



Airbus: A Catalyst of European Integration

By Professor Gabriele Suder, SKEMA Business School

The first A380 flight announced a European success story that has evolved with the deepening of European integration and the resulting business environment. The European Aerospace and Defence sector is a significant catalyst of an integration that has gained business recognition over time, and that has been business-driven. This case therefore studies the link between the growing role of the European aerospace industry and European integration. 'Defence' was at the very heart of the European settlements after World War II: peacekeeping and security concerns were the main driving force behind post-war economic cooperation².

Over time, the EU has set out clear objectives that aim to improve the security and economic prosperity of its members. The Cologne European Council recognized the need for sustained efforts for a competitive and dynamic industrial and technological defence industry in support of Europe's capacity to respond to international crises. At the Lisbon Council, the Heads of State and Government set the strategic goal of becoming the most competitive and dynamic knowledge-based economy in the world within a decade. This message was reinforced at the Barcelona Council, which called for a significant boost in the overall R&D and innovation effort in the Union. More recently still, the Thessaloniki Council decided that the time had come to take concrete steps in the field of defence, of which the aerospace industry is the most integrated part.

Why aerospace? As a high-technology, high skill dual-purpose industry, the European aerospace industry is uniquely placed to contribute significantly to these economic and strategic aims: it is a crucial component in maintaining Europe's industrial and technological capability for:

- transportation
- communication
- observation
- security and
- defence.

Airbus¹ was one of the first firms created as a truly European company. Its main shareholders and stakeholders are four major European nations (Germany, Spain, UK

and France). The firm is now one of only two worldwide aircraft manufacturers in the market for large commercial airliners that design, build, sell and provide support for commercial aircraft with a capacity of 100 seats or more. Airbus boasts the most modern and comprehensive airline families in the world and consistently captures about half of all commercial airline orders.

Airbus history

Airbus Industrie, as it was formerly known, began as a consortium of European aviation firms that joined together to compete with American companies such as Boeing and McDonnell Douglas. In the 1960s, European aircraft manufacturers had been competing as much with each other as with the American firms that were already giants in the sector. In the mid 1960s, tentative negotiations commenced that were to give birth to a true European collaboration that, it can be argued, saved a fragmented sector from forecasted decline.

At its very beginning, in September 1967, the British, French and German governments signed a Memorandum of Understanding (MoU) to start the initial development of a 300-seat Airbus A300. This was the second major joint aircraft programme in Europe, preceded only by Concorde, for which no ongoing consortium had been devised.

An earlier announcement had been made in July 1967 but was condemned by the British Aircraft Corporation (BAC). The British government refused to back its proposed competitor, a development of the BAC 1-11, and instead waited to support the Airbus aircraft. In the months following the agreement, both the French and British governments continued to express some doubts about the project. One of the issues was the development and requirement for a new engine that was to be developed by Rolls-Royce, the RB207. In December 1968, the French and British partner companies, Sud Aviation and Hawker Siddeley proposed a revised configuration, the 250-seat Airbus A250. Renamed the A300B, the aircraft would not require new engines, and hence reduced development risks and costs, and the project started to make progress. In 1969, the partnership was shattered by Hawker Siddeley's withdrawal from the project. Given the participation by the British partner up to that point, France and Germany were reluctant to take over its wing design. Finally, the British company agreed to continue as a major subcontractor.

Airbus formed: changing mindsets

Airbus Industrie was set up formally in 1970 following an agreement between Aerospatiale France and Deutsche Aerospace (Germany); they were joined by CASA (Construcciones Aeronáuticas SA) of Spain in 1971. Each company would deliver its parts of the plane components as fully equipped, ready-to-fly items. The name *Airbus* was taken from a non-proprietary term used by the airline industry in the 1960s to

refer to a commercial aircraft of a certain size and range. The term was linguistically acceptable to both the French and Germans.

In 1972, the A300 took off for its maiden flight. Its first production model, the A300B2, entered service in 1974. Initially, the success of the consortium appeared to be short-lived but, over time and by 1979, 81 aircraft had entered into service and the partners continued their cooperation. The launch of a new aircraft project in 1981 confirmed Airbus as a growing competitor in the aircraft market: the A320 had over 400 orders before its first flight, compared to the 15 pre-orders clocked up by A300 in 1972.

