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# **European Community Defense Industries: Threat to U.S. Competitiveness?**

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"Americans want more than just a level playing field--they want to win."

-- Boone Pickens

## INTRODUCTION

Our world has changed dramatically over the past several years. The international environment is still in flux and no one is quite sure what we will face as we move into the next century. It is against this backdrop that defense industries worldwide are deciding what course they will take for the future. Defense industries in both the United States and Europe are facing the same constraints and opportunities posed by the changing environment. The question is who will adapt to the situation in the most effective and efficient manner--who will be in a better position to meet the challenges at the turn of the century.

Whether European defense industries are able to pose a competitive challenge to the United States as we move into the next century depends on a number of developments in which none of the outcomes are certain. The first is the nature of the security and economic relationships between the United States and its European allies. The degree to which these relationships remain cooperative or become confrontational will determine the type of competition that will develop in the defense sector. The second issue is how the European countries resolve the role of the European Community (EC) in national defense and security policies, especially in the

area of defense industry. The third development is U.S. defense industry policy and the degree to which the United States remains a viable industrial force capable of meeting competitive challenges.

This paper looks at the issue of competition between the U.S. and European defense industries as we move toward the year 2000. It is a survey of literature<sup>1/</sup> addressing the developing relationships between the United States and Europe, relationships within Europe itself as it wrestles with the processes of unification, and possible U.S. policies to strengthen its own defense industries and meet the potential challenge from Europe. The paper presents a broad scope of alternative views held by the many experts on these issues. Based on these views, the paper lays out a set of policy recommendations reflecting the majority views of the experts surveyed in the literature.

#### **THE NEW DEFENSE INDUSTRIAL ENVIRONMENT**

As mentioned earlier, the changing world environment poses new constraints for defense industries on both sides of the Atlantic.

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<sup>1/</sup> Although originally intended to be a comprehensive literature review, considerably more documentation on these subjects was found than initially anticipated. This survey, therefore is a representative sampling of the available literature reflecting the range of opinions held on these issues. Detailed citations for the references in parentheses can be found in the bibliography. For the sake of brevity, U.S. government documents are referred to only by their document number, with full citation in the bibliography.

The disappearance of an overt threat from the once menacing Soviet Union and its allies has led to pressures in both the United States and Europe to cut defense spending. Reduced defense budgets will limit the number of future weapon systems acquired in Europe as well as the United States. Additional arms control agreements could further limit these numbers. As a result, the future NATO market for weapons will be substantially curtailed for both U.S. and European weapons producers.

At the same time, the remaining markets outside the NATO alliance will provide even fewer opportunities for defense sales than in the past. Not only has the world market for weapons become saturated, but many smaller nations have become defense producers, themselves, adding to world capacity in a shrinking market. In addition, these smaller countries can provide considerable competition for the remaining markets. The weapons systems they are producing are not the most technologically advanced, but they are often adequate for the needs of many Third World countries. These simpler designs can be offered at prices far more competitive than either the United States or Europe can grant.

The continued promotion in Western countries of advanced technologies has led to the development and acquisition of increasingly complex weapons systems. While these advanced systems are more capable and require fewer numbers to meet strategic objectives, the concurrent increase in weapons costs has become

prohibitive. Not only are costs for R&D and manufacturing processes rising because of the greater complexity of the technologies, but the smaller production runs mean the per unit cost for each weapon is significantly higher as well. Reduced national defense budgets are simply unable to continue funding the acquisition of so many advanced systems. This will require significant weapons trade-offs in the future and some defense manufacturers will no longer have customers for their products.

Such changes in the defense sector environment are further complicated by the trend toward greater international economic interdependence and increased competition from foreign companies for domestic markets. "Globalization" of the market place has led to a stronger tendency toward protectionism on both sides of the Atlantic. The growing interdependence is particularly important for national security because of the increasing dependency on foreign sourcing for critical defense components. Such issues have sparked considerable debate over free trade versus protectionist policies. At the one extreme are those who argue that globalism is an undesired development because nations will always exist and act in their own interests.<sup>2/</sup> At the other extreme are those who argue that the nation-state will gradually disappear altogether and all economic transactions will operate without borders. (Hart and

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<sup>2/</sup> For example, see Paul Cregan, America Asleep, in which he refers to the concept as "globaloney" and argues that our mesmerization with the idea of world-wide free trade has led to our decline and loss of world leadership.

Thurrow in Altschiller, 1988) This debate becomes important to defense industries as countries consider more free-market type policies for managing their defense sectors in our new world environment. Initially, the move toward free-market concepts was confined within a country, but is now being extended not only to groups of countries, such as the EC, but also to alliances, such as NATO. (Webb, 1989)

From the U.S. viewpoint, the defense environment presents even further complications. The United States, which until recently had a large domestic demand for defense production, chose not to support its defense industrial base by promoting exports. We further limited our exports by pursuing a nonproliferation policy for advanced weapons systems, and by restricting our allies who have purchased our weapons or technology from selling U.S.-origin defense items to third countries. As our own defense industrial base contracts, we will now find ourselves competing in a declining market with Europeans and other defense producers who have placed no such restrictions on their defense industries and who do not want to purchase our weapons with such strings attached.

In the past, the United States has been competitively strong in the defense trade arena because of our lead in so many defense related technologies. We have had the ability to design, develop and produce the most advanced weapons systems for our own forces

and those of our closest allies.<sup>3/</sup> At the same time, however, the European nations have desired a domestic production capability in order to reduce their dependence on the United States. In order to increase the Europeans' share in the burden of a common defense, we have supported to some extent the development of European indigenous defense production. This has been primarily through the reciprocal procurement memorandums of understanding (MOUs)<sup>4/</sup> between the United States and the other NATO countries that were agreed to in order to level off the U.S. advantage in defense trade vis-a-vis the Europeans and promote greater burdensharing<sup>5/</sup> in the alliance. Although the agreements are designed to be a two-way street, they have never been reciprocal and the Europeans do not view them as such. These agreements are intended to ensure that US and EC defense contractors are not discriminated against in each other's home country. However, since the US defense procurement budget is much greater than the combined European budgets, European firms enjoy more nondiscriminatory access. While US companies will get

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<sup>3/</sup> For a history of NATO weapons cooperation and trends, see Simon Webb, NATO and 1992: Defense Acquisition and Free Markets, July 1989 and United States Congress, Office of Technology Assessment, Arming Our Allies: Cooperation and Competition in Defense Technology, OTA-ISC-449, May 1990.

