

August 1997

NATO ENLARGEMENT

Cost Estimates Developed to Date Are Notional





United States
General Accounting Office
Washington, D.C. 20548

**National Security and
International Affairs Division**

B-277471

August 18, 1997

The Honorable Benjamin Gilman
Chairman
The Honorable Lee H. Hamilton
Ranking Minority Member
Committee on International Relations
House of Representatives

On July 8, 1997, the North Atlantic Treaty Organization (NATO) invited Poland, Hungary, and the Czech Republic to become NATO members.¹ If approved by the current membership, the alliance's expansion will entail costs to NATO, its current members, and the newly invited states. Several efforts have been made to estimate these costs. At the request of Congress, the executive branch prepared a study on NATO enlargement issues, including cost, which was released in February 1997. Other estimates have been developed by the Congressional Budget Office (CBO) and the RAND Corporation.

In response to your request, we have evaluated the executive branch's estimate. Our specific objectives were to (1) assess the reasonableness of the study's key assumptions, (2) verify the pricing of individual cost elements and identify the basis for the pricing, (3) determine whether the estimate's major cost categories and elements should be ascribed to NATO enlargement, (4) identify factors that were not included in the study's cost estimate that could affect enlargement costs, and (5) compare the executive branch's estimate with the CBO and RAND estimates. As agreed with your offices, we did not independently estimate the cost of enlarging NATO.

Background

NATO was established in 1949 to help provide for its members' common defense. The key provision of the treaty in this regard is article V, which states that an attack on one member shall be considered an attack on all members. To meet its military objectives, NATO (1) developed standards to help ensure that its members' forces can operate with one another, (2) established force requirements for its members, and (3) agreed to commonly fund the procurement of equipment and facilities needed to accomplish common goals. In 1994, NATO announced that it would invite

¹Twelve nations initially signed the NATO treaty in 1949. NATO has since expanded three times to its current 16-nation membership of Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom, and the United States.

other European states to join the alliance. Twelve Central and Eastern European nations indicated interest in doing so, and since 1994, NATO and its members have been providing assistance to help these countries prepare for eventual membership.² Figure 1 shows those nations interested in becoming NATO members. In July 1997, NATO invited three of these countries—Poland, Hungary, and the Czech Republic—to enter into negotiations to become NATO members. It is NATO's goal to have the 16 member states ratify the new members' admission into NATO by April 1999.

²See our report entitled NATO Enlargement: U.S. and International Efforts to Assist Potential New Member States ([GAO/NSIAD-97-164](#), June 27, 1997).

Figure 1: States Invited to Join and Interested in Joining NATO



^aSerbia and Montenegro have asserted the formation of a joint independent state, but this entity has not been formally recognized as a state by the United States.

^bFormer Yugoslav Republic of Macedonia.

In 1996, Congress asked the executive branch to report on the cost of enlargement and on a range of related issues.³ The executive branch issued its report in February 1997.

The Department of Defense (DOD) was primarily responsible for preparing the report's cost estimate. However, at the time DOD developed its estimate, many key cost determinants had not been established. Consequently, as the executive branch report stated, its analysis of enlargement costs should "be seen as purely illustrative and designed to provide an approximation of the costs of enlargement." As the basis for its analysis, DOD made the following key assumptions:

- Specific nations would be invited to join NATO in the first round of enlargement.⁴
- NATO would continue to rely on its existing post-Cold War strategy to carry out its collective defense obligations (i.e., each member state would have a basic self-defense capability and the ability to rapidly receive NATO reinforcements).⁵
- NATO would not be confronted by a significant conventional military threat for the foreseeable future and such a threat would take many years to develop.
- NATO would continue to use existing criteria for determining which items would be funded in common and for allocating costs among members.⁶

Using these assumptions, DOD estimated that the cost of enlarging NATO would range from about \$27 billion to \$35 billion from 1997 through 2009.⁷ The estimate was broken down as follows:

³The executive branch's report was required by the Fiscal Year 1997 Defense Authorization Act (P.L. 104-201, section 1048).

⁴The number of countries DOD assumed would be invited to join NATO and the actual countries that were the basis for the estimate are classified information.

⁵NATO adopted a new post-Cold War strategic concept at its Rome summit meeting in 1991. The concept provides for substantial reductions in the size and readiness of NATO's forces but increased force mobility, flexibility, and ability to adapt to the changed threat environment.

