

CBI Product Factsheet:

Aerospace parts in Europe

Introduction

The European aerospace industry is one of the key, high-tech sectors of Europe. Over 2,000 aeronautics, space and defence companies in Europe employ more than 750 thousand people and generate a turnover of almost €190 billion. Europe holds an extremely strong position in large civil aircraft and helicopters. The sector is growing rapidly, and the focus on costs is intensifying, thus increasing the share of non-European procurement. As a result, there are a growing number of opportunities for Developing Country exporters in terms of subcontracting the manufacturing of metal parts for aerospace equipment, as long as product quality and price meet the expectations of the buyer(s). The best opportunities are for non-critical parts delivered by exporters from established aerospace supply countries, such as Pakistan and India.

Product description

An aerospace part is a component approved for installation on a type-certificated aircraft. A production certificate holder may produce parts from the type design that is associated with the production approval. A Parts Manufacturer Approval (PMA, more specifically EASA Part 21 Subpart G POA) for parts destined for aircraft built in Europe is granted by EASA (European Aviation Safety Agency) or from any of the National Aviation Authorities of the Members States of the European Union.

When 'aerospace parts' are referred to in this survey, this concerns the selection of products in Table 1 of Annex 1, unless stated otherwise. Note that this selection includes not only metal parts, but also other parts such as plastic parts. All of the codes for aerospace parts belong to the CN Chapter 8803.

Geographic scope

The geographic scope is the European Union area, however, in certain parts of this survey, the focus is on a selected group of countries: France, Germany, the United Kingdom, Italy and Spain. These countries are the largest importers of aerospace parts in Europe, accounting for more than 90% of total imports. When 'focus countries' are referred to in this survey, this concerns the selection of these five countries, unless stated otherwise.

Product specifications

Specifications of aerospace parts as required by European buyers are described below. Pictures 1-6 show some examples of aerospace parts.

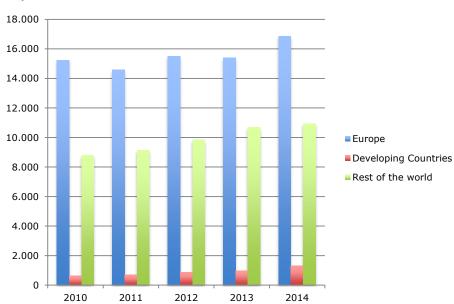
- Material: as light-weight is an important requirement for aerospace equipment, aerospace parts must be made of light-weight material. In the case of metal parts, the material is often aluminium, and also titanium.
- Quality and reliability: Quality assurance (QA) and reliability of the parts are essential and the more critical the application of the part, the higher the requirements. This is because there are stringent requirements of weight-to-strength considerations and a need for highly reliable systems. Aerospace companies work on zero defect targets (which can be compared to the automotive industry).
- Labelling and packaging: The labelling and packaging of aerospace parts depends on how critical its application is. The more critical the application, the higher the requirements. In general, aerospace parts can be packed in a carton or a wooden box, depending on the size of the parts. The outer package should include the brand name and type number. The package for ocean transportation is a wooden, steel or plastic pallet, wrapped with plastic sheet and sealed with metal strips. The size of the boxes depends on customer requirements and preferences and is also influenced by the weight per box and handling possibilities.
- Note: If you use wood packaging materials to export products to Europe, you must consider health (phytosanitary) requirements set for these materials; in practice this means that the wood must have undergone heat treatment or been fumigated with methyl bromide.
- Last but not least: packaging is always labelled, not only for the purposes of identification during transport, but also to indicate the quantity, weight, the products themselves and the producer's name.

What is the demand for aerospace parts in Europe?

