies, an initiative that has had positive effects within the field of security and Defense, with special characteristics in each country. Some of the significant progress achieved in this field has been the result of singular bilateral goodwill agreements. Furthermore, the changes that have taken place in development models, from closed economies towards a constant opening of economies, have opened new horizons for cooperation and associations between neighboring countries, which also have an effect on the field of security and Defense. All of this certainly represents a historical transformation in the strategic relations of the Southern Cone.

4.1. Chile and Argentina

In a little over a decade Chile and Argentina have moved the focus of their relations towards cooperation, association and integration.

This change has had significant effects in the field of security and Defense. With relations moving from discord towards association, the center of strategic relations has also moved towards cooperation in identifying shared interests in this stage of globalization, integration and achievement of common objectives.

During these years, the progress experienced through this bilateral process in the area of Defense has been founded on two main pillars that have taken shape gradually: the building of trust and the search for relations of association.

a) The Building of Trust

Trust has been developed in the fields of Foreign Policy and Defense, and in this case, within the field of military policy.

In the setting of the American continent, the bilateral agenda of Chile and Argentina does not have pending border issues. On the Antarctic continent, the territories of both countries overlap by 21 geographical degrees, between longitudes 53º and 74º, where the border has not yet been defined. The two nations have mutually recognized their sovereignty between longitude 25º and 90º West, in compliance with the Vergara-La Rosa Declaration of March 4, 1948. In the Antarctic region not yet defined the two nations agreed to act with a spirit of cooperation. In 1984, with the mediation of Pope John Paul II, the Treaty of Peace and Friendship was signed, by which they definitively moved out of one of the most difficult and risky periods of bilateral relations, through the observance of international law and consolidating the explicit commitment of both countries to abstain from using force. In 1991, the Presidents of Chile and Argentina reached an agreement on 22 of the 24 border points under litigation. In this agreement they also agreed to submit the controversy of Laguna del Desierto to arbitration. The arbitration award came in 1994, and was duly obeyed. Lastly, the two nations signed in the Agreement to precisely define the border

line between Monte Fitz Roy and Cerro Daudet at Campo de Hielo Sur December of 1998 and their Congresses ratified it in 1999.

Efforts made during the bilateral process of consolidating trust were initially focused on initiatives directed towards stabilizing strictly military relations between both countries. These tasks took much of the first half of the 1990s. During the second half of the decade further progress was reached, several proposals were made in other relevant areas of Defense and from 1995 onwards both countries began to institutionalize relationships of cooperation within this field.[14]

b) Political Association and Common Policies

The second pillar on which the bilateral defense relations with the Argentine have developed has been one of a gradual convergence of policies in this field, on the basis of an enlarged agenda on common objectives within the context of globalization and integration processes.

Chile and Argentina have tended towards a growing convergence in defense matters of a world scope. One example is the importance assigned to the maintenance and building of international peace under the mandate of the United Nations. This has made it possible to carry out military exercises directed towards achieving greater cooperative operations between the two forces.

Both countries have also been able to coordinate common endeavors intended to consolidate post Cold War stability in the region. For example they have promoted the banning of weapons of mass destruction and have also played important roles in the course of the Conferences of Ministers of Defense of the Americas –the second conference was held in Argentina (Bariloche, 1995) and Chile organized the fifth (Santiago, 2002, see Box 6)[15]– and in the promotion of mutual trust both at the meeting of experts in Buenos Aires (1994) and the Conference of Santiago (1995).
Within the subregional sphere, cooperation between the two governments has acquired

BOX 6

DECLARATION OF SANTIAGO

Approved at the 5th Conference of Ministers of Defense of the Americas, the Declaration of Santiago sets forth a list of cooperative recommendations for dealing effectively with the new security problems within the region. These include:

- The regard of democracy and its institutions as essential elements for the security of the American continent.
- The importance of constitutional subordination of the Armed and Security Forces to the legitimately constituted civil authorities of each State.
- The adoption of effective policies to reduce poverty as a significant contribution towards a greater democratic stability and security in the American region.
- The rejection of all forms of terrorism and the increase of international cooperation for addressing it jointly.
- The confirmation that the region is gradually progressing towards a sophisticated security system, formed by a network of traditional and new institutions and security regimes, both collective and cooperative of a hemispheric, regional, subregional and bilateral scope and that a new architecture of flexible security has been taking form.
- The suitability of progressing in updating and systematizing the common principles for the security of the region.
- Full accession to the International Humanitarian Law, with the consequent strengthening of the introduction, integration and continuity of education programs about Human Rights and the International Humanitarian Law within the professional education process of the armed and security forces.
- The promotion of the publication of Defense Books, in accordance with the specific situation of each State.
- The promotion of transparency in the Defense budgeting process, as well as strict compliance with requirements for submitting data to the United Nations Standardized Report on Military Spending.
- The increase in the scope and efficacy of the Measures to Promote Mutual Trust and Security among States, especially the implementation of combined exercises of the Armed Forces.

14 The institutional mechanisms established are described in Part III, Chapter III.

15 The 5th Conference of Ministers of Defense of the Americas was held in Santiago, Chile, November 13-22, 2002. During the conference the "Declaration of Santiago" on the security of the American region was approved.

great importance through proposals ranging from fighting terrorism to protecting the air and Antarctic environments.

In the strictly military sphere, in 1999 the navies of Chile and Argentina began combined Antarctic navy patrols. Both navies also signed an agreement for the joint production of naval units. The first result of these agreements was the overhauling, at the Shipyard and Workshops of the Chilean Navy (ASMAR), of the destroyer Hércules, the flag-ship of the Argentine Navy. Both cases are an excellent example of the potential of military cooperation as a way of achieving common policy objectives.

4.2. Chile and Peru

A close and fruitful relation with Peru is a highly important objective to Chile, considering the geographic proximity and the potential for economic development which integration offers to both countries.

Chile and Peru have expressed coinciding points of view on different issues of global and regional interest, especially after signing the Minutes of the Chile-Peru Mixed Commission responsible for the verification of the position of border mark N°1 and to demarcate the maritime boundary, of August 19, 1969.

In later years, both countries have achieved new progress. The "Act of Execution" of the Treaty of 1929 and its Regulations, signed in 1999 under the provisions of Article 5 of that Treaty and Article 2 of its Complementary Protocol, as well as the unveiling of the Christ of the Concord at Morro de Arica, in 2000, were milestones in their relations.

In the Joint Declaration of the Presidents of Chile and Peru signed on July 30, 2001, the Heads of State of both countries agreed that the two countries are called to develop exceptional and permanent links within the framework of an associated strategy founded on the two governments will for cooperation and coordination, on shared principles, values and objectives, on their neighboring status and on a common view of the future of their respective peoples, with the purpose of promoting regional development and integration. In particular they agreed to strengthen and intensify cooperation and mutual trust relations within the scope of security and defense and agreed to develop an "homologation" process in their respective defense spending measurement systems.

On this occasion, the Heads of State arranged for the introduction of the "Two plus Two Meetings" with the establishment of a Permanent Advisory and Political Coordination Committee comprised of the Ministers of Foreign Affairs and Defense of both countries. They also agreed upon the establishment of a Defense and Security Committee (COSEDE), comprised of high-level officials of the Ministries of Foreign Affairs and Defense of each country, including the Armed Forces.

To date, this Committee has met twice: in Chile (Santiago, October 25, 2001), when they approved the "Memorandum of Understanding between the Republic of Chile and the Republic of Peru for the Strengthening of Cooperation in Matters of Mutual Interest concerning Security and Defense", and in Peru (Lima, March 26, 2002), when it agreed to establish a working group to start preparing a common methodology for measuring defense spending.

On August 23, 2002 the Presidents of Chile and Peru met in Santiago and signed a Joint Declaration and several bilateral agreements. One of them established the terms of reference to be used as a basis in the work of the experts responsible for preparing a proposal on a standard common methodology for measuring defense spending.

4.3. Chile and Bolivia

Relations with Bolivia are characterized by the sustained efforts made by the Presidents of both countries to hold talks for the purpose of achieving a higher level of cordiality and understanding on a wide variety of issues concerning development on the basis of the essential framework of these bilateral relations.

As a result, these conversations have reaffirmed the principles, treaties and agreements that sustain these relations, in accordance with which there are no outstanding territorial issues between the two countries. In turn, the free transit regime at the ports of Arica and Antofagasta, which benefits Bolivia, based on the Peace and Friendship Treaty of 1904, constitutes a basic issue to consi-der in these bilateral relations.

Since 2000, the meetings of both Presidents within the framework of multila-teral summit meetings in Brasilia, Québec, Santiago, Lima and San José de Costa Rica, reveal that relations have

reached a stage that allows for progress in the analysis of different subjects of mutual interest. Both Presidents have taken several steps towards restoring trust and thereby developing different initiatives that will help to initiate development possibilities to mutual advantage. On these occasions, specific issues of mutual interest have been analyzed, such as those concerning energy, mining, water resources, infrastructures linked to transport, cooperation in agricultural matters and regional and local cooperation.

These presidential meetings have also led to meetings on different technical issues, including the Border Committee, Political Meetings, the Joint Commission against the Drug Trafficking and negotiations on a Treaty for the Exchange of Convicts.

Today Chile and Bolivia have relations in the fields of politics, economics, national borders and culture, which represent ongoing work by various bilateral bodies and coordinated efforts in different forums of regional integration. Within this context the effective establishment of physical interconnection corridors with Bolivia, as well as project to establish a framework agreement for energy interconnection, are worthy of mention. These are some of the efforts that work towards closer relations in the fields of politics, economics and strategy.

An unprecedented event worthy of note is the visit paid by the Commander in Chief of the Army of each country at the Conferences of American Armies (CEA), when these have been held in Bolivia and Chile, respectively.

Within this general framework, there is frequent interaction with Bolivian government officials in activities related to defense — such as academic and professional events. Bolivia also participates in FIDAE (International Fair on Air and Space) which takes place every other year in Santiago. The Air Force Hospital has also treated several members of the Bolivian Armed Forces and in the field of industry ENAER (Chile's National Aeronautics Enterprise) has done some work on air force equipment for the Bolivian Air Force.

3. International Conflicts

States, the basic political units of international relations, interact within an international system that humans have gradually made progress in regulating. However, in this environment states are not free from threats that may sometimes interfere with their normal development. This suggests that conflicts continue to be one of the elements that put pressure on world environment.

1. RISKS AND THREATS

Debate about what the concept of security should entail in our contemporary world reveals the importance of the concept of threats to defense policy matters.

Threats, understood as real or perceived actions, provoked consciously or unconsciously, by a potential enemy who presumed to have the intention and capacity to affect our own interests negatively, has always been considered the central element in the structuring of a nation's defense. In effect, Defense begins by establishing what is to be protected, which are the risks or threats to the object to be defended, when this defense action should take place, and then, defining the means through which defense will act.

However, this approach leads to a conceptual distortion of the notion of threat. Although it has a strong influence in Defense planning, it does not encompass the entire spectrum of situations that modern Defense should consider. There are some fields within the scope of action of Defense that are not necessarily determined by threats, such as those that deal with cooperation and the international commitments a State must assume in a world where some contemporary processes, such as globalization, require cooperative behavior. Hence the importance of identifying the opportunities in which it is possible to act cooperatively in search for peace.

An adequate understanding of threat demands that it be considered in conjunction with other concepts, which today form part of the interests of the nation.

A series of current phenomena has led to the design of an international security agenda that is more varied and sophisticated. These issues have been analyzed in previous chapters. Suffice is to point out here that this type of phenomenon includes such items as the diversification of the actors who play a part in the international system; the emergence of new problems associated with or derived from the globalization

process; the fact that crises are emerging as a recurrent type of conflict and, lastly, the strategic changes that are becoming appa-rent at the beginning of the 21st century. It can then be said that the complexity of the international security agenda reveals a reality where traditional elements of international conflicts are mixed together with other elements that are not necessarily new but which have acquired unprecedented features in the light of the changes in the international setting following the end of the Cold War.

On the other hand, globalization has developed on the basis of a qualitative advancement of information technologies, which has introduced changes in the field of strategy that can be summarized under the heading of "Revolution in Military Affairs". These changes have produced an enormous gap, or differences in capabilities, among the states that produce high technology and those states that depend on it. Among the latter, some countries or groups of countries supported by them have tended to design strategies that allow them to achieve their objectives without becoming involved in open conflict within a setting that favors the countries that possess state-of-the-art technology. This is how "asymmetric" threats have emerged.

All this has required nations to not only set aside the view of a threat as an element isolated from other components of national interest, but to be open to new definitions of threats in addition to those considered as "traditional " or conventional. Some of these new types of threats are those called "emerging" or unconventional threats and they also include asymmetrical threats such as those against the United States and other countries, and even some in our own region.

1.1. Conventional Threats

Conventional threats to countries in the Americas are linked to security situations that have afflicted relations between them since the 19th Century. Classified as of state origin, they generally have to do with conflicts between states of a territorial or sovereignty nature. The existence of situations of this type, which can become threats, is not a thing of the past within the contemporary world or the region. That is to say, the current international situation and the emergence of new types of threats, does not rule out traditional threats.

Traditional threats can have an internal or external origin:

a) Internal Threats

Internal threats are those that emerge inside a country and affect both the normal functioning of legitimately established institutions and coexistence and national development. It is common practice for democratic states to have available an array of nonmilitary instruments to meet these threats, the use of which is constitutionally and legally regulated, as well as the potential intervention of national military forces.[16] Therefore this type of threat is of interest here only to the extent to which they can generate situations of internal crises that may result in international crises affecting sovereignty or the territory and triggering the political and/or military intervention of third parties for their resolution or control.

b) External Threats

External threats are those that affect the State and originate outside its borders. Behind them is a political will –either state or non-state in character– to cause a specific effect and they are therefore deliberate actions.

1.2. Non-conventional Threats

Unconventional threats are characterized by situations not necessarily linked to states. Many of them are situations of a social or transnational nature.

The existence of these threats introduces a factor of conceptual difficulty because they combine typically domestic issues with external security considerations, or they influence a nation's domestic environment and spread from there to the international arena. This implies the need to define clearly the role that the Armed Forces should play in these matters.

In this respect, there is consensus in Chile regarding the idea that unconventional threats generally constitute security-related problems rather than Defense ones. Consequently, Chile should deal with them through the Order and Security Forces. The role reserved for the Armed Forces is to offer their support to State authorities and to the police forces in these matters, in compliance with the rules of law currently in force. With regard to the international sphere, the defense policy supports the nation's foreign

16 For the case of Chile, see Part I, Chapter I.

policy in that it should address these threats through interstate cooperation under established agreements.

These are threats that do not originate from sources equivalent to the state that is challenged, but although their perpetrators are militarily inferior, they can cause serious damage to a state. They are characterized by their high degree of unpredictability.

Some of the significant issues in unconventional threats discussed in the region during the last few years are:

a) The Difficulty of a Single Agenda
The principle of the 1997 National Defense Book –that unconventional threats do not affect states in the same way or with the same intensity– has been confirmed in recent years. In effect, the impact of these issues on each country varies in accordance with the perspective of each State.

For this reason, it is difficult to establish a single agenda on new threats for the continent.

b) Ordering of Priorities
Just as it is difficult to establish a single agenda for unconventional threats for the entire continent, setting priorities in addressing them is also a complex task. Even if regional discussions established the use of a single agenda, the fact that emerging threats have a different urgency or priority for each country would be difficult to avoid.

This is why prevention and international cooperation presently appear to be the best and most effective way available for addressing this type of threat facing the continent.

c) Diversified Response
Even though no country is exempt *a priori* from the danger of unconventional threats, even asymmetric threats, their impact on the countries of the continent varies in function of constants such as geographical location and size, or variables such as strategic importance or the range of the State's material and human resources. Therefore, the way in which each country deals with them and joins international commitments to prevent or combat them is also different.

2. PREVENTION AND REACTION

In order to cope with different threats, countries adopt precautionary and reaction measures in the form of public policies aimed at preventing or combating each situation that can be detected in the described scenarios. For each kind of threat, the State will prepare a public policy for prevention and reaction, with the necessary components to implement the processes of decision-making and actions required to counteract their effect.

2.1. Conventional Threats: Prevention and Reaction

In general, countries identify potential situations in which conventional threats could materialize. These potential situations have been labeled "conflicts hypothesis" and are generally characterized by:

- Their origin varies based on their wolrd geographical location.
- The identification of a hypothetical conflict is different from its probability of occurrence.
- Within the context of interaction and cooperation, the probability of a hypothetical conflict materializing decreases and this decrease, in turn, stimulates the will to identify new opportunities for interaction and cooperation.

Although "conflicts hypothesis" have a low rate of probability in the region, they still constitute potential situations and, therefore entail a potential risk. These potential threats persist for Hispanic nations, either as unresolved border demarcation problems arising from the administrative structure of the Spanish Empire, which was transferred to the newly independent nations, or from antagonisms resulting from armed conflicts between them or between one of them and another country, or as a consequence of or associated with a propo-sal to review current treaties or differences in the interpretation of instruments, particularly if they have been executed.

The integration and cooperation processes in different areas of the American continent, which began at the end of the 20th century and still continue, have been accompanied by the challenge of generating trust so as to remove those elements that make for potential conflict in those areas and to promote progress towards closer relations between states. This process,

which could eventually resolve these potential conflicts, progresses at varying rates, since it depends on the political will of states to promote its progress.

In this process, the Armed Forces can play an active role in establishing new ties of cooperation within its sphere of action, but they must not deviate from the constitutional role which the State assigns to them.

In this sense it does not seem appropriate to reduce the use of Armed Forces in cases of traditional potential conflicts, which have varying degrees of effect and validity. The Armed Forces act in compliance with the guidelines of a Defense Policy that is closely related to the country's foreign policy and both must follow the general direction of the Head of State in order to ensure an environment of peace that will allow the nation to make progress in ensuring the national welfare.

2.2. Non-conventional Threats: Prevention and Reaction

In addition to seeing unconventional threats as security rather than Defense issues, with the consequent effects that this view implies for the use of police and military forces, the State of Chile's approach to the challenges they pose takes the following elements into account:

- Within the current international context, the State of Chile favors cooperation among states as a means of dealing with this type of threat.
- This approach requires implementing a national intelligence system, which is presently under development.
- Defining which situations are considered threats to the security of the country and what priority should be assigned to dealing with them is an exclusive right of the Chilean State.

Based on this approach and the dynamics of international events, Chile has signed a number of agreements related to international terrorism. The most recent of these are a direct expression of the our country's commitment to the international effort against terrorism that has gathered momentum after the attacks perpetrated against Washington D.C. and New York on September 11, 2002 and round out the set of international conventions and protocols that Chile signed earlier on the same subject (See Box 7).

3. TYPES OF CONFLICTS

The origin of international conflicts can be found in the existence of opposing interests among states, between a state and a social or political group, or between social or political groups themselves. These opposing interests can be related to historical, ethnic, social, religious, economic or ideological factors. So then, it is geopolitical reasons, economic interests or political actions that most frequently produce an international conflict, even when something else is the apparent cause.

Conflicts generally fall under one of two basic categories: crisis or war, although it is perfectly possible for one to turn into the other with no relation of continuity. In any case, the analysis presented in this Part II reveals that the type of conflict that could appear in the region in the future is that of crisis.

3.1. International Crisis

Crisis is a conflict of limited intensity involving actors in the international system attempting to achieve certain objectives through pressures or negotiations without resorting to confrontations or a generalized use of force.

From a political perspective, a crisis may occur for different reasons. The factors that can set it in motion may be found in the sphere of relations between states, but it can also have its causes in the country's domestic environment and manifest itself as an international crisis. This is the situation addressed here, when the situation brings about the involvement of third parties.

It is important to stress that not all of the causes of crises are necessarily controlled by the actors involved. Herein lies the difficulty in dealing with crises.[17] However, it may be the case that one of the actors thinks he will benefit or achieve his objectives if he moves his relations with other actors towards a crisis situation. Along these lines, history has recorded actions taken by other states with the deliberate purpose of triggering a crisis situation, which they will use as a political instrument to achieve their objectives.

17 "Crisis management" is a means of dealing with situations that could escalate in varying degrees but without resorting to a generalized use of military force.

BOX 7

AGREEMENTS RELATED TO INTERNATIONAL TERRORISM

a) Agreements signed by Chile since 2001

- International Convention for the Suppression of Terrorist Bombings, New York, December 1997 (R: September 13, 2002).
- International Convention for the Suppression of the Financing of Terrorism, New York, December 1999 (R: November 10, 2001).
- Inter-American Convention for the Prevention and Elimination of Terrorism, Barbados, signed on June 3, 2002.

b) Agreements to which Chile has been a party since 1974

- Convention on Offences and Certain Other Acts Committed on Board Aircraft, Tokyo September 14, 1963 (S: January 24, 1974).
- Convention for the Suppression of Unlawful Seizure of Aircraft, The Hague, December 16, 1970 (R: February 2, 1972).
- Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation, Montreal, September 23, 1971 (S: February 24, 1974).
- Convention on the Prevention and Punishment of Crimes against Internationally Protected Persons, including Diplomatic Agents, New York, December 14, 1973 (S: January 21, 1977).
- International Convention against the Taking of Hostages, New York, December 18, 1979 (R: November 12, 1981).
- Convention on Physical Protection of Nuclear Materials, Vienna, October 26, 1979 (R: April 27, 1994).
- Protocol on the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, Montreal, February 24, 1988 (R: August 15, 1989).
- Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, Rome, March 19, 1988 (R: April 22, 1994).
- Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf, Rome, March 10, 1988 (R: April 22, 1994).
- Convention on the Marking of Plastic Explosives for the Purpose of Detection, Montreal, March 1, 1991 (R: August 2, 2000).

S: Signed. **R:** Ratified.

History also teaches us that this type of behavior can only meet with success if such a behavior does not lead to war, that is to say, that the interests at work are not of vital importance to the actor or to the other challenged actors, so that when faced with implicit or potential punishment, the latter would resign themselves to surrender to the pressures or demands received.

Even though the defining conditions of a crisis exclude or limit the use of force, its use should always be considered. In this same way, for many different reasons there will always be the risk that the situation will not be resolved, but will escalate into a generalized use of military force. One of the most important features of a crisis is precisely the degree of uncertainty as to its effects, outcome, conclusion or escalation.

The use of the concept of crisis in all its complexity, and methods of crisis management, requires coherent, uniform conceptual criteria at all levels of Defense. At the strategic level it is also essential to have clear, well-defined rules of engagement.

3.2. War

War is a conflict in which the vital interests of a country are under threat. It is the most extreme of conflicts and commits the entire potential of the country to action.

War does not spring up suddenly; it is usually preceded by a situation of crisis. The lack of agreement in a crisis situation may lead to an escalation, which can in turn lead to the generalized use of force to achieve the desired objectives.

In war, once hostilities have been initiated, the use of military force gains in importance as the central element of a country's response. Definitively, the role of the Armed Forces is nothing more and nothing less than to crush the will to fight of the enemy forces, which can be achieved either through complete defeat or by placing them in a situation in which it would be completely useless to continue fighting.

4. The Geostrategic Challenge

Chile's geography has peculiar features that require careful study considering its defense. The variety of the geographical features within our territory comprise geostrategic characteristics that must be considered in designing and implementing the National Defense Policy. They affect both its infrastructure and the deployment of its Armed Forces during peacetime.

1. THE GEOSTRATEGIC PERSPECTIVE

From a geostrategic perspective, the following are some of the factors involved in planning for Defense:

1.1. The terrestrial factor

The nation's continental territory in the shape of a long narrow strip is one of the most important factors to consider. It requires making a choice as to where to concentrate the nation's defense efforts, since it is impossible to distribute forces along the entire length of such an extensive border. Also, the need to ration manpower and equipment increases as the distances between extreme regions increases the difficulty of executing strategic maneuvers. Lastly, the narrowness of the territory located on the South American continental shelf implies a lack of strategic transversal depth which makes it very difficult to carry out any east-west defensive action.

Access to the opposite ends of the country is difficult: the North at one end (Regions I, II and III) encompasses the world's most arid desert and the South, at the other end (Regions XI and XII) has no land link to the central area of the country.

The differences in climate and terrain require different acclimatization and training for personnel and different equipment for the different regions of the country, all of which makes mobilization and training of reserve personnel more difficult. This situation also entails logistic difficulties, since it requires maintaining equipment and materials that adapt to different altitudes and weather conditions. The result is a need for a significant investment in personnel and equipment.

The unequal distribution of the population and the low densities at opposite ends of the country require considering the transfer of manpower and material resources from the central zone

(Regions V through VIII) to those areas, making maintenance and training of reserve forces more difficult.

The country's long, narrow shape and its rough terrain pose serious challenges to the network of highways, and affect operational and logistic transportation, which implies countless provisions of all sorts, especially those resulting from national mobilization.

Due to these factors, National Defense has long had to maintain personnel and equipment permanently deployed at the extreme ends of the country, a situation that cannot be changed until there is a substantial change in the variables that make this condition imperative.

1.2. The maritime factor

The portions of the ocean of interest to the country –as described in previous sections on Chile's ocean territory and the analysis of Chile's territory and population,[18]– are of vital importance to its development, since the greatest portion of its imports and exports flow through it.

The following are some of the factors involved in defense of Chile's ocean territory:

The narrowness of the national territory and the difficulty and lack of flexibility of surface and air routes, makes it necessary to perform the majority of operational, military forces and administrative and logistical support services transportation by sea, making use of the national sea lines of communications.

The strategic importance of the straits between oceans in the south constitute a daunting task that must be taken into account in the development of any situation involving National Security and which affects the strategic deployment of the naval force.

The vast size of Chile's ocean territory forces its navy to make a substantial effort to safeguard the nation's sovereignty and provide life-saving missions, as well as to control the passage of vessels that may carry substances that are hazardous to human health as well as to the environment, in compliance with international regulations.

Guaranteeing communication by sea, both domestic and international, is a strategic imperative if a situation of crisis or conflict occurs, since interruption of these links would cause problems, in a relatively short period of time, that would affect the very survival of the country as well as jeopardize the vital support of its northern and southern tips.

The situations described above do not only require the demanding and traditional tasks of protecting our sovereignty against a military threat that may reach us by sea, or protecting the sea routes for military or trading purposes in the event of conflict. We must also be on guard against other challenging issues, such as effective protection of our vast Exclusive Economic Zone, or changes in international maritime law. This implies that, just as in the rest of the national territory, it is imperative for National Defense to make use of its influence and activities within a framework of peace in the Chile's ocean territory.

1.3. The Aerospace Factor

Within this sphere, the objective of Defense is to influence from the air, the events that take place on the land and sea. In accordance with the geographical demands of the country, the air space has features that determine the methods utilized to achieve this objective.

The following are some of the factors that affect Defense from the air perspective:

The size and shape of the national territory impose serious logistical demands and a need for land support structures for air operations. Consequently, an effective instrument of deterrence requires logistical means capable of a fast, effective reaction, which in turn requires the building and equipping of air bases for training in peacetime and operations during wartime.

The vastness of the air space under aeronautical control makes it advisable to use satellites, which permit surveillance, facilitate navigation and communication, and help meteorology. However, Chile is still a country that has to depend on the satellite technology produced by other countries, and therefore, its access to this technology and its marketing or transfer are subject to decisions taken abroad. For these reasons Chile is determined to achieve certain levels of self-sufficiency in this field of basic importance to Defense.

18 See Part I, Chapter II.

The rough terrain of the national territory limits the use of monitoring elements located on the land surface. In addition, the narrowness of the territory impo-ses serious demands on early warning alarm systems designed to anticipate air threats and react appropriately. The technological limitations imposed by the geography of the country aggravate this condition if the speed of modern combat planes and the short distances between the border and our air bases or other vital points of the country are taken into account.

Extreme weather conditions restrict the use of air weapons in some regions of the country.

The support for the other components of the military is limited by available means, but it clearly poses exacting demands on air alarms since most of the operations performed by the Army and Navy require protection from the air.

2. CONCLUSIONS OF THE GEOSTRATEGIC ANALYSIS OF THE NATIONAL TERRITORY

Analysis Considering the geostrategic factor as a whole, we must bear in mind that Chile's geography constitutes one of the most significant factors in strategic operations of the Armed Forces. Geography sets favorable or unfavorable conditions on any consideration of the use of force. While it is true that the magnitude and length of Chile's land, ocean and air borders offer potential for integration and development, they also increase the potential for conflict because, as they enhance the relations and diverse types of contacts, they also present more opportunities to increase the potential for disagreements that can lead to crisis and conflict situations when states have opposing interests.

The characteristics of the geographical factors, in the form of geographical discontinuity, long distances from the central nucleus, relative non-population of the two ends of the country and, in general, the island characteristics of the national territory, make the permanent presence of Armed Forces in the north and south regions of the country an imperative. On the other hand the scanty flexibility offered by the national land communication network, restricted by geographical features, requires the use of sea and air transportation for logistics maintenance, as well as transport, making sea lines of communications, both domestic and international, of vital importance for the survival of the country in the event of conflicts. The construction of important road works which would run parallel to the north-south National Highway 5 through the whole length of the country, would provide land transport with greater flexibility.

All these conditions, in conjunction with the weather characteristics and the land forms of the different areas of the national territory, as well as the large area of air and ocean spaces that must be guarded and protected, require different, specific ideas and solutions for each of the different theaters of operations. Each requires appropriately trained units with personnel and equipment that is suitable for the particular characteristics of each area's geography.

In most cases, forces are present to fulfill a military mission, but they also constitute a valuable contribution to national development, especially in isolated areas or areas considered isolated due to their small populations.

All these factors must be taken into account when defining the structure, organization, deployment, equipping, instruction and training of personnel that comprise the institutions of the Armed Forces, to enable them to effectively perform their essential mission.

Table of Contents

Foreword
by the President of the Republic 7

Prologue
by the Minister of National Defense 9

PART I

The State of Chile 15

1. Foundations And Characteristics 16
1. Basic Principles of the State 16
1.1. Institutional Order: Democracy and the Constitutional State 17
1.2. National Objectives 17
2. Characteristics: State and Defense 17
2.1. Defense as a Function 18
2.2. Defense, Security and Development 18
2.3. Human Security 18
2.4. National Defense and the Internal Order of the Republic 19

2. The Territory and Population of Chile 20
1. The National Territory 20
2. Chilean Geography 23
2.1. The Land 23
2.2. The Sea 23
2.3. The Airspace 24
2.4. The Polar Territory 25
3. The Population of Chile 25
3.1. National Identity 27
3.2. Data and Background Information 28

PART II

Defense Environment 29

1. International Security Trends 30
1. Diversification of Actors involved in International Security 30
1.1 The Economic Agents 30
1.2 The Civil Society 31
2. Changes in International Security Concepts 31
3. The State as Coordinator and Regulator of the Globalization Process 31
4. Development of Global Governance Regimes 31
5. A Greater Demand on UN Peacekeeping Operations 32

2. International Settings that Influence Defense 33
1. The World Context 33
2. The Continental Context 34
2.1. America: A Region that Contributes to Strategic Stability 34
2.2. Threats to the Continent 34
2.3. A Governance In Security Issues 35
2.4. Interamerican Security Institutions 38
3. The Regional Context 38
4. The Neighboring Context 39
4.1. Chile and Argentina 39
4.2. Chile and Peru 41
4.3. Chile and Bolivia 41

3. International Conflicts 43
1. Risks And Threats 43
1.1. Conventional Threats 44
1.2. Non-Conventional Threats 44
2. Prevention and Reaction 45
2.1. Conventional Threats: Prevention and Reaction 45
2.2. Non-Conventional Threats: Prevention and reaction 46
3. Types of Conflicts 46
3.1. International Crisis 46
3.2. War 47

4. The Geostrategic Challenge 48
1. The Geostrategic Perspective 48
1.1. The terrestrial factor 48
1.2. The maritime factor 49
1.3. The Aerospace Factor 49
2. Conclusions of the Geostrategic Analysis of the National Territory 50

PART III

National Defense Policy 51

1. Concepts and Definitions 52
1. Objectives of National Defense 52
2. Characteristics of Chile's National Defense Policy 53
3. Reference Framework 53
4. Sources of the Defense Policy 54
4.1. National Security Policy 54
4.2. The Global Political-Strategic Assessment (AGPE) 56

2. Elements of the National Defense Policy 56
1. Elements of the Chilean Defense Policy: NDB 1997 56
1. 1. National Objectives 56
1.2. International Context 56
1.3. World and Regional Stability 57
1.4. Defense and Security 57
2. Crux of the National Defense Policy 57
3. Use of the Defense Means 57
3.1. Deterrence 57
3.2. Cooperation 58

3.3. Coercive Use of Military Power 58

3. The Defense Sector and International Policies 63
1. United Nations Peacekeeping Operations (UNPKO) 63
1.1. General Considerations 63
1.2. Chile's Policy for Participation In UNPKOs 64
1.3. The Armed Forces in UNPKOs 65
1.4. Participation of Chile In UNPKOs since 1997 66
2. Mutual Confidence Measures 66
3. Instruments of Cooperation and Understanding 67
3.1. Cooperation Mechanisms 67
3.2. Cooperation Agreements 69
4. Policy on Humanitarian Demining 69
4.1. Humanitarian Demining under the Ottawa Convention 69
4.2. Humanitarian Demining and Human Security Policy 69
4.3. Implementation of the Ottawa Convention 69

4. The Defense Sector and National Policies 72
1. Territorial Policies 72
1.1. Development Policies in Border Zones 72
1.2. Development Policies in Isolated Zones 74
1.3. Policies Related to Maritime Interests 75
1.4. Antarctic Policy 76
1.5. Space Policy 77
2. Development Cooperation Policies 79
2.1. Environmental Policy 79
2.2. Military Industry 80
2.3. Science and Technology 81

PART IV

The Conduct and Organization of the National Defense 82

1. Conducting the National Defense 83
1. Conducting the National Defense 83
2. Superior Institutions of Defense 83
2.1. President of the Republic 84
2.2. Minister of National Defense 84
2.3. National Congress 84
2.4. National Security Council (COSENA) 85
2.5. Superior Council of National Security (CONSUSENA) 85
3. Conducting at the Political - Strategic Level 85
4. Conducting the Armed Forces at the Strategic Level 86
5. Military or Joint Strategic Conduct of the Armed Forces 87
6. Fields of Action 87

2. Ministry of National Defense 88
1. Organization of the Ministry of National Defense (MOD) 88
2. Offices of the Undersecretaries of the Ministry of National Defense 88
2.1. Office of the Undersecretary of War 88
2.2. Office of the Undersecretary of the Navy 89
2.3. Office of the Undersecretary of the Air Force 89
2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile) 90
2.5. Office of the Undersecretary of the Investigations Police 90
3. National Defense General Staff (EMDN) 91
4. Superior Council of National Defense (CONSUDENA) 91
5. National Academy of Political and Strategic Studies (ANEPE) 91
6. Head Office of National Mobilization (DGMN) 92

3. National Mobilization and Military Service 93
1. National Mobilization 93
1.1. Mobilization of Manpower 93
2. Compulsory Military Service 94
2.1. Modernization of Compulsory Military Service 95
3. Reserve Forces 96

4. The Armed Forces 96
1. Military Policy 96
2. Mission of the Armed Forces 97
3. Functions of the Armed Forces 97
3.1. Joint Functions 97
3.2. Common Functions 97
3.3. Specific Functions 97
4. Considerations Regarding Jointness 98
4.1. Introductory Concepts 98
4.2. The Conduct of Joint Operations 98
4.3. Joint Operations 98
4.4. Conclusions about Jointness 98
5. Interoperability 98

PART V

The Means for Defense 100

1. The Chilean Army 101
1. Mission of the Army 101
1.1. National 101
1.2. International 101
2. Organization 101
2.1. High Command 101
2.2. Operational Units 102
2.3. Means and Capabilities 102
2.4. Military Institutes Command (CIM) 104
2.5. Administrative, Logistical and Technical

Support Organizations 104
2.6. Branches and Services 106
3. Strategic Vision 106
3.1. Scopes of Action 106
4. The Modernization Process 107
4.1. Bases for Strategic Changes 107
4.2. Objectives of the Modernization Process 108
4.3. Stages of the Modernization Process 108
5. Planning 108
6. Women in the Army 109

2. Chilean Navy 110
1. The Navy's Mission 110
1.1. In Peacetime 110
1.2. In Wartime 110
2. Organization 111
2.1. High Command 111
2.2. High Level Organizations 111
2.3. Combat Forces 111
2.4. Special Support Organizations 112
3. Strategic Vision 112
3.1. Scopes of Action of the Navy 114
3.2. Objectives of the Navy for the Bicentennial 115
4. Planning 116
5. Management Control 117
6. Women in the Navy 117

3. The Chilean Air Force 118
1. The Mission of the Air Force 118
1.1. In Peacetime 118
1.2. In wartime 119
2. Organization 119
2.1. High Command 119
2.2. Combat Command 120
2.3. Support Units 120
2.4. Operational Units 120
2.5. Means and Capabilities 120
2.6. Support Organizations 122
3. Strategic Vision 123
3.1. Scopes of Action of the Air Force 123
4. The Modernization Process 124
5. Planning 124
6. Women in the Air Force 125

4. The Professional Education Process in the Armed Forces 126
1. Training Military Personnel 126
2. Chilean Army 126
2.1. Officers 126
2.2. Enlisted Personnel 127
3. Chilean Navy 128
3.1. Officers 128
3.2. Enlisted Personnel 128
4. Chilean Air Force 128
4.1. Officers 128
4.2. Enlisted Personnel 129

PART VI

Defense Resources 130

1. Analysis of Defense Spending 131
1. Defense Spending and its Relation to other Macroeconomic Variables 131
1.1. The Incidence of the Gross Domestic Product (GDP) 131
1.2. Level of Perceived Threats 133
2. Defense and Fiscal Expenditures 133
3. Defense Demand, GDP and Perceived Threats: Their Effects 133
4. The Armed Forces as a Purchasing Power 134

2. The Defense Budget 135
1. The Budget Structure of the Ministry of National Defense 135
2. Budget Procedures and the Allocation of Resources 136
3. Modernization of the Budget Systems 137
4. The Budgets of the Armed Forces: Distribution and Composition 137
4.1. Allocations by Use 139
4.2. The Trend in Personnel Expenditures 139

3. The Defense Procurement System 142
1. Description of the System 142
2. Economic Issues and Financial Effects 143
3. The Management Control System 143
4. Offsets 144

4. The Social Security System of the Armed Forces 146
1. Description of the System 146
2. Composition of the Social Security System Administered by Capredena 146
2.1. The Common Benefits Fund 146
2.2. The Severance Fund 147
2.3. The Curative Medicine Fund 147
2.4. The Social Help Fund 147
3. Beneficiaries and Basis of the System 148
3.1. Beneficiaries 148
3.2. The Bases for the Social Security Framework 148
4. Modernization Criteria 148
4.1. The Ongoing Situation 148
4.2. The Modernization Process 148

5. Standardized Measurement of Defense Spending 150
1. Problems of Comparative Estimates of Defense Spending 151
2. ECLAC Methodology 151

PART III

National Defense Policy

The concept of Defense is related to the action and effect of preserving the possession of an asset or of maintaining an adequate degree of freedom of action that will allow access to that asset.

National Defense can be defined as a set of human, ethical and material means with which a Nation is able to oppose an enemy's threats to its national objectives, in order to ensure its sovereignty and territorial integrity. Its purpose is to achieve the degree of external security the country needs to attain its national objectives free from external interference.

The Armed Forces constitutes the core of the instruments of Defense. These instruments are directed and organized by a state policy that expresses the will of the Chilean State to use them either in deterrent or cooperative actions during times of peace, and through military operations in wartime, to contend with external interference that threatens the achievement of our national objectives.

In short, Defense, on the one hand, protects the population, the territory, the goods and the activities that take place within the nation's boundaries and, on the other, helps to support the implementation of Chile's foreign policy that is founded on the search for a world order regulated by law and consequently, one in which all States, including ours, will be committed to the obligations that emanate from international law.

Defense can be analyzed from different perspectives: as a function, as a set of regulations, as an organization and as an economic challenge. This part of the Book basically addresses the first of these perspectives, while the others are described in the following parts.

Finally, although Defense is essentially directed towards the external security of the country, at the same time it supports the national development through the human and material resources that each one of the Armed Forces institutions possesses.

1. Concepts and Definitions

When analyzing Defense as one of the basic functions of the State, an attempt is made to explain its daily routine. The idea is to observe the wide range of activities that Defense undertakes to safeguard specific possessions that are essential to the country. This chapter addresses issues such as the objectives of Defense, the characteristics and sources of National Defense Policy, and the context in which it is applied.

1. OBJECTIVES OF NATIONAL DEFENSE

In broad outlines, Defense, on the one hand, protects the population, the territory, the goods and activities that take place within the nation's boundaries and, on the other, helps to support the implementation of Chile's foreign policy that is founded on the search for a world order regulated by law.

In order to fulfill this general purpose, Defense pursues the following objectives:

a) To preserve the independence and sovereignty of the country.
b) To maintain the integrity of the national territory.
c) To help establish the external security conditions needed to achieve the public welfare of the country.
d) To support Chile's international projection.
e) To help maintain and promote international peace and security, in accordance with national interests.
f) To contribute to national development and cooperate with the achievement of a balanced and harmonious realization of the nation's different capabilities.
g) Within the institutional sphere, to help preserve Chile's institutional system as a Democratic Republic and Constitutional State.
h) Likewise, because it embodies national traditions and symbols, to help safeguard our historical and cultural identity, but not preventing the renewal and enrichment of these traditions and symbols.
i) To contribute to the State's activities aimed at strengthening of civil society's commitment to Defense.

Furthermore, in order to achieve these objectives, Defense has a number of different instruments, among which the Armed Forces constitute the core element. These instruments are directed and organized by a state policy that expresses the will of the Chilean State to use such means in deterrent or cooperative actions during

peacetime and in military operations in wartime, to contend with external interference that threatens the achievement of our national objectives.

2. CHARACTERISTICS OF CHILE'S NATIONAL DEFENSE POLICY

Our National Defense Policy is a set of principles and criteria that guide the State's function of Defense with a view towards preserving the sovereignty and territorial integrity of our nation and to contributing to the achievement of other national objectives. It provides the general outlines for structuring, coordinating and attuning efforts made to contend with the obstacles, risks and threats that third parts may raise against national interests.

Defense Policy is a State policy and therefore it must be considered over and above all political contingencies and at the same time it transcends the projects and actions that successive governments of the country may undertake.

As a state policy it is also a public policy and, therefore, must be formulated, implemented and verified under the same general conditions as other public policies, including being subject to the approval of civilian opinion and objections. However, Defense Policy must have certain protections due the nature of some of its issues or elements, which differentiate it from other public policies. This is why is a public statement that Defense activities should be protected through special legal systems. For these reasons, Defense merits specific treatment and sensitive handling.

Like every activity of the State, Defense Policy has a dual nature of continuity and change. This sector embodies national traditions and symbols, and many of the factors that guide it are of a permanent nature or very stable over time. However, their permanence over time is only valid to the extent that they will not be changed by the emergence of new elements that have to be considered or due to shifts in the conditions behind their development. In other words, it needs sufficient energy to be able to adapt to international changes that would affect the security of the nation. In addition, it is necessary that they be consistent with the position the country takes towards the world, with risks and threats to be faced, and with the nation's geographical environment and finally with the national traditions in Defense matters.