<sup>4/</sup> For a description of the background and issues involved in the MOUs, see United States, General Accounting Office, International Procurement: NATO Allies' Implementation of Reciprocal Defense Agreements, GAO/NSIAD-92-126, March 1992.

<sup>5/</sup> For a history of the issue of burdensharing and its complications in NATO relations, see Ethan Barnaby Kapstein, The Political Economy of National Security: A Global Perspective, pp. 169-172 and Christopher Coker, Drifting Apart?: The Superpowers and Their European Allies, pp. 35-52.

non-discriminatory access only up to 25% of the EC government market, EC companies will get 80% non-discriminatory access to the US government purchases. (GAO/NSIAD-91-167; Williams, Teagan, and Beneyto, 1990)

The effort has been so successful that European defense industries are now able to compete directly with U.S. industries for their share of the world market in weapons and defense equipment. While there are different assessments of how successful Europe will be in future competition, there is general agreement that the playing field will probably be more level in the future, to the detriment of U.S. industries. Further, the decline in domestic demand for U.S. weapons will lead U.S. weapons producers to pursue European markets for their products more aggressively than in the past. Although European sales are only a small portion of total defense sales (1-9%), as U.S. defense budget cuts reduce business, European markets will become more important to US firms' business. Since European defense markets are declining as well, this will put even greater pressure on European defense industries to compete with the United States on an equal footing and lead to calls for reciprocal access to the equally declining U.S. defense market.

## **THE EVOLVING U.S.-EUROPEAN RELATIONSHIP**

This new defense industrial environment has raised concerns about the future of the Atlantic Alliance as Europe moves toward a single market and economic tensions mount. The fear is that the already adversarial aspect of transatlantic economic relations (GATT negotiations) will be further exacerbated by the EC 1992 process and spill over into defense trade with damaging implications for the future political cohesion of NATO. As one reading put it, "War is hell, but the trade version makes hell attractive--protectionism in an area as important as defense among allies will trigger such a war and undermine the alliance."<sup>6/</sup> The political aspects are entwined with the economic--successful completion of a unified market will expand Europe's ability to compete with the United States, and with economic weight could come political might, especially if political integration follows economic integration. A merged Western Europe, therefore, will seriously challenge American power and call into question our future relationship within NATO. (Kegley and Wittkopf, 1991)

### **The European Security Environment**

A reduced security threat and progress toward European political and economic unification have combined to give Europeans the confidence to develop a more assertive approach to their security concerns. At the same time, the unification process has

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<sup>6/</sup> Michael Silva and Bertil Sjogren, Europe 1992 and the New World Power Game, p. 253.

renewed the debate over the political and strategic direction of the European Community (EC). In particular, there is a divergence of views about the long-term security relationship with the United States.<sup>1/</sup>

The future of the Atlantic Alliance has been the subject of many comprehensive studies in recent years. (Kegley and Wittkopf, 1991; Webb, 1989) Holders of one perspective doubt whether the United States will continue its commitment to Europe indefinitely. (Cregan, 1991) Proponents point to the large U.S. budget and trade deficits, and the increasing importance of economic links with the Pacific Rim countries. From this viewpoint, closer European political and defense cooperation is seen as a practical hedge against the probability of U.S. withdrawal. This school of thought includes those who believe the United States should not continue spending money to defend Europe. Europe is characterized as selfish and gaining an economic advantage at our expense because they are not spending as large a portion of their GNP on their own defense. (Culbertson in Altschiller, 1988)

A more radical version envisions a greater Europe detached from the both the United States and the former Soviet Union, in which the post-war division of Europe is erased. This point of view is generally held by Europeans that want to re-make Europe in

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<sup>1/</sup> For a historical discussion of U.S.-EC relations see Clifford Hackett, Cautious Revolution: The European Community Arrives, pp. 189-216.

order to mark themselves off from America. They are determined to create a specifically European security entity. Some want to enhance the European voice within NATO, but most want to give Europe an independent voice on global issues, particularly those affecting its own security. They hope to use their voice to influence U.S. policies. In some situations, Europeans may want to be able to cooperate with us, even when they want to appear to be separate and independent actors. At other times they may want to be able to take a different line when they disagree with us. (Walker in Wharton, 1992; Rummel, 1992)

The central and most enduring viewpoint is that a U.S. commitment to the defense of Europe is essential for a stable strategic posture. To be convincing, this commitment requires not only an explicit U.S. strategic guarantee, but also the presence of conventional forces and theater nuclear weapons in Europe. Supporters of this viewpoint do not believe that Europe is capable of mounting a credible substitute for U.S. forces. They fear that withdrawal of the U.S. commitment would leave Europe unable to deter any subsequent return to expansionism by Russia.

From this perspective, greater defense cooperation within Europe is seen as valuable in helping modernize the Alliance's conventional forces and reassuring the United States that Europeans will bear a proper share of the defense burden, but not as a precursor for self-sufficiency. This view holds, therefore, that

Europe and the United States are joined inevitably for the future.  
("Survey", The Economist, 1 September 1990; Eide in Wharton, 1992)

There are many variations across this continuum, but most experts believe that whether NATO survives or not, there will eventually be some European security arrangement that will include the United States and Canada in its structure. The agreement on future cooperation in the security arena will greatly affect the future of defense procurement among the current NATO allies. Continued security cooperation will enhance the cooperative approach to procurement because of the need for standardization, the desire for greater European burdensharing, and the trend toward greater equalization within the procurement market.