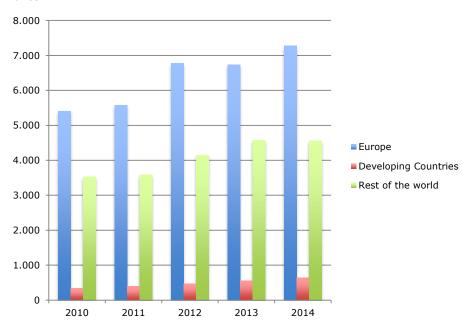
Imports

Figure 1-6: Imports of aerospace parts to Europe and focus countries, by main origin (2010-2014), in € million

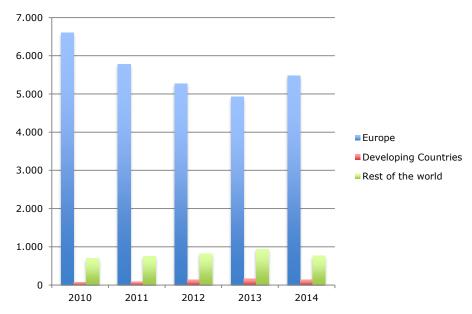




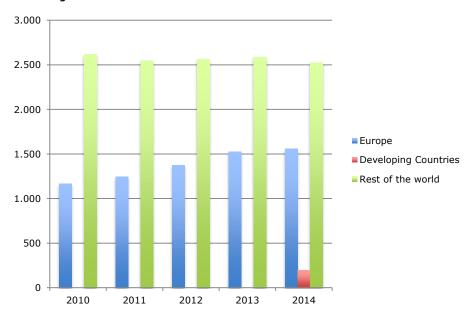




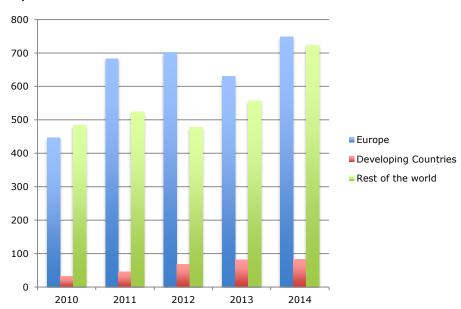
Germany



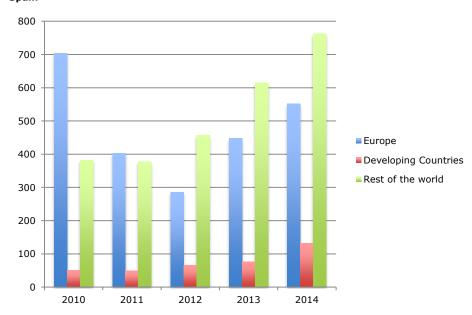
United Kingdom



Italy



Spain



Source: Trademap

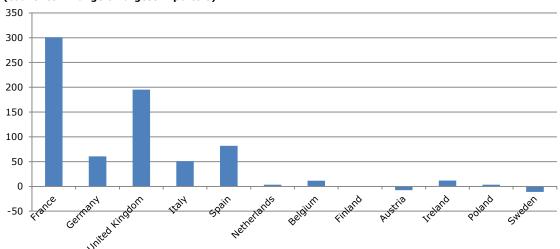


Figure 7: Absolute growth in imports of aerospace parts from developing countries (2010-2014), in € million (countries in range of largest importers)

Source: Trademap

- European imports of aerospace parts reached €29 billion in 2014, reaching a peak in 2014. The average annual growth in 2010-2014 was 4.3%.
- The share of European imports from developing countries increased from 2.6% in 2010 to 4.5% in 2014. Most imports originate from intra-European sources (58% of all imports in 2014). For the coming years, the share of imports from developing countries is predicted to grow to 5%-6%.
- The five focus countries represent nearly 90% of European imports in 2014. The development in imports in the focus countries depends largely on the activities of the large aircraft builders (e.g. Airbus) in these countries.
- The leading importer is France, followed by Germany, the United Kingdom, Italy and Spain.
- France is the leader in imports from developing countries, followed by the United Kingdom, Germany, Spain and Italy.
- The import of aerospace parts is expected to show a modest growth in the next few years, in the range of 0%-2%.

