THE TRANSATLANTIC DEFENSE INDUSTRIAL BASE: RESTRUCTURING SCENARIOS AND THEIR IMPLICATIONS

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April 2005

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This manuscript was funded by the U.S. Army War College External Research Associates Program. Information on this program is available on our website, *http://www.carlisle.army.mil/ssi/*, at the Publishing button.

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ISBN 1-58487-193-8

FOREWORD

Today, U.S. and European defense firms are at a crossroads. Opportunities for the construction of a transatlantic defense sector are tangible, but significant obstacles may accelerate the formation of a bipolar industrial base. While market forces played a key role in the transformation and consolidation of these sectors in recent years, political considerations are largely responsible for a restructuring process that has been almost entirely among U.S. firms in the United States and among European Union companies in Europe.

In this monograph, Dr. Terrence Guay examines the forces that have shaped the restructuring of the U.S. and European defense industries since the end of the Cold War, and presents factors that will influence further restructuring and consolidation in the short- and medium- terms. He contends that a transatlantic defense industrial base is preferable to a bipolar one, and recommends that the U.S. Government open its defense equipment market to more European firms, and that European governments reciprocate. Additionally, military forces should put greater effort into coordinating procurement requirements and needs, and firms should explore expanding transatlantic links.

The Strategic Studies Institute is pleased to publish this work as part of our External Research Associates Program.

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SUMMARY

This monograph compares the post-Cold War restructuring of the defense industries in the United States and Europe with the aim of understanding the implications for the transatlantic industrial base. We argue that different processes of industrial restructuring and consolidation present obstacles to transatlantic initiatives, and that government policies and conflicting political visions exacerbate the opportunities for collaboration between the United States and Europe. We assess the extent to which the restructuring of the U.S. and European defense industrial bases has uprooted national champions and, assisted by global competition, provided an industrial foundation for more extensive transatlantic cooperation. We conclude by suggesting factors that will shape further restructuring and consolidation in the short- and medium-term, and making recommendations for assisting the development of a transatlantic, rather than bipolar, defense industrial base.

THE TRANSATLANTIC DEFENSE INDUSTRIAL BASE: RESTRUCTURING SCENARIOS AND THEIR IMPLICATIONS

INTRODUCTION

This monograph compares the post-Cold War restructuring of the defense industries in the United States and Europe with several objectives in mind. First, it is important to examine the process of restructuring and consolidation on both sides of the Atlantic, and the different forms that this industry has taken. This will provide some sense of the strategic visions of the private and public sectors, and the opportunities for partnerships at the corporate and military procurement levels. Second, it is necessary to learn what roles private sector and public officials have played in the restructuring process, and the extent to which U.S. and European political, industrial, and military leaders have collaborated in this restructuring process through formal channels such as the North Atlantic Treaty Organization (NATO), the European Union (EU), or bilateral relations, and informal channels. This will help us to understand the extent to which U.S. and European defense industry restructuring have been independent or mutual processes. Third, it is essential to describe the obstacles that make the armaments market significantly different than other markets for goods and services. Such political and economic obstacles in Europe and the United States go a long way toward explaining why a truly transatlantic defense industrial base has been so difficult to create. The present "bipolar defense industrial base," and the lack of political will to change this, is responsible for much of the "capability gap" among NATO members. Finally, the monograph will conclude by assessing the extent to which the restructuring of the U.S. and European defense industrial bases has uprooted national champions and, assisted by global competition, provided an industrial foundation for more extensive transatlantic cooperation. It will also suggest likely scenarios for further restructuring and consolidation, particularly along the transatlantic dimension, in the short-term (0-3 years) and medium-term (4-10 years), and make recommendations for assisting the development of a transatlantic, rather than bipolar, defense industrial base.

POST-COLD WAR INDUSTRIAL DEVELOPMENTS

The end of the Cold War forced defense firms around the globe to adapt to a dramatically different operating environment. With defense spending plummeting in almost every country, defense companies had few options. They could merge with or acquire other firms in the hope that economies of scale and scope would ensure their survival; find or develop new export markets; diversify into other sectors that depend less on government defense contracts; or go out of business, in effect, by selling themselves to the highest bidder. U.S. and European defense firms pursued each of these strategies, but the timing, pace, and industrial structure varied considerably.

United States.

Historically, the engine of growth for the U.S. defense industry was strong domestic demand, fueled by the Cold War. Times were especially prosperous for the industry from the late 1970s through the late 1980s. By the early 1990s, however, the tide had turned. As the defense budget was slashed in search of a "peace dividend," the U.S. defense industry realized that the golden years of President Ronald Reagan's buildup were over. Military spending declined from $422 billion in 1989 to $290 billion in 1999 (in constant 2000 dollars), with the steepest decline coming in the mid-1990s.[1] Prodded in 1993 by then Secretary of Defense Les Aspin, the industry hastened to adjust.[2] Layoffs by firms such as Northrop, Hughes, Lockheed, General Dynamics, Litton Industries, and TRW marked a spate of "downsizings" and acquisitions, culminating in the mergers of Lockheed and Martin Marietta, Boeing and McDonnell Douglas, and Raytheon and Hughes. A 2003 Pentagon report found that the 50 largest defense suppliers of the early 1980s have become today's top five contractors.[3]

U.S. firms now dominate the global defense industry: six of the top ten defense companies in the world are based in the United States, including Lockheed Martin, Boeing, Northrop Grumman, Raytheon, General Dynamics, and United Technologies (see Table 1). The U.S. defense industry—or at least the aerospace and electronics

components of it—consolidated quickly, but with the strong urging of the Pentagon. Most of the mergers occurred between 1993-98. Since the late 1990s, major defense contractors have pursued three strategies: buying relatively small defense units from diversified U.S. conglomerates (like General Motors and TRW); acquiring defense-related businesses outside of aerospace and electronics (such as information technology or shipbuilding); or expanding abroad by buying foreign defense firms. The first strategy has been just about exhausted. The second strategy is likely to continue to be popular, especially in a post-9/11 world where the U.S. Government is spending considerable sums on Homeland Security, intelligence, and surveillance. The third strategy is the most difficult to predict or pursue, especially since most of the smaller European defense firms now have been acquired by larger European or U.S. companies. The next step for U.S. firms would be to acquire or merge with large European companies—a much more significant development than the ad hoc alliances and collaborations that often arise with large multination weapons systems. But, as will be made clear below, the obstacles to this strategy are formidable.

U.S. RANK	WORLD RANK	COMPANY	DEFENSE REVENUE[1]	TOTAL REVENUE[1]	FROM DEFENSE
1	1	Lockheed Martin	$30,097	$31,824	95
2	2	Boeing	27,360	50,500	54
3	3	Northrop Grumman	18,700	26,200	71
4	5	Raytheon	16,896	18,100	93
5	6	General Dynamics	12,782	16,617	77
6	10	United Technologies[2]	5,300	31,034	17
7	11	L-3 Communications	4,369	5,062	86
8	12	Honeywell	4,200	23,100	18
9	13	Computer Sciences Corp.[3]	3,818	14,800	26
10	14	Science Applications[4]	3,735	6,720	56

[1] Figures are in US$ million.
[2] U.S. Government sales only.
[3] For fiscal year ending 3/31.
[4] For fiscal year ending 1/31.
Source: Figures derived from Defense News Top 100 *(http://www.defensenews.com/content/features/2004chart1.html)*.