In the meantime, the 1977 merger of Hawker Siddeley with BAC formed British Aerospace (BAe). In 1979, BAe (now BAE SYSTEMS) formally joined the consortium again, taking a 20 per cent stake in it. This left the Germans and French with 38 per cent each, and the Spanish firm with 4 per cent. It was a fairly loose alliance that only significantly changed in 2000 when DASA, Aerospatiale and CASA merged to form EADS. DASA DaimlerChrysler Aerospace AG, which had been founded by Deutsche Aerospace at the end of the 1980s, merged with Aerospatiale-Matra of France and Construcciones Aeronáuticas SA (CASA) of Spain to give birth to the European Aeronautic Defence and Space Company (EADS). Since this merger, the former DASA has operated as EADS Germany. In 2001, BAE and EADS then formed the Airbus Integrated Company. Airbus SAS employs about 57,000 people, mainly in six countries, all located in Europe.

The creation of Airbus SAS coincided with the development of the Airbus A380, as yet the world's largest commercial passenger jet. Airbus was ready for its most ambitious European adventure yet with this economic mega-jumbo.

Forging a common corporate mentality over time

Driven by high R&D costs, aerospace companies started to cooperate much earlier than their counterparts in other sectors. Over several decades, from soon after World War II, firms learned to work together, first to check on each other's activities, for political reasons and finally for reasons of efficiency.

They gradually developed a dense network of joint ventures that served as a basis for a wave of consolidation in the industry at the end of the 1990s. It is noteworthy that, in comparison to this, land system companies and naval shipyards have never reached a similar degree of cooperation in Europe: during the cold war, R&D costs in these sectors were lower and (as far as land armaments are concerned) production runs longer, making purely national programmes and production facilities sustainable. This situation changed with procurement cuts in the early 1990s. The ensuing period, however, has been too short to make up for the delay in production networking over several decades, in particular since almost no intergovernmental programmes had been launched that could have structured industrial cooperation.

The aerospace industry, despite its military origins, realizes more than 70 per cent of its turnover in the civil market. The importance of commercial business is due to

a reduction in military orders in Europe, the growth of civil aviation in general and the competitiveness of Airbus in particular.

Airbus is in many ways both the result of and the driving element for cross-border consolidation. First, cooperation within the consortium has led to a considerable *degree of specialization among the partner companies, binding them together* in a core area of activity. Secondly, the transformation of Airbus into an integrated company meant a *wider restructuring of the whole aerospace sector*, including defence activities. Again, this stands in opposition to the land systems or naval shipbuilding sectors where producers are often highly specialized, with little diversification, and are rarely associated with big commercial groups (except in Germany).

A market under pressure

Between 1993 and 1997, a wave of consolidation in the USA led to the creation of aerospace and defence giants with turnovers several times greater than those of the biggest European groups. The only way for Europe's national champions to sustain competition with companies the size of Boeing, Lockheed-Martin and Raytheon was to *pool R&D resources, broaden market access and reform the Airbus system*. The temptation to *move from cooperation to integration* was all the more irresistible because competition with the US was high across both the civil and the defence markets. Since the 1997 MDD-Boeing merger in particular (in which Boeing was hoping to diversify and yield further competitive edge from military interests), European governments actively supported the Europeanization of their aerospace industries.

Historical opportunities and challenges

The early evolutions of European integration gradually introduced freedoms of movement for goods, services, capital and people and the harmonization of most business-related red tape. Today, companies can sell their products anywhere in the Member States and consumers can buy where they want with no penalty; citizens of the Member States can live and work in any other country and their professional qualifications should be recognized there; currencies and capital flow freely between the Member States, and European citizens can use financial services anywhere in the Union. European integration has taken care of professional services such as banking, insurance, architecture and advertising, and these can be offered in any Member State, for use by the citizens of any other Member State.