Leading suppliers

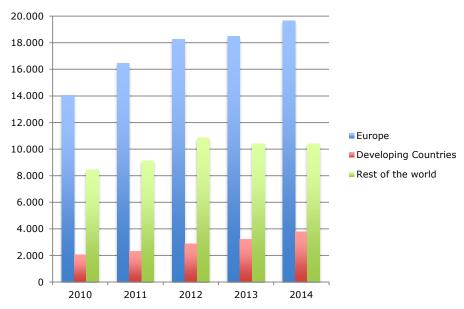
- Most intra-European trade originates in Germany, France and the United Kingdom.
- The largest supplier in the category 'rest of the world' is the USA, followed at a great distance by Canada (the result of the Canadian airplane builder Bombardier's supplier network) and Russia.
- Imports from developing countries are dominated by Tunisia and Morocco (both due to supplier relationships with French Tier 2 suppliers in the Airbus supply chain), China, Turkey, Malaysia and India. Other suppliers from developing countries that play a role in European imports include Mexico, South Africa, Brazil, Indonesia and Thailand. While the Chinese market accounts for almost every third Airbus sold, it continues to play a limited role with regard to supplying aerospace parts (e.g. only 1% of parts for Airbus aircraft come from China).
- Tunisia and Morocco are especially strong in exports to France (because of their proximity and historical ties), while China is particularly strong in exports to France and the United Kingdom. Turkey is an important exporter to Spain and Italy, while Malaysia exports primarily to the United Kingdom and India to the United Kingdom and France.

Tip:

 Benchmark your company against your peers from European countries (as those from Tunisia, Morocco, China, Turkey, and India are probably difficult to find). Several factors can be taken into account, such as market segments served, perceived price and quality level, countries served, etc. Two sources that are useful to find exporters/producers of aerospace parts per country are the <u>EASA List of Approved Production Associations</u> and <u>ITC Trademap</u>.

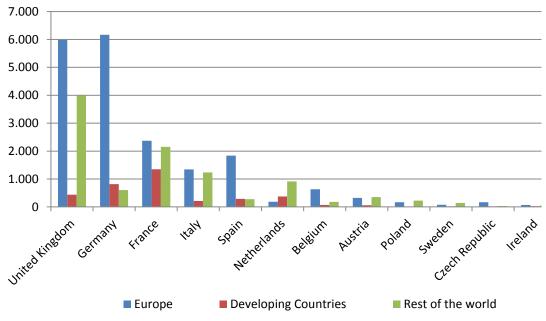
Exports

Figure 8: Exports of aerospace parts from Europe, by main destination (2010-2014), in € million



Source: Trademap

Figure 9: Leading exporters of aerospace parts (2014), in € million



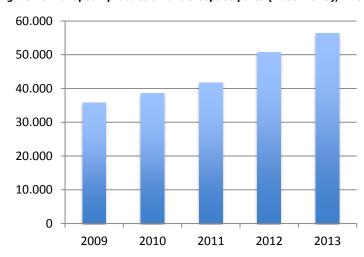
Source: Trademap

- European exports of aerospace parts reached €34 billion in 2014. Average annual growth in 2010-2014 was 8.4%. In
 contrast to many other industries, the financial crisis did not have a major influence on trade values in 2009 and
 2010.
- The share of European exports to developing countries increased from 8% in 2010 to 11% in 2014. For the coming years, the share of exports to developing countries is predicted to grow to 12%-14%.
- The five focus countries represented 86% of European exports in 2014.
- The leading exporter is the United Kingdom, accounting for one third of total exports in Europe. Germany is in the second position (22%), followed closely by France (17%), Italy (8%) and Spain (7%).

- French exports to developing countries (mostly to Morocco and Tunisia, because of the Airbus supply chain) are large, representing more than 35% of all European exports to developing countries. Germany is in the second position (21%), followed by the United Kingdom (12%), the Netherlands (10%) and Spain (8%).
- The European export of aerospace parts is expected to grow slightly in the next few years, in the range of 0%-2%.