Table 1. Top Ten U.S. Defense Companies (2004).

Europe.

Europe's defense industry began the 1990s as a collection of national defense fiefdoms. While the U.S. defense industry was rapidly consolidating during the first half of the decade, most European firms continued to look inward. European consolidation at this time took the form of large national defense champions acquiring small domestic firms (a strategy pursued by Germany's Daimler-Benz), or big companies acquiring targets in countries with minor defense industries (e.g., France's Thomson-CSF purchasing the defense electronics business of Dutch Philips). Transnational collaborations that did exist generally took the form of joint ventures (for products like missiles) or multinational consortia (like the Eurofighter)—both of which enabled defense firms to maintain their national independence. Large-scale cross-border mergers were hindered by the reluctance to see a domestic company acquired by a foreign firm. This concern was most evident in the political realm, as national governments worried about the loss of sovereignty (particularly the insecurity that armaments may not be readily available) and the political consequences of restructuring-induced job losses that might accompany such an acquisition. France's *dirigism* was (and remains) the most recognizable form of government involvement in the defense sector, but all European countries employed similar policies to some degree. However, defense firms resisted industry-wide rationalization almost as much. Many executives feared the uncertainty that would follow mergers with respect to the cozy relationships they had cultivated through the years with their "home" defense ministry. The extent to which these links would be weakened by Europe-wide industrial restructuring was unclear. The status quo was the safest option for both government and business.

By the late 1990s, this situation became untenable. Given the consolidation in the United States and the political impetus for a European Security and Defense Policy (ESDP) within the European Union (EU), European defense firms found themselves under political and economic pressure to consolidate. The first major consolidation occurred in the United Kingdom (UK) in January 1999, when General Electric Company (GEC) agreed to sell its defense arm (Marconi Electronic Systems) to British Aerospace. The new

entity was renamed BAE Systems. Nine months later, a European defense giant was born. The first step, as in the UK, was national consolidation. As part of its privatization in June 1999, France's Aérospatiale joined with Matra to create an aerospace and defense electronics powerhouse. Four months later, this combined entity merged with Dasa to form European Aeronautic Defence and Space Company (EADS). Construcciones Aeronauticas Sociedad Anomina (CASA), Spain's leading aerospace and defense firm, also merged into EADS.

Similar consolidation occurred in related sectors. In October 1997, the French government announced that it would privatize Thomson-CSF, and bring Dassault Electronique, the space and defense electronics businesses of Alcatel, and the satellite businesses of Aérospatiale within the company. Thomson-CSF acquired Racal Electronics of the UK in June 2000 and was renamed Thales. Two companies now account for Europe's helicopter business: Eurocopter (a division of EADS) and AgustaWestland (which combined the helicopter interests within Italy and the UK). MBDA, the world's second-largest maker of missiles (behind Raytheon), was formed in 2003 by merging the missile interests of EADS, BAE Systems, and Finmeccanica.

Table 2 shows that BAE Systems dominates Europe's defense industry, while Thales and EADS each have roughly half the defense revenues of BAE Systems. As described above, the paths of these mergers appear to represent two different strategies of consolidation. BAE Systems is the result of the consolidation of much of the UK's national defense infrastructure into one company, without any major cross-border ties. EADS, on the other hand, was formed via a "merger of mergers," thereby producing a company that would be in a stronger position to negotiate transnational ventures. It is significant that the momentum to create EADS was driven not so much by national leaders, but by corporate executives who made a conscious and calculated decision to keep their respective national leaders uninformed of the plans, until the advanced stage of the negotiation.[4] By such unusual discretion, political meddling in what was essentially a business decision was kept to a minimum.

EU BANK	WORLD BANK	COMPANY	COUNRTY	2003 DEFENSE REVENUE [1]	2003 TOTAL REVENUE [1]	% OF REVENUE FROM DEFENSE
1	4	BAE Systems[2]	UK	$17,159	$22,359	77
2	7	Thales	France	8,476	13,310	64
3	8	EADS[3]	Multiple	8,037	37,797	21
4	9	Finmeccanica[4]	Italy	5,896	10,857	54
5	18	Rolls Royce	UK	2,490	9,960	25
6	20	DCN	France	2,085	2,085	100
7	22	Rheinmetall	Germany	2,014	5,334	38
8	23	Dassault Aviation	France	2,009	4,144	49
9	24	Snecma	France	1,846	8,037	23
10	26	Smiths Industries[5]	UK	1,778	4,235	42

[1] Figures are in US$ million. Currency conversions calculated using prevailing rates at the end of each firm's fiscal year.
[2] Does not include 2004 Alvis acquisition.
[3] EADS is 30.2 percent owned by DaimlerChrysler (Germany), 30.2 percent by SOGEADE (a French holding company comprised of Lagardère and the French state), and 5.5 percent by SEPI (Spanish state holding company). Approximately 34 percent of EADS shares are held by the public. EADS is registered in the Netherlands.
[4] Purchase of AugustaWestland shares from GKN pending.
[5] Fiscal year ending 7/31.
Source: Figures derived from Defense News Top 100 *(http://www.defensenews.com/content/features/2004chart1.html)*.

Table 2. Top Ten European Union Defense Companies (2004).

BAE Systems, which may at first glance look like a "national champion," instead may be a test case of a new breed of firm: a genuine transatlantic defense company. One reason British Aerospace opted to merge with GEC rather than Dasa was to own Tracor, GEC's largest subsidiary in the United States. As discussed below, merger talks between BAE Systems and U.S. firms have intensified in recent months. British firms have long enjoyed preferential access to U.S. firms and technology. Such access is critical today, as U.S. officials after September 11, 2001, are even more anxious about the possibility of sophisticated technology falling into enemy hands by way of European defense contractors. The British are trusted with technology, and are allowed to buy into the U.S. market, in a way that the French and Germans are not.[5]

In the case of both EADS and BAE Systems, the Europeans have formed defense titans that can finally match their U.S. counterparts. With the notable exception of shipbuilders, land vehicles producers, and aircraft engine makers, there is little left to consolidate within Europe. Directions des Constructions Navales (DCN), the French shipmaker, is likely to be controlled by the state for some time. However, Noelle Lenoir, France's European minister, suggests that the project of creating a pan-European shipbuilder along the lines of EADS is important to the French and German governments.[6] But U.S. and European firms so dominate the global armaments market that few opportunities remain for nonorganic revenue growth.

The global trend is toward consolidation among national defense firms or developing strategic alliances with U.S. or European companies. In 1990, the world's 10 largest defense companies comprised just 37 percent of global weapons sales. By 2000, the world's 10 largest defense firms were responsible for 58 percent of international arms sales.[7] Significant steps have been taken toward cross-border rationalization only within the European region. Much of this can be explained by the wider economic restructuring that Europe has experienced over the past 20 years.[8] The EU's Single European Act (SEA) was a driving force in the efforts to make European firms more competitive at the global level, and the results spilled over into the defense sector. But economics can only go so far in shaping an industry whose foundation is ultimately political.