In particular in 1992, cross-border companies in Europe were given further leeway. A company could organize its structure, or establish subsidiaries or branches, across national borders without any extra costs resulting from different national regulatory requirements on company organization. Specifically, European industry, like that of Aerospace, relies on this point in order to improve distribution of its activities – and increase productivity.

European integration of rules and regulations underlies the relative ease with which Airbus can establish strategic cooperation agreements with firms based in other Member States. In this way, 2002 and 2003 marked two essential events: the adherence of the EU to Eurocontrol, and the signature of a cooperation memorandum between the two parties on 22 December 2003. The cooperation memorandum stimulates five fields of cooperation, all essential to Airbus:

- the settlement of a Single European Sky;
- R&D;
- gathering and data analysis in the fields of air traffic and environment;
- aerial navigation by satellite (like Galileo);
- international cooperation in aerospace fields.

Due to the increasing demand of aerial space capacity, the European Commission also launched a major initiative in the shape of an Advisory Council for Aeronautics Research in Europe (ACARE), launched in 2001, that would guarantee close collaboration between major R&D players in aeronautics.

ACARE defines and updates the Strategic Research Agenda (SRA) that maps out plans for research programmes. The SRA takes account of five principal challenges to competitiveness: quality and economic access, environment, security, safety, and the efficiency of the air transport system in Europe. The agenda thus aims to create innovative tools and initiatives to improve the efficacy of current research, setting up further mechanisms inside the European area of research thanks to additional public and private investment. This agreement is fundamental because it provides a solid basis to strengthen partnerships amongst firms of the aeronautics sector inside Europe that constitute the backbone of Airbus.

These political stimuli have also translated into the possibility, for any company in Europe, to establish stages of its supply chain across European Member State borders, using production factors located or sold in other Member States wherever suitable and economically advantageous. This opportunity has not only generated delocalization, in- and outsourcing, but also contributed to balance out some economic differences between the European states. The firm is able to define and determine a product's specification and how to market it without consideration of national barriers. Thanks to the integrated market, Airbus has the possibility to promote, distribute and sell its products, goods and services to wherever its management finds it desirable or profitable in Europe, without any extra costs other than those due to geography and local preferences, such as costs of broadcasting advertisements in national markets.