⁶NATO funds only those facilities or portions of facilities that are over and above the needs of an individual country's own national security requirements. For example, NATO would fund only the portion of infrastructure at an air base that is beyond the host nation's own needs, such as hangars for reinforcing aircraft, but not hangars for the host country's aircraft.

⁷DOD assumed that NATO would reach a "mature capability" to operate with new members by 2009.

- about \$8 billion to \$10 billion for improvements in current NATO members' regional reinforcement capabilities (e.g., addressing shortfalls in deployable support capabilities),
- about \$10 billion to \$13 billion for restructuring and modernizing new members' militaries (e.g., selectively upgrading self-defense capabilities), and
- about \$9 billion to \$12 billion for costs directly attributable to NATO enlargement (e.g., ensuring that current and new members' forces are interoperable and capable of combined NATO operations and upgrading or constructing facilities for receiving NATO reinforcements). (See app. I.)

DOD estimated the U.S. share of these costs would range from about \$1.5 billion to \$2 billion—averaging \$150 million to \$200 million annually from 2000 to 2009 (see app. II). The estimated U.S. share chiefly consists of a portion of direct enlargement costs commonly funded through NATO's Security Investment Program. DOD assumed that the other costs would be borne by the new members and other current member states and concluded that they could afford these costs, although this would be challenging for new members.

CBO and RAND estimated the cost of incorporating the Czech Republic, Hungary, Poland, and Slovakia into NATO. They based their estimates on a range of NATO defense postures from enhanced self-defense with minimal NATO interoperability to the forward stationing of NATO troops in new member states. However, they also noted that the current lack of a major threat in Europe could allow NATO to spend as little as it chooses in enlarging the alliance. CBO's estimate ranged from \$61 billion to \$125 billion—including a \$109-billion estimate that was predicated on a resurgent Russian threat, although it was based on a self-defense and reinforcement strategy similar to that used by DOD.⁸ Of this \$109 billion, CBO estimated that the United States would pay \$13 billion. Similarly, RAND's estimate ranged from \$10 billion to \$110 billion and included a \$42-billion estimate that was also based on a self-defense and reinforcement strategy. RAND estimated that the United States would pay \$5 billion to \$6 billion of this \$42 billion in total costs.

Results in Brief

Our analysis of DOD's cost estimate to enlarge NATO indicates that its key assumptions were generally reasonable and were largely consistent with the views of U.S., NATO, and foreign government officials. In particular, the

⁸CBO's lowest estimate is based on a low-threat assessment; the additional costs are predicated on a resurgent Russian threat.

assumption that large scale conventional security threats will remain low significantly influenced the estimate. However, DOD's lack of supporting cost documentation and its decision to include cost elements that were not directly related to enlargement call into question its overall estimate. Because of the uncertainties associated with enlargement and DOD's estimating procedures, the actual cost of NATO enlargement could be substantially higher or lower than DOD's estimated cost of about \$27 billion to \$35 billion. Our comparison of DOD's estimate with the RAND and CBO estimates does not indicate that the RAND and CBO costs estimates are more reliable than DOD's.

We could not verify DOD's pricing of many individual cost elements because DOD officials did not develop sufficient supporting documentation. According to DOD officials, DOD priced many cost elements on the basis of expert guesses, due to the lack of hard data. Moreover, in one case we examined, the U.S. Air Force provided us information on the cost of refurbished Western aircraft that was significantly higher than the cost used in DOD's estimate.

DOD included two major cost categories that cannot be directly attributed to NATO's enlargement. First, we found no direct link between the cost of remedying current shortfalls in NATO's reinforcement capabilities and enlargement of the alliance. Neither NATO nor DOD had identified any specific reinforcement shortfalls that would result from enlargement. Instead, DOD estimated the cost of satisfying perceived shortfalls in capabilities the allies have currently in meeting existing requirements. Second, we question whether all of DOD's new member modernization and restructuring costs are attributable to NATO enlargement. NATO has yet to determine what types of modernization and restructuring will be sought from new members and some upgrades, such as Western aircraft, may not be required. Moreover, as DOD notes, new members are likely to incur costs to restructure and modernize their forces whether or not they join NATO.