All the agencies of the State that have direct responsibilities in Defense must participate in the formulation of Defense Policy. Particularly important is the leading role played by the Ministry of National Defense and the Armed Forces, as well as the Ministry of Foreign Affairs and the Defense Commission of both Chambers of the Legislature. Because Defense is the expression of a national concept, it is also advisable to consider the opinion of other institutions, both state and private, that have a qualified knowledge of the subject. One of these is what is known as the "Defense Community", a group comprised of military and civilians, mainly from academic centers and political parties, whose common denominator is their knowledge and experience in Defense matters. The purpose of this group is to establish the lines of civilian and military thought in the investigation and discussion of general issues that bear a relation with National Defense.

Along with providing general guidelines for the work of the institutions of the sector, Defense Policy includes the criteria and basic direction to the precautions that should be taken to neutralize external threats, as well as to deal with domestic emergencies when the constitutional states of emergency so determine[19], to help reduce the effects of natural disasters and to support Chile's image abroad. Such guidelines are intended for all state agencies that take part in Defense matters rather than to the Armed Forces in particular. For these there is a Military Policy, derived from the Defense Policy that lays the foundations for the actions of the armed forces during peacetime.

3. REFERENCE FRAMEWORK

Chile's Defense Policy is formulated in line with the following general principles:

a) The Chilean State does not hold any aggressive intentions towards any country in the world; neither has it had territorial claims in the neighboring context.

b) The Chilean State has the will to protect its population, to defend its national interests, and to safeguard its political independ-

19 For further information about the domestic role played by the Armed Forces, please see Part I, Chapter II.

ence, its national sovereignty and its territorial integrity.

c) The Chilean State has the responsibility to maintain an adequate military capability to assist in the achievement of its national objectives, bearing in mind that the development of that military capability is proportional to the development of the country's other capabilities.

d) The Chilean State has the responsibility to use all its national capabilities and, particularly its military power, for the Defense of the country and the protection of the national interests in the face of foreign threats, if it is necessary.

e) The Chilean State should encourage civil society's commitment to National Defense, with objectives, that include, among others, the necessary provisions for the fulfillment of Compulsory Military Service, the meeting of the needs of national mobilization and the need to maintain the competence and capabilities of reserve personnel.

f) For the Chilean State –as for all states in general–, its relative geographical location is a significant factor in the formulation of its Defense Policy.

g) The Chilean State has situated its Defense Policy entirely within the institutional legal framework currently in force in the country and recognizes and respects the treaties and international agreements incorporated to this framework, in such a manner that its Defense Policy has the legitimacy which is proper for all policies of State and that it represents the political commitment that, on one hand, binds the State to the nation's citizens and, on the other, to the international community.

h) The Chilean State considers as particularly important and advisable the existence of a close relationship and coordination between its Defense and its Foreign Policy, so that they complement and reinforce each other, although the former will act in support of the latter.

i) The Chilean State shall uphold its commitment to contribute to the defense and promotion of international peace, in accordance with national interests.

4. SOURCES OF THE DEFENSE POLICY

The 1997 Book of National Defense identifies as the main sources of Defense Policy, the National Security Policy and the Global Political-Strategic Assessment (AGPE). It should be noted that the notion of "source" should not be understood in its basic sense, as the basis or origin of something, but in its meaning of documentary, work or materials, in the sense that they serve as information or inspiration for a research work or, as in this case, for the elaboration of a public policy. Consequently the National Security Policy and the AGPE fulfill a role of this type in the formulation of the Defense Policy.

4.1. National Security Policy

In theory this is the policy that establishes, among other aspects, the criteria to coordinate actions to be carried out in the spheres of development and of Defense, with the purpose of eliminating or reducing the vulnerabilities of the country so as to achieve a condition that will permit the attainment of national objectives. Consequently, National Security Policy should identify which vulnerabilities will be addressed through Defense, which through development, and which in coordination between the two of them.

It should be stressed, however, that the Chilean State has not created any set of criteria or guidelines that, as a general framework, could be understood as a National Security Policy. It should also be emphasized that this situation has not prevented Chile from having a Defense Policy, implicit in the past and increasingly explicit following the publication of the 1997 Book of National Defense. In order to achieve a coordinated management of a global approach to the task of eliminating or reducing the country's vulnerabilities, it would seem sufficient to have an adequate coordination between the Defense Policy, the Foreign Policy, development policies and those of public order and internal security, which would probably require establishing earmarked institutional bodies to act as liaison between the different public sectors or, perfecting those already in existence.

4.2. The Global Political-Strategic Assessment (AGPE)

The rule that formalizes the Global Political-Strategic Assessment (AGPE) as a pattern for the basic analysis of National Defense, dates back to 1950, a time when the State perceived the need

for a method by which its political authorities could relate the national situation to the world, continental, regional and neighboring scenarios during a future period. In order to achieve this, Chile adopted a method of analysis that was used to visualize potential scenarios within the political or strategic contexts and to indicate the possible effects of State decisions on international actors that were the targets of those decisions (See Box 8).

The AGPE constitutes the central element of the Political-Strategic Planning System that includes, among others, the National War Plan and the Plan of National Mobilization.[20]

Because it is a link between Defense Policy and the goals and priorities of the public agenda, the AGPE consists of an ongoing, systematic and prospective analysis of national objectives (current and permanent). Its aim is to propose objectives that not only support Defense Policy but also the policies of related public sectors.

Its current format is the result of successive amendments, made since the time it was adopted, for the purpose of adequately relating national objectives to the different international scenarios, attempting on the one hand, to reduce external risks and threats to the country derived from detected controversies as well as to take advantage of cooperation possibilities with other countries resulting from coinciding views.

The results obtained through the AGPE include a wide variety of background data and recommendations that can be of help to the President in making the best decisions on issues involved in safeguarding the national interest and therefore constitutes an important basis for political-strategic conducting, as well as for the process of political-strategic planning taken as a whole.

BOX 8

CHARACTERISTICS OF THE GLOBAL POLITICAL-STRATEGIC ASSESSMENT (AGPE)

- It is a continuous process that delivers useful information supporting the decision-making of the President.
- It is a multisector process because requires the participation of representatives from other ministries, and agencies including delegates from the Armed Forces.
- It has a political-strategic character because it analyzes a variety of factors rather than those of military nature only, and because it provides recommendations that allow all the State agencies to take the necessary precautions to face potential conflict situations, especially those that may involve the Armed Forces, either directly or indirectly.
- It is a process under a centralized direction and execution, because it is a political-strategic document that must be directed and executed by a high-level office within the structure of the Defense Ministry, where the pertinent ministries and agencies and the Armed Forces can be in constant interaction.

20 When DFL-181 was enacted in 1960, the Primary National Defense Documents that comprised Executive Decree 37 of 1950 were renamed as the Primary National Security Documents.

2. Elements of the National Defense Policy

Chile's Defense Policy is based on elements that endow it with particular characteristics. Many of these elements have been described in the text published in 1997. This Book incorporates some new elements, such as new ways of using Defense means and the legal, international and national frameworks recognized and in force in Chile.

1. ELEMENTS OF THE CHILEAN DEFENSE POLICY: NDB 1997

The 1997 version of the National Defense Book (NDB) constituted a significant measure of transparency, because it revealed certain central aspects of our Defense Policy to both the national and the international community. Some of its elements are reiterated in the present text, but it is important to summarize some of its general contents, since in the process of compiling this 2002 version of the Book, they have retained their general characteristics and were not modified. The following are some of the more significant of these elements:

1. 1. National Objectives

It has been pointed out that Chile's national objectives excluded territorial claims on its neighbors' territory and emphasized our country's definite vocation for peace. Along these lines, Chile supports its national objectives through a Defense Policy whose purpose is to safeguard national interests through a defensive attitude, although it would not be inconsistent to opt for deterrence mode in the political-strategic context. In summary, it has been stated that Defense continues to rely, primarily, on its own national capabilities and on balancing factors that can be found within the international system, due to the political-strategic stature attained by the country and international ties established as well as all the diplomatic activities undertaken.

1.2. International Context

The international context has been characterized as complex, with a globalization process currently under way that is not, however, eradicating national diversity nor implying a uniformity of positions and objectives among states. Therefore, the nation-State continues to be the central –although not the only– unit of international order. We have concluded that it is necessary to preserve national identity and that the relative geographical location occupied by each State in conjunction with its national interests shall con-

tinue to be a significant point of reference for the respective Defense policies.

1.3. World and Regional Stability

Peace has been appraised as an element of vital importance and Chile's willingness to participate in peacekeeping operations sponsored under the United Nations Charter has been clearly stated, considering that the maintenance and promotion of world peace are among the objectives of its Defense Policy. We have also established the value of the integration process promoted since the early 1990s, emphasizing the promotion of trust among states as the political basis of these processes. Although we pointed out that Mutual Confidence Measures were not an additional mechanism of Defense, we have duly noted the importance that Chile attributes to the promotion of confidence within this sphere. We have highly commended the expansion of democracy in the continent and defined arms control as a mechanism that helped to reduce the potential for conflicts, thus facilitating regional stability.

1.4. Defense and Security

With respect to the relation between Defense and security, in addition to defining the different areas encompassed by these state functions, we have affirmed that it is not ethically justifiable to ensure a country's security by trampling on the enduring values of justice and human dignity.

2. CRUX OF THE NATIONAL DEFENSE POLICY

The Chilean State has a Defense Policy directed towards protecting the coun-try's population, defending its national interests and safeguarding its political independence, national sovereignty and territorial integrity. But it is also clear, in a comprehensive and modern sense, that stability and international security are influential factors in a nation's own security.

On this basis, we can say that the fundamental pillars that support Defense Policy to do so, are the renovation of the institutions of the Defense sector, including the Armed Forces, the incentive to cooperate with the region in matters concerning defense and security, and working towards world peace and security.

Both cooperation within the region and contributing to world peace and security are implemented within the framework established by Chilean Foreign Policy and the foundations of our Defense Policy.

3. USE OF THE DEFENSE MEANS

The Defense Policy has established three general forms of using Defense resources. These forms are detailed below:

3.1. Deterrence

Chile maintains a defensive attitude as a fundamental orientation of its Defense Policy, as well as its deterrent character in the political-strategic sphere. It must be noted that the deterrent form refers to conventional deterrence, since Chile holds to its international commitments on issues regarding the non-proliferation of weapons of mass destruction.

In broad outlines, deterrence is a political-strategic way of using Defense means, in which the Armed Forces play a primary but not exclusive role. What deters is the nation's overall power, directed by the political authorities of the State and supported by political consensus, as well as by the population's determination to support the objectives of Defense. In other words, it is impossible to deter without the existence of military force, but deterrence is basically achieved by virtue of the political-strategic stature the country has been able to achieve.

Deterrence is an effect. It is a psychological and subjective state that one seeks to produce in the mind of a potential adversary. It therefore centers on the available capabilities and the determination to use them, to make deterrence a viable option. Deterrence attempts to discourage, as early as possible, any enemy intention to interfere against one's own vital interests, by demonstrating that the cost of interference will be higher than its expected benefits. The most effective deterrence is that which insinuates one's potential capacity to win. That is, the best form of deterrence is preparing oneself to win.

Deterrence helps to stabilize international relations, convincing parties not to resort to force to impose solutions in the event of conflict. Through deterrence, the State can also prevent conflict from escalating and becoming an armed confrontation. As the international system has developed, other actors with varying degrees of power have appeared, some capable of disputing

and even threatening the power of a state. Consequently, they must also be considered as potential enemies to be deterred.

It is important not to confuse the orientations of Defense Policy with the way in which the alternative between defensive and offensive strategic attitudes operate. In this sense, within a policy oriented towards protecting the country's population, defending its national interest, and safeguarding its political independence, national sovereignty and territorial integrity, deterrence cannot be limited solely to a defensive strategy. Strategic defense alone, unyielding as it may be, may not suffice to deter a potential enemy that threatens force or has decided to use it.

3.2. Cooperation

In particular, after the last decade of the 20th century, the Chilean State has incorporated bilateral and multilateral cooperation on issues concerning Defense and security into its Defense Policy within the framework established in the integration processes it promotes and through active participation in maintaining and building international peace and security and enforcing it under certain conditions.

This is not inconsistent with the fact that our Defense Policy has a fundamental defensive orientation and a deterrent character in the political strategic sphere. On the contrary, Chile is determined to increase its present degree of international cooperation, at different levels or contexts (neighboring, regional-subregional, continental and global).

We must keep in mind that Chile's cooperation in the region dates back a long time, and there are military cooperation systems in the American Continent, such as the Conference of American Armies, the Interamerican Navy Conference and the Conference of American Air Force Chiefs; combined exercises such as Unitas, Rimpac, Team-Work, Red Flag, Passex, Cabañas, and other more recent efforts, that deal with cooperation, integration and transparency, which demonstrates that cooperation has been ongoing since the mid-20th century, though, certainly with different emphases during that time.

The security of Chile depends, primarily, on its most adjacent strategic environment, but the importance of its relations concerning security with other international actors and the implications of an international agenda less linked to definitions of an exclusive territorial nature has increased. Because of this, Chile should not restrict its Defense Policy to a mere protection of its territory, which of course continues in effect. It should be enriched by the opening of its economy, the renewal of the international political institutions in which the country participates, the dynamics of globalization and the growing importance of international crises that have their roots in conflicts between states or non-state threats.

Cooperation does not mean minimizing or changing the roles and missions which the Armed Forces have been performing and fulfilling throughout their history, but it also implies that part of their efforts should be directed towards collaboration with the national drive towards integration.

3.3. Coercive Use of Military Power

The Chilean State recognizes as situations of legitimate use of military forces, in cases of international conflict, those included in the framework established by the United Nations Charter. In effect, its Article 51 recognizes the immanent right to legitimate defense, individual or collective, in cases of armed attack against one of its members. The Chilean State also allows the individual or collective use of armed forces undertaken on the basis of a resolution of the United Nations Security Council, pursuant to Chapter VII of the above-mentioned Charter.

In any case, Chile will regulate the use of force in accordance with the conventions and international agreements that govern International Humanitarian Law and the general rules of national law.

a) International Humanitarian Law

International Humanitarian Law (IHL)[21] is the set of international rules, originating in conventional or common law, that, for humanitarian reasons, restrict the right of parties in an armed conflict, international or not, to use the means and methods of warfare. The purpose is to protect people or assets that are or could be affected by the conflict.

With relation to persons, IHL protects every individual who is not participating, or is no

21 Also called International Law on Armed Conflicts (ILAC) o simply Law of War.

longer an active combatant in the conflict; the civilian population; military personnel sick or wounded in war on land; persons wounded and/or shipwrecked during war at sea, medical personnel belonging to the Armed Forces, prisoners of war, personnel belonging to religious orders, and staff of civilian protection organizations.

With respect to assets, IHL protects cultural assets, especially historical monuments, works of art, or places of worship. It protects the environment against extensive, lasting or serious damages. For this purpose, it prohibits means and methods that may cause this type of harm or impair the health or survival conditions of the population.

For purposes of applying IHL, an armed conflict can be either a situation of declared war recognized by the parties or de facto situations in which armed hostilities have begun without a prior declaration of war. IHL must also be applied by forces intervening in international conflicts by virtue of the authority established in Chapters VI, VII and VIII of the United Nations Charter.

However, IHL is not applicable to cases of international terrorism, whether they take place within the context of an international or internal armed conflict or as isolated or combined actions intended to create panic in the population, regardless of the goals they pursue. In case of acting against terrorism, the provisions of international human rights law set forth in general and special conventions established to combat terrorism will be observed. These include the international conventions on the "Suppression of Terrorist Bombings" and on the "Suppression of the Financing of Terrorism". Both international instruments oblige countries to include these offenses in their legislation; they facilitate the rules for the investigation and prosecution of offenders and establish more effective regulations for extradition and mutual assistance in penal matters.

Neither does IHL apply to situations of internal violence, which do not reach the level of an armed conflict. In these cases, internal legislation and the regulations concerning the respect for human rights should be applied.

b) IHL measures observed in Chile

Taking into account the wide conceptual meaning encompassed by the term war or armed conflict, Chile states that IHL should be fully applied in all cases where armed struggle between parties with opposing interests take place. Therefore, our country participates actively in all such instances that help improve the means and methods of efficiently teaching and applying IHL.

In this respect, on August 31, 1994, Executive Decree 1229 on Foreign Affairs was enacted. The Decree created the National Commission on Humanitarian Law, comprised of representatives from the Ministries of Foreign Affairs, Defense, Justice, Education and Public Health. The functions of this Commission include preparing proposals for the full compliance with international commitments subscribed by Chile, to which end has made progress towards identifying, studying and proposing legal reform bills in order to incorporate the regulations contained in the Geneva Conventions of 1949 and their additional Protocols of 1977 into national legislation.

Additionally, Chile is at present engaged in a legislation process aimed at approving and endorsing other conventions and treaties related to IHL. The attached table shows the present status of approval and/or endorsement of these pieces of legislation.

Lastly, in the sphere of IHL education, Chile is presently carrying out a process of incorporating this subject into the general and specific education programs that are usually suggested or implemented as a matter of State policy. In general, respect for human rights and IHL are objectives inherent in all Chilean education. More specifically, the instruction about IHL is integrally and systematically imparted to the Armed Forces. The military institutions are implementing dissemination programs about IHL by increasingly incorporating these subjects into the study plans of their professional training institutes and into the training of recruits. IHL is also a relevant issue of education programs implemented at the Chilean Joint Training Center for Peace Operations (CECOPAC) (See Figure 4).

c) National Law for Situations of External Conflict

The different situations of external security affecting the State call for endowing authori-

FIGURE 4

Incorporation of Treaties on IHL into Chilean Law

Treaty	Description	Current status
(I) Geneva Convention for the Relief of the Condition of the Wounded and Sick in Armed Forces in the Field August 12, 1949.	Protects wounded and sick combatants, the staff caring for them, their lodging and materials used. Regulates the use of the Red Cross and Red Crescent Moon Symbols.	Approved by National Congress on August 22, 1950. Enacted on December 5, 1950. Published in the Official Gazette on April 17, 18, 19 & 20, 1951. Endorsed through deposit of documents in Berne, on October 12, 1950.
(II) Geneva Convention for the Relief of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea August 12, 1949.	Extends protection to shipwrecked combatants and establishes conditions for their care.	Approved by National Congress on August 22, 1950. Enacted on December 5, 1950. Published in the Official Gazette on April 17, 1951. Endorsed through deposit of documents in Berne on October 12, 1950.
(III) Geneva Convention relative to the Treatment of Prisoners of War. August 12, 1949.	Gives protection to members of the armed forces who are taken prisoner.	Approved by National Congress on August 22, 1950. Enacted on December 5, 1950. Published in the Official Gazette on April 18, 1951. Endorsed through deposit of documents in Berne on October 12, 1950.
(I) Additional Protocol relating to the protection of victims of international armed conflicts. June 8, 1977.	Extends protection to civilians and limits warfare techniques.	Enacted by Decree 752 of the Ministry of Foreign Affairs Published in the Official Gazette on October 28, 1991. Endorsed on April 24, 1991.
(II) Additional Protocol relating to the protection of victims of non-international armed conflicts. June 8, 1977.	Contains the fundamental guarantees for persons not participating in hostilities during an non-international armed conflict and sets standards for the protection of civilians, as well as their property and essential facilities.	Enacted by Decree 752 of the Ministry of Foreign Affairs Published in the Official Gazette on October 28, 1991. Endorsed on April 24, 1991.
Convention on prohibitions or restrictions on the use of certain conventional weapons which may be deemed to be excessively injurious or to have indiscriminate effects, Geneva October 10, 1980.	Establishes a framework for protocols that ban the use of certain weapons.	Sent to the National Congress for its approval in January of 2002. Currently in the second constitutional proceeding at the Senate of the Republic.
(I) Protocol on non-detectable fragments. Geneva, October 10, 1980.	Prohibits the use of weapons that cause injuries through fragments that cannot be detected by X-rays.	Sent to the National Congress for its approval in January of 2002. Currently in the second constitutional proceeding at the Senate of the Republic.
(II) Protocol on prohibitions or restrictions on the use of mines, booby-traps and other devices, Geneva October 10, 1980. Amended on May 3, 1996.	Prohibits the use of mines, trap weapons and other devices against the civilian population and restricts their use against military objectives. The amended protocol extends the prohibition of these devices and the prohibition also applies to domestic conflicts.	Sent to the National Congress for its approval in January of 2002. Currently in the second constitutional proceeding at the Senate of the Republic.
(III) Protocol on prohibitions or restrictions on the use of incendiary weapons, Geneva, October 10, 1980.	Prohibits the use of incendiary weapons against civilians and also restricts their use against military objectives.	Sent to the National Congress for its approval in January of 2002. Currently in the second constitutional proceeding at the Senate of the Republic.
(IV) Protocol on blinding laser weapons, Geneva, October 13, 1995.	Prohibits the use of laser weapons that cause permanent blindness.	Sent to the National Congress for its approval in January of 2002. Currently in the second constitutional proceeding at the Senate of the Republic.
Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, Paris, January 13, 1993.	Prohibits the use, production and stockpiling of chemical weapons and promotes their destruction.	Enacted on December 1996. Published in the Official Gazette in March 1997. Is in force since April 29, 1997. Endorsement documents were deposited at the United Nations Secretariat on July 2, 1996. In March of 1997 DGMN is appointed national authority for the fulfillment of the norms contained in this Convention.

▸▸▸

FIGURE 4

Incorporation of Treaties on IHL into Chilean Law (Continued)

Treaty	Description	Current Status
Convention on the prohibition of the use, stockpiling, production and transfer of anti-personnel mines and on their Destruction, Ottawa September 18, 1997. (Ottawa Convention)	Prohibits anti-personnel mines.	Subscribed by Chile in Ottawa, on December 3, 1997. Approved by the National Congress in May 2001. Chile deposited the endorsement instruments on December 10, 2001, at the United Nations Secretariat. Published in the Official Gazette on March 9, 2002.
Convention for the protection of cultural property in the event of armed conflict. The Hague, May 14, 1954.	Protects artistic and historical architectural monuments and other cultural property.	Chile has not yet subscribed this convention.
(i) Protocol for the protection of cultural property in the event of armed conflict, The Hague, May 14, 1954.	Prevents the export of cultural property in occupied territories and safe conduct passes, as well as the return of these assets.	Chile has not yet subscribed this convention.
(ii) Protocol for the protection of cultural property in the event of armed conflict, The Hague, March 26, 1999.	Improves the protection of cultural property; strengthen penalties for violations and also applies to domestic conflicts.	Chile has not yet subscribed this convention.
Convention on the prohibition of military or any hostile use of environmental modification techniques, Geneva, December 10, 1976.	Prohibits the military use of environmental or geophysical modification techniques that are dispersed in the air and have lasting effects as war weapons.	Chile acceded on April 26, 1994. Enacted on May 31, 1994. Published in the Official Gazette in August 1994.
Statute of the International Criminal Court. It took effect in 2002, but Chile is not yet a party. Rome, July 17, 1998.	Establishes a permanent international court with jurisdiction over genocide crimes, war crimes, crimes against humanity, as well as the crime of aggression, as yet undefined.	The Constitutional Court received the accusation of unconstitutionality put forth by members of the House of Representatives and ruled that the Treaty containing the Rome Statute of the International Criminal Court requires a constitutional reform before it can be approved by the National Congress. The Executive submitted a bill for constitutional reform to Congress.

Source: Ministry of Foreign Affairs

ties in charge of the management of all levels of National Defense with a set of provisions of different legal rank, which will give flexibility and adaptability to the State organization, as well as with an opportune and effective capacity for reaction when faced with any eventuality. These provisions establish a national legal framework for addressing external threats and their effects include the virtue of making significant modifications to the organization of State administration and its procedures, thus enabling it to deal with those threats in the best way possible.

Book Four, Title III, Article 418 (on "Complementary Provisions"), of the Military Code of Justice, establishes that, for the effects of that book and by extension for all rules governing National Defense, a state of war shall exist, not only when it has been officially declared, but also when it is de facto or when an order for mobilization has been given.

An official declaration of war is a special power of the President of the Republic, as is set forth in the provisions of Article 32, Number 21, of the Constitution. To declare war, the President must propose to the National Congress a law requesting authorization to make the declaration and he must also hear the opinion of the National Security Council on the matter.

In turn, and in accordance with the provisions of Law 18.953, Art. 1, which establishes the regulations for Mobilization, The National Mobilization is the combined activities and measures taken to prepare a part or all of the human, material and industrial potentials to adequately address a state of war. The application of these activities and measures can only take place during the enforcement of the last stage of emergency and begins on the date stipulated in the respective executive decree for mobilization. It is important to note that without prejudice to the above, so-

me of the mobilization activities and measures, those corresponding to the preparation stage, are carried out in a state of normality without the need to previously establish a state of war.

The state of assembly has been envisioned for foreign war situations and is declared by the President of the Republic in agreement with the National Security Council under the provisions contained in the Constitution.

The mere existence of and external war is sufficient to declare a state of assembly, without the need for a previous enactment of a law authorizing the declaration of war. It must not be understood, however, that all declarations of a state of assembly will automatically precede an official declaration of war.

A state of assembly is declared through an executive decree signed by the President of the Republic, the Minister of the Interior and the Minister of Defense and is in force as from its date of publication in the Official Gazette. A state of assembly can also be declared for either the entire national territory or for only a portion of it, for a maximum period of 90 days. However, the President is empowered to request an extension or a new declaration if the circumstances that caused it persist.

Nevertheless, Chilean law also allows using a state of emergency for cases of harm or danger to national security due to causes of foreign origin. Establishment of a state of emergency is not sufficient basis for declaring mobilization. With the agreement of the National Security Council, the President shall call for mobilization under the provisions of the Constitution, to be in force in all or part of the national territory for a maximum period of 90 days, and can declare it again or extend it, if the circumstances that advised its adoption persist.

3. The Defense Sector and International Policies

This chapter sets forth and describes the activities of the sector that are part of the National Defense Policy but also pertain to policies in the international context related to foreign security. It particularly addresses progress made in the field of cooperation with United Nations peacekeeping operations and the fulfillment of commitments on demining.

1. UNITED NATIONS PEACEKEEPING OPERATIONS (UNPKO)

The term "Peacekeeping Operations" is not mentioned in the United Nations Charter. The practice of carrying out these operations since 1945 has created a series of universally accepted principles that constitute the legal framework for the implementation of peacekeeping operations.

1.1. General Considerations

The Chilean State recognizes the United Nations Charter, signed in San Francisco, USA, in 1945, as the basic legal framework for international security. Two chapters of the Charter specifically deal with the regulations of peacekeeping military operations. Chapter VI gives the rules for peacekeeping operations (PKO) and Chapter VII deals with peace enforcement (PE). The basic difference between the two lies in the fact that the operations carried out under Chapter VI do not provide for the use of coercive force (which is only authorized in situations of legitimate defense), while those performed under Chapter VII include coercive actions. More precisely, Chapter VII refers to "action with respect to threats to the peace, breaches of the peace and acts of aggression" and includes the measures that the UN Security Council may decide to take in this respect, either of a provisional order without involving the use of force or those which are necessary to maintain or restore international peace and security through the use of air, sea or land forces.

Peacekeeping operations require a special agreement reached between the UN and member states that have decided to participate in peacekeeping operations, and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes. For this reason, the legal framework in which these peacekeeping operations are carried out calls for regulations of an international order as well as for internal laws for participating countries.

Some of the issues defined by these agreements are the scope of operations, the countries or ar-

eas where they will take place, their length, the type and quantity of resources to be committed and, in particular, complementary aspects and limitations that may be "agreed upon".

Peacekeeping operations are a dynamic concept that evolves in accordance with changes undergone in the form of using resources to address different situations that require action. In fact, in the beginning, military forces were used in procedures adopted to deal with conflicts between states, with extensive participation of military observers supervising conditions of ceasefire, but the situation underwent substantive changes over time. Particularly with the end of the Cold War, there has been an increase in the number of cases of internal conflicts, i.e., those in which contending factions belong to the same State.

Within this context, the need for the United Nations to maintain its legitimacy in the preservation of international peace and security, has led it to promote the participation of multinational forces, in accordance with different regional or international arrangements for which participating countries need to have pro-perly trained military forces available, thus enabling them to provide a fast response, upon authorization of the Security Council. This policy of the United Nations entails that once the situation that gave rise to such an intervention has consolidated, a peace operation would be deployed in order to support the building of peace.

1.2. Chile's Policy for Participation in UNPKOs

Taking into account the changes that have taken place internationally, the Chilean State policy of participation in peacekeeping operations has also changed, but still maintains its conceptual, doctrinal and political-strategic principles.

Chile's participation was established through an executive decree approving the pertinent policy in November 1996. This document specified what the State understands as peacekeeping operations and clearly limits the scope of Chilean participation to Chapter VI of the United Nations Charter.

The following are some of the prominent general, political and operating criteria established through that decree:

a) UNPKOs must meet the national interest that is related to commitments entered into with the United Nations and to a concern about peace issues.

b) The Chilean State does not place contingents at the disposal of the United Nations so that this organization can autonomously decide upon their assignment.

c) The Chilean State shall assess each United Nations request for participation in peacekeeping operations separately, on its own merits. The President shall make the final decision about Chile's participation in peacekeeping operations.

Since 1997, the Chilean State has made some changes to its UNPKO participation policy.

In 1999 a Memorandum of Understanding was subscribed with the United Nations Secretary-General that establishes Chile's contribution to the UN's Stand By Forces Agreements[22] (See Figure 5).

In addition, Executive Decree (G) 68 was enacted in October 1999, with wording that incorporates the provisions of the 1996 executive decree into the changes made.

The executive decree of 1999 extends Chile's participation in UNPKOs to participation under certain powers included in Chapter VII of the Charter, but with restrictions on involvement in some of the actions it provides for.

One limitation that has been maintained is that of not authorizing the use of Chilean Forces for the search and/or capture of criminals, belligerents or war criminals.

Chile also maintained its limitation to the effect that it will only assign professional staff, either civilian or military, and preferably volunteers, to UNPKOs. These leadership groups may not contain drafted personnel.

Another important innovation is the creation of the Chilean Joint Training Center for Peace Operations (CECOPAC), with the purpose of training both national and foreign military, police and civilian staff who will participate in peacekeep-

22 Memorandum of Understanding between Chile and the United Nations Organization of November 11, 1999..

FIGURE 5

Resources Made Available by Chile to the Reserve Forces of the UN

ARMY	NAVY	AIR FORCE
Military Observers and General Staff Officers 1 Mechanized Infantry Company 1 Mechanized Reconnaissance Platoon 1 Engineer Platoon for the Assistance and Training on mine fields and explosives 1 Engineer Platoon for Water Treatment 1 Signals Section 1 Quartermaster Unit 1 Level-1Medical Unit 1 Ordnance Section 1 Medium Transport Platoon 1 Air Platoon	Military Observers. General Staff Officers and Public Affairs Officers 1 Missile Frigate 1 Marine Corps Company 1 Combat Engineer Section 1 Logistics Support Section 1 Military Police Section	1 Medium Helicopter Transport Unit 1 Fixed Wing Tactical Transport Unit 1 Medical-Health Group
POLICE FORCE	**INVESTIGATIONS POLICE**	**CIVIL REGISTRY AND IDENDIFICATION SERVICE**
50 Policemen	10 civil police officers	25 Electoral Service Officers

ing operations. As an agency under the Ministry of National Defense, the Center receives advise from the National Defense General Staff, which in turn can advise the Ministry on UNPKO issues and thereby inform the rest of the government system.

1.3. The Armed Forces in UNPKOs

The Services of the National Defense participate in peacekeeping operations in accordance with the policy and instructions of the Chilean State. Determining which resources will be used basically depends on the type of operation the President of the Republic has decided to accept and on an analysis of the capabilities that can best fulfill the proposed mission.

This UNPKO participation commitment does not deviate the Armed Forces from their essential and primary mission, which is that they exist to defend the homeland. When the Chilean State decides to participate in a certain UNPKO and to assign a mission to fulfill it, it should consider contributing funds in the event they are needed to complement the funding allocated by the United Nations.[23]

Each operation involves creating a certain particular set of Rules of Engagement, which must be approved by the national authorities of the participating countries. In Chile's case, these rules must comply with both the legal regulations in force and the conditions imposed by International Law, with the emphasis that they may not, under any circumstances whatsoever, limit the right to legitimate defense.

1.4. Participation of Chile in UNPKOs since 1997

Chile's participation in peacekeeping operations dates back to 1948. At that time, Chile began its participation in Treaty or Cease Fire Observation missions, through Officers acting as observers, including those in India-Pakistan and the Middle East, that still continues today. However, Chile has increased its participation since 1990, taking part in operations in Iraq-Kuwait in 1991 (Air Force), Cambodia in 1992 (Navy), Iraq in 1996

23 Official Gazette N° 36.510 of November 10, 2000.

(Air Force), Bosnia and Herzegovina in 1997 (Police Force), and Eastern Timor in 2000 (Army).

In August 1996, as the 1997 Book of National Defense was being prepared, the Air Force sent a helicopter group, comprised of 41 permanent officers and staff, on a UN mission to Iraq to verify its compliance with regulations prohibiting it from producing nuclear, chemical or biological weapons. In 2000, an Army officer joined this group as weapons inspector.

In April 1997, in response to a UN request, a contingent of 50 members of the Chilean Police Force was ordered to participate in the International Police Task Force (IPTF) for Bosnia and Herzegovina under the Dayton Agreements signed between the enemy parties of that republic belonging to the Former Federation of Yugoslavia.

In 1998, in view of the significant increased number of peacekeeping operations taking place throughout the world at that time and the need to establish a permanent liaison between the Ministry of National Defense and Chile's Permanent Mission to the United Nations, an officer was added to the Mission as Defense Attaché.

In January 2000, the army deployed a group of helicopters comprised of 3 airships and 41 officers and NCO personnel to the United Nations Mission in Eastern Timor (UNTAET). An army officer was also added to the mission, as planning officer in the General Headquarters of UNTAET.

In the same year, Chile added an army officer to the Office of the Chief of Staff of the United Nations Mission in Kosovo to act as Liaison Officer between the forces of the North Atlantic Treaty Organization (NATO) and of the UN that are participating in that peace mission.

Lastly, in 2001, a naval officer was added to the staff of the Training Center for Peace Operations in the Republic of Argentina (CAECOPAZ) and another naval officer was added to the Infantry Battalion of the Argentine Navy deployed in the peacekeeping mission in Cyprus.

2. MUTUAL CONFIDENCE MEASURES

Since the publication of the 1997 Book of the Defense and within the sphere of Mutual Confidence Measures, a number of activities have been taking place that have helped significantly in achieving greater transparency and mutual understanding among the Armed Forces of Chile, Argentina and Peru.

As part of the Memorandum of Understanding for Closer Cooperation in Security Matters of Mutual Interest, signed between Chile and Argentina in 1995, experts from both countries began in 1997 to draft a "Glossary of common terms for combined Chile-Argentina exercises," which should be approved by both parties during 2003.

A clear sign of the strengthening of the bonds of friendship between the armies of Chile and Argentina, a combined support exercise called "Araucaria," to deal with catastrophe and natural disaster situations in border zones took place in 2002. Cooperation in Antarctic issues has also seen substantive progress. Examples of this are the agreement of the Antarctic Departments of both armies to carry out surveillance and route demarcation tasks that will facilitate safe and clear traffic between the O'Higgins (Chile) and Esperanza (Argentina) bases; to organize, beginning in 2003, a permanent combined land patrol for search and rescue; to undertake a permanent system of cooperation and exchange on logistical issues such as health support between both bases, meteorological information and environmental procedures. In addition to these activities there is the decision to make a combined ascent of Mount Vinson in 2003, the highest point on the Antarctic continent.

The two countries have undertaken several combined naval operations in the "Integración" and "Viekaren" exercises (for Naval Control of Maritime Traffic and Maritime Search, Rescue and Salvage). The latter effort is limited to the southernmost zone and is part of the Peace and Friendship Treaty of 1984. Air-sea units and support sea units normally assigned to these areas also participated in the exercises. Another prominent effort is the Combined Naval Antarctic Patrol, which takes place every year to provide support to the units normally operating in the area in the event of possible rescues and salvages, as well as to control and combat pollution caused by possible disasters.

The Air Force has carried out the SAR "Andes" search and rescue exercises, with air resources from both countries in different locations of the territory. Relations between the Chilean Air Force and its Argentine counterpart have included crew exchanges in several different fields and

carrying out different activities in the air-medical field. In the field of maintenance, the Chilean Air Force has inspected the engines of the "Tucano" aircraft of the Argentine Air Force. An important feature of these institutional relations is the participation of air combat units of both countries in the "Cruzex" exercise, held in Brazil in May 2002.

The bilateral conferences between the Chiefs of the General Staffs and the services, as well, have significantly increased the exchange on the professional level, between both armed forces. Some of worthy of mention are participation in staff courses, exchange of instructors in the Training Centers for Peace Operations, incorporation of Chilean officers into the Argentine Battalion deployed in Cyprus, participation in the "Cabañas" peace operation exercises, technical courses in high technology and scientific and technical cooperation in the field of military industry.

Additionally, as a result of the cooperation agreement on matters related to catastrophes, a cabinet exercise took place in 2001, with the objective of strengthening and perfecting the bilateral cooperation relations for responding to crises caused by natural disasters.

This exercise will be carried out for the first time on land in 2003, in the general area of Puerto Natales and Río Turbio, in the southern part of both countries, with the participation of civilian authorities and military units of both nations.

This ongoing exchange and the visits between units and staff of the different military and air garrisons and navy districts, have led to a better mutual understanding and prevented situations which could result in errors and misunderstandings or crises.

Chile has undertaken mutual confidence measures with Peru and since 1999, they have become even more dynamic. Within the framework of the Round of Conversations between the General Staffs and Senior Military Leadership of the Armed Forces of Chile and Peru, the two countries have adopted several agreements for the exchange of staff, academic activities and training and support of Antarctic activities.

Some of the more important military exercises have been the "Reskatamuy" exercises, in which naval units participate in maritime search and rescue operations in northern Chile and southern Peru, the combined oceanographic voyages to study of the El Niño weather pattern and the "Passex" exercises involving units from both navies during the passage of Chilean ships past the coasts of Peru. In 2002 the multinational "Unitas Pacífico" exercise took place along the Chilean coast with the participation of naval units from Peru, the United States, Colombia, Ecuador, Mexico and Panama.

Since 1999 the respective air forces have been carrying out search and rescue exercises along border zones.

3. INSTRUMENTS OF COOPERATION AND UNDERSTANDING

As part of the general guidelines for Chile's Foreign Policy, the Defense sector has been promoting a series of instruments to foster cooperation and understanding with the different countries of the world.

3.1. Cooperation Mechanisms

a) With Argentina

Since 1995, the Republics of Chile and Argentina have been carrying out a series of activities as part of the promotion of mutual confidence measures, a framework within which political and military relations have obtained qualitative benefits for both countries. (See Box 9).

b) With Peru

Both countries have been collaborating in the promotion of mutual confidence measures since 1986; however, the establishment of cooperation mechanisms has witnessed a growing impetus in recent years. Within this process new areas of agreement, reflection and analysis have been found that forecast increasing agreement in matters related to security and defense. (See Box 10).

c) With Brazil

Bilateral relations have grown since 2000, in response to the challenge of strengthening historically close bilateral relations. As with Argentina and Peru, the establishment of cooperation mechanisms in the sphere of security and defense attempts to reinforce common views, reflections and analyses, so as to build a shared approach to these matters. (See Box 11).

BOX 9

CHILE-ARGENTINA: INSTITUTIONS FOR COOPERATION IN DEFENSE AND SECURITY ISSUES

Consultation and coordination mechanism between the General Staffs of the Armed Forces.
Established in 1994, within the framework of the Peace and Friendship Treaty of 1984, this institution has performed an important role in the establishment of measures for the promotion of mutual confidence between both countries.

Permanent Committee on Security (COMPERSEG)
The Chile-Argentine Permanent Committee on Security was established on May 7, 1996, in Buenos Aires, and is comprised of high-level and senior officials of the Ministries of Foreign Relations and of Defense of Chile and Argentina. It was created through the Memorandum of Understanding for Strengthening Cooperation in Security Issues of Mutual Interest, signed on November 8, 1995, and it has an executive function with regard to decisions adopted by the Presidents and Ministries of Foreign Relations and of Defense of Chile and Argentina.

Between 1996 and December 2002 twelve meetings were held, which have achieved very high levels of cooperation in different spheres of Defense.

The COMPERSEG has also been a good opportunity for carrying out joint academic activities in subjects that include analysis of security in the region.

2+2 Meetings
They are called 2+2 Meetings because they involve the Ministers of Foreign Relations and of Defense of both countries. They were established in 1997, in response to the will to consolidate the progress in bilateral relations in the fields of security and Defense.

By 2002 this institution had met four times: twice in Chile (Zapallar, 1997 and 1999) and twice in Argentina (Campo de Mayo, in 1998, and Buenos Aires, in 2001).

These meetings have led to agreements concerning combined exercises between the Chilean and Argentine military forces and the establishment of systems for cooperation in the Antarctic; a deeper joint analysis of measures for implementing the Political Declaration of MERCOSUR, Bolivia and Chile as a Peace Zone; discussions on the strategic situation of the region and progress on issues within the disarmament agenda.

BOX 10

CHILE-PERU: INSTITUTIONS FOR COOPERATION IN DEFENSE AND SECURITY ISSUES

2+2 Meetings
The First Meeting of the Permanent Committee on Consultations and Political Coordination, comprised by the Ministers of Foreign Relations and Defense of both countries was held in Lima on September 9, 2001. This Committee began the process of standardizing the respective systems of calculating Defense spending. They also led to agreements to eradicate anti-personnel mines, thus complying with the Ottawa Convention commitments; to carry out combined naval operations and to exchange military and teaching staff between institutes and academic development centers of the Armed Forces.

Committee for Security and Defense (COSEDE)
This committee is comprised of officials from the Ministries of Foreign Relations and of Defense of both countries, as well as members of the Armed Forces.

It has met on twice: in Chile (Santiago, October 25, 2001), when it approved the "Memorandum of Understanding between the Republic of Chile and the Republic of Peru for Strengthening Cooperation in Security and Defense Issues of Mutual Interest," and in Peru (Lima, March 26, 2002), when it agreed to establish a working group to begin preparing a common methodology for measuring Defense spending.

The COSEDE provides a new framework for the meetings of the General Staffs' Senior Leadership of the Armed Forces of both countries, with a view to reinforcing cooperation and bilateral transparency within the military sphere.

3.2. Cooperation Agreements

In conjunction with Defense cooperation mechanisms, Chile has signed a series of complementary agreements that strengthen relations within the sphere of Defense with countries in all regions of the world. These agreements, since 1997 are detailed in the adjoining figure. (See Figure 6).

4. POLICY ON HUMANITARIAN DEMINING

One of the areas of the Chilean Foreign Policy related to issues of international security, and which evidences the support of the Defense Policy, is the promotion and implementation of International Humanitarian Law and its effective application. To achieve this goal, Chile has supported international efforts to eliminate conventional weapons that could be considered as excessively injurious or having indiscriminate effects.