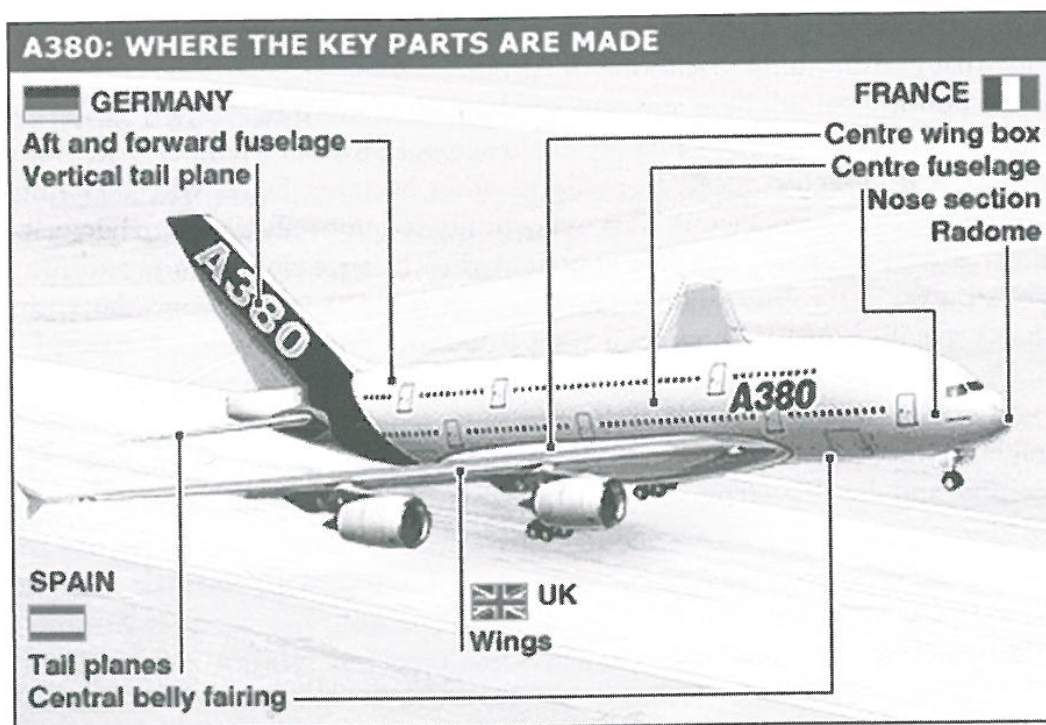
Consolidating cooperation

The creation of Airbus and its structure was first organized by Natco, a network of geographically separate specialized sites of manufacturing coordinated by a Central

Entity, that is, one nation named to be responsible for the production of aircraft parts. Airbus Manufacturing manages the production of Airbus aircraft, which takes place at different sites in Europe. Typically, manufacturing is organized as a transnational process, structured around key manufacturing units. Each one is responsible for producing a complete section of the aircraft for delivery to the final assembly lines.

Airbus organizes its structure, operations and manufacturing through Centres of Excellence. These are transnational in several fields and thus represent still greater European corporate integration: Airbus employs around 40,000 people in several European countries. Construction takes place at a number of plants across Europe. Airbus sites are located throughout Europe, while its main factory is situated in Toulouse, France. The two final assembly plants of Airbus are located in Toulouse, France and Hamburg, Germany.

Given distance and diversity, the corporation has worked and is still working to strengthen cooperation, and harmonize the processes, ways of working, procedures, cultural differences and operations for increased productivity. For instance, specially enlarged jets, called 'Beluga', were created to move aircraft parts between the different factories and the assembly plants; the system relies on aircraft capable of carrying entire sections of fuselage of the Airbus aircrafts. This means it is not in use for the A380, which has exceptional width of fuselage and wings; the parts are mainly shipped to Bordeaux, France, and then transported to Toulouse (via a specially enlarged road) for final assembly.



Case Study Figure 1 Airbus A380 (by permission of Airbus SAS 2010)

Civilian and military product innovation

Over its existence, Airbus has developed from the role of challenger to that of market leader in both civilian and military sectors, and has profited from unique integration based on EU history and political will.

While the civilian Airbus product line started with the A300, a shorter variant of it – known as the A310 – was also conceived to confirm market presence. Airbus then launched the very successful A320 with its innovative fly-by-wire control system. The A318 and A319 followed as shorter derivatives with some of the latter under construction for the corporate *biz-jet* market (Airbus Corporate jet). A stretched version known as the A321 proved competitive with later models of the Boeing 737.

In January 1999, the Airbus Military SAS was launched to conceive and support development and production of a turboprop powered military transport aircraft (the Airbus Military A400M). The aircraft represents a joint development of seven NATO members, that is, Belgium, France, Germany, Luxembourg, Spain, Turkey and the UK, and is an alternative to the C-130 Hercules. Longer-range products in civil aircraft, the twin-jet A330 and the four-jet A340, have efficient wings enhanced by winglets. The Airbus A340-500 excels with an operating range of 13,921 km (8650 nautical miles) – the second longest *range of any commercial jet* after the Boeing 777-200LR (with a range of 17,446 km, or 9420 nautical miles). Here, integration is further illustrated inside civilian and military planes with the use of fly-by-wire technologies and the common cockpit systems in use throughout the aircraft family.

International challenges

Boeing has continually protested over the support that Airbus receives from the governments of the partner nations. In July 2004, for instance, Airbus was accused of abusing a 1992 non-binding agreement covering launch aid. Airbus has received launch aid from European governments, repayable through strict commercial contracts and (the company contends) fully compliant with the 1992 agreement and WTO rules. The agreement allows up to 33 per cent of the programme cost to be met through government loans, fully repayable within 17 years with interest and royalties. These loans were held at a minimum interest rate equal to the cost of government borrowing plus 0.25 per cent, which would be below market rates available to Airbus without government support. In 2010, the WTO ruled that Boeing's complaint about excessive subsidies to Airbus was justified, with the USA claiming that government subsidies to Airbus included \$1.5 billion in R&D subsidies, \$1.7 billion in infrastructure subsidies, \$2.2 billion in equity infusions, and \$15 billion in launch aid (comprising \$4 billion for the A380).

