

"SECURITY ALTERNATIVES IN SPAIN: THE ECONOMIC IMPACT OF SPAIN'S
INCORPORATION OR NOT INTO NATO"

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0.. SUMMARY AND CONCLUSIONS.

1. The economic obligations derived from the possible incorporation to NATO will not imply a substantial increase in the level of national defense expenditures over and above what is adequate to national defense interests and to Spain's economic possibilities. Even though it can not be said offhand that "there does not have to be necessarily a Spanish contribution to the Alliance", it is a fact that this contribution may be considered insignificant (of approximately 1%) with respect to the nation's own defense budget.
2. It is even more mistaken to sustain the opinion, already quite widespread, that integration to NATO would imply a considerable increase in defense expenditures, an increase which rather frequently has been erroneously estimated as a doubling of the actual defense expenditures. The economic obligations which would result from adherence to NATO with normal status and participating in the greater part of its organisms, both civil and military, are not of sufficient consequence in themselves to be considered a decisive factor in the political decision to be made as to whether or not to join NATO.
3. Membership in the Alliance could have positive economic consequences in the field of defense logistics and particularly in the sector involved in multinational co-production of war material having favorable repercussions on the development of national military industries and most specifically through the attainment of the advanced technology associated with this industry. These consequences are highly dependent on the particular cooperation agreements undertaken and thus are not quantifiable "a priori". The Administration should give the utmost importance to the industrial and technological impact of Defense expenditures, giving a greater transparency to the technical decisions made on defense expenditures and establishing permanent channels of communication between private and public sectors in order to plan the production of war material.
4. The integration within the Atlantic Alliance's security scheme, which constitutes a system of security which has been consolidated in the course of forty years, could provide an atmosphere of stability and national security, rebounding in reliance and stimulation of the national economy and favoring an increase in investments and economic activity in general.

The economic impact, therefore, is not of transcendence to the decision-making process regarding integration or non-integration to NATO, but rather in so far as it would stimulate the development of a national defense industry - and related services - which, more over, could benefit from the technology of NATO nations.

6. The security model based on neutrality clearly involves greater costs than that of integration in NATO, at least in the near and not so near future; even though in the long-range it could have positive consequences for the development of the nation's military industry, it would have to overcome the immediate difficulties to be encountered in the present economic system based on numerous multinational inter-dependencies.

From a strictly economic point of view, which is what pertains to this study, the neutrality option is less advisable and riskier than adherence to NATO.

7. In order to reach a well-founded decision on the national future security model, considering the NATO option as one among alternative solutions, it is highly recommended that a team of experts in the subject of NATO be formed in order to become familiar with the internal workings of this Organization, given the numerous complexities and peculiarities of the Atlantic Alliance. This team should gather the necessary information on the defense industry of the present member nations so as to provide responsible authorities with a better basis of judgment. If it should be decided to opt for the integration solution, this team would be in condition to negotiate the membership status as well as possible economic commitments most advantageously.

1. INTRODUCTION

1.1. These notes have the object of analyzing for the "Seminary on Security Alternatives in Spain", what would be the economic impact on our country of adhering or not to the North Atlantic Treaty Organization (NATO). Spain is now at a crucial stage in the determination of its future model of defense. The decision is of such transcendancy that it has become one of the most outstanding issues in politics; it has become a matter of priority for public opinion as well as for Parliament, and consequently for all the media.

In no way do these notes pretend to influence the decision to be adopted regarding the nation's incorporation to NATO. That decision must be made by the competent authorities, and primarily on the basis of the strategic factors and value judgements previously referred to. We must limit our scope here to the analysis of the economic impact involved, a factor of undeniable significance to the decision-making process involved.

1.2. Spain's election of a security model is practically limited to one of the following alternatives:

a) Continuation of the bilateral security relations initiated in 1953 with the United States, subscribing three treaties: mutual defense aid, economic aid, and the so called protective treaty - all of which have been renegotiated in the course of the years, adapting them to the circumstances of the moment, until the ratification of the actual "Treaty of Friendship and Cooperation between Spain and the United States of America" ratified on January 24, 1976, and which will expire on September, 1981.

b) The non-renegotiation of bilateral relations with the United States, confronting a political position of isolationism or neutrality;

c) Adherence to a multilateral and collective security alliance.

1.3. First among the alternatives here presented is a security relation well-known to all because of the almost two decades during which it has been maintained. It was a solution for a past period during which the United States acted as Spain's protector before the nations of the world, given the absence of Spain from practically all international organizations excepting the more extensive forums of the United Nations and the Organization of European Cooperation and Development.

If at first this bilateral Spanish-American relation entailed an important economic compensation, in subsequent agreements this compensation decreased to the point that today it can be considered practically irrelevant, as it has come down to political tutelage from the United States in exchange for an important cession of Spanish bases and national military facilities for American use.

1.4. Regarding the option of integration within a multilateral defense alliance, the choice of the alliance is conditioned by the situation of Spain within the European community. The point of equilibrium of European security, or rather the point of equilibrium of security between the United States and the Soviet Union, in alliance with certain European nations which profit from that equilibrium, is based in Europe on the existence of two blocks, the Atlantic Alliance and the Warsaw Pact. Physically intercalated between both blocks, there lies a strip of nations not aligned within them which from North to South includes Finland, Sweden, Austria and Switzerland, Yugoslavia and Albania, which nonetheless does not prevent border contact between the blocks: the contact between the Soviet Union and Norway on the North, that of East Germany and Czechoslovakia with West Germany on the central area, and that of Russia and Bulgaria with Turkey and Greece on the South.

Spain is located towards the West of this strip or hinge of land, thus on the Western part and in the rear guard of the area that this block covers in Europe. Consequently, both because of its geographic situation and due to the nature of its socio-political and economic system, within the range of the security options presented and considering the alternative of adhering to a collective and multilateral security alliance, it would be logical to study the possible incorporation of Spain to the Atlantic Alliance which, while maintaining the nation within the Western circle, it would also allow for a wider and more heterogeneous context of security relations than the actual exclusive bilateral relations maintained with the United States which ^{are} unbalanced because of the clear inferiority of the Spanish part with respect to the North American part.

1.5.

We will limit, therefore, our attention to the two possible "arenas" which would entail a change in Spain's defense model:

- integration in NATO
- the adherence to neutrality politics

taking into account that of the two models, that of incorporation to NATO is not incompatible with the continuation of bilateral relations with the United States.

1.6. Outline for these notes.

The authorities competent in the subject must analyze the advantages and disadvantages of each alternative selecting the one which will assure the greatest possible security compatible with national sovereignty and with the nation's economic possibilities. The decision to be taken has, among others, an economic element which is one of the aspects to be analyzed in the process of deciding. Thus, it is convenient to evaluate in so far as it is possible with the quantitative data available, the economic consequences of a possible eventual incorporation of Spain into NATO comparing them to the consequences of not incorporating.

We will schematize these notes in four general sections:

1.6.1. Given the possible incorporation to NATO, Section 2 exposes the annual obligation to contribute which would be contracted for two different concepts. The first of these is the financing of NATO's annual budget - civil and military - which covers the economic requirements for the operation of the various organisms of the Alliance. Secondly, there is the financing of NATO's so called "common infrastructure" which includes all those installations constructed for war use which are of common interest to all member countries and which is financed by mutual agreement amongst all the potentially benefiting countries, within the context of NATO's general infrastructural plan.

1.6.2. Continuing within the "arena" of adherence to NATO, Section 3 analyzes other possible economic consequences which could result from:

- the influence that communal planning could have on the level of the national defense budget or in its functional distribution.
- the consequences which integration to NATO could have on the structure of the nation's forces.
- the economic obligations derived from annexing units to NATO's military command.
- the possibility of obtaining military aid from NATO.
- the benefits derived from collaboration within NATO in the production of armaments and war material.

1.6.3. Section 4 analyzes in general lines the economic impact of not incorporating to NATO within the "arena" of neutrality.

1.6.4. Section 5 includes a cost-efficiency method designed to study the alternatives of adhering or not to NATO. This methodology is more extensive than the normal cost-benefit^{one} as it takes into account the multiple variables of

human, technological, physical and financial resources pertinent to the analysis of the risks involved in this decision. The cost-efficiency method has been sketched, in view of the lack of solid conclusions derived from the cost-benefit test, as a decision which englobes internal and external security, and which could serve once - and not before - the decision-making authorities have carefully weighed the importance of each of the variables involved in the decisions affecting national defense.

1.6.5. Section O summarizes all the recommendations derived from the evaluations, bearing in mind that the decision on the Spanish model of security entails value judgements and strategic considerations which normally escape quantification.

2. CONTRIBUTION TO NATO'S BUDGET AND INFRASTRUCTURE.

2.1. NATO.

The economic obligations that a nation acquires when it joins NATO obviously depend on the nation's membership status within the Atlantic Alliance. Perhaps at this point it should be made clear that the fifteen countries which form the Atlantic Alliance, having subscribed this alliance through a pact denominated The North Atlantic Treaty or The Atlantic Charter, all belong as a consequence of this to NATO (North Atlantic Treaty Organization) which is merely the organic structure which gives shape to this Alliance. (See Annex 1).. Nonetheless, there is a certain tendency to speak about the Atlantic Alliance and of its highest organism, the Council, when in effect one is referring to the political engagement contracted amongst member countries; and to allude to NATO with reference to the military part of the alliance, an erroneous but frequent distinction which has led Giscard d'Estaing himself to state: "we do not form part of the integrated military organization in times of peace, that is NATO", while in fact France is a member of NATO, with full-rights, and only maintains an observer's position in the integrated military command or the military structure of NATO. The mistaken identification of NATO solely with the defensive part of the Alliance is clearly refuted in Article I, Section a) of the "Agreement on the Status of the North Atlantic Treaty Organization, National Delegations and the International Secretariat" dated September 20, 1.951 which literally reads: "the "Organization" means the North Atlantic Treaty Organization composed of the Council and its dependent organisms" without distinction between military and civil organisms, as all are included within the organic structure of the Alliance denominated NATO.

2.2. Commitments.

Having made this distinction, it is possible to qualify the presence of a nation in NATO: each member's status is negotiable and ultimately accepted freely and independently by each country. Theoretically, it could vary from the mere subscription of the Washington or North Atlantic Treaty to full participation in all the organisms and Agencies of the complex organic structure which is the Alliance. One would assume, however, that the mere signing of the mentioned Treaty would logically imply at least permanent representation in the Atlantic Council in order to participate in, and benefit from joint political consultations. The fifteen countries presently allied maintain an ambassador and a permanent mission at the Council and possible representation in the dependent civil organisms as full-rights members, while in the military organisms only France, Greece and Iceland maintain special situations: France does not participate in the military structure except as an observer; Greece is in a special position with respect to NATO's military command as a result of its disputes with Turkey, and is subject to renegotiations; Iceland does not even possess armed forces. Nonetheless, the fifteen nations - having signed the Treaty - assume without exception the commitment to mutual consultations if the security of one of the parts should be threatened, and are also committed to considering an armed attack against one of the member countries as one undertaken against all, and to engage each in whatever action it "deems appropriate, including the use of armed forces", as reads Article 5 of the Treaty. All members of NATO are implicated in the commitment to mutual defense.

2.3. Being the economic aspect what concerns us in this study, we will start from the working hypothesis that if Spain should decide to join NATO it would do so with normal status, participating in the greater part of the organisms which make up the civil and military structures of the Organization (See Annex I on the structure of the Alliance), because as we will see further on it is normal for all to contribute to the economic requirements of NATO in a proportional manner and only France avoids, due to its special situation, participating in part of the economic obligations (even though this position has not resulted in great economies for the country).

2.4. Contribution to NATO's budget.

The organic structure of NATO, like that of any other multinational organization, has operating costs which must be borne by member nations. To obtain and manage the necessary funds, there are two types of budgets in NATO.

- Civil Budget
- Military Budget

2.4.1. The Civil Budget covers operating expenses, furniture, equipment

and salaries for the civil organisms of the International Secretariat at Evere (Brussels). The civil budget comes to approximately 50 million dollars per annum. Payments are allocated among member nations according to percentages agreed upon after arduous negotiations when NATO was created, and revised in 1951 when Greece and Turkey joined the organization, and subsequently in 1955 when Germany adhered. From that date on, and given the difficulty of agreement and the small sums involved, these percentages have been maintained in spite of variations in the economic potential of member countries.

The percentages in effect today, in decreasing order, are:

United States	24'40
Great Britain	19'50
France	17'10
Germany	16'10
Italy	5'96
Canada	5'80
Belgium	2'86
Holland	2'85
Denmark	1'65
Turkey	1'65
Norway	1'15
Portugal	0'65
Greece	0'39
Luxembourg	0'09
Iceland	0'05

The budget is prepared in Belgian francs by the International Secretariat and each country changes to its currency its corresponding percentage or quota on the basis of ^{the} rate of exchange in effect. The sums are then paid to the Central Treasury in each country's national currency in three payments scheduled in the course of the year.

2.4.2. The Military Budget covers operation costs and capital costs for NATO's General Headquarters, the specialized "agencies" and certain aspects of the military exercises and manoeuvres of the Alliance (See Annex II on the agencies covered by this budget).

The operation costs include civil personnel salaries (each country pays for its own military personnel) and other office material expenses, electricity, supplies, transportation, etc; capital expenses include construction, furniture and equipment expenses. The Military Budget, however, solely finances peace time facilities, such as troop quarters, housing, general warehouses, etc.;

wartime facilities, such as an aerodrome or a telecommunications center, are financed by the "common infrastructure" programs we will study further on. This is one of the many complexities which make the internal workings of NATO quite complicated to someone not familiar with the subject, because of the diversity of situations and nuances which must be differentiated within the organization.

2.4.3. NATO's Military Budget comes to approximately 250 million dollars per annum. The national percentages for its financing were similar to those for the Civil Budget until 1966 when France withdrew from the integrated military post. From that date on, as France ceased to share in the costs of the military structure, the Military Budget has been subdivided into two:

- Military Budget for 15 Nations (with France).
- Military Budget for 14 Nations (without France).

The percentages agreed upon for both these budgets are as follows:

Military Budget for 15 Nations

United States	25'00
Great Britain	18'22
France	17'10
Germany	16'10
Italy	6'12
Canada	5'80
Belgium	2'95
Holland	2'94
Denmark	1'74
Turkey.....	1'65
Norway	1'20
Portugal	0'65
Greece	0'39
Luxembourg.....	0'09
Iceland	0'05

Military Budget for 14 Nations

United States	30'16
Great Britain.....	21'98
Germany	19'42
Italy	7'38
Canada	6'99
Belgium	3'56
Holland	3'55
Denmark	2'10
Turkey	1'99
Norway	1'45
Portugal	0'78
Greece	0'47
Luxembourg	0'11
Iceland	0'06

From the total military budget, in general, approximately 60% corresponds to the "Budget for the 14 Nations" and the remaining portion to the "Budget for the 15 Nations" (See Annex II on agencies in which France participates).

Unlike the Civil Budget, and as one more of NATO's complexities, Military Budgets utilize a monetary unit defined by NATO, the "accounting unit". Each country's contribution is made effective in three payments per year, each of which covers approximately one third of the total sum. Each country exchanges at the Central Treasury its own currency^{for} "accounting units".

