

The European Aeronautic Defense and Space Company (EADS):
A New Dimension of European Cooperation?

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Abstract

This paper examines the creation, development and current role of the European Aeronautic Defense and Space Company (EADS) in the European and global aerospace and defense sectors. It describes the political and economic context surrounding the creation of EADS, with particular emphasis on the challenge posed to European governmental and industrial leaders by the rapid and thorough consolidation of the U.S. defense-industrial base following the end of the Cold War. The structure, operations and product line of EADS are then discussed in connection to ongoing trends in the European and global markets for defense equipment. Finally, the significance of EADS is assessed in relation to political and institutional developments within the European Union intended to promote effective cooperation in the realms of foreign policy and defense equipment procurement.

I. Circumstances and chronology of EADS creation

This section examines the events and decisions culminating in the formation of EADS. Of particular importance is the transatlantic context in shaping the decisions of European government and industry leaders to combine their respective national assets into a single corporate entity having a major presence in both military and commercial markets. Of particular emphasis was the wave of defense sector mergers that swept the United States following the end of the Cold War—especially the Boeing takeover of McDonnell-Douglas—that created American aeronautical assets of such scale, resources and product range as to dwarf European capabilities. These international pressures combined with an implacable economic and financial logic within Europe itself to drive the political and industrial leadership—most importantly in France and Germany—to create a single defense and aerospace company to challenge American dominance in a sector crucial to both the military and commercial dimensions of security.

Post-Cold War Developments in Aerospace and Defense: A New "Defi Americain"?

Since the implosion of its primary military and political rival, the USSR, the United States enjoys a measure of supremacy in the realms of security and commerce unrivaled in its past history. Both the fact and impression of military primacy was greatly enhanced as result of the (first?!) Gulf War, in which a U.S.-led coalition dispatched of the formidable (at least on paper) forces of Saddam in a sort of high-tech blitzkrieg. Despite the fact that Saddam still clings to power, the unmistakable impression left by the Gulf War was that the U.S. wields an unrivaled force projection capacity built on industrial and technological capabilities that leave it with no "peer" competitor.

This striking degree of U.S. preeminence in the military realm was accompanied by and reinforced by a concomitant (and probably coincidental) resurgence in the performance of the American economy. Despite the 1992 Clinton campaign's incessant emphasis on the failures of the Bush administration, nearly all indicators of macroeconomic health had already begun to point upward in 1992. Perhaps a bit like the cock taking credit for the dawn, Clinton was able to claim the creation of millions of jobs and preside over a falling budget deficit, record low unemployment combined with almost no inflation and low interest rates, a booming stock market, and thus in the elections of 1996 ride the wave of an economy seemingly going from strength to strength. Although the Clinton administrations cannot credibly take credit for this fortuitous convergence of circumstances, they most assuredly deserve recognition for their determined and concerted efforts to marry these developments in the realms of security and economics into a coherent "geo-economic" strategy designed to extend U.S. commercial and political influence abroad. Despite a perceived lack of interest and expertise in foreign affairs (reinforced by his own proclamations concerning the priority of domestic concerns such as health care reform), Bill Clinton arguably is distinguished from his post-WWII predecessors by a "more active industrial, technology and export promotion policy emphasizing economic security in defining national security."¹

Much of the impetus to coordinate the ability of the U.S. government to promote the export of American commercial goods and services can be found in pressures emanating from post-Cold War developments in the defense industrial base. In hopes of realizing the promised but ever elusive "peace dividend", the Pentagon used declining procurement budgets as a lever to encourage the rationalization of its contractor base through a combination of acquisitions, mergers and even the elimination among suppliers of military equipment.² Especially significant in its connection to the commercial realm is the fact that this consolidation occurred in a technological and industrial context in which the lines between the civilian and military sectors were becoming increasingly blurred. As military strategy, tactics, operations and equipment come to rely more and more heavily on so-called information technologies (IT, especially data processing and microelectronics), the "defence industry is gradually dissolving into civilian high-technology industries."³

As the military and economic dimensions of national security have become so tightly linked at the technological and industrial levels, "the defence industry thus has become part of a pattern of intensifying economic and trade competition, especially in high-technology industries, that is being fought out by commercial as well as political means."⁴ In this competition, the Europeans found themselves in the 1990s at a marked disadvantage relative to the sole superpower that demonstrated the willingness and ability to use its enhanced leverage in the security realm to affect the outcome of commercial contests.⁵ As noted by a perceptive observer, "the US pursues an

¹ Jens Van Scherpenberg. Transatlantic competition and the European defence industries: a new look at the trade-defence linkage." *International Affairs* Vol.73, No.1 (January 1997): 99-122. p.108. He further notes that under Clinton: "Linking military dominance with an aggressive pursuit of economic interests has since become a core element of the US economic policy agenda."

²Such encouragement extends to the Pentagon's reimbursement of defense contractors for expenses incurred during their restructuring. Charges allowed against defense contracts include costs associated with downsizing the workforce, even including compensation for the termination of executives. The policy has been the subject of spirited debate within Congress. See *AWST* 22 July 1996, p.30.

³Van Scherpenberg, p.103. He goes on to observe that while "there will always remain technologies for which there is a clear military demand but virtually no civilian market ... with the focus of future military strategy shifting to IT, this 'purely military' segment of defence technologies is shrinking."

⁴Van Scherpenberg, p.104.

⁵Van Scherpenberg uses an economic model to illustrate the current situation. In this view, the U.S. has emerged as the near

explicit and coherent strategy for defense-related industries, aimed at technological superiority in all relevant sectors. European countries, in contrast, do not have the means to implement such a strategy individually and lack the political consensus to develop one collectively.⁶

Under pressures to consolidate at least as severe as those facing their American counterparts, European aerospace firms in the 1990s continued to shed workers as their respective governments wield the budget axe.⁷ The ominous implications for the European industry were not lost on its leadership—consolidate quickly and effectively or risk elimination from the arena.⁸ Pressure for consolidation within the European aerospace and defense sector intensified with the wave of mergers that swept the United States following the end of the Cold War. The 1997 Boeing takeover of McDonnell-Douglas in particular faced European industrialists and political leaders with a most pressing instance of a perennial problem—an American firm of such scale, resources and product range as to dwarf European capabilities.⁹ The creation of a single and much-strengthened American competitor increased the pressure for and raised the stakes of a thoroughgoing consolidation of the European aerospace sector. For many observers at the time, the national political and strategic rationale behind the merger was clear: "You have one national aircraft company now. It says that our policy is based on a definition of markets on a global basis. I believe that's very realistic. Ultimately, the marketplace would have demanded it, but the Clinton administration really saw the need and responded."¹⁰

For the Europeans, the implications of the merger appeared potentially disastrous, because the new American entity would wield a degree of market power unprecedented in the history of the industry¹¹. The new company would generate \$48 billion in projected annual

monopoly supplier of the commodity, external security "in the global marketplace of sovereign states."(p.105). Perceptive of the power accruing to its position, Van Scherpenberg argues (p.107) that: "America's singular stance as the one remaining military superpower in command of the most advanced defence technology makes it a very rational policy choice to use its political leverage to promote its civilian foreign economic interests as well."

⁶ Burkard Schmitt. "European and Transatlantic Defence-Industrial Strategies." A paper prepared for the IISS/CEPS European Security Forum, Brussels, 25-November 2002. Found at the website of the European Security Forum <http://www.eusec.org/schmitt.htm>. Schmitt is Assistant Director for the European Union Institute for Security Studies based in Paris.