DOD's third cost category, direct enlargement, contains elements appropriately attributed to NATO enlargement, based on our analysis. These are costs that will directly result from enlargement, such as developing interoperability between new members and NATO and creating reinforcement reception facilities.

NATO enlargement could entail additional costs beyond those included in the DOD estimate. These costs could include assistance, such as enhanced

Partnership for Peace or other bilateral assistance provided as a consolation to countries not invited to join NATO in July 1997. There will also be additional costs associated with subsequent decisions to invite additional countries to join NATO. In addition, the United States may provide assistance to help new members restructure and modernize their forces, which DOD acknowledged but did not include in its estimate of the U.S. cost share. For example, Polish officials said they may need up to \$2 billion in credits to buy multipurpose aircraft. While not an added cost of enlargement, such assistance would represent a shift in the cost burden from the new member countries to the countries providing assistance.

As noted, CBO and RAND developed a range of cost estimates for NATO enlargement, including estimates that employ a defense strategy similar to DOD's. Several factors account for the differences between DOD's estimate and the CBO and RAND estimates, including those estimates that employed defense strategies similar to DOD's. For example, CBO assumed a much larger reinforcement force and much more extensive modernization, infrastructure, and training costs than DOD did. RAND assumed a somewhat larger reinforcement force and higher training and air defense modernization costs than DOD did.

Uncertainties Exist, but DOD's Key Assumptions Appear Reasonable

The ultimate cost of NATO enlargement will be contingent on many factors that had not been determined when DOD prepared its estimate, many of which will likely remain undetermined, at least in the near term. For example, NATO had not yet determined which countries would be invited to join NATO. While it subsequently invited Poland, Hungary, and the Czech Republic to join, NATO has yet to formally define its future (1) strategy for defending the expanded alliance, (2) force and facility requirements of the newly invited states, and (3) formula for allocating costs in the expanded alliance. Also unknown is the long-term security threat environment in Europe.

Nonetheless, DOD's key assumptions constitute a reasonable attempt to address these uncertainties. First, the number and mix of new member states DOD assumed in its cost estimate were generally consistent with the expectations that were current at the time and with the results of the July 1997 NATO Madrid summit. Second, DOD's assumption of a NATO strategy to use reinforcement forces rather than station substantial permanent forces in the countries of the new members is consistent with U.S. and NATO policy and with the current low-threat security environment in Europe. In 1991, NATO adopted a new post-Cold War strategy that

involves replacing larger and relatively static forces with smaller, more mobile forces to reinforce members' self-defense efforts. Officials at the U.S. mission to NATO told us that NATO is likely to maintain this strategy for an expanded alliance.

Third, DOD's most important assumption in terms of its cost projection is that there is currently no major conventional threat to NATO's security and any such threat would take years to develop. The presumed extent of such a threat affects assumptions concerning NATO strategy, reinforcement forces, the urgency with which new members' defense capabilities would be improved, and the willingness of members to allocate resources to NATO-related defense needs. U.S. and foreign government officials and experts that we consulted supported the expectation of a continuing low-threat environment.⁹ Fourth, officials from the U.S. mission to NATO told us that NATO would continue to use its current eligibility criteria for commonly funded projects—as assumed by DOD. Moreover, they informed us that it was reasonable for DOD to use NATO's current cost allocation formula in its estimate because NATO had not yet determined the countries that would be invited to join.¹⁰

DOD also assumed that during the 1997-2009 period, new members would increase their real defense spending at an average annual rate of 1 to 2 percent. Both private and government analysts project strong economic growth, especially over the long term, for potential member countries. Projected increases in defense budgets appear affordable, given the predicted economic growth rates. For example, private analysts project economic growth rates averaging between 4 and 5 percent annually for the Czech Republic, Hungary, and Poland for 1997 to 2001. However, these analysts also point out that potential new member countries face real fiscal constraints, especially in the short run. Increasing defense budgets at the expense of pressing social concerns becomes a matter of setting national priorities and is difficult to predict.

DOD further assumed that current NATO members would on average maintain constant real defense spending levels for 1997 through 2009.¹¹

⁹The executive branch's estimate states that costs would increase substantially if the threat increased substantially—but adds that it is impossible to estimate the additional costs of meeting an increased direct territorial threat to NATO from outside conventional military forces.

¹⁰NATO's formula for allocating costs is based on the relative size of its members' economies.