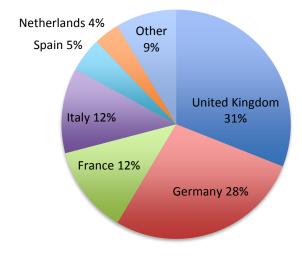
Production and apparent demand

Figure 10: European production of aerospace parts (2009-2013), in € million



Source: Eurostat Prodcom

Figure 11: Leading European producers of aerospace parts, 2013



Source: Eurostat Prodcom

- European production totalled €56 billion in 2013, after an average annual increase of 12% in the period 2009-2013.
- The United Kingdom accounted for slightly more than 31% of total European production in 2013, Germany for 28%.
- The European aerospace industry is highly integrated; it is characterised by a high number of cross-border ownerships and manufacturing networks.
- Although average employment costs tend to be high, the production of aerospace equipment and parts is quite profitable. A considerable share of added value is spent on research and development, which is reflected in the increasing number of patent applications originating from the aerospace sector.

• The industry is also highly concentrated, both geographically in a few European countries and in terms of few large enterprises. Employment in the aerospace sector is particularly significant in the United Kingdom, France, Germany, Italy, Spain, Poland and Sweden.

Tip:

 Figure 11 reveals that in addition to United Kingdom and Germany, there is also considerable production output in France and Italy. The presence of producers in these countries offers subcontracting opportunities for Developing Country exporters.

50.000 40.000 30.000 20.000 10.000

2011

2012

2010

Figure 12: Apparent demand for aerospace parts in Europe (2009-2013), in € million

Source: Eurostat Prodcom

2009

0

- European apparent demand totalled €50 billion in 2013, after an average annual increase of 9% in the period 2009-2013.
- Germany, France, the United Kingdom and Italy are the dominant aircraft production countries in Europe. The demand for aerospace parts in these countries is therefore high.

2013

Macro-economic indicators

- The major determinant of aerospace parts demand is investment activity in the end-user industries for aerospace equipment, which can be, for example, the defence industry or civil aircraft industry. Aerospace parts demand depends both on the demand for replacement parts as well as demand for new aerospace equipment. In general, both are stimulated by economic growth, however, note that the aerospace industry investment cycle does not always correspond to GDP development.
- What is in fact more important, is the forecast that global air travel is set to increase between 50-100% in the next 10-15 years (aerospace resource guide). This scenario is expected to create global demand for an additional 8,000-10,000 helicopters by 2020, and 25,000-30,000 large civil aircraft, 20,000-25,000 business jets and 4,000-6,000 regional jets by 2030.
- In addition to the expected growth of global air travel, another market driver are airplane retirements and replacements. In the next few decades, as a rough estimation some 2,000 airplanes will be replaced by new ones. Main drivers for replacement are the need to cut fuel costs and reduction of emissions and noise levels.
- The profitability of aerospace parts imports is influenced by the exchange rate between the euro and the US dollar, as many engineered parts that are sourced globally are paid in US dollars. While earlier forecasts did not predict this exchange rate to surpass 0.80 until 2020, it reached this point in 2015, with an exchange rate of 0.90 in June 2015. This is having a major effect on the price of engineered parts imports. Particularly if it persists for several years, this situation is likely to have a negative impact on the level playing field of European imports paid in US dollar, relative to local European production.

Tip:

• If the value of the euro remains at the current low level, producers from developing countries should increasingly focus on reducing costs in order to remain competitive in the European market.

What trends offer opportunities on the European market for aerospace parts?

Original equipment manufacturers search for outsourcing opportunities

- In recent years, the aerospace industry has changed structurally because of new global strategies implemented by the large aircraft manufacturers (also called Original Equipment Manufacturer or OEM). The main elements of their new strategies have been: 1) improvement of market access (making EASA airworthiness certification process easier for companies outside Europe), 2) production at lower costs (as in the automotive industry), 3) improved access to raw materials and human capital, and 4) management of risks (e.g. currency volatility). The main consequence of this change in strategies is a rising share of non-European procurement. This trend can be seen from the rising share of imports from developing countries in recent years. Another effect of this new strategy is that risk-sharing partners are becoming responsible for larger subsystems and work packages (i.e. suppliers from Tiers 1-2-3 will cooperate more in order to reduce costs).
- In recent years European (mostly French/Italian) OEMs established production sites in Northern Africa. This can be also seen from the Trade Statistics.
- The quality of the parts and processes at the suppliers' premises is extremely important. It is assured by quality systems (e.g. AS9100). Other very important requirements include 100% on-time delivery and the type of equipment used, as there is a growing need for 5-axis CNC machines to reduce cost on machine set-up times. Finally, suppliers are increasingly being required to follow the principle of 'design to build' instead of 'build to print', which means that they must provide solutions for the processes of design and manufacturing.