POLITICAL ENVIRONMENT

While the economic environment may be ripe for transatlantic opportunities, political considerations pose formidable obstacles in both the United States and Europe.

United States.

As indicated in Table 3, U.S. defense spending dipped by more than 31 percent between 1989 and 1999. However, in just 4 years, spending has returned to 1989 levels. Today, the Pentagon accounts for almost half of global defense spending.[9] This figure may increase if budgetary projections hold up. Congress approved a $416 billion

fiscal 2005 defense funding measure, which contained a record $70 billion for research and development (R&D)—20 percent above the peak levels of President Reagan's historic defense buildup in the 1980s.[10] Tens of billions more out of $78 billion allocated for procurement will go for big-ticket weapons systems. Financing the activities of U.S. troops in Iraq and force modernization are expected to push defense spending to nearly $500 billion in 2005, above the inflation-adjusted Cold War average, and $50 billion above 2004. The Congressional Budget Office estimates that the long-term price tag for all the planes, ships, and weapons the military services want will be at least $770 billion above what the Bush administration's long-term defense plan calls for.

COUNTRY	1989	1994	% CHANGE FROM 1989	1999	% CHANGE FROM 1989	2003	% CHANGE FROM 1989
United States	$422,133	$334,539	-20.8%	$290,480	-31.2%	$417,363	-1.1%
EU-15	180,319	159,176	-11.7%	153,561	-14.8%	154,909	-14.1%
France	38,807	37,438	-3.5%	34,209	-11.8%	35,030	-9.7%
Germany	38,128	30,214	-20.8%	28,744	-24.6%	27,169	-28.7%
United Kingdom	46,746	40,268	-13.9%	35,171	-24.8%	37,137	-20.6%
European "Big Three" Total	123,681	107,920	-12.7%	98,124	-20.7%	99,336	-19.7%

Note: Figures are in U.S.$ million, at constant 2000 prices, and exchange rates are for calendar year.

Source: Figures derived from the Stockholm International Peace Research Institute (SIPRI), *http://first.sipri.org/non_first/result_milex.php*.

Table 3. Defense Spending—United States and Europe.

Industrial consolidation within the United States is virtually complete. The five largest defense firms so dominate Pentagon procurement that further consolidation among them would weaken the competitive bidding process to an unacceptable level. Some critics argue that consolidation has already gone too far and has eliminated the virtues of competition. The logical next step would be to include more non-U.S. firms in the procurement process and to permit transatlantic mergers. Yet, the obstacles are significant.

Ron Sugar, chairman and chief executive of Northrop Grumman, probably reflects the view of many government, military, and industry officials when he says, "We're not just making toothpaste, we're in the business of national security. National borders do matter."[11]

Had U.S. defense industry consolidation been pursued to its logical conclusion, Northrop Grumman would have been acquired by Lockheed Martin or Boeing. In fact, Lockheed Martin and Northrop Grumman agreed to a merger in 1997, and it was widely assumed that the U.S. Government would approve, it being the last logical step in the Defense Department's goal of industry consolidation. With one acquisition following another, however, both the Defense and Justice departments had become increasingly worried about the lack of competition in the defense marketplace.[12] In 1998, the U.S. Government announced that it would oppose the merger on the grounds that consolidation was beginning to compromise competition in the contracting process. However, this conclusion was based almost entirely on an understanding of the defense sector as a national market. Certainly, plenty of capable non-American suppliers existed, particularly in Europe. But the political obstacles to viewing military contractors from a global or even transatlantic perspective are daunting.

How one defines the size of the market is critically important. While leery of more domestic mergers, some officials (in both government and industry) have been quietly floating the idea of an Atlantic partnership.[13] Such an Atlantic merger would need to be supported by the White House, Congress, and the Pentagon, and would have to ensure the safety of key U.S. technologies. Nevertheless, by expanding the geography of the market, the number of possible competitors is also simultaneously expanded, allowing firms to wring more savings out of consolidation while still allowing the benefits of competition. BAE Systems is a prime candidate for an intercontinental merger, although Northrop Grumman is also known to be on the menu of some European firms. BAE Systems, moreover, already has put in place many of the safeguards U.S. officials would require when it assumed Tracor as part of GEC's defense business, and when it acquired Lockheed Martin's aerospace electronics systems business in 2000.

The environment for consolidating a transatlantic defense industrial base is currently being poisoned by some U.S. politicians who seem to be going out of their way to antagonize European countries and their defense firms. Part of this stems from a decades-old interest in protecting weapons manufacturing jobs in the United States, while a more recent justification is to punish European firms for not supporting the Iraq War. In September 2003, the U.S. House of Representatives Armed Services Committee drafted a controversial bill barring the Pentagon from using overseas suppliers in purchasing parts for essential weapons systems. Additionally, the U.S. content requirement for Pentagon purchases would increase from 50 to 65 percent.

The bill provoked a storm of protests from numerous corners.[14] Defense Secretary Donald Rumsfeld opposed the measure on the grounds that it would reduce the Pentagon's supplier base and cost the Defense Department and its U.S. contractors billions of dollars to replace foreign-made machine tools. Senate Armed Services chairman John Warner also was opposed, fearing it would lead to retaliation by other countries and jeopardize America's approximately $50 billion annual trade surplus in aerospace products. U.S. defense firms and trade groups, including the Aerospace Industries Association (AIA), resisted the bill on the grounds that it would wreak havoc by barring foreign subcontractors in product supply chains and hamper foreign sales by U.S. defense firms. In a letter sent to Senator Warner by the AIA and the European Association of Aerospace Industries, the trade groups said such a provision "would undermine cross-Atlantic defense industry relationships."[15] Compliance costs, certifying that U.S. defense contractors did not use foreign parts, also would be burdensome.

The European Commission warned Congress that adoption of legislation urging the Pentagon to buy all essential weapons parts from U.S. manufacturers could spark a new transatlantic trade dispute.[16] The Commission threatened to take their case to the World Trade Organization (WTO) if the final bill contained provisions contrary to WTO rules. A requirement to purchase only U.S.-made machine tools, for example, would likely violate WTO rules governing government procurement. Under current laws, 50 percent

of a U.S. weapons system must be American-made.[17] The Pentagon fought attempts in 2003 to make the laws more stringent, arguing that would anger allies and increase the cost of some programs. Just 4.1 percent, or $8.6 billion, of the $209 billion that the Pentagon spent on procurement in fiscal 2003 went to foreign entities.

Given the fragile state of U.S.-Europe economic relations, which have been strained in recent years by disputes over genetically-modified organisms, steel, merger approvals, and aid to Airbus and Boeing, another high-profile trade controversy would not be helpful for transatlantic relations. In the end, Congress kept a Buy America provision in the defense bill, but it does not require the Pentagon to favor U.S. manufacturers.[18] It now only directs the Pentagon to assess the ability of U.S. manufacturers to produce military systems and creates a fund to support them. It also creates an incentive program to encourage defense contractors to use U.S. machine tools.