¹¹In 1996, defense spending as a percent of gross domestic product was 2.0 percent for Italy, 1.7 percent for Germany, 2.9 percent for the United Kingdom, and 3.0 percent for France. If gross domestic product grows in real terms, then these percentages will decline under DOD's assumption of constant real defense spending.

Analysts have expressed somewhat greater concern about this DOD assumption, generally considering it to be an optimistic, but reasonable, projection. Some analysts indicated that defense spending in some current member states may decline further over the next several years. Such declines would be due, in part, to economic requirements associated with entry into the European Monetary Union.¹²

DOD's Pricing of Cost Elements Could Not Be Verified

Many of DOD's estimates for specific cost elements could not be verified. DOD officials did not consistently document their analyses. As a result, we were unable to audit or validate estimates for most specific cost elements. Moreover, until NATO officials determine which facilities in the new member states are needed and are able to see the condition of these facilities, the scope of required improvements can only be guessed at. In discussing a draft of this report with DOD officials, they suggested that such information will not likely be available for several months and that estimates of a quality higher than "notional" could not be prepared until early 1998.

In many cases, DOD's estimates were based on expert judgment. For example, DOD based its \$140 million to \$240 million estimate for the cost of upgrading a new member's existing air base into a NATO collocated operating base on expert judgment, not on surveys of actual facilities. The DOD source for that figure told us that the actual cost could easily be double—or half—the estimated cost. Similarly, according to DOD, most of the other infrastructure upgrade and refurbishment cost estimates are also based on expert judgments.

DOD developed other cost element estimates on a highly aggregated basis. For example, DOD's \$8 billion to \$10 billion estimated cost for upgrading allied reinforcement capabilities was developed without specific data regarding actual shortfalls in these capabilities. This estimate contained only two elements—upgrades to air force units (wings) and ground units (divisions). DOD analysts stated they did not compute costs of individual items in these units. Instead, they computed a general cost estimate encompassing a broad range of deployable logistic support capabilities (e.g., engineer and medical unit equipment and specialized containers) based on NATO assessments that shortfalls exist in commitments made to

¹²European Monetary Union membership requires a nation to keep its budget deficit at or below 3 percent of its gross domestic product.

NATO.¹³ DOD officials were unable to respond to our requests for data concerning the amount of equipment needed or cost by equipment type.

Similarly, DOD's estimated cost for training and modernization is notional, and actual costs may vary substantially from estimates. DOD analysts did not project training tempos and specific exercise costs. Instead, they extrapolated U.S. and NATO training and exercise costs and evaluated the results from the point of view of affordability. DOD's estimate for modernization and restructuring of new members' ground forces was also notional and was based on improving 25 percent of the new members' forces. However, it did not include specifics as to what would be done to upgrade the equipment and how much it would cost.

In one of the cases where DOD officials provided us with an information source—a U.S. Air Force officer—we could not confirm DOD's estimate. Our analysis of data regarding the purchase of refurbished aircraft showed that the cost of purchasing refurbished F-16 aircraft would be at least 11 percent higher than the high end of DOD's estimate. When we asked about this difference, DOD analysts said that it may have been due to changes in equipment packages and pricing terms between the time they developed their estimate and the time we contacted the Air Force to verify the estimate.

Estimates Include Some Costs That Are Not Directly Related to Enlargement

Substantial portions of DOD's total estimate consist of costs that are not directly related to enlargement, in contrast to those costs included in the direct enlargement category. While they may represent valid costs that could be incurred by current and new NATO members, they cannot at this time be ascribed directly to the enlargement of NATO. Nevertheless, according to DOD officials, the enhancements that these costs underwrite would be critical to the military effectiveness and credibility of an enlarged alliance.