Tips:

- In theory, exporters from developing countries could benefit from the trend of OEM need for outsourcing production, however, a direct relation with the OEM also means risk-sharing and high financial requirements and risks. Therefore, exporters from developing countries could better focus on Tier 1-2-3 suppliers.
- Suppliers have better opportunities if they 1) have a 100% on-time delivery performance, 2) work with 5-axis
 machinery, 3) work according to the principle of 'design to build' and have a quality system (e.g. AS9100) in
 place.

New technologies

- Aircraft companies are increasingly using composites predominately in order to reduce weight and maintenance costs
 of the airplane.
- Hydraulic fracturing ("fracking") is leading to a shift from coal to natural gas power generation. The main result of
 this trend is a larger demand for greater industrial gas turbines (IGTs), also influencing the aviation engine
 technologies developed for the aerospace engine segment.
- Additive manufacturing, or 3D printing, has the potential to be the next disruptive technology used for the creation of
 aerospace parts. It is already used for nozzles, prototypes of plastic interior parts, landing gear and other structural
 parts.

Harmonisation of airworthiness certification

In general, certification for aerospace parts and equipment is costly, as most of the aerospace products are manufactured in small series. The recent shift of OEMs to more globalised sourcing has put the harmonisation of airworthiness certification higher on the international aircraft industry's agenda. Another driver (or sometimes barrier) of this harmonisation trend are the existing and developing international production fragmentation networks. Furthermore, intensifying transatlantic relations within joint development and production projects stimulate initiatives to harmonising standards, testifying and certifying procedures.

Tips:

- The governments of Developing Countries should put efforts into creating bilateral agreements which facilitate the
 reciprocal airworthiness certification of civil aeronautical products imported/exported between two signatory
 countries. Bilateral Airworthiness Agreements (BAA) 154 or Bilateral Aviation Safety Agreements (BASA) with
 Implementation Procedures for Airworthiness (IPA) provide for airworthiness technological cooperation between
 the European Aviation Safety Agency (EASA) and the counterpart civil aviation authorities in Developing
 Countries.
- The governments of developing countries should devote effort to the regional harmonisation of airworthiness certifications, which could make specific countries or regions more attractive as sourcing partners.

Environmental protection

- The expectations for environmentally friendly aircraft are currently very high on the agenda of the international aircraft industry.
- Lightweight aircraft by using new materials and composites can significantly improve fuel efficiency. Much of the current effort of aeroplane producers and their component suppliers to reduce fuel consumption and emissions is concentrated in the area of lightweight materials.
- Environmentally friendly aircraft does not only involve other materials, but also innovation in the area of power/fuel management, 'smart wings', cockpit advances and independent energy sources for equipment.
- The European Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) entered into force on 1 June 2007. The purpose of REACH is to control all chemicals manufactured, imported or used in Europe. Where a substance will have to be substituted, finding alternative chemical substances for products already in service will be challenging, in particular considering that they must remain economically competitive, while complying with the required safety standards. If the Commission continues on its current path of adding more substances, there is a big risk that huge economic damage will be done, forcing some European aerospace firms to move production to non-European countries. One example of chemicals that have been discussed a lot recently are chromates and Potassium dichromates. Chromates provide corrosion inhibition to structural airframe elements, Potassium dichromate is the chromic free alternative, currently regarded as the most effective solution available for the corrosion protection of aluminium airframes.

Tip:

 Meeting European environmental regulation and producing solutions that can help potential European buyers to reduce environmental hazards is an important and ever increasing trend that can be used strategically for exporters from developing countries.

With which requirements should aerospace parts comply in order to be allowed on the European market?

Requirements can be divided into: (1) legal requirements you must meet in order to enter the market and (2) additional requirements, which are those most of your competitors have already implemented, in other words, the ones you need to comply with in order to keep up with the market.