### **The European Economic Environment**

In 1985, the EC<sup>8/</sup> approved a program to remove all physical, technical, and fiscal barriers to internal trade by December 31, 1992. This program, known as EC 1992, is behind schedule, but when fully implemented is intended to affect all goods traded in or with the EC.<sup>2/</sup> While defense trade is specifically excluded, there

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<sup>8/</sup> For a description of the EC organization and structure, see Emile Noel, Working Together--The Institutions of the European Community, 1988.

<sup>2/</sup> For detailed discussions of the history, development and current initiatives of the European unification process see: Michael Calingaert, The 1992 Challenge From Europe; Clifford Hackett, Cautious Revolution; Nicholas Colchester and David Buchan, Europower; Gary Clyde Hufbauer, Europe 1992: An American Perspective; Spyros G. Makridakis, Single Market Europe; Robert Williams, Mark Teagan, and Jose Beneyto, The World's Largest

remains considerable debate over whether the program should be extended in the future to cover this sector.<sup>10/</sup> In any event, most experts agree that defense industries will be affected by the 1992 program by association with related civil industries. (Reed, June 1989; Edwards, 1989; GAO/NSIAD-91-167)

Much of what develops in the defense industrial sector will depend on the degree of success in achieving the objectives of the unified European market and the character of that market, if achieved. The spectrum of views on the likelihood of success is broad.<sup>11/</sup> A minority view believes that the eventual single market will exist only on paper. Some contend that history clearly argues against success and would require the unlikely convergence of many different factors to provide any hope at all. (Silva and Sjogren, 1990) Others argue that the program is encouraging and logical, but that despite the good will, bureaucratic obstacles are too great to realize eventual implementation. (Allen and Smith, 1992)

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Market: A Business Guide to Europe 1992; and Pascal Fontaine, Europe--A Fresh Start.

<sup>10/</sup> This debate is discussed in more detail in the section on European defense industrial policies.

<sup>11/</sup> A more radical element takes the view that the creation of single market will bring about the collapse of the world as we know it. In the Bible, Leviticus predicts a time when "ten women shall bake their bread in the same oven," which is the symbolic event signaling the impending end of the world. Some Christians point to the unification of Europe into one common market as the prophesied event. This argument is cited in Michael Silva and Bertil Sjogren, Europe 1992 and the New World Power Game, p. 101.

The more general outlook, particularly on the part of government organizations on both sides of the Atlantic, is positive about the future of EC 1992. EC organizations see the process as inevitable--a requirement for survival in the new world economy where they have to compete with the United States and Japan. This perspective holds that the process of EC 1992 is now irreversible and that remaining hurdles will be overcome. Furthermore, it will lead to success with European monetary union and political union, as well. (Brock, Friedman, Robb, Hunter and Yochelson, 1990)

Promoting European economic integration has been a goal of American foreign policy since the 1950s, and officially it remains so according to the State Department:

"Our reasoning is simple...an economically integrated Europe promotes political and social integration, and a United Europe--a strong Europe--is a cornerstone of U.S. policy. At the same time, if 1992 is implemented in a closed or protectionist manner, it would cast a pall over the future, giving succor to those that would prefer isolation, self-sufficiency, and protection. If 1992 results in an inward-looking European Community, it could prompt others to respond in kind." <sup>12/</sup>

Fortress Europe is the term often used to express concern that the 1992 process might cause the community to turn inward.

As might be expected, the range of views on the eventual character of the single European market is also quite broad. A few, but optimistic, believe that the idea of a fortress Europe is

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<sup>12/</sup> Cited in Charles W. Kegley, Jr. and Eugene R. Wittkopf, American Foreign Policy: Pattern and Process, p. 202.

a thing of the past and promote the idea of moving toward free and open markets between Europe and the United States. This view maintains that European exports and Europe's position as the world's largest trader are too important to be placed in jeopardy. Holders of this view argue that EC 1992 has been driven largely by multinational companies of Europe, and it is in their best interests to ensure that a global trade war does not erupt. Further, they maintain that the underlying philosophy of the EC 1992 process is to open up Europe in order to spark competition so that increased efficiency and innovation develop--protectionist actions would defeat these lofty ambitions. It is believed that the opportunities, both political and economic, offered by EC 1992 will greatly benefit the United States. (Williams, Teagan and Beneyto, 1990; Brock, Friedman, Robb, Hunter, and Yochelson, 1990)

On the other hand, most observers agree that the current tendency of the single market has been toward protection of European industries from outside competition. Even those who do not feel the process is promoting protectionist policies admit that particular sectors could impose barriers to non-EC countries for a variety of political and social reasons. (Williams, Teagan and Beneyto, 1990; Reed, 1989) Europeans have shown that an effective combination of government policies and management incentives can produce winners, such as Airbus. Holders of this perspective believe that the areas likely to be protected by the EC are those sectors specifically targeted for development or that have received

protection in the past. (Edwards, 1989; GAO/NSIAD-91-167) Many of these are important to defense industries and include:

- o Advanced materials
- o Manufacturing processes
- o Electronics
- o Biotechnology
- o Telecommunications
- o Aircraft

#### **EUROPEAN DEFENSE INDUSTRY POLICIES**

Given the trends in the new defense industrial environment and the potential for stress in the relationships between the United States and Europe in the future, how the Europeans proceed in restructuring their defense industries in the context of the EC initiatives will be critical.