Chile also adheres to the international principles that hold that parties in an armed conflict do not have a right to an unlimited choice of means or methods of combat; the banning of the use of weapons, projectiles, materials and means of combat that inflict superfluous or unnecessary suffering; and that a distinction should be made between the civilian population and military forces.

Chile adhered to the Ottawa Convention in 1997 by virtue of these international principles, the evolution of the country's foreign relations and its national defense needs. The fact that anti-personnel mines are weapons that do not discriminate between the civilian population and military forces has been of particular importance.

4.1. Humanitarian Demining under the Ottawa Convention

As established in the Ottawa Convention, humanitarian demining broadly includes:

a) The destruction of stockpiled anti-personnel mines (mines in storage), and the removal and destruction of mines disseminated in mined fields. It also involves including provisions that regulate the prohibition of the use, stockpiling, production and transfer of anti-personnel mines into a country's national legislation.

b) Humanitarian demining also includes compliance with the rules and procedures concerning humanitarian assistance to victims of accidents caused by anti-personnel mines, and to their families and communities.

BOX 11

CHILE-BRAZIL: INSTITUTIONS FOR COOPERATION IN DEFENSE AND SECURITY ISSUES

Bilateral Working Group on Defense (GTDB)
The Working Group was established through the agreement of the Defense Ministers of Chile and Brazil when they met in Brasilia on July 13, 2000. To date, two meetings of this Group have been held: the first in Santiago, on December 14, 2000; the second in Brasilia, on November 13, 2001.

This group has turned into a mechanism for political consultations intended to develop bilateral relations in the field of Defense, scientific and technological cooperation and institutional cooperation between the Armed Forces of both countries.

These ministerial meetings have served the purpose of complementing bilateral relations between Chile and Brazil especially on the subjects of organization of ministerial structures and promotion of the exchange of officers attending academies of advanced studies in both countries. This instrument has also been useful in disseminating the ECLAC study on "Standardized Methodology for the Measurement of Defense Spending" approved by Chile and Argentina.

This working group also decided to hold meetings between the Defense General Staffs of Brazil and Chile.

4.2. Humanitarian Demining and Human Security Policy

Humanitarian demining is one of the areas of interest to the Human Security network, of which Chile is a member. This implies that the Chilean State, without neglecting its essential commitment to safeguard the security of the State, also, as a complement, approaches security issues from the perspective of the human individual and his or her rights. (See Box 12).

4.3. Implementation of the Ottawa Convention

Two prominent aspects of Chile's process of complying with the commitments made through the Convention are: the establishment of the National Demining Commission (CNAD) and the submission of the Report on Transparency Measures.

FIGURE 6

Cooperation Agreements and Memoranda of Understanding between Chile and Other Countries

July 4, 1997	Germany	Agreement on conditions relating to the organization of information and working visits.
August 8, 1997	Argentina	Agreement on cooperation in catastrophic matters.
August 20, 1999		Agreement for the co-production of navy units between the Republics of Chile and Argentina.
July 27, 2001		Memorandum of Understanding on technical and scientific cooperation and logistical development on Defense matters.
July 13, 2000	Brazil	Declaration on bilateral cooperation in the Defense area.
August 27,1999	Ecuador	Protocol of cooperation in the sphere of Defense.
October 17, 2000	United States of America	Agreement on acquisition and/or exchange of supplies and reciprocal services.
May 10, 2001	El Salvador	Declaration of Intentions for bilateral cooperation in the sphere of Defense.
April 1, 1997	Spain	Protocol on cooperation in the sphere of Defense. Statute of the Joint Spanish-Chilean Commission.
May 29, 1998	France	Amendment to the agreement related to cooperation within the framework of Defense.
March 12, 2002	United Kingdom of Great Britain and Northern Ireland	Memorandum of Understanding within the sphere of Defense.
May 15, 2001	Guatemala	Declaration of Intentions for bilateral cooperation in the sphere of Defense.
December 7, 2000	Netherlands	Declaration of Intentions for bilateral cooperation in the sphere of Defense
May 11, 2001	Honduras	Letter of Intent for bilateral cooperation in the sphere of Defense.
April 8, 1997	Italy	Memorandum of Understanding in the sphere of Defense.
October 19, 2000	Jordan	Memorandum of Understanding on cooperation in matters related to Defense.
May 8, 2001	Nicaragua	Agreement on cooperation relating to technical cooperation in the field of Defense.
September 9, 2001	Peru	Joint presidential statement relating to the strengthening and intensification of mutual confidence in the fields of security and Defense.
August 23, 2002		Joint presidential statement regarding expansion and strengthening of bilateral relations.
November 27, 2000	Portugal	Memorandum of Understanding for cooperation in the field of Defense.
May 30, 1997	Russian Federation	Protocol of Intent for cooperation in the field of Defense.
May 28, 1997	Sweden	Memorandum of Understanding for cooperation in the field of Defense.

BOX 12

CHILE'S PROCESS OF ADHERENCE TO THE OTTAWA CONVENTION

- **December 3, 1997.** Chile acceded to the Convention on the Prohibition against the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and their Destruction.
- **April 26, 1999.** Chile officially declared a unilateral moratorium on the production, exportation, importation and installation of new anti-personnel land mines.
- **May 8, 2001.** National Congress approves the Convention.
- September 10, 2001. Chile delivered the instrument of ratification of the Ottawa Convention to the Headquarters of the United Nations Organization in New York.
- **March 9, 2002.** Enactment and publication in the Official Gazette of the Ministry of Foreign Affairs of Executive Decree 4, which incorporates the Ottawa Convention to the State's internal legal system.
- **May 2, 2002.** In compliance with the Convention, the National Demining Commission was established through the enactment of Executive Decree 79 (Undersecretariat of War), on May 2, 2002.

Between the signing of the Convention in 1997 and the enactment of the agreement related to the Ottawa Convention on March 9, 2002, when the commitments contained in this treaty took effect in Chile, the country carried out the following important activities related to humanitarian demining:

- Determination of the approximate cost of demining projects.
- Destruction of stockpiled anti-personnel mines.
- Mine removal and destruction at the mined field of Tambo Quemado.
- Collaboration and participation in demining activities in Nicaragua and Ecuador.

a) The National Demining Commission (CNAD)

The National Demining Commission (CNAD) was established on August 19, 2002 by the Ministry of National Defense. The Commission is a public agency with a national scope and a multipart representation. It reports directly to the President of the Republic and is chaired by the Minister of National Defense. It is comprised of the Undersecretaries of Foreign Relations, Finance and National Health, the Chief of Staff of National Defense, the General Chiefs of Staff of the Armed Forces and its own Executive Secretary. For working and support purposes it is headquartered in the National Defense General Staff at the Ministry of Defense.

The Commission's objective is to help all State agencies achieve the planning, coordination and operation capabilities needed to meet the commitments Chile has made in signing and ratifying the Ottawa Convention.

In particular, the Commission has been responsible for preparing and implementing the National Plan for Humanitarian Demining, with its respective budgetary program.

b) The Report on Transparency Measures

In compliance with the commitment set forth in Article 7 of the Convention, relating to "Transparency Measures," in 2002 Chile submitted a public report to the United Nations with basic information concerning humanitarian demining. (See Box 13).

BOX 13

REPORT ON TRANSPARENCY MEASURES

- **End of anti-personnel mine production.** Through its 1999 unilateral moratorium, Chile has definitively closed its national programs of anti-personnel mines. (FAMAE and Cardoen).
- **Signposting and demarcation of mined fields.** All anti-personnel mines that Chile possesses are either in munitions depots or in properly identified mined fields, delimited and signposted. No Chilean State anti-personnel mines exist in zones not officially controlled or identified.
- **Total anti-personnel mines in Pampa Chaca after the destruction of August 27, 2002:** 333,737, both installed in mined zones and in stock.
- **Total disseminated anti-personnel mines:** 122,661, which shall be removed and destroyed in their entirety.
- **Total anti-personnel mines in stock:** 211,076 anti-personnel mines, of which 182,429 will be destroyed within the terms established by the Convention.

4. The Defense Sector and National Policies

As an integral part of Defense, the Armed Forces help in the performance of activities carried out within the territory –such as support for initiatives related to border and isolated zones– and cooperate with national industry and with national cultural, scientific and technological progress, a task they have performed since the birth of our nation as a republic.

1. TERRITORIAL POLICIES

The concept of sovereignty assumes the existence of a territory circumscribed by physical or geospatial boundaries and the ability to hold it under the exclusive jurisdiction of the State. This idea of exclusivity allows the government to direct its administrative management in accordance with its policies and objectives, with the defense sector playing an important role in policies aimed at the development of those zones of the territory that require special State support due to their characteristics and location.

1.1. Development Policies in Border Zones

From a Defense perspective, border zones are of particular significance because of the convergence of historical aspects with the fact that they are a tangible reference for estimating potential risks and threats. This is why integrating processes, which are normally initiated in connection with specific, operational objectives, can become a closer economic and even political relationship, to the extent that the two states involved in the integration process accept their respective national identities and mutually recognize the territory over which they each exercise sovereignty.

Chile has defined its border zones taking into account the special characteristics of its territory along international borders and areas where international treaties of permanent effect are applied. Its border zones are governed by specific legislation that calls for effective coordination between the National Office of State Borders and Boundaries, the Ministry of Foreign Affairs and the Ministry of National Defense. This sphere has special mechanisms for decision-making, which guide the State in issues of government owned land, water resources, natural resources, scientific and mountain climbing expeditions in the Andes, and with respect to enforcing legal provisions at the remote ends of the country.

This concern is reflected in the importance attributed to the initiatives for physical integration with neighboring countries, with a direct impact on the development of the border zones.

It must be stressed that the initiatives, which each State desires to promote in its border zones, can be of a unilateral, bilateral or multilateral nature. Chile has adopted initiatives of a unilateral nature, which are State decisions with the objective of promoting the development of an area of the national territory without the participation of another State.

Complementarily, Chile has taken part in conjunction with Argentina in the promotion of joint initiatives to promote the development of some parts of the long border they share. The solution to the boundary disputes that were still outstanding between the two countries during the last decade of the 20th century not only helped raise these bilateral relations to what perhaps can be defined as its best historical level but also helped promote joint initiatives of great relevance for both countries.

There are also initiatives of a multilateral nature, the most striking example of which may be that of the European Union.

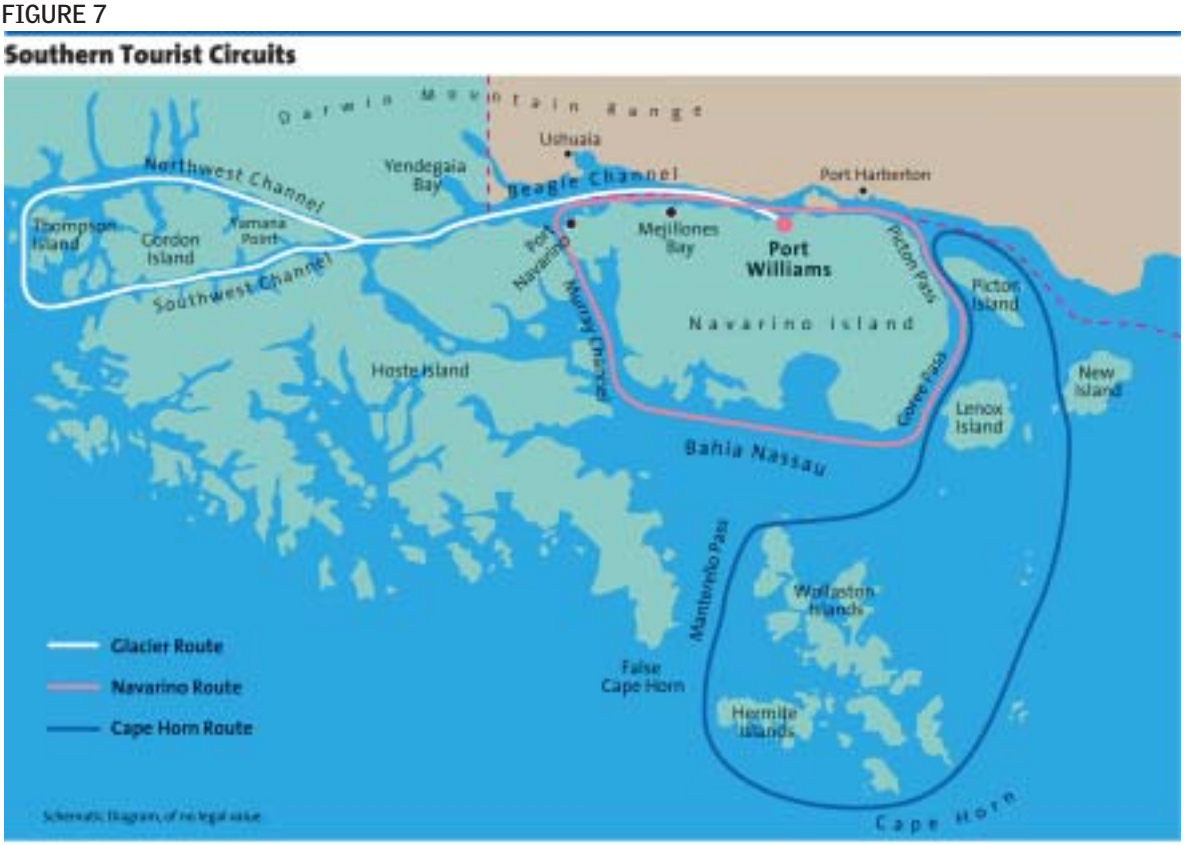
The experience of the European Economic Community, which preceded the current European Union, shows that acceptance of national identities, including holding sovereignty over a defined and recognized territory, with respect to which no claims are encouraged and consequently the overcoming of territorial and boundary litigations, are essential if a progressively closer integration is desired.

a) Unilateral Initiative: Southern Maritime Tourism Routes

As part of government policy following a global analysis in which the Chilean Navy participated, it was decided to open three new navigation routes in the Beagle Channel-Cape Horn area. The purpose was to promote tourism in the surrounding areas, with subsequent benefits for the inhabitants of Region XII.

The opening of these routes created the need for upgraded and updated cartographic maps of the area, as well as the corresponding state-of-the-art navigation aids needed to effectively protect human life at sea and to navigate safely through the channels and fiords of this region. (See Figure 7).

FIGURE 7



b) Bilateral Initiative: Mining Treaty between Chile and Argentina

This Treaty opens the border to mining projects originating in the neighboring country and hopes to encourage coordinated international work in promoting mining activities, the use of copper and defense against trade protectionism. This instrument is consistent with the broadening of border demarcation agreements and the expansion of physical integration agreements. These include the opening and closing of border passages and the scheduling of investments to establish a connection infrastructure across selected passages.

The Treaty determines the scope of applicability through coordinated demarcation. This area does not extend to the entire national territory and does not include maritime spaces, island territories or the coastal border, as they are defined by each country. The border line shall be preserved and when the nature of the works so require, the Ministers of Foreign Affairs, through the Joint Border Commission, have the authority to decide any question or request made by the parties with respect to the precise determination of that border line, for the effects of application of the Treaty.

The scope of application does not imply a repeal of the Chile's mining legislation or the creation of an extra-territorial area, or that the Management Commission would have supranational status. Neither is it part of the concept established in Chile's Constitution concerning zones declared by law of importance to national security (Art. 19, N° 24, Sec. 10). This scope is an essential reference point for the jurisdiction of the Treaty Management Commission and deals with the possibility of using this space for an operations area and facilities connected to concessions and plants located in the other country's territory.

Another issue of interest relates to the establishment of water rights and the possibility of guaranteeing that a mining project has access to this natural resource within the territory of the other party under the Treaty. The use of water resources located in the territories of the parties could be permitted in compliance with each country's applicable internal legislation, even when they are not shared water resources. This is an innovative relationship that opens new roads to border facilitation and to the cross-border movement of goods, particularly from the point of view of constituting rights over water located in another State.

The Treaty includes a wide range of mechanisms and instruments for resolving disputes between the parties in accordance with the matter or object under dispute. (See Box 14).

1.2. Development Policies in Isolated Zones

The low population density that characterizes some regions of Chile constitutes a significant vulnerability factor. This should be added to the fact that different conditions existing in these zones have imposed a relatively slower development than experienced by other areas of the country, even though the zones have considerable economic potential based on their abundance of natural resources.

In contrast to Chile's projected population growth, which is rather moderate, forecasts of its economic growth are significant. As a consequence of the combination of both factors, Chile has become an attractive destination for both foreign investment and, eventually, for the population of less developed or overpopulated countries lacking physical space. A significant portion of these potential flows of investment and migration can be largely channeled towards those

BOX 14

MINING INTEGRATION AND COMPLEMENTARITY TREATY BETWEEN CHILE AND ARGENTINA

This Treaty originated in the Agreement signed by the Presidents of Chile and Argentina on December 29, 1997, as well as in the Protocol and Complementary Agreement signed on August 20 and 31, 1999, respectively. On August 29, 2000, the Chilean Senate approved the Mining Integration and Complementary Treaty between the two countries and on December 20 of the same year both Presidents signed the ratification documents.

The Mining Treaty provides for a Management Commission (Art. 18) which is defined as a non-supranational body, to administer it. The Commission is comprised of representatives of the Ministries of Foreign Affairs and Mining of Chile and Argentina (Art. 18 MT), and can summon the pertinent representatives of public agencies when it deems it advisable.

remote areas, a challenge that is also shared by the National Defense.

The Chilean State has strived to implement measures that will benefit those remote areas, so as to promote their development, increase their population and fully integrate them into the rest of the country. The first of these goals has taken the form of development plans for the northern and southern ends of the country and the promotion of initiatives to channel domestic migration towards those areas.

The presence of Armed Forces units in these remote areas located far from the vital centers of the country, have attracted settlers and given birth to communities. The history of our country is marked by situations in which population centers emerge after a military presence has been established or a military presence has enabled the maintenance and development of a social group.

Ever since 1953 the Chilean Army has been establishing a presence throughout the length of our national territory and has cooperated in the development and flexibility of our land route system. To date, these works have enabled the Chilean State to build more than 3,500 kilometers of roads, 6,000 linear meters of runways and air fields and 3,000 linear meters of bridges, thus promoting territorial integration and generating centers of development which, along with the improvement of the socioeconomic conditions of their inhabitants, have improved the presence and action of the State. At present, the Army through its Military Work Corps (CMT), and in close contact with the Road Construction Office of the Ministry of Public Works, is focusing its attention on consolidating the axes of action defined by the Andean Route, the Main Coastal Highway and the Longitudinal Southern Highway and their secondary roads, with emphasis in Regions I, II, IX, X, XI and XII.

Also working towards territorial consolidation, the Navy has promoted the development of the city of Puerto Williams, which since its foundation in 1953, has provided ongoing support to the isolated areas of the Tierra del Fuego archipelago at the southernmost tip of Chile, to island territories and to the territory of the Antarctic Chilean peninsula, as well as assisting and giving security to navigators by maintaining lighthouse keepers who live in desolate areas and barren islets.

The Air Force, in turn, connects the continental, island and Antarctic territories by air and helps the population in cases of emergency, especially in places where other means of access are difficult or cut off. It has also installed air bases in territories that are not accessible through other means, so as to reaffirm and consolidate national sovereignty, as in the case of Campo de Hielo Sur.

1.3. Policies Related to Maritime Interests

Maritime interests correspond to national development activities that generate benefits of a political, strategic, economic, scientific and social order for the country as a whole. They are related to the exploitation, enjoyment and use of the resources or benefits provided by the sea, the seabed and the subsoil, which are under the maritime jurisdiction of the State. They take place on the high seas, and in the coastal zone and interior waters.

In order to obtain the maximum benefit from this oceanic potential, the Chilean State has taken measures to legislate and develop sea activities and has fostered an awareness of maritime issues within the country.

Within this field, the work of the Chilean Navy is directed towards achieving conditions that will ensure national sovereignty at sea and achieve the environment of peace necessary for growth and development. Additionally, it will provide our people with a maritime perspective that will give Chile a leading role in the development of the Pacific Basin and help them to value the sea as a real source of growth and development for our country. Lastly, it seeks to create a national awareness of the sea's importance to our economic development, which is largely dependent on foreign trade, more than 90% of which is carried by sea.

Chile's maritime interests include some specific objectives, which the Navy, with its distinctive skills, helps meet. For example:

a) To facilitate a more efficient use of the natural resources of the national oceanic territory.

b) To develop scientific research and technologies related to all the activities that support and sustain the use, exploitation, preservation and management of the natural resources of the national oceanic territory.

c) To improve the legal framework and to reinforce the administrative agencies in charge of this territory and maritime activities in compliance with national and international law.

d) To protect and preserve the sea environment within the national oceanic territory and to prevent the sea activities of other States from affecting Chilean interests or the quality of life of its inhabitants.

e) To provide effective security for the national oceanic territory, maritime interests and sea routes that are of vital importance to the country in the event of possible threats, unlawful actions or aggression that may harm the State's jurisdiction and sovereignty, and to take proper precautions to neutralize them.

f) To promote and develop the shipbuilding industry in Chile, utilizing the installed capacity of both private and State dockyards, with the active participation of ASMAR (Navy shipyards and repair shops).

The projection of the country towards the Asian Pacific through its maritime routes is one of the country's maritime interests. Easter Island, Chile's nearest territory to the nations situated on the eastern rim of the Pacific basin plays an essential role in the achievement of that objective.

Easter Island is the westernmost of the oceanic islands within Chilean territory. It is located at latitude 27° 07' South and longitude 109° 11' West, 3,700 km offshore from the port of Caldera. It covers an area of 165 km^2 and has an approximate perimeter of 61 km. It was incorporated to Chilean sovereignty on September 9, 1888 by Policarpo Toro Hurtado, a Lieutenant Commander of the Chilean Navy, who took possession of it in the name of the Chilean Government on that date. Statutory Decree 575, of 1974, established the Chilean Province of Easter Island, under the authority of Region V. Its capital city is Hanga Roa and it has a population of 3,837 inhabitants. The presence of the Chilean sea authority in that area of the Pacific is exercised through the Port Authorities.

Apart from its archeological and tourist attractions, Easter Island is Chile's door to the Pacific, constituting an essential support point for the sea and air routes that travel across the southwest quadrant of the Pacific.

1.4. Antarctic Policy

The Chilean Antarctic Territory is an important element in the definition of Antarctic policy. Chile established the delimitation of its territory on that frozen continent in 1940, through Executive Decree 1747.

This decree establishes that the Chilean Antarctic or Chilean Antarctic Territory comprises all lands, isles, islets, reefs, glaciers, and others known or unknown, in the respective territorial sea within the limits of the segment between the meridians of 53° and 90° longitude to the west of Greenwich.

Chilean Antarctic rights are founded on historical, geographical and legal bases. Under these bases Chile attended negotiations on the Antarctic Treaty of 1959, in conjunction with 11 other states.

With relation to territorial sovereignty rights, Article IV of this Treaty establishes that none of its provisions can be interpreted as detrimental to the bases of territorial sovereignty rights or as their relinquishment on the basis of previously made claims. In this respect the Treaty protects the legal status of the Chilean Antarctic Territory and guarantees the position of parties with respect to relevant issues regarding sovereignty over that continent.

As the Antarctic Treaty acknowledges in its Article IV, Chile maintains its irrevocable right of territorial sovereignty in the Antarctic.

It is worth noting that two other countries have filed territorial sovereignty claims in portions of the same geographical area where Chile claims sovereignty rights. However, Chile and Argentina (one of the two other countries) have mutually recognized their Antarctic rights, without demarcating their respective territories, before subscribing the Antarctic Treaty.

As a founding member of this instrument, Chile participates with voting rights, in decision-making processes related to the Antarctic and is willing to consider international control and cooperation programs, to the extent that they do not affect its sovereignty rights. Chile aims to project its national interests in that region of the world, without ignoring environmental issues and strictly observing the different conventions on the Antarctic System, which have been subscribed.

Additionally, on October 4, 1991, it subscribed the Additional Protocol to the Antarctic Treaty on the Protection of the Environment (Protocol of Madrid), with the objective of further protecting the Antarctic environment and its dependent

BOX 15

ANTARCTIC POLICY

- To protect Chile's Antarctic rights and secure them within the framework of the Treaty.
- To participate actively in the Antarctic System.
- To consolidate the national institutional system within the Antarctic.
- To strengthen the participation of the Magallanes and Chilean Antarctic Region in accordance with administrative powers granted to it by national legislation and to promote public utilities in the continental territory so as to constitute an effective "bridge" to the Antarctic.
- To preserve the peace zone, scientific activities and the ecological reserves.
- To guide national Antarctic sciences towards a closer integration with prevailing trends in this field.
- To preserve living marine resources and to develop southernmost fishing.
- To promote controlled tourism.
- To encourage international cooperation.

CONTRIBUTION OF THE ARMED FORCES

- Establishment of permanent bases in the Antarctic territory.
- Meteorological and scientific activities.
- Support of scientific activities undertaken by other national or international organizations.
- Exploration of the territory and its projection towards the South Pole, with meteorological, glaciological, geodesic and hydrographic purposes.
- Logistical support to Antarctic activities undertaken by other national and international institutions.
- Air evacuation of people.
- Removal of waste and pollutants produced by national and foreign bases.

and associated ecosystems. In acknowledgement of the importance of safeguarding and protecting the integrity of the ecosystem of the seas surrounding the Antarctic, on September 11, 1980, in Canberra, Australia, Chile signed the Convention on the Protection of Living Antarctic Marine Resources.

Based on the above-mentioned legal instruments, the Chilean State enacted its National Antarctic Policy in March 2000, with the objectives described in the adjoining box. (See Box 15).

In this territory the Chilean State has established and operates the harbor master's offices of Bahía Fildes, Bahía Covadonga, Puerto Soberanía and Puerto Paraíso, all agencies that provide support to human safety at sea and perform tasks related to safeguarding the local marine environment.

Of these, Soberanía and Covadonga are active year-round, since they have been operated by staff from the Prat Naval Base since 1947, and from the O'Higgins army base since 1948, and their complete rehabilitation is included in institutional plans.

24 On the same island of King George, the Chilean Antarctic Institute (INACH) has established the Julio Escudero and Julio Ripamonti bases. The first of these is the most important Chilean scientific base in the Antarctic.

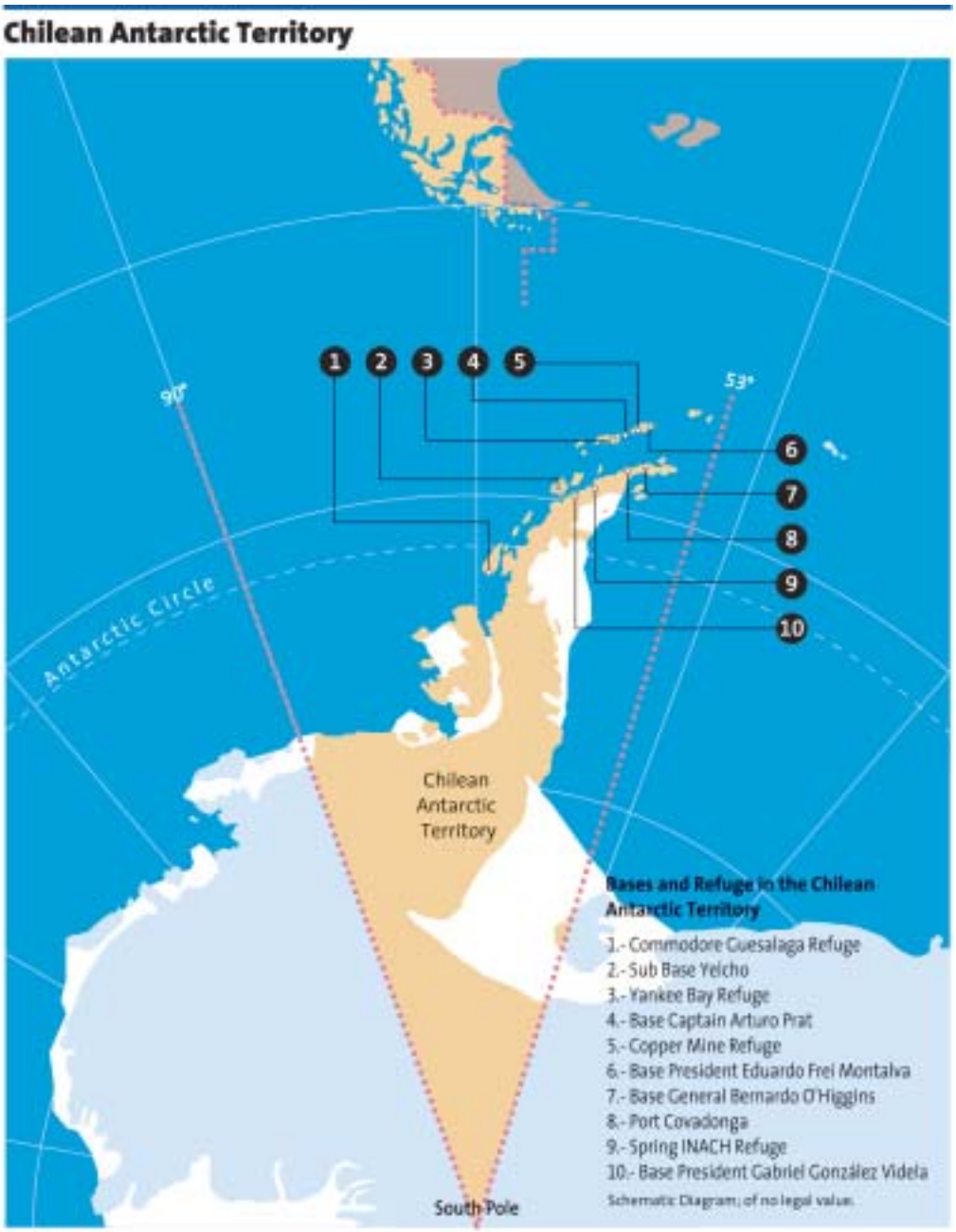
These facilities are supplemented by the Presidente Eduardo Frei Montalva air base on King George Island, which is considered the most important air base of the Chilean Antarctic territory. It also operates year-round.[24] This is the site of the first Chilean Antarctic settlement, called Villa Las Estrellas. The settlement has all necessary basic services (post office, hospital, telephones, bank, school, etc.) and is a symbol of Chilean sovereignty in the Antarctic region. The Teniente Luis Carvajal air base and the Arturo Parodi polar station, which is the nearest construction to the South Pole within Chile's Antarctic territory, are also part of the settlement.

Scientific endeavors, environment preservation and the exercise of the authority of the State in this territory are supported through these means (See Figure 8).

1.5. Space Policy

Since 1959, the year our country signed an agreement with the United States of America for the installation of a satellite tracking station at Peldehue, Chile's space technology has been a tool used by different organizations, universities, research centers, and enterprises. However, Chile is only a user country of this technology and therefore depends on other states to obtain information, services and satellite images. Therefore Chile has a peremptory need to participate with its own capabilities in space activities.

FIGURE 8



a) Frame of Reference

Within the international sphere, the guiding criteria for Chile's space policy are the following:

- To defend the principle that outer space is a common heritage of humanity, in accordance with the provisions of current international legislation, which has been ratified by our country.
- To promote the peaceful use of outer space so as to strengthen international peace.
- To safeguard national sovereignty and security against the potential misuse of space technology by other nations.
- To promote international cooperation and integration with the Latin American region in space activities.

Within the national sphere, the criteria that guide our space policy considers, that within the scope of security and Defense, the use of space shall be carried out in accordance with

current international regulations, which stipulate the peaceful use of outer space and promote cooperation in joint projects among civilian and military agencies.

b) Objectives

The main objectives of Chile's space policy are:

- To define the actions related to the use, knowledge and progress of space science and technology, thus contributing to a safe and sustainable socioeconomic development of the country, cooperating at the same time with the implementation, follow-up and coordination of national science and technology projects.
- To promote the training of the necessary human resources for the development of space science and technology.
- To increase our international participation so as to achieve a more relevant role in this sphere through the coordination of organizations and institutions that undertake science and technology tasks.
- To promote, encourage and disseminate information about space science and technology and the benefits obtained through them so as to create national awareness of their importance and growing influence in national and world activities.

c) General Guidelines

Priority shall be given to the development of the following items inherent in a space system:

- Space elements. Manufacture of satellites, carrying capacity and equipment or remote acquisition and sensor equipment, telecommunications and scientific items.
- Space infrastructure. In this field emphasis shall be given to developing specialized manufacturing laboratories, testing and integration of control and tracking centers. Construction of launch centers has not been considered.
- Launching. The development of rockets, vectors, space transportation vehicles or others intended for the transport of space elements has not been considered.
- Information System. The trend will promote the establishment of a National Center for receiving, storage, processing and distribution of special data, with the objective of avoiding duplicate acquisitions and achieving efficiency at the national level in the handling of this resource.
- Space Activities. They will be mainly directed towards the creation of an analysis team comprised of scientists, professionals, technicians, and experts who will enable the operation of the aforementioned system elements.

2. DEVELOPMENT COOPERATION POLICIES

The Defense Policy includes a series of elements to enable its institutions to devote part of their efforts to national development, utilizing their individual and collective skills.

2.1. Environmental Policy

The general objective of the Chilean State Environmental Policy is to promote the sustainability of the environment within the development process and its final objective is to improve the quality of life of Chilean citizens and of future generations.

Each State sector must develop an environmental policy to be applied in its own sphere, within the framework established by the national policy. To this effect, the Ministry of National Defense has prepared a sector policy called the Defense Environment Policy, which will serve as a general guideline to the specific policies of the different organizations and institutions under the Ministry of National Defense. The legal framework in which the National Defense Institutions operate in this field are Law 19.300, "Constitutional Organic Law on the General Foundations of the Environment" and the declarations and international agreements and treaties to which the Chilean State is a party.

In order to organize the activities of the Ministry within this sphere, the National Defense Environment Committee, under the Chief of the National Defense General Staff, was established on January 30, 2001. In April 2001 an Agreement on Environmental Cooperation was signed between the National Commission for the Environment (CONAMA) and the Ministry of National Defense. Its objectives are to establish a working, collaborative relationship between the two institutions; to ensure that the Defense Policy is an environmentally clean policy, and to identify environmental issues that the Armed Forces and the Forces of Order and Security are to address and to take actions that will result in the effective resolution of these environment problems.

Environmental activities carried out by the National Defense institutions can be divided into

two large categories. The first category deals with the environmental sustainability of the normal activities of the Defense sector organizations. These organizations have been gradually incorporating procedures that will minimize the environmental effects of their normal activities. The second category is participation by the National Defense institutions in the State's National System of Environment Management (SNGAE).

The national environmental system currently in force assigns specific obligations and responsibilities to some specific institutions of National Defense, with respect to the control, prevention and care of the environment in Chile or in areas where the State has made international commitments to use its resources for preservation of the environment.

Some of the most significant activities carried out by the armed institutions are the Army's efforts to achieve clean production in its industrial and chemical complex located in the Metropolitan Region and the education and training of staff at the Army's Military Polytechnic Academy in subjects related to environmental management. Environmental concerns are now one of the variables that must be taken into account in the planning or performance of all the Army's field activities. Project are also being undertaken to optimize the handling of contaminating wastes in environmentally sensitive areas such as along the coast, agricultural, tourist or archeological zones, and neighboring natural reserves.

For its part, the Navy has undertaken an especially intensive environmental work due to national and international legislation that assigns it specific functions in environmental matters.

In order to carry them out, the Service for the Preservation of the Water Environment and Combating Pollution was created in 1993. Its efforts are directed towards safeguarding the quality of the water environment in the sea, rivers and lakes of the country, minimizing risk situations through the prevention, control and combat of pollution and spillage of any harmful substances.

In order to meet this objective, the Service has a National Plan for the Research, Oversight and Control of Water Pollution. It also carries out its activities in different work areas, particularly in those that derive from the Permanent Commission of the South Pacific (PCSP), the National Advisory Committee on Global Change, the application of the Protocol on Environmental Protection of the Antarctic Treaty (Protocol of Madrid), the National Oceanographic Committee (CONA), and the International Maritime Organization.

The Navy plays a particularly important role in stimulating the development of the system of environmental institutions dealing with the water environment, and through its efforts to achieve the full environmental sustainability of its facilities and to ensure that all Navy ships meet the requirements established in current international regulations (MARPOL).

Lastly, the Air Force has incorporated environmental criteria and procedures aimed at protecting the environment, in particular from sound pollution. One particularly important task is that performed by the Office of Meteorology of the Chilean Air Force, which provides information about different environmental variables, thus contributing to the environmental management of the country and, in particular, to prompt reaction to environmental emergency situations. Additionally, this agency is responsible for the administering the Global Warning monitoring stations in Chile (in the southern city of Valdivia and Easter Island).

2.2. Military Industry

The Defense Industry and the military industry in particular, contributes to the country's development by providing innovative technology and possibilities for the transfer of technology.

Within this sphere, the Army's contributions are centralized in the Military Industry and Engineering Command. Factories and Workshops of the Army (FAMAE), the Chemical and Industrial Complex and the Research and Control Institute carry out the most important activities. Military manufacturing capability, mainly represented by FAMAE, Although its technological development permits the manufacture of weapons of different types and calibers, armored vehicles, rockets and ammunition, it is also utilized for the manufacture of tools and articles for national production. Similarly, military chemical production manufactures explosives and supplies used in industry and in mining enterprises.

The Navy has its shipyards and repair shops, Shipyards and Workshops of the Navy (ASMAR) and its related enterprises SISDEF y SOCIBER. ASMAR is an autonomous State-owned enterprise that has grown into a highly-professional industrial complex, with the capability of meeting increasing demand for careening maintenance, repair and construction of ships belong-

ing to the Chilean Navy and to the National Merchant Marine, as well as for maintenance and repair of navy ships from other countries. It has three dockyards located in Valparaíso, Talcahuano and Magallanes. To date, ASMAR has built 95 ships and other sea craft in its dockyards.

The Air Force basically channels its efforts through the National Aeronautics Enterprise (ENAER). This enterprise has achieved strategic business alliances in the national and international spheres for different projects. In the manufacturing field, the "Pillán" basic training aircraft constitutes a distinctive item and is in full operation in several air forces around the world. It also manufactures pieces and parts in conjunction with various foreign companies of recognized prestige in the world of aeronautics. Lastly, ENAER has incorporated state-of-the-art retrofitting technology for combat aircraft and its installed capacity allows it to overhaul the Air Force's inventory of aircraft, as well as that of military and civil aircraft from other countries.

2.3. Science and Technology

In this field, Defense institutions have made several contributions to the national community. As part of joint agreements with State, private and university institutions, they carry out scientific researches, which have resulted in the pooling of know-how to the benefit of these institutions as well as to that of the private development sector.

Using the CEOTAC computer program, the Army has developed an Institution and Organization Management Training Program (SEGIO). The SEGIO includes training for different civilian and military institutions, including the "Catastrophe Training System", directed towards State public administrators and the "Disaster Training System", with the objective of boosting the preparedness of authorities responsible for decision-making in cases of crises at the political-strategic level.

Naval architecture is one of most significant contributions of the Navy through her dockyards, shipyards and workshops, in addition to the development of weapons control and command and control systems as well as propulsion systems for its combat units. In the field of scientific research, the Navy also contributes, through the Navy Hydrographic and Oceanographic Service (SHOA), to the dissemination of the national oceanographic plan that meets research requirements coordinates efforts undertaken by different organizations, universities and research centers related to sea activities.

The Air Force itself is continually incorporating new technology into its activities. The development of ENAER has allowed the incorporation of technologies that go beyond aeronautics, reaching an advanced development of technology, which has been recognized worldwide. This is the case of Bureau Veritas prepared for ISO 9002, the MIL-9858 A military specifications and those for the United States Federal Aviation Agency (FAA). Furthermore, the special activities undertaken by the Air Force has permitted the incorporation of satellite technology to operate a satellite station within the country.

With regard to geographical information technologies, the Defense sector has the basic territorial information required by the country. This activity is implemented through the preparation of land, sea and air cartography carried out by the Military Geographic Institute (IGM), the Navy Hydrographic and Oceanographic Service (SHOA) and the Aerial Photogrammetry Service of the Air Force (SAF).

The IGM prepares the official cartography of the country, in the different forms and scales used for mining, public works, urbanization, education, health and statistics activities, and, in general, to support development decision-making of administrative authorities.

The SHOA has implemented the hydrographic mapping of the Chilean coast. This task was initiated in 1843 at mouth of the Río Bueno and its scope was later increased with constantly improving technologies, until the current electronic mapping of the entire national coast, including its fiords, channels, bays and ports as well as their accesses. These places are thus open to the safe traffic of freighters both for domestic and foreign trade and their passage is facilitated through the implementation of a complete system of lighthouses and buoys that are essential for navigating through the channels and allowing vessels to avoid the rigors of the southernmost ocean waters.

Lastly, through the use of different aerial photography techniques, the SAF provides an important service to the planning and development of road infrastructure, survey of native forests, determination of zones suitable for habitation and production of different agricultural products, mine prospecting, environmental assessments and other similar matters.