In the post 9/11 "Global War on Terror" (GWOT) era, the Pentagon is shifting its spending priorities in ways that probably will not help European defense firms. With an emphasis on information technology, intelligence, surveillance, communications, and related technologies requiring high levels of security, foreign firms—even European ones—are at a competitive disadvantage for Pentagon contracts, even at the subcontractor level. Some defense firms are making the necessary changes to fill the needs for anti-terrorism and homeland security.[19] Northrop Grumman expects sales to the U.S. Government related to homeland security of at least $500 million. The U.S. Department of Homeland Security has a faster growing budget than the military defense budget, with investments expected to grow more than 10 percent each year until 2009. But most European firms will not be trusted to supply these needs.

Some Pentagon and military officials are more interested in including European defense firms in the procurement process than Congress or U.S. defense companies. In June 2004, then Air Force Secretary James Roche warned that consolidation among U.S. contractors had left the Pentagon overdependent on a small number of key suppliers in certain sectors.[20] He said the main way to correct this is to encourage overseas manufacturers to compete for Defense Department spending. He even has encouraged EADS to compete

if a controversial Air Force tanker refueling contract (originally awarded to Boeing, but rescinded after an ethics scandal) is reopened, especially after the European firm's victories over Boeing in tanker competitions in the UK and Australia. EADS has suggested that the company would consider opening production lines in the United States, particularly if it were allowed to compete for major U.S. defense contracts.[21] But until there is evidence of this in Washington, production facilities will remain within their respective borders.

Europe.

As mentioned above, only the United States among the major transatlantic powers has returned to Cold War levels of defense spending. While most European countries cut their defense spending by a smaller percentage than the United States between 1989 and 1999, few have increased spending by any significant amount in response to recent terrorist threats (see Table 3). Germany and the UK account for a disproportionate amount of spending cuts in Europe. In the UK, the defense industry lost about 160,000 jobs between 1990 and 1998, when it employed just 260,000. The drop in Sweden went from 22,782 workers in 1990 to just 14,810 in 2002. The French sector had 250,100 workers in 1990, but 84,100 fewer in 2000. However, in the United States, approximately 3 million people were employed in arms production in 2003—just 115,000 less than 1990.[22]

The EU continues to move toward a common defense policy, although the significance and tangibility of agreements varies considerably. An analysis of the European Security and Defense Policy (ESDP) requires far more space than is available in this monograph.[23] Suffice it to say that progress toward an ESDP of any meaning will influence trans-European defense industry consolidation positively, but may not be helpful for NATO. We highlight here those aspects of ESDP that have the potential for significant impact on this sector.

Cooperation in weapons procurement will be a key test for the successful fusion of ESDP and defense industry consolidation. In September 1998, France, the UK, Germany, and Italy signed an agreement giving a legal identity to the Joint European Armaments Organizations (commonly known by its French acronym—OCCAR).

OCCAR's largest managed project to date is Europe's first indigenous antiballistic missile defense system. The €3 billion tri-nation production program was awarded funding by OCCAR in November 2003. In October 2003, EU defense ministers backed ambitious plans to have their armed forces capable of working together by 2010.[24] The plans were a response to EU Common Foreign and Security Policy (CFSP) Secretary General Javier Solana's long-standing view that the EU needs improved security and defense capabilities. For the EU to have armed forces that are agile, flexible, deployable, and sustainable, member states would need to combine forces and focus on quality and increasing military spending.

In June 2004, EU foreign ministers approved the creation of the European Defense Agency (EDA), designed to improve Europe's military capabilities and support its security and defense policies. The aim of the EDA is to help member states improve cooperation on R&D, develop defense capabilities, foster armaments cooperation, and coordinate Europe-wide purchasing and contracting of weapons systems. Its small first year budget of €2 million will rise to €25 million in 2005. Although the agency budget will require unanimity, Secretary General Solana managed to secure agreement from ministers that as many decisions as possible will be taken by majority voting.[25] As in most of the EU's defense-related initiatives, Britain and France played instrumental roles in establishing the EDA. For France, the EDA is a platform to create a European defense manufacturing base, supported by more spending on R&D and with contract preferences for European firms. In a sense, the EDA transfers France's statist approach to business-government relations to the EU level. For Britain, the EDA is a forum less for industrial policy than for improving the military capabilities of member states—an objective shared by NATO. Unfortunately, this divergence in views may not be healthy for the EDA's long-term viability.

While BAE Systems, EADS, and Thales have supported the creation of such an agency, arguing that only through consolidating spending and research budgets can EU countries compete with an ever-rising U.S. defense budget, their chief executives issued a joint statement warning that the agency risks becoming "a fig leaf to cover the nakedness of any real efforts to improve European defence" unless it is given real power from the outset.[26] The firms would like

the EDA to identify holes in military capabilities and push member states to increase funding to fill the shortfalls. In addition, they want the EDA to have a modest budget to coordinate research spending, and to have the authority to break down internal barriers to the defense trade. More controversially, they also call on the EDA to help protect Europe's defense industrial base. While not advocating a "Fortress Europe," they also do not want "indigenous defence technology overtaken or dependence on foreign technologies [to] become a necessity, especially where technology transfer terms are very restrictive"—a clear reference to U.S. export regimes. Still, many European executives understand the benefits of gaining access to U.S. defense technologies. In November 2003, Philippe Camus, joint chief executive of EADS, called on European governments to step up R&D in advanced technologies by pressing forward with a European defense procurement and research agency, and to foster greater transatlantic cooperation in the defense industry.[27] He also said that both the European and North American industry associations were now united in encouraging their governments to open up "the playing field for cooperation and competition," adding that transatlantic allies should foster an environment in which industrial partners can focus on delivering the most advanced systems in the most cost-efficient manner. This is particularly important to Camus, since a consequence of the wave of consolidations and mergers in the late 1990s is that now fewer players of true global scale exist, thereby making it more important to promote industrial cooperation and strategic partnerships for competition to be maintained and for innovation to push the sector forward.

While the EU does not have any equivalent to the proposed "Buy America" defense procurement rules, member states have kept weapons procurement and other purchases related to the production of war material outside of the EU's open procurement rules governing virtually every other area of national government purchases. The UK and France, which are home to the bulk of Europe's defense industrial base, traditionally have been the most adamant that these are national issues, although France's recent initiatives in this area (e.g., ESDP, EDA, and OCCAR) appear to be attempts to mold the EU in France's image. The EU's competition and trade policies also have been circumscribed to some extent when

applied to the defense sector (e.g., dual-use goods). On the political side, member countries have pledged themselves to creating a rapid reaction force that could deploy troops for humanitarian or crisis intervention. Such initiatives have influenced national government procurement decisions, particularly the interest in developing cargo and troop transport capacities.

