

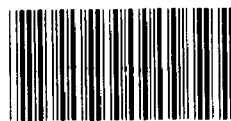
**GAO**

Fact Sheet for the Chairman,  
Subcommittee on Europe and the  
Middle East, Committee on Foreign  
Affairs, U.S. House of Representatives

January 1986

# AIR DEFENSE

## Cooperative Agreement Between the United States and the Federal Republic of Germany



128997

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UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

NATIONAL SECURITY AND  
INTERNATIONAL AFFAIRS DIVISION

January 15, 1986

B-221581

The Honorable Lee H. Hamilton  
Chairman, Subcommittee on Europe  
and the Middle East  
Committee on Foreign Affairs  
House of Representatives

Dear Mr. Chairman:

In response to your request of August 12, 1985, we have determined the status of, and the unresolved issues related to, the United States-German agreement on "Cooperative Measures for Enhancing Air Defense for Central Europe." The portion of your request dealing with selected provisions of the Arms Export Control Act is covered in a separate briefing report.

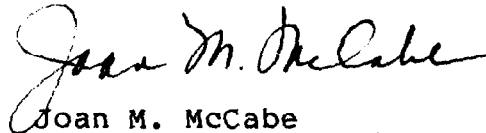
The air defense agreement is a multibillion dollar barter and foreign military sales arrangement that calls for essentially equivalent U.S.-German burden sharing for the defense of air bases in the Federal Republic of Germany using U.S. Patriot and French-German Roland surface-to-air missiles. The general air defense agreement was concluded in December 1983, followed by an implementation agreement in July 1984. The United States has not yet fully accepted the agreement pending clarification and finalization of some of its terms and conditions, including those related to (1) the type of air defense programs or efforts to be financed by the Germans and (2) the transfer of Roland missiles to the United States. The Department of Defense currently plans to finalize the agreement in March 1986.

In performing our work, we reviewed the legislation authorizing the agreement and background material about the agreement and its implementing provisions. We discussed the agreement and related matters with Departments of State and Defense personnel and a representative of the Raytheon Corporation, the Patriot system prime contractor. We also discussed the information presented in this fact sheet with agency personnel.

B-212581

Detailed information about the agreement is set out in the appendixes. Unless you publicly announce its contents earlier, we plan no further distribution of this fact sheet until 15 days from the date of this letter. Let us know if we can provide further assistance. I can be reached at 275-4128.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Joan M. McCabe".

Joan M. McCabe  
Associate Director

THE AGREEMENT ON COOPERATIVE AIR DEFENSE IN  
CENTRAL EUROPE BETWEEN THE UNITED STATES AND  
THE FEDERAL REPUBLIC OF GERMANY

In February 1983, the United States and the Federal Republic of Germany (FRG), recognizing the need to upgrade air defenses in Central Europe, began to discuss the problems of point and area defenses for air bases in Germany. They realized that a cooperative venture of some type was the only viable approach because of the magnitude of costs involved. The key focus of the talks was on the deployment of the U.S. Patriot and the German-French Roland surface-to-air missile systems<sup>1</sup> under the principle of equivalent contribution. In December, the U.S.-FRG general agreement was signed, followed by an implementation agreement in July 1984. The agreement has since been accepted by the FRG, but the United States has not yet accepted it pending clarification and finalization of some of its terms and conditions. Full acceptance of the agreement by the United States requires written notification to the FRG. The Department of Defense (DOD) expects to provide the notification in March 1986.

MAJOR COMMITMENTS  
UNDER THE AGREEMENT

The basic framework for the agreement on "Cooperative Measures for Enhancing Air Defense for Central Europe" was established on December 6, 1983, with the signing of a general agreement by the U.S. Secretary of Defense and the FRG Minister of Defense. On July 12, 1984, an implementation agreement was signed by the same U.S. and FRG officials. The agreement contains the following major commitments:

The United States will:

- Purchase and provide 14 Patriot units,<sup>2</sup> including one maintenance unit and one training unit, to the FRG at no cost.
- Waive or reduce certain charges (in return for FRG-provided goods and services) in connection with the FRG purchase of 14 Patriot units, including costs for

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<sup>1</sup>Additional information about these missile systems is in appendix II.