Airbus, on the other hand, argues that some of the (directly or indirectly) government-funded military contracts awarded to Boeing (the second largest US defence contractor) are in effect a form of subsidy (see the Boeing KC-767 military contracting scandal). The significant US government support of technology development via

NASA (National Aeronautics and Space Administration) also provides significant support to Boeing, as do the large tax breaks offered to Boeing that are suspected of violating the 1992 agreement and WTO rules. For its recent products, such as the 787, Boeing has also been offered substantial support from local and state governments. Airbus and Boeing are also in dispute regarding the American company's offering of the 787 Dreamliner. EU trade officials are questioning the funds provided by the Japanese government and Japanese companies for the launch of this aircraft. In March 2011, the WTO ended a six-year-old lawsuit judging that some \$5.3 billion of US subsidies to Boeing, much of it in export subsidy and tax breaks, was illegal.

The competition is fierce. In 2003, Airbus delivered more jet-powered airliners than Boeing for the first time in its 33-year history. With a market share of 50.7 per cent, Airbus confirmed its (close) leadership again in 2010 for aircraft orders and deliveries, mainly for its 320 (versus the B373 for Boeing). With 510 units delivered in one year, Airbus has excelled, in particular, in emerging markets and the low-fare sector.

After losing supremacy to America in the battle of commercial airliner sales in the 1950s and 1960s, Europe seems to have regained the upper hand. Industry analysts widely attribute this to Airbus's more efficient product line, compared to many of Boeing's older designs; the 737, for example, still uses components designed in the 1980s. The 747 was designed in the late 1960s and the 757 and 767 were conceived in the late 1970s. Boeing claims the Boeing 777 has outsold its Airbus counterparts, which include the entire A340 series, as well as the A330-300. The smaller A330-200 competes with the 767, and dominated that class until the introduction of the 787.

Currently, there are around 4540 Airbus aircraft in service in the A320 range alone. But Airbus products are still outnumbered six to one by in-service Boeings (there are over 8000 Boeings in service, altogether). Airbus entered the modern jet airliner market relatively late (in 1972 compared to 1958 for Boeing) and its sales are mainly civilian (as compared to the numerous Boeing aircraft used by the military in the USA and other countries). However, the company has won a relatively greater share of orders and delivered more aircraft in 2003, 2004 and 2005 than its main competitor, and broke its deliveries record in 2010.

More than just commercial competition, the challenges for Airbus and Boeing are frequently perceived as a political and geopolitical quarrel. In this duopoly, Airbus is an emblem of EU influence on the economic and geopolitical scene and has helped Europe gain politico-economic influence, improve its image as a competitive market and build a true identity.

Key success factors

At Airbus, European values and the integration of market, labour, capital and services represent a tool in the search for efficiencies, such as human resources (HR). The group's corporate culture and philosophy are critical success factors in its own integration which goes hand-in-hand with that of its home region.

Internal corporate communications are heavily based on European values and identity, and, with these, a feeling of Europeanism is created internally. Internally,

Airbus promotes a strong message to staff to get involved in multicultural teams, cooperating and sharing experiences, to move internationally and to recognize and use beneficial differences as complementarities. The resulting feeling of cohesion and appreciation of diversity is actively used in initiatives that aim to motivate people to participate actively in company integration. For instance, personal training sessions are regularly organized for managers and operational staff to enhance people's intercultural management skills and career development: how to collaborate efficiently with those many different cultures that make up the corporation.

Airbus' corporate culture is built on innovation, creativity and free-thinking. Our organization reinforces transnational working patterns while preserving the diversity of cultures and languages which has proved a key asset in the company's development and growth. (Source: <http://www.airbus.com/about/philosophy.asp>)

Cultural diversity and European progressive integration constitute a value to the company.