European governments are showing a growing inclination to procure from European companies, which is upsetting some U.S. defense firms that often could rely on steady sales to U.S. allies. Airbus's military subsidiary beat Boeing and Lockheed Martin to win a €20 billion contract to supply seven European countries with 180 new military transport aircraft—the A400M.[28] But the most important test came in January 2004, when the UK Ministry of Defence opted to spend $23 billion on refueling aircraft from EADS.[29] The 27-year contract was a major blow to Boeing, which has a near monopoly on tanker aircraft, and to BAE Systems, which had teamed up with the U.S. firm in the expectation that they would win the competition. The EADS-headed consortium included Rolls-Royce, which will manufacture the tankers' engines, and Thales, which will produce much of the avionics in factories in Britain. Losing the UK contract effectively would have shut Airbus and EADS out of the tanker market. While the actual factors determining the outcome of the decision may never be known, it is likely that national industrial issues played a major role. The Airbus-led team, AirTanker, emphasized that its A330s are partly built in the UK and half of all new planes and 90 percent of conversions of the old aircraft used for their bid will be built in the UK. AirTanker claimed that 7,500 jobs would be added or sustained if their bid was picked, while Boeing's team could claim just 5,000. In another example, the British Ministry of Defence in 2003 selected Thales, instead of BAE Systems, to design a new aircraft carrier. Perhaps as a consequence, France and Britain agreed in June 2004 to cooperate in building their next generation aircraft carriers.[30]

As has been their practice since the SEA, the European Parliament and especially the European Commission have tried harder than the Council to develop a European industrial base.[31] In its most recent statement on the subject, the Commission argues that, "Strengthening the industrial and market situation of European defence companies

will greatly improve the EU's ability to fulfill the Petersberg tasks in the accomplishment of ESDP. It will also benefit collective defence by strengthening Europe's contribution to NATO."[32] To achieve this goal, the Commission proposed action in the areas of standardization; monitoring of defense related industries; intracommunity transfers; competition policy; harmonized procurement rules; closer cooperation on the export control of dual-use goods; and R&D.

At the political level, then, European governments have a mixed record. On the one hand, they seem more willing to see Europe's defense industry strengthen vis-à-vis U.S. firms, but they are less committed to institutionalizing these goals within the EU, OCCAR, or NATO. It is too early to say whether EDA will have a significant impact on Europe's industrial base, but prior EU attempts in this area have been disappointing.

TRANSATLANTIC OR BIPOLAR?

Both political and economic factors will determine the direction of transatlantic collaboration in the defense sector. The level and form of defense spending is one of the most critical factors (see Table 3). While the Bush administration increased U.S. defense spending to among the highest amounts since the end of World War II (although not nearly as high when measured as a percentage of gross domestic product), it is not clear that this amount of spending can continue. Gradually rising interest rates, large federal budget deficits, and, perhaps most importantly, a shift in public opinion away from spending on defense may push Washington to reduce military spending. Meanwhile, Europe has slashed defense spending since 1989, and has done little to increase it since 9/11 or the Iraq War. Advocates of ESDP, as well as U.S. officials, have called on European governments to increase defense spending for several years. An increase in spending would serve to strengthen Europe's defense industry, assuming the additional funds were allocated toward equipment purchases and wisely spent by OCCAR and EDA. European firms would then be in a better position to negotiate with U.S. firms, should they opt for enhanced transatlantic ties. Alternatively, they might find it more attractive to focus on Europe, especially if EDA gives preferences to European firms.

One indication that Europe may be opting for the bipolar path is the political capital expended on the Galileo project—a joint undertaking by the EU and the European Space Agency.[33] Galileo, Europe's alternative to the U.S. Global Positioning System (GPS), was given the go-ahead in May 2003 by European governments who agreed to fund the €3.6 billion project. The target is to have 27 satellites fully operational by 2008. Galileo is not a solely European project, as China has agreed to invest €230 million in the collaboration, and India and Israel, among other countries, are also lobbying to participate. Such countries are barred from collaboration on GPS since it is largely a military system run by the Pentagon. While it certainly has technological merits and provides economic benefits, Galileo's foundation lies in the politics of the EU and ESDP. The EU views Galileo as a move away from dependence on the Pentagon's GPS, and a step towards a common defense. It is telling that non-European countries have been included in, or may yet join, Galileo. Their involvement reduces funding requirements from European defense budgets. The U.S. GPS system is closed to outsiders for security reasons. The perception that the U.S. stresses security concerns over economics in its arms production, whereas the Europeans are struggling to finance core military capabilities, contains a good deal of credence in the case of satellite navigation.

Outright transatlantic mergers may be difficult to pull off, but more traditional collaborations on large weapons systems are still viable. While it has been long common for companies to team up when submitting bids, especially as a means to gain access to a market that for political reasons would otherwise be closed, transatlantic alliances contain their own set of problems. The most serious is technology transfer. The Pentagon does not trust many non-U.S. defense firms with state-of-the-art technologies, fearing that such know-how may end up in the hands of enemies. Another problem with such collaborations is the demand by governments participating in such projects that companies in their countries should get a certain proportion of the associated work. For example, Norway, one of eight countries partnering on the $244 billion F-35 fighter jet project, has threatened to pull out if project manager Lockheed Martin does not help Norway's local industries secure work on the aircraft.[34] By contributing funds for developing the plane in its early stages, the

expectation of participating countries like Norway is that they will gain access to technology and production.

Blame for letting political tensions spill over into defense industrial matters does not rest entirely with the United States. The EU is considering ending its arms embargo on China. Imposed after the 1989 Tiananmen Square massacre, France and Germany, among others, would like to see arms sales to the world's largest weapons importing country resumed. However, in May 2004. the U.S. House of Representatives Armed Services Committee approved legislation that would impose new export restrictions on sales of U.S. defense and sensitive technologies to any country selling arms to China.[35] In addition, the committee adopted an amendment that would bar the Pentagon for 5 years from doing any business with a company that sells arms to China, a prohibitive penalty for European defense firms.

U.S. administration officials find themselves in a difficult situation.[36] An easing of restrictions on the sales of military equipment to close U.S. allies would enhance the interoperability of U.S., NATO, and other allied forces—a goal that U.S. officials have set since discovering the weaknesses of European forces during the 1991 Gulf War. On the other hand, the United States is sensitive to the security concerns of Taiwan and other East Asian countries, and opposes any initiative that would strengthen China's military capabilities significantly. House Republicans in particular are putting pressure on the administration's efforts to ease controls on sales of military goods to Europe, and any weakening of European restrictions on arms sales to China would strengthen their position. While this case can be viewed on one level as a domestic dispute between the legislative and executive branches, the fact that U.S. policy on transatlantic arms production and sales is so fractured and contentious hampers efforts to promote collaboration and is a harbinger of continued confrontation in the short term.