⁷ A mid-1995 EU survey of the European aerospace sector documented continued erosion in the industry's employment base due to cuts in military procurement, continued weakness in civil markets exacerbated by a weak dollar, and (Ironically) increased labor productivity. See AWST 31 July 1995, p.27.

⁸For example, Richard Evans, CEO of British Aerospace and president of the European Association of Aerospace Industries was quoted as saying: "The alternative is simple—a repeat of [Europe's failure in] the consumer electronics industry, the shipbuilding industry, the steel industry." See AWST 17 March 1997, p.50.

⁹See articles detailing the terms of the proposal and discussion of its possible impact in WSJ, NYT, FI of Monday 16 December 1996. Also consult AWST 23/30 December 1996, pp.10-13 for background and analysis of the implications of the merger in relation to the pattern of post-Cold War consolidation in the U.S. defense industry to date.

¹⁰Felix Rohatyn as quoted in NYT Monday 16 December 1996, p.C14. James Sterngold, the author of the article (p.A1) observed that the merger "signified the near completion of one of the swiftest and most complete transformations ever of an industry—as a matter of an explicit government policy. The lesson is that the Clinton Administration has largely succeeded in turning the country's military contractors, over a span of just four years, into instruments of one of its most important goals: making the economy more competitive globally."

¹¹Wolfgang H. Demisch of BT Securities put it this way: "The merger creates this incredible powerhouse with massive technical, financial, manufacturing and marketing resources. They've got it all." As quoted in NYT Monday 16 December 1996, p.C14.

revenue, employ 200,000 workers and offer a product line including the world's premier fighter aircraft (F-15, F/A-18), military transports (C-17), missiles, space vehicles, electronic products and systems, and of course the most comprehensive line of commercial aircraft. Also, the new Boeing would have cash reserves of around \$6 billion, and the additional revenue generated by McDonnell-Douglas's defense products would be available to the new entity. Not only will defense sales cushion the eventual and inevitable downturn in commercial orders, they "also will enable Boeing to use the cash flow to fund growth of new commercial aircraft products."¹² Second, the combined commercial product line of the merged company accounted for over 90% of the world's existing fleet of aircraft, meaning a steady stream of revenue for decades to come from the lucrative sale of spare parts and product support services. Also, it could be safely assumed that at least some McDonnell-Douglas customers would retain some loyalty to the company and its product line, giving the merged company an advantage in future large commercial aircraft (LCA) sales contests with Airbus Industrie.

Creating EADS: Franco-German Leadership Again¹³

These international pressures combined with an implacable economic logic within Europe itself—neither governments nor companies could rely upon levels of domestic or overseas sales sufficient to support separate national programs of research and development of military or commercial products, especially in the aeronautical sector. The Germans took the initiative in the person of Jurgen Schrempp, head of the newly created transatlantic automotive giant, Daimler-Chrysler. Concern for the commercial and financial future of its Deutsche Aerospace unit (DASA) led him approach British Aerospace (BAE) with a proposal for full merger of DASA and BAE. The industrial logic was clear, as the companies already were partners in the Airbus consortium, and had overlapping interests in other sectors.

Surprisingly to many, the new (from June 1997) Socialist government responded quickly to the proposed German/British link, and moved to restructure French national capabilities by promoting the merger of state-owned Aerospatiale with privately-held defense contractor and publisher Matra controlled by Jean-Luc Lagardere. Confronted with the fact that a merged DASA/BAE would far outweigh the French share within the Airbus consortium, Prime Minister Lionel Jospin announced in July 1998 that merger talks were already well advanced. By June 1999, the merger of Aerospatiale and Matra was official, with the French government retaining a 48% stake in the new company.

Schrempp then saw an opportunity to accomplish in a single masterstroke the consolidation of the European aeronautics sector, but quickly found that he had badly overreached. Even before the Aerospatiale-Matra merger had been concluded, Schrempp approached Lagardere about the possibility of a 3-way link among the German, French and British concerns. But the deal proved far too complex, and negotiations deteriorated quickly to the point that the DASA-BAE merger itself was fatally jeopardized, finally falling apart in January 1999.

In danger of ending up with no merger partners at all, Schrempp undertook secret and ultimately successful discussions with the very top Lagardere-Matra leadership, excluding even representatives of the respective governments. His goal, which met with strong initial resistance from the French government, was to merge the two separate national industrial assets into a truly integrated company independent of state priorities in its strategy and decision-making. Confronted in late June 1999 with a *fait accompli*, Jospin was initially opposed, especially

¹²AWST 17 March 1997, p.46. The article cites Brian Callan of Merrill Lynch as saying that with the extra revenue Boeing might well undertake a complete redesign of the 737: "This could be a multi-billion dollar program and Boeing, at some point, will need every penny it can get."

¹³ An excellent account of the negotiations concerning the creation of EADS can be found in Business Week, International Edition, 10 July 2000. The article entitled *Airbus: Birth of a Giant* is the cover story for the European edition of that date, and my account here relies upon it and other news sources.

because the deal included stipulations that the French state would reduce drastically its ownership and influence in the new enterprise, and this only 3 weeks after the Lagardere-Matra merger. However, with negotiations now broadened to include government officials and corporate executives on both sides, a compromise was reached whereby Daimler-Chrysler could divest itself of DASA's holdings in the new entity if major disagreements over business strategy and policy might arise with the French state, which itself would retain a 15% stake. By October 1999, the deal was complete, and announced to the world by French Prime Minister Lionel Jospin and German Chancellor Gerhard Schroeder.

II. Description of EADS structure and operations

The European Aeronautic Defence and Space Company (EADS) was officially created as a publicly-traded corporation in July 2000.¹⁴ EADS is registered as a corporation in the Netherlands. 34.1% of its stock is publicly owned and traded on exchanges in France, Germany and Spain. Daimler-Chrysler owns 30.2% of the stock, as does a French group that includes industrial, financial and state partners.¹⁵ The remaining 5.5 % of EADS is owned by a Spanish state holding company. In 2001, the company claimed over \$30 billion in annual revenues, with just under two-thirds of that total coming from the Airbus Industrie unit. Net income was in 2001 \$1.37 billion Euros.¹⁶ Overall, approximately 80% of EADS revenue is derived from commercial sales, and 20% from defense. Geographically, EADS generates about 45% of revenue in Europe, 34% in North America, 10% in Asia, and the remaining 11% in the rest of the world. EADS employs about 103,000. Over 40% of these are in France, about 37% in Germany, 11% in the UK, almost 8% in Spain, 2% in the Americas and the remainder elsewhere in the world.

The company has five major divisions: Airbus, Aeronautics, Defense and Civil Systems, Space, and Military Transport Aircraft.

The Airbus division is the most important from all perspectives: sales, profits, facilities, and number of employees. The division employs about 45,000 in 16 major centers in Europe, developing 3 major families of commercial aircraft—the A318-321 single-aisle, the A300/310 twin-aisle, twin-engine, short-medium range airliners and freighters, and the A330/340 medium-long haulers. Airbus also has developed and operates through a subsidiary 5 A300-600ST "Super-Transporters" (nicknamed Beluga) having 1,400 cubic meters of cargo space to carry aircraft sections and components among its sites in Europe and elsewhere.