The Airbus Company culture

Proud of our past

Thirty years of European partnership producing a family of aircraft

Making history with new technology

Changing the face of the industry'

'Confidence in a challenging future

One organization working together as a truly integrated team

Taking advantage of and developing our cultural diversity

Taking a leading part on the world stage

Designing and manufacturing the world's largest commercial airliner

(Source: <http://www.airbus.com/careers/life/company.asp>)

Opportunity creation in Human Resources

The Human Resources Director of the Central Entity explains the extent to which Airbus's HR management is based on EU-created opportunities in the following interview:

Question: What sort of working environment does Airbus offer?

Airbus strongly believes in the multicultural value of its workforce. With 45,000 employees, representing more than 30 nationalities speaking 20 languages, we are creating a business culture of openness, originality, drive and enthusiasm. We do not believe in forcing everyone into a company

mould. Our cultural diversity is a major business advantage – enabling us to work closely with a wide range of customers, understanding their needs and speaking their own languages. We offer exciting opportunities for international ‘players’ who are able to adapt to a multicultural team, enjoy working on a project basis and are willing to learn from others, while contributing their own ideas and experience.

The transfer of knowledge and cross-cultural cooperation are key factors in our success. We promote cross-functional and international mobility and we seek to recruit graduates with an international mindset. International experience is increasingly needed for a successful career within Airbus.

Question: What does cultural diversity mean at Airbus?

Over the past 30 years, we have mastered the art of creating effective teams of individuals with different nationalities, backgrounds and skills. Airbus boasts at least 80 different nationalities and 20 languages amongst its employees.

We do not try to standardise our employees. On the contrary, we encourage individual originality, drive and enthusiasm. Preserving diversity also presents a key business advantage. It enables us to work closely with customers by understanding their needs and speaking their language.

Question: What are the opportunities for working internationally?

Within Airbus, there are a number of opportunities to work internationally – via transnational work teams, exchange programmes and international transfers. Vacancies are advertised internally across the Airbus organization worldwide. Transnational and cross-functional moves are encouraged throughout the company.

(Source: Interview release of Airbus.com: <http://www.airbus.com/careers>, information L. Darnis, February 2005)

The location of Airbus’ headquarters in Toulouse is not random: the main aerospace schools (ENAC, Sup Aero, etc.) are located in this attractive south-western city of France which boasts engineers from all over Europe. Airbus Central Entity and Airbus France are also both located in Toulouse.

Cooperation, integration and innovation

Of equal importance to borderless HR management for Airbus is borderless innovativeness. The one may go in hand with the other through a diversity of educational backgrounds, cultures and ways of thinking and doing.

The need for innovation and continuous technological development is crucial for customer satisfaction and company competitiveness. Because competitors and customers are relatively scarce in this market, research and development programmes

represent very heavy costs. To respond to this problem, the European Commission decided to get involved with the STAR 21 programme, launched in 2002. STAR 21 deals with five prime objectives:

- Opening markets with a single set of competition rules and relaxation of the 'Buy American Act'.
- Developing a coordinated research policy in order to secure EUR100 billion of R&D finance over 20 years.
- Creating and extending the 'single sky' with the EU as the decision-making and control authority in all areas of civil aviation.
- Harmonizing operational requirements, equipment and defence budget, and reduction of capability deficits.
- Developing a coherent space policy along with the necessary funding based on the Galileo and GMES (Global Monitoring for Environment and Security) projects.

The harmonization of industrial policy favours innovation and R&D, and clearly helps industry to maintain market share. For example, the A380 competes directly with the B747 (the B version being the longest aircraft ever, test-flown for the first time in March 2011) on long-distance carriers with a far bigger passenger capacity (from 550 to 800 passengers). Due to a high degree of innovation, it is also an economical aircraft. In the middle-distance carriers market, the 7E7 by Boeing, launched in 2008, competes with the A330 and carries between 200 and 250 passengers. With kerosene consumption 20 per cent lower than that of its competitors for a 0.85 Mach speed, kilometre price per passenger is decreased.

Moving towards alternatives, Lufthansa, the German airline, in 2011 started the world's first scheduled daily flights specifically based on the use of biofuel blended jet fuel, adding further challenges to both corporations' race for innovation. TAM, Brazil's largest airline, had run the first Jatropha-based biofuel flight in 2010 and is turning to alternative solutions.