Despite these formidable obstacles, signs are that a transatlantic defense industrial base is feasible. General Electric announced in November 2003 that it planned to buy a minority stake in Snecma, once the French government launches its partial privatization of the company.[37] Still, acquisitions in the short term are likely to

remain small. The main developments in transatlantic acquisitions in 2003 were the acquisition of two European producers of aircraft engines, FiatAvio and MTU Aero Engines, by U.S. companies (The Carlyle Group and Kohlberg Kravis, respectively), and General Dynamics' acquisition of the Austrian producer of military vehicles, Steyr Spezialfahrzeug.[38] Most of the investment flows have gone from the United States to Europe. European acquisitions of U.S.-based companies were much smaller deals, primarily by British companies.[39]

The pattern in recent years often has been characterized by high expectations of an impending union between key U.S. and European defense firms that falls just short of consummation. General Dynamics considered a merger with BAE Systems in 2003, as Boeing and Lockheed Martin had previously.[40] For BAE Systems, such a merger would have allowed the company to expand its business with the U.S. Government, where it already generates almost a quarter of its revenues, and gain greater access to U.S. technologies. For General Dynamics, a union with BAE Systems would fill in its military aerospace and shipbuilding businesses. However, the negotiations broke down after BAE Systems refused to sell its profitable and fast-growing North American operations. This suggests the difficulty that General Dynamics would have had to sell a full-blown merger to U.S. Government officials, who might be wary of technologies slipping beyond their full control.

For U.S. firms looking for opportunities abroad, European companies seeking to protect markets can be a bigger problem than European politicians. General Dynamics boldly tried to acquire the UK's armored-vehicle maker, Alvis PLC, in early 2004.[41] The U.S. firm had received regulatory approval from the EU and Britain's Department of Trade and Industry. But in June, BAE Systems offered to pay almost $100 million more than General Dynamics's $556 million bid, and the Alvis board withdrew its recommendation to shareholders that they accept the General Dynamics bid. With the Alvis acquisition, General Dynamics would have been one of the top three armor vehicle makers in Europe, along with GIAT of France and Germany's Krauss-Maffei. For General Dynamics, the acquisition was about a strategic plan to broaden the company's

global presence.[42] Although in the end this case turned out to be another example of national rather than transnational consolidation, it is significant that Nick Prest, Alvis chairman, could say that Alvis executives briefed the Ministry of Defense of the likely General Dynamics acquisition "as a matter of courtesy." This is an indication that firms—not governments—are calling many of the shots at this stage of transatlantic dealmaking.

FUTURE SCENARIOS

Given the above summary of defense industry restructuring in Europe and the United States, and the opportunities and obstacles that this sector faces, it is possible to sketch scenarios for future developments in the transatlantic defense industrial base.

Short-term (0-3 years).

The key factors that will affect developments in the near term include the political and industrial decisions made by the UK; U.S.-Europe relations during the second Bush administration; the GWOT; and opportunities for further consolidation outside of defense aerospace and electronics. Perhaps the most important factor will be the decisions made by UK defense firms and their government. The British government is the pivotal actor (some might say "mediator") in U.S.-Europe relations. The current government has been a strong supporter of the United States in the GWOT and Iraq War, and numerous reports suggest that Prime Minister Tony Blair and President Bush share a close personal relationship. At the same time, this UK Prime Minister is much more cooperative than any of his predecessors in EU matters, with his backing of ESDP perhaps most relevant to this discussion. In military procurement, the UK purchases more from Thales than from any U.S. defense firm, and uses the French company as a counterweight to its largest contractor—BAE Systems. With his Labour Party very likely to win a third election in May 2005, Prime Minister Blair and his cabinet colleagues may play a decisive role in nudging the UK defense sector toward Europe or the United States.

British firms also will be key players in the near term. As mentioned above, BAE Systems sells more to the U.S. Government than any other non-U.S. company, which would make it a valuable acquisition for a U.S. defense contractor. Yet, while the U.S. defense market is extremely important to BAE Systems, so are the European defense and civilian markets. With the recent ascent of Airbus in the global aerospace industry, now surpassing Boeing in aircraft orders and production, it would be extremely awkward for a U.S. defense company to become a part of the consortium as a result of acquiring BAE Systems (unless, of course, BAE's stake in Airbus was sold to EADS). Publicly, BAE Systems claims that it is not interested in selling its North American business unit. Certainly, a U.S. firm could make an offer that BAE Systems could not reasonably refuse, but negotiations by Northrop Grumman and Boeing have yielded no results, and the premium that BAE Systems would demand is too costly for any U.S. company at this time.

By almost every account, U.S.-Europe relations have worsened over the past 4 years. Shortly after his re-election, President Bush announced that he would work during his second term to improve transatlantic relations, beginning with a tour of Europe in early 2005.[43] Certainly, European leaders (particularly France's President Jacques Chirac and Germany's Chancellor Gerhard Schroeder) also must do their part if they wish to reverse the damage in U.S.-Europe relations. However, it is difficult to separate the defense dimension of U.S.-Europe relations from the economic, political, and cultural dimensions. Trade and economic disputes still play a central role in the U.S.-EU link. On the political front, the U.S. and many European governments disagree on policies toward Iraq, Iran, China, and Israel, among other countries. And Robert Kagan's quip that "Americans are from Mars and Europeans are from Venus" contains more than a grain of truth.[44] Such a range of differences and disagreements does not present an environment conducive to transatlantic defense industrial mergers and acquisitions or collaboration on military procurement between the United States and Europe on a bilateral basis or even within NATO.

The third factor, the GWOT, will affect industrial restructuring in two ways. First, the conduct of and results against the GWOT will affect the U.S.-Europe relationship just described. A smooth transfer

of authority in Iraq, the capture of leading international terrorists, and a reduction of terrorist acts should enhance U.S. prestige and improve transatlantic relations. As underscored by the March 2004 train bombings in Madrid, Spain, and the discovery of terrorist plots in the UK, Europe is not immune from terrorism and has every interest in the successful prosecution of the GWOT. However, poor handling of these issues by the United States, at least in the perception of Europeans, will accelerate ESDP and European initiatives to handle military and counterterrorism activities on their own. The Galileo satellite communications project may be a harbinger of more European-based projects.

The second way in which the GWOT will affect defense industry restructuring is in the types of products that defense firms will develop. As shown in Table 1, three of the top ten U.S. defense contractors (L-3 Communications, Computer Sciences Corp., and Science Applications) are "nontraditional" defense firms, in the sense that they produce intelligence, surveillance, and communications products rather than planes, tanks, ships, or missiles. Also as mentioned above, the budget for the Department of Homeland Security presents opportunities for these nontraditional companies, as well as for the likes of Lockheed Martin and Northrop Grumman. One consequence of this trend is that more traditional defense firms may seek to acquire these recent additions to the list of top defense suppliers. Such acquisitions will almost certainly be among U.S. firms or among European companies, since it is hard to imagine U.S. officials approving European purchases of U.S. firms while this sector is still regarded as important to nurture while conducting the GWOT.