Table of Contents

Foreword
by the President of the Republic 7

Prologue
by the Minister of National Defense 9

PART I

The State of Chile 15

1. Foundations And Characteristics 16
1. Basic Principles of the State 16
1.1. Institutional Order: Democracy and the Constitutional State 17
1.2. National Objectives 17
2. Characteristics: State and Defense 17
2.1. Defense as a Function 18
2.2. Defense, Security and Development 18
2.3. Human Security 18
2.4. National Defense and the Internal Order of the Republic 19

2. The Territory and Population of Chile 20
1. The National Territory 20
2. Chilean Geography 23
2.1. The Land 23
2.2. The Sea 23
2.3. The Airspace 24
2.4. The Polar Territory 25
3. The Population of Chile 25
3.1. National Identity 27
3.2. Data and Background Information 28

PART II

Defense Environment 29

1. International Security Trends 30
1. Diversification of Actors involved in International Security 30
1.1 The Economic Agents 30
1.2 The Civil Society 31
2. Changes in International Security Concepts 31
3. The State as Coordinator and Regulator of the Globalization Process 31
4. Development of Global Governance Regimes 31
5. A Greater Demand on UN Peacekeeping Operations 32

2. International Settings that Influence Defense 33
1. The World Context 33
2. The Continental Context 34
2.1. America: A Region that Contributes to Strategic Stability 34
2.2. Threats to the Continent 34
2.3. A Governance In Security Issues 35
2.4. Interamerican Security Institutions 38
3. The Regional Context 38
4. The Neighboring Context 39
4.1. Chile and Argentina 39
4.2. Chile and Peru 41
4.3. Chile and Bolivia 41

3. International Conflicts 43
1. Risks And Threats 43
1.1. Conventional Threats 44
1.2. Non-Conventional Threats 44
2. Prevention and Reaction 45
2.1. Conventional Threats: Prevention and Reaction 45
2.2. Non-Conventional Threats: Prevention and reaction 46
3. Types of Conflicts 46
3.1. International Crisis 46
3.2. War 47

4. The Geostrategic Challenge 48
1. The Geostrategic Perspective 48
1.1. The terrestrial factor 48
1.2. The maritime factor 49
1.3. The Aerospace Factor 49
2. Conclusions of the Geostrategic Analysis of the National Territory 50

PART III

National Defense Policy 51

1. Concepts and Definitions 52
1. Objectives of National Defense 52
2. Characteristics of Chile's National Defense Policy 53
3. Reference Framework 53
4. Sources of the Defense Policy 54
4.1. National Security Policy 54
4.2. The Global Political-Strategic Assessment (AGPE) 56

2. Elements of the National Defense Policy 56
1. Elements of the Chilean Defense Policy: NDB 1997 56
1. 1. National Objectives 56
1.2. International Context 56
1.3. World and Regional Stability 57
1.4. Defense and Security 57
2. Crux of the National Defense Policy 57
3. Use of the Defense Means 57
3.1. Deterrence 57
3.2. Cooperation 58

3.3. Coercive Use of Military Power 58

3. The Defense Sector and International Policies 63
1. United Nations Peacekeeping Operations (UNPKO) 63
1.1. General Considerations 63
1.2. Chile's Policy for Participation In UNPKOs 64
1.3. The Armed Forces in UNPKOs 65
1.4. Participation of Chile In UNPKOs since 1997 66
2. Mutual Confidence Measures 66
3. Instruments of Cooperation and Understanding 67
3.1. Cooperation Mechanisms 67
3.2. Cooperation Agreements 69
4. Policy on Humanitarian Demining 69
4.1. Humanitarian Demining under the Ottawa Convention 69
4.2. Humanitarian Demining and Human Security Policy 69
4.3. Implementation of the Ottawa Convention 69

4. The Defense Sector and National Policies 72
1. Territorial Policies 72
1.1. Development Policies in Border Zones 72
1.2. Development Policies in Isolated Zones 74
1.3. Policies Related to Maritime Interests 75
1.4. Antarctic Policy 76
1.5. Space Policy 77
2. Development Cooperation Policies 79
2.1. Environmental Policy 79
2.2. Military Industry 80
2.3. Science and Technology 81

PART IV

The Conduct and Organization of the National Defense 82

1. Conducting the National Defense 83
1. Conducting the National Defense 83
2. Superior Institutions of Defense 83
2.1. President of the Republic 84
2.2. Minister of National Defense 84
2.3. National Congress 84
2.4. National Security Council (COSENA) 85
2.5. Superior Council of National Security (CONSUSENA) 85
3. Conducting at the Political - Strategic Level 85
4. Conducting the Armed Forces at the Strategic Level 86
5. Military or Joint Strategic Conduct of the Armed Forces 87
6. Fields of Action 87

2. Ministry of National Defense 88
1. Organization of the Ministry of National Defense (MOD) 88
2. Offices of the Undersecretaries of the Ministry of National Defense 88
2.1. Office of the Undersecretary of War 88
2.2. Office of the Undersecretary of the Navy 89
2.3. Office of the Undersecretary of the Air Force 89
2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile) 90
2.5. Office of the Undersecretary of the Investigations Police 90
3. National Defense General Staff (EMDN) 91
4. Superior Council of National Defense (CONSUDENA) 91
5. National Academy of Political and Strategic Studies (ANEPE) 91
6. Head Office of National Mobilization (DGMN) 92

3. National Mobilization and Military Service 93
1. National Mobilization 93
1.1. Mobilization of Manpower 93
2. Compulsory Military Service 94
2.1. Modernization of Compulsory Military Service 95
3. Reserve Forces 96

4. The Armed Forces 96
1. Military Policy 96
2. Mission of the Armed Forces 97
3. Functions of the Armed Forces 97
3.1. Joint Functions 97
3.2. Common Functions 97
3.3. Specific Functions 97
4. Considerations Regarding Jointness 98
4.1. Introductory Concepts 98
4.2. The Conduct of Joint Operations 98
4.3. Joint Operations 98
4.4. Conclusions about Jointness 98
5. Interoperability 98

PART V

The Means for Defense 100

1. The Chilean Army 101
1. Mission of the Army 101
1.1. National 101
1.2. International 101
2. Organization 101
2.1. High Command 101
2.2. Operational Units 102
2.3. Means and Capabilities 102
2.4. Military Institutes Command (CIM) 104
2.5. Administrative, Logistical and Technical

Support Organizations 104
2.6. Branches and Services 106
3. Strategic Vision 106
3.1. Scopes of Action 106
4. The Modernization Process 107
4.1. Bases for Strategic Changes 107
4.2. Objectives of the Modernization Process 108
4.3. Stages of the Modernization Process 108
5. Planning 108
6. Women in the Army 109

2. Chilean Navy 110
1. The Navy's Mission 110
1.1. In Peacetime 110
1.2. In Wartime 110
2. Organization 111
2.1. High Command 111
2.2. High Level Organizations 111
2.3. Combat Forces 111
2.4. Special Support Organizations 112
3. Strategic Vision 112
3.1. Scopes of Action of the Navy 114
3.2. Objectives of the Navy for the Bicentennial 115
4. Planning 116
5. Management Control 117
6. Women in the Navy 117

3. The Chilean Air Force 118
1. The Mission of the Air Force 118
1.1. In Peacetime 118
1.2. In wartime 119
2. Organization 119
2.1. High Command 119
2.2. Combat Command 120
2.3. Support Units 120
2.4. Operational Units 120
2.5. Means and Capabilities 120
2.6. Support Organizations 122
3. Strategic Vision 123
3.1. Scopes of Action of the Air Force 123
4. The Modernization Process 124
5. Planning 124
6. Women in the Air Force 125

4. The Professional Education Process in the Armed Forces 126
1. Training Military Personnel 126
2. Chilean Army 126
2.1. Officers 126
2.2. Enlisted Personnel 127
3. Chilean Navy 128
3.1. Officers 128
3.2. Enlisted Personnel 128
4. Chilean Air Force 128
4.1. Officers 128
4.2. Enlisted Personnel 129

PART VI

Defense Resources 130

1. Analysis of Defense Spending 131
1. Defense Spending and its Relation to other Macroeconomic Variables 131
1.1. The Incidence of the Gross Domestic Product (GDP) 131
1.2. Level of Perceived Threats 133
2. Defense and Fiscal Expenditures 133
3. Defense Demand, GDP and Perceived Threats: Their Effects 133
4. The Armed Forces as a Purchasing Power 134

2. The Defense Budget 135
1. The Budget Structure of the Ministry of National Defense 135
2. Budget Procedures and the Allocation of Resources 136
3. Modernization of the Budget Systems 137
4. The Budgets of the Armed Forces: Distribution and Composition 137
4.1. Allocations by Use 139
4.2. The Trend in Personnel Expenditures 139

3. The Defense Procurement System 142
1. Description of the System 142
2. Economic Issues and Financial Effects 143
3. The Management Control System 143
4. Offsets 144

4. The Social Security System of the Armed Forces 146
1. Description of the System 146
2. Composition of the Social Security System Administered by Capredena 146
2.1. The Common Benefits Fund 146
2.2. The Severance Fund 147
2.3. The Curative Medicine Fund 147
2.4. The Social Help Fund 147
3. Beneficiaries and Basis of the System 148
3.1. Beneficiaries 148
3.2. The Bases for the Social Security Framework 148
4. Modernization Criteria 148
4.1. The Ongoing Situation 148
4.2. The Modernization Process 148

5. Standardized Measurement of Defense Spending 150
1. Problems of Comparative Estimates of Defense Spending 151
2. ECLAC Methodology 151

PART IV

The Conduct and Organization of the National Defense

The fact that Defense is a regulatory activity determines the way in which it is implemented. Since it is essentially a matter of national concern, the President of the Republic is responsible for its management and conduction, with the assistance of different advisory and coordinating services. These include all the institutional agencies of the Republic involved in the decisions to assure the country's external security.

The importance of the decisions made at the higher levels of the Defense structure, as well as in the defense sector itself, for the country's development during peacetime as well as in wartime or any other type of armed conflict, requires comprehensive advisory services to the Head of State. These take the form of political collaboration from State agencies, institutions or political authorities and the military collaboration of the Armed Forces. According to the Political Constitution, the Minister of National Defense should work right alongside the President of the Republic in governing and administrating the defense sector. It is the Minister's job to head the Defense Ministry, comprised of advisory and work bodies, public services, and subordinate organizations, as well as the Armed Forces and Police and Security institutions.

The Minister of Defense is responsible for submitting the National Defense Policy for the consideration of the President of the Republic. In the event of armed conflict, the law provides that the State be organized into Fields of Action and makes the Minister of Defense responsible for coordinating the different ministries compliance with the measures adopted by the President of the Republic.

1. Conducting the National Defense

Given the nature and impact of decisions involved in National Defense, its conduction requires a specific system and order. The President of the Republic bears the main responsibility for these matters. This chapter summarizes important aspects of the conduct and organization of the Defense sector.

1. CONDUCTING THE NATIONAL DEFENSE

The Conduct of the Defense is a process used to make the decisions required to guide and direct the country's defense. Based on a specific organizational structure, this process flows through a regulated and systematized channel starting from the highest level of the State (the office of the Executive), where decisions are made, to the strategic or military level. Conduct occurs when command is exercised. The President of the Republic directs the Commanders in Chief of the Armed Forces through the Minister of National Defense, who acts as the regular channel for this purpose, though his duties differ in peace and war.

The rules governing the conduct of the defense in Chile are based on different instruments that vary in their legal rank and the different contexts of the times in which they were enacted. The conceptual evolution of the field of Defense has attempted to better reflect the practical exercise of the modern State in this matter, and has given place, for example, to a typology that distinguishes between the political and strategic level and the military strategic level. However, the rules governing the conduct of the Defense have not followed a similar evolution of the concept. Nonetheless, this section attempts to provide a systematic presentation of the ideological principles and current legislation and of the modern approach to conducting military operations at different levels in academic and institutional defense spheres, both in Chile and abroad.

2. SUPERIOR INSTITUTIONS OF DEFENSE

Under Chile's system of presidential government, the highest Defense institution is subordinate to the President of the Republic. Other bodies that perform varied duties according to the laws of our country are the National Congress, the National Security Council, and the Superior Council of National Security. As a whole, these State institutions and agencies that act at the highest level of conducting the defense consti-

FIGURE 9

tute what is known as the superior structure of the Defense. (See Figure 9)

2.1. President of the Republic

Article 24 of the Political Constitution of Chile refers to the President of the Republic as the one responsible for governing and administrating the State, and extends the President's authority to everything related to the maintenance of public order and external security of the Republic.

In terms of the defense duties (i.e., the duties regarding the country's external security), the President of the Republic has the following authority:

- To dispose, organize, and distribute the land, sea, and air forces.
- To assume the position of Supreme Commander of the Armed Forces in the event of war.
- To declare war, with prior authorization of the legislature, placing on record that the opinion of the National Security Council was considered.
- To declare, together with the other bodies of the State, the constitutional states of emergency and siege.[25]

These duties comprise the main exclusive decision-making authority of the President of the Republic in the area of Defense.

25 Political Constitution of the Republic of Chile, Article 32, Nos. 7, 19, 20, and 21.

2.2. Minister of National Defense

The Minister of National Defense is the direct and immediate collaborator of the President of the Republic for governing and administrating the area of defense. The Minister governs the Defense Ministry in accordance with the policies and directions given by the President.

The Minister's general task is to plan and direct the activities of the Ministry, and to provide direct and immediate advice to the President about national defense conduct, during peace and war.

As shown below, the Minister of National Defense performs his duties with the advice of the Board of the Commanders in Chief of the Services (JCCJ), which act as the Minister's main advisory body in these issues. It also has the support and advice of the National Defense General Staff (EMDN), an agency of the Ministry of Defense, and of ad hoc organizations that deal with specific matters: the General Advocate Committee, the Personnel Directors Committee, and the Health Directors Committee. Other agencies, some under one of the Undersecretary Offices or the National Defense General Staff, are the Office of National Mobilization (DGMN), the National Academy of Political and Strategic Studies (ANEPE), the Superior Council of National Defense (CONSUDENA), and others.

2.3. National Congress

The National Congress is comprised of the Senate and the Chamber of Deputies. Each legislative chamber has a Committee on Defense, which is responsible for analyzing and reporting

to its chamber's plenary all bills related to national defense in general and to the Armed Forces in particular.

In addition to analyzing and approving the defense sector budget, which includes the financial resources for defense, the Congress meets with the Executive Branch to approve laws to authorize or reject the entry of foreign troops into the national territory, as well as the posting of national troops abroad.

The Congress also has the authority to approve or reject the State of Siege, proposed by the Executive

2.4. National Security Council (COSENA)

Created in 1980 by Chile's Political Constitution, its mission is to advise the President of the Republic on national security issues as requested by the President. It is empowered to provide the President, the Congress or the Constitutional Court with its opinion on any event, action or subject that it believes to be a serious threat to the foundations of the nation's institutional system or which may compromise its national defense. Among its other powers, the Council may also gather, from the authorities and officers of the State administration, any information related to the country's external and internal security.

The Council is chaired by the President of the Republic, and is comprised of the following authorities, all of which have the right to vote:

- President of the Senate
- President of the Supreme Court
- Comptroller General of the Republic
- Commander in Chief of the Army
- Commander in Chief of the Navy
- Commander in Chief of the Air Force
- General Director of the Police Force

The following authorities are also part of the COSENA, but without the right to vote:

- Minister of Internal Affairs
- Minister of Foreign Affairs
- Minister of National Defense
- Minister of Economy
- Minister of Finance

This Council may be convened by the President of the Republic, or at the request of its members, and its agreements are adopted by absolute majority of the members with the right to vote.[26] Its Secretary is the Chief of the National Defense General Staff.

2.5. Superior Council of National Security (CONSUSENA)

Legislative Decree 181, created this agency in 1960, to advise the President on issues related to the nation's security and maintaining the country's territorial integrity.

In addition to its advisory function, the CONSUSENA is responsible for analyzing and proposing measures to coordinate the work of the different ministries in implementing the decisions and guidelines of the President of the Republic.

In this task, the Superior Council will determine the national defense needs and enforce all measures established by the President to increase the country's economic and defensive potential and decide how to use the country's resources in emergencies. It shall also determine the National Defense needs and request, from the appropriate agency, the funds needed to create, develop and maintain the essential power and operational capabilities of the Armed Forces. It is also responsible for reviewing and approving the national or primary documents of the national defense.

The Superior Council consists of the President of the Republic and the following authorities:

- Minister of State
- Minister of Foreign Affairs
- Minister of National Defense
- Minister of Economy
- Minister of Finance
- Commander in Chief of the Army
- Commander in Chief of the Navy
- Commander in Chief of the Air Force
- Director of State Borders and Limits
- Chief of the National Defense General Staff

Its Secretary is the Secretary of the Superior Council of National Defense (CONSUDENA).

The Superior Council is exclusive an advisory body; the President of the Republic has the exclusive right to accept or reject the resolutions of the Council. In this issue, it differs politically from the National Security Council, that adopts its resolutions by agreement of its voting members.

26 Political Constitution, Articles 95 and 96.

3. CONDUCTING AT THE POLITICAL-STRATEGIC LEVEL

Conducting at the political-strategic level refers to the leadership of the President of the Republic, with the assistance of the Minister of Defense, in decision-making and decision taking processes in issues of international cooperation in which Chile provides a specific number of military forces. In addition, in the case of events in which Chile participates to prevent or manage a conflict including war, but which involve developing and employing all or part of the armed forces and other means of national power in a synchronized fashion to secure national objectives.

The process that leads to political-strategic decisions by the President of the Republic bring together the political and technical perspectives of different sectors of the State administration, as well as the military or strategic perspective. Based on this, the President decides how to address a situation.

The country's legislation establishes that the body where these political, technical and strategic perspectives come together is the Superior Council of National Security (CONSUSENA). Within this Council, the Minister of Defense is responsible for proposing the National Defense Policy for the approval of the President of the Republic, both in peace as well as in war. The Minister is especially responsible for:

- Considering and assessing the manpower and material needs of the Armed Forces, required to maintain its potential, preparation and proper training.
- Proposing, according to the corresponding plans, the missions to be carried out by the Armed Forces and their priority.
- Proposing to the CONSUSENA, for its consideration and approval, all issues related to national security in which the National Defense Field must take actions.
- Establishing the necessary contacts with the other ministries and civilian organizations to make the best use of the state services related to national security.
- Participating in the study of the preliminary plans and implementing the part for which his office is responsible.

Since the CONSUSENA meets only when convened by the President of the Republic, many duties concerning political and strategic conduct are routinely performed by the State, particularly by the National Defense General Staff, including:

- Preparation of the Global Political-Strategic Assessment.
- Conduct of the National Primary Planning Process
- Order and oversee the strategic (secondary) planning deriving from the national primary planning.

4. CONDUCTING THE ARMED FORCES AT THE STRATEGIC LEVEL

Statutory Decree 181 and its implementing regulations use the concept "strategic conduct of the Armed Forces" to mean the action by which the Superior Council of National Defense advises the President of the Republic and studies and proposes measures for coordinating the work of the different Ministries to carry out the policy set by the President.

The President will have at all times –in peace, war or state of emergency– a direct chain-of-command relationship with the corresponding Commanders in Chief, through the Ministry of Defense. When war or a state of emergency make it necessary to establish joint forces in certain areas, the line of command between the President and the military commanders on the field in charge of those joint forces will be through the Minister of Defense and the Chairman of the Board of the Commanders in Chief of the Services.

In times of war, the President of the Republic assumes as Supreme Commander of the Armed Forces and the law authorizes him to personally exercise the strategic conduct of the Armed Forces or to delegate this responsibility to the Chairman of the Board of the Commanders in Chief of the Services.[27]

In addition to the tasks already mentioned, in which the Minister of Defense must submit proposals for the approval of the President of the Republic, the Minister must also:

- Propose directives and orders for the strategic conduct of the Armed Forces.
- Approve the strategic (secondary) plans, implemented through the Board of the Commanders in Chief of the Services.

27 See Executive Decree 272, of 1985, "Regulations for the constitution, mission, hierarchy and duties of the Armed Forces".

To enable the Minister of Defense to best perform the functions assigned to the position, the law provided it with its own advisory body to deal with issues involving the three branches of the armed forces: the Board of the Commanders in Chief of the Services (JCCJ), which has the National Defense General Staff (EMDN) as its permanent working staff. The Board is comprised of the Commanders in Chief of the Army, Navy and Air Force. In peacetime, the Minister of Defense chairs the Board. During wartime, the Board is chaired by a military officer appointed by the President of the Republic to act in the capacity of Chairman of the Board.

In addition to advising the Minister of Defense, the Board of the Commanders in Chief of the Services (JCCJ) also has some specific duties, such as:

- Reviewing and proposing military policy and measures related to national defense involving the Armed Forces, and reviewing and evaluating their needs.
- Proposing solutions to all problems related to military strategy and its development in wartime.
- Issuing instructions and provisions for the strategic conduct of the Armed Forces, deriving from the primary (national) and secondary (strategic) planning.
- Proposing the establishment of joint commands or forces where required by National Security.

In peacetimes as well as during wartime, each member of the Board, i.e., each Commander in Chief, shall be responsible for enforcing the decisions adopted in relation to their respective service.

5. MILITARY OR JOINT STRATEGIC CONDUCT OF THE ARMED FORCES

This level of conduct includes formulating and directing activities carried out by the Armed Forces preparing and executing war and its campaigns. The direction and coordination of the activities of each of the services is crucial in function of the strategic objectives established.

The Board of the Commanders in Chief of the Services (JCCJ) is in charge of the coordination of the activities rooted from the military or joint strategic conduction. For this purpose, in addition to its responsibilities outlined in the previous point, this Board have the following duties:

- To study and approve the plans of the subordinate joint commands.
- To plan the Armed Forces training in all aspects of joint actions.
- To order the direction and execution of joint exercises and maneuvers.

In wartime, the Chairman of the Board of the Commanders in Chief of the Services (JCCJ) is in charge of the strategic conduct of the Armed Forces, whenever the President of the Republic so decides, and, with the approval of the Minister of Defense, will always execute all decisions related to joint forces.

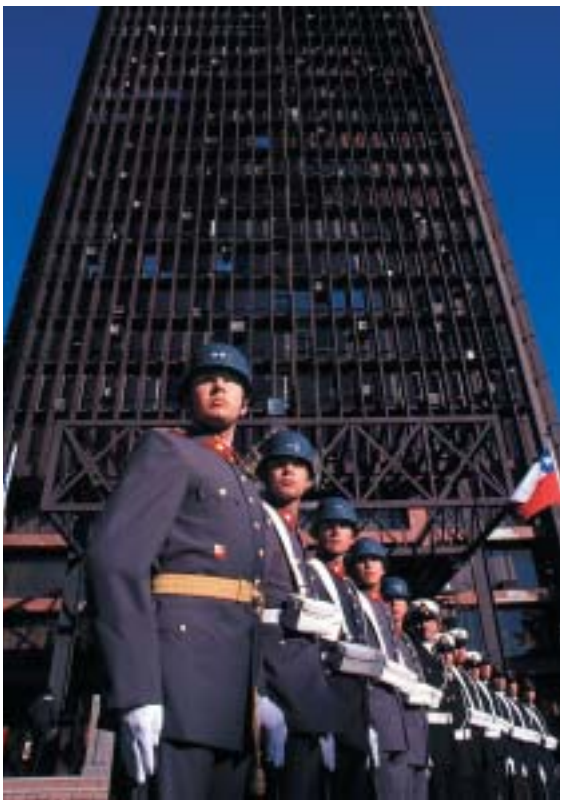
6. FIELDS OF ACTION

In order to deal with threats or risks to the country's security, and to the national defense in particular, Chile's legislation groups all the ministries, institutions and agencies under them into four fields of action: Internal, Diplomatic, Defense, and Economic.

The 1960 legislation that constituted the Superior Council of National Defense and the fields of action established that the planning of measures for national defense purposes was to take place during times of peace, excepting measures that might be adopted in wartime. In order to facilitate the planning, coordination and execution of various actions related to conflict prevention, and more importantly to conflict resolution, the fields of action have been considered as the State's permanent mode to face conflicts, both in peacetime and in wartime.

However, Chile's normal routine in times of peace is organized into ministries and their subordinate institutions and agencies, rather than into fields of action. There are two reasons for this arrangement. The first is the nature of the public functions in times of peace, oriented to highly specific sectors, with unique needs and therefore unique requirements. The second is the fact that the fields of action were formulated on the basis of their immediate predecessors: the "fronts" structured, in the 1950 legislation, for national mobilization purposes in the event of armed conflicts. These "fronts" were: Interior, Exterior, Military, and Economic.

2. Ministry of National Defense



The Ministry of National Defense is the public agency by which the Head of State guides and directs the country's defense. For this purpose, Law 18.575, the General Constitutional Organization of the State Administration, has made the Head of State also responsible for proposing National Defense Policy and the specific policies and plans deriving from it.

1. ORGANIZATION OF THE MINISTRY OF NATIONAL DEFENSE (MOD)

The Ministry is formed by the Offices of the Undersecretaries of War, of the Navy, of the Air Force, of the Police Force (Carabineros de Chile), of the Investigations Police, and the National Defense General Staff (EMDN), in addition to the organizations mentioned in the preceding chapter.

The institutions of the Armed Forces (Army, Navy and Air Force) and those of Public Order and Security (Carabineros and Investigations Police) are under the Ministry of National Defense.[28] (Figure 10)

28 Although the police institutions are administratively under the Ministry of Defense, in operational matters they are under the Ministry of State.

2. OFFICES OF THE UNDERSECRETARIES OF THE MINISTRY OF NATIONAL DEFENSE

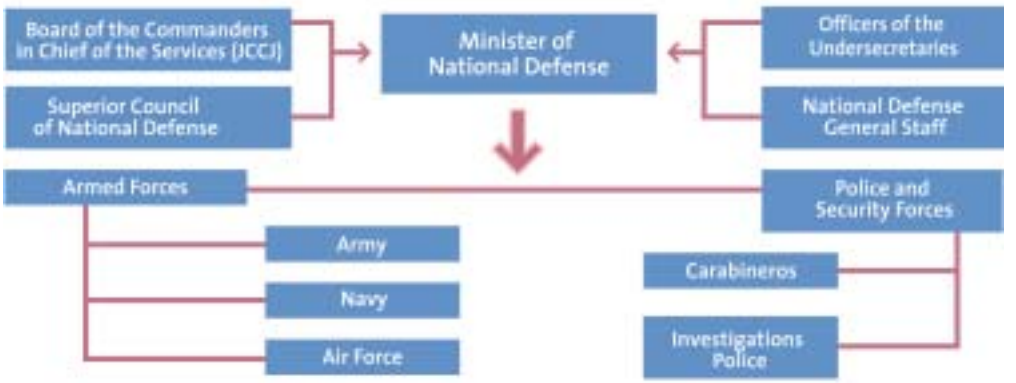
These are the Minister's immediate advisory and assistant agencies, headed by an undersecretary who has the trust of the President. In addition to specific tasks assigned by the Minister, they analyze and deal with administrative matters related to the institution they serve, and promote all the initiatives and projects beneficial for the development of the Defense and of Public Order and Security.

2.1. Office of the Undersecretary of War

This office executes and processes legal, regulatory, administrative, budgetary, and social security issues in the active, retired and veterans sectors of the Army and subordinate agencies. It also coordinates the study and processing of joint issues for the five Offices of the Undersecretaries of the Ministry of National Defense.

FIGURE 10

Organizational Chart of the Ministry of National Defense



Under the Office of the Undersecretary of War are the agencies that report directly or have relations with the Ministry, such as the Head Office of National Mobilization (DGMN), the National Defense Pensions Fund (CAPREDENA), the Military Archbishop of Chile, the Factories and Workshops of the Army (FAMAE), and the Civil Defense of Chile (See Box 16).

2.2. Office of the Undersecretary of the Navy

This office executes and processes legal, regulatory, administrative, budgetary and social security issues in the active, retired and veterans sectors of the Navy and subordinate agencies. It coordinates the actions of the public agencies and services related to its sector. Shipyards and Workshops of the Navy (ASMAR) reports to the Ministry of National Defense through this undersecretary's office.

This office performs all the tasks involved in the administration and supervision of its national assets located along the seacoasts and rivers and lakes. Granting sea and aquiculture concessions and coastal planning are particularly relevant aspects of this function (See Box 17).

2.3. Office of the Undersecretary of the Air Force

This office executes and processes legal, regulatory, administrative, budgetary and social security issues in the active, retired and veterans sectors of the Air Force and subordinate agencies.

The National Aeronautics Enterprise (ENAER) reports to the Ministry of National Defense

BOX 16

CIVIL DEFENSE OF CHILE

The Civil Defense of Chile is a public-law corporation assigned to undertake continuing and one-time actions to protect the population against any disaster that could affect the citizens or urban areas. It was created by Law 8059, published in Official Gazette N° 20,084, of February 16, 1945.

It is headed by the Minister of National Defense, who delegates his authority to the institution's Director General, who is responsible for directing and administrating the service.

Volunteer individuals or organizations form the Civil Defense of Chile. The Civil Defense agency also has "on-duty" personnel, (remaining personnel from the military service draft) which, according to the provisions of Law Decree 2306, Article 30, of 1978, must be provided by the Head Office of National Mobilization. This personnel is assigned to serve in the Civil Defense of Chile for a period similar to that of Military Service, i.e. one year. They are trained to execute the missions of the institution. Today the Civil Defense has 9,000 members, 5,500 of whom are volunteers, and 3,500 are on-duty personnel.

The Civil Defense of Chile is organized nationwide. Currently, it has 104 local headquarters and 41 radio stations. Local headquarters are the operating and action units of the institution in event of an emergency or catastrophe, and they are members of the individual Emergency Committees and the Emergency Operations Centers (C.O.E.), agencies that define the Civil Defense units' missions at the district, provincial and regional levels.

BOX 17

NATIONAL POLICY ON COASTAL EXPLOITATION

This policy establishes an organizational framework for the best use of the sea and land along the coast, determining the essential elements for its development. The coastline of continental Chile, plus the islands close to the continent and
other intermittent islands totals 84,040 km. To date, 4% of it has been granted in Sea Concessions and Destinations, and Aquiculture Concessions.

These spaces are a limited resource that allows multiple uses some of which are exclusive and others that are mutually compatible. The basic purpose of the National Policy on Coastal Exploitation (PNUBC) is to determine the best use of coastal areas.

This policy provides for the operation of a National Commission for Coastal Use, and a Regional Commission for Coastal Use, which is comprised of the authorities, related to the sector and has the mission of proposing the appropriate zoning.

The National Commission –the entity in charge of providing advice to the President of the Republic– is chaired by the Minister of National Defense and comprises the Office of the Undersecretary of the Navy, the Ministries and other agencies related to the field.

BOX 18

CHILEAN SPACE AGENCY

This is a decentralized public service, with legal capacity and its own capital, under the direct oversight of the President of the Republic. Its purpose is to advise him concerning space issues and serve as coordinator between public agencies with related responsibilities.

The Agency has the following tasks:

- Advise the President of the Republic so that Chile's foreign policy, in matters that affect space issues can be adapted to the national space policy by promoting coordination between the Ministry of Foreign Affairs and the other ministries represented in the Chilean Space Agency and making the proper proposals.
- Promote and propose international agreements in order to access and channel scientific, technological and economic cooperation in the field of space activities.
- Promote and propose agreements or other instruments designed to channel public and private contributions to develop space activities.
- Study the national legislation applicable to space issues and propose the improvements or reforms required, at the institutional and functional levels. In particular, the Commission is to prepare and propose a bill to create an institutional system that will permanently undertake space activities.
- Coordinate, with all state and private agencies, both national and international, all space-related activities carried out in Chile or by Chile abroad.
- As a coordinating and driving entity for the country's space activities, the Agency is to structure a National Space Plan coherent with the outline established in this National Space Policy.

through this Undersecretary's Office, and is responsible for supporting the activities of the Chilean Space Agency. (See Box 18)

2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile)

This office has the mission of directly advising the Minister of National Defense in all matters related to the Chilean Police Force (Carabineros) and the Police Force Pension Fund Directorate (DIPRECA), whether they are administrative, legal, social security or budgetary issues that are to be processed through this Undersecretary's Office.

2.5. Office of the Undersecretary of the Investigations Police

This office has the mission of directly advising

the Minister of National Defense in all matters related to the Investigations Bureau of Chile, whether they are administrative, legal, social security or budgetary issues, whether they have a general or specific nature, that should be processed through this Undersecretary.

3. NATIONAL DEFENSE GENERAL STAFF (EMDN)

The National Defense General Staff is the permanent advisory, working and coordination agency of the Minister of National Defense in all issues related to the preparation and use of the Armed Forces. This is a joint agency, comprised of representatives of the three services under the command of the Chief the National Defense General Staff. The EMDN also acts as the working and coordination agency of the Superior Council of National Security (CONSUSENA) and the Board of the Commanders in Chief of the Services (JCCJ).

The position of Chief of the National Defense General Staff is a Division General, a Vice-admiral or a General of the Air Force, filled for two-year terms on a rotating basis by each of the services. The National Defense General Staff also has a Vice Chief, a position filled on a rotating basis by a General (Army or Air Force) or a Rear Admiral, and the Special Directorates and Departments listed in its internal regulations. In addition, there are permanent or temporary Advisory Councils and Committees under the Chief of the National Defense General Staff established by executive decree or by ministry orders.

The general duties of the National Defense General Staff are:

- To undertake all work or studies determined by the Minister of National Defense, and those agreed to by the Superior Council of National Security, by the Board of the Commanders in Chief of the Services, and which are related to National Security, and the preparation and use of the Armed Forces, whether in peacetime, crisis or in wartime.
- To prepare and maintain an up-to-date national (primary) and strategic (secondary) National Defense planning.
- To execute, in coordination with the Head Office of National Mobilization, all work or studies related to national mobilization, as ordered by the Superior Council of National Security.
- To coordinate the execution of joint duties and tasks to be performed by the Armed Forces.
- To coordinate with the Ministry of Internal Affairs those activities that should be executed by the Armed Forces related to the country's interior security, and in cases of catastrophe, according to the Constitution and the laws. (See Figure 11)

4. SUPERIOR COUNCIL OF NATIONAL DEFENSE (CONSUDENA)[29]

Its main duty is to control the investments and purchasing of weapons systems, and other systems, as well as major combat and combat support, crafts and vehicles, that are done by the services according to the Copper's Reserved Law, and authorized by Executive Decree. It is chaired by the Minister of Defense and comprised of:

- Minister of Foreign Affairs
- Minister of Finance
- Commanders in Chief of the Army, Navy, and Air Force
- Undersecretaries of War, the Navy and the Air Force
- Chiefs of the General Staffs of the Services
- Chief of the National Defense General Staff

Its Secretary is a general staff qualifed retired coronel.

5. NATIONAL ACADEMY OF POLITICAL AND STRATEGIC STUDIES (ANEPE)

The National Academy of Political and Strategic Studies is the academic entity of the Ministry, specializing in security and defense issues.[30] Its mission is to carry out academic, research, extension and dissemination activities to increase knowledge on topics related to National Security and National Defense. The work of ANEPE is directed towards the staff of the Armed Forces, the Public Order and Security Forces, the State administration (especially of the Defense sector), the private sector, and the Defense community in general.

29 Created by Law 7144, of January 5, 1941.

30 Recognized as a Higher Education Institution by Law Constitutional Organic Law on Education 18.962, of March 10, 1990.

FIGURE 11

In particular, its orientation towards the civilian world is part of the Ministry's effort to expand civilian participation in defense, in order to train civilians in various related matters and encourage their participation in working groups on defense.

Its Director is a General Officer of the Armed Forces in active duty, appointed by the President of the Republic. Its academic body is comprised of civilian professionals and National Defense professionals in active duty or retired.

One of its principal activities are the undergraduate and postgraduate courses, such as the High Command Course, the Higher Education Course for Senior Officers (Ltc or Major) of the Logistical and Administrative branches of the Services, the Diploma in Political and Strategic Studies (DEPE), and the Master's program in Security and Defense.

6. HEAD OFFICE OF NATIONAL MOBILIZATION (DGMN)

Representatives of the three services of the Armed Forces participate in this ministry agency. Its director is a General Officer of the Army or an equivalent rank of the Navy or Air Force, in active duty appointed by executive decree.

The main duties of the DGMN are to coordinate and control the following activities:

- National Mobilization, which is the series of activities and measures designed to prepare part or all the manpower, material and industrial potential of the country, in order to deal with an armed conflict.
- Recruitment, which focuses mainly on the drafting, selection and distribution of citizens performing Compulsory Military Service.
- Control of weapons and explosives. The DGMN has by law the responsibility of controlling firearms, ammunitions, explosives and chemical products used in manufacturing explosives, which are in the possession of individuals or legal entities.
- Control of chemical and toxic weapons. This is a responsibility derived from Chile's ratification of the "International Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons."
- Martial arts. The law establishes that the Minister of National Defense, through the DGMN, will control these activities in the country.

3. National Mobilization and Military Service

This chapter describes National Mobilization as the provision and preparation of the manpower and material resources to serve the State in order to deal with an armed conflict. Compulsory Military Service gives Chile enough forces to perform Defense tasks in peacetime and to generate trained reserves for any mobilization process.

1. NATIONAL MOBILIZATION

It consists of three stages: preparation, execution, and demobilization. The preparation takes place during the normal, non-emergency state, through the planning and enlisting of manpower, material, and industrial potentials. Preparation is decentralized and involves, among other matters, the organization of the entire State administration in Fields of Action.

1.1. Mobilization of Manpower

In the event of a foreign armed conflict, considered in the Political Constitution of the Republic as an emergency state called a "State of Assembly," the criteria for allocating resources to increase the forces are changed in response to emergency situations associated with the state of alert. National Mobilization is an attempt to prepare the country without producing obvious changes in the normal course of the country's activities.

The ongoing preparation and updating of the mobilization documents and plans is the duty of the National Defense General Staff (EMDN), while the enlistment that includes the coordination and execution of the preparatory mobilization measures is the duty of the Head Office of National Mobilization (DGMN).

It recent years there has been a constant concern to modernize concepts and procedures in order to take the mobilization process to more realistic scenarios in keeping with its needs.

For this reason, the DGMN implemented its "Advance" project, which essentially involves updating at all levels (EMDN, DGMN, Services' General Staffs, operational units, naval zones, air bases, and Mobilization Base Units), the validation and control procedures of the reserve management, and requirements of the field of the national defense. The project also aims at improving the consultation, analysis and evaluation processes involved in the assignment of resources, ensuring effective, timely management of the data during the stage of preparation, and consequently, in the mobilization of the human potential.

2. COMPULSORY MILITARY SERVICE

Compulsory Military Service was established in Chile by means of Law 1362 on "Army and Navy Recruits and Replacements," passed on September 5, 1900. Though its application is nationwide, in other words, based on the compulsory, binding nature of the public obligation, the cost of this model of recruiting is very high and not in keeping with the current needs of the National Defense. During most of the 19th Century, it was applied selectively, through a recruiting system designed to select troops from the conscript base. This system has been maintained over time with some variations, giving rise to a model known as a compulsory-selective recruiting model.

2.1. Modernization of Compulsory Military Service

Throughout the century in which compulsory military service has been in force, Chilean society has undergone a significant and important process of changes, to which this service to the country has had to adapt from time to time. The new social, economic and cultural realities, mainly since the 1960's, as well as Chile's defense needs deriving from the changes in the international and strategic arena, especially after the end of the Cold War, made a substantial modernization of compulsory military service advisable.

In 1994 the country began to modify the military service, to introduce some elements to compensate for the compulsory-selective nature of its recruiting, without affecting its military foundations. In a second stage in 2000, a National Forum on Compulsory Military Service was held, with the participation of several organizations representing civil society and State agencies and institutions, particularly the Armed Forces.

On September 5 of that year, Executive Decree 81 of the Ministry of National Defense approved a proposal to modernize the Compulsory Military Service, based mainly on a series of ideas outlined in this forum.

The proposal mainly considers designing a recruiting system that promotes voluntary enlistment to perform this service to the country, to be complemented by a selection of the percentage of troops not covered by voluntary recruits, through a public, universal lottery mechanism. Some of the innovations to be introduced are related to the objectivity and transparency of the recruiting system, the establishment of automatic enrollment in the Military Registries of all Chilean citizens, the improvement of types of service and the creation of a control and supervisory system for the entire selection and recruitment process. The intention is also to strengthen and improve the legislative and institutional treatment of the rights and responsibilities of the recruits, and to regulate the causes of exclusion more precisely. It also promotes voluntary military service for women.

This proposal, that involves considerable modification of Law Decree 2306, of August 2, 1978, was prepared based on certain initial conditions that comprise the foundation of the State's general policy on military service. These initial conditions are:

- The State has the responsibility of guaranteeing the country's defense and, for this purpose, must keep the Armed Forces in a condition to meet the operational requirements of its missions.
- The State has limited funds to execute the plans and projects designed to meet the various needs and demands of society, and thus lacks the financial resources required to have a full professional force.
- Through the Constitution, the State has set forth every citizen's ethical imperatives of solidarity and service to the society where they were born and of which they are a part, which requires a personal contribution to the defense of the country by means of military service.
- The State is responsible for providing for society's aspirations concerning the principles of equality in public duties and human dignity, and for establishing the institutional mechanisms that ensure respect for these principles.

The amendments included in the bill that modernizes compulsory military service, submitted to the Legislature in December 2001, meet the needs of the Armed Forces on the one hand, and, on the other, respond to the universal aspirations of civil society.

However, this does not mean that the obligatory nature of the military service as established in Article 22 of the Constitution is changed. Instead, the objective of the government's policy is to make voluntary enlistment the preferred means of troop selection.

This initiative is included in a schedule of several stages until full implementation of the new compulsory military service model in 2005. This modernization of the compulsory military service involves modifying laws and regulations, adapting the

structures of the National Defense institutions, and assigning more resources and incentives to facilitate the goal of significantly increasing the recruitment of volunteers.

3. RESERVE FORCES

The reserve forces are a group of people, with or without military training, who are part of the country's manpower, but not included in the conscript base or in active duty in the services. Personnel in the military reserves or in the Armed Forces are called reservists and will be classified as trained and untrained reserves.

The law defines the concepts involved as follows:

a) Manpower: people who reside nationwide or who may enter the country and, because they are Chilean citizens, constitute the total human resources available to the country.

b) National Reserve: people, without distinction of gender, who meet the psychological, physical and morale conditions to be mobilized or to perform other duties in benefit of the country.

c) Military or Armed Forces Reserve: people, without distinction of gender, of the required military age, with or without military training, that meet the conditions to be mobilized by the Armed Forces. The military or Armed Forces reserve is formed with the following personnel:

- Personnel retired from the permanent staff of the services of the Armed Forces
- Personnel from the Officers and NCO schools of the Armed Forces, ho-norably discharged.
- Personnel with military training from compulsory military service, a professional military course or other special course.
- Personnel without military training.

4. The Armed Forces

To protect the population, the territory and property and activities carried out within the national borders, and to support the administration of the country's Foreign Policy, the State has the resources of the National Defense. Among them, the Armed Forces is the only military component and constitutes the foundation of Chile's defensive power.

1. MILITARY POLICY

Military Policy is the set of guidelines that the Ministry of Defense gives to the Armed Forces to implement the military norms deriving from the National Defense Policy. This policy provides a guideline for the work of the Armed Forces as a harmonic, coordinated body, thus, providing the foundations for jointness. Military Policy attempts to strategically respond to the requirements of the Defense Policy and to establish the basis for the specific policies of the services. It establishes the criteria or standards for the materials, weapons systems and equipment commonly used in the three services, logistical and resource management procedures, standard operating procedures, joint training and doctrine, and issues that help optimize the performance of common and joint tasks of the services, among others.

2. MISSION OF THE ARMED FORCES

The Chilean Army, Navy and Air Force are the only services that constitute the Armed Forces, which are subordinate to the Ministry in charge of the National Defense. These services exist to defend the nation, are essential for national security, and guarantee the institutional order of the Republic. In their capacity as armed services, they are essentially obedient, non-deliberating, professionals, hierarchical, and disciplined.

In relation to defense or external security, the general mission of the Armed Forces is to deter or combat all foreign threats in order to safeguard sovereignty and maintain the integrity of the national territory. They also cooperate with military forces of other countries in bilateral or multilateral initiatives, always in the best interest of the country.

Based on these purposes, the work of the Armed Forces is constant and hinges on the oath taken by each member entering its ranks, to serve the country and defend its essential values, and on the proper enlistment of the personnel and resources of each of the armed services. For these

reasons, and due to the nature of the missions assigned, this profession is considered primarily vocational. This is reflected in the corresponding legal texts that establish, among other aspects, that "incorporation into the ranks and staffs of Officers and personnel of the Permanent Staff is only allowed through their own Military Academies."[31]

Considering the specific demands imposed by military duty and the professional career, the organizations and personnel exercising them, as well as its institutes of professional training, comply with jurisdictional, disciplinary and administrative principles set forth in the specific legislation.

The Armed Forces personnel is comprised of the permanent staff (Officers, NCOs or Sailors, and Civil Employees), contract personnel, and reserve staff called to active service. Complementarily, though they are not part of the permanent staff, ensigns, cadets, cabin boys, apprentices, and students of the institutional schools, as well as recruits, are also subject to the hierarchy and discipline of the Armed Forces and corresponding laws.

The Armed Forces need to be prepared and trained to fulfill their missions with enough flexibility and dynamism. In general terms, they have to be prepared for combat and for maintaining the state of peace of Chile, and also to participate in the State's effort to maintain peace in the world. For this reason the Armed Forces must be conceived to face the full spectrum of military operations, i.e. from peacekeeping and peace building to crisis prevention and war.