You can find a general overview of the <u>EU buyer requirements for metal parts</u> on the Market Intelligence Platform of CBI. In addition, consult the <u>EU Export Helpdesk</u>, the <u>ITC Market Access Map</u> and the <u>ITC Standards Map</u> for more information on gaining access to the European market.

Legal requirements

Product safety is the main driver behind European legal requirements for aerospace parts. Getting European airworthiness certification (EASA approval, also refer to <u>Product description</u>) for processes and parts is particularly demanding, which is why it can be considered a severe challenge for producers from developing countries to supply to the European aerospace industry.

At the same time, the barrier of receiving airworthiness certifications is also reason for the leading aerospace companies to remain hesitant in starting subcontracting relationships with producers from developing countries.

In practice, the approval for aerospace parts made in Developing Countries sometimes may take too long and become expensive as well. Therefore, it is important that countries who aim to support their aerospace industry, enter into a bilateral aviation safety agreement with the EASA, allowing producers to inspect and certify components locally, instead of shipping them to Europe for safety checks.

Other, general legislation that must be taken into account:

- Wood packaging materials used for transport (including dunnage) (<u>Directive 2000/29/EC</u>): Europe sets requirements
 for wood packaging materials such as packing cases, boxes, crates, drums, pallets, box pallets and dunnage (wood
 used to wedge and support non-wood cargo).
- Another packaging related directive is the general directive about <u>packaging and packaging waste</u> (Directive 94/62/EC). This directive prescribes the marking of the kind of packaging material used, and the maximum levels of heavy metals in the packaging material.

For aerospace parts a 1.7% duty is levied on European imports from third countries. Several countries benefit from a preferential 0% tariff, for example Indonesia, Pakistan, Vietnam, the Philippines, Bosnia and Egypt. The TARIC database shows more details for Chapter 8803. Note that it is only possible to claim a preferential tariff treatment with a Certificate of Origin.

Tip:

Make sure that your wood packaging material qualifies for the European market. If you are not sure, ask your wood packaging material supplier for clarity. Your wood packaging material supplier should take any further actions required in order to comply with the Directive. If the supplier is not able to do so, you could possibly switch to another supplier.

Additional requirements

Additional requirements are requirements set by companies or industry regulating bodies, not the European Union or individual European Union member states. Although, of course, the customer has clear technical requirements for the part itself (such as design, material, dimensions and finishing), the aerospace industry is characterised by one quality system that every company adheres to: AS9100 certification. While AS9100 is a must for exporters from developing countries, an additional step in improving opportunities could be NADCAP approval.

AS9100 is a comprehensive quality management system standard for the aerospace industry. Most aerospace manufacturers and suppliers worldwide require compliance and/or registration to AS9100 as a condition of doing business with them.

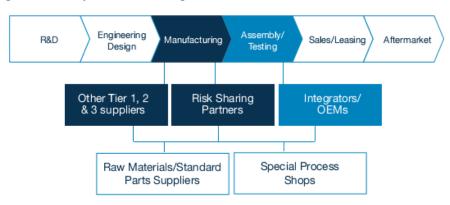
NADCAP stands for National Aerospace and Defence Contractors Accreditation Program, NADCAP is a global cooperative standards-setting program for aerospace engineering, defence and related industries. The NADCAP program gives accreditation for special processes in the aerospace and defence industry, such as heat treatment and chemical processing of aluminium alloys. Several of the large aerospace equipment producers require NADCAP from their suppliers, for example, Boeing, General Electric and Honeywell.

In addition to these two standard certifications, European companies will also require an in-depth supplier assessment and a Parts Manufacturer Approval as well.

What do the trade channels and interesting market segments for aerospace parts look like in Europe?

Potential buyers in Europe are the so-called Tier 2 or Tier 3 aerospace suppliers in Europe. These prospects can be approached directly, but an indirect approach (agent or distributor) may be a good option too. The Tier 2/3 suppliers are a chain in the large aerospace production value chain, which is presented in Figure 13 below.

Figure 13: Aerospace Manufacturing Value Chain



Source: EASA (2013)

For aerospace parts suppliers from developing countries, the best strategy to enter the European aerospace industry is to focus on tier 2 or 3 companies that integrate parts with their own parts/products to provide comprehensive solutions to the aircraft manufacturers (or: Original Equipment Manufacturers (OEMs)).