<sup>2</sup>A unit is defined as a "fire unit" consisting, for the Patriot, of a fire control station and its associated launchers and missiles, a maintenance section, and a decoy unit. The number of launchers can vary from five to eight, although eight is considered the standard configuration.

nonrecurring research, development, test, evaluation; production equipment; administrative services; quality assurance, inspection, and contract audit services; and other contract services, such as assembly, packing, crating, and transportation.

FRG will:

- Purchase 14 Patriot units.
- Purchase and provide 27 Roland units to the United States at no cost, and operate and maintain these units for 10 years at U.S. bases in the FRG.
- Operate and maintain 12 U.S.-owned Patriot units for 10 years at U.S. bases in the FRG.
- Spend \$50 million on air defense programs or other efforts.
- Purchase and operate 68 Roland units at FRG bases, 6 of which are collocated with U.S. bases.

The agreement and subsequent arrangements provide for German industry to participate in producing and maintaining both the U.S. and FRG Patriot units covered by the agreement. The U.S. prime contractor, Raytheon Corporation, has agreed to FRG industrial participation in the Patriot program for a total of \$500 million--\$330 million in production, \$70 million in production of limited-life components, and \$100 million in support facilities.

IMPLEMENTATION AND CURRENT  
STATUS OF THE AGREEMENT

DOD has been provided with specific legislative authority to implement the U.S. commitments under the agreement. Before acquiring that authority, DOD reported to the appropriation committees on the U.S.-FRG "cost balance" negotiated under the agreement, showing the equivalent contributions of each. Although the agreement is currently being executed, it is not yet in full force since all its conditions have not been met and it has not been finally accepted by the United States.

Authorization  
and funding

The Department of Defense Authorization Act of 1985, approved in October 1984, authorized the Secretary of Defense to carry out the U.S.-FRG air defense agreement. Because this authorization was limited to one year, in early 1985 the administration asked for legislative authority to implement the agreement over the life of the program, which involved transferring defense articles and services and waiving

administrative and other charges required for arms transferred under the Arms Export Control Act (AECA). The requested authority was included in the International Security and Development Cooperation Act of 1985, dated August 8, 1985. The act stated that the authority granted was an extension of the authority previously provided in DOD's 1985 Authorization Act.

Both acts contained similar provisions. They specifically authorized the transfer of the U.S. Patriot system to the FRG without charge in return for Roland systems and services stated in the agreement, and also gave the Secretary of Defense specific authority to, among other things:

- waive charges for administrative services normally charged in accordance with AECA section 21(e)(1)(A),
- waive other contract administration charges,
- provide one Patriot training unit without the assurance of advance payment required by AECA section 22, and
- use NATO's Maintenance and Supply Agency and share expenses for joint use of depot level support facilities.

The only funds specifically appropriated to implement the U.S.-FRG agreement were initially authorized in August 1983 by the House and Senate Armed Services Committees' conferees, who noted that improving NATO's air defense capabilities was urgent and imperative. They authorized \$200 million in fiscal year 1984 funds for NATO air defense. These funds were not requested by the administration; however, according to DOD, \$185 million is being used to purchase 3 Patriot units, 40 missiles and associated spares, as well as facilities necessary to initiate an increase in the Patriot production rate. If Congress approves, the remaining \$15 million will be used for research and development of anti-tactical missile radar sensors.

The administration did not request any additional funds specifically for the agreement in fiscal years 1985 and 1986 and none were provided by the Congress. The Senate Committee on Appropriations stated in November 1985 that the U.S.-FRG agreement is fully funded with the Army request. Funds for the Patriot units being provided to the FRG at no cost are included in the U.S. Army's overall program to procure 103 Patriot units.