Their peacetime deployment and organization must grant them sufficient capacity to become the military might the State needs to address potential conflicts or to assume the tasks of international cooperation assigned by the State.

3. FUNCTIONS OF THE ARMED FORCES

In order to perform the tasks assigned, the Armed Forces carry out a series of joint, common and specific activities.[32]

The joint and common activities performed give evidence of the usefulness of acting in coordination under the concept of a "unity of war" Normally, joint and common activities are coordinated and ordered by the National Defense General Staff.

3.1. Joint Functions

These are activities that, in order to meet a specific goal, require the active, integrated participation, under a single command, of the means and combat capabilities of the Army, the Navy, and the Air Force, or at least of two of these services.

3.2. Common Functions

These are activities that, though they pursue a similar purpose, are performed individually by the Army, the Navy and the Air Force, without detriment to the corresponding coordination.

3.3. Specific Functions

These are the activities that are exclusively performed by each service of the Armed Forces.

The singularity of each society and the capabilities and limitations with which each State develops in the international arena determine that the roles, missions and characteristics of the Armed Forces are special and unique for each particular country. They are encompassed within each State's freedom of action to establish its own concept of national security and its own Defense Policy.

4. CONSIDERATIONS REGARDING JOINTNESS

In the search for strategic solutions according to our reality and the availability of resources, and considering the experience of countries that have been in conflict recently, there is a clear need for jointness in order to integrate capacities and thus achieve results that make timely, efficient and effective use of the military means.

Though this approach has gathered special mo-

31 Officers of the Religious Service and Officers of the professional services (M.D, Vet., lawyers) are excepted from this law. See, Constitutional Organic Law of the Armed Forces 18.948, February 1990.

32 See Executive Decree 272 of March 16, 1985.

mentum since the end of the Cold War, Chile has been undertaking a sustained increase of its training capacity and joint forces operation since 1951, implemented through a series of joint activities by the Armed Forces. One of the most relevant manifestations is the Southern Military Region (RMA), a joint combatant command. Other joint efforts are represented by the joint academic activities in the War Colleges. In term of the services, there are joint courses, joint war games, and joint exercises that teach and train the personnel of all ranks and services' units in joint issues. The National Defense General Staff (EMDN), a military organization of the Ministry of Defense, created in 1942 can be considered the highest representation of jointness— acting as integrator, planner, coordinator and advisor in joint issues, projects, doctrine, planning and organizing the forces in a joint fashion.

The fulfillment of the missions assigned to the Armed Forces, presumes that they need to carry out complex military operations requiring significant land, sea, air, logistical and intelligence efforts that must be duly coordinated at the highest strategic level. This assumption is valid, for not only reaching objectives in a war, but also when they are limited as in cases of crisis. This necessary coordination is reflected in the strategic solution adopted by the Armed Forces. When this solution requires attaining a specific strategic objective through an integrated, coordinated and well-balanced effort of the land, sea and/or air means, the consequence is the imperative to create a joint force, or joint command with these characteristics; that, necessarily leads to jointness.

4.1. Introductory Concepts

Military or joint strategy is defined as "the art and science of developing, conceiving and directing the use of military forces in the preparation and execution of war and its campaigns, coordinating the activities of each of the services of the Armed Forces and joint commands to attain and secure the objectives stated by Policy."

In other words, the Armed Forces as a whole constitute a joint force per se, that may form other subordinated joint forces of permanent nature (joint combatant commands) or circumstantial (joint tasks forces) such as, airborne joint task forces or amphibious joint task forces, if the situation so recommends.

The way in which the means and their characteristics (joint, combined or ser-vices) are organized will depend on the nature of the objective, of the strategic imperatives, of the analysis of the strategic conducting elements, and of the assigned mission. This is why the use of joint means is a command responsibility of the commander who is entrusted with the mission and objective.

4.2. The Conduct of Joint Operations

Consists of the activities performed to exercise the command and coordination between forces of two or more services whenever they are required to participate in joint operations, to obtain an strategic objective that cannot be secured only by one service's effort.

The conduct of joint operations is a strategic decision that has to be made at the level of the Armed Forces and its natural projection goes down to a Joint Combatant Command. But it can be implemented at levels lower than a joint command, i.e. at the level of joint task forces and joint operations (Airborne or Amphibious Ops), whether they originate in the Armed Forces or through a joint combatant command. (See Box 19.)

4.3. Joint Operations

A joint operation is an offensive military action conducted by a specific joint task force generated by the Armed Forces or by joint combatant commands, for a specific period. It comprises forces of two or more services under a single joint command, in order to reach a strategic objective that would not be possible otherwise.

4.4. Conclusions about Jointness

This general overview of the subject of joint conduct of campaigns and operations leads to some conclusions:

a) Modern warfare is inherently a joint action and it is unfeasible to think that one of the military components of the Armed Forces could, attain by itself, the strategic objective assigned.

b) Nevertheless, in order to attain the strategic objective at the lowest cost possible and within the period established, instead of structuring permanent joint forces, it is important to use resources appropriate for the purpose.

c) The relative importance of each service

BOX 19

CONDITIONS FOR JOINT COMMAND

In terms of the objective: to have strategic characteristics or repercussions in order to justify the use of means from the different services under a common command.

In terms of the forces: to be those of two or more services, in quantity or size proportional to the nature of the objective to be attained. A special characteristic of the forces is that they do not have to be always under the Joint command.

In terms of command: to be exercised by an officer of any of the participating services, with the advisory of a Joint Staff comprised proportionally of members of the participating services and whose task is to advise the Commander on joint issues and the particular doctrine, characteristics and capabilities of each participating service.

In terms of the scenario: The characteristics of the scenario, together with the nature of the objective, are probably the most relevant elements to consider for the organization of a joint force or a joint operation (airborne or amphibious). In this case, it is evident that the scenario and the objective are such that they are possible only through a joint force. If an objective is possible to be attained by forces of one service by itself or by one service with the support of another (combined forces), a joint command or the organization of a joint force is unjustified.

could vary in each theater depending on its superiority, on its permanent comparison of forces, the threats to be addressed, the strategic situation and the scenario. However, in a joint theater, the components must have similar strategic capacity and responsibility in the achievement of the strategic objective.

d) Defining the strategic objectives that can only be achieved through the coordinated use of land, sea or air resources is the origin of joint command.

Lastly, it must be stressed that Chilean legislation establishes that the Board of the Commanders in Chief of the Services must propose the solution to all problems related to military strategy and its development in wartime, and therefore propose the establishment of joint combatant commands when required by national security. Thus, the creation of joint combatant commands or joint task forces starts off at the Board of the Commanders in Chief of the Services, according to the strategic solution adopted in the light of the elements described above.

5. INTEROPERABILITY

Interoperability is the ability of systems, units or forces to provide to or accept services from other systems, units or forces, and to use these exchanged services effectively. Interoperability may be considered today as a basic requirement for executing joint military operations or operations of combined forces forming an international coalition.

Nationally, interoperability has an impact on the operation and organization of the Armed Forces and its resources. The challenge of Chile's defense institutions is to improve the capacity to operate among themselves, in other words, to incorporate interoperability into their modernization processes as an important factor in making decisions, stressing the progress of command and control structures and processes, as well as data management. Chile has progressed in standardizing joint procedures, though from an operational point of view the doctrine, training processes, and equipment and system standardization still need to be adapted. In the technical use of the resources, it is necessary to standardize the procedures, the language and the classification of all the services.

Internationally, defining the requirements of interoperability, to eventually carry out activities within a joint force under the mandate of the United Nations, is the responsibility of the government, and especially of the ministries of Defense and of Foreign Affairs. The decisions made in these fields will determine the standards of interoperability to be attained and will constitute the framework in which the different participating states will strive for that goal.

Table of Contents

Foreword
by the President of the Republic 7

Prologue
by the Minister of National Defense 9

PART I

The State of Chile 15

1. Foundations And Characteristics 16
1. Basic Principles of the State 16
1.1. Institutional Order: Democracy and the Constitutional State 17
1.2. National Objectives 17
2. Characteristics: State and Defense 17
2.1. Defense as a Function 18
2.2. Defense, Security and Development 18
2.3. Human Security 18
2.4. National Defense and the Internal Order of the Republic 19

2. The Territory and Population of Chile 20
1. The National Territory 20
2. Chilean Geography 23
2.1. The Land 23
2.2. The Sea 23
2.3. The Airspace 24
2.4. The Polar Territory 25
3. The Population of Chile 25
3.1. National Identity 27
3.2. Data and Background Information 28

PART II

Defense Environment 29

1. International Security Trends 30
1. Diversification of Actors involved in International Security 30
1.1 The Economic Agents 30
1.2 The Civil Society 31
2. Changes in International Security Concepts 31
3. The State as Coordinator and Regulator of the Globalization Process 31
4. Development of Global Governance Regimes 31
5. A Greater Demand on UN Peacekeeping Operations 32

2. International Settings that Influence Defense 33
1. The World Context 33
2. The Continental Context 34
2.1. America: A Region that Contributes to Strategic Stability 34
2.2. Threats to the Continent 34
2.3. A Governance In Security Issues 35
2.4. Interamerican Security Institutions 38
3. The Regional Context 38
4. The Neighboring Context 39
4.1. Chile and Argentina 39
4.2. Chile and Peru 41
4.3. Chile and Bolivia 41

3. International Conflicts 43
1. Risks And Threats 43
1.1. Conventional Threats 44
1.2. Non-Conventional Threats 44
2. Prevention and Reaction 45
2.1. Conventional Threats: Prevention and Reaction 45
2.2. Non-Conventional Threats: Prevention and reaction 46
3. Types of Conflicts 46
3.1. International Crisis 46
3.2. War 47

4. The Geostrategic Challenge 48
1. The Geostrategic Perspective 48
1.1. The terrestrial factor 48
1.2. The maritime factor 49
1.3. The Aerospace Factor 49
2. Conclusions of the Geostrategic Analysis of the National Territory 50

PART III

National Defense Policy 51

1. Concepts and Definitions 52
1. Objectives of National Defense 52
2. Characteristics of Chile's National Defense Policy 53
3. Reference Framework 53
4. Sources of the Defense Policy 54
4.1. National Security Policy 54
4.2. The Global Political-Strategic Assessment (AGPE) 56

2. Elements of the National Defense Policy 56
1. Elements of the Chilean Defense Policy: NDB 1997 56
1. 1. National Objectives 56
1.2. International Context 56
1.3. World and Regional Stability 57
1.4. Defense and Security 57
2. Crux of the National Defense Policy 57
3. Use of the Defense Means 57
3.1. Deterrence 57
3.2. Cooperation 58

3.3. Coercive Use of Military Power 58

3. The Defense Sector and International Policies 63
1. United Nations Peacekeeping Operations (UNPKO) 63
1.1. General Considerations 63
1.2. Chile's Policy for Participation In UNPKOs 64
1.3. The Armed Forces in UNPKOs 65
1.4. Participation of Chile In UNPKOs since 1997 66
2. Mutual Confidence Measures 66
3. Instruments of Cooperation and Understanding 67
3.1. Cooperation Mechanisms 67
3.2. Cooperation Agreements 69
4. Policy on Humanitarian Demining 69
4.1. Humanitarian Demining under the Ottawa Convention 69
4.2. Humanitarian Demining and Human Security Policy 69
4.3. Implementation of the Ottawa Convention 69

4. The Defense Sector and National Policies 72
1. Territorial Policies 72
1.1. Development Policies in Border Zones 72
1.2. Development Policies in Isolated Zones 74
1.3. Policies Related to Maritime Interests 75
1.4. Antarctic Policy 76
1.5. Space Policy 77
2. Development Cooperation Policies 79
2.1. Environmental Policy 79
2.2. Military Industry 80
2.3. Science and Technology 81

PART IV

The Conduct and Organization of the National Defense 82

1. Conducting the National Defense 83
1. Conducting the National Defense 83
2. Superior Institutions of Defense 83
2.1. President of the Republic 84
2.2. Minister of National Defense 84
2.3. National Congress 84
2.4. National Security Council (COSENA) 85
2.5. Superior Council of National Security (CONSUSENA) 85
3. Conducting at the Political - Strategic Level 85
4. Conducting the Armed Forces at the Strategic Level 86
5. Military or Joint Strategic Conduct of the Armed Forces 87
6. Fields of Action 87

2. Ministry of National Defense 88
1. Organization of the Ministry of National Defense (MOD) 88
2. Offices of the Undersecretaries of the Ministry of National Defense 88
2.1. Office of the Undersecretary of War 88
2.2. Office of the Undersecretary of the Navy 89
2.3. Office of the Undersecretary of the Air Force 89
2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile) 90
2.5. Office of the Undersecretary of the Investigations Police 90
3. National Defense General Staff (EMDN) 91
4. Superior Council of National Defense (CONSUDENA) 91
5. National Academy of Political and Strategic Studies (ANEPE) 91
6. Head Office of National Mobilization (DGMN) 92

3. National Mobilization and Military Service 93
1. National Mobilization 93
1.1. Mobilization of Manpower 93
2. Compulsory Military Service 94
2.1. Modernization of Compulsory Military Service 95
3. Reserve Forces 96

4. The Armed Forces 96
1. Military Policy 96
2. Mission of the Armed Forces 97
3. Functions of the Armed Forces 97
3.1. Joint Functions 97
3.2. Common Functions 97
3.3. Specific Functions 97
4. Considerations Regarding Jointness 98
4.1. Introductory Concepts 98
4.2. The Conduct of Joint Operations 98
4.3. Joint Operations 98
4.4. Conclusions about Jointness 98
5. Interoperability 98

PART V

The Means for Defense 100

1. The Chilean Army 101
1. Mission of the Army 101
1.1. National 101
1.2. International 101
2. Organization 101
2.1. High Command 101
2.2. Operational Units 102
2.3. Means and Capabilities 102
2.4. Military Institutes Command (CIM) 104
2.5. Administrative, Logistical and Technical

Support Organizations 104
2.6. Branches and Services 106
3. Strategic Vision 106
3.1. Scopes of Action 106
4. The Modernization Process 107
4.1. Bases for Strategic Changes 107
4.2. Objectives of the Modernization Process 108
4.3. Stages of the Modernization Process 108
5. Planning 108
6. Women in the Army 109

2. Chilean Navy 110
1. The Navy's Mission 110
1.1. In Peacetime 110
1.2. In Wartime 110
2. Organization 111
2.1. High Command 111
2.2. High Level Organizations 111
2.3. Combat Forces 111
2.4. Special Support Organizations 112
3. Strategic Vision 112
3.1. Scopes of Action of the Navy 114
3.2. Objectives of the Navy for the Bicentennial 115
4. Planning 116
5. Management Control 117
6. Women in the Navy 117

3. The Chilean Air Force 118
1. The Mission of the Air Force 118
1.1. In Peacetime 118
1.2. In wartime 119
2. Organization 119
2.1. High Command 119
2.2. Combat Command 120
2.3. Support Units 120
2.4. Operational Units 120
2.5. Means and Capabilities 120
2.6. Support Organizations 122
3. Strategic Vision 123
3.1. Scopes of Action of the Air Force 123
4. The Modernization Process 124
5. Planning 124
6. Women in the Air Force 125

4. The Professional Education Process in the Armed Forces 126
1. Training Military Personnel 126
2. Chilean Army 126
2.1. Officers 126
2.2. Enlisted Personnel 127
3. Chilean Navy 128
3.1. Officers 128
3.2. Enlisted Personnel 128
4. Chilean Air Force 128
4.1. Officers 128
4.2. Enlisted Personnel 129

PART VI

Defense Resources 130

1. Analysis of Defense Spending 131
1. Defense Spending and its Relation to other Macroeconomic Variables 131
1.1. The Incidence of the Gross Domestic Product (GDP) 131
1.2. Level of Perceived Threats 133
2. Defense and Fiscal Expenditures 133
3. Defense Demand, GDP and Perceived Threats: Their Effects 133
4. The Armed Forces as a Purchasing Power 134

2. The Defense Budget 135
1. The Budget Structure of the Ministry of National Defense 135
2. Budget Procedures and the Allocation of Resources 136
3. Modernization of the Budget Systems 137
4. The Budgets of the Armed Forces: Distribution and Composition 137
4.1. Allocations by Use 139
4.2. The Trend in Personnel Expenditures 139

3. The Defense Procurement System 142
1. Description of the System 142
2. Economic Issues and Financial Effects 143
3. The Management Control System 143
4. Offsets 144

4. The Social Security System of the Armed Forces 146
1. Description of the System 146
2. Composition of the Social Security System Administered by Capredena 146
2.1. The Common Benefits Fund 146
2.2. The Severance Fund 147
2.3. The Curative Medicine Fund 147
2.4. The Social Help Fund 147
3. Beneficiaries and Basis of the System 148
3.1. Beneficiaries 148
3.2. The Bases for the Social Security Framework 148
4. Modernization Criteria 148
4.1. The Ongoing Situation 148
4.2. The Modernization Process 148

5. Standardized Measurement of Defense Spending 150
1. Problems of Comparative Estimates of Defense Spending 151
2. ECLAC Methodology 151

PART V

The Means for Defense

The means for the National Defense consist of the human and material resources that a country has in order to reach the level of external security that will allow it to achieve its national goals, and guarantee its sovereignty and territorial integrity, free from external interference. Among these means, the Army, the Navy and the Air Force are the basic elements, and they are fundamentally in charge of enforcing the State's missions to defend the country.

They must organize, equip and train for this purpose. This means that they must be always ready in peacetime to put into practice the dissuasive character of our Defense, and at the same time, perform international cooperation tasks in the areas of defense and security. Complementarily, they participate in the country's historical tradition and in the transmission of our national identity traits, as well as contributing significantly to the nation's economic and technological development, and in support of the community.

This part also mentions the main characteristics of each of the services and their modernization processes. These processes involve the evolution experienced in the last few years to maintain their readiness and preparation in accordance with the advances of military technology and science, and the changes undergone in our society. An example of the Armed Forces' adaptation to the modern world is the increasing incorporation of women into the different services of the Armed Forces, which has even given them access to the combat and combat support branches of some services.

1. The Chilean Army

The Chilean Army was born with and for the country. Its history summarizes not only its vocation of service in the defense of the Homeland, but also recalls its triumphant history in the battles fought for her in the past. It is also important to highlight its contribution to international peace, to the consolidation of the territory, and in general to the challenges of security and development that the country faces.

1. MISSION OF THE ARMY

The mission of the Army is to help maintain the nation's territorial integrity and sovereignty. Therefore, it has the responsibility of participating in the land defense of the country in the event of any action coming from abroad, which may threaten or attack them.

It fulfills its mission by means of effective preparation and proper use of its human and material resources in the execution of the following activities:

1.1. National

It develops and maintains the combat readiness of its forces by means of combat training and military education.

1.2. International

It participates in State initiatives for safeguarding international peace and security under the authority of the United Nations. Under the mandate of the Organization of American States (OAS), it participates in the Inter-American Board of Defense (JID), and is represented in the Inter-American Defense College (CID).

As one of its founding members, the Army also plays an active role in the American Armies Conference (AAC), a multilateral military agency with the objective of promoting close integration and cooperation between the American armies to study issues of mutual interest in terms of the continent's security and defense.

2. ORGANIZATION

The following chart summarizes the general structure of the Army: (See Figure 12)

2.1. High Command

The Command of the Army is exercised by the Commander in Chief of the Army (CJE), as head of the service. The different Operational Units that cover the national territory and the different

training, support and other technical Commands report directly to the Commander in Chief of the Army.

Many advisory agencies, the Operational Units and Commands are, thus, under the authority of the Commander in Chief. The Army General Staff is among the first group and is the main advisory body for the decision making and decision taking processes. To perform its main functions the Army General Staff has the following Directorates:

- Directorate of Army Personnel.
- Directorate of Army Intelligence.
- Directorate of Army Operations.
- Directorate of Army Logistics.
- Directorate of Army Education.
- Directorate of Rationalization and Development of the Army.
- Directorate of Army Finances.

The Office of the Secretary General, the Office of the Judge Advocate General of the Army, the Office of the Inspector General, and the Center for Military Studies and Research are all at the same level.

2.2. Operational Units

The Army's presence in the national territory is visible by means of the different military garrisons, from those located in the Chilean high plateau in the extreme north, to those in Chilean Antarctica. Essentially, these means consist of operational units called Divisions, under which there are tactical units such as regiments and battalions from the different branches and services of the Army. The peacetime deployment of these Operational units, from north to south, is as follows:

- Sixth Army Division: covers the jurisdiction of Region I, with headquarters in the city of Iquique.
- First Army Division: covers the jurisdiction of Regions II and III, with headquarters in the city of Antofagasta.
- Second Army Division: covers the jurisdiction of Regions IV, V, and VI, in addition to the Metropolitan Region, with general quarters in the city of Santiago.
- Third Army Division: covers the jurisdiction of Regions VII and VIII, with headquarters in the city of Concepción.
- Fourth Army Division: covers the jurisdiction of Regions IX and X, with headquarters in the city of Valdivia.
- Seventh Army Division: covers the jurisdiction of Region XI, with headquarters in the city of Coyhaique.
- Fifth Army Division: covers the jurisdiction of Region XII, with headquarters in the city of Punta Arenas. (See Figure 13)

2.3. Means and Capabilities

Overall, the Army is structured around the proper organization of command and combat and combat support forces, within the operational framework, constituting its peace and war potential. The Army's major asset is its men and women, whose training and professionalism make them the main axis of the service's capacities. Its operational systems are organized into the following subsystems:

a) Information Subsystem

Meets the intelligence needs of the three military operational levels (strategic, operational, and tactical) and makes use of different types of collection capabilities to provide the necessary and timely information to the

FIGURE 12

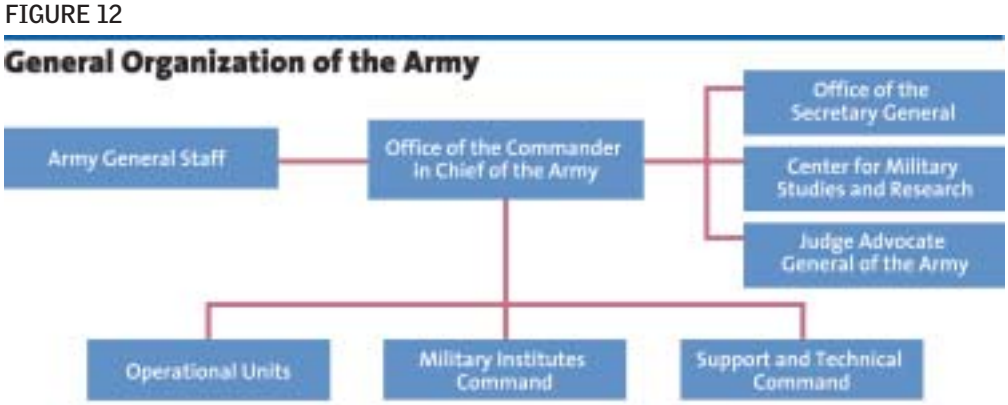


FIGURE 13

Army Operational Units

authorities to facilitate the decision-making process.

b) Command and Control Subsystem (C4I)
Coordinates and directs operations, fitting into the command and control systems C4I (Command, Control, Communications, Computers and Intelligence) at higher levels, facilitating the execution of data processing activities and the decision-making process, and maintaining an up-to-date view of the situation, as well as providing with EW activities. It also orders and controls all of these activities.

c) Maneuvering Subsystem
Performs various duties based on the Army's territorial deployment, the types of units, the population density, and the capacity to obtain resources for material and industrial readiness, among others. The purpose of this work is to help the Army achieve its strategic objective by the use of force, through units of different characteristics and capacities, which interact in a coordinated fashion.

d) Logistical Support Subsystem
Optimizes the resources and the use of the technological applications, centralizes the facilities to satisfy material, life, and combat needs, and organizes logistical units according to operational needs. This subsystem is sustainable provided it is developed in peacetime, and the maintenance function acquires vital importance as it increases the useful life of the existing material.

2.4. Military Institutes Command (CIM)

As an executive agency of the service's educational system, the CIM manages the education and training of Officers, Non-Commissioned Officers, and Enlisted men. Its colleges, military academies, branches and specialties schools are centers for imparting the teaching-learning process to all personnel, for the purpose of achieving the professional and specialization levels required by the modern demands of authority, control and execution of the military profession.

2.5. Administrative, Logistical and Technical Support Organizations

The commands are at the same level as the operational units and are in charge of providing training, administrative, logistical and technical support to the different Army units. Some of the commands perform both military-related duties as well as those that collaborate with the different aspects of the country's development. These Commands are as follows:

a) Logistical Support Command (CALE)
Executes all logistical actions for the Service meeting the living and combat needs of the troops in all areas and services, such as Quartermasters, Health, Transportation, Ordnance and Veterinary. These duties are performed through Maintenance, Service, Supply and Repair.

b) Army Administrative Support Command (CAAE)
Manages the staff support and welfare system of the Institution, through several facilities throughout the country. The administrative support services, such as Social Welfare, State housing programs, Recreation centers, Religious and Funeral services, and the Family information bureau for enlisted men, are all under this command.

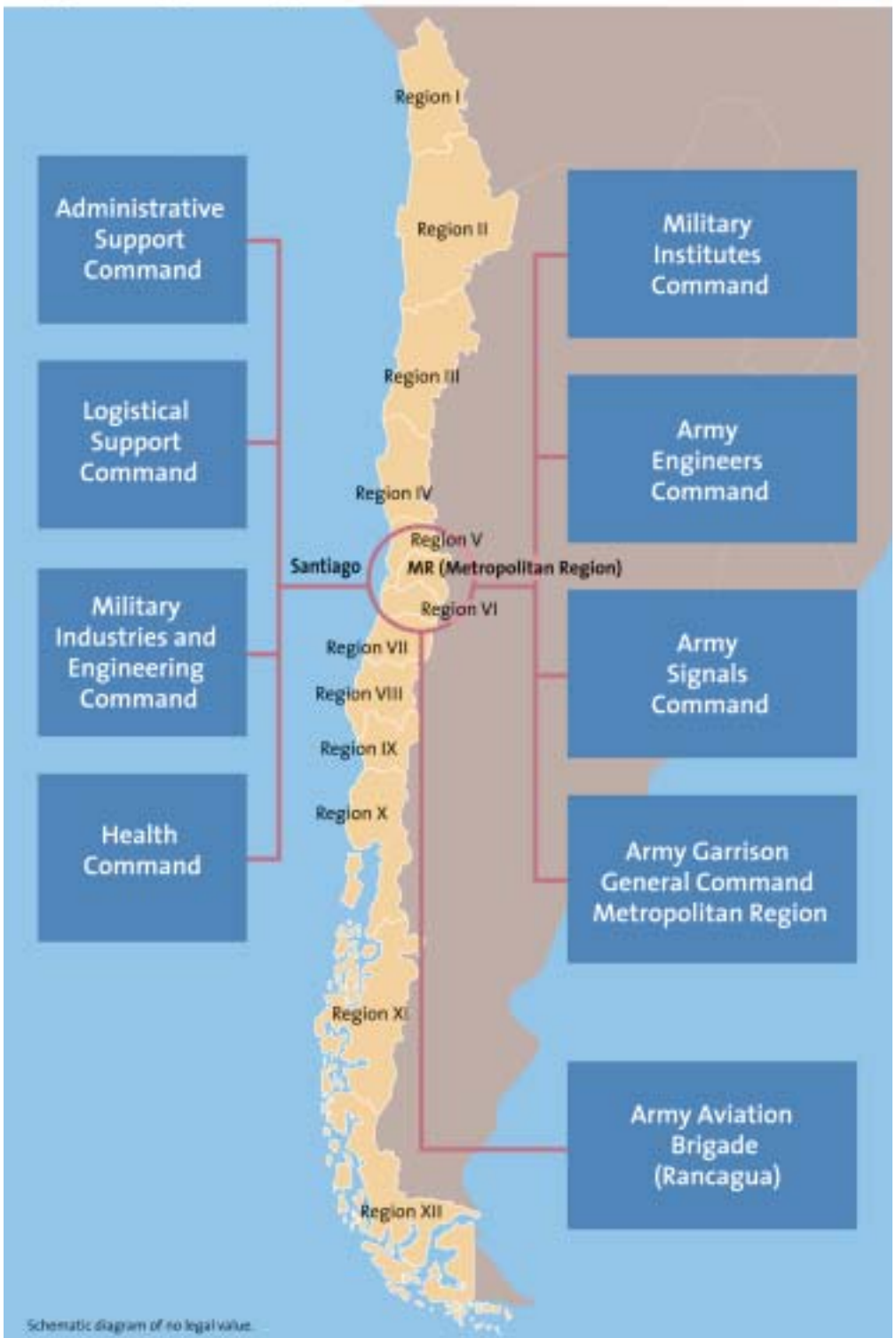
c) Military Industry and Engineering Command (CIMI)
Centralizes all military industrial activities in the service, grouping the different industrial facilities of the Army under one command. Through the different CIMI agencies, the Army's Factories and Workshop (FAMAE), the Military Geographic Institute (IGM) and the Research and Control Institute (IDIC), the Army provides the most significant support to development and to the national industry.

d) Army Engineers Command (CINGE)
Its mission is to advise the Commander in Chief of the Army (CJE) in relation to military infrastructure, management of the institution's real property, and execution of road infrastructure projects and works by means of the Military Works Corps (CMT).

e) Army Signals Command (CTE)
Its mission is to advise the Commander in Chief of the Army (CJE) in matters related to telecommunications, electronic warfare as well as Information management and data processing systems, and to manage the Army's telecommunications system, (C4I System: Command, Control, Communications, Computers and Intelligence) implementing the authority and administration system of the Commander in Chief of the Army.

FIGURE 14

Army Training and Support Commands



f) Army Health Command (COSALE)
Manages the Army's health system and provides medical and health services through a network of facilities. This capacity allows it to provide special support in some services to public and private health organizations. Its main facility is the Santiago Military Hospital.

Lastly, at the same level as the Operational Units and Commands, are the General Commander of the Army Garrison, Metropolitan Region, in Santiago, and the Army Aviation Brigade with headquarters in the city of Rancagua, Region VI. (See Figure 14)

2.6. Branches and Services

The Army is comprised of Branches and Services of diverse characteristics and with different functions, both individually and jointly. The Branches are: Infantry, Artillery, Armored Cavalry, Engineers and Signals. Services include logistics and administration. Logistical services are those of Ordnance, Quartermaster, Transportation, Health and Veterinary. Administrative Services, in peacetime, correspond to General Adjutancy, Military Justice, Military Police, Religious Service and Welfare; and in wartime, they include Burial and Replacement services.

3. STRATEGIC VISION

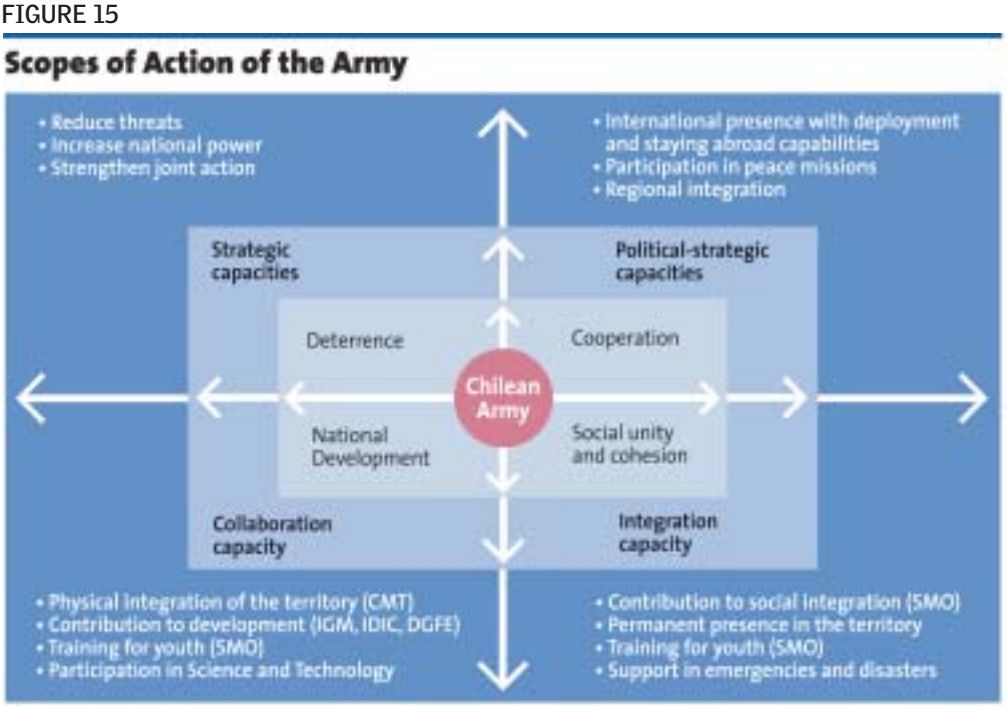
The Chilean Army is undergoing an "integral strategic change." This change consists of a modernization process based on the incorporation of the concept of force projection and interoperability, and strengthening the vocational-professional model, the institutional integration of the society and its commitment to the republican spirit. (See Figure 15)

3.1. Scopes of Action

The Chilean Army plays a permanent part in national life. Generically, its actions take place in four basic areas of activity, which comprise the main tasks of its military function. On this basis, given its territorial deployment, its strategic capacities, and its contribution to the political-strategic field, the Army works to enforce the objectives of the Defense Policy and contributes to Foreign Policy. Similarly, as an integral part of society, the Army collaborates with the nation's development through its technology and industry-related activities and through the effective and rational use of its capabilities and potential.

Exercising effective deterrence is fundamental to reducing threats, especially in a setting of uncer-

FIGURE 15



tainty. The purpose is to preserve the peace and reduce the possibility of any crisis or armed conflict in the international arena. With this purpose, the new design of the forces being implemented enhances their own strategic capabilities and allows them to achieve greater interoperability with other institutions of the national defense.

In addition to the particular scope of the armed forces, the Army focuses its efforts on a second area of strategic action: cooperation, as an expression of the State's interest outside Chile. In order to meet this objective, priority is given to participation in peace missions under the UN supervision or mandate, an activity the Army has been involved in since 1948. It also participates in instances that contribute to strengthening the bilateral and regional integration processes.

There are two other areas that are especially relevant, not because of the impact they have had throughout history, but because they are within the institutional scope and territorial deployment of the Army. These are related to the tasks of development and contribution to the country's unity and cohesion, basic assumptions for an effective defense.

Thus, the Army's collaboration in the country's development goes beyond its presence throughout territory, because it is also manifested in the training young people receive through Military Service; the provision –by the Military Geographic Institute– of conventional and digital land cartography, as well as complementary educational texts. In turn, the Research and Control Institute is the official State agency in charge of quality control in different areas, and the Directorate of Equine and Remount Development collaborates to improving the country's agricultural equine stock. Another aspect is the task of physical integration of the national territory, by means of the duties performed by the Military Work Corps and its capacity to act in the event of emergencies or natural disasters.

On the other hand, the Military Studies and Research Center (CESIM) encourages academic research in the areas of defense, and participates in the area of science and technology through different agreements with universities, and public and private institutions, to integrate this field's knowledge into issues of national interest. Lastly, the Army contributes to unity and social cohesion both as a result of its territorial deployment and by including in its ranks a diverse group of people, representative of Chilean society. This reality gives it a character that few public institutions have, and its actions help transmit the characteristics of Chilean society from one generation to the next.

4. THE MODERNIZATION PROCESS

The process of modernization involves transforming and improving the capacities, structures and management that will allow the Army to adapt to the demands imposed both by national and international events, as well as by rapid technological change.

The process is basically oriented to developing a modern, highly specialized organization, with units of high performance and efficiency. It also seeks to increase the capacities of its personnel, helping them to acquire the skills required for using complex weapon systems. In this manner, the Army helps the country exercise an appropriate level of deterrence and, in turn, acquires the necessary skills to cooperate with UN missions.

This process sometimes involves tasks requiring deep institutional changes at different levels, for the purpose of incorporating that specialization and attaining fluency and certainty in the decision-making process.

Therefore, the modernizing effort aims at gradually achieving a design of the forces that is realistic and based on the availability of economic resources. This means implementing periodic decisions that will allow the process to continue for the immediate term, and later lead to the changes foreseen for the year 2013. Thus, all activities that imply an organizational change, a change of facilities or mobilization of personnel will be founded on an integral feasibility study of the proper dimension and coherent with the service's capabilities.

4.1. Bases for Strategic Changes

The elements that strengthen the modernization process –begun in 1992– are the following:

a) Projection of Force: this concept refers to the purpose of achieving a usage capacity in different scenarios, quickly and for deterrence and cooperation effects, both in the national and international areas. Through this effort, the Institution evolves towards a more functional, flexible and modular structure.

b) Interoperability: aims at optimizing operational integration, both in the national field and with the armies of other countries that are part of peacekeeping forces, to operate effectively in a multifunctional context.
c) Vocational-Professional Model: its members share spirit of service and professional performance as core elements for effectively executing their military function.
d) Army integrated into society: contributes to the country in peacetime, in emergencies, and in wartime, within the framework of an institutional doctrine that confirms its vocation of service.
e) Army committed to constitutional principles: in other words, it is founded on the principles of an institutional system that are established by the Political Constitution and express the republican tradition of independent Chile.

4.2. Objectives of the Modernization Process

The objectives that guide the modernization process of the Army are:

a) Strengthen the units' rationalization, completion, and training, and incorporate a modern concept of structure and management into the organization.
b) Continue with the process of rationalizing the management of the financial resources allocated by the State.
c) Optimize the Institution's human resources management systems by introducing new technologies and administrative procedures.
d) Complete the weapons and technical resources systems needed by the operational units, through the incorporation, replacement or reinforcement of the existing elements.
e) Restructure the educational and training system.
f) Improve the institutional infrastructure.
g) Contribute to United Nations peacekeeping operations in which the State decides to participate.
h) Strengthen the science and technology area.
i) Optimize the ways in which Military Service can be performed, according to the framework for the modernization of the SMO.

4.3. Stages of the Modernization Process

The Chilean Army is enforcing the provisions of the "Alcázar Plan," the master document of the modernization process. In general, the main objective of this Plan is to rationalize and optimize the Institution's human and material resources, in harmony with the country's political, cultural and economic reality. Therefore, it includes the modernization efforts undertaken by the Army, and calls for the following development stages:

- Stage I: Begun in 1992 and completed in 1998.
- Stage II: Begun in 1998, and scheduled to last until 2013.

To accomplish the modernization process described above, the Army is carrying out two types of projects: global projects that benefit the institution as a whole and specific projects that directly support each of the High Agencies, Commands and Operational units.

In this context, the following activities are at the following levels of progress:

a) Restructuring of the institutional educational and training system to increase the training level of the personnel and improve their professional efficiency in using new weapons systems.
b) The Military Academy, the War College and the Military Polytechnic College, under a new educational concept, are executing study programs and post-graduate and post-degree programs in the area of military sciences, some of which have the significant participation of civil professionals.
c) Reorganization of units, including the incorporation, replacement and completion of modern weapon systems and technical resources, under the concept of accomplishing tasks in a comprehensive sense during times of peace, crisis, war and natural disasters.
d) Optimization of technological research by institutional agencies, with the capacity for contributing to the nation's development.
e) Development of logistical units and troop support systems, in accordance with the unit's current and future capabilities.
f) Renewal and extension of the military, social and welfare infrastructure.

5. PLANNING

The Development of the Force involves a series of actions projected for the period from 2003 to 2006, designed to complete the units and achieve the Army's new organization and force structure, ensuring their rationalization, and in turn, incor-

porate education, management and full integration of the administrative and logistical support subsystems into its overall duties

Because it is impossible to have an accurate prediction of the different variables that may have an effect when conceptually scheduling for a long-term time horizon (2013), the decision was made to establish a consolidation phase from 2006 to 2010, which coincides with the bicentenary of Chile's independence. After that year, that the strategies laid out in the "Alcázar Plan" for 2013 will most likely continue in effect. (See Figure 16)

6. WOMEN IN THE ARMY

The presence of women in the Army dates back to the wars against the Peru-Bolivia Confederation in the first half of the 19th Century. Following that, women took part in the War of the Pacific. In that war, although they were only accompanying the troops in support and health-related roles, they did not hesitate to bear arms and take heroic action in military campaigns.

Executive Decree 317 of August 19, 1974 created the School of the Women's Army Auxiliary Service and the Service itself. In 1975, the law was amended to bring the female commissioned and non-commissioned officers who had graduated from School of the Women's Army Auxiliary Service onto the institution's staff.

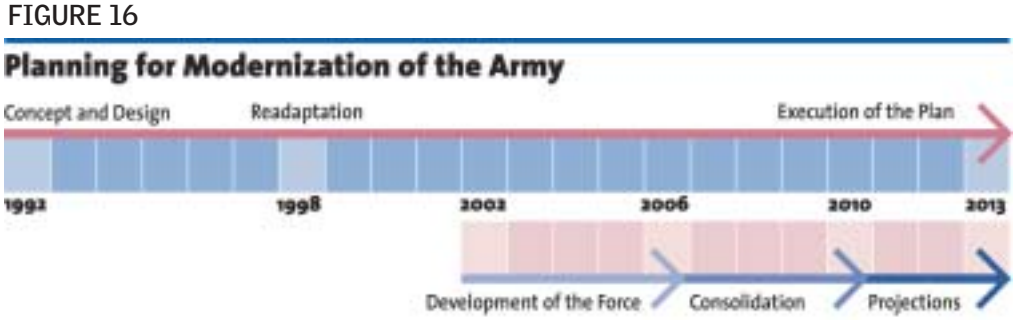
During the 1990's, under the Modernization Plan of the Chilean Army, the uniformed female members experienced significant changes. The Women's Army Auxiliary Service School was closed in 1995 so that commissioned and non-commissioned officers could graduate from the Military Academies.

The amendments to Law Decree 1 "Statutes of Armed Forces Personnel," of 1997, established the time required in the officers' ranks for retirement expanding it up to 30 years of service and created the rank of Colonel of the Women's Military Service. The service branches of Quartermaster and Ordnance were also opened to these women officers, as well as those of Combat Support branches —Artillery, Engineers and Signals— held until that time by male personnel only. Hence, women can now rise to the rank of General.

The Women's Military Service has been assigned a new role related to Personnel Administration, by which the members of this Service perform personnel advisory tasks in the High Agencies, Commands, Combat and Tactical Units, in replacement of the Officers from combat and combat support branches who held these positions. The new improvement areas were defined for the Enlisted Personnel as of 1997, so that the Non-Commissioned Officers School graduates female personnel to work in the ranks of Health, Quartermaster and General Assistant.

Women's participation in the Army has undergone true progress, making a net contribution to the institution's professionalism. The opportunities for personal and professional development that Chilean women find today in this service of the Armed Forces are reflected in the increasing number of vacancies offered by the Military Academies to satisfy women's increasing interest in a military career. The incorporation of women in the Military Academies does not intend to replace the male staff, but to integrate women into the Institution, in order to strengthen the structure of the service. Efforts to include women in the Army's activities have also reached recruitment, with the drive to promote voluntary Military Service by young Chilean women.