The final factor that will influence short-term restructuring is the condition of firms producing primarily land vehicles and naval ships. This is less of a problem in the United States than it is in Europe, where further consolidation among or between French and German companies in particular would make financial and industrial (if not political) sense. In the United States, two naval shipbuilders operate six yards, while Europe has 21 firms with 23 yards.[45] Whereas U.S. defense firms have made a fair number of acquisitions in Europe in these particular sectors, European governments likely have reached the limits in their willingness to allow this trend to continue. In

October 2004, two of Germany's biggest shipbuilders, Howaldtswerke Deutsche Werft (HDW) and ThyssenKrupp, merged their assets. The next logical step would be a merger with France's DCN, although some in the French government would like to include Thales in the mix—an addition that the Germans feel would give the resultant company too much of a French orientation.[46] Given the strong hand that the French government has to influence this sector, it would be virtually impossible for shipbuilders to consolidate on their own accord. Other than land vehicles and shipbuilding, there likely will be few instances of defense mergers and acquisitions. One exception may be Saab. BAE Systems announced in December 2004 that it planned to sell 10 percent of its 35 percent stake in Sweden's largest defense company.[47] This may present an opportunity for EADS or for a U.S. defense or specialty firm (like The Carlyle Group) to take over all of BAE Systems' interests in Saab.

To sum up, in the near term, we can expect further consolidation among European producers of land vehicles and naval ships (once agreement is reached between national governments), and an increased prominence of nontraditional defense firms on both sides of the Atlantic. Mergers among the largest defense firms essentially will depend on the direction chosen by UK politicians and business leaders. U.S.-Europe relations, broadly defined, will determine whether these sectoral changes will be transatlantic or bipolar in nature.

Medium-term (4-10 years).

In the medium term, we are likely to see fairly significant developments in the transatlantic defense industrial base. Five factors will play important roles. The first is a change in military equipment procurement, which will affect industrial developments in at least three ways. Unless the United States and Europe experience a horrific terrorist act, it is likely that defense spending will level out or even decline. As discussed above, Europe's defense spending is far below levels at the end of the Cold War and, short of a series of terrorist acts in European cities, it is unlikely that it will rise much in most countries. The implication for European defense firms is that further consolidation may be the best bet for cutting costs and

increasing competition. A second aspect of procurement changes is an emphasis on systems integration rather than weapons platforms.[48] This trend started with the Pentagon, but has now been adopted by the Europeans, too. A company that can integrate systems that link ships, aircraft, tanks, and satellites into a seamless network will have an edge in winning contracts, as Thales has discovered. A third aspect of procurement is an even greater pressure to "buy domestic." In the current political environment, it is hard to envision the Pentagon purchasing any significant amount of weapons systems from non-U.S. suppliers (BAE Systems excepted for reasons already discussed). The EU-15 countries dramatically have cut their purchases of U.S. weapons in recent years (see Table 4). These countries bought $1.4 billion in arms from the United States in 2003, down from $3.5 billion in 2000. Central and Eastern European countries that joined the EU in 2004, particularly Poland, have a greater export potential for U.S. defense companies. However, even this market may prove difficult if EU membership, and the obligations and policy harmonization that accompanies it, results in "New Europe" becoming more like "Old Europe."[49] At the same time, the share of the international arms market held by U.S. firms has shrunk from 47 percent in 1999 to under 24 percent in 2003 (see Table 5). Given the decline in European and global purchases of U.S.-made weapons, the U.S. Government is going to be very reluctant to increase its spending on European-made equipment.

Second, within a decade it should be clear whether ESDP and other EU-initiated defense and defense industrial policies will amount to anything substantial. It will be an immense challenge for an institution of 25 members to reach agreement on important foreign, security, and defense policy matters, let alone whether and how military force should be used. It will require a political will that the EU could not muster in the Iraq War to address many of the challenges in the medium-term future (GWOT, relations with Russia and China, and regional stability in North Africa and the Middle East, to name a few). The opportunities on the defense economics front appear more manageable, but by no means assured. One of the next big steps that the EU could take in achieving a truly single economic market would be to apply such liberalizing principles to the market for defense equipment. EU treaties currently exempt arms

RECIPIENT COUNTRY	FY2000	FY2001	FY2002	FY2003
Austria	8,036	15,271	4,923	5,703
Belgium	36,739	85,732	48,580	68,358
Denmark	15,496	47,200	94,980	22,734
Finland	12,535	89,215	7,216	4,950
France	84,580	268,878	229,626	45,598
Germany	295,329	93,982	161,365	319,314
Greece	2,080,834	809,797	335,514	54,128
Ireland	-	4	9	12,510
Italy	160,300	805,387	168,158	154,119
Luxembourg	345	573	2,823	2,037
Netherlands	420,630	263,099	156,047	97,969
Portugal	5,795	20,383	160,843	7,908
Spain	92,369	65,439	122,966	119,889
Sweden	4,366	3,232	6,731	2,090
United Kingdom	328,345	678,009	247,146	464,913
TOTAL EU-15	3,545,699	3,246,201	1,746,927	1,382,220
Czech Republic	11,073	9,581	20,544	8,805
Hungary	6,772	3,197	12,797	5,365
Poland	20,549	27,974	65,489	3,570,226
Turkey	386,191	141,567	205,868	440,042

Note: Figures are in U.S.$ thousand and represent foreign military sales agreements.

Source: Figures derived from Defense Security Cooperation Agency (DSCA), *http://www.dsca.osd.mil/programs/biz-ops/2003_facts/Facts_Book_2003_Oct04_FINAL.pdf*.

Table 4. U.S. Arms Sales to Selected European Countries.

SUPPLIER	1999	2000	2001	2002	2003	1999-2003
United States	9,977	6,071	4,887	4,279	4,385	29,599
Russia	3,731	4,003	5,521	5,963	6,980	26,198
France	1,457	743	1,095	1,324	1,753	6,372
Germany	1,282	1,261	575	573	1,549	5,240
United Kingdom	967	1,105	968	639	525	4,204
Ukraine	770	327	631	233	234	2,195
Italy	426	174	260	511	277	1,648
China	207	160	347	410	404	1,528
Netherlands	318	195	188	257	268	1,226
Canada	130	102	80	316	556	1,184
World Total	21,257	15,549	16,611	16,143	18,680	88,240
US % of Total	46.9%	39.0%	29.4%	26.5%	23.5%	33.5%

Note: Figures are in U.S.$ million at constant (1990) prices.

Source: Figures derived from the Stockholm International Peace Research Institute (SIPRI), http://www.sipri.org/contents/armstrad/app12A2004.pdf.

Table 5. International Arms Sales: Top Ten Suppliers of Major Conventional Weapons (1999-2003).

production and procurement from EU rules, such as antitrust and open procurement policies. While the EDA and OCCAR described above may go some way toward opening weapons procurement, treaty revisions would be the best way to forge a single market for defense-related material. The pursuit of such political and economic policies discussed here face huge obstacles from mostly large European countries (particularly France and the UK) that still cling to the notion that preserving an indigenous defense industry is essential for national security. Until this concern is ameliorated by greater political integration, including an ESDP that the rest of the world takes seriously, countries like France, Germany, and the UK will continue to swim against the tide of market forces and corporate decisionmaking.