2.5. The potential Spanish contribution to civil and military budgets.

How much would Spain have to contribute if it should join NATO? According to General Haig, in 1978 Commander-in-Chief of the Allied Forces in Europe^{*}, NATO's personnel had estimated that the total possible contribution to the military and civil budgets would come to approximately 10 million dollars per annum, equivalent to 3% and 4% respectively. At the moment of adhering, Spain must negotiate, on the basis of its relative economic and defense possibilities, the exact percentages. But the 10 million dollars per year given as a working hypothesis did not come to 0'5% of the annual defense budget for 1978, year in which they were estimated. The small sums involved are irrelevant when it comes to deciding whether or not Spain should join NATO.

* Seminary on "Spain, NATO and Western Defense", organized by the Ditchley Foundation in collaboration with the Institute for Conflict Studies of Washington Ditchley Park, UK, April, 1978.

2.6. Contribution to NATO's "common infrastructure".

NATO's so called "common infrastructure" includes all the permanent installations necessary for the deployment and operation of NATO's armed forces in wartime and for their preparation in times of peace, such as general headquarters, aerodromes and military bases, telecommunications installations, oil pipe lines, radar stations, missile ejection sites, etc. As previously indicated, the infrastructure does not include installations for general use ^{those} and not specifically designed to back the armed forces in wartime operations. An illustrative case usually cited to demonstrate to what degree this differentiation is carried out in effect is that even though the construction of an aerodrome would be financed with ~~infrastructural~~ infrastructural funds, if a cafeteria ~~was~~ was installed on the same location it would be charged to the Military Budget because it is considered a peace time facility. If an installation is to be used exclusively by national forces, the Alliance considers it "national infrastructure" and it must be financed by the pertinent national budget.

2.7. Thirteen countries share today the financing of the general infrastructure. Iceland has nothing to do with infrastructural programs and France only collaborates in certain projects. Funds are provided through a quinquennial budget financed by the allied nations as per a system of percentages agreed upon amongst them. As in the case of the annual Budgets which finance the organic structure (civil and military) there is no mathematic formula from which to derive these percentages; they are rather determined by means of difficult negotiations in the course of which the most variegated criteria, even that political in nature, may be claimed. Nonetheless, the basic factors considered are:

- each nation's capacity to contribute.
- the benefits each country could potentially derive from the installations.
- the economic benefits which the host country may obtain from the location within its borders of an installation.

Each nation's capacity to contribute is estimated primarily on the basis of its Gross National Product. The benefits each country may derive from use of the installations depend on the degree to which national forces might eventually require to make use of these installations, and each country must contribute in proportion to this potential utilization. The economic benefits obtained by the "host country" may be significant, such as employment of the national labor force, entry of foreign revenues, extension and improvements of the national communication network or of telecommunication and oil pipe line networks, etc. but these benefits must be contrasted with the burdens which must be borne by the host country which must finance the acquisition of grounds,

the conditioning of accesses, the supply of light, water and other public services required.

The infrastructural programs are accounted for in IAU's or "International Accounting Units".

Due to the quinquennial calculation of the budget, inflation is causing serious financial problems. Thus, for instance, the IAU which in 1978 was equivalent to 3'50 dollars towards the end of 1979 had a value of 4'80 dollars.

The percentages per country agreed upon in 1979 to finance the infrastructure are as follows:

	<u>Without France</u>	<u>With France</u>
Belgium	5.5912	4.624
Canada	6.3578	5.504
Denmark	3.7273	3.082
France	--	13.212
Germany	26.5446	21.953
Greece	0.7932	0.658
Italy	7.9873	0.658
Luxembourg	0.2130	0.176
Holland	5.1386	4.250
Norway	3.1417	2.599
Portugal	0.2011	0.201
Turkey	0.8045	0.802
Great Britain	12.0797	10.460
United States	27.4200	25.873

(See in Annex III documentation related to the common infrastructure published by NATO).

2.8. Spain's potential contribution to infrastructural programs.

If Spain should opt to become a member of the Atlantic Alliance it would have to participate in infrastructural programs, which would entail contributing to them in its corresponding proportion. In the previously referred to Seminary held at Ditchley Park, General Haig estimated that the Spanish contribution to the infrastructure would come to some 50 million dollars per year. However, this estimate must be taken with considerable reservations as Spain's quota will be highly conditioned by:

- a) the specific projects to be developed
- b) the installations Spain will provide, amongst which the bases and military

facilities presently ceded to the United States by reason of the Spanish-North American Treaty seem most appropriate.

c) other installations today solely for national use, and

d) those of NATO's installations which Spain might potentially utilize such as NATO's integrated telecommunication network.

All these factors make it difficult to arrive at an accurate "a priori" estimation, but the sum cited by General Haig would scarcely come to 2% of Spain's defense budget for 1978. Even though the sums involved in financing the infrastructure are much higher than the quotas to finance the organic structure, they may also be considered of little significance with respect to the total Spanish military budget and, therefore, irrelevant in so far as to whether or not Spain should join NATO.

3. Other potential economic consequences.

3.1. The common planning of NATO's Force Objective.

The eventual incorporation of Spain with a normal status similar to that of most nations could indirectly affect defense expenditures. Spain would have to participate in NATO's common quinquennial planning in which, with supervision from the International Secretariat of the Alliance, NATO's higher military authorities and the national delegations study the threats posed at that given moment by the Warsaw Pact, the forces necessary to confront those threats, and the allied nations' capacity to retaliate. From the determination of the "gap" existing between the Common Force Objective deemed necessary and the forces in effect contributed by member nations, and considering each country's possibilities, the common planning leads to conclusions regarding the need to increase defense efforts; and from the analysis of the respective strength of forces other conclusions are reached which are transmitted to the allied countries through the corresponding Minister of Defense as recommendations from NATO's Committee for Defense Planning. These "recommendations" try to be consistent with two aspects which are in a certain sense incompatible, or at least open to discrepancies: on the one hand, the Organization's higher authorities determine the common forces necessary to counteract the military powers which threaten the Alliance's security; on the other hand, however, each nation maintains absolute sovereignty with respect to its contribution to the common defense. Even though the principle of national sovereignty is maintained, the "recommendations" made by the Alliance after hearing the national delegations' common planning, are at least an instrument of pressure on those allied nations which do not respond adequately to the common defense effort. When a country does not comply with the "recommendations" it has received, it finds itself obliged to justify

before NATO the reasons which hindered it from attaining the objective agreed upon.

3.2. The common planning is carried out through a complicated procedure; The countries involved must reply each year to a Defense Planning Questionnaire or DPQ which contains questions on the respective nation's annual Defense Budget and other long range projects and plans. Quinquennial planning is initiated every two years and given shape by a Ministerial Board from the Committee for Defense Planning which determines the Common Force Objective to be reached within the quinquennium. The Review Commission proceeds to analyze yearly, by means of the Defense Review, and going nation by nation, the force objectives attained and those not yet reached;

As a result of this Defense Review, an annual report is submitted to NATO's Committee for Defense Planning.

Through NATO's common planning, thus, a continuous contrasting and justification of the respective defense efforts takes place through frequent multilateral exchanges and consultations which take into consideration each nation's unique characteristics, its particular economic situation, and whatever political and economic factors may serve to arrive at a just distribution of the common defense efforts. The constant exchange of specific and detailed information on the military programs of the various countries is encouraged, hence clarifying their respective possibilities, and leading to a greater understanding of mutual problems and difficulties and to a critical appraisal of the programs.

3.3. With respect to Spain's participation in NATO's common planning, the following points ought to be analyzed:

- a comparison of Spain's defensive efforts with those of other allied nations.
- a comparison of the structure of defense expenditures.
- the analysis of the structure of the armed forces in relation to that of other allied nations and with respect to the missions to be undertaken.
- the possibility of annexing forces to NATO and participating in multinational manoeuvres.
- the possibility of receiving military aid.
- participation in NATO's logistics.

We will briefly analyze as follows the possible economic consequences which might be derived from these aspects:

3.4. A Comparison of Spanish defense efforts.

The Alliance, in order to compare the defense efforts of member nations, has standardized defense expenditures through a common definition which is not public but confidential. According to this definition one must add to the budget prepared by the Defense Department, if ^{they are} not already included within it, the pensions paid to retired military men and that portion of the paramilitary forces which have received instruction, are organized, and have the means to intervene as tactic units in the battlefield in case of war. It is not correct then, to add to defense expenditures all the budgets of the State's defense forces just because they can be characterized as military organisms because of their disciplinary and judicial régimes. Thus, for example, the Italian Public Security Forces, by reason of their duties and organization, may be considered as a police body midway between what in Spain is the National Police and the Civil Guard however, according to NATO's definition, only 20% of the budget for these Public Security Forces is to be added to Italian defense expenditures.

If Spain were to join the Alliance, it would be necessary to clarify what part of its security forces would be considered paramilitary forces according to NATO's criterion. At this point, we will limit ourselves to adding to the military budget the pensions for retired military men given the relative importance of this factor. On this basis, the Spanish "per capita" defense budget has been calculated from the year 1972, a key year as during it Law 32/71 on Budget Allocations for National Defense went into effect (extended and modifies by Royal Decree Law 5/77), which introduced important variations in the Defense Budget in relation to that of previous years.

3.5. On the basis of data from the "Military Balance" of the London Institute for Strategic Studies, the per capita defense costs for NATO's European countries have also been estimated for the 1972-1979 period. Spain has a low "per capita" defense expenditure together with Italy, Luxembourg, Portugal and Turkey, and in principle, it would be among the countries which would receive the recommendation to increase defense efforts. However, NATO's requests to member nations to augment defense efforts are usually relative in nature. In this way, when in 1977 the Committee for Defense Planning proposed increased defense efforts, it requested a 3% increase in each nation's defense budget (in real terms), without pretending to equalize the percentages of the defense budgets with respect to the GNP. And moreover, the agreement reached was qualified with an additional clause stating that "economic circumstances will have an effect on the possibilities of attaining the 3% agreed upon".

3.6. With the figures which appear on Annex 5 the index number for defense expenditures for 1979 was calculated on the basis of the year 1972, obtaining the following values, listed as follows in decreasing order:

	<u>Index No. for 1979</u>
Spain	387'5
Belgium	349'0
Luxembourg	341'2
Denmark	312'4
Turkey	305'3
Holland	288'9
Norway	273'2
Germany	271'2
Greece	250'8 (year 1978)
France	245'8
Great Britain	222'7
Italy	182'3
Portugal	92'3

Spain appears at the head of the list of "per capita" percentage increases in defense expenditures during the 1972-79 period, and because of this it would have more than sufficient arguments to claim in its favor greater defense improvements than those of NATO's other European countries.

Thus, we do not consider well-founded the considerably generalized opinion that if Spain should join NATO it would have to substantially increase its military budget, an increase which is often mistakenly estimated at a doubling of the present levels.^x In any case, what is absolutely certain is that no nation belonging to NATO is ever forced to undertake expenditures outside of those freely and independently decided upon by the competent national authorities in consonance with each nation's own political requirements.

3.7. Structure of the Defense Budget.

It is traditional to subdivide the Defense Budget into three basic functions:

- a) Remunerations, which includes payments to military personnel and to civil personnel serving the military administration.
- b) Maintenance, which covers all aspects related to instruction, conservation, and the logistic support necessary so that all the resources available maintain their operational efficiency.

^x Spain in NATO? Alvarez de Castro (Pseudonym), Ed. _____, Madrid, 1978.

- c) Investments, which covers everything related to the acquisition of armaments and new materials, be it by purchasing or manufacturing, the construction of general infrastructure facilities, and investment funds.

The first two functions listed, personnel remunerations and maintenance, are usually enclosed within the general heading of "operations" thus differentiating within defense two large sectors:

- a) Operations, which covers all those funds which will not signify any increment in "credits" for the armed forces but which will be dedicated to their maintenance and preparation.
- b) Investments, which covers the incrementation of immobilized fixed assets, or, what is important, the renovation of the ones in existence.

3.8. It is generally considered that an ideal distribution of defense expenditures, in general terms, would be as follows:

Personnel.....	50%	} Operations 70%
Maintenance	20%	
Investments	30%	

Modern armed forces tend to decrease personnel costs to under the 50% level in order to augment their capacity to finance increasingly complex and costly war material.

Given the difficulties which are frequently encountered in distinguishing what is in effect maintenance ^{from} what must be strictly considered as investment, it is common practice to simplify budgetary classification by differentiating at least "personnel" from the rest, a simplification which does not escape limitations as within the "rest", not included under "personnel", one must place allocations for training, instruction and other concepts. This prevents us from considering this "rest" as a subdivision covering solely "materials", even though materials do in effect absorb a major percentage of the funds not allocated to "personnel".

3.9. The difficulties involved in learning how other nations separate the sums dedicated to maintenance ^{from those dedicated} to investment have obliged us to limit our scope to a simplified division between "personnel expenses" and the "rest." From among NATO's member nations the following percentages for personnel remunerations in relation to the total national defense budget may be pointed out, cited as average percentages for the 1976-78 period:

	<u>%</u>
Germany	43'3
Belgium.....	50'5
France	35'4
Great Britain	40'2
Italy	33'9

(These percentages do not include the sums dedicated to military pensions and paramilitary forces in order to facilitate their comparison with the corresponding Spanish quantities).

During the same period of 1976-78, Spain dedicated to personnel remunerations 61'8% of the military budget which seems to indicate that if Spain should opt to join NATO it would probably be recommended to reduce in so far as possible the percentage allocated to "personnel". But it must be taken into account that the above mentioned countries, except for Italy and Belgium, maintain armed forces supplied with the most modern materials and with a military potential proportional to their position of prominence and weight within the realm of the world's nations; while, on the other hand, a low budgetary level is usually detrimental to the percentage allotted for materials ^{given that} personnel costs are unavoidable and have an absolute minimum level which inflates the personnel percentage. In this regard, Italy could serve as a model of a country which, with low defense expenditures, has nonetheless managed to maintain a reduced percentage of personnel expenses.

In any case, the evolution of the percentage of personnel expenses within the Spanish budget in the course of the years has been as follows:

<u>Year</u>	<u>Percentage</u>
1.976	62'3
1.977	61'4
1.978	61'8
1.979	59'1
1.980	55'8

Hence, one can appraise a tendency to approach the 50% level considered ideal for those armed forces not outstandingly modern and powerful.

Therefore, it can not be inferred from the above that out of Spain's integration in NATO, other reasons than those inherent in the nation's own interests would appear to continue with the present evolution of the distribution of defense expenditures.

3.10. Structure of the armed forces.

The overall structure of a nation's armed forces in three traditional branches - land, navy and air - is exclusively of each nation's competence. However, membership in the Atlantic Alliance conditions this structure because of the missions to which it may be assigned within the common defense context of the Alliance. Even though NATO's common planning is carried out in a practical manner and adapted to national realities, it must also be based on a common military doctrine for the utilization and structuring of its forces. NATO has not succeeded in arriving at a total specialization of each nation's defensive efforts in consonance with the missions assigned to it through the common planning, but it has managed to influence the security solutions opted for by each country. Spain's integration in NATO, therefore, could sooner or later lead to changes in the structure of its forces, which would entail economic consequences of greater or lesser significance depending on the importance of the adaptations.

Annex VI presents the distribution of the totality of the armed forces of the nations being studied into the three branches of land, air and sea. Even though the figure given for human effects is in itself a very poor indicator of each armed forces' potential, it does give us an overall picture of the structure of the forces. It may be observed that the composition of Spain's Armed Forces (76% land, 13% marine, and 11% Air Forces) is similar to that of Greece and Turkey, countries in which the land forces clearly predominate, even though Spain differs from these countries to a certain degree in the percentage corresponding to marine forces.