The Aeronautics division generates just over 5 billion euros in revenue and employs about 24,000 people across its six business units. The main focus of the military aircraft unit is the Eurofighter program, a multi-role fighter and ground attack aircraft designed and manufactured by a consortium of European firms for sale to air forces in Europe and around the world. With responsibility for both component manufacturing and final assembly work, EADS has a 46% share in the Eurofighter program. A second important unit within the EADS Aeronautics division is Eurocopter, a major global designer and manufacturer of civil and military helicopters. A third unit is ATR (Avions de Transport Regional), a major designer and manufacturer of turboprop aircraft of 40-70 seats, of which EADS owns 50%. A fourth unit is EADS Socata, which builds a range of light aircraft for both the civil and military markets, and also designs and manufactures aircraft components for Airbus, Eurocopter and other builders. A fifth unit, EADS

¹⁴ Visit the company's website www.eads.com for additional information on its organization, product lines and financial data.

¹⁵ The current status and future policy of those private French stakeholders has become quite controversial in the wake of the death in March 2003 of Jean-Luc Lagardere, EADS co-chairman and patriarch of the media to missiles conglomerate, which owns 15% of EADS. Speculation surrounds the continued commitment of Lagardere's future management to EADS, and to the ongoing consolidation of the European defense sector, both of which had been high priorities of the company's 72 year-old founder.

¹⁶ Financial figures for 2002 (released March 2003) show only small declines in revenue and earnings, but shrinking orders, especially for Airbus, presage difficult times in the coming months. <http://www.finance.eads.net/>

Sogerma provides aircraft overhaul and maintenance services for airlines and corporate customers. EADS EFW (Elbe Flugzeugwerke) is based in Dresden, and converts Airbus A300/310 aircraft for cargo and freight applications.

The Defence and Civil Systems division contributes about 3.3 billion Euros to EADS revenue (10% of total), employs over 17,000 and consists of four main business units. The missiles unit is responsible for EADS participation in the MBDA consortium, whose shareholding partners include EADS (37.5%), BAE Systems (37.5%) and Finmeccanica (25%).¹⁷ Through its role in MBDA, EADS is involved in dozens of programs involving all major types of missiles and their components. The Systems and Defence Electronics unit provides a broad range of threat detection and weapons guidance components and software having land, air and naval applications. The Defence and Civil Systems division also has units specializing in telecommunications and internet business services.

The Space division contains several business units involved in developing the hardware and software used to exploit the scientific and commercial potential of space. Most important among the business units of the Space division—which contributes about 8% of EADS revenue and employs over 10,000—are Astrium (satellites), and the EADS share in Arianespace (launch services).¹⁸

The Military Transport Aircraft (MTA) division is the smallest in terms of its contribution to revenue, accounting for only 2% of sales, and employs only about 3,500 people. Its product line consists almost entirely of light-to-medium transports built by CASA, which are flown by operators in Europe and worldwide. EADS MTA has also developed versions of its transports adapted for maritime patrol, and equipped with the FITS system of sensors and data processing software. In addition, MTA undertakes modernization of avionics packages on C-130 Hercules and P-3 Orion aircraft, and also manufactures composite material aerostructures for commercial aircraft manufacturers worldwide. The importance of the MTA division within EADS may well be enhanced in future years as it assumes responsibility for producing some components (horizontal stabilizers, nacelles), and for final assembly of the A400M (discussed more fully below) beginning in about 2012.

III. EADS position in the European aerospace & defense market¹⁹

At the end of the Cold War, the market for arms production and purchasing in western Europe was highly fragmented into separate entities in which the respective national governments contracted with numerous suppliers for their particular weapons and equipment needs. In many cases these suppliers were themselves at least partially owned by those same governments, and thus enjoyed a highly privileged status with respect to procurement policies. As the situation has been perceptively characterized, "Europe's defence industry entered the 1990s as a collection of national fiefdoms."²⁰ The few cross-border programs that did exist were based on the principle and practice of *juste retour*, meaning that transnational cooperation in the development and procurement of defense weaponry and equipment was concerned primarily with political, industrial and technological questions related to the sharing of design and production work, as opposed to issues of cost and performance.

¹⁷ Additional information on MBDA's history, structure and operation can be found at its website <http://www.mbda.net>

¹⁸ The EADS share in Arianespace is approximately 25%. For more on its structure and operations visit www.arianespace.com

¹⁹ A useful source in sorting the complexities of collaboration in the European defense and aerospace industries is found at the website of Defence Systems Daily at <http://www.defence-data.com/index2/index2.shtml>. The section called Western European Ownership Jigsaw describes the product lines and ownership structure of many important European aerospace and defense firms, including EADS.

²⁰ Terrence Guay and Robert Callum. "The transformation and future prospects of Europe's defence industry." *International Affairs* Vol.78, No. 4 October 2002):757-776, p.757.

Economic pressures stemming from the rapid consolidation of the U.S. defense-industrial bases so effectively orchestrated by the American government (as described above) pushed European political and industrial leaders to develop and pursue strategies of rationalization involving three main elements: privatization, mergers and acquisitions and joint ventures.²¹ The British conservative governments of the late 1980s and early 1990s initiated the trend of privatization by divesting state holding in key defense contractors across the range of weapons and equipment. Continental governments followed suit only haltingly, but at the same time encouraged their firms to integrate and consolidate within national borders. Subsequently, these privatized (fully or partially) and amalgamated firms sought cross-border alliances in many forms, from joint ventures regarding a specific program, to partnerships intended to develop a range of products, to the outright merger of assets into a new corporate entity (Eurocopter).

The creation of EADS represents the extension of this rather eclectic and ad hoc approach to rationalization, and the complexity of its structure and the extremely wide variety of its products and services reflects these origins. "With EADS, sectoral consolidation did not terminate at the national level."²² Instead, the creation of EADS involved the merger of national champions that themselves had been the product of more-or-less voluntary previous consolidation within their respective borders. Specifically, the two major entities that were joined to create EADS—Aerospatiale-Matra of France and DASA of Germany—had only very recently assumed those identities.

Indeed, the pressures and processes that resulted in EADS continue to produce sectoral consolidation that is truly European in scope, even if maddeningly convoluted in structure and less than fully coherent in terms of corporate organization and product lines. As characterized in a recent RAND report, real rationalization is taking place, especially in certain sub-sectors of the industry: "Despite this apparently complex structure, the same industrial players are active in most market segments and are present in many different forms: either as single corporate entities or, through their stakes in other players or through mergers, structural or program-specific alliances, joint ventures, or other types of linkages."²³ EADS is definitive of this trend, as its business units are important actors in all key market segments in which EADS has a presence—fixed wing military aircraft (Eurofighter), helicopters (Eurocopter), missiles (MDBA), and space (Astrium, Arianespace).

There are now three major groups—EADS, BAE Systems, and Thales—that dwarf their rivals in the European aerospace and defense industry.²⁴ Moreover, some of the more important of the now second-tier players, such as SAAB and Finmeccanica are being pulled into the orbit of the emerging core of the European aerospace and defense sector. As recently noted, "SAAB is clearly in the sphere of influence of BAE Systems, which is its 35% shareholder, and Finmeccanica is in EADS' sphere of influence."²⁵ Although EADS realizes only about 20% of its revenues from defense-related activities, the absolute amount (over 6 billion Euros) is sufficient to rank EADS as Europe's 2nd-largest defense contractor, albeit far behind BAE Systems, with defense-equipment sales well in excess of 13 billion Euros. Indeed, recent speculation centers on a possible merger of EADS and Thales, which would accomplish further rationalization and bring the new Continental entity into near parity with its British counterpart in the defense electronics

²¹ Leanne C. Powner. *European Defense Industry Restructuring: Going, Going...*
<http://www.geocities.com/CollegePark/Classroom/4424/papers/EDIR/>

²² Guay and Callum, p.760.