FIGURE 16



2. Chilean Navy

The Navy's contribution to Chile in almost two centuries of life is characterized by its actions in the conflicts faced by the country, by its role in the national consolidation, and its participation in the nation's cultural, scientific and technological development. Its resources are instruments that must be always available to help promote and support the nation's interest wherever they are implemented.

1. THE NAVY'S MISSION

The Chilean Navy has the basic mission of participating in the country's foreign security and military defense on an ongoing basis, safeguarding its sovereignty and territorial integrity. For this purpose, it carries out actions both in peace and in wartime

1.1. In Peacetime

Contribute to the development of Chilean maritime power, providing security for navigation, encouraging sea activities and port development, continuing the marine cartography and signaling, and performing inspections and supervisions that safeguard human life at sea.

Supervise the national maritime territory, comprised of the Inland Waters, Territorial Sea, Exclusive Economic Zone, and Presence Sea, protecting the national security and interests, as well as the integrity of the water environment.
Support the nation's development, connecting the isolated areas by sea, and assisting their inhabitants.

Perform the tasks of maritime supervision, search, rescue and security, in the maritime zone for which the country is responsible, according to the international agreements regulating this matter.

1.2. In Wartime

Carry out operations that will allow Chile the free use of the sea at all times, and the sea lines of communications to sustain the war effort and protect international trade. Simultaneously, deny this privilege to the enemy in order to strengthen the nation's war effort, on the one hand, while weakening the corresponding effort of the enemy, in the interest of a victorious outcome for the nation.

Help project the nation's military power into enemy territory and in turn prevent the projection from the sea of the adversary's military power.

Support the war effort of other services of the Armed Forces.

2. ORGANIZATION

In line with the mission and context of a continuous search for more effective management, the Navy has recently readapted its general organization, allocating more functional characteristics to its senior staff.

In this way, the Navy's current organizational structure is made up of high level directing and management entities, technical agencies, forces and operational resources, and support establishments. This structure is detailed below.

2.1. High Command

The Office of the Commander in Chief of the Navy is the leading entity of the Institution. The Admiral who holds the position of Commander in Chief operates with a group of direct consulting agencies, formed by the officers exercising the institution's higher command. These include the Strategic Planning Council (for institutional direction issues), the Economic Council (for budgetary and financial control issues), and the Navy's Council (for handling institutional management issues).

The Commander in Chief constitutes its command authority with a General Staff, and the support and advice of the Office of the Secretary General, Comptroller's Office, Office of the Inspector General, and a set of management control systems. (See Figure 17)

2.2. High Level Organizations

a) General Staff of the Navy
This agency provides advisory services and work for the Commander in Chief of the Navy with respect to all issues related to institutional planning, administration and upper-level direction, performing the duties of upper-level planning and coordination with the other navy directing agencies and authorities, in general.

b) General Directorate of Naval Personnel
This is the higher agency responsible for the Navy's human resources management. As such it constitutes the highest echelon of the institution in relation to personnel administration, assuming the corresponding functions of selection, incorporation, training, promotion and retirement of the personnel. For this effect, it has a group of specialized technical agencies that take care of the educational, medical-health, welfare and religious assistance aspects.

c) General Directorate of Naval Services
This agency is in charge of the upper-level management of the Navy's material and technological resources. As such, it constitutes the highest echelon of the institution in terms of material logistics, in charge of cre-

FIGURE 17

General Organization of the Navy

ating and supporting the resources with which the Navy operates, and the rules to be applied for effective and safe use of people and environment. In order to perform its functions, it has several technical and specialized logistical agencies under it, covering regulations, research and development, procurement, project management and material management.

d) General Directorate of Naval Finance
This agency is in charge of managing the financial resources of the institution. As such, it is in charge of proposing and executing the financial policy of the Navy, performing integral control of the financial-accounting management and establishing the general rules and procedures in budgetary, accounting, calculation, cost control and financial order matters. In the performance of their duties, both technical agencies specialized in budgets and accounting are under this Office.

e) General Directorate of Maritime Territory and Merchant Marine
This is an agency of the Navy by which Chile ensures the enforcement of laws and international agreements to protect human life on the sea, the marine environment, and the natural sea resources, and to regulate the activities carried out in this field, thereby contributing to the nation's sea development.

In this context, this office coordinates its leadership functions through the Offices of "Maritime Security and Operations" and "Maritime and Sea Environment Interests." Its operations are carried out in a decentralized manner, implemented through the four Naval Zones that supervise a total of 16 Maritime Governorships that execute their tasks through 61 Harbor Master's Offices and 266 Sea Mayor's Offices.

f) Naval Operations Command
This command is in charge of directing the navy operations in order to achieve the strategic objectives assigned to the Navy. It is also in charge of training the Navy's forces to carry out the operations set forth in the corresponding plans and to direct the operations determined by the Commander in Chief. The Naval Operations Command is in charge of battleships, submarines, aircraft, and amphibian and special forces.

2.3. Combat Forces

The naval forces are the elements that execute the Navy's strategy and consist of operational forces and type forces, organized, equipped and trained to achieve the objectives of naval warfare. Combat forces consist of units or groups organized to perform a specific mission.

The Type Forces are the Fleet, the Submarine Force, Naval Aviation, the Marine Corps, the Amphibian and Naval Transportation Command, and the Tactical Divers Command. The main function of the commanding officers of the Type Forces is to keep the units available and trained to be integrated into task forces and groups to be created, according to operational tasks.

While performing their assigned missions, the Navy forces also cooperate in activities that benefit the country in peacetime, under the regulations established by law.

The Naval Zones are operational and logistical forces designed to contribute to maritime defense and to control and protection of maritime traffic within their jurisdictions. They consist of combat, sea and coastal patrolling and logistical support resources. They perform their operational tasks through their subordinate or assigned combat means and they provide logistical support to other forces through the naval and navy air bases and stations in response to operational requirements and directives from the service's technical agencies. (See Figure 18)

The naval and navy air facilities include all land-based facilities within a specific area, and they have been established to provide, coordinate and execute the services they are to provide to the navy forces.

2.4. Special Support Organizations

In addition to the agencies already mentioned, there are other specialized technical agencies that report to the Navy due to their nature, technical relationship or purpose. Because of their contribution to the nation's interests, the more important of these are:

a) Hydrographic and Oceanographic Service of the Navy (SHOA)
Involves the specialized technical activity that the Navy has carried out for almost two hundred years, studying the geography of the Chilean shores, coast profiles, bathyme-

FIGURE 18

Naval Zones

try, tides and currents, geographical features and obstructions. The purpose is to develop maps and install the maritime signals required to ensure safe navigation and expedite use of national marine routes. For a country with a lengthy coastline and island territory such as Chile's this activity is essential to the country's integration.

The Hydrographic and Oceanographic Service of the Navy is also an official technical and permanent State service in the areas of hydrography, nautical cartography, oceanography, tides and seaquakes, nautical geography, nautical astronomy, time signal, and navigation-oriented aerophotogrammetry. Through scientific sea research, it also contributes to the development and promotion of other related activities of interest for the country, such as "red tide" control and follow-up and forecast of the El Niño weather pattern.

b) Shipyards and Workshops of the Navy (ASMAR)

This autonomous state-owned company was created in 1960 to meet the needs of careening, maintenance, repair and construction of vessels for the Chilean Navy. As a subsidiary activity, it also serves the vessels of the Merchant Marine. It has three properly equipped shipyards, located in Valparaiso, Talcahuano and Magallanes, with up-to-date technical and professional capacities to service the high technology now used in battleships and with ISO-9001 quality certification since 1997.

3. STRATEGIC VISION

The Navy's doctrine may be summarized in the following basic premises:

- Chile is a country for which the sea has special relevance, so the Navy plays an essential role in the country's security.

- The concept of Sea Control, which is the reason behind Chile's naval and marine tasks, is the cornerstone of the Three Vectors principle of Naval strategy. The objective of this strategy is to achieve a certain degree of control over activities that take place in a specific marine area during a specific period of time, with the purpose of enjoying its use or to deny or obstruct its use to any adversary.
- Control of the sea takes place under two conditions: either a conflict or a peacetime environment. In the event of a conflict, control is oriented mainly to allowing Chile's forces to operate without any threats from the sea. In peacetime, it focuses on carrying out the marine activities without any interference or restriction that could affect the nation's waterways. Under both circumstances, the presence of the Naval Force is indispensable; only its mode of use may vary.

3.1. Scopes of Action of the Navy

The Chilean Navy's contribution to national development is based on an articulating idea called the "Three Vectors Naval Strategy", which recognizes three particular scenarios:

- The sea space, which is related directly to the security of inland areas of strategic interest.

- The sea space of specific interest for Chile due to its intrinsic economic value or due to the industrial or research activities performed in that space.

- The international sea space, which is of interest in terms of Chile's political, economic and security interaction with other countries.

When these scenarios are identified, the naval strategy described above is applied, and each vector is in charge of carrying out the Navy's activities in each of the spaces described and listed below:

The **Defense Vector** consists of the defense of our national territory, its citizens, its assets and its rights. In this field, related to national sovereignty, the Navy is part of a military system that acts together with the Army and the Air Force to deter or repel potential aggressors.

Regarding the actions of the Armed Forces, the Navy promotes the development of skills and joint activities to achieve the most effective and efficient military strategy, in which, in wartime, the Navy will be in charge of controlling the sea in a specific area for as long as the operations so require.

The **Maritime Vector** consists of the supervision and control of our extensive national sea territory, in which the Navy must be continually and integrally present. Its task is to protect the

renewable living resources of the area and the marine environment and enforce the laws of the Republic. In addition, it must carry out tasks in the Maritime Responsibility Zone, an area of about 30,000,000 km2 granted to Chile by international agreements. Protection of human life in the sea, search and rescue missions, and naval control of maritime traffic are the main commitments assumed.

In short, the Navy must exercise a certain degree of control to have clean and safe oceans, and to facilitate the economic development of the country, promoting the rational use and exploitation of our national territory.

The **International Vector**, in support of the State's foreign policy, consists of the Navy's participation in promoting and protecting a fundamental priority national interest that allows us to preserve the international peace, security and stability of the sea, which is just as significant as our development and progress.

It should be noted that in the field of international security involves promoting, as well as defending, interests. This makes way for a concept of security focused not only on threats, but also on identification of opportunities that can in turn generate new interests and instances of cooperation.

Within the region, the Navy will continue its joint Antarctic patrols and bilateral exercises with Peru and Argentina.
In the wider international field, to prepare for potential participation in multinational peacekeeping operations and strengthening operational, technical and human ties, the Navy will maintain and increase its presence in joint exercises. This will emphasize and consolidate the institution's reputation as an oceanic Navy, placing it in a better position with respect to the navies of countries in the Pacific Basin and contributing more effectively to the State's foreign policy. (See Figure 19)

3.2. Objectives of the Navy for the Bicentennial

a) Mission for this Decade
As part of its permanent mission, in the regional and international political-strategic context of the moment and the medium term, the Navy has assumed the specific mission for 1999-2010 of contributing to the consolidation of Chile as a maritime nation with a relevant role in the globalized world, with a Naval Power capable of:

- Defending, together with the Army and the Air Force, Chile's sovereignty and territorial integrity.

- Supervising and controlling the maritime zone for which the nation is responsible.

- Contributing, together with other navies, to maintain international peace and stability, in accordance with Chile's Foreign Policy and Defense.
- Participating in the protection of na-

FIGURE 19

Scopes of Action of the Navy

tional interests abroad, according to State policies and International Law.

b) Specific Objectives

To help achieve this mission, the Navy has set itself the following goals:

Objective 1:

Increase the effectiveness and productivity of the Navy, in order to generate the savings required to develop its strategic capabilities, which involves: concentrated, connected and communicated ground infrastructure, modern and standardized material, and if possible, developing its own technology in critical areas; and optimization and preservation of the institutional human resources.

Objective 2:

Publicize naval activities, so citizens know the work and contribution of the Navy to national development, implementing an effective communications plan to inform citizens of the service's actions, and to provide an efficient, quick service to the community through state-of-the-art technology.

4. PLANNING

Given the mission and forces available, the Chilean Navy has structured and prepared the planning of operational, development and support activities in three different time periods: (See Figure 20)

- The "Ocean" Directive, which defines the institution's objectives to be met within a period of twelve years, and provides a guideline of how it intends to meet them. This directive contains the Navy's permanent mission, its vision, and the mission, strategy and objectives to be reached within the time frame, all considering the realistic possibility and financial feasibility of implement it within the established time period.

- The "Admiral" Directive guides the pursuit of the objectives established in the Ocean Directive through partial objectives and policies for each area. This is a four-year schedule that runs from the Commander in Chief of the Navy's second year in office to his successor's first year, thereby giving true continuity to the pursuit of the long-term objectives.

- The Annual Plan of Activities (PACA), plans the specific tasks for each calendar year and allocates resources to a group of "administrative commands" in charge of performing those tasks and working towards the objectives established in the Ocean and Admiral Directives.

5. MANAGEMENT CONTROL

Each unit is required to maintain current infor-

FIGURE 20

mation on the ability to perform the assigned roles, so its Command can have up-to-date information on this aspect and all changes that occur.

There is a cost accounting system that keeps track of the resources allocated for tasks and how they should be used, for each executing unit and each type of activity performed.

A network system provides monthly reports on the physical progress of the assigned tasks. It also provides six-month reports on problems encountered, experiences, levels of activity, development projects, etc.

The Navy is preparing the consolidated financial statements to report on how its assets are managed and this information will contribute significantly to the decision-taking process.

6. WOMEN IN THE NAVY

The role of women in the Navy is nothing new or contrary to the work of the institution, as women have been present in some specific areas for several decades.

Like all the services that have opened their doors to women, the Navy needs to make some material and cultural changes to facilitate their performance, at both the officer and enlisted man levels.

Beginning in 2003, the Navy will gradually incorporate women into the Naval officer positions of medical doctor, dentist, and attorney. It will do the same for sea-going positions in the Naval health specialties. Then, according to the progress of the institution's projects and changes, women will be trained to enter the officer and seaman ranks in the areas of Provisioning and Coast Guard, providing services mainly in land-based divisions.

Nevertheless, placing women in positions that involve their presence onboard the combat units and shipboard service in general is something to be evaluated in the future, after the early stages provide some experience, reduce cultural barriers and address other aspects inherent in Naval operations, evaluate the greater experience of other navies, and complete the physical adaptation of ship facilities.

The incorporation of women is advantageous for the Institution as it provides an improved selection base and introduces abilities and skills that are more frequent in women. Despite these benefits, this incorporation process requires work in several areas, namely defining women's professional careers, making the role of mother compatible with the long absences from home that on-board sailors must face, and taking into account living in very confined spaces.

3. The Chilean Air Force

Since its beginning in the early 20th Century, Chilean aeronautics has been constantly evolving. This process has given the Chilean Air Force (FACH) its present significant strategic dimension. Thanks to decades of effort, the FACH has served as a basis for developing the different components of an authentic Aerospace system.

1. THE MISSION OF THE AIR FORCE

The Chilean Air Force's mission is to defend the country by controlling and exploiting air space, participating in the surface battle and supporting its own and friendly forces with a view to contributing to the strategic objectives set for the Armed Forces by national policy.

In order to fulfill its mission, the Air Force carries out specific functions both in peacetime and in wartime.

1.1. In Peacetime

In conjunction with the General Office of Civil Aeronautics (DGAC), the Chilean Air Force controls air traffic so that the country's air activity is undertaken safely within international parameters and so that it can react in the event of an illegal incursion into Chilean air space.

It contributes to developing aerospace power. This is a real, potential or limited ability to use air space for one's own benefit. Even if it does not have any spacecraft, a country may be considered to have aerospace power when it has policies or plans to use this capability in the future.

Since it works with the DGAC in controlling air traffic for the safety of air activity, the Air Force has the means to respond in the event catastrophes and disasters caused by aviation accidents. This rescue capability is used frequently in emergencies affecting the country as a result of natural disasters.

Through the Aerophotogrammetric Service (SAF), it performs its assigned duties within the country in terms of aerophotogrammetry, cartography and other related fields. It has the ability to observe the earth from space, which offers planners in all fields of the country's endeavors an overview that allows them to make optimum use of their resources.

It promotes the development of aerospace inter-

ests, the aeronautical and aerospace industry, aeronautical infrastructure, scientific and technological development, civil, sporting and commercial aviation, aerospace policy, national and institutional infrastructure and awareness of the country's air space.

1.2. In wartime

It undertakes operations aimed at destroying or neutralizing enemy air, ground and sea forces. Air Power offers the possibility of facing enemy forces almost anywhere, reducing the impact of such factors as distance or terrain features.

It directs and controls air defense based on controlling and watching over national air space. In the event of unidentified, illegal or hostile incursions, it intercepts the aircraft, thereby being able to provide a graduated response, including the use of force if circumstances warrant.

It achieves a degree of control over air space that allows Chile's own and friendly forces to operate. Air Control is the degree of freedom of action acquired in a given space and time as a result of subjecting the enemy to air power, so as to be able to use air space for one's own benefit and deny its use to the enemy.

It offers support to operations carried out by ground and sea forces, so as to contribute to their war efforts. This support takes different forms and helps ground forces neutralize or destroy enemy resources.

It undertakes strategic air reconnaissance and surveillance, and military air transport. The resources at the Air Force's disposal make it a useful instrument for efficiently observing enemy actions, contributing valuable information to the various levels of command conducting the war. In the other hand, military air transport allows forces to be quickly deployed over long distances, expediting any possible change of the main effort of war operations.

2. ORGANIZATION

In order to fulfill its mission, the various components of the Air Force are organized as shown in the following table: (See Figure 21)

2.1. High Command

An Air Force General who holds the position of Commander in Chief of the Air Force exercises the Command of the Air Force, and is responsible for strategic leadership and administrative management of the Institution.

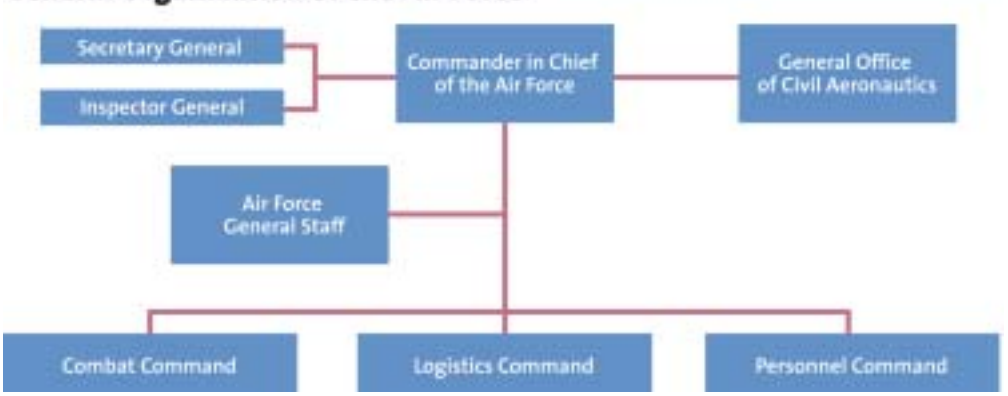
The working group that helps him do this job is the Air Force General Staff, which advises him in planning, managing and controlling the Institution, so as to meet air activity requirements in peacetime and their use in wartime.

The Air Force General Staff consists of the following Offices:

- Directorate of Air Force Personnel
- Directorate of Air Force Intelligence
- Directorate of Air Force Operations
- Directorate of Air Force Logistics
- Directorate of Air Force Anti-aircraft De-

FIGURE 21

General Organization of the Air Force



fense and Special Forces
- Directorate of Air Force Telecommunications, Information Management and data processing.
- Directorate of Air Force Finance.

2.2. Combat Command

Combat Command is the Higher Operational Unit that manages the Air Force's operational units with a view to keep them in the state of operational readiness that the service planning requires.

2.3. Support Units

a) Logistics Command
This executive unit's mission is to obtain, provide, maintain and develop the material, technological and logistical information resources required to meet the needs arising from war and development planning and those generated by institutional activities.

b) Personnel Command
This executive unit's mission is to manage personnel system duties with a view to full development of human resources in support of the Air Force's mission.

2.4. Operational Units

Represented by five Air Brigades, whose jurisdictions cover the country's territory. (See Figure 22)

Air Brigades are operational units that exercise command within a geographic area and whose mission is to conduct air operations with the resources at their disposal in their areas of authority. A General Officer commands each of these Brigades and reports directly to the Commander in Chief of the Air Force. Each Air Brigade has Air Groups equipped with different types of aircraft, which conduct combat and air support operations according to institutional planning and instructions.

Air Brigade I, with its headquarters in Iquique, covers Region I. The Air Brigade V, with headquarters in Antofagasta, covers Regions II and III. Air Brigade II in Santiago covers Regions IV through VIII, including the Metropolitan Region. Air Brigade III, with headquarters in Puerto Montt, covers the south, including Regions IX and X and part of Region XI. Air Brigade IV, with headquarters in Punta Arenas, covers the far south, including part of Region XI and all of Region XII.

The Air Force implements its air power through these units, developing their capabilities and means.

2.5. Means and Capabilities

a) Capabilities
Air Power is the force component of Aerospace Power that is employed in the air space in order to use it for one's own benefit and deny its use to the enemy. It is represented by the total of all the weapons systems used by the Air Force to combat the enemy and includes all necessary support activities to be able to use them, and trained personnel to operate them.

Air Power is effective when it meets the following requirements:

- Highly trained, motivated and technically capable personnel
- Reliable, with timely intelligence that supports decision-making processes
- Sustained logistical support in terms of quantity, quality and timing
- Appropriate technology for the setting

The natural projection of air space is outer space. Acquiring the capability to operate in that sphere has a multiplying effect on Air Power and national development, mainly due to our country's geographical configuration.

b) Means
Air Power requires striking a careful balance between capabilities and resources, which determine the effectiveness and efficiency of the use of the air.

The total of offensive and defensive combat aircraft, which is the main force at the service's disposal, must be accompanied by means of transport, command and control that allow operations to be planned, coordinated and directed. These resources must resist attacks by the enemy and, in addition to those indicated above, include anti-aircraft detection and defense, and an infrastructure that is capable of sustaining operations.

Air Force resources are capable of exploiting the third, aboveground dimension. This capability contributes, on the one hand, to operational supremacy in a given theater of operations, and, on the other, to an integrat-

FIGURE 22

Air Force Operational Units

ed, joint and possibly combined use of the resources available.

Thanks to their ability to gain height, and for speed and range, the resources at the Air Force's disposal can counteract threats or comprise a threat over a very extensive area in a short period of time. These resources may be deployed rapidly to far distant theaters to provide timely help for an ally, or to act as a deterrent element in the event of aggression.

Within its organizational structure, the Air Force balances all of these resources, distributing them to the Air Brigades throughout the whole territory. This ensures efficient performance of the mission with which it has been entrusted.

The Air Force's weapons systems are reinforced with in-flight refueling and airbone early warning capabilities, which are considered force multipliers.

Heavy and light air transport are added to these resources, consisting of aircraft capable of transporting cargo and passengers under peace, war and emergency conditions. Transport and rescue capabilities are supplemented by helicopters suitable for operating in different types of terrain.

For efficient use of its material resources, the Air Force also has air bases, anti-aircraft defense units and detection units in its various Brigades, all coordinated by means of an automated command and control system which enables efficient handling of the flow of information in order to carry out operations.

In addition to these operational resources are the resources provided by commercial aviation and by civil and sporting aviation, which furnish new contingents of pilots each year.

All of these human and material capabilities make up a system called the Aerospace System. The Air Force is the main component of this system.

c) The Attributes of the Air Power

Beyond its own specific mission, it cooperates in the success of the other services' missions, contributing to land and sea battles by means of combat operations against ground and sea targets, and combat support (such as aerospace surveillance, air reconnaissance and air transport).

The Air Force's speed of reaction is strengthened by an appropriate early warning system; in turn, the in-flight refueling capability makes it possible for aircrafts to increase their operating range and results in a greater capability to influence a geographical area.

The Air Force is also an efficient instrument in times of crisis, because of its firepower, response capability, speed, mobility, flexibility, range and precision in attacking enemy targets.

d) Deterrence Effect

The dissuasive capability of the air combat arm is based on the following characteristics, among others:

- Quick preventive or reaction deployment
- Ability to attack targets specified by the Executive wherever they are located, with precision, firepower, speed and timing.
- It may be used independently for strategic operations, but is tremendously adaptable for use in joint theaters of operations.

2.6. Support Organizations

a) General Office of Civil Aeronautics (DGAC)

This is a State agency that reports directly to the Commander in Chief of the Air Force. According to national legislation and international law, its mission is to aid and protect air navigation in an air space whose longitudinal axis runs down to the South Pole and whose transverse axis runs more than 5000 kilometers into the Pacific Ocean from Chile's coastline, to Meridian 131 West.

If there are any illegal flights into sovereign air space, the DGAC and Air Force act in coordination to identify and control the event. For that, they adhere to the rules and regulations of the Air Regulations and the principles of Article 51 of the United Nations Charter.[33] The same coordination applies to

34 For further details, see Part III, Chapter IV.

search and rescue activities, an example of which is the mutual use of the worldwide COSPAS-SARSAT satellite network. With regard to these satellite technologies, the DGAC has developed programs aimed at incorporating new concepts of navigation and air-traffic control by means of satellites, which will enable airplanes over-flying our air space to do so quickly, efficiently and safely.

b) Chilean Meteorological Service

This organization is responsible for directing, controlling and maintaining the country's weather service so as to meet weather forecasting and information needs. It is also responsible for coordinating these aspects with other national and international agencies.

c) Aerophotogrammetric Service (SAF)

This is an executive technical unit, whose mission is to meet institutional needs in terms of aerophotogrammetry and related techniques, instruct and train personnel in these techniques and undertake air exploration in search of natural resources within the country's territory, to the benefit of development projects implemented by other public agencies or private parties who request the service.

d) National Aeronautical Enterprise (ENAER)

The National Aeronautical Enterprise (ENAER) is an autonomous State-owned company whose board of directors is chaired by the Commander in Chief of the Air Force. It engages in building, repairing and modifying airplanes and aeronautical parts and components.[34]

3. STRATEGIC VISION

The Chilean Air Force exists to defend the country and is essential for the country's national security.

In general terms, the Air Force aims to optimize its capabilities during this ten-year period, to successfully defend Chile's sovereign air space, operate in any scenario and operate in conjunction with other air forces with a view to support. Chile's State policy of collaborating in building world peace.

As part of the Air Force's vision, the concept of unity of war is central to the institution's growth. In this regard, the decision to equip the Air Force with modern resources of combat presupposes conceiving a strategic solution in a manner that projects beyond the air sphere.

An evaluation of the institution's capabilities and limitations has led to an effort to rationalize the common activities of the Armed Forces. In light of this, the Air Force and other services have steered execution of various activities towards the particular service, which has developed greater and better capabilities for carrying out a particular task. For example, training of Rangers and Special Forces has been assigned to the Army and Navy, while missile maintenance has been channeled to the Navy. Service's aims are also geared towards searching for different instances for joint action in operational and logistical areas and in others of mutual interest.

3.1. Scopes of Action of the Air Force

In fulfilling its mission, the Air Force acts in three major scenarios – National, for preparing and making ready its capabilities; Regional, for coping with possible conflicts arising in the area; and Worldwide, as part of multinational forces or forming part of aeronautical technical plans and cooperation between Air Forces. Likewise, it contributes significantly to the country's development and cooperates with the activity of the State in promoting national interests in international spheres.

a) Defense Sphere

The Air Force has planned building a modern, technologically advanced force capable of credible deterrence that can be used either on its own in air battles or in conjunction with the Army and Navy in accomplishing a war's strategic objective.

b) Development Sphere

The Air Force seeks to get close to the community of which it is a part. This effort is not only related to defense of the population, but also to putting its capabilities at the disposal of the country's development, since the characteristics of the Air Force's resources means that they can play a dual role. The work of agencies such as the Aeropho-

33 See Part III, Chapter II.

togrammetric Service, the Meteorological Service and the Air Rescue Service are prominent in this effort.

The resources at the Air Force's disposal link the furthest points of the country's territory (such as Easter Island and Chilean Antarctica) and its most isolated zones (such as Campo de Hielos Sur) with its central areas quickly and efficiently.

c) International Sphere

The Air Force's range, speed and flexibility make it an ideal instrument for supporting the country's interests in international spheres. The Institution is developing its resources to reinforce its ability to cooperate with its neighbors, and at regional and world levels, as part of multinational forces in peacekeeping operations, undertaking actions of a humanitarian nature and forming part of aeronautical technical plans and cooperation between Air Forces.

Currently, air combat resources on international missions resulting from resolutions passed by the UN Security Council tend to be used in conjunction or in combination with friendly Air Forces. Hence the need to have interoperable weapons systems.

Furthermore, in addition to their possibility of rapid deployment in various scenarios, the above capabilities make the Air Force a valuable element available to the President of the Republic for handling any crisis, allowing him to control its permanence and operation and graduate its use.

4. THE MODERNIZATION PROCESS

The institution's modernization process seeks to build a modern, powerful Air Force to meet the demands that this concept and its specific strategy make upon the country. Two essential factors need to be combined in order to keep the Air Force's strength current. These are technological evolution and financial resources.

Technological innovation requires periodic modification and ultimately replacement of air materials. The financial resources required to do so must be shared with the other needs of society, so replacing combat aircraft is based on completion of its life cycle, staggering these replacements over the years. This procedure seeks to prevent two or more weapons systems from becoming obsolete at the same time in a given period, a circumstance that, in addition to adversely affecting the Air Force's combat capabilities, would also place a heavy financial burden on the country's resources by having to cope with replacing two or more systems simultaneously during the same period.

A modern platform has a high degree of availability because technology makes for lower operating costs, increases the length of time between breakdowns and has more efficient pieces of equipment that range from large capacity engines to structures made of compound materials that suffer less fatigue and deformations.

Together with the above, the Air Force's modernization process must enable it to be prepared to cope with conventional and non-conventional threats in accordance with its assigned mission.

In order to fulfill its declared aims, the institution's modernization process is geared towards achieving the following objectives:

a) Structure a force that meets the requirements of modern warfare and efficiently supports National Defense Policy.
b) Develop and consolidate capabilities to achieve better integration with multinational forces designed to make and keep the peace.
c) Modernize and adapt systems of administration, logistics, personnel and finances, so that they expedite management with a view to achieving better training of the force.
d) Strengthen the institution's organizational culture, so as to give each of its members a sense of belonging and of adhering to the Air Force's basic values.
e) Structure a system of full education, which duly provides the institution with the personnel that it needs, in terms of both quality and quantity, and that is compatible with the level of modernization of its operational systems.

5. PLANNING

The Institution's modernization plans are drawn from the Chilean Air Force's Objectives Plan for this ten-year period, called "Bicentenary." This plan sets the objectives and capabilities that must be achieved in each area in order to implement the institution's strategic vision and be constantly prepared and ready to perform its perma-

nent mission and missions of international cooperation as determined by the State.

The Objectives Plan is based on the vision of the Air Force as an expression of the State in the national air space. It stipulates that the Air Force, as a permanent institution of the Republic, is geared towards cooperating for the common good. The level of operational capability that the Air Force seeks to acquire through the "Bicentenary" plan helps strengthen the security that society needs for its development. This is because that level of operational capability is a dissuasive capability, which has a decisive influence on maintaining the peace, which is the country's ultimate aim.

6. WOMEN IN THE AIR FORCE

In 2000, the Air Force provided for women to enter the "Capitán Manuel Ávalos Prado" Air Force Academy as cadets and, therefore, with the possibility of graduating as officers in the Chilean Air Force.

Women go through the same application and admission process for the Academy as the men, and, once admitted, they may apply to the ranks of War Pilot, Aeronautical Engineer, Air Defense and Administration without any restrictions.

From the moment they begin their career in the Air Force Academy, they are required to meet the same level of demands as the men in air, military and academic spheres. The level of requirement in physical-sports spheres has been made the same for both genders. In short, women have been fully integrated into military activities.

The Air Force considers that incorporating women into the Institution strengthens its human resources in such a way that the whole of the institution's personnel contribute to the country's defense and development.

To the extent that women fulfill the same duties as their male companions in general missions, institutional plans consider their full incorporation into combat branches.

4. The Professional Education Process in the Armed Forces

Given the nature of the Armed Forces and their missions, which even put the lives of their members at risk if required, the military profession is essentially vocational in nature. This makes the education and training of the members of the Armed Forces unique and means that they can only enter the military profession via the Armed Forces' Academies.

1. TRAINING MILITARY PERSONNEL

The National Defense Institutions choose their personnel from among the voluntary applications of thousands of young men and women who apply each year to the various academies for officers and non-commissioned officers to start their professional careers at an early age. This makes for a homogenous body of officers and non-commissioned officers who have the necessary virtues and character for the profession of arms that they have chosen.

The academies' varied curriculum includes all military subjects and special areas of expertise, as well as subjects from other spheres, that are needed to provide the necessary basis to form the scientific, technical and humanities foundation required by all military professionals. Thus, according to the Constitutional Organic Law on Education, the Armed Forces' educational institutions are empowered by law to award diplomas for special fields of study, diplomas in professional and technical fields and academic degrees. Recently, in order to optimize the use of resources and the particular capabilities of each institution, specialization courses common to the Armed Forces have been taught jointly, according to each one's particular area of expertise. For example, Ranger and Parachutist courses for personnel from the three services are taught at the Army's Airborne and Special Forces School; instrument navigation courses and other aviation-related courses are taught by the Air Force, while those related to diving, rescue operations and other specific activities on or under sea are taught by the Navy.

2. CHILEAN ARMY

2.1. Officers

Officer training is a constant, progressive process that starts at the Military Academy and continues throughout the officer's professional career with academic and training requirements that enable an officer to perform in different areas. Officers must acquire their knowledge and practical expertise in their chosen fields both in in-

stitutional centers and in other national and international centers, which may or may not be military in nature.

The complete process involves a basic training cycle, a specialist training cycle and an advanced training cycle.

a) Basic Training
The Military Academy provides future officers with military abilities associated with leadership, platoon level command abilities, use and command of weapons systems and management. It also trains them in complementary abilities based on arts, science and technology, so that they can link it in relation to a branch, service or special area of expertise.

Training future officers is basically geared towards strengthening their preparation in military spheres. This involves four years of professional training that, in addition to making them army officers, means that they graduate with a bachelor degree in Military Science.

b) Technical and Professional Training
In this field, officers are trained to exercise command of Tactical Units from the different branches or support services, according to the different degrees of specialization required for proper tactical and technical use of the resources provided. This area includes the basic and advance courses for junior officers. Similarly, officers are trained to perform in special areas of combat that cover institutional needs, such as special forces, rangers, paratroopers, military pilots, mountain warfare instructors, divers, specialists in electronic warfare, as well as other supplementary special areas of expertise such as horseback riding instructors, college professors, language interpreters, physical education instructors, among others.

In order to complete this training, the Army has academic and training infrastructure in its own facilities and also takes advantage of international agreements with Armies around the world.

c) Advanced Training
This takes place in the War and Military Polytechnic Colleges. The former trains general staff officers and the latter military polytechnic engineering officers. According to the Basic Law on Education, both are the primary military education institutions that meet state's requirement for professional military education. Consequently, they undertake teaching, research and extension tasks. According to annual planning, they program under and post graduates courses and award degrees in military science and build graduate programs in various military science disciplines designed to accomplish the institution's educational goals. Civilian students, and others from abroad, also participate. In turn, the Academies are entrusted with training the professors required to cover the teaching demands of each of the institutes.

Supplementary to the training described above, officers take courses and specialize in areas with a view to obtaining graduate degrees, such as an MA or a PhD in specific areas, from universities and higher education centers in Chile and abroad.

2.2. Enlisted Personnel

As with the officers, training the NCOs is a continuous, progressive process that starts in the Non-Commissioned Officers Academy and continues throughout the NCO's professional career, with academic requirements and specific training, so that they can perform in the branches or support services to which they belong. As part of their professional possibilities, the Institution also gives them the chance to join the ranks of officer.

a) Basic Training
The Non-Commissioned Officers Academy provides the basic training for future NCOs in a two-year period of study. During that time, future NCOs acquire the technical and professional knowledge required to perform in the Army's various units and organizations.

b) Technical and Professional Training
This process provides Enlisted men with the technical and tactical training required to be promoted to higher ranks as NCO's according to institutional needs, until they reach the rank of Sergeant Major.

They may also specialize in higher technical fields, in either combat or teaching. These include physical education instructors, intelligence specialists, mountaineering instructors, aircraft observers, electronic warfare, rangers, paratroopers, Special Forces and divers. They can also apply at the same time for diplomas as gunsmiths, weapons systems maintenance mechanics, engine mechanics, electronic technicians, musicians, blacksmiths, stewards and cooks.

3. CHILEAN NAVY

3.1. Officers

Through the Navy's Board of Education, the General Personnel Board is responsible for training seamen. This process includes everything from selecting applicants for a career in the Navy to providing the fleet with men who are morally and professionally suited for fighting at sea, and able to operate high technology materials and weapons.

a) Basic Training
The basic training process starts in the Naval Academy, where, in addition to doctrinal, naval and military teaching, officers are also trained in engineering, which is then completed in the Naval Polytechnic College,.

The Naval Academy in Valparaíso trains future officers in a four-year program, from which students graduate as midshipmen.

b) Advanced Training
After graduating from he Naval Academy, officers attend the Naval Polytechnic College, from which they graduate with a degree in Engineering after 6 years of higher education. The Naval Polytechnic College, teaches the technological knowledge required for operating, maintaining and administrating the Navy's resources.

The Naval Polytechnic College, is made up of the Schools of Engineering, Operations, Armaments, Supplies, Naval Aviation, Submarines, Marine Corps, Health and Coast and Lighthouses.

c) Graduate Training
Prior to entering the Naval War College (AGN), officers take correspondence courses for two years and then attend the College in person for one year. After studies at the AGN, plus complementary graduate courses for at least a semester, and submission of a thesis, officers are awarded a Master's degree in Naval and Maritime Science, with different special fields of study.

This College's activities focus on training mid level officers to perform at higher command levels as well as prepare them as General Staff specialists.

3.2. Enlisted Personnel

Seamen enter basic training establishments, which train them to perform the institution's typical operational and administrative duties.

a) Basic Training
The Navy has two schools for training its seamen, depending on their future specialization. The Sailor School on Quiriquina Island off the port of Talca-huano trains sailors and marines; they graduate as seamen after two years.

The School of Naval Craftsmen in Talcahuano also trains naval technicians in a three-year program that trains them to work in shipyards and land-based support facilities.

b) Technical and Professional Training
As with the officers, after a few years of practical application aboard or in one of the Navy's facilities, seamen enter the various Specialization Schools under the Naval Polytechnic College, where they receive additional teaching regarding their special fields of expertise and various technological fields. This broadens their range of knowledge and gives them greater mastery in using and maintaining the resources under their care, whether on board ship or in land-based naval facilities.

Similarly, they are given the necessary training to assume new responsibilities and continue to advance in their professional careers, which culminate as Master Chief Petty Officers.

4. CHILEAN AIR FORCE

4.1. Officers

Training officers is a constant, progressive process that begins in the Air Force Academy and continues throughout their professional careers, with academic and training requirements that enable them to perform in various positions, both as pilots and in ground support activities. Officers must acquire knowledge and practical experience in specific fields in both institutional and other national or international educational centers, which may or may not be military.

As with their fellow military, the process includes a basic training cycle, a specialist training cycle and an advanced training cycle.

a) Basic Training
Cadets enter the Air Force Academy after completing higfh school. There, they begin a full training program in the various fields, either in air or ground based branches of the Air Force. The cadets graduate with a BA in Social Sciences.

b) Technical and Professional Training
Upon graduating as second lieutenants, officers in the air branch continue their pilot training in the Instrument Flying School in Puerto Montt and the Tactical School headquartered in Iquique, where they fly combat jets. Officers in ground-based branches continue their studies in the Aeronautical Polytechnic College and the Anti-aircraft Artillery Tactical School. Upon completion of their studies, they receive a degree in Aeronautical Engineering, management, communications, electronics or anti-aircraft artillery, as applicable.

Once they complete this cycle, officers are assigned to Air Force units throughout the country. Upon completing their course in the Tactical School, air-branch officers are selected as fighter pilots, transport pilots or helicopter pilots, and are awarded the title of War Pilot. Officers in land-based branches are awarded a professional degree depending on the specific course attended.

At various stages of their careers, officers must take specialization courses within the Institution or in establishments outside the Air Force.

c) Advanced Training
In addition to these courses, officers are called to the Air Force War College, where they take courses that are both a requirement and preparation for being initially command advisors and then tactical unit commanders. As part of this process, they participate in a joint course with students from the Army's and Navy's War Colleges.

They then continue their advanced training attending courses that train them to exercise higher levels of leadership in the Institution, as air force colonels. These courses are taken both in the Institution and in national and foreign universities, and officers can apply for graduate degrees, such as an MA or a PhD.

4.2. Enlisted Personnel

The Institution's Enlisted staff is divided into two specific areas – line personnel and service personnel. Line personnel enter the Chilean Air Force by applying and being selected by the Specialization School. Service personnel are those who have completed the Basic Aero- military Course in the Specialization School and have a previously acquired special area of expertise.

a) Basic Training
People enter the Specialization School, where Line personnel are trained, once they have completed their high school education. Studies comprise a two-year long full training program, from which they graduate as air force corporals, and ready to begin practical training in the Institution's units in various areas of specialization, depending on the Air Force's requirements.

In order to enter the Air Force Services' branches, applicants have to pass the basic Aero-military Course in the Specialization School, from which they graduate as corporals. During their careers, these corporals are put through the same on-the-job training process as line personnel, in order to acquire the various levels of efficiency required by the Air Force.

b) Technical and Professional Training
During their careers, personnel must undergo various training processes in their special area of expertise. After passing these, they become senior grade technicians, which is also required for future promotion.

Once they have been promoted to sergeant second class, they must take a supervisor course and/or an additional specialization course in their particular area of expertise at the Non-Commissioned Officer Advanced Training School (E.P.S.), polytechnic colleges or universities in the Metropolitan Region or other regions of the country. Passing the course means that they have achieved the maximum level of technical and practical efficiency and that they are professionally qualified to be promoted to Staff Sergeant.

Finally, they take the course for promotion to Chief Master Sergeant, to allow them to reach to the top rank in their career. Besides to passing this course, the Special Board of Selection must approve them for promotion. They are now trained to manage military affairs at an intermediate level.