3.11. Given the scarce significance of these percentages, they should be complemented by some indicator of the combat resources available to each force. In order to work with simple indicators, we have selected for the Ground Forces - in which the total number of effects is more significant than in the other forces - only the total number of combat vehicles available to it, which is today generally accepted as an elementary indicator of military potential. For the Air Forces, the total number of combat planes, without regard to type, was compared; and for the Marine Forces, given the impossibility of classifying together all vessels because of their very distinct characteristics and as it is difficult to select one type of vessel as representative of naval power, the corresponding figures for five different types of vessels are presented.

In Table II of Annex VI it may be seen that Spain, which in its percentage

of ground forces came very close to Greece and Turkey, is very far from them with respect to the absolute number of combat vehicles (Spain 860, Greece 1.340 and Turkey 2.800) occupying the seventh place and having behind it only much smaller nations such as Holland, Norway, Belgium, Denmark and Portugal.

3.12. With reference to air potential, Table III shows, englobing in one all the diverse types of combat planes and not taking into consideration each type's possibilities, that Spain again holds the seventh place (with 214 planes) and is behind Turkey (339), Italy (319) and Greece (257) and, as in the case of its Ground Forces, it is ahead of only those countries smaller in size: Holland, Belgium, Norway, Denmark and Portugal.

3.13. The comparison of naval potential is more complex: Table IV of Annex VI shows that Spain is among the three European countries which have aircraft carriers, together with France and Great Britain, ^{that} but on the other hand it lacks missile launching boats, and holds the following places with regards to other naval resources:

	<u>Rank</u>
- Conventional submarines	8th
- Principal combat surface units	3rd
- Other units	6th

3.14. By way of summary, in very general lines, and focusing on the possible economic consequences as pertains to this study, it may be pointed out that Spain's most outstanding characteristics are a low level of ground and air material and a high percentage of ground effects which must be contrasted precisely with the low percentage of the Air Forces's effects.

The steps which Spain could take to modify the structure of its forces by reason of its own national politics would probably coincide with the recommendations which might come out of NATO's planning of the joint Force Objective. Perhaps the integration of Spain in this organization may make it necessary for the country to augment its air and naval potential as, given that it is not located at the forefront of NATO's block, as in the case of Turkey, Greece, Italy and Germany, the Alliance's interests with respect to Spain's Ground Forces would be more along the lines of modernization and incrementation of materials and not of its human effects.

3.15. The incorporation of forces to NATO and participation in international manoeuvres.

In the commitment of forces which a nation engages upon with the Atlantic

Alliance, the incorporation or subordination of these forces to NATO's military command is classified according to the following categories:

- a) forces under NATO's command.
- b) forces "assigned" to NATO.
- c) forces "earmarked" for NATO.
- d) national forces.

(See Annex VI on the nature of each type of vinculum).

Each year, each unit's status of commitment to NATO's command may be reconsidered, confirming or varying this status.

The units under NATO's command or assigned to NATO must maintain the standards of preparation preconized by NATO's military command, and their level of preparation, to be evaluated through a given series of tests, must be reported in the annual Defense Planning Questionnaires (DPQ). This requires a certain level of training and maintenance expenditures which could be more readily avoided if the nation should opt to not join the Alliance.

On the other hand the units must also participate in NATO's manoeuvres and exercises with other allied nation's forces and this too would entail expenditures.

The expenses incurred upon by the military personnel and forces which participates in these manoeuvres and exercises may be subdivided into three types:

- National expenses, to be borne by each nation to support its national forces. This is the major expense which results from these manoeuvres and exercises.
- Bilateral expenses: to be borne by each country for the services and supplies received from the country in which the manoeuvres and exercises take place.
- Common expenses: are a consequence of the international implications of the integration of forces and are charged to NATO's international credits. These would include, for example, the expenses incurred upon for the use of computers, telecommunication systems, or any complementary civil transportation resources.

These expenditures, of course, ought to be confronted with total sovereignty of decision, and in any case, it is up to each country to effectuate its own expenditures in training, maintenance and manoeuvres.

Membership in NATO, nonetheless entails a greater obligation in this respect

as these costs become more difficult to avoid once a nation has committed itself to prepare for the common defense. Recently, there was surprise within NATO's circles when, for the first time in the history of the Alliance, Belgium announced that it would not participate in manoeuvres planned for the Mobile Force in Turkey .. even after having committed itself to sending to these manoeuvres a mirage squadron with the technical team needed to carry out this operation.

3.17. Possibility of obtaining military aid and assistance from NATO.

Article 3 of the North Atlantic Treaty literally reads: "In order to guarantee the most effective fulfillment of the objectives of this Treaty, the parts concerned, acting individually and jointly, continuously and effectively, through the development of their own resources and lending each other mutual assistance, will maintain and augment their individual and collective potential to resist armed attacks." The principle of mutual assistance, in order to arrive at the necessary defense potential, is thus set forth in general lines. And in consonance with this principle, during the decade of the 50's the United States poured out millions of dollars on European allied nations in order to accelerate their economic recuperation and strengthen their defense resources.

Nowadays, however, the situation is very different. Aid programs are usually limited and, of course, the common planning of NATO's forces can not pretend to establish a correlation between force objectives and the aid to be granted to those nations which can not reach them. If a country is not capable of reaching the level of forces planned, its only alternative is to defer that obligation. Nonetheless, a nation can claim economic difficulties in reaching a desirable defense potential when requesting aid, and this is what Portugal and Turkey have done. In these specific cases Germany and the United States agreed to military aid programs for both countries. In the case of Portugal, the aid provided was the fitting out of a Brigade, with expenses borne by the United States and Germany, which would be put under NATO's command.

In the case of Turkey, the nation has received preferential treatment from both Germany and the United States; the United States with the recently drafted Treaty for Economic and Defense Cooperation, and Germany with the extension of the military aid program which expired towards the end of the past year, pretend the economic recuperation and the strengthening of this nation's defense potential, as it is situated in a key location not only with respect to the Warsaw Pact but also in relation to the Middle East.

3.18. NATO, thereby, is an appropriate forum in which to seek economic and

military assistance to improve common defense, but being aware of the fact that this aid is ultimately granted through Government to Government bilateral negotiations, in which the aiding country logically expects to be compensated with the use of military bases, the sale or co-production of war material from the aiding country or at least with having an underlying influence in the country because of the ties of economic and military dependency derived from such aid.

Would the aid resulting from a bilateral treaty with the United States be more profitable than that which could follow from adhering to NATO? We do not believe so. First of all, it is well known that the aid received by way of grants as a consequence of the Treaty with the United States is very limited (it comes to less than 1% of the Spanish National Defense Budget per year) which makes it to a certain extent irrelevant. The rest of the aid received is in the way of loans, at average market interest rates, and to be invested in American products. (See Annex VII on the aid received from the present Spanish-American Treaty). It is unthinkable that the United States, in the midst of a period of economic crisis, could substantially increase this aid in the future. Secondly, it would be compatible with Spain's integration in NATO to negotiate treaties with the United States as well as with other allied nations. Therefore, membership in NATO would allow the country to receive aid equivalent or superior to that derived from an exclusive bilateral treaty with the United States.

It would also be possible to obtain from NATO whatever other nations may contribute to installation and improvement projects negotiated within the context of NATO's "common infrastructure", as long as what is received in this respect is more than what Spain would have to contribute to the whole. This has occurred in the cases of Greece and Turkey, nations which have received from the infrastructure considerably more than what they have had to contribute to finance this "common infrastructure". These aspects will be further analyzed in Section 5.

4. The neutrality option.

4.1. To enter into the "arena" of neutrality, it is necessary to start from the premise of the rupture of the bilateral security relation which Spain has maintained with the United States since 1953 which has, indirectly, aligned Spain with the Western defense block.

The "Defense Treaty between the United States of America and Spain", signed on September 23, 1953, in its Article 1 reads: "In consonance with the principles pactured in the Treaty relative to aid for mutual defense, the Govern

ments of Spain and the United States esteem that the contingencies with which most nations might be confronted, make it advisable for both nations to maintain stable and friendly relations in support of those policies which serve to strengthen Western defense.^{*} These policies include in consequence with the above premises and in order to attain the accorded objectives, the Government of Spain authorizes the Government of the United States to develop, maintain and utilize for military purposes, together with the Spanish government, those zones and installations in territories under Spanish jurisdiction which both nations' competent authorities may deem necessary for the fulfillment of the objectives of this Treaty." The "Treaty of Friendship and Cooperation between Spain and The United States of America", ratified on January 24, 1976, in the same spirit as that of previous agreements states in Article V: "In recognition of the fact that their cooperation has strengthened the Western world....., a defense relation is established between the United States and Spain... will seek, through this defense relation to reinforce even further their own security and that of the Western world.^{*} To implement the objectives of the present Treaty the United States will be able to use specific military facilities within Spanish territory...." emphasizing in Article VI: "Given that the use of the facilities mentioned in Article V will contribute to Western defense^{*} this defense relation.....(will be adjusted to harmonize) with the security arrangements already in effect in the North Atlantic area."

It must also be taken into account, even though the pact does not reflect this, that the military bases being utilized by the United States in Spain are situated in a key logistic position of access to the Middle East, a critical area for American interests.

4.2. The above - together with the multiple Spanish-American economic ties through multinational firms - is highly significant and must be taken into account when considering the alternative of neutrality, as this would entail depriving Western defense of the Spanish territories which for almost decades have been more or less at the complete disposition of American strategy for Western European defense. We emphasize the importance of this premise because if Spain should decide to adopt a position of neutrality with respect to the two blocks which confront each other in Europe, it would obviously not be able to count on the United States' goodwill and this definitely conditions the type of neutrality Spain should take up.

Europe now has seven neutral nations: Sweden, Finland, Switzerland, Austria, Yugoslavia, Albania and Ireland. The last two are countries marginally situated and with little specific weight within the consortium of nations.

* The underlining is ours.

Out of the five remaining nations, Finland and Austria are "neutralized" nations, with the implications this signifies with respect to national sovereignty and independence. Yugoslavia is a communist autocracy, in a tolerated heterodoxical situation, which dedicates over 5% of its GNP to national defense, thus maintaining a peculiar and expensive neutrality, and which is very likely, once Tito, its key figure disappears, to lose this neutrality or to join the strip of "neutralized" countries which separates in Europe the Western ^{from} the Eastern blocks.

The two remaining nations, Sweden and Switzerland, are the ones which maintain a fully sovereign and traditional neutralism based on national characteristics which ought to be pointed out:

- a traditionally stable democratic system of government.
- a high "per capita" income: Switzerland 13.800 dollars and Sweden 10.500, which puts both nations among the first four nations of the world in this respect.
- a high industrial development.
- an outstanding defense effort: Switzerland dedicates 292 dollar per citizen and Sweden 400, whereas Spain barely surpasses 100 dollars.
- a great reaction capacity for the nation's defense: Switzerland can mobilize 10% of its population in 48 hours and Sweden 9% in 72 hours.

4.3. Spain, which has been neutral since the beginning of the present century, can not be denied the right to opt for a position of neutrality, which would be as much as denying its sovereignty and independence, but if it should choose this alternative it would lose the support of the United States' superpower and possibly displease the most important Western European nations, leaving it in an uncomfortable position. This neutrality would have to be motivated by the anticipation of important political and economic advantages, based on a strong national feeling, proud and committed, dissuasive of possible destabilizing foreign interferences, and thus necessarily an armed neutrality, with great strength and organization to make the attitude adopted believable.

This armed neutrality, in order to be qualified as such, would have to take the form of an effective national defense organization which would make possible the mobilization of 10% of its population within 48 to 72 hours and with a system of instruction which would maintain the three and a half million Spanish citizens first to be mobilized adequately trained. This organization must be complemented with a perfected system of civil defense and of general economic mobilization for defense.

On the other hand, a neutrality supplied with foreign war material will always ^{be} potentially subjected to restrictions in the supply of spare parts

and stock in general. Hence, in order to overcome this dependency the nation would have to undertake the development of its defense industries so as to make itself self-sufficient for the greater part of the war materials it requires. As the increasing complexity of armaments makes multinational cooperation and co-production advisable in order to facilitate the financing of the high costs involved in researching, developing and producing these systems, the neutrality position would make it necessary to engage in very costly and long-range investments in order to develop independently the nation's war industry. Thus, it is doubtful that Spain, which due to its geographic position requires considerable naval and air forces in order to guarantee its defense, would be able to supply itself with the basic combat resources needed to maintain armed forces suited for neutrality without incurring upon important economic efforts.

Consequently, from the economic point of view, which is what concerns this study, it must be deduced that an armed neutrality would be a costly alternative, undoubtedly more costly than the selection of the defense model of integration in NATO's security system, which, as we have seen, would not require defense expenditures greater than those being presently borne as a result of Spain's bilateral security relation with the United States.

5. The optimal economic determination of adhering or not to NATO.

5.1. A procedure to illustrate the economic impact of Spain's potential incorporation to NATO is the classic cost/benefit analysis, which compares the advantages (benefits) and disadvantages (costs) which the position of entering NATO would have for Spain in relation with those of not entering. Through this procedure, only those elements which vary from the position of entering NATO to the position of not entering NATO are analyzed, which is a serious limitation when dealing with complex and changing circumstances. In this case, the pertinent comparison would be between

1) Spain does not adhere to NATO

1.1. Advantages/Benefits

-

1.2. Disadvantages/Costs

- . Increasing costs not shared with other members of the Alliance.

2) Spain adheres to NATO

2.1. Advantages/Benefits

- . Receives military and industrial technology
- . Provides additional employment to the national industry (shadow wages)
- . Receives infrastructural facilities.

2.2. Disadvantages/Costs

- . Contribution to the civil budget.
- . Contribution to the military budget.
- . Additional contribution to infrastructural programs.

The economic benefits (social point of view) of adhering to NATO are the sum of 2.1 + 1.2, and the costs the sum of 2.2 + 1.1. Estimating the latter at, for example, US\$ 30 million/year at 1979 fixed \$, the economic benefits or savings of US\$ 4.5 millions/year already justify adherence to NATO from the social point of view of generating a rate of profit of 15%, which is the social opportunity cost for capital in Spain: lower rates do not justify public expenditure, while higher rates would require their augmentation. The annual benefits mentioned (US\$ 4.5 millions = 320 million ptas.) can and should be obtained together with an absorption of technology and the generation of employment, the two most obvious sources of profit which must not be allowed to go to waste. By way of summary, it must be pointed out that it is highly unlikely that the possible adherence to NATO will not generate greater benefits than economic costs (social point of view); what's more, it would be a fundamental step which the Spanish government should take, if it be the case, by availing itself of the occasion to increase employment and absorb technology.