²³ See the summary of RAND's analysis of the European Defense industry as found at
http://www.rand.org/publications/DB/DB358/DB358_sum.pdf

²⁴ Thales is the entity created from the merger of Thomson-CSF (itself the result of previous mergers) with the British firm Racal.

²⁵ Standard and Poors. *European Aerospace Industry Hits Strong Turbulence*. 4 September 2002.
www.standardandpoors.com/

segment.²⁶ By contrast, the land armaments and shipbuilding sectors have not seen the emergence of business entities that might play a role comparable to EADS and its counterparts as the core or fulcrum around which meaningful consolidation might occur.

IV. The role of EADS in the global aerospace & defense market

EADS and the Global Market for Large Commercial Aircraft (LCA): The Creation and Development of Airbus Industrie²⁷

Arguably the most important development in commercial aeronautics in recent decades is the re-emergence of a European capability in large airframe manufacturing in the form of Airbus Industrie, a consortium of aeronautics firms in France, Germany, the United Kingdom and Spain supported by their respective governments. In order to be successful, the Europeans would not only have to accommodate the distinctive interests and capabilities of the respective national firms and governments, but do so in a way that translated commercial imperatives into a business strategy capable of first regaining a foothold in the global market for commercial airliners, and then wresting the technological and industrial initiative from the Americans. The products of the American manufacturers (McDonnell Douglas and especially Boeing) were the concrete representation of US leadership in the aeronautics industry, and also a crucial element of American political and economic dominance in the Cold War era. Therefore, the characteristics of the American commercial aircraft product lines—range, payload, fuel consumption—defined the very terms in which any prospective European response to the American challenge would have to be expressed. To be effective, European political and economic aspirations would have to be translated into the same currency as used by the Americans: aircraft with performance characteristics comparable to existing products, yet able to attract demand in a market in which the terms of competition already had been set by the leading firms.

The real challenge, therefore, was to retain the political interest, financial support and industrial expertise of all three nations without allowing the aircraft projects themselves to be held hostage to differences among them. The launch of the A300B in 1969 proved successful in all of these respects. By designing and producing a twin-engine, wide-body, medium-haul plane using American engines and other standard components, the management of Airbus Industrie opted for a tactical move that was cautious yet innovative. The very configuration of the first Airbus thus represented the opening move in a larger strategic gambit, as "Airbus management sought to fill a particular niche in the global market . . .", but also to begin the process of rebuilding the foundation for an autonomous European civil airframe sector.²⁸

The mechanism of cooperation chosen by the partners was also crucial in the eventual success of the European venture. Formed under French law as a *Groupement d'Interet Economique* (GIE) rather than as a corporation, the "GIE format ... was vital in building confidence and credibility amongst airline customers."²⁹ Particularly important in this regard was the joint and

²⁶ Regarding the EADS-Thales merger speculation, see the article entitled "EADS Best Hope Goes Up in Smoke" in *Business Week OnLine*, 24 March 2003. <http://www.businessweek.com/>

²⁷ The section on Airbus Industrie and its impact on the global aeronautics draws directly upon my own *Airbus Industrie: The Politics of An International Industrial Collaboration*, New York: St. Martin's Press, 1995.

²⁸ M.Y. Yoshino. "Global Competition in a Salient Industry: The Case of Civil Aircraft." in *Competition in Global Industries*, ed. Michael E. Porter, pp. 517-538, Boston: Harvard Business School Press, 1986, p. 523. A similar observation concerning the LCA industry in the early 1970s: "...there was no wide-bodied aircraft designed specifically to fly over medium-to-short hauls. Hence there was a market gap. Airbus Industrie, by introducing the A300 series, filled this void." See Baidul A. Majumdar, "Upstart or Flying Start? The Rise of Airbus Industrie." *The World Economy*, Vol. 10, No. 4 (Dec. 1987): 497-518, p. 504.

²⁹ Keith Hayward. "Airbus: twenty years of European collaboration", *International Affairs*, Vol. 64, No.1 (Winter 1987-88): 11-26, p.19.

several liability of the industrial partners, with government backing (and even outright state ownership in the case of Aérospatiale) providing the ultimate security to prospective customers. "In other words, Airbus products had the guarantee of the two powerful European nations--France and Germany--not an insignificant factor in establishing its much needed credibility."³⁰ The creation of an innovative framework of collaboration among its leading aeronautics firms therefore reinforced the European strategy based on a technically and commercially feasible product.

Despite lacking any certainty of return on investment, the consortium's management was not deterred in its intention to establish the requisite capability to remain in the business over the long haul. Everyone in the commercial airline business recognized that Boeing had attained its commanding position by designing and building a whole family of aircraft, a concept that offered substantial benefits to both customer and manufacturer. As a prospective competitor to the market leader in an oligopolistic industry, AI realized that it would have to adopt similar tactics or ultimately fail in its attempt to alter the competitive balance. While the A300 did indeed exploit an existing market gap, it alone could do little to diminish the relative strength of the American producers. The consortium either had to press onward or else become a one-shot cooperative project having no real impact on the larger strategic situation in the commercial airframe market. Therefore, what was a "political decision in the 1960s to support a European civil aircraft industry by subsidizing the development of one new aircraft, the A300, has over time turned into the need to subsidize the market entry of a producer of a complete family of aircraft."³¹

In the mid-1970s the partners and governments of the consortium faced a crucial decision concerning how precisely to expand the AI family. Once the fundamental decision to launch a derivative aircraft was taken, the question became whether simply to "shrink" the A300 with minor modifications to the basic plane or to take a more substantial technological leap. AI's decision to undertake significant new financial and technological risks concerning the configuration and capabilities of the A310 was not merely a response to existing market imperatives. While opting for a substantially modified version of the A300, the consortium used technological initiative to effect a change in the strategic dynamics of the industry. With the A310, "the GIE tried to regain control of the market not by launching a completely new product, but in perfecting an existing product so as to make a 'half-generation' advance."³² Therefore, the decision to build a substantially modified aircraft, even while the consortium's first product still was far from commercially remunerative, was a tactical move in the consortium's longer-run strategy of using new technologies to alter existing market dynamics. "With the A310, the European consortium tried to impose upon the market its own specific rhythm of technological change in such a way as to constrain the competition . . ."³³

But since sales of the A300 to that point had provided nowhere near enough capital to finance the necessary investments in technology, tooling and training, at this juncture can be seen most clearly the crucial role played by the political and financial support of the national governments in the ultimate success of the European gamble in civil aeronautics. Not only in terms of short-term prospects, but more important for the consortium's future ability to remain in the business, government support allowed AI to overcome the market uncertainties of high costs and long product development lead times that, for private capital, would have constituted an insurmountable barrier. In "bankrolling billions of dollars, the member countries minimized that risk, enabling Airbus Industrie to design the A300 series in order to take advantage of a market gap."³⁴

³⁰Yoshino, p.522.

³¹Gernot Klepper, "Entry into the Market for Large Transport Aircraft" *European Economic Review*, Vol. 34, No.4 (1990): 775-803, p.780.

³²Muller, pp.180-81.