Further challenges also arise from emerging countries such as India that experienced a 43 per cent growth of passenger transport for civil aviation alone between 2008 and 2010. Its Hindustan Aeronautics Limited (HAL) is an emerging player in the defence sector, ranked 34 in the top 100 defence aircraft producers worldwide and benefiting from strong ties into Indian R&D competencies. For private jets, Airbus's private jet company record for 2010, delivering 15 planes worth US\$1.5 billion, confirms the role of China as the firm's fastest-growing and most challenging market in terms of innovation and customization.

European and international suppliers

The quality and flexibility of subcontractors and suppliers is crucial because they provide Airbus with all parts of the final product. An aeroplane is made up of thousands of parts or components provided by different firms: systems for engines, electronics (for

semi-conductors for instance) and information technology (IT). Around a thousand subcontractors are involved in manufacturing an aircraft.

The corporation has links with suppliers from all over the world. For instance, some parts supplied in 2003/4 came from:

- USA: engines in collaboration with SNECMA, security, navigation system;
- Europe: electronics, development, fuselage, opening door system;
- Asia Pacific: front doors, access doors, wings, body, tools;
- Africa: cables.

For the very large A380, Airbus has reorganized its purchasing policy by widening some of its vetting of tender for new suppliers. It has also tried to minimize the number of suppliers. The firm's aim is to negotiate as best as possible in order to have the most cost-efficient products. This means building up real partnerships and the evolution of European integration and its administrative procedures increasingly facilitate this process. On the supplier side, EU integration offers suppliers three main options for cost and operational efficiency:

- Joining the firm, to reduce costs and benefiting from each other's capabilities.
- Relocating their production into Eastern EU countries, to use lower-cost labour.
- Offering innovative products to the firm, to differentiate themselves from competitors.

In the supply chain process, the integrated system chosen by Airbus aims to reduce costs for both parties. Programmes, operations and functions are thus transversal and transnational, and are reinforced by means of conference calls, video conferencing, regular shuttles, networking and air-bridges from site to site, e-portals and e-room collaboration.

IT tools infrastructure: linking people and knowledge for greater and faster integration

IT plays a key role in corporate integration, particularly in strengthening transnational cooperation and enhancing reactivity and constant and regular communication and exchanges. Airbus has created an integrated internal portal named 'Airbus People' and e-rooms offering all employees a shared, secure collaborative space to exchange data, documents and planning. Airbus People and other portals open to external stakeholders (suppliers, customers, etc.) are now the basis and structure of 'Airbus Collaboration'. These tools provide the drive to harmonize ways of working, processes and procedures, documents, messages and identity.

Altogether, Airbus makes extensive use of portal technology to work with three different groups: the air transport community (airlines and legal authorities), worldwide suppliers (subcontractors and forwarders), and employees and on-site subcontractors.

The company's portals promote cultural integration, enable process optimization and facilitate information systems harmonization and file sharing.

Sup@irWorld Solutions

Sup@irWorld Solutions, one of the main integration projects, provides web-based collaborative tools to enhance working efficiency between Airbus and its suppliers. Its solutions have been running since March 2005. It provides solutions for integration internally and externally by harmonizing all the procurement processes on each international site and entity. With such tools and solutions, Airbus's suppliers obtain one common strategic policy and objective, whichever site they deal with. Internally, this tool and shared solutions enhance inter-site cooperation, offering a single way of working for all the Airbus entities.

Airbus manages this tool as one policy regarding procurement, customer relationships, human resources and other fields – creating a single point of contact, a working place and a source of information for its corporate activities and its stakeholders.

Sup@irWorld covers all exchanges for both flying and non-flying materials, goods and services and acts as the 'backbone' of both the procurement channel for Airbus People and in the Airbus supply chain through its supplier portal. Sup@irWorld consists of four interlinked domains, which address four key channels with suppliers: sourcing, e-procurement for non-flying goods, e-collaboration for flying goods and procurement master data management.