5.2. The procedure here exposed is, of course, very elementary and useful to reach decisions more limited in scope (to select, for example, between two types of battle vehicles) but not for strategic decision of the order of incorporating to NATO or not, requiring a detailed survey and perspective of the evolution of NATO - which is today difficult if not impossible - in order to project with accuracy the evolution of the costs and benefits involved in adhering or not. In essence, we do not believe that the results presented will be determinative for the decision of whether or not to join NATO, because cost/benefit methods are hardly ever employed in decisions made by the Spanish Administration, even when the quantities concerned are far superior than those involved in the present case, and of much less political significance. We rather believe that what is at issue with regards to the decision of adhering or not to NATO is the determination of under what conditions this decision will be reached, so that what is determined is not so much the adherence in itself but a defense strategy. As in the case of the cost-benefit procedure, several of the decisions to be made on security matters are independent of Spain's adherence to NATO or not: the defense effort is global and a result of national strategy; the defense function will become more and more intensive in its requirements of technology and physical capital, while the need for human capital decreases; the greater technological intensity will affect not only physical capital, which is becoming increasingly complex, but also human capital which must be educated to a greater level. More significantly, the economic differences involved in the decision of incorporating or not to NATO are not strategic differences but only of degree: specialization or not of the forces; rate of technological adaptation; technical assistance. Thus, the cost-efficiency method should be utilized taking into account economic and technological factors grouped under five categories:

- area of exogenous stimuli (security threats, "recommendations" from NATO);
- area of technological resources;
- area of human resources;
- area of physical resources (particularly energy);
- area of financial resources.

The methodology should begin by tackling the whole security strategy in the form of a "tree of relevance", with political weights for each sub-objective. What is at stake is to assure the best possible use of the instruments available to the State with any defense strategy, so as to be able to measure for each combination of political weights and available instruments, the assignment of those instruments which will make possible the achievement of the greatest possible number of political objectives.

This methodology, outlined in Annex VII, has the following advantages:

- The "tree of relevance" includes all the technological and economic factors

which must be considered in order to reach a rational decision on national security.

- Each one of the sub-objectives of each line of the "tree of relevance" may be analyzed by the political authorities at each given moment; by definition, the sum of all these analyses es equal to 1..
- The efficiency indicators for each sub-objective may be based on historical experiences.

Annex VIII summarizes all the necessary phases of the algorithm for optimal determination.

5.3. From this point of view, the relevant question is how to organize the interaction between security objectives and economic objectives. The reaction capacity of the industry and service sectors to the demand for defense goods and services; the capacity to readapt to new demands in quantity and quality; and the effective reduction of risks in the security system, these all constitute issues which have been studied in other countries^x and which should be studied in Spain. The real economic significance of Spain's incorporation or not into NATO essentially depends on how the defense function is developed in Spain and on how the Spanish network of industries and services is organized in relation to security matters.

* Measuring Industrial Adequacy for a Surge in Military Demand: An Input - Output Approach, The Rand Corporation, R-2281-AF, September, 1978. Also, Defense Industrial Planning for a Surge in Military Demand, The Rand Corporation, R-2360-AF, September 1978.

5.4. One final commentary on the multiplying impact. It is usually argued, as one of the reasons which justifies Defense expenditures in general, and the adherence to NATO in particular, that investments made on defense materials and infrastructure, can have a multiplying impact on the economy, as occurred in the United States and France. This is not the place to develop this important subject, but two factors should be pointed out. First of all, as may be gathered from statistics for 27 European nations since 1967, there appears to be no close correlation between the level of development and national defense expenditures, even though the relation defense expenditure/GDP is generally lower for developing countries (developed) as is also the case with respect to other typical governmental expenses (education, transportation infrastructure). With the exception of the USA and the USSR, the average ratio for defense expenditures/GDP is 2.9% and 2.5%, excluding as well opposite nations with latent disputes such as Yugoslavia, East Germany, Greece and Turkey. From this point of view, Spain's defense expenditures (1.8% of its GDP) could be even higher given its GDP, in comparison with most European countries. Secondly, if this expenditure can be augmented in Spain, it should be done so through investments and not through current expenditures (retributions to personnel), as has been occurring over the past few years.

<u>Year</u>	<u>1970</u>	<u>1975</u>	<u>1980(e)</u>
% Investment in defense/GDP	.23	.37	.50
Source: Ministry of the Economy, 1980		e=estimation	

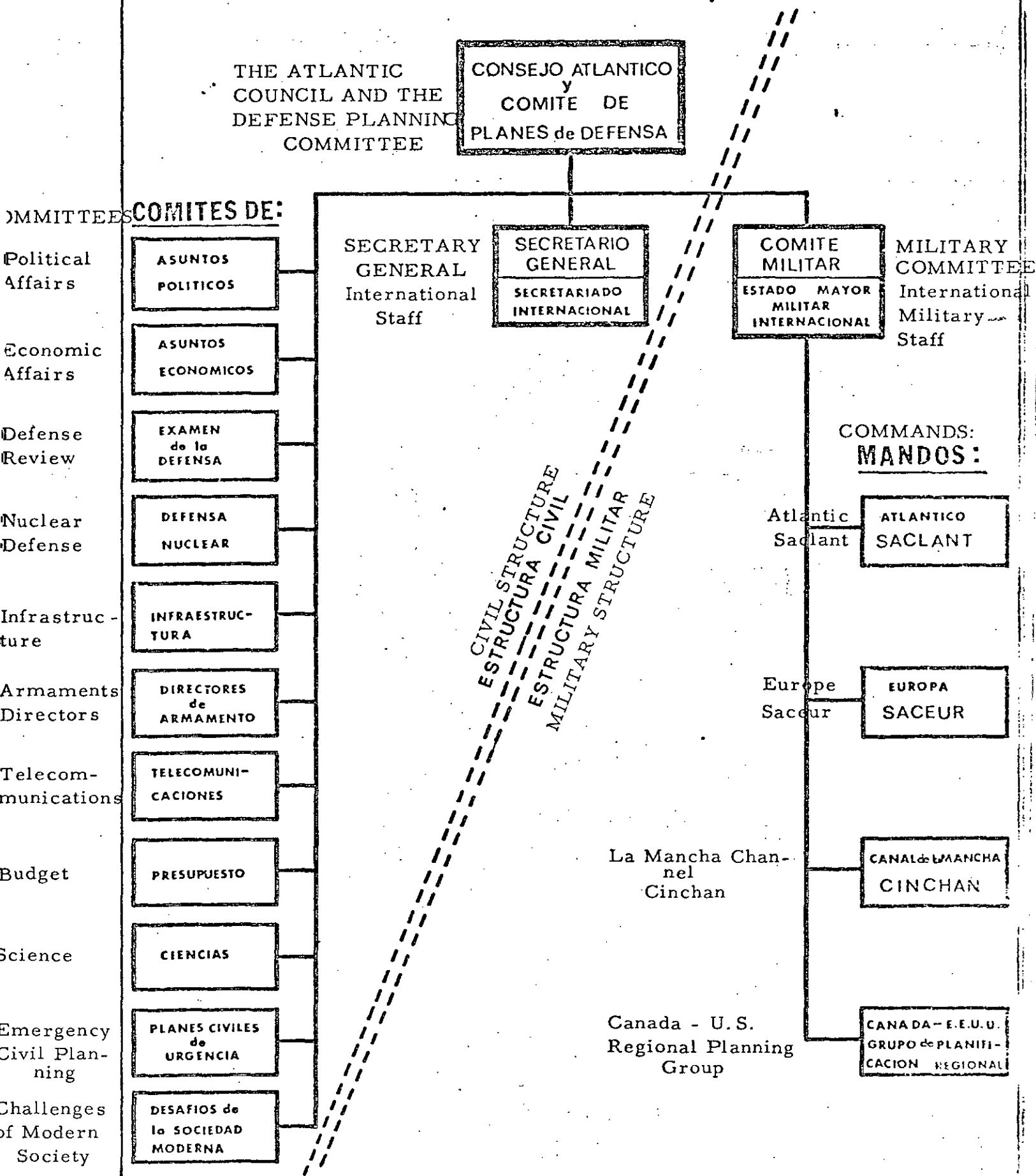
This investment which in itself could come to 1.2% or 1.3% of the GDP towards the end of the 90's, should assimilate the technology develop so as to take advantage of the obvious technological economies of the defense function. The approach presented herein confirms our previous conclusion that what is at issue is not so much Spain's adherence or not to NATO, but rather the technological reconversion of Spanish defense functions within a national strategy.

ANNEX I

NATO'S STRUCTURE

CIVIL AND MILITARY STRUCTURE

ESTRUCTURA CIVIL y MILITAR



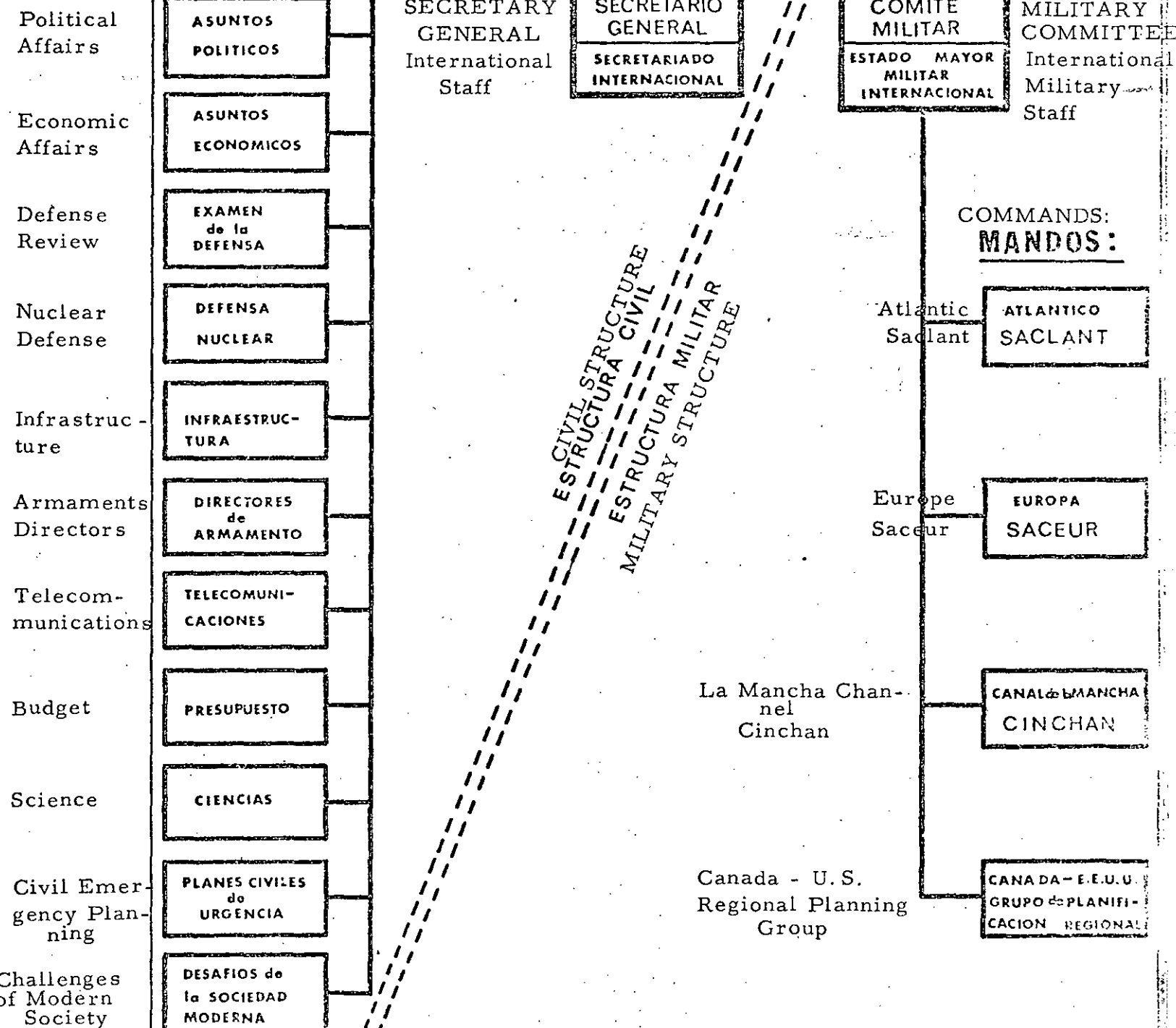
CIVIL AND MILITARY STRUCTURE

ESTRUCTURA CIVIL y MILITAR

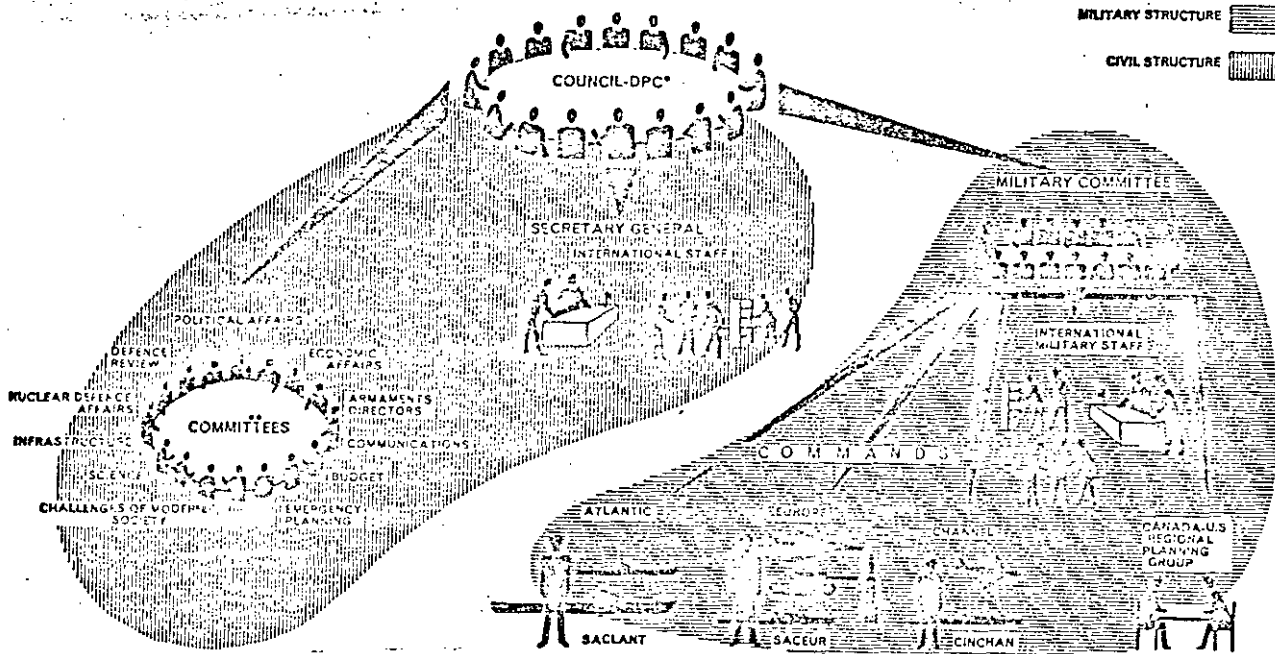
THE ATLANTIC
COUNCIL AND THE
DEFENSE PLANNING
COMMITTEE

CONSEJO ATLANTICO
y
COMITE DE
PLANES de DEFENSA

COMMITTEES COMITES DE:



NATO CIVIL AND MILITARY STRUCTURE



ANNEX II

NATO'S AGENCIES

- Civilian Agencies:

- . Central Europe Pipeline System (CEPS).
- . NATO Air Defence Ground Environment Organization (NADGE).
- . NATO Hawk Production and Logistics Organization (NHPLD).
- . NATO Maintenance and Supply Organization (NAMSO).
- . NATO Multi-Role Combat Aircraft Development and Production Management Organization (NAMMO).
- . NATO Integrated Communications System Organization (NICSO).
- . NATO Advanced Air Alarm Program Management Agency (NAPMA) being organized for the development of the AWACS System.