³³Muller, p.180.

³⁴Majumdar, p.515.

For the U.S. civil airframe manufacturers, AI's persistence in building, marketing and even designing new aircraft despite any apparent prospects of program profitability were an anomaly. At first it had seemed safe ignoring the upstart: "Until the late 1970s, the U.S. manufacturers had dismissed Airbus as just another feeble and disappointing effort of the European commercial aerospace industry."³⁵ But with AI's sale to Eastern Airlines in 1978, attitudes in the U.S. industrial and political circles changed rapidly, as Americans recognized that the consortium was "committed to a fundamental goal that was different from their own."³⁶ From this point forward, both US aerospace executives and government officials began to perceive the Airbus consortium for what it was: a means to larger ends in a strategy calculated to reestablish a permanent European presence in global civil airframe manufacturing.

In a "zero-sum" contest such as the emerging transatlantic struggle in civil airframe manufacturing, success for one player in garnering outside resources also would deny their use to the other. In the late 1970s, therefore, British financial capital and technology represented an important prize for both the Airbus partners and the American manufacturers. Seen in light of the strategic engagement, BAe's decision to join AI from 1 January 1979, even paying a hefty entry fee for the privilege, was a major victory for the consortium. Although Rolls-Royce and British Airways remained outside the collaborative effort, once again the national governments of the three major European aeronautics powers were officially committed to the Airbus program. This commitment would prove important not only financially and industrially, especially for the new A310 program, but also in international marketing efforts in regions where British political influence remained strong.

By solidifying the financial, commercial and political prospects of the collective European effort, the official British return to the Airbus program also allowed the consortium to consider more daring options regarding its next move. In relation to the consortium's long-term objectives, developments in the early 1980s were especially important. The market leader, Boeing, had just introduced two new products, the single-aisle 757 and the wide-bodied, twin-engine 767, with the latter a direct competitor of the A300/A310. At this point, the Germans argued for designing a long-range, large-capacity aircraft that would challenge Boeing in that segment of the market in which, with the famed 747, it possessed an outright monopoly. As before (but this time with success), the French pressed for the single-aisle option; in hopes of garnering a significant share of the anticipated 727/DC-9 replacement business, thus opening a completely new market niche for Airbus products.

The launch of the single-aisle A320 involved not just the penetration of a new market segment but also a major technological leap. By introducing a fully computerized flight control system and redesigning the cockpit around the new technology, AI sought to take a major step in differentiating its products from those proposed by its competitors. But such an advance would have implications beyond the merely technological: "With this airplane . . . [AI] attempted, in making a generational advance, to impose upon the market its own rhythm of generational change, and to establish in its turn the market standard, which would confer upon it leadership in that segment."³⁷

The wisdom of the European move was vindicated as the order book for the new aircraft grew rapidly, including major purchases from important airlines in the United States. So, with the A320, AI confronted the American manufacturers not only with competition in an additional market segment but also with a product that promised to set new industry standards. This wresting of the technological initiative from the industry's dominant players was thus a very significant element in consortium's the overall strategy. Having introduced the A320, AI was no longer merely responding

³⁵Yoshino, p.523.

³⁶Yoshino, p.525.

³⁷Muller, p.183.

to conditions established by its competitors; now it was influencing directly the very rules under which the competition would take place. "Public funds, so criticized by the American competition, had thus given Airbus the necessary breathing space to acquire sufficient commercial credibility to play its own game in an autonomous manner, with success if one judges by the sales figures for the A320."³⁸

With the commercial success of the A320, the technological prowess of the partners had been combined with the financial support and political will of the national governments in implementing a game plan that had begun to pay real dividends. Airbus Industrie wasted no time in following the initiatives of the A320 with the launch of not one but two new products in 1987. But with the A330/A340 program, a technological leap of the magnitude realized with the A320 was rejected in favor of a more conservative tack. In keeping with its earlier strategy on the A300/A310, the consortium sought to implement another major piece of the "family of aircraft" concept while incurring minimal technological risk. With the A330/A340, the innovations introduced in the A320 program would bear additional fruit with a prudent and calculated extension of the product line into the last remaining US-monopolized segment: "Airbus Industrie sought above all to consolidate its position by imposing the technological breakthroughs of the A320 as new standards."³⁹

Even as it has rounded out its product line in the 1990s to include three main types of aircraft, AI expanded its offerings with derivative products, including the A300-600, the A310-200 and A310-300, the A321 and, most recently, the A319. Now able, like its major competitor Boeing, to offer airlines a range of aircraft across the major market segments, AI has attained the stature of the world's second largest civil airframe manufacturer. But concomitant with this stature, and from the perspective of this study more important than the achievements in technology and marketing themselves, is the fact that AI has thoroughly and permanently altered the very structure of the industry in which it now competes. Even though Boeing continues to be the market leader and remains the single most significant force in the industry, American hegemony in the civil airliner market has been broken decisively.⁴⁰

Furthermore, it must be recalled that AI's ability in attaining this stature within 30 years is due not only to the organizational skill of the consortium's management, or evidence simply of the partner's design and production capabilities, but testament also to the sustained political will of the national governments that funded the programs. As a result of this constancy, national and even European political and economic goals have been realized through the commercial strategy employed by Airbus Industrie. From inception right through its recent successes, AI's "mission was to keep Europe in the technological forefront in commercial aviation and related industries to bolster export and provide employment in a key sector."⁴¹ Understood as an instrument forged to meet the political and industrial ends of national governments, AI has served its purpose well. Sequential product development according to the family-of-aircraft concept comprised the operational or tactical level of this strategy, which first penetrated a neglected market segment and then followed this opening wedge with innovations that gradually

³⁸Muller, p.175.

³⁹Muller, p.185.

⁴⁰The writing on the wall had been legible for some years. As Hayward observed in 1986, "European industry is better placed now than at any other time since 1945, to effect a strategic shift in the commercial balance of power in civil aerospace." Keith Hayward, *International Collaboration in Civil Aerospace*, p.26.

⁴¹Yoshino, p.524. Other observers share this view. Mowery (*Alliance Politics*, p.135) says: "Much of the motivation for the Airbus Industrie venture stems from the desire of European governments to maintain, for reasons of national security and economic development, a substantial aircraft design and production capability." Similarly, Hayward (*International Collaboration in Civil Aerospace*, p.166) notes: "From this perspective, the money invested in Airbus represents a strategic commitment to maintain a basic, and technologically important industry in Europe."

took the technological initiative from the established market leaders. Set to be a major player in developing the next generations of commercial aircraft, by the 1990s Airbus Industrie had rewritten the rules and indeed redefined the very shape of the arena for a strategic contest that is certain to continue into the next century.