DOD's decision to include \$8 billion to \$10 billion as the estimated cost to enhance current members' reinforcement capabilities is questionable. According to U.S. and NATO officials, NATO currently has long-standing shortfalls in combat support and combat service support capabilities needed to carry out its post-Cold War strategy. Current members have chosen not to fulfill these requirements, but it is not known whether they

¹³NATO and U.S. officials in Europe acknowledged that there are persistent shortfalls among the allies in combat support and combat service support units; however, the specific shortfalls have not been defined nor is there a direct link between the perceived shortfalls and DOD's cost estimate or between the shortfalls and NATO's enlargement.

lack the capabilities to fill the requirements or whether they simply have not assigned forces to NATO due to other national priorities. Moreover, neither DOD nor officials at the U.S. mission to NATO had identified any specific shortfalls that could be attributed only to bringing new countries into NATO. DOD officials told us that while reinforcement needs would not be greater in an enlarged NATO, enlargement makes fulfilling these requirements essential. DOD officials stated that these costs were included because an enlargement report to Congress on military implications and costs that ignored current shortfalls, which would seriously impair an enlarged NATO's military effectiveness, would be seen as incomplete.¹⁴

We also question whether all of the \$10 billion to \$13 billion DOD included for new members' military modernization and restructuring are enlargement costs. Modernization costs incurred in response to NATO requirements could logically be considered NATO enlargement costs. However, because NATO has yet to formulate requirements for new members, identifying such costs is speculative. Given current NATO requirements, some costs, such as certain training and air defense costs,¹⁵ are more likely to result from enlargement than others, such as the purchase of Western fighter aircraft.

According to DOD, potential new members will incur modernization and restructuring costs whether or not they join NATO.¹⁶ Therefore, not all modernization and restructuring costs incurred by the new members will necessarily represent net additions to their defense budgets.

Additional Costs May Be Associated With NATO Enlargement

Various additional costs may be incurred by the United States in connection with NATO enlargement that were not specifically quantified in DOD's cost study. For example, during fiscal years 1995-97, the United States allocated \$59.6 million in security assistance grants and \$242.5 million in security assistance loans to the newly invited states. DOD acknowledged that the United States may choose to continue or expand

¹⁴While we understand DOD's logic for including costs associated with current NATO member reinforcement shortfalls that would seriously impair an enlarged NATO's military effectiveness, by making this argument, DOD would seem to be acknowledging that NATO's current reinforcement shortfalls also seriously impair the military effectiveness of an unenlarged NATO.

¹⁵For example, NATO has established flying hour requirements for member states' pilots. To meet these requirements, new member states would probably have to increase pilot training budgets. Regarding air defense, CBO and RAND experts informed us that new member states would have to upgrade their air defense missile forces to achieve minimal self-defense capabilities.

¹⁶Similarly, during our review of Partnership for Peace programs, officials in Poland, Hungary, and the Czech Republic told us that their nations would modernize their aging forces, regardless of whether or not they join NATO.

the current assistance being provided to potential new members' restructuring and modernization efforts, but it did not attempt to estimate these costs. Both CBO and RAND assumed that NATO members—including the United States—would need to provide substantial levels of security assistance to help the new members. A Polish official told us that Poland would likely need \$2 billion in credits to support its acquisition of multipurpose aircraft, although aircraft modernization may not be directly related to enlargement.

Another indirect cost of NATO enlargement may involve increased assistance to countries that applied for NATO membership but were not invited to join in July 1997. According to U.S. and NATO officials, the United States, NATO, and other NATO members may increase their Partnership for Peace and related assistance as a consolation to those countries. The amount of any such increase is unknown and would have been speculative had it been included in DOD's cost estimate.

U.S. and NATO officials have stated that additional Central and Eastern European nations may be invited to join NATO in the future, most likely in 1999. However, DOD's cost estimate addressed only a first round of invitations and did not take into account a second or third round of invitations to join NATO. If additional countries are invited, additional enlargement costs would be incurred.

Differences in Estimates Are Due to Various Factors

Several factors account for the differences between DOD's estimate and the CBO and RAND estimates, even those that employed defense strategies similar to DOD's. Table 1 illustrates the major results and key assumptions of the three estimates.

Table 1: Comparison of DOD, CBO, and RAND Estimates

Assumptions	DOD	CBO	RAND
Total cost	\$27-\$35 billion in constant 1997 dollars	\$61-\$125 billion in constant 1997 dollars (\$109 billion for a defense strategy similar to DOD's)	\$10-\$110 billion in constant 1996 dollars (\$42 billion for a defense strategy similar to DOD's)
U.S. cost share	\$1.5-\$2.0 billion	\$13.1 billion ^a	\$5 to \$6 billion ^a
Notional new NATO members	A Small Group (details classified)	Poland Hungary Czech Republic Slovakia	Poland Hungary Czech Republic Slovakia
Time period	1997-2009	1996-2010	Approximately 1995-2010
Threat assessment	Low threat	A resurgent Russia ^a	Low threat ^a
Comparable force posture options	4 divisions/6 wings	11.7 divisions/11.5 wings ^a	5 divisions/10 wings ^a

^aThese assumptions correspond to the estimate based on a defense strategy similar to DOD's.