- Military Agencies:

- . Allied Communications Security Agency (ACSA).
- . Allied Long Lines Agency (ALLA).
- . Allied Naval Communications Agency (ANCA).
- . Allied Tactical Communications Agency (ATCA).
- . Allied Radio Frequency Agency (ARFA).
- . Advisory Group for Aerospace Research and Development (AGARD).
- . Military Agency for Standardization (MAS).
- . NATO Defence College (NDC).
- . SACLANT Anti-submarine Warfare Research Centre (SACLANTCEN).
- . SHAPE Technical Centre (STC).

ANNEX 3

NATO AGENCIES

CIVILIAN AGENCIES

→ *Central Europe Pipeline System (CEPS)*

Established in 1957 for the multi-national control of the operation and maintenance of the integrated military pipeline network in Central Europe, this Organization has eight member nations. Is responsible to the Council. Located at Versailles, France.

→ *NATO Air Defence Ground Environment Organization (NADGE)*

Established in 1965, this Organization completed in August 1973 the implementation of the NADGE Improvement Plan. The system provides for NATO Europe a single integrated semi-automatic Air Defence System, stretching from Northern Norway to Eastern Turkey, capable of providing continuous early warning and tracking of hostile aircraft and missiles, and enabling retaliatory action to be taken through computerized air defence centres. This Organization has completed its mission and was disbanded at the end of 1975.

Responsibility for maintaining the NADGE System has been transferred to the NATO Air Defence Electronic Environment Committee (NADEEC), which was established in July 1972. This body is directly responsible to the Council and is located in Brussels.

→ *NATO Hawk Production and Logistics Organization (NHPLO)*

Established in 1959 to supervise the multi-national production of the HAWK surface-to-air missile system in Europe, this Organization has started on a European Limited Improvement Programme. Seven nations participate. Is responsible to the Council. Located at Rueil-Malmaison, France.

→ *NATO Maintenance and Supply Organization (NAMSO)*
Established in 1958, this Organization supplies spare parts and logistic support for a number of jointly-used weapon systems or equipments, especially missiles and electronic systems. All nations except Iceland are members. Is responsible to the Council. Located in Luxembourg.

→ *NATO Multi-Role Combat Aircraft Development and Production Management Organization (NAMMO)*
Established in 1969 by the NATO Council to supervise the development and production of the MRCA project. NAMMO is an inter-governmental body supported by Germany, Italy and the United Kingdom, and is located in Munich, Federal Republic of Germany.

→ *NATO Integrated Communications System Organization (NICSO)*
Established in 1971 to supervise the planning and management of the NATO Integrated Communications System (NICS). This system will comprise the majority of NATO's existing communications (including the NATO Satellite Communications System) and will involve the creation of new and improved networks for common use by all elements of the Alliance. Is responsible to the Council. Located in Brussels.

MILITARY AGENCIES

Allied Communications Security Agency (ACSA)
Advises on all matters relating to communications security. Located in Brussels.

Allied Long Lines Agency (ALLA)
Created in 1951, this Agency provides the focal point within NATO for the formulation of policies and plans to meet the long lines requirements of NATO. Is responsible to the Military Committee. Located in Brussels.

Allied Naval Communications Agency (ANCA)
Established in 1951 to meet requirements of the Major NATO Commanders for adequate and reliable communications for maritime operations. Located in London.

Allied Tactical Communications Agency (ATCA)
Established in 1972, this Agency supports the Military Committee, the Major NATO Commanders and Nations, by formulating policy, requirements and procedures in the field of tactical communications for land and air operations. The Agency effects liaison with the Allied Naval Communications Agency (ANCA) when considering joint operations in which naval or maritime air forces are involved. The ATCA Secretariat is located in Brussels.

Allied Radio Frequency Agency (ARFA)
Formed in 1951 for the establishment of policies concerned with the management of the military use of the radio frequency spectrum. The Agency also provides engineering assistance to all nations and NATO Commands in the selection of suitable radio frequencies. Located in Brussels.

Advisory Group for Aerospace Research and Development (AGARD)
Created in 1952. Brings together aerospace scientists from NATO nations for exchange of technical information and co-operation in research and development. Provides scientific and technical advice to the Military Committee, other NATO bodies and to member nations in the aerospace field. Is responsible to the Military Committee. Located in Neuilly-sur-Seine, France.

Military Agency for Standardization (MAS)
Set up in 1951 to foster military standardization with the aim of enabling NATO forces to operate together in the most effective manner. Consists of representatives of all participating nations and is served by an international staff. Chairman, MAS, is the sole promulgating authority for all

standardization agreements and is responsible directly to the Military Committee. Located in Brussels.

NATO Defence College (NDC)

Founded in 1951 for the training of officials, civilian or military, who will serve in key posts in NATO organizations, or in national ministries. Is responsible to the Military Committee. Located in Rome.

SACLANT Anti-submarine Warfare Research Centre (SACLANTCEN)

Created in 1962 for research into submarine detection and oceanographic problems. Is responsible to SACLANT. Located in La Spezia, Italy.

SHAPE Technical Centre (STC)

Created in 1960, this Centre provides scientific and technical advice to the Supreme Allied Commander Europe. Is responsible to SACEUR. Located in The Hague.

NATO Agencies in which France participates:

- NATO Air Defence Ground Environment Organization, with a lay out which extends from the North of Norway to the far Eastern borders of Turkey.
- Central Europe Pipeline System (CEPS), in Versailles (France).
- NATO Hawk Production and Logistics Organization (NHPLO), in Rueil-Malmaison (France).
- NATO Maintenance and Supply Organization (NAMSO), in Luxembourg.
- Allied Communications Security Agency (ACSA), in Brussels.
- Allied Long Lines Agency (ALLA), in Brussels.
- Allied Radio Frequency Agency (ARFA), in Brussels.
- Advisory Group for Aerospace Research and Development (AGARD), in Neuilly (France).
- Military Agency for Standardization (MAS), in Brussels.
- SACLANT Anti-submarine Warfare Research Centre (SACLANTEN) in Spezia, (Italy).

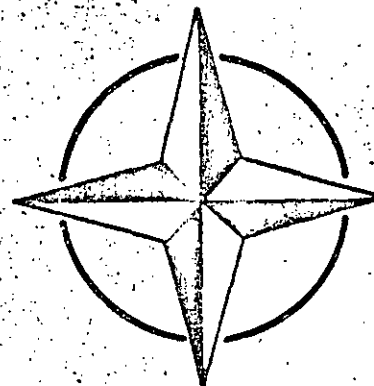
ANNEX III

NATO COMMON INFRASTRUCTURE

NATO INFRASTRUCTURE PROGRAM

**A COMMONLY FINANCED
MILITARY CONSTRUCTION PROGRAM**

FEB 1980



WHAT IS NATO INFRASTRUCTURE?

- **MILITARY FACILITIES FOR JOINT USE OF TWO OR MORE COUNTRIES OR WHICH HAVE A HIGH DEGREE OF COMMON INTEREST AND WHICH ARE ESSENTIAL TO THE OPERATIONS OF NATO FORCES.**
- **JOINTLY FINANCED BY 13 NATIONS (LESS ICELAND) PLUS FRANCE FOR CERTAIN PROJECTS.**
- **MANAGED ON THE BASIS OF AGREED RULES, PROCEDURES AND STANDARDS.**
- **IMPLEMENTED BY HOST COUNTRY AGENCIES OR, FOR SPECIAL CASES, BY SUPREME COMMAND HEADQUARTERS OR NATO AGENCIES.**

NATO COMMON INFRASTRUCTURE

• MAJOR ACHIEVEMENTS SINCE 1951

AIR POWER ----- 220 MODERN AIRFIELDS

**COMMUNICATIONS ----- 31,000 MILES OF LAND-LINES AND SUBMARINE
CABLES A NATO SATELLITE COMMUNICATIONS
SYSTEM**

FUEL FOR GROUND,

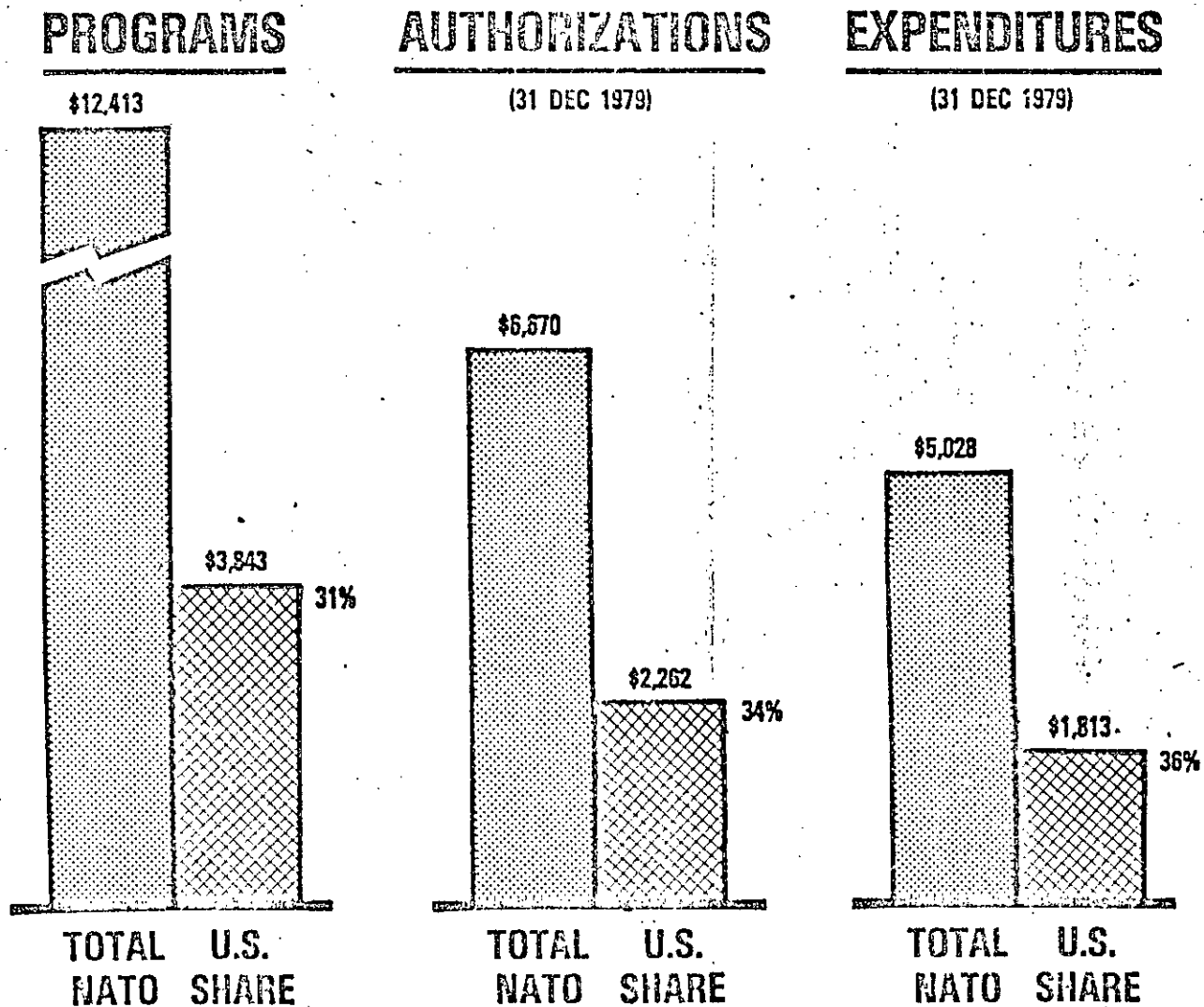
**AIR AND SEA FORCES -- 6,300 MILES OF FUEL PIPELINES
2 MILLION CUBIC METRES OF FUEL STORAGE**

**AIR DEFENSE ----- 104 NIKE SITES
108 HAWK SITES**

• UNDER PROCUREMENT OR IN PLANNING

-MODERNIZATION AND AUTOMATION OF COMMUNICATIONS

INFRASTRUCTURE FINANCIAL SUMMARY, 1951-1979:
PROGRAMS THROUGH SLICE XXXV; AUTHORIZATIONS AND
EXPENDITURES
THROUGH 31 DECEMBER 79
(IN \$ MILLIONS)



COST SHARING FORMULAS

PAST

CURRENT

SLICES	I	II-VII	VIII-XI	XII-XV	XVI-XXV	XXVI-XXX****				XXXI-XXV	
	COST SHARING APPROVED IN										
	1950	JUNE 1950*	FEB 1957	FEB 1961	JAN 1965**	SEPT 1966***	MAY 1975	MAY 1975	MAY 1975	DEC 1979***	DEC 1979**
COUNTRY	%	%	%	%	%	%	NORMAL***	NORMAL**	SPECIAL***	%	%
BELGIUM	13.18	5.462	4.39	4.24	4.61	5.30	5.5520	4.8215	5.5520	5.5912	4.624
CANADA	—	6.021	6.15	5.51	5.48	6.31	6.3132	5.4825	6.3132	6.3578	5.504
DENMARK	—	2.767	2.63	2.87	3.07	3.54	3.7012	3.2142	3.7012	3.7273	3.082
FRANCE	45.46	15.041	11.87	12.00	13.16	—	—	13.1580	—	—	13.212
GERMANY	—	—	13.72	20.00	21.86	25.18	26.3585	22.8902	26.3585	26.5446	21.953
GREECE	—	0.750	0.87	0.67	0.65	0.76	0.7932	0.6888	0.7932	0.7932	0.658
ITALY	—	5.681	5.61	5.97	6.58	7.58	7.9313	6.8877	7.9313	7.9873	6.606
LUXEMBOURG	0.45	0.155	0.17	0.17	0.18	0.20	0.2115	0.1837	0.2115	0.2130	0.176
NETHERLANDS	13.64	3.889	3.51	3.83	4.23	4.87	5.1026	4.4312	5.1026	5.1386	4.250
NORWAY	—	2.280	2.19	2.37	2.59	2.98	3.1197	2.7092	3.1197	3.1417	2.599
PORTUGAL	—	0.146	0.28	0.28	0.30	0.35	0.3701	0.3214	0.3701	0.2011	0.201
TURKEY	—	1.371	1.75	1.10	1.10	1.26	1.3238	1.1497	—	0.8045	0.802
UNITED KINGDOM	27.27	12.758	9.88	10.50	10.42	12.00	11.9950	10.4167	11.9950	12.0797	10.460
UNITED STATES	—	43.679	36.98	30.85	25.77	29.67	27.2279	23.6452	28.5517	27.4200	25.873
TOTAL	100.00	100.000	100.00	100.00	100.00	100.00	100.0000	100.0000	100.0000	100.0000	100.000

*THIS FORMULA REPLACES THE SHARES PREVIOUSLY APPLIED IN SLICES II, III, IVa, AND IVb TO VII.

