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# Arming Europe

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Seth G. Jones & F. Stephen Larrabee

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SINCE THE end of the Cold War, Europe's defense industry has undergone important changes. There has been a marked consolidation of the defense industry and a visible increase in intra-European collaboration. In 1993 only two European defense firms—British Aerospace (BAE) and Thompson SA—were among the top-ten defense firms in the world. Today, four European firms—BAE Systems, EADS, Thales and Finmeccanica—are among the top ten. This consolidation has largely been driven by a desire to compete with U.S. defense firms on the global arms market, since, with the partial exception of UK defense companies, European firms have had difficulty penetrating the U.S. defense market.

These developments have received relatively little attention outside the boardrooms of a few U.S. defense firms. However, they raise important issues for U.S. policy, notably whether these changes will enhance transatlantic defense cooperation or hinder it.

Several factors have been responsible for the consolidation of the European defense industry since the end of the Cold War. Economic factors—the de-

crease in European defense budgets after the collapse of the Soviet Union, the scale of national procurement, and the rising cost of the development and production of weapons and defense equipment—clearly played a role in promoting the consolidation. But they do not give the whole story. A more important factor was the consolidation of the U.S. defense market, which created several giant defense firms led by Lockheed Martin and Boeing that threatened to dominate the global arms market. This created a notable incentive for European defense firms to compete. The decline in the U.S. defense budget in the 1990s in the aftermath of the Cold War led U.S. government leaders to push for consolidation in the U.S. defense industry. For example, Lockheed acquired the Fort Worth division of General Dynamics in 1993 and then merged with the missile manufacturer Martin Marietta in 1995 to form Lockheed Martin.

The rise of large, competitive and technologically advanced U.S. defense firms provided a major impetus for European defense firms to consolidate. As Thomas Enders, then-CEO of defense and security systems at EADS and now CEO of EADS, noted: "In view of the mega-mergers in the U.S., it was clear to European industry leaders that national consolidation and joint ventures were inadequate counters to the competitive challenge being posed by U.S. industry."

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Equally important in driving the rise in intra-European consolidation and the creation of several major prime firms was a *political desire* for Europe—especially the EU—to play a larger and more autonomous global role. The desire among European states to build an autonomous military capability created an important incentive for consolidation. The close relationship between European states and the expectation of future cooperation meant that intra-European consolidation would preserve European security of supply, sustain a strong European defense industrial base, and maintain European technological capabilities. Indeed, major consolidation outside Europe would have decreased security of supply and would have compromised the viability of the European defense industrial base.

Two examples illustrate the rationale for consolidation. First, the establishment of EADS created a transnational European defense giant with two major benefits: the ability to compete with U.S. firms such as Boeing and Lockheed Martin; and the ability to produce a variety of advanced armaments, such as the Eurofighter combat aircraft, the Eurocopter, the A400M transport aircraft and precision-guided missiles, all of which would improve Europe's ability to act autonomously. Following the December 1997 declaration by European leaders regarding the need for regional consolidation, government and industry negotiations were initiated to create a European defense company. While British Aerospace declined to join the German aerospace company Dasa, secret negotiations in 1999 between the shareholders of Daimler Chrysler, the Spanish state holding company SEPI, the Lagardère Group, and the German, Spanish and French governments eventually led to the creation of EADS. French Defense Minister Alain Richard and Economy Minister Laurent Fabius jointly noted that the establishment of EADS "goes in line with the European policy

promoting an autonomous defense industry that is globally competitive."

Second, the creation of MBDA in the late 1990s was a significant step toward consolidating European missile production under one roof and challenging U.S. missile producer Raytheon. Following negotiations between executives from British, Italian and French missile companies and their respective governments, MBDA was established in 1999, producing guided weapons for land-based, naval and airborne requirements such as the Meteor and ASRAAM air-to-air missiles and the Exocet anti-ship missile.

Alongside the merger process, there has also been an increase in intra-European defense projects. During most of the Cold War, European states tended to collaborate with American defense firms rather than with other European firms; now European defense firms are almost twice as likely to pursue coproduction and codevelopment projects with each other than with U.S. firms. As with consolidation, this trend is driven by the desire to both compete with U.S. firms and address gaps in current European capabilities. A recent report, *Towards an EU Defence Equipment Policy* (2003), concluded that "there is a danger that European industry could be reduced to the status of sub-supplier to prime U.S. contractors, while the key know-how is reserved for U.S. firms." This concern was reinforced in a joint statement issued on June 24, 2004, by the CEOs of Europe's three largest defense firms—BAE Systems, EADS and Thales: "Industry in Europe is under enormous competitive pressure from the United States. With U.S. defense research-and-technology investment running at around eight times that of Europe's fragmented total, and with substantial growth in the Pentagon's vast procurement budget in a heavily protected national market, American industries are reaching new heights." They stressed that intra-European defense consolidation is critical because Eu-

European governments and industry do not “wish to see indigenous defense technology overtaken or dependence on foreign technologies become a necessity.”