CBO's cost estimate is significantly higher than DOD's, even for a similar defense strategy, for several reasons. First, where DOD assumed a reinforcing force of 4 divisions and 6 wings, CBO assumed a force of 11 2/3 divisions and 11 1/2 wings and a much larger infrastructure in the new member states to facilitate the reinforcements. Second, CBO's new member modernization costs are much higher than DOD's and include the purchase of 350 new aircraft and 1,150 new tanks. DOD assumed that about 25 percent of the new member states' ground forces would be modernized through upgrades and that each nation would procure a single squadron of refurbished Western combat aircraft. Third, CBO assumed much higher training costs, \$23 billion, which included annual large-scale combined exercises. DOD included \$2 billion to \$4 billion for increased training due to enlargement. Fourth, CBO's estimate included the purchase of Patriot air defense missiles at a cost of \$8.7 billion, which is considerably higher than DOD's assumed purchase of refurbished I-HAWK type missiles at \$1.9 billion to \$2.6 billion. Finally, CBO's infrastructure costs were much higher than DOD's and included new construction, such as extending the NATO fuel pipeline. Moreover, CBO assumed the construction would be built to meet U.S. standards. In contrast, DOD's estimate included refurbishment of existing facilities to minimal wartime standards.

RAND's cost estimate is somewhat higher than DOD's, although both were based on similar threat assessments. First, it had a larger reinforcement package of 5 divisions and 10 wings and therefore higher infrastructure costs. Second, it also assumed new members would purchase the more

expensive Patriot air defense system rather than a refurbished I-HAWK type system. Finally, it also assumed greater training costs than did DOD. The author of the RAND study stated that if he had used DOD's assumptions, his cost range would then be almost identical to DOD's.

Agency Comments

DOD and the Department of State agreed with our principal conclusion that the uncertainties associated with the military implications of NATO enlargement and DOD's estimating procedures resulted in cost estimates that were notional and that could differ substantially from actual enlargement costs. DOD stated that because an initial attempt to identify military requirements through the NATO defense planning process will not occur until 1998, it will remain difficult to develop more solid estimates prior to that time frame. DOD also agreed that most of the costs associated with the allies' reinforcement capabilities and modernizing the military forces of new members are not directly linked to enlargement but said that (1) current members must upgrade their reinforcement capabilities to be able to more effectively implement NATO's 1991 Strategic Concept and (2) new members must modernize to enhance their self-defense capabilities.

We agree that until military requirements for new members are identified through NATO's defense planning process, it will be difficult to develop more reliable estimates of the cost of enlargement. We also agree that shortfalls in the NATO allies' reinforcement capabilities and new members' modernization of military forces should be considered in deliberating the Alliance's enlargement. However, in deliberating these matters, it should be understood that upgrading current members' reinforcement capabilities and modernizing new members' forces need to occur whether or not the Alliance enlarges.

The Department of State said that NATO enlargement may also result in some increase in NATO's civil budget. This budget pays for NATO's own administrative, security, and communication costs for the civilian international staff. State could not estimate the amount of such an increase but said it would likely be manageable.

DOD's written comments are reprinted in appendix III. DOD also provided technical corrections that have been incorporated in the report where appropriate. The Department of State provided oral comments.

Scope and Methodology

To address our objectives, we interviewed officials and gathered and analyzed information from the Department of State; the Office of the Secretary of Defense; the Joint Chiefs of Staff; the Defense Intelligence Agency; the Defense Security Assistance Agency; the U.S. Mission and Military Delegation to NATO in Brussels, Belgium; the U.S. European Command in Germany; U.S. country delegations in Poland, the Czech Republic, Hungary, and Germany; and governments in the Czech Republic, Poland, Hungary, and Germany. We also interviewed officials and analysts and gathered information at CBO, the RAND Corporation, the British American Security Information Council, PlanEcon, Inc., the WEFA Group, and several academic institutions.