##### **Policy Debate**

In the past, there has been a strong consensus within the EC that defense and security issues should remain the purview of individual national sovereignty and should not become part of an integrated European approach to security. This view was contained in the language of the Treaty of Rome, Article 223, which specifically excludes "the production of, or trade in, arms, munitions and war material" from any EC rules. (Colchester and Buchan, 1990)

With the passage of the Single European Act, however, this consensus has begun to unravel. Those who believe that Europe should have common security and defense trade policies support the moves of the European Commission, which on behalf of the EC has increasingly expanded its authority into security and defense issues. While the final provisions of the Single European Act are careful to acknowledge that NATO (and the WEU) are essential for military coordination, the Act's Article 30(6c) leaves open further EC coordination on the "political and economic aspects of security." Seizing this as their legitimate agenda, the "Euros" of the European Commission proposed policies to harmonize tariffs on defense items imported into the EC, to standardize technology transfers and export control practices, and to set common regulations concerning product standards and mergers and acquisitions. There is considerable disagreement among the nations as to whether the European Commission has the jurisdiction to set policy on these defense issues, and the UK, for one, has flatly refused to agree to the proposals. (GAO/NSIAD-91-167)

Disagreement on EC policy has not prevented Europeans from beginning the actual process of rationalizing their defense industries to more effectively compete in world markets. Parallel to the EC programs, and to a large extent more important, are the programs of the Independent European Program Group (IEPG).<sup>13/</sup> Here,

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<sup>13/</sup> The IEPG is not part of the EC structure. Its members include all the European nations of NATO except Iceland. It was set up in 1976, but only really began to function in 1984. For

again, there is a lack of consensus on the degree of latitude to be given to the IEPG in terms of binding decisions. Even though the EC countries are divided over its future status, the IEPG has made some slow progress in implementing proposals in areas where agreement can be reached. Such progress demonstrates European commitment to maintenance of a continental defense industry in the face of American competition since this organization is tasked specifically to restructure European defense industries in order to become more competitive with the United States. (Kapstein, 1992)

#### **Potential Impact of European Programs**

The development of the EC 1992 program,<sup>14/</sup> while not directly affecting the defense industrial sector, will certainly influence much of the production within these industries because of dual-use technologies and cooperation with other programs under the IEPG that complement those of the single market program. Some experts believe that the combination of tariffs, subsidies, local content rules, and encouragement of European companies to cooperate (consortia, mergers, etc.) will make US company sales in Europe more difficult and will force US companies to face stiffer European

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discussion of IEPG history and current work program, see Carol Reed, "1992: IEPG-EDIG--For and 'Open" European Defense Market?", Defence, September 1989, pp. 705-709.

<sup>14/</sup> For a discussion of the potential implications of the general EC 1992 program, see United States, Office of the U.S. Trade Representative, Task Force on the EC Internal Market, EC 1992: An Assessment of Economic Policy Issues Raised by the European Community's Single Market Program, May 1990.

competition at home. Some believe that the European Commission proposals will eventually be realized and will form the basis for a united European position with respect to the major U.S. defense producers. (Williams, Teagan, and Beneyto, 1990)

Others conclude that most of these issues pose little concern for the United States. They consider the tariff proposal dormant and not likely to be implemented because of the Commission jurisdiction issue. They point out that the rules-of-origin and product standards issues are directly tied to resolution of the tariff issue and are expected to meet NATO guidelines in any event. In addition, they argue, technology transfer concerns are being dealt with in the context of COCOM--in which the United States has a leading role. (GAO/NSIAD-91-167)

On the other hand, there is general agreement across-the-board that the issue of "blocking" U.S. restrictions on U.S. products and technology reexport is a direct challenge to U.S. legislation and licensing policy and is being used to exclude U.S. manufacturers from participation in European defense projects. The formation of large defense conglomerates is also considered a threat. Some of the biggest mergers attributed to EC 1992 have occurred in defense-oriented companies--the Siemens(German)-General Electric Corporation (UK) takeover of Plessey (UK), the West German "marriage of the elephants" between Dornier-Daimler-Benz-AEG and Messerschmitt-Bolkow-Blohm (MBB), Thomson-CSF's (French) purchase

of Philip's (Dutch) defense company HSA, and so on. While such moves toward consolidation of defense manufacturers are a natural progression of industry rationalization across European borders, the mergers are also explicitly intended to make European firms more competitive and gain a larger market share at U.S. expense. (Harrop, 1992; Kapstein, 1992; Young and Hamill, 1992; Colchester and Buchan, 1990; Reed, June 1989; and Van Tulder and Junne, 1988)

One expert pointed out an additionally significant concern that has not yet been addressed by others. As defense industries restructure to meet the challenges of our new environment, they are frequently deciding to rely more on dual-use technologies and civil sector inputs to produce the components and subassemblies for weapons systems. An area of growing worldwide competition and an increasingly important part of U.S. defense trade, these dual-use products will be directly subject to EC rules of origin, product standards, and export controls. According to this view, issues affecting dual-use production should be watched more closely in the EC 1992 context than those relating to major end items. As European initiatives have shaped up, it may not be by accident that it is precisely the dual-use production that is most likely to be affected. (Edwards, 1989) It is also interesting that defense industries have been more attracted to the EC-sponsored civil/dual-use R&D programs (such as JESSI, EURAM, and ESPRIT) than they have been to the specifically defense R&D program, EUCLID--all

programs that have to date tended to exclude U.S. participation. (Clark and Lilley, 1989; Colchester and Buchan, 1990)

Of greater concern to major weapons systems producers are the IEPG plan and the independent initiatives of European defense producers. The IEPG program, if successfully implemented, could reinforce increasing preference for European firms in conducting defense research, development, and procurement and could potentially exclude the United States. (GAO/NSIAD-91-167) Notably, progress in R&D cooperation, the application of political pressure to buy European equipment over U.S. equipment, and the efforts to eliminate offsets on bids among Europeans--but not for Americans--are all combining to reinforce a mindset that gives preferential treatment to European industries to the detriment of American.

Also of concern are developments occurring in the European defense market outside the EC 1992 and IEPG programs. European governments consider defense industries such as aerospace, computers and microelectronics to be the determinants of future international competitiveness. As a result, defense industrialists point out that they do not need a common EC policy on defense related issues to begin collaborating on ventures, such as AIRBUS, because they are aware of the changes taking place in the world and of the need to stay competitive. (Dosser, Gowland, and Hartley, 1982) Such independent initiatives will tend to be protectionist

toward non-European companies. The EC 1992 programs, which demonstrate the European desire for greater competition and freer trade, are likely to serve as cover for activities that are exclusionary. EC policies have proven to be weak in preventing industrial collusion and officials tend to look the other way when European interests are at stake.