Table of Contents

Foreword
by the President of the Republic 7

Prologue
by the Minister of National Defense 9

PART I

The State of Chile 15

1. Foundations And Characteristics 16
1. Basic Principles of the State 16
1.1. Institutional Order: Democracy and the Constitutional State 17
1.2. National Objectives 17
2. Characteristics: State and Defense 17
2.1. Defense as a Function 18
2.2. Defense, Security and Development 18
2.3. Human Security 18
2.4. National Defense and the Internal Order of the Republic 19

2. The Territory and Population of Chile 20
1. The National Territory 20
2. Chilean Geography 23
2.1. The Land 23
2.2. The Sea 23
2.3. The Airspace 24
2.4. The Polar Territory 25
3. The Population of Chile 25
3.1. National Identity 27
3.2. Data and Background Information 28

PART II

Defense Environment 29

1. International Security Trends 30
1. Diversification of Actors involved in International Security 30
1.1 The Economic Agents 30
1.2 The Civil Society 31
2. Changes in International Security Concepts 31
3. The State as Coordinator and Regulator of the Globalization Process 31
4. Development of Global Governance Regimes 31
5. A Greater Demand on UN Peacekeeping Operations 32

2. International Settings that Influence Defense 33
1. The World Context 33
2. The Continental Context 34
2.1. America: A Region that Contributes to Strategic Stability 34
2.2. Threats to the Continent 34
2.3. A Governance In Security Issues 35
2.4. Interamerican Security Institutions 38
3. The Regional Context 38
4. The Neighboring Context 39
4.1. Chile and Argentina 39
4.2. Chile and Peru 41
4.3. Chile and Bolivia 41

3. International Conflicts 43
1. Risks And Threats 43
1.1. Conventional Threats 44
1.2. Non-Conventional Threats 44
2. Prevention and Reaction 45
2.1. Conventional Threats: Prevention and Reaction 45
2.2. Non-Conventional Threats: Prevention and reaction 46
3. Types of Conflicts 46
3.1. International Crisis 46
3.2. War 47

4. The Geostrategic Challenge 48
1. The Geostrategic Perspective 48
1.1. The terrestrial factor 48
1.2. The maritime factor 49
1.3. The Aerospace Factor 49
2. Conclusions of the Geostrategic Analysis of the National Territory 50

PART III

National Defense Policy 51

1. Concepts and Definitions 52
1. Objectives of National Defense 52
2. Characteristics of Chile's National Defense Policy 53
3. Reference Framework 53
4. Sources of the Defense Policy 54
4.1. National Security Policy 54
4.2. The Global Political-Strategic Assessment (AGPE) 56

2. Elements of the National Defense Policy 56
1. Elements of the Chilean Defense Policy: NDB 1997 56
1. 1. National Objectives 56
1.2. International Context 56
1.3. World and Regional Stability 57
1.4. Defense and Security 57
2. Crux of the National Defense Policy 57
3. Use of the Defense Means 57
3.1. Deterrence 57
3.2. Cooperation 58

3.3. Coercive Use of Military Power 58

3. The Defense Sector and International Policies 63
1. United Nations Peacekeeping Operations (UNPKO) 63
1.1. General Considerations 63
1.2. Chile's Policy for Participation In UNPKOs 64
1.3. The Armed Forces in UNPKOs 65
1.4. Participation of Chile In UNPKOs since 1997 66
2. Mutual Confidence Measures 66
3. Instruments of Cooperation and Understanding 67
3.1. Cooperation Mechanisms 67
3.2. Cooperation Agreements 69
4. Policy on Humanitarian Demining 69
4.1. Humanitarian Demining under the Ottawa Convention 69
4.2. Humanitarian Demining and Human Security Policy 69
4.3. Implementation of the Ottawa Convention 69

4. The Defense Sector and National Policies 72
1. Territorial Policies 72
1.1. Development Policies in Border Zones 72
1.2. Development Policies in Isolated Zones 74
1.3. Policies Related to Maritime Interests 75
1.4. Antarctic Policy 76
1.5. Space Policy 77
2. Development Cooperation Policies 79
2.1. Environmental Policy 79
2.2. Military Industry 80
2.3. Science and Technology 81

PART IV

The Conduct and Organization of the National Defense 82

1. Conducting the National Defense 83
1. Conducting the National Defense 83
2. Superior Institutions of Defense 83
2.1. President of the Republic 84
2.2. Minister of National Defense 84
2.3. National Congress 84
2.4. National Security Council (COSENA) 85
2.5. Superior Council of National Security (CONSUSENA) 85
3. Conducting at the Political - Strategic Level 85
4. Conducting the Armed Forces at the Strategic Level 86
5. Military or Joint Strategic Conduct of the Armed Forces 87
6. Fields of Action 87

2. Ministry of National Defense 88
1. Organization of the Ministry of National Defense (MOD) 88
2. Offices of the Undersecretaries of the Ministry of National Defense 88
2.1. Office of the Undersecretary of War 88
2.2. Office of the Undersecretary of the Navy 89
2.3. Office of the Undersecretary of the Air Force 89
2.4. Office of the Undersecretary of the Police Force (Carabineros de Chile) 90
2.5. Office of the Undersecretary of the Investigations Police 90
3. National Defense General Staff (EMDN) 91
4. Superior Council of National Defense (CONSUDENA) 91
5. National Academy of Political and Strategic Studies (ANEPE) 91
6. Head Office of National Mobilization (DGMN) 92

3. National Mobilization and Military Service 93
1. National Mobilization 93
1.1. Mobilization of Manpower 93
2. Compulsory Military Service 94
2.1. Modernization of Compulsory Military Service 95
3. Reserve Forces 96

4. The Armed Forces 96
1. Military Policy 96
2. Mission of the Armed Forces 97
3. Functions of the Armed Forces 97
3.1. Joint Functions 97
3.2. Common Functions 97
3.3. Specific Functions 97
4. Considerations Regarding Jointness 98
4.1. Introductory Concepts 98
4.2. The Conduct of Joint Operations 98
4.3. Joint Operations 98
4.4. Conclusions about Jointness 98
5. Interoperability 98

PART V

The Means for Defense 100

1. The Chilean Army 101
1. Mission of the Army 101
1.1. National 101
1.2. International 101
2. Organization 101
2.1. High Command 101
2.2. Operational Units 102
2.3. Means and Capabilities 102
2.4. Military Institutes Command (CIM) 104
2.5. Administrative, Logistical and Technical

Support Organizations 104
2.6. Branches and Services 106
3. Strategic Vision 106
3.1. Scopes of Action 106
4. The Modernization Process 107
4.1. Bases for Strategic Changes 107
4.2. Objectives of the Modernization Process 108
4.3. Stages of the Modernization Process 108
5. Planning 108
6. Women in the Army 109

2. Chilean Navy 110
1. The Navy's Mission 110
1.1. In Peacetime 110
1.2. In Wartime 110
2. Organization 111
2.1. High Command 111
2.2. High Level Organizations 111
2.3. Combat Forces 111
2.4. Special Support Organizations 112
3. Strategic Vision 112
3.1. Scopes of Action of the Navy 114
3.2. Objectives of the Navy for the Bicentennial 115
4. Planning 116
5. Management Control 117
6. Women in the Navy 117

3. The Chilean Air Force 118
1. The Mission of the Air Force 118
1.1. In Peacetime 118
1.2. In wartime 119
2. Organization 119
2.1. High Command 119
2.2. Combat Command 120
2.3. Support Units 120
2.4. Operational Units 120
2.5. Means and Capabilities 120
2.6. Support Organizations 122
3. Strategic Vision 123
3.1. Scopes of Action of the Air Force 123
4. The Modernization Process 124
5. Planning 124
6. Women in the Air Force 125

4. The Professional Education Process in the Armed Forces 126
1. Training Military Personnel 126
2. Chilean Army 126
2.1. Officers 126
2.2. Enlisted Personnel 127
3. Chilean Navy 128
3.1. Officers 128
3.2. Enlisted Personnel 128
4. Chilean Air Force 128
4.1. Officers 128
4.2. Enlisted Personnel 129

PART VI

Defense Resources 130

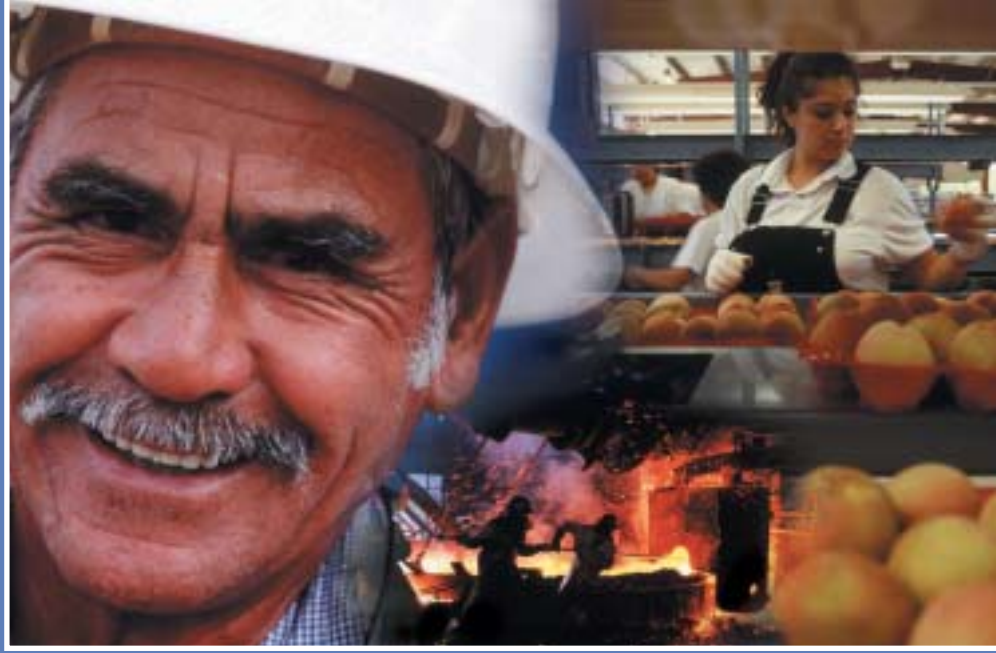
1. Analysis of Defense Spending 131
1. Defense Spending and its Relation to other Macroeconomic Variables 131
1.1. The Incidence of the Gross Domestic Product (GDP) 131
1.2. Level of Perceived Threats 133
2. Defense and Fiscal Expenditures 133
3. Defense Demand, GDP and Perceived Threats: Their Effects 133
4. The Armed Forces as a Purchasing Power 134

2. The Defense Budget 135
1. The Budget Structure of the Ministry of National Defense 135
2. Budget Procedures and the Allocation of Resources 136
3. Modernization of the Budget Systems 137
4. The Budgets of the Armed Forces: Distribution and Composition 137
4.1. Allocations by Use 139
4.2. The Trend in Personnel Expenditures 139

3. The Defense Procurement System 142
1. Description of the System 142
2. Economic Issues and Financial Effects 143
3. The Management Control System 143
4. Offsets 144

4. The Social Security System of the Armed Forces 146
1. Description of the System 146
2. Composition of the Social Security System Administered by Capredena 146
2.1. The Common Benefits Fund 146
2.2. The Severance Fund 147
2.3. The Curative Medicine Fund 147
2.4. The Social Help Fund 147
3. Beneficiaries and Basis of the System 148
3.1. Beneficiaries 148
3.2. The Bases for the Social Security Framework 148
4. Modernization Criteria 148
4.1. The Ongoing Situation 148
4.2. The Modernization Process 148

5. Standardized Measurement of Defense Spending 150
1. Problems of Comparative Estimates of Defense Spending 151
2. ECLAC Methodology 151



PART VI

Defense Resources

Defense is a public asset that must be financed by the State, first, because it performs a basic social function for the existence of society and, second, because it is an asset that cannot be supplied by the market. Market supply mechanisms do not have a practical application in the case of Defense, because, as opposed to what occurs with other goods, there is no competition in the demand for Defense services– everybody receives defense equally– and no one can acquire Defense services for themselves exclusively to the detriment of others.

Defense resources come from the State, either through direct allocation from the public treasury or from funds generated by CODELCO through mechanisms established in what is known as the Copper's Reserved Law.

The State obtains these resources from society's economic capacity, in order to finance, not only the Defense function, but also all the activities entrusted to it. To ensure judicious management, the State has at its disposal a series of budget and evaluation systems to select the activities to be financed according to technical criteria that serve as the basis for political decisions and allow the maximum social benefit.

These characteristics make Defense a purely social asset, and it is the State that decides how and how much of this socially required public good to produce and, on that basis, allocates the resources using the mechanisms available.

1. Analysis of Defense Spending

Knowing how much it costs the State to finance Defense and how the allocated resources are used requires, first, a determination of what constitutes Defense, because the Armed Forces also contribute to development. Secondly, it means taking into account that military spending includes some expenditures that are social in nature, and, thirdly, it means considering that the Armed Forces perform some activities that provide a service for third parties and are financed by the fees charged.

1. DEFENSE SPENDING AND ITS RELATION TO OTHER MACROECONOMIC VARIABLES

It is no easy task to determine how much Defense is necessary (the demand for Defense) in either theoretical or practical terms, as the social demand for Defense is determined by specific factors such as the Gross Domestic Product and appraisal of threats perceived by the country, independent from other considerations, such as medium and long term Treasury policy.[35]

1.1. The Incidence of the Gross Domestic Product (GDP)

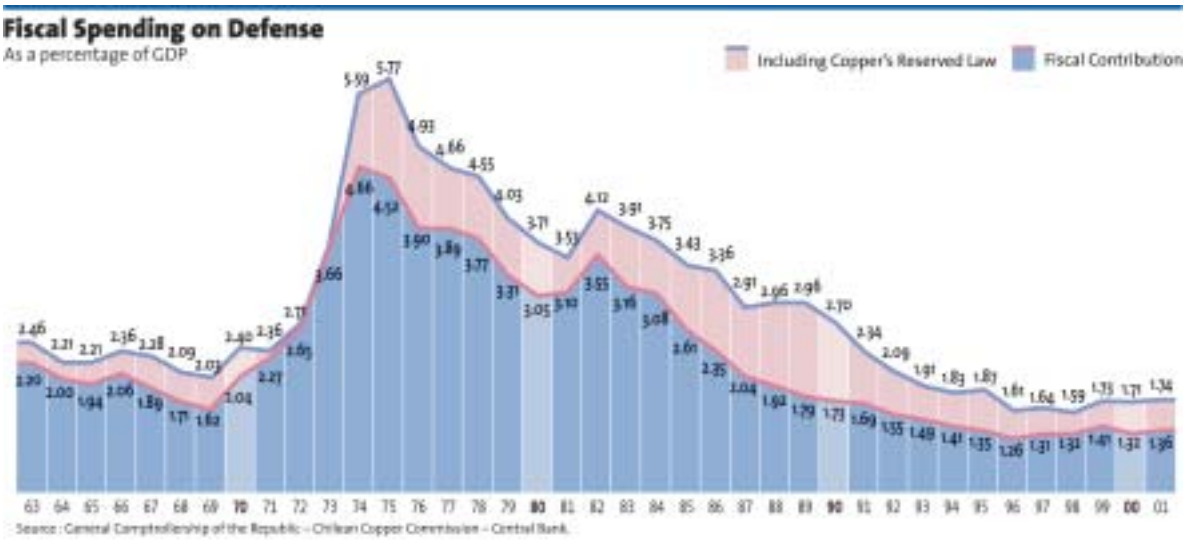
The best way of measuring a country's financial effort to provide suitable Defense is through the ratio of Defense spending to GDP. This ratio may be high in countries fighting a foreign war or suffering from internal conflict, and practically nil in countries that have handed over protection of their sovereignty to foreign powers or international alliances. For a country such as Chile, this ratio expresses the percentage of economic capacity allocated to give credibility to its defense policy.

Figure 23 shows the evolution of Defense spending as a percentage of GDP since 1963, in which several stages are evident.

The first stage consisted of a relative decline in spending until 1969. The second was a rise between 1973 and 1976 as a result of external crises. In the next few years it remained high, although declining slightly, as a result of the economic growth from 1977 to 1981 and because spending was kept at the same or slightly declining levels. During the period from 1981 to 1983, this ratio underwent an upturn due to the sharp

35 There are econometric formulae that could be used to calculate the demand for defense, but such an analysis goes beyond the aims of this study.

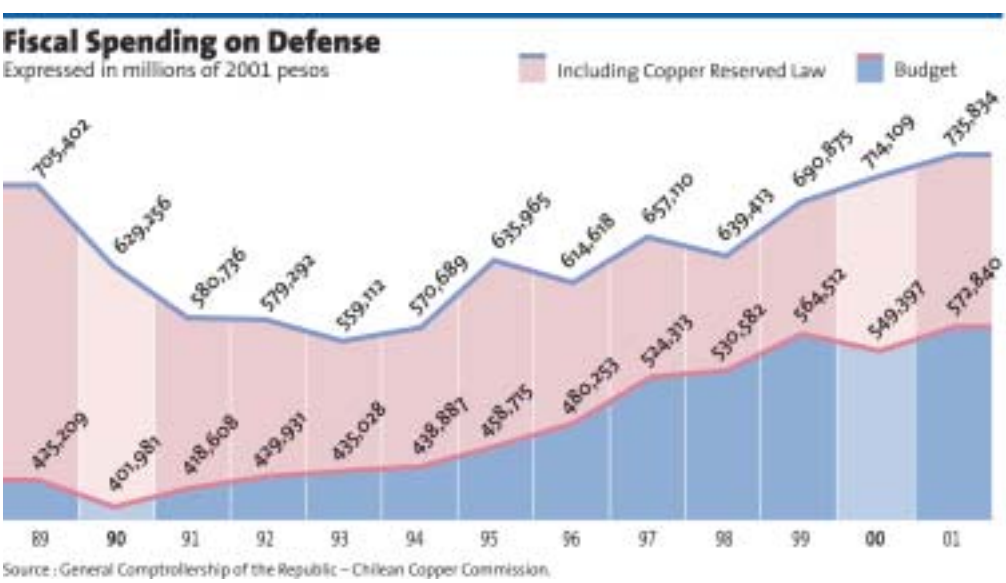
FIGURE 23



drop in GDP during those years. Subsequently, when Defense spending remained relatively constant in an economy that was once again in an upturn, there was a slow decline with ups and downs caused by variations in the price of copper. The ratio has become increasingly lower until it has reached its current values, which are the result of an economy that is growing faster than Defense spending.

Figure 24 shows the evolution of fiscal resources allocated to defense in the period from 1989 to 2001. The lower curve shows the evolution of the respective annual budget allocations. Prices in dollars are converted into pesos at the average exchange rate for the year in question, and prices in pesos are cumulative and then adjusted by the rate of inflation in each year. This curve shows a tendency to lower growth, almost stagnation, until 1995; then a significant increase between 1995 and 1997, due to a special salary adjustment for personnel –the health law in 1996 and the new Personnel Statute or DFL-1 (G) in 1997– followed by another increase as the result

FIGURE 24



of a special allocation in 1999.

Treasury allocations were augmented by revenue from the Copper's Reserved Law. The law states that these funds must be allocated exclusively to purchasing military equipment and weapons systems. The upper curve in Figure 24 shows the total of both allocations to Defense between 1989 and 2001. This curve shows a relatively downward trend in revenue from the Copper's Reserved Law, due to the ups and downs caused by the variable price of copper. It is also evident that the level of total contributions to Defense dropped from 1989 to 1993, in real terms, at which time it reached its lowest point. The level of spending did not recover in real terms until 2000, as a result of an increase in spending on personnel.

1.2. Level of Perceived Threats

In financial terms, this variable is measured by published information on Defense spending by other States. This figure must be corrected to account for exchange rate differentials and differences in the internal prices of some critical factors such as personnel wages.[36]

When our Defense spending is analyzed in relation to the GDP, the resulting percentage should show the impact of perceived threats. This is shown in Figure 23, which shows this ratio over the past 38 years. The graph shows that the ratio has tended to remain at around 1.8% per year over the last few years, which is closely related to a diminished threat perception and to the fact that an equivalent level of Defense must accompany growth in GDP.

Moreover, the absolute level of spending, which is illustrated in Figure 24, has tended to increase in spite of fluctuations in the price of copper reflected in variations in the revenue from the Copper's Reserved Law. This increase in the absolute level of spending is related both to the increase in GDP and to the effects of internal prices of some production factors (wages) as a result of that same GDP growth.

36 It must be noted that this factor must not be measured linearly, since it has significant gaps. In the short term, however, one can assume that its behavior is linear.

2. DEFENSE AND FISCAL EXPENDITURES

An analysis of how much fiscal spending is allocated to Defense (Figure 25) yields a pattern similar to that for the Defense spending/GDP ratio (Figure 23) between 1963 and 2001, except that this ratio increases during that period, because of a drop in fiscal spending between 1985 and 1990. It turns down again in 1991 when GDP grows and the share of fiscal spending in GDP rises.

Two high points can be observed in this distribution: the highest in 1975 (when it was almost one quarter of fiscal spending) and 1989, when, in addition to the effect mentioned above, when there were very high revenues from the Copper's Reserved Law. The ration of Defense to Fiscal spending has tended to stabilize at 8% or 9% over the past decade, which is close to, but slightly lower than the ratio that existed until 1973, when it fluctuated between 8.5% and 12%.

Figure 25 shows that the portion of Fiscal Spending allocated to Defense, including the yield from the Copper's Reserved Law, depends on changes in Treasury policy. These changes modify total fiscal spending and therefore alter the portion allocated to defense spending. Defense spending also changes according to other variables, which add to or subtract from the effect of fiscal policy. One of these variables is the strategic situation of the international arena, which means that fiscal policy only has a relative importance in determining defense expenditures over the long term.

The above can be clearly seen in the period from 1970 to 1976, in which the ratio of Defense spending to GDP rose from 2.4% to 3.6% between 1970 and 1973, while, in the same period, it dropped from 10.5% to 8.5% in relation to fiscal spending as a result of increased fiscal spending. Then, from 1973 to 1976, the two ratios increased, with the rise in the fiscal spending ratio being much higher (since in the period in question fiscal spending remained the same, or dropped, as a result of restrictive economic policies, while Defense spending rose in light of perceived foreign threats during that period).

3. DEFENSE DEMAND, GDP AND PERCEIVED THREATS: THEIR EFFECTS

The ratio described above has two effects that show the correspondence between its elements. First of all, Defense spending resulting from a

FIGURE 25

demand arising from a perceived threat may not exceed a certain limit, which may be expressed as a percentage of GDP. This limit may not be exceeded without adversely affecting the country's development capacity.

Secondly, an erroneous evaluation of a threat could produce an increase in the demand for Defense and its associated increase in spending to meet it beyond a given limit. In turn, if this increase is perceived as a threat by another country, it could lead to what is called an "arms race", where each country involved responds to threats perceived as a result of increased spending on Defense by its possible rivals with more increases.

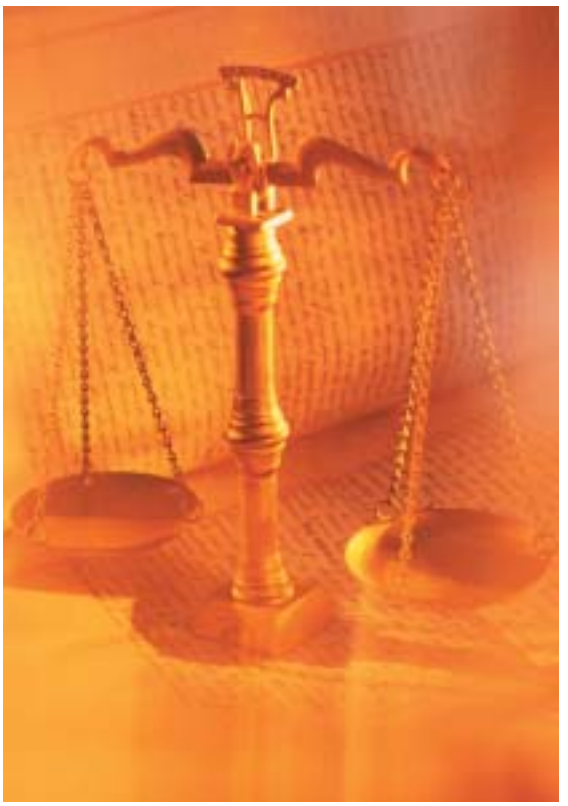
The independence of the demand for Defense in relation to fiscal spending does not mean that –from the perspective of Defense production– government policies geared towards modernizing public management, including budget practices, do not have an effect on Defense spending. Government policies can have an effect by ensuring that public resources are used more efficiently and by meeting the demand for Defense in the most economical way possible in absolute terms and in relation to GDP.

4. THE ARMED FORCES AS A PURCHASING POWER

The Armed Forces acquire most of what they need to operate in the country, except for what is not available on the domestic market or the procurement of which is not economically viable. This policy is being reinforced by instructions from the Commanders in Chief and changes in the tax regulations governing the Armed Forces, especially with regards to importing military equipment. This will mean that procurements will be geared even more to the domestic market.

From the point of view of the country's economy as a whole, the importance of Armed Forces procurement lies primarily in its contribution to certain local economies and some specific sectors of production. Within the latter, the positive effect is a result of introducing standards of quality that guarantee suitable goods and services. This requires the incorporation of production and quality control technologies that will remain available for domestic production of goods and services not strictly designed for National Defense. Weapons and systems maintenance contracts may be even more important, as they will get domestic suppliers involved in learning about complex processes and techniques.

2. The Defense Budget



The budgetary system must consider the difficulties in the efficient use of the resources, such as the limited flexibility of the human resources in the short term and the long period of evolution necessary for the procurement and full operation capability of the means. In Defense, an adequate assessment system and the budget have features that require sophisticated and controlled methods that respond to the Defense Policy definitions.

1. THE BUDGET STRUCTURE OF THE MINISTRY OF NATIONAL DEFENSE

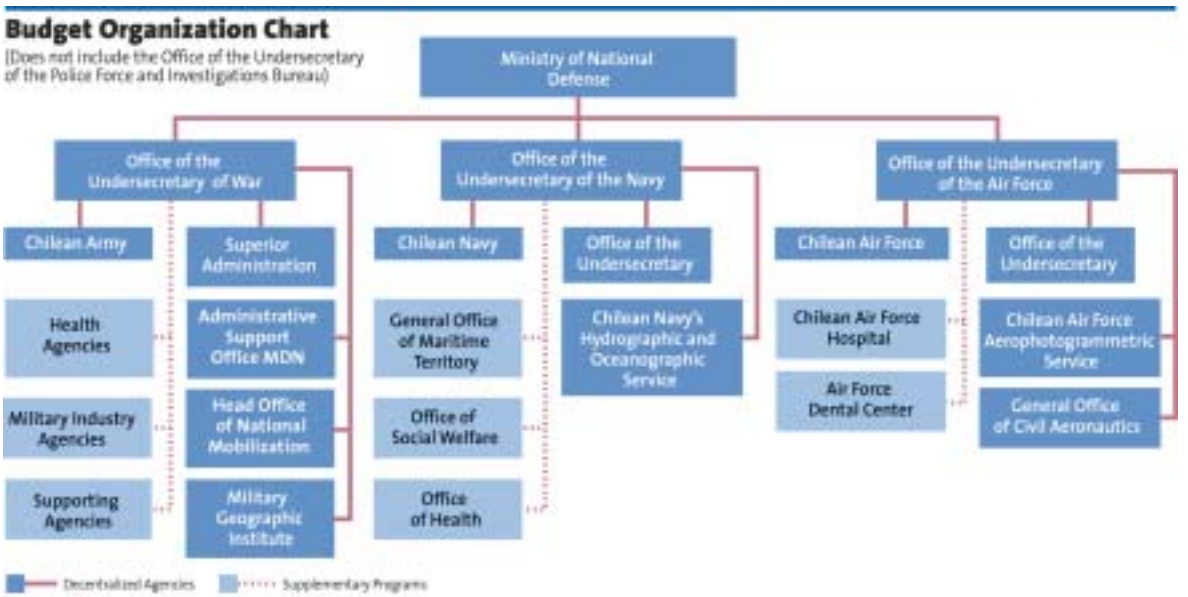
The budget structure corresponding to the Ministry of National Defense is organized into chapters by undersecretaries, which include the Armed Forces budget.[37] The Nation's General Budget provides in each of the above mentioned chapters, for supplementary programs, such as the healthcare budget and other supporting agencies that administer separate budgets with specific purposes and income from different sources. There are also areas for the General Services and Directorates that, with regards to the budget, are closely related to the Ministry.

Figure 26 describes the ministerial organization for budgetary purposes and shows the reporting relationship of the aforementioned agencies. The first type of agency consists of the Offices of the Undersecretaries and the Armed Forces' services, which are solely financed by fiscal revenue and which transfer funds to finance other programs of the defense function. The second type of agency consists of entities reporting directly to the Offices of the Undersecretaries and correspond to programs developed by Armed Forces organizations that render services to third parties and are financed by funds they collect (their own income) and include the Armed Forces' health services, or other services provided to civil society, such as DIRECTEMAR or DGAC. Institutions in the defense sector that represent separate budgetary areas and, for these purposes, are coordinated with the Ministry through the Offices of the Undersecretaries comprise the third type. These agencies are funded with resources generated by the services they provide, in some cases, supplemented by fiscal contributions (IGM, SHOA and SAF).

From the budgetary viewpoint, it should be not-

37 For defense budget purposes, the Offices of the Undersecretary of Police and Investigations are not considered.

FIGURE 26



ed that the National Defense's Social Security Funds (CAPREDENA) are not part of the Ministry of National Defense, but of the Ministry of Labor and Social Security. Additionally, since the Armed Forces get part of their financing directly through the Copper's Reserved Law,[38] it should be mentioned that those resources are not included in the Ministry's budget nor are they recorded in the public accounting, and their scheduling and control system is subject to a different regulation.

2. BUDGET PROCEDURES AND THE ALLOCATION OF RESOURCES

The Nation's General Budget is the State's central tool for allocating public resources. Its definition takes into account all the policies that are technically and economically feasible, so that the set of economic and financial capabilities established by the treasury policy can also fund those given priority by the political authority. The President of the Republic is the authority responsible for preparing the Budget, which must be approved through legislation, enacted by the National Congress and shall be in effect for an annual budgetary period.

The Ministry of National Defense coordinates and manages the fiscal and budgetary policy implementation within the defense sector, and is responsible for submitting the budgets for the required administrative and legislative processing. As regards each of the Armed Forces and other entities reporting to them, the ministerial agency responsible for submission of the budgets is the Office of the respective Undersecretary, where the Undersecretary must participate in the budget preparation and report on the budgetary execution progress to the General Comptrollership of the Republic and the Budget Directorate of the Ministry of Finance.

Regarding the Armed Forces' budgetary management, the Commanders in Chief are responsible for the budgetary formulation and execution for the different programs in accordance with their Constitutional Organic Law. The organizational structure of every service includes the agencies in charge of preparing the corresponding budget and ensuring its execution and control.

The Armed Forces are equipped with different management planning, budget development, financial execution, and evaluation systems. These systems fall under the general regulations governing the financial management of the State and subordinate agencies and, like all other public administration agencies, subject to administrative and accounting control by the General Comptrollership of the Republic and budgetary

38 For further information on this issue, refer to Part VI, Chapter 4.

control by the Office of the Budget.

The purpose of this resource allocation system is to coordinate the different defense sector priorities and incorporate them into the nation's General Budget. In this process, the defense priorities will be assessed based on their technical, economic and political features, and reconciled with the priorities of the other State sectors. Within this general scheme, the Ministry of Finance has established a system of competitive projects that provides resources apart from the requirements established by the law. Since its creation, this system has allocated a significant percentage of its available resources to annual projects that do not involve ongoing spending over time.

3. MODERNIZATION OF THE BUDGET SYSTEMS

Appropriate budget restructuring for each service of the Armed Forces or agency of the defense sector is a fundamental part of a planning system providing for the allocation of resources to the defined activities to achieve the institutional goals, which, in turn, reflect the general goals of National Defense.

Chile's State administration is undergoing a modernization of its public administration that also covers the budgetary and resources allocation processes for the different activities involving public policies. This modernization emphasizes management control, transparency in the use of public resources and improvement in the management of allocated resources. It has also meant increased involvement of the National Congress in both the allocation of resources in the budget and in the control of the execution of specific programs.

Within this general process, the Defense sector and the Armed Forces have achieved important progress in the context of their own restructuring processes int his area. The Armed Forces have designed and implemented management planning, budget and control systems in line with the specific features of each service, which are currently in different stages of development.

4. THE BUDGETS OF THE ARMED FORCES: DISTRIBUTION AND COMPOSITION

The Constitutional Organic Law for the Armed Forces establishes minimum values for the different allocations provided in each budgetary fiscal year. These minimum values were established based on the 1989 budget, which states that the allocation for payroll in Chilean currency must be adjusted, as a minimum, in accordance with the general adjustments for the public sector and the allocation for the remaining national currency expenditures must be adjusted in accordance with the change in the CPI between 1989 and the current year.

Figure 27 illustrates the evolution of these allocations between 1990 and 2002 separately and shows that both experienced an increase of 28%

FIGURE 27

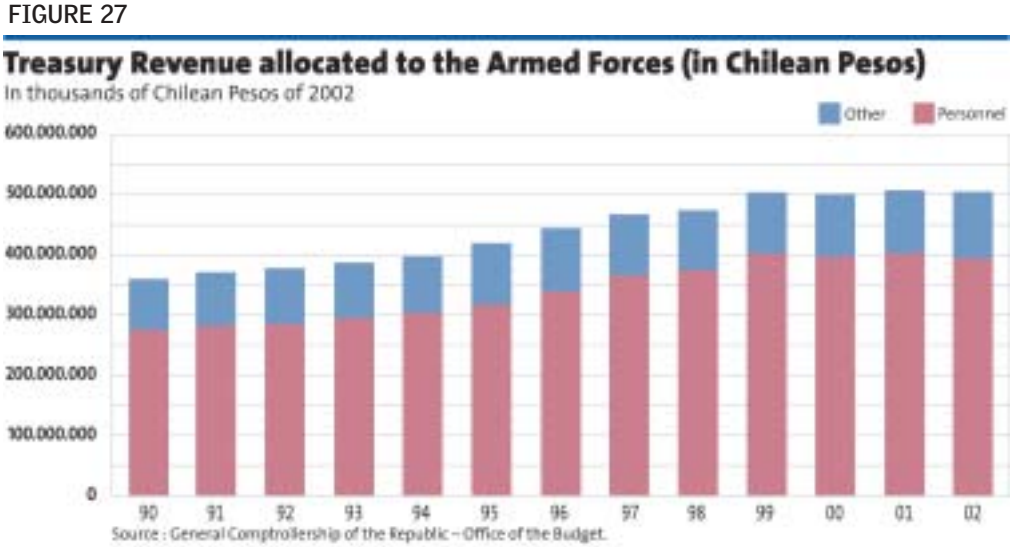
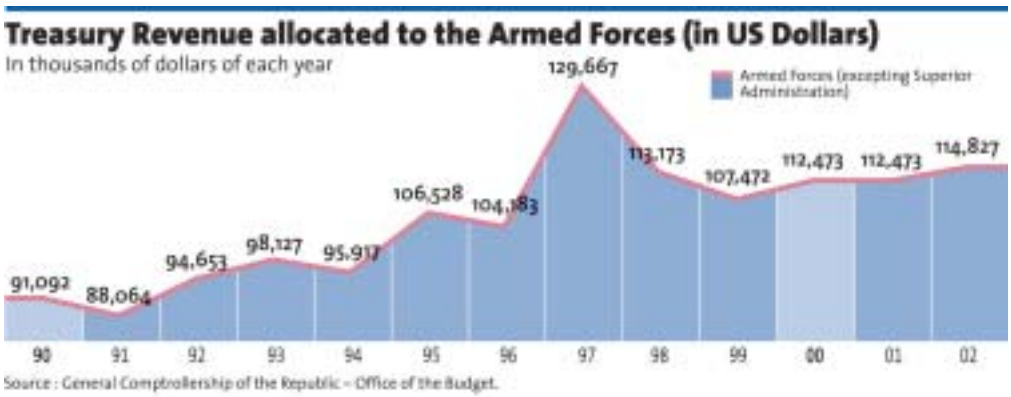


FIGURE 28



for "other" and 40% for "personnel".

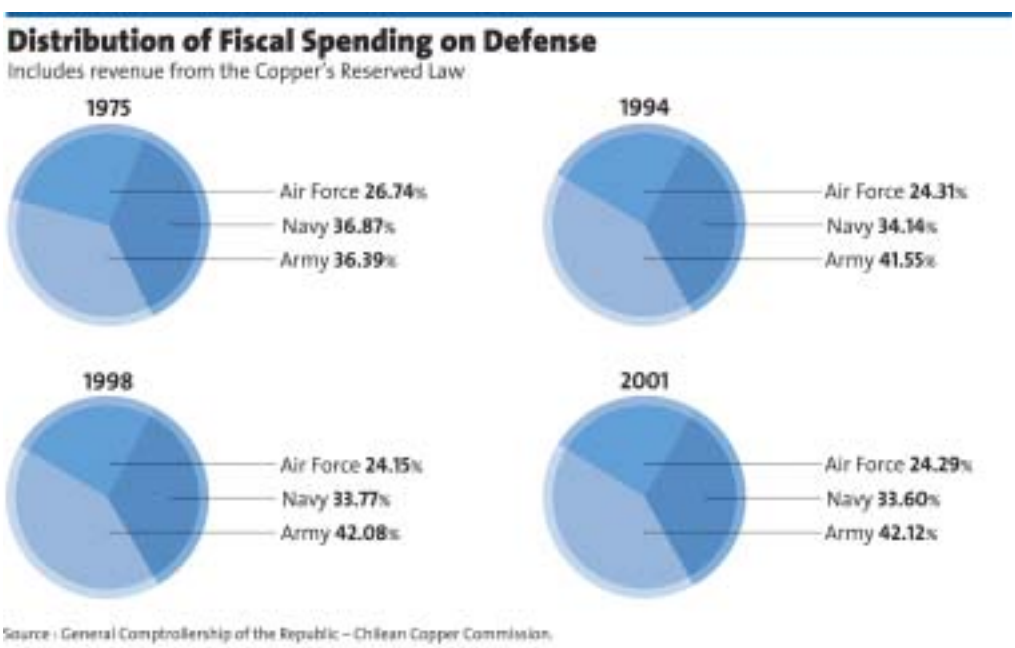
By law, foreign currency allocations may not be lower than the established in 1989 without establishing any adjustability mechanism.

The annual allocation in nominal dollars between 1990 and 2002, illustrated in Figure 28, shows a 25% increase in that period.

Figure 29 displays the distribution of fiscal spending on Defense, including the Copper Law, for each service of the Armed Forces over the four (4) years that mark the trend.

Until 1975, the Navy was the institution receiving the highest allocation, because its operating and equipment costs were higher, followed by the Army. During 1974 and 1975, this ratio changed due to the expenses derived from the increase in the Army staffing, a process that made it the institution with the highest use of resources by the end of 1976. Likewise, the amendment to the Copper's Reserved Law, the revenue from which had been distributed equally among the three services since 1975, now gave the Army a larger share in these funds. This distribution stabilized in the 80's and continued without significant variation over the last decade, in

FIGURE 29



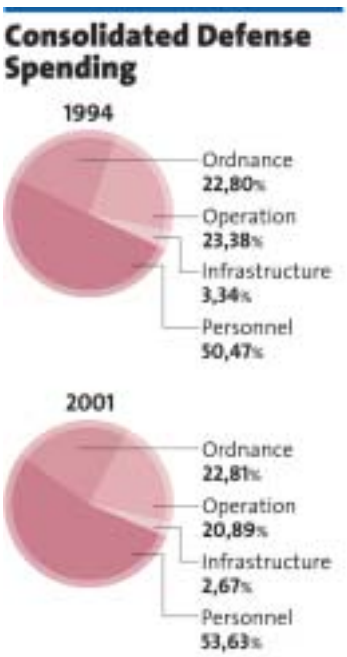
the proportion of 42/34/24 for the Army, Navy, and Air Force, respectively.

Defense spending is distributed over five (5) general areas: Personnel, Operations, Equipment, Infrastructure, and Research and Development. Although the budgetary expenditures may be divided into these categories, the expenditures financed with funds from the Copper's Reserved Law may not be separated in that way. They include operating, military infrastructure construction, and equipment and associated financial expenditures. Even so, given the fact that the most important component of this spending has been the procurement of military equipment, the total funds from this source are classified as Ordnance. Research and Development is a special case; it is not separated in the public accounts, but is incorporated in the other expenses. Figure 30 shows the spending distribution based on these criteria for the years 1994 and 2001.

Figure 30 illustrates the relative increase in the Personnel heading and the relative decrease in the Operation and Infrastructure headings, which is explained by the real increases in payroll, which was proportionally greater than the increases in the remaining operating expenses. This increased spending on payroll must be understood in the context of the increase –up to 1999– in general income levels experienced throughout the country.

In general, the Chilean Armed Forces are operating equipment that is in the final stages of their useful life, so they have a comparatively high maintenance cost. With the operating spending showing a moderate increase, the emphasis has been put on maintaining the operating capabilities of the forces. It should be considered that the process of modernization and replacement of the equipment acquired between 1970 and 1980, most with a long operating life at the time of procurement, started in 1997 with the purchase of new submarines and overhauled, second-hand combat ships. This factor has been critical in the planning of the modernization of the forces and the renewal of the weapons systems of the three services of the Armed Forces.
Spending on military infrastructure is low and reflects that there have been no substantial changes in the distribution and number of units and that the military has been using and repairing its existing infrastructure. The Armed Forces modernization projects, both through the replacement of the equipment at the end of its useful life and the restructuring of the forces will

FIGURE 30



lead to an increase in this item during the next year. This effort will be largely funded by the consolidation of the existing infrastructure.

4.1. Allocations by Use

The treasury allocation to the Defense is given with specific purposes derived from the budget methodology, which makes it possible to classify it according to the kind of expenditures to be financed: "Personnel" and "Other" in Chilean currency. The first one corresponds to the contributions to fund the payroll and other personnel expenses; the second is designed to fund the operating and real investment expenditures (basically in infrastructure). The most important purpose of the foreign currency allocation is the financing of other operating expenses, in addition to financing the military missions abroad, which manage the procurement of equipment and the expenditures of the military attaches' offices.

In addition to the treasury allocations there are the expenditures funded by the Copper's Reserved Law, which are designed for the procurement of war material.

Figure 31 shows the evolution of these allocations, showing their distribution in 1990, 1994, 1997 and 2002. The figure also illustrates the

FIGURE 31

strong variation on the breakdown of the allocation, in which the personnel heading has increased from 41% in 1990 to 55% in 1997. After 1997 it began to stabilize and then decreased slightly beginning in 2001 as a result of the retirements aimed at readjusting the personnel organization. This downward trend should increase in the coming years.

The relative effect of the Copper's Reserved Law decreased in the same period from 35.5% in 1990 to around 21% in the rest of the period. This variation is consistent with the significant fluctuations in copper revenue, basically due to copper prices. The other allocations have not changed significantly and have maintained a relatively stable share.

The coming years should see some movement from "Personnel" to "Other" in Chilean currency allocations, while the other components should remain relatively stable.