#### Equivalent contributions

On October 22, 1984, the Secretary of Defense submitted a report to the House and Senate Appropriation Committees providing details on the negotiated air defense agreement. The report contained a schedule summarizing the financial balance under the agreement. The basic information in the schedule, which is in millions of constant fiscal year 1984 dollars, is shown below. It does not include all of the financial

commitments made by each country under the agreement or otherwise related to defending air bases in the FRG; it instead focuses on the major equipment and services to be provided by one country to the other. For example, the value of the Rolands and the Patriots to be purchased by, and operated mainly for the benefit of, the FRG is not included in the schedule as an FRG cost contribution. Similarly, the value of the Patriots to be purchased and operated by the United States to protect its bases in the FRG is not included as a U.S. cost contribution in the schedule or even specifically mentioned in the agreement as a U.S. commitment.

	<u>Estimated cost</u>	
	<u>U.S.</u>	<u>FRG</u>
	---(millions)---	
U.S. purchase of 14 Patriot units for FRG	\$ 875.3	
Waiver and reduction of costs for 14 Patriot units to be purchased by FRG:		
Research and development	128.3	
Other charges	88.0	
FRG purchase of 27 Roland units for the U.S.		\$ 239
FRG operation and support cost for 10 years for:		
12 U.S. Patriots		682
27 Rolands		170
FRG funding of NATO air defense programs and other efforts		50
	<u>\$1,091.6</u>	<u>\$1,141</u>

We did not attempt to independently determine the accuracy of the estimates, but we did generally discuss them with DOD officials to determine how they were developed.

U.S. purchase of Patriots for FRG

The estimate of the U.S. cost contribution for the Patriot units to be purchased by the U.S. Army and given to the FRG is based on the purchase price of these units. The price does not include nonrecurring research and development and other costs estimated to range from \$135 million to \$216 million. As discussed in the following section, the United States waived similar charges for the 14 Patriot units purchased directly by



the FRG and included those waived charges as part of the U.S. cost contribution under the agreement. DOD officials told us that the FRG would not agree to recognize similar charges as a U.S. contribution for the Patriot units being given to the FRG because such charges would not be included in the price the U.S. Army would pay for the units.

Waivers and reductions for  
FRG purchases of Patriot

On February 8, 1985, the FRG agreed to purchase 14 Patriot units, including 779 missiles, at an estimated cost of almost \$1.2 billion, which excluded nonrecurring research and development and other costs.

Nonrecurring research and development and production costs are normally charged on Foreign Military Sales (FMS) of major defense equipment. However, AECA section 21(e)(2) permits these charges to be reduced or waived for such sales that significantly advance U.S. interests in weapons standardization with NATO and a few other countries. These costs were estimated at \$128.3 million for the FRG purchase of 14 Patriot units. DOD later revised its estimate to \$129.9 million with \$113.8 million applicable to nonrecurring research and development and \$16.1 million to nonrecurring production costs. In its quarterly report on waivers for the period January to March 1985, DOD stated the \$129.9 million for the Patriot missile system was being waived in consideration of NATO standardization.

AECA section 21(e)(1)(A) provides for charging for administrative services. However, Congress, in providing authority to implement the agreement with the FRG, specifically authorized the waiver of this provision and the waiver or reduction of other charges normally assessed under FMS agreements. DOD originally estimated the waived or reduced charges at \$88 million but now has revised its estimate to \$52.5 million, consisting of \$6.1 million for packaging, crating, and handling; \$1.4 million for transportation charges; \$10.5 million for quality assurance and inspection; and \$34.5 million for administration. The principal reason for the reduction is the deletion of assembly costs. Originally, the units were to be partially assembled in the United States, but now they will be completely assembled in Germany.

AECA section 22 requires an assurance of payment in advance of delivery. Congress provided authority to waive this requirement for the delivery of one Patriot training unit. The cost of this waiver is not included in the schedule, and DOD officials told us that they do not plan to implement this waiver. The United States currently plans to provide an existing U.S. Patriot training unit to the FRG, which will be replaced by the unit produced under the FMS agreement.

FRG-furnished Rolands

We did not obtain any details on the FRG cost of \$239 million for 27 Rolands to be provided to the United States. We were informed, however, that it was based on the price to be paid by the FRG to the manufacturer.