Third, U.S.-Europe relations will again play a prominent role. While we do not know what the geopolitical and geoeconomic context

of the medium term will be, we can surmise the issues that will shape it. They include the evolution of the GWOT; developments in Europe's "near abroad," which would include the countries bordering Europe to the east (particularly Russia) and in northern Africa and the Middle East; the addition to the EU of new members, including Turkey; the rise of new economic powers such as China and India; the trade and financial influence of the United States and EU, including the global acceptance of the Euro; and the ability to address social issues, such as immigration and aging populations. Most of these issues have the potential to drive a wedge in transatlantic relations or, just as bad, lead to more inward-looking or unilateral policies. It follows, then, that if these issues push Europe and the United States to work together to resolve them, the transatlantic defense industrial base will benefit. On the other hand, if they serve to further political estrangement, we can expect the completion of a bipolar defense industry.

Finally, the economics of sectoral consolidation will continue to play themselves out. While political obstacles will no doubt continue to slow European defense industrial consolidation from a more market-oriented approach, it would be difficult to believe that the status quo would remain unchanged 5-10 years from now. Consolidation in naval shipbuilding will be slow and messy, but almost certainly will happen. The same is true for the tank, armored vehicle, and other land armaments companies. The largest piece of the transformation puzzle again may come down to the British and BAE Systems. Its access to the Pentagon makes it attractive to U.S. suitors, as well as to EADS. However, a merger between BAE Systems and EADS could "kill the goose that lays the golden eggs," if the U.S. Government then deems the combined entity not trustworthy enough for the most sophisticated (and profitable) technologies.

RECOMMENDATIONS

Based on the above summary and analysis, we propose the following recommendations, which are based on the assumption that a transatlantic defense industrial base is preferable to a bipolar one, and that it should be strengthened.

U.S. Government.

Europeans often have complained that the transatlantic arms trade is not a "two-way street," and in recent years have taken steps to obstruct incoming traffic. This is not in U.S. interests. For this reason, and the equally important recognition that relying on competition among indigenous firms has significant limitations, the U.S. Government should open its defense market to more European firms, while simultaneously encouraging and pressuring (and negotiating with, if necessary) European governments to do likewise. One step likely to yield considerable benefits for the United States and its defense firms is to persuade the EU to implement legislation that would apply the benefits corresponding to the current single market in civilian goods and services to the market for defense material. The U.S. Government also should seek to enhance the contract-awarding and procurement-coordinating authority of NATO, with the objective of promoting transatlantic collaboration at the industrial and procurement levels.

U.S. Military.

The U.S. armed services need to work more closely with their European counterparts, either bilaterally or through NATO, to coordinate procurement requirements and needs. This may be difficult if ESDP becomes so successful as to undermine NATO. However, the benefits are two-fold. First, it will improve the interoperability of U.S. and European military forces, thereby reducing the financial, human, and other costs associated with the deployment of troops. Second, it will reduce the cost of weapons systems. This will become an even more important consideration when U.S. defense spending levels off, as is becoming increasingly likely.

U.S. Defense Companies.

U.S. defense firms should continue to explore opportunities in Europe on two levels. The first is for possible acquisition targets, with the understanding that there may be considerable reluctance and opposition on the part of European business, government,

and society. The second strategy would be to subcontract more technologically sensitive production to European defense companies. This will require persuading U.S. Government officials that European companies and countries can be trusted with such technologies, but may result in a change in perceptions of European defense ministries, who may then be more willing to "Buy American"—an action that many European governments have been less willing to do in recent years.

Conclusions.

Promoting transatlantic defense industry links is not a panacea for the larger issue of establishing a defense industrial base that can develop new technologies and sell them to the Pentagon and European defense ministries at competitive prices. That can in all likelihood be achieved more easily by opening procurement to all bidders. That means persuading the Pentagon (and Congress) to award more contracts to European firms. It also means giving the EU's EDA real responsibilities and decisionmaking powers in procuring weapons systems for member states—a move which would curb the *dirigiste* traditions of certain governments. Such recommendations will face significant opposition on both sides of the Atlantic.

A possible problem for U.S. defense firms is that Bush administration foreign policy actions have caused anti-American sentiment in some markets. In Europe, countries that opposed the Iraq War will very likely opt for European-produced weapons systems over U.S. products whenever possible. U.S. laws that already strongly favor domestic defense firms now are being used by U.S. companies to fend off foreign competition.[50] Sikorsky employed such a strategy in its competition with Augusta-Westland to replace the President's fleet of helicopters. Although Sikorsky's strategy proved unsuccessful, such tactics could prove risky if European governments retaliate by limiting purchases of U.S. defense exports. On the other hand, Control Risks, a UK-based international security consultancy, claims that U.S. defense companies were important business winners in 2003 due to the success of their products during the first month of the Iraq War.[51] The lesson here is that, despite the superiority of many U.S. military items, politics may trump sound economics.

Within the EU, a growing chorus of voices is calling for a single, competitive market in armaments that is treated in much the same way as other economic sectors. As the European Commission succinctly put it, "[T]he survival of a European defence industrial base able to support the ESDP will depend on successful national and trans-European consolidation of the industry as well as transatlantic partnerships between companies."[52] But it will be the intergovernmental Council—not the supranational Commission—that will have the final word on this subject, particularly on how ESDP will shape the EU's relationship with NATO.

At the national level, key European governments remain relatively hostile to acquisitions by U.S. firms. For example, the German government opposes takeovers of German military vehicles' producers by U.S. companies.[53] The 2002 acquisition of the German shipyard HDW by One Equity Partners (OEP), a U.S. institutional investor, led to fears of a sellout of the German arms industry. These fears were ameliorated somewhat in 2004, when HDW was merged with the shipyards of Thyssen Krupp, with OEP's stake reduced to 25 percent. In France, partial ownership by the state and trusted shareholders (*noyau dur*) of defense companies makes acquisitions by U.S. firms virtually impossible. Consequently, such concerns—on both sides of the Atlantic—will be difficult to overcome in the near-term.

NATO's position in this issue is ambiguous. Currently, the alliance plays a relatively minor role in shaping the transatlantic defense industrial base. Occasionally, NATO is responsible for awarding contracts, as it did in April 2004 when it awarded its largest defense contract in decades, a multi-billion euro fleet of surveillance aircraft, to a consortium led by EADS and that included Northrop Grumman.[54] But for the most part, NATO can do little at the moment to shape corporate restructuring, except indirectly by, for example, setting weapons performance goals and interoperability standards. The more important question is whether NATO and the EU will conflict with each other over institutional mission and responsibility. At a summit in London in November 2003, Prime Minister Blair and President Chirac said a European defense policy with its own military capability was perfectly compatible with NATO.[55] The concern that many U.S. policymakers have is whether an EU operational

command cell would duplicate NATO structures. Not only would this be a waste of the already limited budgets of European defense ministries, but it also would affect negatively NATO's capabilities.

In any case, the outcome ultimately will depend mostly on Europe. European efforts to develop a common defense policy will have a large impact on how that region's industry develops. If EDA is successful, for example, in procuring common weapons systems from European arms producers, it will be difficult to break the bipolar orientation of the transatlantic defense sector. In fact, it could even put the capabilities of Europe's defense firms on a par with the U.S. industrial base. But if the EU fails to build any substance into ESDP, and a membership of 25 countries will most certainly make this increasingly difficult, then the chances are good that European defense firms will, one by one, look to U.S. companies to help build their future.

ENDNOTES

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