Take the development of the Galileo global navigation satellite system. European governments could have continued relying on the U.S. global positioning system (GPS) for navigation, but they became increasingly concerned about the security of supply. As a European Commission document noted: “If the EU finds it necessary to undertake a security mission that the U.S. does not consider to be in its interest, [the EU] will be impotent unless it has the satellite navigation technology that is now indispensable. Although designed for civilian applications, Galileo will also give the EU a military capability.” The evidence strongly suggests that European states have established the Galileo program to decrease reliance on others (especially the United States) for global navigation satellite capabilities and to support the European desire to develop an autonomous capability. Galileo is a joint initiative of the European Commission and the European Space Agency, and includes the participation of such firms as EADS Astrium, Alenia Spazio, Alcatel Space and Thales. It also involves the participation of several non-European countries—such as China, Ukraine and India—who are interested in Galileo’s space-based navigation technology.

**W**ITH THE partial exception of BAE Systems, most European defense firms have had difficulty penetrating the U.S. market. This is largely a function of political factors in the United States. The United States has historically been autarkic in the defense industry. There has been deep reluctance to cooperate with foreign governments and defense firms for much of American history, going as far back as Alexander Hamilton’s *Report on the Subject of Manufactures*. Political

obstacles to transatlantic cooperation have included extensive export and technology-transfer controls and restrictive regulatory processes regarding foreign investment in U.S. firms.

Consequently, most European defense firms have been unable to make significant inroads into the U.S. defense market. For example, Thales’s sales to North America in 2004 were 9 percent of overall sales—the same as in 1999, despite massive efforts by Thales executives. Finmeccanica’s sales to North America also remained constant between 1999 and 2004 at 8 percent of total sales. (The major exception was BAE Systems, which nearly doubled the percentage of exports to North America from 17 percent of overall sales in 1999 to 31 percent in 2004, aided in part by the UK’s close strategic relationship with the United States.)

Some European defense firms have begun to break into the U.S. market lately by teaming up with U.S. firms. AugustaWest, which is owned by the Italian firm Finmeccanica, recently won a contract to produce the U.S. presidential helicopter by joining forces with Lockheed Martin, which served as prime contractor on the bid. Finmeccanica has also teamed up with Lockheed Martin, L-3 Communications and Rolls-Royce to bid on producing the U.S. Army’s future cargo aircraft. EADS and Northrup Grumman have agreed to cooperate in a bid to replace the U.S. Air Force’s aging fleet of aerial refueling tankers. Northrup will act as the prime contractor, while EADS would be the principal subcontractor.

However, European firms face a number of obstacles. One is congressional support for the Buy America Act. In May the House of Representatives attached three Buy America provisions to the House version of the 2006 Defense Authorization Act. One of the provisions prohibits the Pentagon from buying from any foreign company that receives subsidies from a government in the World

Trade Organization. The legislation is partly aimed at barring EADS from getting a tanker contract with the Air Force. Another provision would prohibit the Defense Department from doing business with foreign companies that have sold military goods to China for commercial reasons. The third provision requires that more than 50 percent of the products bought by the Department of Defense be American-made.

The Bush Administration has threatened to veto any bill that contains such provisions because they would limit the administration's flexibility in applying acquisition laws and could also prompt retaliation against U.S. defense firms. Moreover, the provision that the Department of Defense must buy American-made products simply cannot be implemented. Some of the products that the Department of Defense must buy—such as electronic flat-panel displays and certain kinds of computer chips—are no longer made in the United States or are only made in limited quantities.

Another problem is posed by the subsidies that firms like EADS receive from European governments. Since the passage of the House authorization act, the United States has filed a WTO case against Airbus—which is 75 percent owned by EADS—over the subsidies it receives. It is highly unlikely that the U.S. government will award a multi-million dollar contract to a company against which it is taking legal action.

EADS's future cooperation with Russia could also prove problematic. During a visit to Moscow in October, EADS management reportedly discussed involving Russia in several large commercial aviation projects. Such cooperation underscores EADS determination to expand its global market presence. However, given growing U.S. concerns about Putin's policies, the cooperation could raise eyebrows in Congress and complicate EADS's effort to penetrate the U.S. market.

**L**OOKING TO the future, two sets of factors—one economic and the other political—are likely to drive the development of the European defense industry. First, economic factors could influence the financial performance of defense companies, the resources available for procurement (including R & D and S & T efforts), unit costs and export sales. In addition, while high economic growth rates will not necessarily translate into higher defense budgets, low or negative growth would shrink the resources available for defense. This could lead to lower defense budgets and increase the incentives for consolidation and collaboration.