There is growing U.S. resentment of EC policies because of the perceived increasing preference for European firms in European defense contract awards. A fairly clear and consistent picture of European policy has begun to emerge. It is far from official, and no one in either the EC or member state governments has yet explicitly stated it, but the signs seem to point to a "defense/technological bloc" under construction within the Community. These perceptions are reinforced by the potential restrictions and barriers inherent in the EC economic integration plans. (Flamm in Hufbauer, 1990; Burt, 1988)

U.S. firms believe Europeans deliberately direct purchases to domestic industries, which is fairly easy to do since few European countries stress competitive sourcing for defense procurement. In fact, in some countries the majority of defense contracts are negotiated without competition, or any bidding is limited to particular, invited firms. Without access to the European process for major weapons systems procurement, U.S. industrialists believe

they will increasingly function as subcontractors in European defense business.

In any event, US companies will be treated far less favorably in Europe than European companies are treated in the United States because of the MOUs governing the purchase of defense articles. The MOU agreements, in the current environment, place U.S. firms at a competitive disadvantage and have contributed to the growing perception in the U.S. government and industry of increasing European preference and discrimination in contract awards. The issue is extremely difficult to prove since the evidence is anecdotal and circumstantial, but the impression of bias is strong and is shared by Canada, as well. (GAO/NSIAD-91-167; Williams, Teagan, and Beneyto, 1990)

Despite the general consensus that European trade policies will less than open, particularly in the defense sector, there are some experts who believe that the opportunities offered to the United States by the EC 1992 program will far outweigh any disadvantages. This view holds that the EC will be unable because of political pressure to raise any of the potential exterior barriers. With the lowering of internal barriers, outside competitors will benefit as well. (Makridakis, 1991; Rosenthal in Hufbauer, 1990) It is also argued that charges of U.S. exclusion is not as big a problem as some claim because many U.S. defense firms that are interested in doing business in Europe have

acquired EC corporate identities as a way around protectionism and as a way to take advantage of European growth opportunities. These companies are particularly strong in the critical defense-electronics sector. (Brock, Friedman, Robb, Hunter and Yochelson, 1990; Reed, June 1989)

The greater consensus of thought argues that even if the above were true, the defense industrial sector is not likely to benefit from the lowering of internal barriers because of continued national desires to maintain minimum domestic production capabilities at any cost. In this case, the formation of cartels based on juste retour (to each according to his contribution) for collaboration will continue. Such collaboration will defeat the concept of competition and any attempts to make the European defense industries more profitable. (Kapstein, 1992; Colchester and Buchan, 1990; Reed, June and July 1989) In one version, this is viewed as a recipe for failure, resulting in European inability to compete with the United States either technologically or financially for defense markets. (Kapstein, 1992; Heisbourg, 1989) In another version, the current trend toward covert collusion and exclusion of U.S. companies grows until a virtual trade war breaks out and subverts the Atlantic Alliance itself. (Burt, 1988; Webb, 1989)

### **The European Perspective**

When confronted with charges of "fortress Europe" Europeans

argue that the United States has been pragmatic about its free trade philosophy with respect to defense trade, too. In fact, a comparison of the Office of the U.S. Trade Representative's report on EC barriers to trade with the EC report on US barriers reveals an almost identical list of complaints. Europeans feel their actions are in response to US practices of protection rather than a type of protectionism initiated by Europe. They argue that the U.S. market for major weapons systems is dominated by U.S. prime contractors, leaving European companies principally in a role of subcontractors at second or lower tiers of production. They also believe that the U.S. gives preference to U.S. industries in contract awards. (Gillibrand, Johnston, and Niblett, 1991)

Europeans do not want to be dependent on the U.S. and it is clear to European leaders that the country that achieves dominance in the high-tech areas will dominate all industries that depend on them, including defense. (Makridakis, 1991) In particular, they believe preferential procurement is necessary in biotechnology, lasers, communications systems, electronics, and information systems. These are areas in which Europe must compete with the United States, which they argue has a tremendously large defense budget that subsidizes these efforts. (Strange in Altschiller, 1988) The Star Wars program, though roundly criticized by West European politicians on doctrinal grounds, was regarded by European defense industrialists as a threat to their own ability to compete with the United States in high-tech weaponry. In most cases, any

alliance impetus for the acquisition of high-tech weaponry is viewed as camouflage for a "Buy American" campaign. (Mason in Clark and Lilley, 1988) The general European industrial consensus is that Europe lags the United States in defense production capability because they are behind in technological development. (Harrop, 1992) Others argue, however, that the technology gap is a myth, and what really exists is a management gap. (Sharp, 1986)

Europeans in general agree that protectionism is rational if there are very good social reasons for it, and/or if there is plenty of competition in the domestic market. This is the basis for their approach on steps to rationalize their defense industries. They recognize that these industries suffer from overcapacity, redundancy, and built-in inefficiencies. A Congressional Research Study<sup>15/</sup> found that European defense industries are:

- o considerably smaller in size than US firms
- o relatively few in terms of major suppliers of defense equipment per country
- o duplicative from country to country
- o frequently nationalized<sup>16/</sup>
- o heavily subsidized.

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<sup>15/</sup> Margaret Berry Edwards, EC 1992: Potential Implications for Arms Trade and Cooperation, Congressional Research Service, p 10.

<sup>16/</sup> For a discussion of the European effort led by Jean-Jacques Servan-Schreiber to develop an independent Europe by creating National Champions to compete with United States, see Robert R. Reich, The Work of Nations, pp. 66-67.

As pointed out earlier, since most have too small a domestic market, they have excess capacity and must rely on trade with the rest of the world to extend production lines and bring down per unit costs of weapons systems.