Although several aerospace tier 1/2/3 companies are seeking to subcontract work in order to reduce costs, becoming their supplier requires patience, financial efforts, an innovative approach and competitive pricing. As a rule of thumb, the higher the product requirements or the more critical the application, the longer it takes before suppliers are qualified. A direct presence in Europe (in one of the focus countries) could strongly support this process.

Producers from developing countries that do not wish to set up an own representation in Europe, should choose an agent or distributor with a good reputation in the aerospace industry.

From practice:

Similar to several other industries, the large OEMs have sharply reduced their number of suppliers. One example is Airbus, which is now dealing with a smaller number of larger manufacturers. As a result, many aerospace parts producers are not supplying Airbus directly anymore but instead deal with 1st, 2nd or 3rd tier suppliers. A next step in Airbus' sourcing strategy is to globalise sourcing operations; Airbus' Global Sourcing Network (GSN) has set a target of 40% to be sourced outside Western Europe by 2020. The GSN central team is based in Toulouse and Ottobrunn and operates Country Sourcing Offices in three strategic countries (China, India, USA). Country Focal Points are Brazil, Japan, Korea, Malaysia, and Mexico.

Aircraft producers (OEMs)

Some examples of leading European (multinational) aircraft producers are the following (listed by country of headquarter location):

- France: Airbus, Safran, Dassault, Latecoere, Airbus helicopters
- Germany: <u>Lufthansa Technik</u>
- Italy: Finmeccanica, Alenia Aermacchi

Several of these companies also produce aerospace parts in-house.

Please note that this enumeration is not complete and is only meant as illustrative of this particular category of companies.

Aircraft part producers (Tier 1-3)

Some examples of aerospace parts producers in Europe, by country of origin, are:

- France: <u>SOGERMA</u>, <u>Aerolia</u>.
- United Kingdom: Rolls Royce, GKN, Gobham, Meggitt
- Germany: Premium Aerotec, Diehl, Liebherr
- Italy: (<u>Avio Aero</u>, <u>Avio</u>), <u>Dema</u>
- Spain: <u>ITP</u>, <u>Aernnova</u>.

 Netherlands: <u>KMWE</u>. The website of KMWE is an example of how exporters from developing countries could design their own websites.

Please note that this enumeration is not complete and is only meant as illustrative of a certain category of companies.

One source that can be used to find (POA approved) producers of aerospace parts per European country is the <u>EASA List of Approved Production Associations</u>. Other sources to find prospects are included in the section "Useful sources".

Market segmentation

Some characteristics of the major market segments in the aircraft industry are the following:

- In the **propulsion** segment the major two competing future concepts are the Geared Turbofan (of P&W and MTU) and the Open Rotor (of GE and Rolls Royce).
- The aircraft engine market is expected to become the strongest growing market segment in the next decades. Big
 consortia characterise the supply chain for aircraft engines; cooperation allows the engine manufacturers to share
 risks and development costs. This segment is characterised by more stable and long-term cooperation than in other
 segments of aerospace value chains. At the same time, requirements for engine part suppliers are extremely high,
 which makes it difficult to supply to this market segment.
- The supply of **landing gear** is in the hands of a duopoly between Messier-Dowty (a subsidiary of Safran) and Goodrich. They offer the complete range of landing gears and are the principal suppliers to Airbus and Boeing. Liebherr, the third player in the sector, is producing landing gear for regional and business aircraft. In the medium term Liebherr may be pushing for a larger market share in this segment, thus destabilising the duopoly.

The focus countries each have their own specialisations:

- France: cockpit technologies, engine manufacturing, final assembly
- United Kingdom: wings, composite applications, engine, MRO (Maintenance, Repair and Overhaul)
- Germany: avionics, fuselages, complex cabin equipment, high-lift systems, vertical tails, engine, final assembly, helicopters.
- Italy: electronics, military aircrafts, helicopter manufacturing
- Spain: tail, fin and pitch elevator, composites, military transport aircraft and helicopters.