4.2. The Trend in Personnel Expenditures

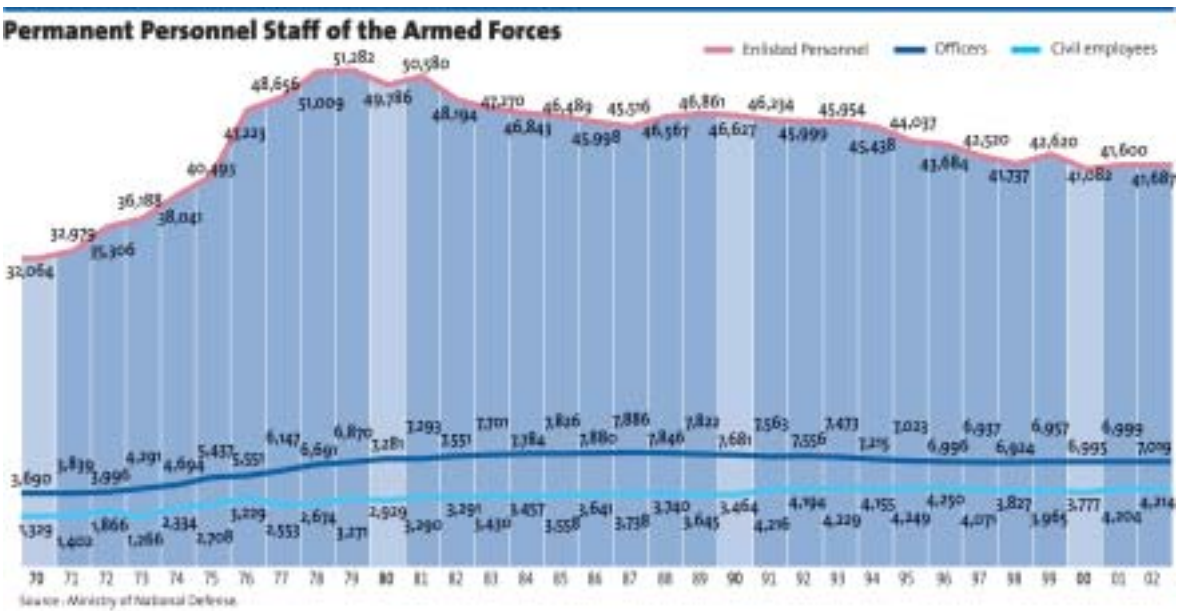
Between 1974 and 1981, due to relations with neighboring countries, the Armed Forces experienced a marked increase in personnel, a process that had been taking place in the Army since 1972. During the 1980's, personnel numbers tended to remain the same, except in the case of the Air Force, and the Navy in particular, which shows a downward trend. Figure 32 illustrates the evolution of the Armed Forces hired personnel.

In general, Armed Forces staffing have experienced two situations associated with and deriving from the number of personnel entering the services during the 1970's. The first situation was the distortion in the personnel hierarchy, caused by a lower number graduates from the military academies in the 1980's and 1990's. The second was the "aging of the staff," a phenomenon that occurs when the staff has a high average number of years in service and associated expenses rise. This situation became evident in 1994, when personnel benefits for professional training increased.

Added to these two phenomena is the fact that in the recent years have seen a general remuneration increase above the CPI in the public sector. Likewise, the hired personnel have received special remuneration increases: during 1996, an adjustment was granted and the Armed Forces' Health Law was enacted, which considered a rewarding bond for the increased health social security contributions; during 1997, an increase associated to the enactment of the new Armed Forces' Personnel Bylaws (War D.L.-1 of 1997) and during 1999, a non-taxable bond was created, which meant another remuneration increase.

The described situation shows the challenges faced by the personnel policies of the sector. To address them, both the Armed Forces' modernization processes and the improvement of the resources allocation systems driven by the Ministry consider instruments and goals aimed at streamlining and improving the human resources management.

FIGURE 32


Permanent Personnel Staff of the Armed Forces
Enlisted Personnel
Officers
Civil employees
Source: Ministry of National Defense

3. The Defense Procurement System

The main component of the procurement system is the Copper's Reserved Law. This law was established in 1940 and is designed to carry out the process of financing, resource distribution, and approval, and procurement of the war material proposed by the Armed Forces. These resources may only be used for the procurement of weapons systems and their associated military equipment .

1. DESCRIPTION OF THE SYSTEM

The allocation of public resources to Defense takes place through various mechanisms aimed at funding the different expenditures originated by Defense. The National Budget is, by definition, the resource allocation mechanism for all public activities funded with treasury resources, which provides for the incorporation of all of society's priorities and for distributing the resources to the activities legitimately established by the society. Nevertheless, it is natural that the national budget structuring is the response to political decisions expressed in the budgetary allocations.

Investment needs in the Defense sector have their own features that differentiate them from the investments required in other sectors of the public business. This is the reason why, in general the different states design special systems to carry out investments in Defense, that is, the procurement of weapons systems, their associated equipment and the required infrastructure for their implementation. In our country, this system has been built around the National Defense Superior Council (CONSUDENA) and the mechanisms established in the "Copper's Reserved Law" (Law 13196) of 1958, and its subsequent modifications.

The Copper's Reserved Law establishes a 10% tax on the export value of the copper and its by-products made by the Corporación del Cobre (Codelco). This law also establishes a minimum amount equivalent to US$ 180,000,000 (one hundred and eighty million US Dollars), adjusted according to the U.S. Wholesale Price Index (WPI) variation between 1987 and the year in question. When the 10% tax on Codelco exports don't cover this value for a specific year, the law states that the General Treasury of the Republic shall provide the difference in the corresponding accounts.

This tax is deposited by the Treasury, in equal parts, into reserved accounts assigned to each of the Armed Forces institutions. These, in turn,

deposit about 5% into an account managed by the National Defense Superior Council (CONSUDENA) for joint projects.[39]

2. ECONOMIC ISSUES AND FINANCIAL EFFECTS

This system dates from the 1940's and has been modified over time to make it more automatic and provide an increased flow of resources to Defense due to the progressive increase in the cost of war material with the constant incorporation of technology. These modifications have led to various consequences for the allocation system.

For example, the mechanism helps prevent competition between the services of the Armed Forces for the resource allocation. Nevertheless, it does not provide an opportunity for the views of each service on how to provide Defense –derived from their specific missions– to be combined into an integrated approach to war material and equipment requirements.

Initially, anticipating the need to harmonize these different service visions, the Legislature gave CONSUDENA a regulating and coordinating function. However, subsequent legal modifications delegating powers to the different services of the Armed Forces and established an automatic allocation and distribution in three equal parts have weakened these functions.

In terms of economic analysis and management, the system has also a positive aspect, as it grants security to the provision of financial resources for the services. As a result, when the pertinent executive decrees are issued, the Armed Forces can commit future resources to fund high-cost equipment needs requiring multi-annual financial flows.

This provides an important advantage for the appropriate allocation of internal resources, because it enables the establishment of plans that are funded over time according to minimum known flows. As long as the financial flows are secure, it is possible to undertake long-term, high-cost, evolving projects and define the priorities according to internal technical criteria. This facilitates the proper equipping of the Armed Forces without the need to allocate funds from other sources.

Nevertheless, the system has other effects on the allocation of resources in the public sector in general and in the defense sector in particular. In general, a certain flow of resources is deducted, making it impossible to assess their allocation based on the set of priorities that the State must address. In other words, allocation of these resources according to a specific piece of legislation does not necessarily satisfy the search for the optimum social or economic benefit. Within the Defense sector, the fact that these resources are allocated based on the particular service priorities diminishes the effect on the production of a more comprehensive Defense.

Furthermore, allocation of the resources in equal thirds limits the possibility of a financial management that channels the fund flows toward higher cost projects, which leads to higher debt levels and financial costs.

The annual fluctuations of the Copper's Reserved Law revenues are seen in Figure 33, which shows the transfers to the Armed Forces from CODELCO. The transfers don't reflect spending exactly because there are balances between the different payment dates that can be passed on from year to year, but these differences disappear over the medium term. (See Figure 33)

3. THE MANAGEMENT CONTROL SYSTEM

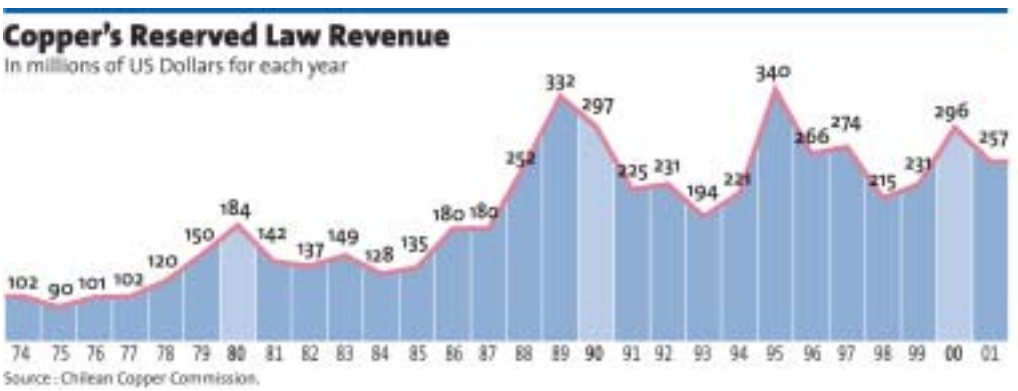
A review of the military equipment procurement process as a whole reveals that there are three controlling agencies in the development of any related project: the General Comptrollership of the Republic and the CONSUDENA, on the one hand, and the internal Comptrollership and Inspection Offices of the Armed Forces, on the other.

Since the formulation of a procurement project is part of an internal process, in this initial stage, control is exercised by the agencies and offices of each service. On the other hand, the external agencies control the operation once the project has been formulated and submitted for approval.

The CONSUDENA must record and control that

39 Given the confidential nature of the law, both the value of the funds provided to the armed forces and their use are confidential and the figures shown in Figure 33 here are for reference purposes only, since they come from Codelco's balance sheets.

FIGURE 33



each project and every action it involves are in accordance with what has been established in the original project, which eventually takes the form of an executive decree signed by the Ministers of Finance and Defense.

For its part, the General Comptrollership of the Republic, under the Political Constitution, oversees all the administrative acts performed by the State agencies. Each project and its respective payments, and all administrative acts in general must be authorized by decree and be overseen by the Comptrollership. This State agency not only ensures that the services subject their resolutions for the record, but also performs reviews at the offices of the public agencies that must issue them. These reviews also extent to the procurement of material for Defense, which includes a visit to CONSUDENA to review the account reporting and verification of movements at the different military missions located abroad.

It should be noted that the legislation governing the Copper's Reserved Law does not empower the Commanders in Chief of the armed services to make direct purchases. Although each purchase is the initiative of the Armed Forces and, until the project is submitted, each Commander in Chief is responsible for how the process is carried out, the finalization of each purchase requires the respective contracts issued by executive decree. This means that the President of the Republic, the Minister of Defense and the Minister of Finance are eventually responsible for each project. Even so, it is important to stress that, before a project can be implemented, it must be previously approved by the Executive, which informs the ministerial authorities of the intended objectives and the procedures adopted to define it and select the best alternatives for its realization.

The good operation of a democratic state entails the need for public transparency and responsibility for the decisions and policies to be adopted, without compromising the necessary confidentiality required by the nature of the equipment being purchased. In fact, during the last decade the most important procurement projects have had a high level of dissemination and exhibition and were generally of public knowledge throughout their entire development process. Undoubtedly, this practice represents progress toward a system that is more open to all branches of government and the citizens and which ultimately contributes to the country's defense financing.

4. OFFSETS

The weapons system procurement processes have given rise in Chile to the initiative to associate these purchases to industrial offset projects, i.e., commercial agreements required by a buyer that force the seller to carry out actions to offset the money flow required by the sales agreement.

The offsets arose as a mechanism to supplement the defense system purchases with commercial and technological initiatives generating socioeconomic benefits for the buying country, and specifically, technological developments for local industry. These initiatives are made possible through the capabilities of the industrial conglomerates producing the weapons systems, which, with a relatively small effort, may transfer technology, orient investments, contract pro-

ductive processes or open markets for the benefit of the buying country's industry.

The Chilean Government decision states that industrial offsets do not determine or affect the selection of the defense material, since the technical decision on the material to be selected corresponds to the respective service of the Armed Forces and the Ministry of Defense.

This policy allows a defense investment to always provide an opportunity for technological, industrial and commercial development for the country.

The National Committee of Supplementary Industrial Programs under the Corporación de Fomento (CORFO) is the Chilean State agency in charge of the negotiation, evaluation and follow-up of the industrial offset bids.

4. The Social Security System of the Armed Forces

Social security for Armed Forces personnel is part of the set of legislation and resources that the State uses to meet the social security needs of the men and women who serve in the Defense services. Therefore, given the special characteristics of a military career, a special system was developed to guarantee proper, life-long protection to the Armed Forces personnel.

1. DESCRIPTION OF THE SYSTEM

Chile's social security system has two groups of people, deriving from the social security reform of 1981. One group consists of all the people who joined the new individual capitalization system and make payments into personal accounts managed by private sector Pension Fund Administrators (AFPs). After Law Decree 3500 was passed, everyone entering the labor market must join the new system.

The other group remained in the old "distribution" system that was structured on the basis of a central administration: the Social Security Standardization Institute. This system, governed by Law Decree 3501, includes the civil pension funds existing in 1981 and standardizes its benefits in a single system and maintains the portfolio of retirees that existed at the time the new system was established.

Nevertheless, the change in the Chilean social security system did not extend to the personnel of the Armed Forces or those of the Forces of Order and Security, which kept their respective systems with some small differences.

The Armed Forces system is generally based on distributions, with contributions from the active, retired and State personnel. Active personnel contribute 6% of their salary or pension, thereby financing a common pool of benefits. This common fund also finances other social services and the administration of CAPREDENA.

2. COMPOSITION OF THE SOCIAL SECURITY SYSTEM ADMINISTERED BY CAPREDENA

CAPREDENA provides social security benefits through four funds. The following are the most relevant features.

2.1. The Common Benefits Fund

The main mission of this fund is to pay social security benefits, pay the transfers required by law, and finance the administration of the social se-

curity institute. These benefits included the payment of retirement and widow's pensions, whose financing is governed by the Fund's implementing act, DFL 31 of 1953, ratified by Law 18948, the implementing act of the Armed Forces, according to the following formula:

a) The Fund pays for 25% of the initial value of the pensions. To meet this legal obligation, the Fund uses the 6% social security tax on the active and retired personnel of the Armed Forces (before 1979 the tax was 8%).

b) The State directly pays 75% of the initial value, plus all adjustments or increases required by law.

Though a deficit is not feasible in this Fund because the State must cover the portion not financed through social security taxes, a review of the figures for the last few years reveals the need for a higher direct contribution from the State, which has doubled in the period. Figure 34 shows the direct contribution of the State to CAPREDENA from 1990 to 2002.

Today, CAPREDENA maintains 92,547 retirees and widows.[40]

2.2. The Severance Fund

Created by Law 8895 of October 4, 1947, its main objective is to make the severance payments according to the provisions established in DFL 1 (G) of 1968, and in Law 18948, the implementing act of the Armed Forces, of 1990. Until 1989, it showed balanced financial statements in terms of its income and expenses, but this situation began to change in 1990 as a result of the legal modifications made between 1988 and February 1990.

These changes led to a structure in which costs were higher than income and the difference was financed, for a time, by the Fund's equity, until 1995. Since then successive direct fiscal allocations have been needed.

2.3. The Curative Medicine Fund

Regulated by law 19465 and financed with the 6% tax on retirement and widow's pensions paid by CAPREDENA, minus the 17.5% that must be left available for the corresponding Commanders in Chief of the services, and with a state contribution of 1% of the retirement and widow's pensions paid by the Fund. In practice, this means that this fund is financed with 5.95% of the contributions paid by its affiliates.

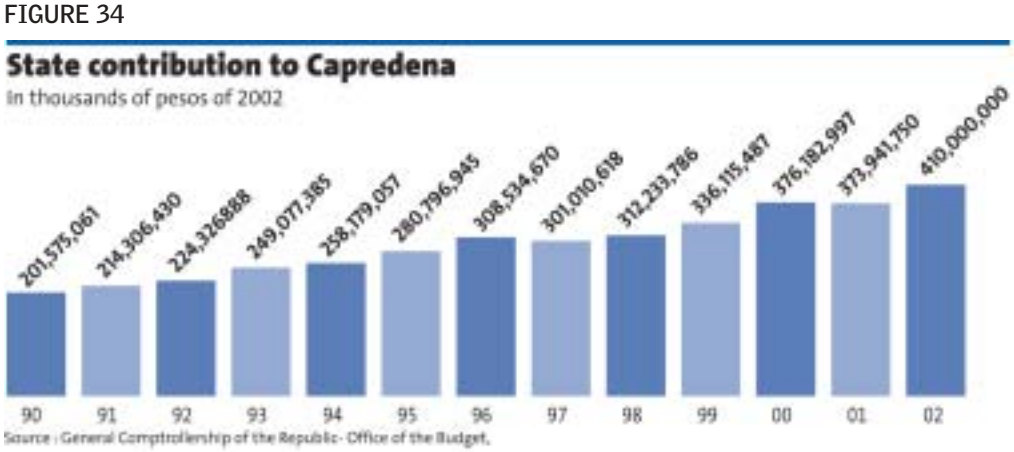
The fund finances the health benefits of 42,000 retired affiliates, who constitute 45% of the total retired individuals. The rest have remained with or rejoined the Armed Forces health systems. This fund is complemented with a voluntary mutual fund.

2.4. The Social Help Fund

This was created Law 16285 of 1965, for the purpose of granting housing and assistance loans to the contributing affiliates of CAPREDENA, with initial capital from the outstanding balance of the loans granted by the institution.

40 Figure updated as of July 2002. Source: Report to the Board of CAPREDENA.

FIGURE 34



According to current regulations, the annual budget is distributed among the affiliates in active service and those retired, proportional to the contributions paid by each group to the Common Benefits Fund.

3. BENEFICIARIES AND BASIS OF THE SYSTEM

3.1. Beneficiaries

All permanent staff serving in the Armed Forces in the different ranks of officers, enlisted personnel, and permanent civil employees participate in the Armed Forces social security system. The retired personnel and their direct surviving family members, retirement and widow's pensions of the system also participate.

The system covers risks during the professional career of the military personnel protecting the member of the system and their family, until the death of the last family member with rights in the system. If the beneficiary is on active duty, it includes accidents, disabling illnesses, death while in service, and after twenty years of service, the possibility of retiring with a percentage of their salary proportional to the years of service.

3.2. The Bases for the Social Security Framework

One of the essential duties of the State is the nation's defense, which requires dedicated citizens engaged in this task and sometimes putting their own lives on the line. For this reason, the State gives these citizens a fair reward during their service, and after they complete their service, the State offers a proper social security and retirement plan.

The risk and the effort involved in the military profession are not compatible with a social security system based on normal mortality and disability rates.

The design of a hierarchical and pyramid-type career is not compatible with a system that is based on an age to ensure certain profitability of the funds in an individual capitalization account. In addition, the highly specialized and specific professional education of the Armed Forces personnel does not welcome everyone to the labor market after retiring.

4. MODERNIZATION CRITERIA

4.1. The Ongoing Situation

The social security framework defined in the notes above shows a situation that is characterized by increasing costs, which arises from the need to finance the social security of the numerous personnel that belong to the large graduating classes of the 1970's and are now retiring after completing their careers, and in agreement with the benefits introduced with the amendments of the laws that regulate the military social security paid in the 1980's.

Furthermore, maintaining certain benefits for which the basic rules have not changed for a long time has become an excessive burden for a system founded on historical circumstances and criteria that have increased the cost of those benefits and the number of beneficiaries. On the other hand, these benefits have differ significantly from those of the civilian system that protects those who could not choose the new individual capitalization system enforced in the country, or who preferred to stay in the distribution system managed by the State. There are even differences in benefits of the same type.

4.2. The Modernization Process

Studies were stated some time ago to analyze the possible solutions to this situation and they explore the characteristics and costs of a military social security system that includes criteria related to the current social security system. Based on the results of these studies and the criteria defined by the Ministry, much work was done to prepare a project that made the social security system shared by the Armed Forces and the Order and Security Forces economically and socially feasible.

The criteria considered are related to the need to maintain a specific system for the Armed Forces and the policies based on the current distribution system, given the characteristics of the professional career in these institutions. This framework will cover the reform of the different subsystems separately, as each of the funds managed by CAPREDENA (or DIPRECA) face specific problems that require specific solutions. A detailed study of the current laws and their regulations, as well as of each benefit granted with the pensions, will allow the system to update the rights of the military personnel, the retired members and their families, and their access requirements.

Ultimately, the application of a gradual modernization criteria presupposes that no member in active duty will see his rights affected and no retired member will see his pension modified due to the implementation of changes proposed.

The working plan considers the participation of the governmental agencies related to the subject and of the military and police services, and considers the creation of technical groups in charge of studying the specific processes. These groups will have the task of submitting a modernization proposal that includes the necessary economic, legal and social security aspects.

5. Standardized Measurement of Defense Spending

Since the end of the 20th Century, Chile and Argentina have promoted a cooperation and integration process. In this framework, the agreement on a common standardized methodology for measuring the corresponding Defense spending, with the collaboration of the Economic Commission for Latin America and the Caribbean (ECLAC) has been a very important progress in this issue. This method has helped to overcome some suspicions caused by the disparity between the figures submitted by governments, international agencies and independent institutions.

By approving, together with Argentina, the method developed by ECLAC for measuring defense spending, Chile has responded to the possibility, put forward in the Book of the National Defense of 1997, of improving its budget and evaluation systems used in defense to provided internationally accepted data

Indeed, in the 1997 book, Chile defined the categories included in defense spending, but indicated that it was not considering the expense of military social security as part of its defense spending. It actually stated: "For the effects of this Book of the Defense, it [social security spending] will be considered separately, because it is not a cost covered by the Ministry of National Defense and therefore is not included in its budget, nor discussed in the National Congress within the items of this ministerial portfolio. The consideration of this item as part of defense spending is debatable because it is a social expense oriented to protecting the personnel serving the defense institutions, and their families, when they are no longer in service." The 1997 book added that "whoever analyzes the information on defense spending shall choose the criteria, which implies fully or partially including or excluding from their analysis the tax-related cost of the social security system of the defense institutions."

Nevertheless, in order to strengthen mutual transparency and trust, the Chilean government agreed with the government of Argentina to ask the Economic Commission for Latin America and the Caribbean (ECLAC) to study a methodology for measuring and comparing their defense spending.[41]

Both countries agreed to not restrict access to the information, and committed to open figures that reflect complex realities, so it could be properly analyzed by the ECLAC experts in charge of the study. They had to work with the budgetary and financial management methods in force in each country, which differ significantly. Due to these differences and the need to find a standardization formula, the study was defined as a "homologation" process for calculating defense spending.

1. PROBLEMS OF COMPARATIVE ESTIMATES OF DEFENSE SPENDING

There are several sources that provide comparison studies on defense expenses. The main ones are the International Monetary Fund (IMF), through its annual book "Government Finance Statistics Yearbook" (GFSY); the United Nations, by publication of the report, Reduction of Military Budgets: Military Expenditures in Standardized Form Report by States; the International Institute for Strategic Studies (IISS), of London, that publishes the Military Balance; the Stockholm International Peace Research Institute (SIPRI) and, before that, the Arms Control and Disarmament Agency (ACDA), which has been part of the Department of State of the United States since 1999. The Congressional Research Service (CRS) and the United Nations, through the United Nations Register of Arms Transfer, also gathers information on military purchases.

Most of the reports published use common benchmarks based on the Classification of the Functions of Government (COFOG), a system developed by the United Nations, and from NATO methodologies. However, these measurement systems are normally fed by the data submitted by the countries analyzed or by the public-domain information available.[42] This is a large disadvantage: the information is not standardized. Moreover, the COFOG and NATO methodological frameworks have some differences with respect to the activities considered as part of the defense function and thus, of the spending involved.

There are various examples of this. NATO considers military pensions as part of defense spending, while the IMF includes them under "Social Security and Welfare" spending. The former considers transactions within the State, an aspect omitted by the IMF, as part of defense spending. Another relevant aspect are the Police Force and Frontier Control, Auxiliary or Paramilitary, which are included as defense expenses by the Atlantic Alliance, but excluded by the IMF. On the other hand, the Civil Defense is part of the GFSY defense concept, but not according to NATO.

There are also differences between each institution's measurements. The ACDA excludes the civilian expenditures of the Ministry of Defense, and foreign military aid, and includes military acquisitions at the time the debt contract is signed, not when the payment is made. In turn, the IMF does not include expenses for non-military purposes, regardless of whether they are made by the Ministries of Defense (Education, Health, Research and Development, interests over military debts and pensions). Also, the SIPRI does not include purchases made with donations within the calculation.

Lastly, while collecting the data there is a persistent danger: many countries argue that they do not have information available, a situation that is particularly frequent in the calculation mechanisms used by the UN.

2. ECLAC METHODOLOGY

Before starting the methodological design, Chile and Argentina submitted to ECLAC a basic document with the work specifications, the basic definitions of the calculation, and in general terms, all data and procedures required to obtain them.

The "Common Standardized Methodology for Measuring Defense Spending" prepared by the ECLAC understands "defense spending" as the expenses incurred to implement activities the direct effect of which is to protect the national sovereignty. In brief, its objective is to reach a condition of external security.

Based on this definition, the study chooses three basic directing principles:

41 The work was requested to the Economic Commission of Latin America and the Caribbean (ECLAC) as it is a supranational institution of the United Nation that enjoys a broad recognition in the economic area, and offers guarantees of seriousness and impartiality to all the countries of the region.

42 Excluding only NATO member countries.

a) National Defense is related to the protection of the geographical boundaries in the event of foreign threats and therefore excludes the expenses of the domestic security function.

b) The expenses are "measured" in terms of the annual cash flows and not of physical or monetary assets accrued over time. This does not prevent other measures of transparency from reporting that information.

c) The governments of Chile and Argentina established that the central goal of their proposal was to have a "standardized methodology" that would permit a rational comparison of the spending and contribute to transparency and trust between the two countries.

In short, the expense to be measured is the expense the countries incur in performing the defense function, restrictively defined in relation to external security and the care of the national sovereignty. This means the analysis does not include the functions of domestic security and other duties performed by agencies under the ministries of Defense, but whose tasks are not directly related to the stated purpose.

The methodology required "operationalizing" the aforementioned criteria. It was also to assume some problems related to the valuation of certain expenses, and clarify any tax-related and fee-related effects that could eventually distort the values. Therefore, some common criteria and "facilitating" procedures were used to calculate the defense spending in Chile and Argentina, thereby enabling their proper comparison.

Standardization was performed based on the budgetary and accounting procedures in force in Chile and Argentina, which are not entirely similar and that the project entrusted to ECLAC did not really intend to modify it, thus assigning more relevance to the data selection criteria.

Though the main objective of the study was to measure defense spending, it seemed appropriate to complement the available information with certain quantitative and qualitative data on the revenues that finance this spending. In this manner, as far as possible, the reliability of the defense spending estimates was strengthened.
A better understanding of the budgetary and government revenue and spending control systems that exist in Argentina and Chile, which constituted the basis for preparing a common standardized methodology for measuring defense spending, led to the conclusion that the essential data should come from government cash-basis accounting ("paid" and "banked" in Argentina and "cash" in Chile), eliminating some specifically budgetary terms such as ("commitments" or "accrued"). The figures were obtained from the General Comptrollership of the Republic and the Office of the Budget, in Chile, and the Integrated Financial Data System of the National Treasury, in Argentina.

The cash-basis accounting criteria is used by the International Monetary Fund in its statistics, which are widely known, accepted and used worldwide.

In addition, as a trial period for analyzing and verifying the strengths and possible weaknesses of the standardized methodology, it was applied in 1996, 1997 and 1998; in other words, in a reasonable and relatively recent period of time, with much data available and stable criteria and procedures in both countries.[43]

Lastly, to prepare the common standardized methodology, the decision was made to submit an option of successive approaches that would allow for definition of different concepts of what defense spending is in the two countries, depending on the coverage of the concept used, from the smallest to the greatest, in order to provide a more complete view that could include different criteria for what comprises the spending.

Thus the Office of the Executive Secretary of the ECLAC proposed that defense spending be calculated for three different aggregates –G1, G2, and G3–, which progressively broaden its scope. In this manner, the methodology proposed can respond better to the aspirations and needs of the countries involved, and allows more valid and pertinent international comparisons, depending on the level used.

a) Aggregate Level G1
The Function of Defense, Central or Basic

43 In the 12th Meeting of the Permanent Security Committee (COMPERSEG: Buenos Ai-res, December 2002), Chile and Argentina agreed to update the application of the ECLAC methodology in both countries, and they analyzed different alternatives to implement this decision.

Defense Spending for Level G1 corresponds —according to the definitions of the IMF in its public statistics manual— to government spending on the management and administration of the military defense, especially the administration, supervision and management of military defense matters and forces, understood as ground, air, or sea defense forces; engineering, transportation, communications, information, materials, personnel and other forces and non-combatant commands; reserve forces and auxiliaries linked to the defense system, equipment and military structures. Issues related to the Civil Defense; applied research and experimental development related to defense, and the management, administration and support of defense matters that cannot be assigned to any of the previous expense categories, for example, those related to civil or academic agencies of the Ministries of Defense.

The calculation procedure starts with the reports that the countries submit to the IMF every year, in which they officially report the defense expenditures made by their respective ministries of Defense, according to a functional ranking of government spending generally used by agencies under the Ministry of Finance. It includes both the disbursements made in local currency and the equivalents in local currency for those made directly in foreign currency. It must be noted that in official publications of Argentina and Chile, and in those of the IMF, only total values are reported in local currency and in current values for each year.

This initial data is corrected because it does not reflect the same concepts, in other words, it includes other expenses associated with different functions of Defense and exclude others that fit the definition of Defense adopted for ECLAC's work.

In the case of Argentina, some items are added such as education, training and health expenses, paid by the Ministry of Defense, excluding the aeronautical police force and other minor items. In the case of Chile, this data also includes the revenue from the Copper's Law. (Information is only available on the revenue from this source, but not the use of these funds, which include all acquisition expenses charged to these funds, including interest and commissions.) In the case of Chile, the expenses that do not correspond to the military function as it was defined or that constitute services supplied to the community by Ministry of Defense agencies and paid by the users must be deducted.

The result of these operations constitutes the first or basic level of Defense Spending or G1, defined as the Central Defense Spending.

b) Aggregate Level G2

Aggregate Level G2 or Extended Defense Spending is obtained by adding the associated expense to Level G1, the net social security expenses executed in each country for paying the pensions of retired military personnel and to their heirs (widow's pension). In the case of Chile, they originate in the expenses associated with the provision and administration of the National Defense Fund, CAPREDENA. In the case of Argentina, they originate in the institute of Financial Assistance or IAF for the same concepts.

Regarding to this Level G2, it is important to note that some methodologies do not include social security expenses deriving from the social security system of retired military personnel, as part of defense spending, as is the case of the United States and in the international agencies. In turn, other methodologies, basically European, do include them. Since this topic is open to discussion and there is no consensus, as indicated in the ECLAC study itself, this Level G2 expresses another concept of defense that differs from and complements Level G1.

The statistics in Chile's 1997 Book of the National Defense do not directly include these figures as defense spending, though some statistics of the social security spending are presented separately.

c) Aggregate Level G3

Aggregate Level G3 or Total, includes several concepts that are related to industrial and defense development activities, as well as to concepts related to the defense spending of other public agencies and military aid. Though in the cases studied in Chile and Argentina some of these items do not have any relevance, they are essential to a more global analysis and sustained effectiveness over time.

The methodology designed by the ECLAC,

that yielded the common standardized methodology described above, was developed to measure defense spending in Chile and Argentina. However, it is possible to apply it in other countries of the region. In fact, during the year 2002 a joint effort was started between Chile and Peru to apply it between both countries[44].

In summary, the policies promoted by the Chilean State in terms of the transparency of defense spending have led to several achievements. On the one hand, while their purpose is to increase mutual confidence between Chile and other countries, they have contributed to improving our external security. From a strictly economic point of view, there is now a nationally and internationally accepted methodology to measure defense spending. Within Chile, this leads to the possibility of a better allotment of the resources, and in internationally it enables a better appraisal of the economic management of the public sector.

44 The 5th Conference of Defense Ministers of the Americas (Santiago, November 2002) recognized the work done by Chile and Argentina, with the contribution of the ECLAC, agreeing to a common standardized methodology for measuring defense spending as a mutual confidence measure and proposed it as an incentive for doing similar efforts in the region. The Conference understood that developing this methodology among other American countries requires establishing the common factors and elements, and considering its particular issues (Conclusions of Point 2 of the Second Labor Commission). In turn, in the 12th Meeting of the Permanent Security Committee (COMPERSEG: Buenos Aires, December 2002), Chile and Argentina agreed on the need to increase the efforts to develop the proposed methodology with other countries of the region and decided to seek ways to disseminate it in order to achieve its best acceptance.

Institutions,Agencies and People involved in the Project "Book of the National Defense of Chile 2002"

Institutions,Agencies and People involved in the Project "Book of the National Defense of Chile 2002"

PERMANENT EXECUTIVE COMMITTEE OF THE BOOK OF NATIONAL DEFENSE 2002

PRESIDENT
Undersecretary of War:
Gabriel Gaspar

GENERAL COORDINATOR
Chief of the MND Advisory Committee:
Rodrigo Atria

EXECUTIVE SECRETARY
Claudio Ortiz

MEMBERS
MND Advisory Committee:
Marcos Robledo
COL (A. Ret.) Julio E. Soto
COL (A. Ret.) Carlos Solar
Felipe Illanes

GENERAL STAFF OF NATIONAL DEFENSE
RA Gerardo Covacevich
COL (AF) José Huepe
CAPT (Nav) Ricardo Benavente
CAPT (Nav) Mario González

ARMED FORCES DELEGATES
COL (A) Jorge Villagrán
CAPT (Nav) Claudio González
COL (AF) Carlos Stuardo

PARTICIPATING AGENCIES

PRESIDENCY OF THE REPUBLIC
Ernesto Ottone
Mireya Dávila

NATIONAL CONGRESS
Senate of the Republic – Defense Commission:
Senator Jaime Gazmuri

STATE MINISTRIES

MINISTRY OF STATE
Office of Public Security and Information:
Luis Marcó

MINISTRY OF FOREIGN AFFAIRS
Office of the Undersecretary:
Heraldo Muñoz
Guillermo Bittelman
Andrés Landerretche

Office of Foreign Policy (DIPEXT):
Mario Artaza

Office of Special Policy (DIPESP):
Luis Winter
Julio Fiol

Office Planning (DIPLAN):
Carlos Portales

Office of State Borders and Boundaries (DIFROL):
María Teresa Infante

Diplomatic Academy:
Juan Pablo Romero

MINISTRY OF NATIONAL DEFENSE
Undersecretary Gabriel Gaspar
José Luis Díaz

Office of the Undersecretary of the Navy:
Undersecretary Ángel Flisfish
CAPT (Nav) José María del Solar

Office of the Undersecretary of the Air Force:
Undersecretary Nelson Hadad

Office of the Undersecretary of the Police Force:
Undersecretary Patricio Morales
LTC (Pol) Lindorfo Ibáñez
CAPT (Pol) Mario Martínez
CAPT (Pol) Álvaro Castillo

Office of the Undersecretary of the Investigations Police:
Undersecretary Gonzalo Miranda
SPREF Salvador Rubio

General Staff of the National Defense (EMDN):
MG (AF) Ricardo Gutiérrez
MG (AF) Osvaldo Sarabia
BRIG (A) Alfonso Neira
BRIG (A) Daniel Carrasco
COL (A) José A. Soto
COL (AF) Guillermo Navarro
COL (A) Germán Kaiser
LTC (AF) Rolando Martinéz
Commander (Nav) Armando Arbutti
LT COM (Nav) Claudio Escudero

Advisory Committee to the Minister of National Defense:
Eugenio Cruz
Renán Fuentealba
Alfredo Canales
Fernando Zuñiga

Head Office of National Mobilization (DGMN):
MG (A) Waldo Zauritz
BG (A) Carlos Oviedo

National Academy of Political and Strategic Studies (ANEPE):
RA (Nav) Jorge Huerta
BG (AF) Javier Anabalón
COL (A) Arturo Contreras
BRIG (A. Ret.) Gustavo Basso
MG (A. Ret.) Enrique Valdés
BG (A. Ret.) Humberto Julio
MG (AF. Ret.) Marcos Mierelles
CAPT (Nav. Ret.) Francisco Le Dantec
COL (A. Ret.) Ricardo Ibarra

Chilean Army:
BG José Miguel Piuzzi
BG Gonzalo Jara
LTC Ricardo Palma
LTC Carl Marowski
LTC Guillermo Carrasco
LTC Hernán Giustinianovic

Chilean Navy:
RA Eduardo García
RA Rodolfo Codina
RA Alexander Tavra
CAPT Claudio Larrañaga
CAPT Federico Niemann
Commander Pablo Muller
LT COM Juan Berasaluce

Chilean Air Force:
BG Ricardo Ortega
BG Enrique Rosende
COL Edgardo Villalobos
COL Guillermo Gallardo
COL Jaime San Martín
Samuel Véliz
Claudio Ramírez

Chilean Police Force Carabineros de Chile:
COL Gustavo González
LTC Enrique Ramírez

Investigations Bureau of Chile:
PREF Daniel Correa
SUBCOM Alejandro Bravo
INSP Víctor Espinoza
Military Studies and Research Center (CESIM)
COL Carlos Rivera
COL Ricardo Lobos
LTC Jorge Fuenzalida

Center of Strategic Studies of the Navy (CEDESTRA):
Fernando Thauby

Center of Air and Space Studies (CEADE):
MG Máximo Venegas
COL Joaquín Urzúa

MINISTRY OF FINANCE
Budget Directorate:
Mario Marcel Hugo Zúñiga

OFFICE OF THE SECRETARY GENERAL OF THE PRESIDENCY
Inter-Ministry Coordination Division:
Alfonso Néspolo

National Environment Commission:
Aarón Cavieres
Hernán Mladinic

MINISTRY OF ECONOMY, PROMOTION AND RECONSTRUCTION
Production Promotion Corporation (CORFO):
Pedro Sierra

Chilean Commission of Nuclear Energy:
Carmen Silva

Institutions,Agencies and People involved in the Project "Book of the National Defense of Chile 2002"

MINISTRY OF EDUCATION
Undersecretary of Education:
Antonio Salinas

National Research, Science and Technology Commission (CONICYT):
Cristina Lazo

MINISTRY OF PUBLIC WORKS
Minister Carlos Cruz

MINISTRY OF AGRICULTURE
Corporación Nacional Forestal (CONAF):
Carlos Weber

MINISTRY OF PLANNING AND COOPERATION
Jaime Fierro
Juan Cavada

Comisión Nacional de Desarrollo Indígena (CONADI):
Cristian Catricura

POLITICAL PARTIES WITH REPRESENTATION IN THE CONGRESS
Partido Demócrata Cristiano (PDC):
Gonzalo García
Eduardo Santos

Partido por la Democracia (PPD):
Jorge Heine
Manuel Durán

Partido Radical Social Demócrata (PRSD):
Isidro Solís
Guillermo Abarca

Socialist Party (PS):
Santiago Escobar

Partido Renovación Nacional (RN):
Miguel Navarro

Partido Unión Demócrata Independiente (UDI):
Germán Concha

ACADEMIC INSTITUTIONS

UNIVERSIDAD DE CHILE
Institute of Political Sciences:
Guillermo Holzmann
Karina Doña
Carolina Sancho

Department of Anthropology:
María Benavente

School of Economic and Administrative Sciences:
Ricardo Paredes

UNIVERSIDAD CATÓLICA DE CHILE
Institute of Political Sciences:
Roberto Duran
Carlos Martín

Department of Electric Engineering - School of Engineering:
Andrés Guesalaga

School of Economic and Administrative Sciences:
Francisco Rosende

UNIVERSIDAD ARCIS
Armed Forces and Society Program:
Carlos Gutiérrez
Alejandro Iturra

UNIVERSIDAD BERNARDO O'HIGGINS
Francisco Achurra
COL (A. Ret.) Héctor Villagra

UNIVERSIDAD DEL DESARROLLO
Daniel Prieto

CENTRO DE ESTUDIOS ESTRATÉGICOS (CEES)
Patricio Rojas

CENTRO DE ESTUDIOS DEL DESARROLLO (CED)
Sergio Micco

CORPORACIÓN TIEMPO 2000
Hugo Espinoza

FACULTAD LATINOAMERICANA DE CIENCIAS SOCIALES (FLACSO-CHILE)
Francisco Rojas

FUNDACIÓN CHILE 21
Oscar Landerretche

INSTITUTO LIBERTAD Y DESARROLLO (ILD)
Axel Buchheister

INSTITUTO LIBERTAD (IL)
Guillermo Pattillo

NON-GOVERNMENTAL ORGANIZATIONS

INSTITUTO DE ECOLOGÍA POLÍTICA
Manuel Baquedano

INSTITUTO DE ECOLOGÍA DE CHILE
Jorge Vergara

CORPORACIÓN DE DEFENSA DE LA FLORA Y FAUNA (CODEFF)
Miguel Stutzin

CORPORACIÓN DE LA DEFENSA DEL BOSQUE CHILENO
Paulina Vera

DEFENSE INDUSTRIES

FABRICAS Y MAESTRANZAS DEL EJERCITO (FAMAE)
COL (A) Carlos Massou
LTC Mario Villarroel

ASTILLEROS Y MAESTRANZAS DE LA ARMADA (ASMAR)
CAPT (Navy) Juan Schilling

EMPRESA NACIONAL DE AERONAUTICA (ENAER)
LTC (AF) Jorge Vargas

EMPRESAS CARDOEN
Carlos Cardoen

SISDEF
Enzo Ibazeta

DTS
Luis Montecinos
Carlos Cifuentes

ORGANIZATIONS THAT PREPARED THE BOOK OF THE NATIONAL DEFENSE 2002

EDITORIAL STAFF
Advisory Committee to the Minister of the National Defense:
Rodrigo Atria
Marcos Robledo
COL (A. Ret.) Julio E. Soto
Eugenio Cruz
COL (A. Ret.) Carlos Solar
Felipe Illanes
Claudio Ortiz

NATIONAL DEFENSE GENERAL STAFF
RA Gerardo Covacevich
CAPT (Navy) Ricardo Benavente
CAPT (Navy) Mario González
Mario Polloni

PRODUCTION TEAM
Marcos Robledo
Javier Galaz
Néstor Sepúlveda

SECRETARY
S. Sergeant (AF) Maria Angélica Marfan
Corporal (A) Claudia Leiva

Institutions,Agencies and People involved in the Project "Book of the National Defense of Chile 2002"

- *Presidency of the Republic, Department of Photography.*
- *National Congress, Public Relations of the Senate.*
- *Supreme Court and Administrative Corporation of the Judiciary.*
- *Chilean Army, Communications Department.*
- *Chilean Navy, Public Relations and Hydrograhy and Oceanography Services.*
- *Chilean Air Force, Public Relations and Aerophotogrammetry Services.*
- *United Nations Organization, Economic Commission for Latin America and the Caribbean, and Public Information Office.*
- *National Tourism Service.*
- *National Copper Corporation.*
- *Eduardo Gallegos, infographist.*
- *Maribel Urrea, designer.*
- *Iván Alvarado, photographer.*
- *David Fuentealba, proofreader.*

The following type fonts were
used in this book:

GriffithGothic
ITC Veljovic
Thesis Sans

Design Concept
Francisco Javier Devilat Rivera
Javier Florentino Galaz Barraza

Designed by
Devilat Comunicaciones Ltda.

Translation
Chilean Language Services
Col (A. Ret.) Julio E. Soto

Printed in Chile by
Instituto Geográfico Militar

GOBIERNO DE CHILE
MINISTERIO DE
DEFENSA NACIONAL

www.defensa.cl