What does the formation of EADS mean for the European half of the duopoly in the global LCA industry? Specifically, what will the effect on structure and operation of Airbus Industrie of the merger of three of its major stakeholders, accounting for 80% of AI's ownership and control?⁴² Simultaneous with the formation of EADS, the Airbus partners announced in June 2000 that an agreement had been reached to create Airbus Integrated Company (AIC).⁴³ EADS controls 80% of the new entity, while the British stake held by BAE remains at 20%. The new arrangements represent an extremely important step in the evolution Airbus Industrie, in that the partners agree to transfer ownership and control of their respective assets and capabilities related to the design and manufacture of Airbus aircraft to a new entity to be headquartered in France. The interests of the shareholders are overseen by a 7-member committee having five representatives from EADS and two from BAE. As a condition of agreeing to the new arrangement, BAE can receive an enhancement of its revenues from the delivery of A340-500/600 aircraft.⁴⁴ BAE also obtained so-called veto rights in key areas including the addition of new partners and the AIC business plan.⁴⁵ In January 2001, the partners announced that all negotiations legal requirements relevant to the creation of AIC had been accomplished, and that the new company would be formed in February 2001.⁴⁶

Recently reported figures regarding orders and deliveries for Airbus products underscores the company's cumulative success.⁴⁷ Even as both LCA manufacturers suffer badly from the sharp downturn in orders, Airbus continues to gain market share in terms of both orders and deliveries. In 2002, Airbus booked 300 new orders, 67 of which were subsequently canceled, leaving orders for 233 aircraft worth \$18.4 billion. In 2002, Boeing had net orders for 176 new aircraft. In 2002 Airbus delivered 303 aircraft (valued at \$19.5 billion), while Boeing delivered 381. However, Airbus claims that in 2003 it will beat Boeing in number of aircraft delivered, which would be an unprecedented development.⁴⁸

The A380: The European Challenge to Boeing in the Superjumbo Segment.

The consolidation of the European aeronautics sector through EADS and the restructuring of the Airbus Industrie consortium into AIC assume additional importance when considered in conjunction with the decision of the Airbus shareholders to formally launch production of the A380 superjumbo commercial airliner.⁴⁹ In announcing the long-anticipated decision 19

⁴² CASA, the Spanish partner having a 4.2 % stake in Airbus Industrie has been absorbed into DASA, which had therefore controlled 42.1% of AI prior to the creation of EADS.

⁴³ See DSD article "Airbus Integrated Company formed", 23 June 2000.

⁴⁴ While BAE did not obtain an increase in its ownership share of AIC as had been hoped, BAE executives interviewed at the July 2000 Farnborough air show claim to have come out rather well in the negotiations. See RE article "Interview: BAE says clinched good deal in Airbus reform", 29 July 2000.

⁴⁵ See Yahoo! article "REPEAT-UPDATE 3—Europe's Airbus up ante in Boeing battle", 26 June 2000.

⁴⁶ See FI article "Integrated Airbus nears completion" 8 January 2001. See DSD article "Airbus to become a company in February", 8 January 2001.

⁴⁷ For a summary of orders, deliveries and customers to date see http://www.airbus.com/media/orders_n_deliveries.asp

⁴⁸ See the BBC story of 14 January 2003. <http://news.bbc.co.uk/1/hi/business/2656205.stm>

⁴⁹ All major news outlets published stories on the launch of the A380, and the company's own account of the event can be found on its website. For details on the successful international marketing campaign of Airbus executive John Leahy that culminated in the launch of the A380, see the Financial Times article "The man who sold the superjumbo", 22 December 2000.

December 2000, the massive and controversial aircraft—specified to carry at least 550 passengers over 8,150 nautical miles—represents the European response to the Boeing 747's dominance of the jumbo end of the LCA market. Projected to cost nearly \$11 billion to develop, the A380 (designated the A3XX during its pre-launch phase) received the official go-ahead once formal order commitments by airlines had reached a total of at least 50. Company officials anticipate the first flight of the aircraft sometime in the summer of 2004, and hope for deliveries to begin in 2006.

Given the high industrial, commercial and technological stakes involved, it is not surprising that the launch of the A380 has reawakened the always simmering transatlantic tensions concerning the proper role of the state in supporting the LCA sector.⁵⁰ As described above, the accords signed in 1992 established criteria and thresholds for permissible government financial, but subsequent developments reveal that both sides believe that the other has regularly violated both the spirit and letter of those agreements.⁵¹ Consequently, the proposed 3XX and its formal launch as the A380 have provided the occasion for disputation and accusation at the highest political levels. As Airbus firmed up specifications and sought orders for the aircraft in the late 1990s, the consortium was also busy lining up the financial support of the respective national governments that would make the lengthy, complex and capital-intensive project viable.

As had been the case with prior Airbus programs, government money for the A380 is to be made available in the form of interest-bearing loans repayable from revenues as aircraft are delivered. And as had been the case with prior Airbus programs, the American aircraft manufacturers and US government have argued that in fact such support was an outright subsidy to Airbus because the so-called loans would never have been made by a rational commercial lender (at least not at an affordable interest rate), and would probably never be repaid in any case. The accusations have been accompanied by thinly veiled threats by the Americans to make the launch of the A380 a serious transatlantic issue, and perhaps even bring it before the WTO.⁵² At the time the A380 was launched in December 2000, US president Bill Clinton warned French president Jacques Chirac at a Washington, DC summit meeting of the possible negative consequences for US-EU relations if the loans are not made on commercial terms.⁵³

For their part, the Europeans respond that the loans promised by the British, French, German and Spanish governments—projected to total approximately \$2.5 billion—are to be made on commercial terms that in no way violate the terms of the 1992 bilateral accord or WTO rules. Moreover, the EU contends that Boeing has continued to receive financial support for commercial aircraft programs from the US government in the form of indirect subsidies through defense and NASA contracts for research and development⁵⁴

⁵⁰ Official US government reaction to the creation of EADS, the formation of AIC, and the A3XX/A380 can be found in recent reports issued by the USTR, including the 2000 Foreign Trade Barriers Report, European Union Section, pp.102-104. www.ustr.gov/sectors/industry/aircraft.shtml

⁵¹ Copies of the 1979 GATT Agreement on Trade in Civil Aircraft, and of the 1992 US-EU Agreement on Trade in Large Civil Aircraft can be found in the Trade Agreements database of the Trade Compliance Center (TCC). The TCC is part of the Market Access Compliance (MAC) unit of the International Trade Administration (ITA), of the US Department of Commerce. <http://www.tcc.mac.doc.gov/>

⁵² In June 2000, US trade representative Charlene Barshefsky requested that Britain and Germany provide specifics of the financial support they intended to provide for the A3XX so that the US government could decide whether to bring the matter before the World Trade Organization (WTO). See ET article "US seeks A3XX superjumbo support details", 27 June 2000. A recent USTR report assesses the effects of the incorporation of the 1979 GATT Agreement on Trade in Civil Aircraft into the WTO as a Plurilateral Trade Agreement among 24 signatories, including the US and EU. See USTR 2000 Trade Policy Agenda/1999 Annual Report, Section II (World Trade Organization) pp. 144--146. www.ustr.gov/sectors/industry/aircraft.shtml

⁵³ See Financial Times article "Airbus launch flies into US challenge over funding", 19 December 2000.

⁵⁴ In this connection, EU Commissioner Pascal Lamy has made public reference to studies that estimate recent indirect US government support of Boeing aircraft development at levels exceeding 7% of the program costs, far above the threshold of 3% set for such support in the 1992 accord. See RE articles "EU says U.S. funding for Boeing may break pact"; "Boeing

The launch of the A380 should be seen as a major development in several respects. First, in the history of Airbus Industrie and its product line, the A380 represents the crowning stage in the consortium's strategy over three decades to offer the full range of products to the world's airlines and their customers. Having first penetrated the sector by placing the A300/A310 in a niche made available by the market conditions of the 1970s, AI made decisive inroads into the single-aisle segment only in the mid-1980s. Even as the A330/340 line established Airbus Industrie in the long distance, mid-capacity market, throughout the 1990s the consortium had conceded the lucrative jumbo segment to the 747. The absence of competition allowed Boeing to reap excess profits and apply the revenue as operating expenses or capital for upgrading existing products and the development of new ones. Therefore, the A380 will accomplish much more than to fill out the product line, claim additional market share, capture new revenues, and improve the overall commercial and financial position of Airbus Industrie. If successful, the A380 will also deprive Boeing of revenues that arguably had been the company's most profitable, at least from the commercial side of its operations. What effects this loss might have on Boeing's future ability to generate revenue and raise capital for the development of future products remains to be seen, but the development cannot be a welcome one in Seattle.