In evaluating the executive branch's cost estimate for the enlargement of NATO, we interviewed the analysts responsible for the study, reviewed the documentation they provided us, and contacted sources they referred us to. In addition, we obtained expert opinions and analyses concerning NATO enlargement and its costs from other government and private sector organizations. To assess DOD's assumptions regarding defense budgets for potential and current NATO members, we interviewed government, private sector, and academic economic analysts and reviewed documents they provided. To obtain information on the modernization plans of potential new member countries, we met with U.S. country delegations and national government officials in the Czech Republic, Poland, and Hungary. To obtain information on reinforcement requirements, we met with officials at the Joint Chiefs of Staff; the U.S. Mission and Military Delegation to NATO in Brussels; and the U.S. European Command in Germany.

To determine if there were any additional costs that could affect enlargement costs but were not included in the DOD estimate, we reviewed other analyses of NATO enlargement, including the CBO and RAND cost studies, and interviewed relevant officials and analysts. In comparing the executive branch's estimate with those of CBO and RAND, we interviewed the analysts at CBO and RAND who conducted the studies and reviewed source information they provided or suggested.

We conducted our review between January and July 1997 in accordance with generally accepted government auditing standards.

We are providing copies of this report to other congressional committees and to the Secretaries of State and Defense. Copies will be provided to others upon request.

Please contact me on (202) 512-4128 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix IV.

A handwritten signature in black ink, reading "Harold J. Johnson". The signature is written in a cursive style with a large, stylized "H" and "J".

Harold J. Johnson, Associate Director
International Relations and Trade Issues

Contents

Letter	1
Appendix I Individual Cost Elements by Category	20
Appendix II Cost Categories and Shares	22
Appendix III Comments From the Department of Defense	23
Appendix IV Major Contributors to This Report	25
Table	Table 1: Comparison of DOD, CBO, and RAND Estimates 13
Figure	Figure 1: States Invited to Join and Interested in Joining NATO 3

Abbreviations

CBO	Congressional Budget Office
DOD	Department of Defense
NATO	North Atlantic Treaty Organization

Individual Cost Elements by Category

New Members’ Military Modernization and Restructuring

- (1) Modernization of 25 percent of planned ground force structure, by division
- (2) Procurement of refurbished I-HAWK type, wide area surface-to-air missiles
- (3) Procurement of refurbished Western combat aircraft
- (4) Modernized ammunition for ground forces
- (5) Modernized ammunition for air forces
- (6) Modernized ammunition storage for air forces
- (7) Modernized ammunition storage for ground forces
- (8) Increased proficiency in individual and unit training

Current Members’ Reinforcement Enhancements

- Highly aggregated cost estimate for deployable logistics sustainment that includes such things as engineering, transport, test and repair equipment, mobile logistics, special operations units gear, medical unit equipment, liquid oxygen equipment generators, and specialized firefighting equipment for
- (1) three allied divisions
 - (2) five allied wings

Direct Enlargement

- (1) Refurbishment and renovation of headquarter facilities
- (2) Communications and intelligence links to forces
- (3) Military education
- (4) Air sovereignty operations centers
- (5) Air command and control costs for initial capability, such as radar
- (6) Air command and control costs for mature capability, such as weapons engagement capabilities

-
- (7) Logistics equipment for initial capability, such as common fuel nozzles and standards and radio frequencies
 - (8) Staff-level planning for host nation support
 - (9) Continued compliance with North Atlantic Treaty Organization (NATO) standards and interoperability in logistics areas for mature capability
 - (10) Collocated operating bases to host reinforcing wings
 - (11) Compatible/interoperable fueling facilities
 - (12) Road and rail upgrades
 - (13) Staging areas for ground reinforcements
 - (14) Fuel storage and distribution infrastructure for reinforcing ground and air units
 - (15) Port upgrades
 - (16) Transportation and operations and maintenance for incremental exercises due to enlargement
 - (17) Upgrades to existing exercise facilities to approach NATO training needs and standards

Cost Categories and Shares

Dollars in billions				
Cost category	New members' share	Current allies' share	U.S. share	Total
New members' military restructuring and modernization	\$10 to \$13	0	0	\$10 to \$13
Current members' reinforcement enhancements	0	\$8 to \$10	0	\$8 to \$10
Direct enlargement	3 to 4.5	4.5 to 5.5	\$1.5 to \$2	\$9 to \$12
Total	\$13 to \$17.5	\$12.5 to \$15.5	\$1.5 to \$2	\$27 to \$35