The growth of protectionism in Europe could also undermine the consolidation of the European defense industry. French Prime Minister Dominique de Villepin recently spoke of the need for "economic patriotism" to protect certain French industries. While the idea of economic patriotism is aimed largely at a domestic audience, French defense executives worry that a growth of protectionism could cause other countries to shun French companies. The effort by Thales, a French firm, to acquire German naval-electronics firm Atlas Elektronik, for instance, has been hurt by such fears.

The second is the political evolution of the European Security and Defense Policy (ESDP). The development of ESDP will have an important impact on the structure of the European defense industry. Increased progress in building ESDP and a stronger European Union may increasingly shift these from national to regional considerations. In addition, governments and defense ministries generally procure weapons, platforms and systems for use during future military operations. Future joint action should increase industry consolidation and collaboration in order to increase interoperability and standardization. Low levels of interoperability and standardization can

severely impede the ability of militaries to fight effectively by complicating command, control, communications, computers, intelligence, surveillance and reconnaissance capabilities (C4ISR).

ESDP has strong public support in Europe and is likely to continue to be an important element of EU foreign policy. However, U.S. fears about the development of the EU as a counterweight seem unwarranted. First, France does not have the political weight to drive the EU integration process. This is even more true since the recent enlargement of the EU in May 2004, which has significantly weakened France's influence within the EU. Second, the majority of the members of the EU, especially the new members from central and eastern Europe, want a strong tie to NATO and the United States, as do other Atlanticist members such as Britain, Italy, Netherlands, Portugal and Denmark. Finally, it has become increasingly clear that a strong ESDP cannot be built without the support and participation of Great Britain—a fact even France has come to realize. Britain's involvement in ESDP serves as an important counterweight to France and ensures that ESDP will not be driven in an anti-NATO or anti-U.S. direction.

An additional political factor will be the development of the European Defense Agency. In 2004 the European Council established the European Defense Agency (EDA) to improve European military capabilities, consolidate defense research and technology, and promote armaments cooperation. With a 2005 budget of more than \$23 million and a staff of approximately eighty people, it is small and has few resources and little decision-making authority. Currently, it is leading or managing several initiatives, including development of unmanned aerial vehicles (UAVs) and intelligence, surveillance, targeting and reconnaissance systems (ISTAR); the enhancement of command, control and communication capabilities;

and the production and development of commercial and military off-the-shelf equipment.

The EDA, together with the European Commission, is scheduled to begin conducting a detailed inventory of EU defense industrial capabilities this year. The inventory is designed to map the entirety of Europe's defense technological and industrial base, from testing and evaluation facilities to industrial capacities. This will give the EDA's steering board an overview of the gaps in the defense sector regarding the fulfillment of the headline capabilities goals for the EU's 60,000-soldier rapid-reaction force, agreed upon at the EU summit in Helsinki in December 1999. When completed, the map will provide the basis for a coordinated cross-border defense industrial policy. However, gathering the information for the map may prove difficult. There are still some barriers to information-sharing among European defense ministries. Thus the EDA will have to overcome the reluctance of both European governments and industries to share information if it is going to produce a useful map.

The EDA has agreed on a new code of conduct aimed at creating a single EU defense market by opening competition for defense contracts worth more than \$1.2 million. The code is designed to constrain the use of Article 296 of the Treaties Establishing the European Communities (2002), which allows EU governments to invoke national security considerations to shield national defense industries from foreign competition.<sup>1</sup> However, the code has been criticized by European defense executives because it is voluntary and non-binding. Many European defense firms feel that only a binding agreement can prevent countries from evading open competition by declaring certain programs "politically sensitive."

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<sup>1</sup>Article 296 was formerly Article 223 of the Treaty of Rome (1957).

U.S. FOREIGN policy decisions, especially regulatory obstacles to transatlantic cooperation, will also have an important impact on the European defense industry. The persistence of obstacles like the Buy American Act over the next decade would encourage greater collaboration among European defense firms. In addition, if the Europeans were to develop the EU as a counterweight to the United States and NATO—as some French officials advocate—the United States might be even less inclined to open its market to European firms. A serious weakening of NATO might cause the U.S. government to conclude that there were few benefits to transatlantic collaboration.