**WITH FRANCE

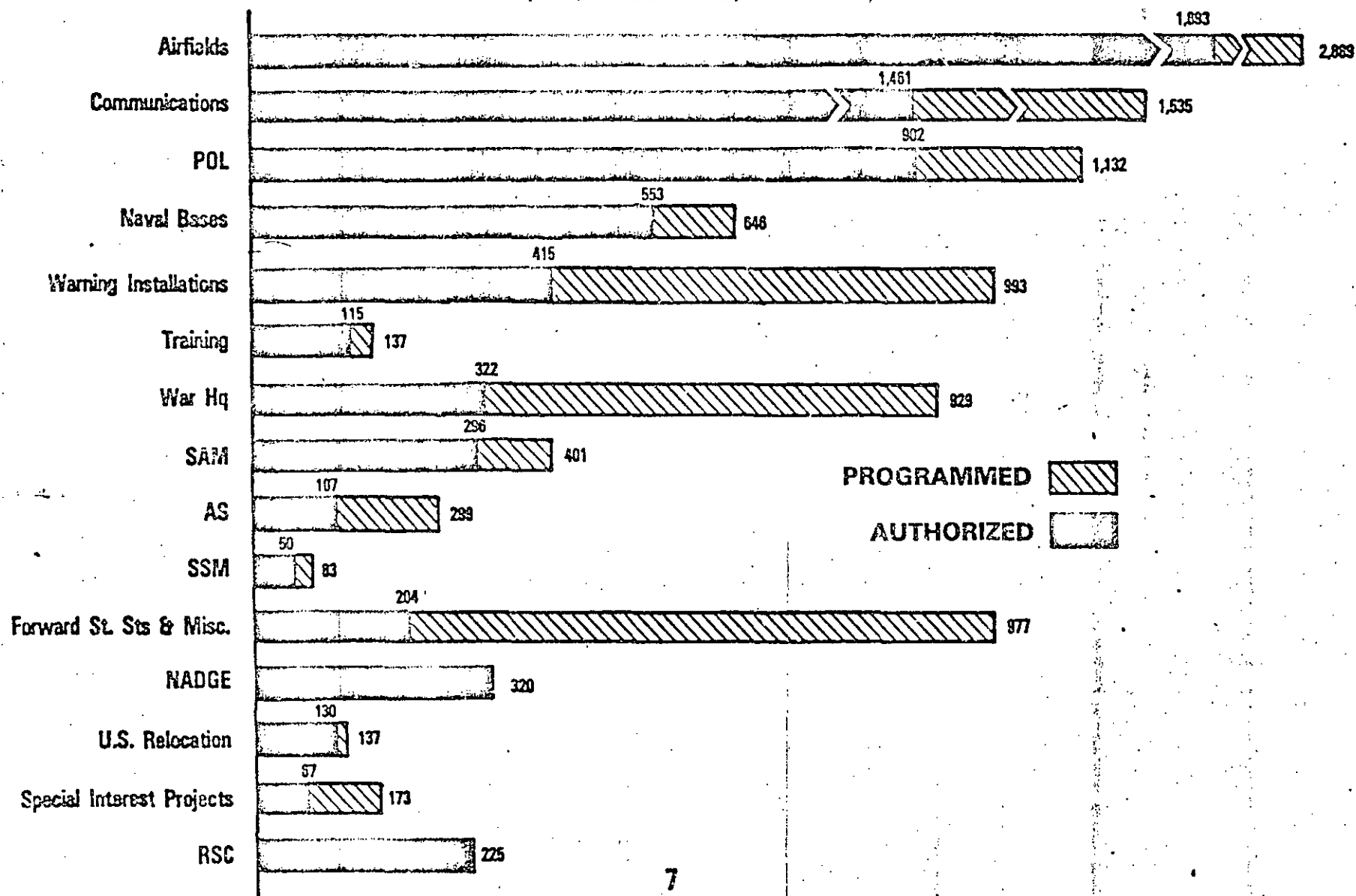
***WITHOUT FRANCE

****INCLUSION OF US SPECIAL PROGRAM REDUCES US SHARE TO 21.56%

NATO INFRASTRUCTURE ELIGIBLE CATEGORIES

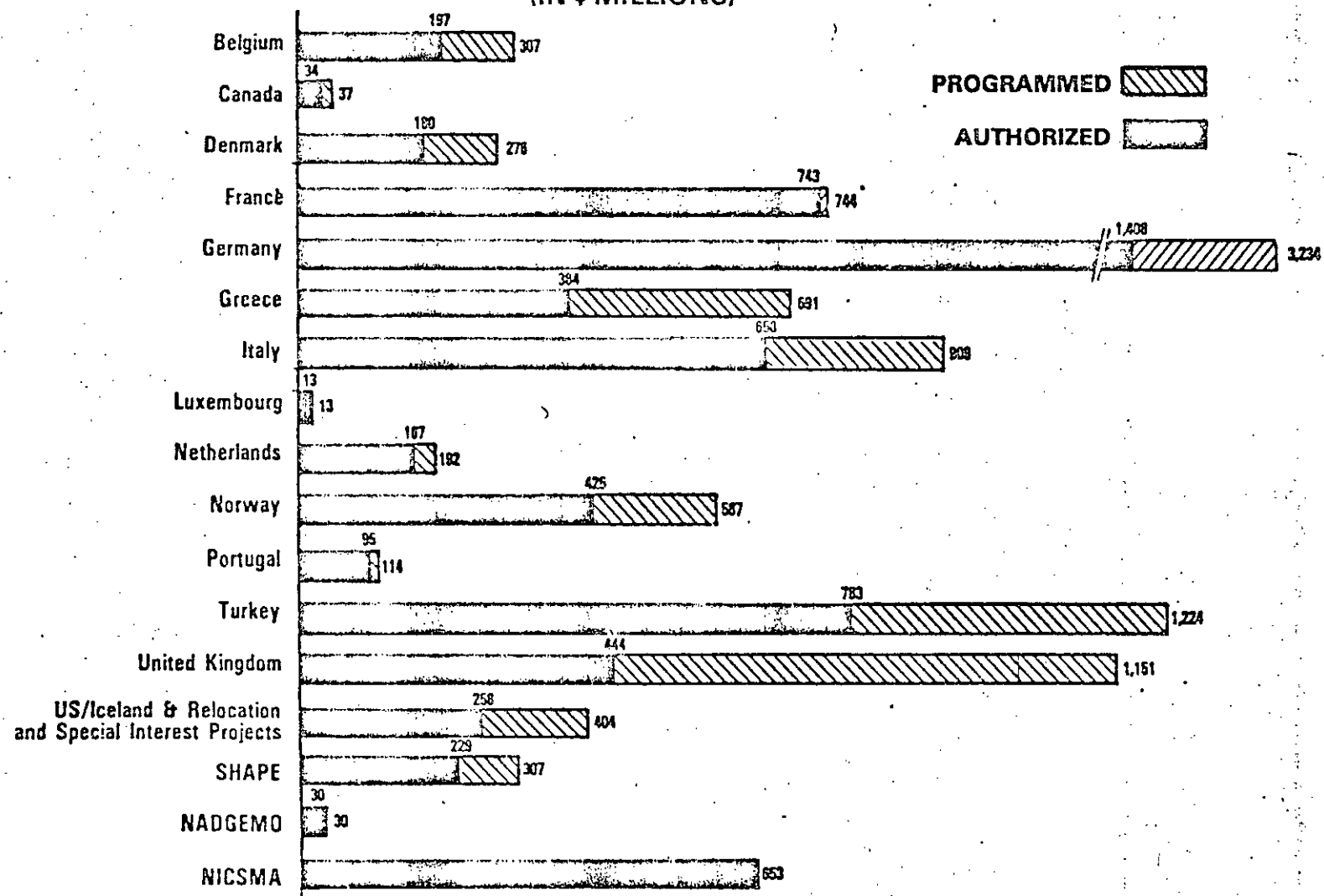
AIRFIELDS	—ESSENTIAL OPERATIONAL FACILITIES AND SHELTERS FOR TACTICAL AIRCRAFT
COMMUNICATIONS	—MILITARY COMMUNICATIONS CONNECTIONS WITH GOVERNMENTS SATELLITE COMMUNICATIONS
POL	—PIPELINES & 30-DAY STORAGE FOR JET FUEL
NAVAL BASES	—POL, AMMO AND OTHER STORAGE, REPAIR FACILITIES, PIERS
WARNING INSTALLATIONS	—FOR COMMON USE—AIR AND SEA EARLY WARNING
TRAINING	—TANK, AIR, AND MISSILE RANGES
WAR HQ	—STATIC AND MOBILE FOR INTERNATIONAL HEADQUARTERS
SAM	—NIKE AND HAWK SITES
FSTS	—FORWARD STORAGE SITES
AS	—STORAGE SITES FOR U.S. SPECIAL WEAPONS
SSM	—MACE AND PERSHING SITES
NADGE	—NATO AIR DEFENSE GROUND ENVIRONMENT—INTEGRATED EARLY WARNING, COMMAND AND CONTROL
REINFORCEMENT SUPPORT	—STORAGE FOR PREPOSITIONED SUPPLIES, EQUIPMENT, AMMO AND RECEPTION AND ONWARD MOVEMENT
OTHER	—CASE-BY-CASE AGREEMENTS (e.g.: CONTROLLED HUMIDITY STORAGE FOR U.S.)

**INFRASTRUCTURE DISTRIBUTION BY CATEGORY,
1951-1980**
PROGRAMS THROUGH SLICE XXXII AND AUTHORIZATIONS THROUGH 31
DECEMBER 79
(IN \$ MILLIONS)



INFRASTRUCTURE DISTRIBUTION BY HOST COUNTRY, 1951-1980

PROGRAMS THROUGH SLICE XXXII, AUTHORIZATIONS THROUGH 31
DECEMBER 79
(IN \$ MILLIONS)



STATUS OF INFRASTRUCTURE AUTHORIZATIONS BY CATEGORY (\$000)

	AUTHORIZATIONS DURING			U.S. SHARE DURING		
	FY 79 ACTUAL (1)	FY 80 EST (2)	FY 81 (EST) (3)	FY 79 ACTUAL (4)	FY 80 (EST) (5)	FY 81 (EST) (6)
BY CATEGORY	95,562	154,370	293,405	22,949	43,518	77,447
AIRFIELDS	87,650	66,283	129,404	23,050	22,244	42,796
COMMUNICATIONS	75,225	109,304	156,177	21,009	28,200	39,840
WAR HQS	41,401	36,106	60,794	11,323	11,933	16,578
POL FACILITIES	35,865	32,473	60,321	9,836	10,787	23,105
NAVAL (FLEET) FACS	49,611	56,260	116,344	13,559	14,825	30,935
WARNING INSTALLATIONS	6,431	6,957	11,204	1,759	2,301	3,000
TRAINING INST	21,850	16,491	29,689	5,976	3,538	8,485
SAM SITES	8,634	8,365	—	5,177	2,143	—
SSM SITES	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
US/	—	—	—	—	—	—
FORWARD ST STS/MISC	89,390	154,603	193,680	24,894	33,974	40,213
SPECIAL INTEREST PROJECTS	32,484	33,510	44,049	8,884	9,273	12,100
CURRENCY ADJUSTMENT	34,225	—	—	10,000	—	—
REINFORCEMENT SUP. CAT.	—	1,689	1,825	—	464	500
TOTAL	578,428	676,416	1,096,892	158,426	183,200	295,000

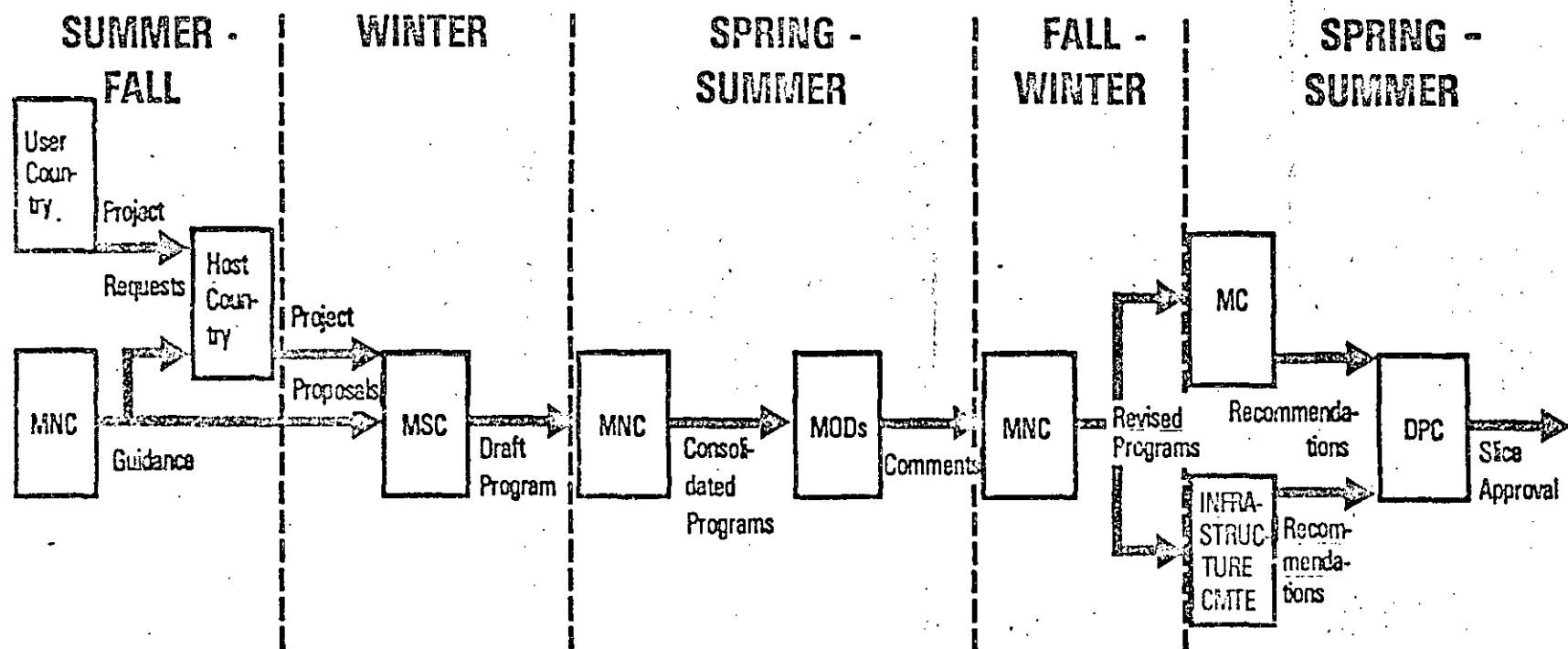
ANNUAL INFRASTRUCTURE AUTHORIZATION AND APPROPRIATION REQUESTS VERSUS OBLIGATIONS

FISCAL YEAR	(\$ IN THOUSANDS)			
	REQUESTED	AUTHORIZED	APPROPRIATED	OBLIGATED
1968	\$60,000	\$60,000	\$37,500	\$30,558
1969	55,000	55,000	47,000	44,304
1970	50,000 (auth.) 50,000 (approp.)	50,000	34,000	28,241
1971	50,000 (auth.) 42,000 (approp.)	41,500	33,500	56,057
1972	20,000 (auth.) 20,000 (approp.)	15,000	14,000	44,085
1973	58,000 (auth.) 38,000 (approp.)	58,000	38,000	74,505
1974	80,000 (auth.) 40,000 (approp.)	80,000	40,000	87,364
1975	88,000 (auth.) 69,000 (approp.)	84,000	69,000	55,967
1976	80,000 (auth.) 76,000 (approp.)	80,000	71,000	71,060
1976T	20,000 (auth.) 20,000 (approp.)	20,000	20,000	43,388
1977	80,000 (auth.) 76,000 (approp.)	80,000	76,000	90,630
1978	85,000 (auth.) 81,000 (approp.)	85,000	81,000	95,728
1979	90,000 (auth.) 70,000 (approp.)	166,300	173,000	158,426
1980	150,000 (auth.) (approp.)	185,000	150,000	183,200 (est.)
1981	300,000 (auth.) (approp.)	—	—	295,000 (est.)