FRG operations and maintenance support

DOD stated the \$682 million was not based on FRG cost but on an estimate of U.S. savings due to FRG operational support. A supporting schedule showed this estimate primarily consisted of \$60.7 million annually for 10 years, or \$607 million (mainly for personnel). The other \$75 million was explained to us as the estimate of initial start-up costs, mainly for common equipment and construction, that the United States would not incur because of FRG support.

The estimated Roland operation and support costs of \$170 million were based on FRG average costs of \$17 million annually for 10 years.

FRG funding of NATO programs and other efforts

The \$50 million in funding for NATO air defense activities was not based on any actual or estimated costs, but rather as an estimated offset to some of the U.S. costs being waived. The type of efforts to be funded has not been agreed to between the two countries. DOD has begun examining an FRG proposal of December 13, 1985, which provides for a number of programs or other efforts to be started over the next several years. A DOD official told us the proposal probably will have to be revised because some of the efforts included in it may not be new initiatives, but those that would have been undertaken by the FRG even if there was no agreement.

Deliveries and deployments

The agreement provides for deliveries of the 40 Patriot units (14 sold to the FRG, 12 U.S.-owned but FRG-operated, and 14 given to the FRG) to start in calendar year 1986 and to be completed by 1992. The 27 Rolands are to be delivered to the United States between 1987 and 1989. The agreement is silent with respect to deliveries of the 68 FRG-owned Rolands.

In addition to the Patriot units covered by the agreement, the United States will deploy and operate more than 40 other Patriot units to help defend U.S. bases in the FRG (see app. II).

In reports to the Senate and House Appropriations and Armed Services Committees in March and October 1985, the Secretary of the Army stated that three Patriot units were deployed to Germany in January 1985, a second group of three units arrived in June 1985, and a third group of three units is scheduled for deployment by mid-1986. They will be operated by U.S. personnel and therefore are not among the 40 Patriot units covered by the agreement. A DOD official told us production of the Patriot units is essentially on schedule with about a month's slippage in the program schedule.

Agreement implementation status

The July 1984 implementation agreement stated that implementation of both the general and implementation agreements would require additional legislative authority and required the United States and the FRG to notify each other in writing as soon as sufficient legislative authority had been obtained. In January 1985, the FRG provided the required written notification. However, the United States has not done so pending clarification and finalization of some agreement provisions, including finalization of the terms on the transfer of Rolands to the United States, the type of data link terminals and friend or foe identification units to be used, the type of programs or efforts to be financed by the FRG, and the terms relative to the FRG furnishing certain equipment for U.S.-owned, FRG-operated Patriot units in lieu of U.S.-furnished equipment. DOD officials said that most of the problems have now been solved and DOD plans to finalize the agreement in March 1986.

PATRIOT AND ROLAND SURFACE-TO-AIR  
DEFENSE MISSILE SYSTEMS

The Patriot missile system is a highly mobile area defense weapon system capable of engaging multiple targets simultaneously. It will replace the Nike Hercules surface-to-air missile system in providing air defense against high-to-medium air threats. The Raytheon Corporation is the system contractor, and Martin Marietta Corporation is the prime contractor for the missiles. Current plans call for the Army to procure a total of 103 units and about 6,000 missiles at a cost of about \$10 billion. Sixty of the units (54 for operations and 6 for training and maintenance) are for U.S. bases in the FRG; 14 units to be provided to the FRG at no cost as part of the air defense agreement; and the remaining 29 units will remain in the United States for training and rotational purposes. The first production units were delivered to the Army in 1982. In addition, the FRG will purchase 14 Patriot units; the Netherlands will purchase 4. Other countries considering purchasing or producing the Patriot include Belgium, Italy, and Japan.

The Roland missile system, of French-German origin, is a low-altitude system for point defense near air bases, providing protection against aircraft that penetrate area defense systems. In accordance with the air defense agreement with the United States, the FRG will procure 95 Roland systems--27 provided to the United States at no cost for protection of its bases in the FRG and 68 for the protection of FRG bases, 6 of which are collocated with U.S. bases.

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