However, there are several steps that the United States and Europe could take to alleviate—though probably not eliminate—future sources of potential discord. One is to improve transatlantic interoperability in such areas as C4ISR, which will be critical for future coalition operations. In Afghanistan, for example, the United States and Europe have been deeply involved in combat and reconstruction operations, though there continue to be interoperability challenges. This was particularly evident at the level of special forces. Highly specialized communications and other equipment were frequently incompatible, and there were significant challenges in passing classified information between U.S. and European forces. Royal Air Force tanker aircraft flown by British aircrews in Afghanistan were compatible with U.S. Navy carrier-based fighters conducting air strikes, but U.S. Air Force tankers were not. There is some prospect for improved cooperation based on lessons from Afghanistan, but the gap is still large. It is also important for U.S. policymakers to recognize that European defense policy is increasingly being shaped within the parameters of the European Union, not NATO. This means that the U.S. military may increas-

ingly have to engage European countries through the EU, not NATO.

Finally, the United States needs to streamline and revise its export licensing regime. The current regime is too restrictive in preventing foreign companies—including those from allied countries—from cooperating with U.S. companies. All military technology exports or overseas transfers require a license from the Office of Defense Trade Controls in the State Department, following interagency coordination. The slowness and complexity of the process, and the large number of items on the Munitions List, make transatlantic collaboration difficult. U.S. firms that wish to collaborate with European firms encounter delays in this process. The British government has been deeply frustrated about export-control hurdles for the Joint Strike Fighter. European firms seeking to acquire U.S. components find the system unpredictable. In addition, European defense firms are often excluded from the U.S. market through political obstacles. The restrictive U.S. licensing regime and the exclusion of European firms from the U.S. market may leave European firms with little choice but to sell to third countries such as China.

ONE OF the major policy issues in the future between the United States and its European allies is likely to be the growing interest of third countries in acquiring European military and dual-use capabilities through licit or illicit means. This has already begun to happen. Of particular concern are European technology transfers to U.S. adversaries, especially China. The United States has expressed concern that the EU may lift its arms embargo of China, which was implemented in 1989 following the Chinese government's crackdown in Tiananmen Square. A decision to lift the arms embargo, coupled with a closer European-Chinese econom-

ic and political partnership, would likely lead to military and dual-use technology transfers to China. This development could increase China's military capabilities by accelerating important components of military modernization and could ultimately impede America's ability to sustain deterrence in Asia.

However, the EU's arms embargo seems safely in place for the time being, in large part due to U.S. pressure. It now looks unlikely that European defense firms will sell weapons or platforms directly to China, because of political concerns and code-of-conduct restrictions. Nor is wholesale licensing probable. Rather, the most likely policy concern in the future will be military and dual-use technology transfers. Even with the embargo in place, European governments and firms have still exported military and dual-use technology to China.

Examples of European exports include British microsatellite and nanosatellite technology for anti-satellite weapon systems, British airborne early-warning radar for Y-8 aircraft, German engines for Song-class conventional submarines, and French and Italian technology for attack helicopters. In addition, China has invested approximately \$240 million in the Galileo navigation satellite system. China Galileo Industries, Ltd., a Chinese state-run company, is developing Galileo's satellite and remote sensing technologies and application systems. According to a cooperation agreement signed by the NRSCC and the Galileo Joint Undertaking in October 2004, China pledged to invest in research and development on space technologies, ground equipment and application systems for the Galileo project. European officials have welcomed Chinese participation in Galileo. "China should remain part of the Galileo project until the end", European Commission Vice-President Jacques Barrot has argued, adding he was delighted by the "strategic partnership which is start-

ing to take shape with China."

However, some European defense firms are likely to refrain from selling weapons to China in order not to risk jeopardizing their ability to compete in the U.S. defense market, which is the largest in the world. EADS has decided, for instance, not to sell military equipment to China regardless of whether the EU lifts the arms embargo. The decision to forgo such sales to China is a reflection of the importance of the U.S. market for EADS and a desire not to endanger potential sales, such as the tanker deal with the Air Force. Moreover, the Chinese market may not be as attractive to some European firms as many U.S. lawmakers fear. China's practice of reverse-engineering foreign technologies in order to produce them itself has angered some European defense firms and may limit the willingness of European firms to sell their defense goods to China.

For the moment, the danger of a U.S.-European clash over arms sales to China has been averted. However, the dispute over the arms embargo underscores the need for closer consultation and coordination of policy between the United States and its European allies in the future regarding dealing with China. This need will become more important as the European defense industry expands in its search for markets.

Finally, there is a need for greater transatlantic defense cooperation more broadly. Given the growing importance of the EU as an international actor and the corresponding consolidation of Europe's defense industry over the last decade, there is little prospect for the creation of a North Atlantic defense community. But it is in the interest of the United States and Europe to coordinate their defense policies more closely and avoid unfettered competition. Streamlining the U.S. export-licensing process, which currently inhibits greater defense collaboration, should be a top priority in this regard. □