Due to these conditions, there has been considerable incentive to "buy national" to sustain domestic production capabilities. However, there are other reasons, as well, that the Europeans deliberately direct purchases to domestic industries:

- o to provide jobs,
- o to develop high technologies, and
- o to address economic concerns such as balance of payments.

In the mid-1980s, however, it also became apparent, as costs for defense continued to rise and budgets were limited, that if they were to maintain even a European defense industrial structure, they had to begin to cooperate on projects in order to spread costs and to improve efficiency of production. Despite the recognized necessity of cooperating among themselves to meet the U.S. challenge, some countries still believe that the European focus on cooperation gives the United States an advantage because it remains independent and does not have to meet the needs of other countries.

Europeans also claim that the protectionist perception is often due to simple differences between the U.S. and European defense industrial cultures. As a result, Europeans find it difficult to cooperate with US on defense projects. Some of these

factors include:

- o differing US and European military missions and equipment requirements,
- o weaknesses in the U.S.-led cooperative programs,
- o US controls, such as technology transfer restrictions.

Europeans simply find it more natural and easier to cooperate among themselves on defense projects than they do with the United States. However, some do admit that the "politics" of cooperation associated with the EC single market process and the IEPG initiatives promote a more unified West European defense industrial base and market and, therefore, preference for European firms in awarding defense contracts. This is because many Europeans believe that the benefits of EC 1992 should be reaped by the Community first, and that "outsiders" should have to earn the right to share in these benefits. (Williams, Teagan, Beneyto, 1990)

#### **U.S. COMPETITIVENESS AND THE EUROPEAN INITIATIVES--POLICY OPTIONS**

How the United States responds to the challenges of the EC initiatives and the increased competition of the future is as important as anything the Europeans might do under their programs. The ability of U.S. defense industries to compete with their European counterparts will reflect the success or failure of U.S. efforts to restructure our own defense industrial sector and to recapture our economic vitality of previous decades.

### **Set the Rules**

If most experts believe that there is a greater probability the United States will continue participating in some form of European alliance, then we need to take steps to ensure that the less optimistic outlook for the economic future does not adversely affect the alliance relationship. Now may be the time to begin negotiations with our allies on the contours of a new alliance that accounts for the new defense environment and lays the groundwork for a cooperative approach to defense trade.

Inherent in such negotiations will be the need to confront some key changes in the traditional role of the United States. For example, we may be part of a NATO-type structure we no longer dominate. Further, as Europe becomes better able to provide for its own defense, we must accept that our lead position in the NATO defense markets will also level off. We must acknowledge that we are now a buyer as well as a seller of defense products and technologies, and that we can learn from our allies just as they have in the past learned from us. (Walker in Wharton, 1992; Hicks, 1990) While we should do all we can to assure that Europe makes the right choices, realistically we have to recognize that the United States will have less influence in European policies in the future than we have had in the past.

Although some argue that our only influence will be through the hands of Germany, it is clear that we need to pursue bilateral

discussions with all the EC countries in order to deal effectively with European initiatives. (Szabo in Wharton, 1992; Tarnoff, 1990) One way of doing this is to renegotiate all of the MOUs on defense trade as part of the above process. Starting from a clean slate, we must make sure that our interests are fully protected in the MOUs and do not allow for continued advantages for European industries.

### **Continue Proactive Diplomacy**

The U.S. government needs to stay actively involved in the process of market unification now underway in Europe. GAO's reports give every indication that our concerns and interests are being taken into consideration as the EC implements its programs. To the extent possible, the EC appears to be pursuing alternatives that allow us to participate in resolving potentially difficult situations rather than forcing their own solutions. The U.S. government needs to continue to weigh in on these issues:

- o Exemption of military items from tariffs,
- o Expansion of the lists of dual-use item used for military purposes and exempted from tariffs,
- o Application rules of origin,
- o Setting standards to preclude the exclusion of foreign products,
- o COCOM/export control regimes that prevent the export of sensitive technologies and products or the reexport of U.S. products/technologies to third countries.

### **Delegate U.S. Organizational Responsibility**

We do not have an single focal point in the government that looks at the total EC defense trade picture in terms of EC policies and other European initiatives, or that coordinates the diverse policy elements associated with European defense trade issues. This is a area critical to our defense industries and therefore to our national security. The president should designate a key component of a National Economic Council as the responsible party for developing and implementing a coordinated policy that is designed to fit into an overall national security strategy.

In addition, a member of each Defense Attache Office in Europe should be assigned sole responsibility for supporting U.S. defense industries in gaining access to European defense markets. This same individual can serve as a focal point for steering European defense industries to opportunities in the U.S. industrial sector as well.

Further, we have no one central office responsible for analyzing or addressing the implications of EC initiatives for U.S. defense trade and cooperation. As a result, we have no way of independently determining the magnitude of the problem and what should be done about it. Therefore, we should set up a program for coordinated collection of data and the levying of information requirements as part of the joint intelligence Community Management Staff to support the government agencies.

### **Formulate a Clear Strategy**

Within the context of developing a national strategy to revitalize our economic base, a major component will be development of goals to sustain our defense industrial base. Several specific decisions related to European defense trade should be contained in that overall strategy.

1. A decision to support the development of European industries as long as markets remain reciprocal. This not only gives us leverage, it opens up opportunities for our own defense industries. The concept of burdensharing will take on different meaning as Europeans become better competitors in the defense arena. Greater cooperation can be supported credibly in the long term only if European defense industries succeed in becoming competitive with American firms. In this regard, and in the interest of alliance relations, the United States should support the IEPG Vredeling Report recommending the enhancement of U.S. cooperation with Europe at both industrial and governmental levels, including recommendations for rationalization of the European industrial base. (Silvestri in Dunn, 1990; Walker in Wharton, 1992)

2. A decision to open U.S. markets to greater European competition and market competition in general. Although noted experts have argued that the defense sector is unique and that free market principles cannot be effective under monopsony conditions

(Gansler, 1989; Colchester and Buchan, 1990), others have developed strong arguments for allowing greater market forces to operate in the new defense environment. One example of such efforts is a proposal to pursue competition for major weapons and subassemblies based on bids from several consortiums that each include both American and European firms. (Webb, 1989; Burt, 1989; Gillibrand, Johnston, and Niblett, 1991) Proponents argue that for such forces to work, only two, but critical, criteria must be met:

- o the group of nations must possess sufficiently common security interests and commitments to allow respective defense companies to engage in technology and design discussions free from political and procedural restrictions that inhibit technological sharing;
- o they must possess sufficiently common security policies and sets of requirements to enable industry to translate collaboration at precompetitive level into cooperative development and production.