Comments From the Department of Defense



STRATEGY
AND
REQUIREMENTS

ASSISTANT SECRETARY OF DEFENSE
2900 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-2900



JUL 28 1997

Mr. Harold J. Johnson
Associate Director, International Relations and Trade Issues
National Security and International Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Johnson:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "NATO ENLARGEMENT: Cost Estimates Developed To Date Are Notional," dated July 15, 1997 (GAO Code 711276/OSD 1412). The Department partially concurs with the draft report with the following observations:

Illustrative Cost Estimates. The principal conclusion of the draft GAO report is that the many uncertainties associated with the exact military implications and costs of NATO enlargement have precluded precise cost estimation, particularly in advance of identification of the countries initially invited to join the Alliance. DoD agrees with this conclusion. It was, in fact the basis of our decision in early 1997 to develop *illustrative* cost estimates rather than attempting to provide precise estimates based on the computation of numerous, detailed sub-elements.

Thus, of necessity, DoD's approach used aggregated cost factors intended to encompass a range of capabilities, and was based on an array of assumptions about how many and what kinds of countries would be invited to join NATO in the first round, the projected security environment, NATO's military strategy for an enlarged Alliance, the force posture chosen to implement that strategy, associated military requirements, and other variables. The GAO report assessment is that our key assumptions in these areas were reasonable. However, the report would be more accurate if it acknowledged that our methodology was explicitly to make reasonable assumptions and use aggregate cost estimates, not attempt a detailed, line-by-line costing.

Much more precise enlargement costs can be estimated as formal requirements are generated through NATO's defense planning process, which will begin to apply to the enlargement process in the 1998 cycle.

DoD's Basic Approach. In our analysis, we set out some basic tasks connected with enlargement, that an enlarged NATO will need to be prepared to



carry out if it is to be able to provide an effective Article V collective defense of the new members. First, current members must make additional progress in upgrading their regional reinforcement capabilities to be able to more effectively implement NATO's 1991 Strategic Concept. Second, new members must continue restructuring and selectively modernizing so that they can enhance their self-defense capabilities. Third, new members must increase their forces' interoperability with current members' forces and they, with the Alliance as a whole, must establish the levels of command and control, air surveillance, logistics and the like necessary for collective defense. Only the last category is a direct result of enlargement, and in that sense only that category is an incremental cost of enlargement. However, without the other two types of enhancements, an enlarged Alliance would not be as militarily credible or effective as it should be, nor as equitable in its sharing of defense burdens.

The Department agrees with the GAO conclusion that the costs of upgrades to current NATO members' regional reinforcement capabilities, and of new members' military restructuring, are not solely and uniquely related to enlargement, as was explicitly noted in the Administration's February 1997 *Report to Congress on the Enlargement of NATO*. Nevertheless, they represent important aspects of an effective collective defense of an enlarged NATO.

Results. Because of the uncertainties discussed above, studies of enlargement costs to date have resulted in a broad range of cost estimates. For this reason, the Department feels that GAO's comparison of the DoD study with those of RAND and CBO should address the full range of estimates produced by the three studies, i.e., DoD's \$27-35 billion estimate, RAND's \$10-110 billion estimate, and CBO's \$60.6-124.7 billion estimate. Such a comparison would reinforce GAO's major conclusion that extant uncertainties preclude precise cost estimation, while also delineating the significantly higher threat assumed by CBO for four of its five options, its resulting large stationed force posture, and associated higher costs.

Detailed, technical corrections to the report were provided separately. The Department appreciates the opportunity to comment on the draft report, and we look forward to working closely with the Congress in the months and years ahead as this important step forward in European security draws near.



Edward L. Warner, III
Assistant Secretary of Defense
for Strategy and Requirements

Major Contributors to This Report

National Security and
International Affairs
Division, Washington
D.C.

David Martin
James Shafer
Celia Thomas
Patrick Hickey
Hynek Kalkus
Pierre Toureille

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

**U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015**

or visit:

**Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

**Orders may also be placed by calling (202) 512-6000
or by using fax number (301) 258-4066, or TDD (301) 413-0006.**

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100

Address Correction Requested