NOTE: Effective with the 1979 legislation, NATO Infrastructure was transferred from the U.S. Army Military Construction Program to the Defense Agencies, Military Construction Program.

NATO INFRASTRUCTURE PROGRAMMING CYCLE

APPROXIMATE TIME REQUIRED TO DEVELOP AND
PROGRAM EACH INFRASTRUCTURE ANNUAL SLICE PROGRAM



MNC - Major NATO Commanders (SACEUR, SACLANT)

MSC - Major Subordinate (to MNC) Commanders

MC - NATO Military Committee

DPC - Defense Planning Committee (NAC without France)

NATO INFRASTRUCTURE PROJECTS — CONSTRUCTION AND PAYMENT

HOST COUNTRY RESPONSIBLE FOR

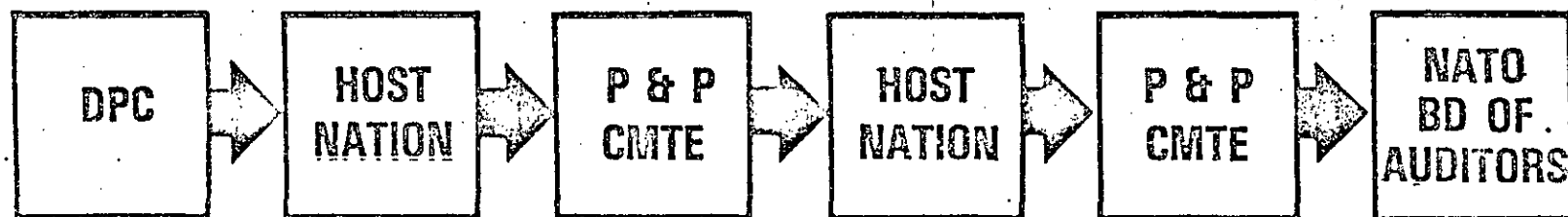
- PROVISION OF LAND
- PROVISION OF ACCESS ROADS
- PROVISION OF UTILITIES CONNECTIONS
- DESIGN AND PREPARATION OF SPECIFICATIONS AND COST ESTIMATES
- SUBMISSION OF PLANS TO NATO PAYMENTS AND PROGRESS COMMITTEE FOR APPROVAL AND FUND AUTHORIZATION
- CONSTRUCTION OF PROJECT AS AUTHORIZED AND TO REQUIRED STANDARDS
- SUBMISSION OF COST ACCOUNTING FOR NATO AUDIT

***COST PAID BY**

HOST
HOST
HOST
NATO
NATO
NATO
NATO

*Costs paid by host country are estimated to average about 13% of costs paid by NATO common funding.

NATO INFRASTRUCTURE IMPLEMENTATION AND BUDGETARY CONTROL



APPROVES
PROGRAM
(SLICE)

SUBMITS
PLANS &
COSTS FOR
PROJECT

REVIEWS,
APPROVES,
FUNDS
PROJECT

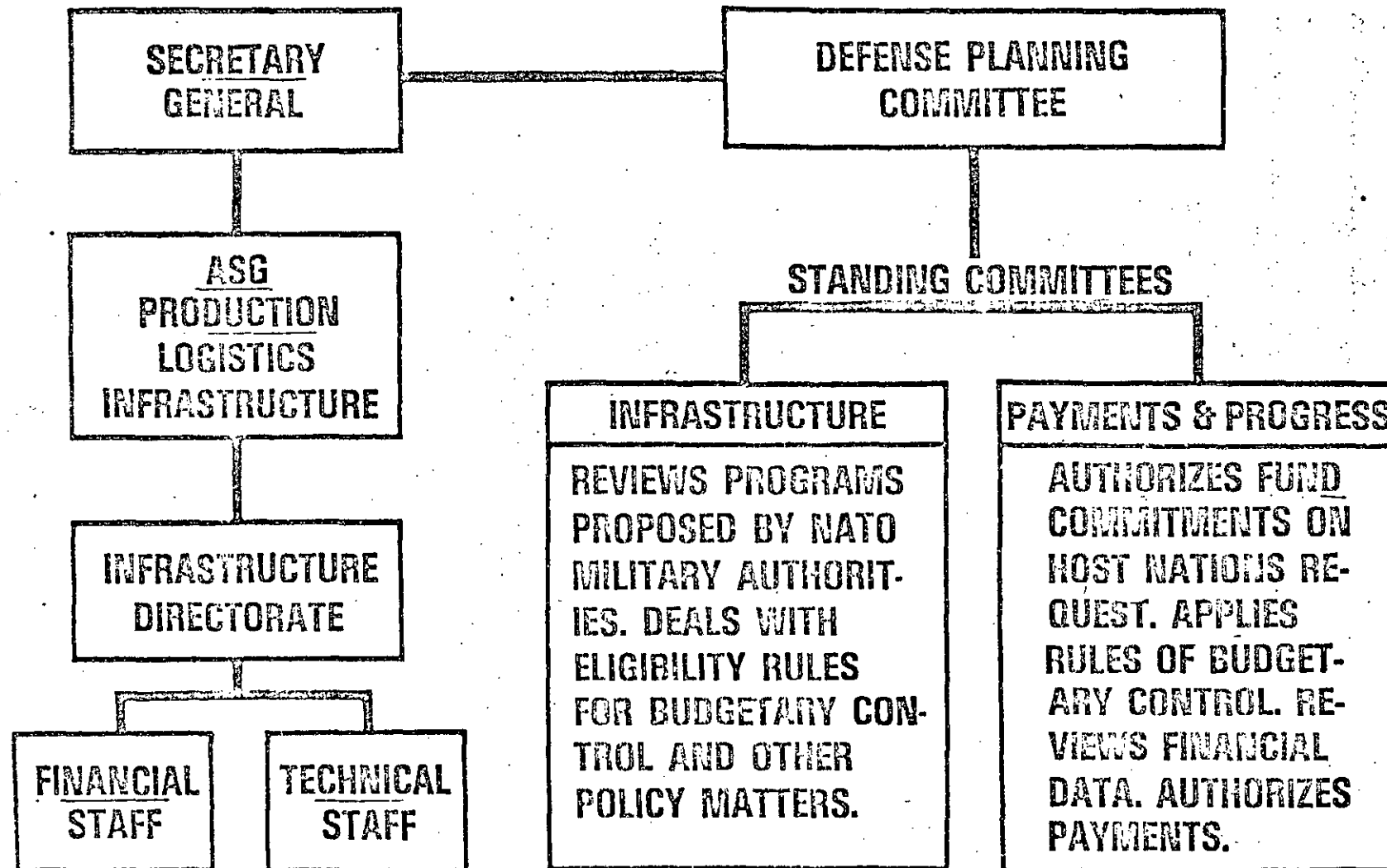
BUILDS

REVIEWS,
ACCEPTS

AUDITS

DPC — DEFENSE PLANNING COMMITTEE
P & P CMTE — PAYMENTS AND PROGRESS COMMITTEE

NATO INFRASTRUCTURE COMMITTEES AND INTERNATIONAL STAFF DIRECTORATE



ANNEX IV

"PER CAPITA" DEFENSE EXPENDITURES IN
RELATION TO THE
GDP.

"Per capita" Defense Expenditures
Gastos de Defensa "per cápita" (1)

(en dólares)
(in dollars)

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Alemania (Germany)	146	215	226	260	242	274	347	396
Bélgica (Belgium)	104	139	153	185	204	246	315	363
Dinamarca (Denmark)	97	125	143	184	168	213	258	303
Francia (France)	142	189	175	233	241	224	285	349
Gran Bretaña (Great Britain)	141	161	176	184	190	210	252	314
Grecia (Greece)	65	74	90	144	138	119	163	-
Holanda (Holland)	117	157	179	215	205	269	309	338
Italia (Italy)	68	75	75	76	68	90	109	124
Luxemburgo (Luxembourg)	34	49	50	61	68	80	102	116
Noruega (Norway)	127	169	187	223	223	280	308	347
Portugal (Portugal)	65	80	91	95	85	48	55	60
Turquía (Turkey)	19	23	30	55	70	58	47	58

España (Spain)	32	40	51	62	69	79	85	124

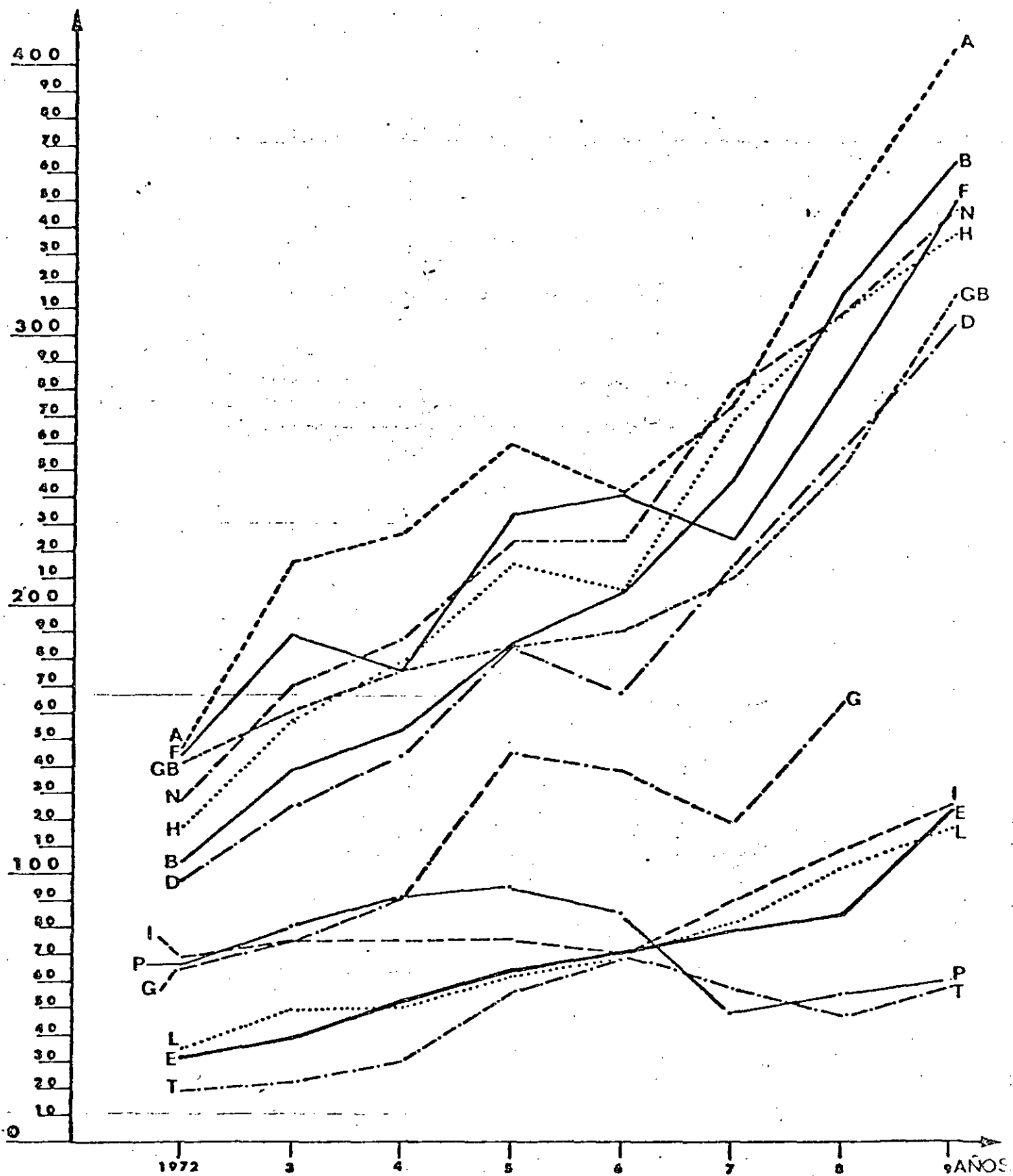
(1) Origen: "Balance Militar" del Instituto de Estudios Estratégicos de Londres.

(Source: "Military Balance", Institute of Strategic Studies in London).

Las cifras españolas están incrementadas en un 25 % para aproximarlas a la definición OTAN de "gasto de defensa".

(The figures for Spain have been augmented by 25% in order to make them comparable to NATO's definition of "defense expenditures".)

(DE/P) GSD/P



Abreviaturas
(Abbreviations)

- | | |
|-----------------------------------|-----------------------------|
| A - Alemania (Germany) | I - Italia (Italy) |
| B - Bélgica (Belgium) | L - Luxemburgo (Luxembourg) |
| D - Dinamarca (Denmark) | N - Noruega (Norway) |
| F - Francia (France) | P - Portugal (Portugal) |
| GB - Gran Bretaña (Great Britain) | T - Turquía (Turkey) |
| G - Grecia (Greece) | E - España (Spain) |
| H - Holanda (Holland) | |

COMPARACION DE GASTOS DE DEFENSA 1976-1979

	Country País	Millions \$ Millones \$				Per capita \$ Per capita \$				% expenses gubernamentales (a)				% of GNP % del PNB ^b			
		1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979	1975	1976	1977	1978
Warsaw Pact																	
	Pacto de Varsovia (c)																
	Bulgaria	438	408	438	s.d.	50	46	66	s.d.	5,3	5,2	5,1	s.d.	2,7	2,4	2,5	s.d.
	Czechoslovakia	1.805	2.437	2.324	2.424	121	162	153	159	7,0	7,3	7,1	7,1	3,8	3,9	4,1	3,8
	East Germany	2.729	4.038	4.238	4.447	158	241	253	266	7,8	8,9	8,9	8,8	5,5	5,7	5,8	5,8
	Hungary	551	715	808	s.d.	52	67	76	s.d.	3,6	3,6	3,7	s.d.	2,4	2,5	2,4	2,4
	Poland	2.252	3.098	3.335	3.496	66	89	95	99	7,4	6,5	7,1	6,1	3,1	3,0	2,8	3,0
	Rumania	759	1.123	1.263	1.259	35	52	58	57	4,0	4,0	3,9	3,5	1,7	1,7	1,7	1,7
	Soviet Union	127.000	133.000	148.000	s.d.	492	508	574	s.d.	s.d.	s.d.	s.d.	s.d.	11-13 %		11-14 %	
NATO																	
	OTAN (e)																
	Belgium	2.013	2.444	3.143	3.636	204	246	315	363	10,2	9,3	9,2	9,2	3,0	3,0	3,1	3,5
	Great Britain	10.734	11.722	14.090	17.572	190	210	252	314	11,0	12,7	10,5	11,5	4,9	5,2	5,0	4,7
	Canada	3.231	3.617	3.692	3.751	140	155	156	157	10,0	8,8	8,8	8,6	2,2	1,8	1,8	1,8
	Denmark	861	1.084	1.317	1.559	168	213	258	303	7,4	7,2	7,2	7,4	2,2	2,5	2,3	2,4
	France	12.857	11.880	15.225	18.776	241	224	285	349	20,6	16,3	17,0	17,5	3,9	3,7	3,2	3,3
	West Germany	15.220	16.814	21.366	24.391	242	274	347	396	23,5	23,5	22,9	22,3	3,7	3,5	3,4	3,4
	Greece	1.249	1.100	1.523	s.d.	138	119	163	s.d.	26,0	20,2	18,3	s.d.	6,9	5,0	5,0	4,7
	Italy	3.821	5.104	6.212	7.089	68	90	109	124	8,6	9,6	8,8	8,2	2,6	2,5	2,6	2,4
	Luxembourg	23	29	37	42	68	80	102	116	2,9	2,7	2,9	2,9	1,1	1,0	1,0	1,1
	Holland	2.825	3.719	4.323	4.767	205	269	309	338	9,8	11,0	9,6	9,1	3,6	3,3	3,6	3,3
	Norway	902	1.132	1.254	1.421	223	280	308	347	7,6	9,2	9,1	9,3	3,1	3,2	3,1	3,2
	Portugal	748	470	540	587	85	48	55	60	s.d.	11,5	10,2	10,4	6,0	4,0	2,9	2,8
	Turkey	2.800	2.429	2.025	2.591	70	58	47	58	29,4	19,1	19,4	15,6	9,0	5,5	4,9	4,5
	United States	91.000	100.928	105.135	114.503	423	465	481	520	23,8	22,7	23,0	21,5	5,9	5,4	5,2	5,0
Other Europ. nat. Otros países europeos																	

ANNEX V

STRUCTURE OF THE FORCES

I. Distribution among the three forces of their percentage of effectives with regards to the total for the armed forces as a whole (1).