3. A decision to rely more heavily on allied defense production, particularly for systems and components where domestic suppliers are no longer cost effective or non-existent. National autarky makes neither military nor economic sense within an alliance. Having taken the step of relying on our allies for mutual front line defense against the USSR, it is inconsistent to argue that we can not rely on them to supply weapons and components

when needed. (Webb, 1989; Colchester and Buchan, 1900) Although a strong element of experts argue that heavy dependence on foreign technology and products for a national defense effort would be politically and militarily untenable (Dertouzos, Lester and Solow, 1989), others point out that such an approach is simply no longer feasible. We ultimately risk losing access to important technology the either is not developed here or can only be developed here at prohibitive cost or with significant delay. This is particularly true as technology development moves more toward spin off from civil to defense. (OTA-ISC-374, 1988; Gummett and Reppy, 1988)

Careful attention, however, must be paid to the type of dependency that we develop. A number of ideas have been put forward for determining which technologies and components we can allow foreign sources to supply and which we can not. One such concept, called the 4/50 rule, appears particularly promising. The approach measures the concentration of suppliers and not the sources or criticality of the item, itself. If more than four countries or companies in different countries are able to supply the item, then there is not need for domestic production. For critical items that do not meet this standard, continued government support of domestic production would be necessary. (Moran, 1989; Kyriakopoulos, 1992)

#### **Provide a More Positive Business Environment for Defense Industry**

U.S. industries need to offset the negative trends in the

defense industrial environment by entering into joint ventures and teaming arrangements to maintain access to the defense market in Europe. To facilitate this, U.S. domestic policies should allow for more consolidation through mergers and acquisitions in defense industries. Adjustment in antitrust legislation should be made if necessary to accomplish this objective.

The U.S. government should be supportive of both the establishment of U.S. companies in Europe, as well as European investment in U.S. defense companies. Such measures help us penetrate foreign markets and bring new ideas and technologies to our workplaces. Congress should give consideration to repealing the Exon-Florio Amendment to the 1988 trade bill, which enabled the President to review and block foreign takeovers of American business. Foreign companies are concerned because the definition of national security was purposely left vague and as a result the measure has had a deterrent effect on foreign firms. (Williams, Teagan, and Beneyto, 1990; Hicks, 1990; Silvestri in Dunn, 1990) Competition can lead to cooperation as Experience has shown that such competition actually leads to cooperation, since a defense firm has to ally itself with a reliable local partner in order to compete successfully in another industrialized country. (Heisbourg, 1989)

The Commerce department should take a new look at the export restrictions the U.S. government currently pursues. Telling

sovereign states what they can or can not do with products that they could make anyway does not make much sense, except in the case of very sophisticated technologies where we have a clear lead. These technologies should be identified and all others eliminated from export restrictions in order to remove limits on U.S. industrial competitiveness.

## **CONCLUSION**

Like all the issues surveyed in the literature, there is a broad spectrum of opinion about the challenge the Europeans can potentially present to the United States and our ability to meet that challenge. At one end are the believers in the resurgence of US as capitalist power--the "bound to lead" syndrome--which can take on any challenge and win. (Silva and Sjogren, 1990) At the other end are the believers in the inevitable relative decline of US economic and military power despite efforts we might take to prevent such a course. (Kennedy, 1989) In between are those who believe that the United States is not being pushed down by forces beyond its control--that we created the problems we face and we can solve them. (Chancellor, 1991) The literature indicates that the European defense industries under their efforts to create a single market will pose a challenge to the United States by the turn of the century. We have the means to meet that challenge, but it requires action on our part and difficult changes in the way we are used to doing things--but after all, we want to win.

ANNEX -- A

DIFFERENT DEFENSE INDUSTRIAL CULTURES

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<u>UNITED STATES</u>	<u>EUROPE</u>
<ul style="list-style-type: none"><li>• A single market</li><li>• Domestic market still considered sufficient to sustain independent industry</li><li>• Competitive procurement among U.S. companies</li><li>• Two or more competitors in each sector</li><li>• Arms-length government to industry relationship</li><li>• Funding revised annually</li><li>• Exports increasing percentage</li><li>• Government-to-government collaboration is the exception</li></ul>	<ul style="list-style-type: none"><li>• Fragmented, but integrating</li><li>• Domestic markets insufficient to sustain national industry</li><li>• A more directed/ competitive procurement mix</li><li>• National champions in many sectors, and often one European industrial alliance</li><li>• National treatment varies widely</li><li>• Multi-year planning the norm</li><li>• Exports essential</li><li>• Transnational collaboration is the norm through the life of the program</li></ul>

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SOURCE: Gillibrand, Sydney, Gerald A. Johnston and Robin Niblett, The Atlantic Partnership: An Industrial Perspective on Transatlantic Defense Cooperation, May 1991.

ANNEX -- B

# ALLIES' DTIB\* STRATEGIES

COUNTRY	NATIONAL PLAN	INT'L COLLABORATION	CIVIL-MILITARY INTEGRAT'N	CONSOLIDATION
France.....	Central government strategy is to maintain areas of excellence in French defense industry, stress international sales.	Systematic approach to European collaboration and strategic alliances, but go-slow approach to free arms market within the EC.	Government encourages diversification of firms, no barriers to civil-military integration.	Government promoting some consolidation, cross-border mergers.
Germany....	Free-market orientation, with close exchange of information between government and industry.	Strong and growing emphasis on collaboration.	Stressing civilian products where militarily acceptable.	Industry is downsizing, government currently sees no need for major additional restructuring of base.
UK.....	Reliance on the private sector, greater civil-military integration, exports, limited government intervention.	Supports collaboration with allies, expects it to increase as budgets are reduced and forces become more international.	Key component--relaxed requirements to permit use of civil technology, most defense firms diversified into civil sector.	Relying on market forces, government provides information to industry about future defense plans and intentions.