- *Sourcing* The sourcing domain allows current and potential suppliers to register with Airbus and tells buyers about their products and capabilities. Suppliers and buyers can also exchange information about requirements through a secure connection.
- *BuySide* This e-procurement domain covers the purchase of general, non-flying goods and services from initial request through to final approval of payment. By simplifying and standardizing procurement processes, BuySide has significantly reduced administrative costs and purchasing lead times. Requisitioners order from electronic catalogues, which are created and updated by suppliers, and which Airbus hosts free of charge. Automation has reduced the time required to process an order from five days to two hours, and cut delivery time from 72 to 24 hours. BuySide automates specific e-procurement terms and conditions, resulting in purchasing that is automatically fully compliant with the contracts set by the European Aeronautic Defence and Space Company, which owns 80 per cent of Airbus.
- *eSupplyChain collaboration* This domain allows Airbus and suppliers of flying goods to collaborate through the entire supply-chain cycle. They can exchange information in real time about forecasts, purchase orders, physical logistics, and the receipt and storage of goods and invoices. Airbus sends immediate notification of changes in requirements or quantities to its suppliers, so that procurement plans can quickly adapt to production changes. It tracks the shipping of purchased goods after they have left the supplier. The supplier has to commit himself to the procurement plan or

propose some recovery plan. Inventory is reduced and visibility on forecast and the ability to track logistics flows also reduces the risk that shortages and late deliveries pose for manufacturing. Reduced risk also means greater assurance that schedules are met for final delivery of airplanes to customers.

- *Found@tion* By consolidating data from 70 different databases in Airbus across France, Germany, the UK and Spain, this domain gives the company, for the first time, a comprehensive view of its suppliers. The constantly updated database provides cross-referenced information about the nature and quality of the suppliers' products and services, purchasing history, comprehensive reporting, and the status of the approval process for suppliers and their products. These services are the cornerstone of the BuySide and eSupplyChain operations.

Sup@irWorld gives Airbus a common way of dealing with suppliers across the organization. The company acts as a single integrated entity in its procurement and presents a single face to its suppliers.

Airbus: 'A European adventure'

The development of Airbus has required gradual cohesion and cooperation over time in concordance with the evolution of the Single Market. The development of the A380, the world's largest passenger jet, has required significant, if not unique, investments in skills, research and technology. Industrial cooperation in the EU is the basis for the success of new aerospace products within an intensively competitive global market. The former French President, Jacques Chirac, expressed this in March 2005 at the official unveiling of the Airbus A380:

The launch of this giant of the airways is the crowning achievement of a fantastic human and industrial adventure. A European adventure of perseverance, innovative spirit and ardent determination ... Today I share the enthusiasm, the emotion and the deserved pride of all the men and women who are part of this immense industrial success story: the engineers, journeymen, assemblers, sales and administrative staff of Airbus and its suppliers. All of you, who have given the best of yourselves to bring this aeroplane into being, I pay you the warmest homage. Whether you work in Germany, the United Kingdom, Spain, France or other countries, notably in Europe, it is your common dream that is taking shape here at AéroConstellation, the A380 assembly site. This is the culmination, I know, of years of effort, imagination, sacrifice and willpower ... First of all, it is the success of a European company: EADS, the parent company of Airbus with BAE Systems, is probably the first truly European company, in its ownership structure, its working methods and the common culture that has developed between the French, Germans, Spanish, British and their partners from other countries of the EU. It is also the success of an innovative Europe. A Europe where every nation contributes what it does best. A Europe that is demonstrating its capacity to master and integrate the most advanced technology. (Source: http://www.ambafrance-au.org/article.php3?id_article=888)

Questions

- 1 Why is a globally competitive aerospace industry central to the achievement of Europe's economic and political objectives?
- 2 How does Airbus manage corporate integration? As Airbus stands for the European Union microcosm with all its cultural differences, challenges, stakes, etc., what are the key success factors and barriers that helped Airbus in this challenge?
- 3 Transnationality is a main characteristic of Europeanized firms. Identify the key operational assets of Airbus.
- 4 Why has innovation become crucial for the European agenda? Find examples in the Airbus case.