I. Distribución entre los tres ejércitos de los porcentajes de efectivos sobre el total de las fuerzas armadas (1)

	<u>Total de Efectivos</u>	<u>% de Ejército de Tierra</u>	<u>% de Marina</u>	<u>% de Ejército del Aire</u>
	(Total troops)	(% Ground Forces)	(% Marine)	(% Air Forces)
Alemania (Germany)	489.000	69	8	23
Bélgica (Belgium)	87.100	73	5	22
Dinamarca (Denmark)	34.000	62	18	20
Francia (France)	502.800	65	15	20
Gran Bretaña (Great Britain)	313.253	51	22	27
Grecia (Greece)	190.100	79	9	12
Holanda (Holland)	109.700	68	16	16
Italia (Italy)	362.000	69	12	19
Noruega (Norway)	39.000	51	23	26
Portugal (Portugal)	63.500	63	22	15
Turquía (Turkey)	485.000	80	9	11

España (Spain)	315.000	76	13	11

II. Number of combat vehicles available.

II. Número de carros de combate disponibles

	<u>Núm. de Carros de Combate (1)</u>	<u>Rango</u>
	(No. of Combat Vehicles)	(Rank)
Alemania (Germany)	3.779	1°
Bélgica (Belgium)	386	9°
Dinamarca (Denmark)	368	10°
Francia (France)	2.160	3°
Gran Bretaña (Great Britain)	1.171	6°
Grecia (Greece)	1.340	5°
Holanda (Holland)	800	8°
Italia (Italy)	1.650	4°
Noruega (Norway)	186	11°
Portugal (Portugal)	123	12°
Turquía (Turkey)	2.800	2°

España (Spain)	860	7°

(1) Datos procedentes del Balance Militar 1.978-79.
Data obtained from the 1978-79 Military Balance.

III. Número de aviones de combate disponibles (2)
(Number of combat planes available)

	<u>Aviones de Combate (2)</u> (Combat planes)	<u>Rango</u> (Rank)
Alemania (Germany)	484	2°
Bélgica (Belgium)	148	9°
Dinamarca (Denmark)	114	11°
Francia (France)	471	3°
Gran Bretaña (Great Britain)	511	1°
Grecia (Greece)	257	6°
Holanda (Holland)	162	8°
Italia (Italy)	319	5°
Noruega (Norway)	115	10°
Portugal (Portugal)	18	12°
Turquía (Turkey)	339	4°

España (Spain)	214	7°

(2) Origen: Balance Militar 1.978-79.
(Source: 1978-1979 Military Balance).

Naval Potential
IV. Potencial Naval (3)

Aircraft carriers <u>Portaeronaes</u>	Rank <u>Rango</u>	Conventional Submarines <u>Submarinos con- vencionales</u>	Rank <u>Rango</u>	Principal combat surface units <u>Unidades de su- perficie princi- pales de combate (a)</u>	Rank <u>Rango</u>	Missile launching boats <u>Lanchas por- ta misiles</u>	Rank <u>Rango</u>	Other units <u>Otras Unidades (b)</u>	Rank <u>Rango</u>
Alemania (Germany)	-	25	3 ^a	22	6 ^a	40	1 ^a	83	3 ^a
Bélgica (Belgium)	-	-	-	4	12	-	-	27	11 ^a
Dinamarca (Denmark)	-	6	-	13	4 ^a	10	4 ^a	29	10 ^a
Francia (France)	2	29 (c)	1 ^a	61	2 ^a	5	6 ^a	123	1 ^a
Gran Bretaña (Great Britain)	3	29 (d)	2 ^a	72	1 ^a	-	-	107	2 ^a
Grecia (Greece)	-	9	7 ^a	16	7 ^a	8	5 ^a	56	5 ^a
Holanda (Holland)	-	6	-	25	5 ^a	-	-	40	9 ^a
Italia (Italy)	-	11	6 ^a	29	4 ^a	-	-	47	7 ^a
Noruega (Norway)	-	15	4 ^a	8	11 ^a	27	2 ^a	39	8 ^a
Portugal (Portugal)	-	3	-	13	10 ^a	-	-	10	12 ^a
Turquía (Turkey)	-	12	5 ^a	14	8 ^a	13	3 ^a	82	4 ^a
España (Spain)	1	8	8 ^a	30	3 ^a	-	-	48	6 ^a

Notas: (a) Cruceros, fragatas, destructores y corbetas. (cruisers, frigates, destroyers, and corvettes).

(b) Lanchas torpederas, patrulleros, buques de desembarco, minadores y dragaminas. (Torpedo boats, patrol boats, landing craft, mine layers and mine sweepers).

(c) Francia tiene además 6 submarinos nucleares. (France also has six nuclear submarines).

(d) Gran Bretaña tiene además 4 submarinos nucleares. (Great Britain also has 4 nuclear submarines).

(3) Origen: JANE'S Fighting Ships 1.979 (solo se consideran buques de más de 100 Tns.).

Source: JANE'S Fighting Ships 1979 (only takes into account vessels of over 100 tons).

ANNEX VI

THE INCORPORATION OF FORCES TO NATO'S COMMAND

The incorporation or subordination of forces to NATO's military command may be subdivided according to the following categories or types:

a) Forces under NATO's command.

These are the troops which are placed directly under the orders of NATO's High Command in times of peace. More specifically, the troops in this situation are the anti-aerial defense troops based in Europe and subordinated to SACEUR (Major European Commander) because of the urgency of response required from these forces in case of alarm. Also under NATO's command, there is an assembly of forces from the various nations denominated the Allied Mobile Force, which though small in number and mainly symbolic in character, is charged with the mission of rapidly transferring itself by air to one of the flanks of deployment in case of imminent threats. Other forces under NATO's command are the naval forces of the Atlantic, subordinated to SACLANT (Major Atlantic Commander), practically all of which belong to the United States, excepting a small group of vessels from all nationalities (STANAVFORLANT) which symbolizes the participation of all the other nations.

b) Forces "assigned" to NATO.

These are forces which remain under national command in times of peace but which must be prepared to transfer to NATO's command in case of alarm with the dates and time periods previously agreed upon. This is the situation of the units stationed in Germany by other countries (except for the French units which are subjected to a different regime), and of other large units which in spite of their situation within national territories, have a prior commitment because of their status as "assigned forces".

c) Forces earmarked for NATO.

These are forces which remain under national command in times of peace but which transfer to NATO's command in war time, but without a predetermined period of time within which they must effectuate their change in subordination.

d) National forces.

These are forces which are not included in NATO's joint strategy planning because they have been assigned to defend national territories or because they are exclusively at the orders of their corresponding national command.

ANNEX VII

AID TO BE GRANTED THROUGH THE SPANISH-
AMERICAN TREATY FOR FRIENDSHIP AND COOPERATION.

The aid which will have been obtained at the end of the five-year period during which the Treaty is in force, provided the U.S. Congress ratifies it annually is as follows:

Military aid:

- 600 million dollar loan (120 per year) for the purchase of American military material.
- The donation of defense materials worth 75 million dollars.
- Instruction for personnel from the Spanish Armed Forces valued at 10 million dollars and offered as a grant (2 million per year).
- A maximum contribution of 50 million dollars for the improvement of the Alarm and Control Networks of the Spanish Air Forces (which is also beneficial to U.S. aviation).
- The sale under favorable conditions of 4 ocean mine sweepers and one tender mine sweeper.
- The leasing of 42 F-4E aircrafts (project discarded).

Civil Aid:

- * Credit of 450 millions from EXIMBANK to Spanish firms.
- Grant of 23 millions for scientific and technological research (4'6 millions per year)
- Cooperation in cultural and educational matters for a value of 12 million dollars (2'4 millions per year).

ANNEX VIII

COST-EFFICIENCY METHODOLOGY

1. External security

1.1. The protection of Spanish interests in foreign countries.

1.1.1. To insure the supply of incoming goods and raw materials.

1.1.2. To guarantee the exportation of products.

1.1.1.0.1. Favor financial feasibility.

1.1.1.0.1.0.1. Reducing capital costs
to finance Spanish
presence.

1.1.1.0.1.0.2. Directly participating
in international
undertakings.

1.2. Discourage or repel foreign threats.

1.2.1. Existing threats.

1.2.1.1. With new methods and instruments.

1.2.1.1.1. Reduce the degree of uncertainty in the environment.

1.2.1.1.1.0.1. Encourage an understanding of the characteristics of the threats.

1.2.1.1.1.0.2. Encourage an understanding of the basic matrix of legal and administrative relations.

1.2.1.1.2. Contribute the basic national effort.

1.2.1.1.2.0.1. Encourage awareness of defense requirements.

1.2.1.1.2.0.2. Maintain relations with industry and service enterprises on security matters.

1.2.1.1. With existing methods and instruments

1.2.1.2.1. Increase the real effectiveness of the existing production of goods and services.

1.2.1.2.1.1. Increase efficiency with existing human resources.

1.2.1.2.1.1.1. Stimulate investment to take advantage of production capacity of human resources.

1.2.1.2.1.1.2. Strengthen the availability of adequate technology.

1.2.1.2.1.1.3. Perfect the organization of human resources.

1.2.1.2.1.2. Reinforce the production of capital goods.

1.2.1.2.1.2.1. Adjust human resources to the production system.

1.2.1.2.2. Increase the apparent efficiency of the production of existing goods and services.

1.2.1.2.2.1. Favor the reduction of internal production costs.

1.2.1.2.2.1.1. Compensate tax costs.

1.2.1.2.2.1.2. Reduce capital costs.

1.2.1.2.2.1.3. Direct subsidies.

1.2.1.2.2. Stimulate the operating efficiency of existing services and equipment.

1.2.1.2.3.0.1. Stimulate the improvement and consolidation of operating criteria.

1.2.1.2.3.0.2. Facilitate the financing means inherent to the operation.

1.2.1.2.3.0.3. Cover the risks of re-assigning personnel from less to more productive functions.

1.2.2. New threats

1.2.2.0.1. Reduce the degree of uncertainty in the environment.

1.2.2.0.1.0.1. Encourage an understanding of the characteristics of the threats.

1.2.2.0.1.0.2. Encourage a basic knowledge of the legal and administrative relations

1.2.2.0.2. Increase basic national effort.

1.2.2.0.2.0.1. Encourage awareness of new threats.

1.2.2.0.2.0.2. Maintain relations with industry and service enterprises on security matters.

2. Internal security (outline)

2.1. Reduce or eliminate new risk zones.

2.1.1. With citizen support

2.1.1.1. Reinforce the protection from risks appearing in other countries.

2.1.1.1.1. Reinforce political feasibility.

2.1.1.1.2. Reinforce financial feasibility.

2.1.1.1.3. Reinforce technological feasibility.

2.1.2. Without citizen support.

2.1.2.1. Reinforce research and protection in new areas of risk

2.1.2.1.0.1. Stimulate own's own technological development.

2.2. Eliminate or reduce existing areas of risk.

2.2.1. By eliminating or reducing its causes.

2.2.1.1. Eliminating the causes which have appeared in other countries.

2.2.1.1.1. Reinforce political feasibility.

2.2.1.1.2. Reinforce financial feasibility.

2.2.1.1.3. Reinforce technological feasibility.

2.2.1.2. Increase the efficiency of the means available against the causes of risk.

2.2.1.2.1. Increase real effectiveness.

2.2.1.2.2. Increase apparent effectiveness.

2.2.2. By reducing the consequences.

2.2.2.1. Increasing security effectiveness.

2.2.2.2. Increasing the efficiency of available effectiveness.

2.2.2.2.1. Reinforce political feasibility.

2.2.2.2.2. Reinforce financial feasibility.

2.2.2.2.3. Reinforce technological feasibility.

STEPS IN THE COST EFFICIENCY
METHODOLOGY FOR SECURITY MATTERS.

STAGES	CRITERIA	USEFUL FOR
<u>The objectives enter</u>		
1. Tree of relevancy	<u>Objective</u> based on recog nition of globalization.	- organize the complete deci sion model from more aggre gated (social objective) to more dispersed (Operationa sub-objectives)
1.1. Assign weights	<u>Subjective</u> or political	- assign priorities to the sub-objectives.
1.2. Classify areas of the functional cycle	<u>Definition</u>	- Compile the 74 sub-objec tives in 5 groups
1.3. Calculate efficiency indicators	<u>Objective</u> /Historical	- determine priorities in the functional cycle
<u>The instruments enter</u>		
2. State interests	<u>Objective</u> /historical	- measure their cost/efficien cy, object of the analysis
3. Matrix (2, 1.2) of the instru ments and functional cycle	Combination of criteria 2 and 1.2	- relate the instruments with the sub-objectives
3.1. Index value of the ins- truments equals the sum of weights (1.1) calcula- ted by indicators (1.3)	Combination of 1.1 and 1.3.	- calculate the value of each instrument
<u>The sector enters</u>		
4. Seven requests for instruments (functional parameters) to aid in the designation of instru- ments. Their number and type is not fundamental as they will be eliminated further on (see 6)	<u>Objective</u> /historical or wilfull	- know within what spectrum the State's instruments may be used.
4.1. Distribution of 2 in 4	" " "	- design the matrix for instrument use
4.2. Matrix (2,4)	Combination of criteria 2 and 4	- Weigh the application of instruments to sectors
5. Matrix of sectoral profiles	<u>Objective</u> /historical or wilfull	- define the "demand func- tion" of instruments for each sector.
5.1. Weigh for each sector the combination of functional parameters (4,5)		
6. Sector/instrument matrix, mul- tiplying (2,4) x (4,5) =(2,5) (functional parameters are eliminated)	<u>Objective</u> /historical or wilfull, as 2, 4, and 5	- assign the cost of instru- ments among the sectors.
<u>Final operation</u>		
7. Cost/efficiency for each sec- tor	<u>Objective</u> /historical and	- finalize the analysis
7.1. Compare cost 6 with value 3.1	<u>Subjective</u> /wilfull as a result of 1 through 6.	

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BIOGRAPHICAL NOTES

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- Licenced Cavalry Commander by the General Staff.
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- General Staff Diploma at the "Command and General Staff College" of Fort Leavenworth, United States.
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- Presently elaborating, as a Doctoral Thesis, a study on "The Economic Consequences of Adherence to NATO".

LUIS MARCO BORDETAS

- Adviser to the Minister of Economic Affairs, the World Bank, and the World Tourism Organization.
- Has been an officer of the World Bank and Technical Secretary General to the Ministry of Industry and Energy.
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