## \* Defense Technology and Industrial Base

SOURCE: United States Congress, Office of Technology Assessment, Building Future Security, OTA-ISC-530, June 1992.

## ANNEX -- C

## PRIORITIES FOR RESTRUCTURED DTIBs\*

COUNTRY	CORE CAPABILITY	R&D	PROCURE- MENT	SURGE/ MOBILIZE
France.....	Full range of major tactical weapons platforms, nuclear weapons	New emphasis on space systems, command and control, and guided standoff missiles	Rafale fighter, Leclerc tank, Amethyste submarine, Charles de Gaulle carrier, Helios and Syracuse satellites	Little emphasis on planning by Services.
Germany....	Issue is currently under study	Stresses joint development programs, aerospace	Major cuts over next decade in heavy armor. Continued commitment to the European Fighter Aircraft in question.	No detailed defense industrial mobilization planning.
UK.....	Determined by market forces	Aviation, stealth, and electronics	Challenger tank, European Fighter Aircraft, attack helicopter, nuclear deterrent.	Currently relies on limited, ad hoc planning, but may move to more structured planning.

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\* Defense Technology and Industrial Base

SOURCE: United States Congress, Office of Technology Assessment, Building Future Security, OTA-ISC-530, June 1992.

## ANNEX -- D

### JOINT EUROPEAN R&D EFFORTS RELATED TO DEFENSE<sup>17/</sup>

The formation of joint efforts such as the European strategic program for research in information technology (ESPRIT) and the joint European submicron silicon program (JESSI) could make significant inroads in technologies critical for defense production, adding to the extensive capabilities Europeans have been able to develop in a number of important "niche competencies". These two R&D programs are designed to improve chip technology and use throughout the Community. JESSI is a \$4 billion program that excludes all non-EC companies, and is reportedly a direct response to the U.S. semiconductor research effort--SEMATECH.

The BRITE (Basic Research in Industrial Technology for Europe) Project addresses efforts in areas such as laser technology, CAD/CAM, membrane technology, advanced materials, and automated manufacturing techniques. Begun in 1985 with 125 million ECU, it was funded for an additional 60 million in 1986.

EURAM (European Research in Advanced Materials) is to provide Europe with the capacity to produce advanced materials that are currently imported or manufactured under license. The goal is to develop sophisticated materials for electronics, data processing, telecommunications, the motor industry, shipbuilding, construction, aerospace, biotechnologies and other sectors. Seventy million ECU for 1986-1989 was provided. In addition, BRITE/EURAM were jointly funded for an additional 439.5 million ECU for 1989-1992.

EUCLID (EUropean Cooperative Long-Term Initiative in Defense), agreed to in June 1989, will identify key defense technological and research priorities which will then be broken down into projects for industry to work on. The program is conducted under the aegis of the IEPG. Estimated allocations amount to only \$140 million. Added to this is the aeronautics program that consists of two pilot programs (one through 1991, the other through 1993). A full program will be developed in 1994.

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<sup>17/</sup> Clarence A. Robinson, Jr., "Policy Unveiled to Stem Technology Base Erosion," Signal, December 1990, p. 40; Robert Williams, Mark Teagan, and Jose Beneyto, The World's Largest Market: A Business Guide to Europe 1992, pp. 243-244; United States Congress, Office of Technology Assessment, Arming Our Allies: Cooperation and Competition in Defense Technology, OTA-ISC-449, p. 18.

## ANNEX -- E

### AIRBUS--THE SUCCESS STORY<sup>18/</sup>

The European aviation companies have been investing heavily in R&D, first to catch up with the United States and second to develop expertise in particular areas. Small domestic markets have compelled most of the companies to specialize, giving them "niche competencies" to bring to multinational consortia. British Aerospace, for example, is outstanding in wing design, while Messerschmitt-Bolkow-Blohm has developed expertise in the processing of composites and in flexible automation for the manufacture of body sections.

During the late 1980s, each of the major European companies invested extensively in new flexibly automated equipment and computerized systems. These investments boosted productivity and reduced delivery times and costs, enabling the Europeans to bid successfully for major pieces of many programs, of which Airbus is but one. European nations are now seeking a larger share of the world aerospace market, and specialized expertise is a cornerstone of each of their strategies.

Using the French organizational mechanism under Airbus Industrie has allowed the Europeans to pool their resources and create a decision-making structure. The participating companies from France, West Germany, the United Kingdom, and Spain retain their independence and technical strength, but have the benefit of a single-point marketing and customer-support organization.

The Airbus marketing strategy has emphasized the aggressive use of advanced technology, particularly in materials applications, systems for flight control and safety, and aerodynamics. It has also sought to develop a family of airplanes for markets not served by new aircraft or not served at all. What Airbus has not yet achieved are two other capabilities: outstanding product support and the ability to manage changes in production levels and high levels of output. With the bailout of Northwest Airlines, however, they may be moving toward eliminating these shortcomings.

The consolidated European firms find it essential to participate in both military and commercial markets in aviation and in aerospace to remain competitive. The U.S. Aerospace Industries Association (AIA) is concerned about America's eroding competitive

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<sup>18/</sup> Michael L. Dertouzos, Richard K. Lester and Robert M. Solow, Made in America: Regaining the Productive Edge, pp. 210-216; Jeffrey Harrop, The Political Economy of Integration in the European Community, pp. 131-136.

and technological edge in both areas because the United States has been exploiting its technology reserves without replenishing them, while the Europeans have been aggressively developing technologies for a competitive edge.

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