In addition to its significance to the current and future business prospects of Boeing and Airbus Industrie, the launch of the A380 has larger commercial and even political ramifications. In rounding out the Airbus family of aircraft, the A380 represents the culmination of the European effort to re-establish themselves as competent competitors to the Americans in the LCA industry. Once dismissed by their rivals as capable of building only excellent trains or at best "political airplanes", the past success of Airbus and now the launch of the A380 serve notice that Europeans can hold their own in head-to-head competition on a global scale in an industry requiring highly developed skills in product design, engineering, manufacturing, financing, and after-market support. Having attained parity with the world's sole superpower in a sector so crucial in terms of exports, job creation, technological development (across a broad range of applications), and prestige also brings new impetus and credibility to the ongoing process of European integration. The effective bridging of linguistic and cultural divides within the consortium as a GIE--an achievement that can be expected to continue under the new EADS and AIC structures--represents an accomplishment of historic proportions and provides an object lesson in true collaboration.

*The A400M: Airbus Industrie as a Military Contractor?*⁵⁵

Another point of transatlantic friction concerning Airbus Industrie and its American rivals is the recent and successful foray of the consortium and other European partners into the realm of military aircraft. Initially known as the Future Large Aircraft (FLA), and proposed by Airbus as a replacement for their ageing fleets of troop and equipment transports, the A400M will be purchased by seven governments.⁵⁶ In March 2000 the governments issued the European Staff Requirement (ESR) specifying the criteria for their military transport needs, and by the late spring had selected the A400M over the Boeing C-17 and the Lockheed-Martin C-130. Along with its owners EADS and BAE Systems, Airbus Industrie then took on risk-sharing, industrial partners from Belgium, Portugal, Spain, and Turkey to create Airbus Military Company (AMC) to manage all aspects --development, sales, customer support--of the A400M project.

V. Assessment of EADS regarding the possible creation of an integrated European defense capability.

rejects EU subsidy charges", 12 January 2001.

⁵⁵ Additional information on all aspects of the A400M project can be found at the website of the Airbus Military Company at www.airbusmilitary.com

⁵⁶ See Defense systems Daily article "Germany, France decision gets Airbus A400M programme underway", 12 June 2000. Airbus Military Company provides information on the A400M program on its website.

With the creation of EADS, the West European countries have taken an important step toward the real consolidation of the supply side of the continent's defense-industrial base.⁵⁷ And although the British remain outside the EADS structure, BAE Systems is closely associated with EADS and its constituent elements in both the commercial and military realms. However, as compared to the American experience, the European process of rationalization has been an ad hoc and piecemeal affair, with no overall direction or coordination from the governments that make up the demand side of the business. Therefore, even as their orders for defense equipment increasingly are filled by truly European business entities, procurement policies remain the jealously guarded prerogatives of the separate national governments. As summarized by Guay and Callum, "previous efforts to institutionalize (or at least coordinate) defence procurement have yielded a litany of acronyms but few tangible accomplishments."⁵⁸ In the Western European context, there is no authority in any way comparable to the U.S. DOD, both in terms of responsibility for procurement, or in having the capability to aid in defraying the costs of consolidation. It has therefore been left up to the political and industrial leaders within the respective countries to formulate and implement a restructuring policy for the defense-industrial base, and up to them to manage the economic and political consequences of that consolidation. The result is a partial and exceedingly complicated pattern of industrial structures and arrangements emblematic of the political and economic cross-pressures at work in the sector—the desire to preserve national defense-industrial capabilities on the one hand, and the imperative to create economically viable business units on the other.

EADS, The EU and the Future of European Defense Policy Cooperation.

Through its strategy of continued acquisitions, the leadership of EADS clearly intends to be European leader in aerospace and defense in the coming decades. Even as sales and earnings continue to suffer from the downturn in the civil market with earnings, EADS is using its considerable cash reserves to finance additional purchases in the defense sector. These contracts and revenues will be valuable in diversifying the company away from its current over-reliance on Airbus, and insulate the company from future shocks (cyclical or otherwise) to which the civil market is so prone. As EADS co-CEO Camus had said: "We have to develop within our industrial group major military application programmes, helicopters, missile or space programmes because these have and will enable us to survive and even prosper during times of the civil crisis."⁵⁹ Confounding the achievement of these goals, however, is the absence of common purpose and absence of effective coordination among the governments that would provide the programs and contracts for EADS and its counterparts.

Recent developments within Europe strongly suggest that optimism concerning defense spending adequate to sustain a viable base of military contractors is misplaced. The individual states have seen their defense budgets fall through out the 1990s, with research, development and procurement expenditures suffering disproportionately. The events of September 11, 2001, while potentially providing some impetus toward a rebound in European defense budgets have served to only widen the already massive gap in spending (especially on procurement) in comparison the U.S. With respect to programs in which EADS has a major stake, the recent announcement of the German decision to reduce the number of A400M transports that the government would purchase from 73 to 60 will at best have the effect of raising the unit price of the remaining aircraft produced, and may call the viability of the entire program into doubt. In further bad news for EADS, the German government also announced that it would cut back

⁵⁷A report by the U.S. General Accounting Office discusses these developments. Defense Trade: European Initiatives to Integrate the Defense Market. National Security and International Affairs Division. GAO/NSIAD-98-6. www.gao.gov Figure 2 p.13 provides several examples of European cross-border consolidation in defense equipment.

⁵⁸ Guay and Callum, p.773.

⁵⁹ Christina Mackenzie. Flight International, Jan 14, 2003, p17.

substantially on the number of air-to-air missiles that will outfit its Eurofighters, raising questions about the firmness of its commitment to the crucial fighter aircraft program.⁶⁰

Should we expect that the European Union might provide the institutional framework and political impetus necessary for a truly common policy in defense policy in general and procurement in particular?⁶¹ The results to date do not justify optimism in that regard. With respect to a European security identity, whether within or apart from NATO, recent events suggest that those frustratingly slow and complex efforts may have been suffered fresh setbacks. Although the 1991 Maastricht Treaty had expressly established a Common Foreign and Security Policy as the second of three "pillars" on which future European cooperation would be built, only halting progress has been made since.⁶² Efforts to realize a European Security and Defence Identity (ESDI) in the mid-1990s were transmuted into a Common European Security and Defence Policy (CESDP), and given a prominent face in the appointment of former NATO Secretary-General Javier Solana as the EU's High Representative for Common Foreign and Security Policy. Yet few practical results are evident since then in developing a common approach or speaking with a single European voice on security matters. Indeed, the depth of current divisions within Europe regarding whether or not to support possible U.S.-led military action against Iraq suggests that agreement on foreign and security policy will be very hard to reach in the foreseeable future. As summarized by one observer: "Whether or not there will be a war against Iraq, the debate over war has already claimed a victim: the vision of the European Union as a global actor."⁶³

With respect to procurement issues, there is only slightly more room for optimism.⁶⁴ Along with other suppliers of defense equipment, EADS is pressing governments in Europe to create coordinated research, development and procurement management capabilities comparable to those in the United States. As recently reported, "the aim would be to set up a European Security and Defense Research Agency (ESDRA), under the auspices of a new European Security and Defense Agency (ESDA)."⁶⁵ Beginning in the 1990s, EU members have worked to promote

⁶⁰ SpaceDaily. "German military to tighten its belt amid strategic shift." Dec. 5, 2002. <http://www.spacedaily.com/2002/021205141218.qvfgz30t.html>

⁶¹ Jolyon Howorth provides comprehensive and insightful examination of EU foreign and security policy initiatives in his study entitled "European integration and defence: the ultimate challenge?" Chaillot Paper 43, Institute for Security Studies, November 2000.