Tip:

 According to the type of parts, exporters from developing countries can target markets that are specialised in particular product types.

Useful sources

France

- Finding prospects: Artema, Cyclex.
- GIFAS French Aerospace Industry Association
- Magazines and news: <u>Axes Industries</u>, <u>Industries & Technique</u>, <u>Usine Nouvelle</u>.
- <u>Techniques de l'Ingénieur</u> French information portal for technical and industrial scientific developments and trends; click on 'ressources documentaires' to look for newest industry trends.
- Trade fairs: <u>Aeromart Toulouse</u>, <u>Industrie Paris</u>, <u>International Paris Air Show</u>, <u>Midest</u>, <u>SEPEM INDUSTRIES</u>.

Germany

- o Finding prospects: ALROUND, German Aerospace Industries Association (BDLI), German Commercial Agents Directory, HANSE Aerospace, Sachon, VTH Verband Technischer Handel, Wer liefert was?
- o German aerospace clusters: Aerospace Initiative Saxony, Aviabelt, bavAviria, Berlin Brandenburg Aerospace Alliance (BBAA), Forums Luft- und Raumfahrt Baden-Württemberg, Hamburg Aviation, Hanse Aerospace, Hanseatic Engineering & Consulting Association (HECAS), Niedersachsen Aviation Hannover.
- o Trade fairs: Airtec, Aero, ILA.

Italy

- Finding prospects: Azienda in fiera, Confindustria, Federation of the Italian associations of mechanical and engineering industries, Italian Federation of Aerospace, Defense and Security Industries (AIAD), Italy Business.
- Italian aerospace clusters: Campania Aerospace, Lazio Aerospace Technology District, Lombardy Aerospace District.
- Trade fair: Aerospace & Defense Meetings Torino.

United Kingdom

- Aerospace growth partnership
- **British Helicopter Association**
- Finding prospects: <u>ADS</u>, <u>Applegate Directory</u>, <u>Engineering</u>, <u>Hotfrog</u>. Magazines and news: <u>Industry.com</u> portal that connects most industry magazines published in United Kingdom and Ireland, e.g. <u>Industrial Technology</u> and <u>The Engineer</u>.
- Trade fairs: Farnborough International Air Show, Helitech International and Subcon (list of exhibitors).

Other

- AeroSpace and Defence Industries Association of Europe (ASD)
- European Aviation Safety Agency. Read more details of the POA process and requirements.
- Finding prospects: <u>ABC Business Directories</u>, <u>European Aerospace Cluster Partnership</u>.
- Trade fair databases: <u>AUMA</u>, <u>Eventseye</u>.

 Trade statistics: <u>Eurostat</u>, <u>ITC International Trade Statistics</u>.

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This survey was compiled for CBI by Globally Cool – Creative Solutions for Sustainable Business in collaboration with CBI sector expert Peter Lichthart

Disclaimer CBI market information tools: http://www.cbi.eu/disclaimer

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Annex

Four codes have been selected for aerospace parts. Also refer to Table 1 below for the classification. Table 1 also shows the list of Prodcom codes used for the production statistics of aerospace parts.

Table 1: Selected products, based on CN and Prodcom nomenclature

Subsector and	CN code	Prodcom code	Description
product groups			
Propellers, rotors and parts	880310	30305030	Propellers and rotors and parts thereof, for aircraft, n.e.s.
Undercarriages and parts	880320	30305050	Undercarriages and parts thereof, for aircraft, n.e.s.
Other aeroplanes or helicopter parts	880330	30305090	Parts of aeroplanes or helicopters, n.e.s. (excl. those for gliders)
Other air- and	880390		Parts of aircraft and spacecraft, n.e.s.
spacecraft parts			Parts for aircraft spark-ignition reciprocating or rotary
		30301500	internal combustion piston engines, for use in civil aircraft
		30301600	Parts of turbo-jets or turbo-propellers, for use in civil aircraft
		25621007	Turned metal parts for aircraft, spacecraft and satellites

Source: CN and Prodcom Nomenclature

The government of the United Kingdom issued a $\underline{\text{guide}}$ that helps companies to classify aircraft parts and accessories in chapter 88 paragraph 3.