⁶² A report from the U.S. General Accounting Office (GAO) provides a useful summary of these developments from the 1950s through 1997. See "Defense Trade: European Efforts to Integrate the Defense Market. Appendix I "Chronology of European Defense Initiatives", (pp.30-31). [GAO/NSIAD 98-6.](http://www.gao.gov) (October 1997), www.gao.gov

⁶³ Burkard Schmitt. "Disunity holds the EU back from a major global role." [International Herald Tribune](http://www.ihrt.com/), February 13, 2003. Schmitt goes on to note: "The more important a foreign policy issue is, the less relevant the EU becomes as a framework for action. When push comes to shove, all member states play a national game and follow their own short-term interests."

⁶⁴ A thorough summary of recent developments in the U.S. and European defense sectors is found in a piece authored by Gordon Adams, Christophe Cornu and Andrew D. James, and edited by Burkard Schmitt entitled "Between cooperation and competition: the transatlantic defence market. [Chaillot Paper 44](http://www.ihrt.com/), Institute for Security Studies (January 2001). The section by Cornu (Chapter Two) entitled "Fortress Europe—real or virtual" contains useful discussion of European efforts to coordinate security and procurement policies.

⁶⁵ [AWST](http://www.ihrt.com/) 11/25/2002, Vol. 157 Issue 22, p32. The article goes on to note the obvious: "European defense research and technology (R&T) investment lags substantially behind that of Washington. This is further compounded by much of the work remaining at the national level, with duplication of effort diluting the effect of resource allocation."⁶⁵ Jolyon Howorth provides comprehensive and insightful examination of EU foreign and security policy initiatives in his study entitled "European integration and defence: the ultimate challenge?" Chaillot Paper 43, Institute for Security Studies, November 2000.

⁶⁵ Burkard Schmitt. "Disunity holds the EU back from a major global role." [International Herald Tribune](http://www.ihrt.com/), Thursday February 13, 2003. <http://www.ihrt.com/>. Schmitt goes on to note: "The more important a foreign policy issue is, the less

cooperation in arms purchasing. Especially important in that regard has been the creation of the Western European Armaments Group (WEAG) within the framework of the Western European Union (WEU). Principal among its responsibilities as a forum for discussion of procurement policies among the 19 member governments is the prospective development of a European Armaments Agency (EAA), as envisioned by the Maastricht Treaty. However, in spite of ambitious plans, "The states participating in the ad hoc group on the EAA, created in 1994, quickly disagreed on the ultimate objective and responsibilities of the future Agency."⁶⁶ Perhaps most promising in the long run is the creation of OCCAR (Organisme Conjoint de Cooperation en matière d'Armement) in 1996 by the governments of Britain, France, Germany and Italy to serve as a mechanism of collaborative project management (in particular the A400M military transport) that might yet evolve into a collective procurement arm.⁶⁷ In addition, at the Farnborough Airshow in 2000, the governments of six countries (France, Germany, Italy, Spain, Sweden and the United Kingdom) signed letters of intent (LOI) to harmonize laws and regulations regarding procurements so as to promote pan-European weapons programs and purchases—clearly a potentially significant development. As Cornu notes: "The stakes are high: clearly, the new transnational companies can only fully exploit their advantages if Europe creates a homogeneous defence economic environment."⁶⁸ Yet, despite these encouraging developments, Cornu concludes: "European armaments policy is still clearly directed by governments. Only political impetus would make it possible to develop these disparate elements towards structured objectives."⁶⁹

In light of the bleak defense spending and procurement outlook in Europe, what are the prospects for EADS as a transatlantic supplier of defense products to the US military? So far, efforts in that direction have yielded precious little, in sharp contrast to the success of BAE Systems at garnering substantial workshares on several key US projects, including the JSF. For EADS, a small contract with the U.S. Coast Guard is the only success to date. Perhaps joint ventures with American firms might provide opportunity for EADS to penetrate the U.S. market? At the 2002 Farnborough International Air Show, "Philip Condit, CEO of Boeing, and Phillippe Camus and Rainer Hertrich, co-chief executives of the French-German-controlled European Aeronautic Defense & Space (EADS), used the occasion to announce their agreement to cooperate in developing a multibillion-dollar, US-led global missile-defense system."⁷⁰ However, As Axel Krause goes on to note: "Some defense experts in France are already warning EU allies that the proposed deal could only result in enhancing Boeing's role in Europe, thus endangering a key component in EADS's strategy--challenging US dominance on the military side of the aerospace business, similar to its success with Airbus civilian planes." Yet, despite the very public show of transatlantic cooperation, there is little in the deal to support the idea that the U.S. is prepared to allow a truly two-way street in defense procurement. Indeed, the events of recent weeks concerning US and European and especially French!) disagreement regarding policy toward Iraq make it even less likely that the American government will use EADS as a supplier⁷¹

relevant the EU becomes as a framework for action. When push comes to shove, all member states play a national game and follow their own short-term interest."

⁶⁶ Gordon Adams, Christophe Cornu and Andrew D. James. "Between cooperation and competition: the transatlantic defence market. Edited by Burkard Schmitt. *Chaillot Paper 44*, Institute for Security Studies (January 2001).

⁶⁷ Visit the website of the organization at <http://www.occar-ea.org/>

⁶⁸ Gordon Adams, Christophe Cornu and Andrew D. James. "Between cooperation and competition: the transatlantic defence market. Edited by Burkard Schmitt. *Chaillot Paper 44*, Institute for Security Studies (January 2001).

⁶⁹ Gordon Adams, Christophe Cornu and Andrew D. James. "Between cooperation and competition: the transatlantic defence market. Edited by Burkard Schmitt. *Chaillot Paper 44*, Institute for Security Studies (January 2001).

⁷⁰ Axel Krause. "EADS Targets US Market." *Europe*, Nov. 2002, Issue 421, p20.

⁷¹ See the article entitled "EADS Best Hope Goes Up in Smoke" in *Business Week Online*, 24 March 2003.

Therefore, it seems clear that for the foreseeable future the prospects for EADS as a developer and manufacturer of military equipment depend entirely upon the willingness and ability of European governments and publics to provide revenue sufficient to support a viable defense-industrial base. Given recent trends and current circumstances, such reliance constitutes a vulnerability for the company and its stakeholders. Products cannot be developed and tested, factories cannot remain open, synergies with commercial applications will not be realized unless there is a credible prospect of reliable future demand. Consolidation of productive assets and capabilities can yield few practical benefits if decisions and policies regarding their use are not implemented with constancy and effectiveness. Therefore, in the near term the success of EADS will derive from what had already been accomplished over the past 35 years through the creation and development of Airbus Industrie.