CBI MARKET SURVEY

THE ELECTRONIC COMPONENTS MARKET IN FRANCE

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Report summary
This CBI market survey discusses, among other things, the following highlights for the electronic components market in France:

- Considerable market growth in the 2005-2010 period of 4.4%.
- This is especially due to increasing sales of high-tech tailor-made products which are produced following locally developed technology.
- After the loss of GSM and PCs production, the French electronics industry has specialised in areas such as aerospace, defence, automotive and other niches.
- Total import value of actives and assemblies in France declined fast in recent years, while electromechanicals showed some growth.
- In 2005, major DC suppliers to France were Morocco, Tunisia, China and South Africa.
- Compared to 2004, total share of DCs rose 2% to 20%.

This survey provides exporters of electronic components with sector-specific market information related to gaining access to France. By focusing on a specific country, this survey provides additional information, complementary to the more general information and data provided in the CBI market survey 'The electronic components market in the EU', which covers the EU in general. That survey also contains an overview and explanation of the selected products dealt with, some general remarks on the statistics used as well as information on other available documents for this sector. It can be downloaded from http://www.cbi.nl/marketinfo

1. Market description: industrial demand and production

Industrial demand

After the loss of a large GSM and also PCs production, the French electronics industry has entered an era of higher specialisation in areas such as aerospace, defence, automotive and a number of professional or industrial niches. It is now a dynamic market for embedded technologies.

Total market size

Ranked third in the EU, far behind Germany, the country is in competition with the number two market in the EU, the UK. Referring to table 1.1, which gives the developments in the several subgroups, the market fell again in 2005 after good recovery in 2004 (7.1% for total and as much as 10.5% for actives). For the coming years, growth could be affected by continuing difficulties in the telecommunications sector. Especially passive components are expected to decline in the years up to 2010 (-0.8% annually). The 2005-2010 average growth of 4.4% for the French component market comes only from two sectors: aerospace & defence (+5%) and automotive (+6%).

Table 1.1 French market electronic components, 2003-2010, € million

	Market value				Growth rates (%)	
	2003	**2004**	**2005**	**2010**	**04/05**	**05/10 (annual)**
Active components	3,903	4,316	4,047	5,334	-6.2	5.7
Passive components	569	565	522	501	-7.6	-0.8
Electromechanical components	1,991	2,042	2,028	2,334	-0.7	2.9
Total	**6,464**	**6,923**	**6,597**	**8,169**	**-4.7**	**4.4**

Source: Decision (July 2006)

Electronic assemblies
The French EMS (electronic manufacturing services) market is the third largest in Europe and increased to a value of € 3.1 billion in 2004. The computer industry was the largest client, followed by automotive.

The French PCB market, part of the EMS market, increased 1.5% to € 515 million in 2004. Rigid multi-layer boards accounted for 55% of the market, compared to 48% in 2002. However, its market share will decrease gradually in favour of of flexible and semi-rigid PCB, which offer more flexibility to customers. The industrial sector grew to be the largest end user sector, accounting for 32% of sales in 2004. The market is expected to grow just under 9% from 2004 to 2009 to reach a value of € 560 million. Some large players include Cire Group (http://www.cire.fr), market leader in France, specializing in the automotive and telecommunications sectors), Thalès (http://www.thalesgroup.com; aerospace, defence and security & services) and Alcatel (http://www.alcatel.com).

With regard to integrated circuits, part of the EMS market as well, the main products in France in 2005 were metal oxide semiconductors (23%), microprocessors (18%) and micro controllers (19%). The most important applications were telecommunications (33%), automotive industry (15%) and ICT (13%).

Market segmentation
In general, major end user sectors in France are the automotive industry, industrial applications, consumer products and military and space. Some well known end users of electronics in France are Agilent Technologies (http://www.agilent.com; test and measurement equipment), Bull (http://www.bull.com; IT), Eads Defence And Security Systems (http://www.eads.com), Lexmark International (http://www.lexmark.fr; computer hardware), Sagem (http://www.sagem.fr; communication and defence), Schneider Industrial (http://www.schneider-electric.fr), Seb (http://www.seb.fr; small home appliances), Thomson Broadcast Solutions (all products are sold to Chinese TCL; http://www.thomson.com) and Valeo (http://www.valeo.com; automotive).

Trends in consumption
- Consumer electronics producers have been leaving the country, relocating production to low-wage countries in, among others, Central and Eastern Europe.
- Following the downturn in GSM and consumer electronics production, a great number of PCB manufacturers have shifted their productions to cater to the needs for high-tech tailor-made products of the high number of small and medium-sized enterprises in France.

Production

Total production
Table 1.2 shows an indication of the production of electronic components in France. Please note that reliability of Eurostat data is limited. However, they can be used to analyse the development over years. The total production value in France declined fast in recent years: 63% in the period 2000-2004. This is in line with the European trend. In total production value, France – still one of the large producers in Europe – ranked third in Europe behind Germany and Italy in 2004, but ahead of the UK and Spain. Adding to the information from the table, according to industry experts, French production of PCBs totalled € 329 million in 2004, remaining stable in 2005 but expected to decrease in 2006.

Table 1.2 French production value of electronic components, 2000-2004, € million

	2000	2002	2004
Active components	3,186	2,311	339
Electromechanical components	2,744	1,893	1,641
Passive components	933	1,355	581
Electronic components (excl ass)	**6,863**	**5,559**	**2,562**
Electronic assemblies	966	819	744

Source: Eurostat (2006)

In France there are still hundreds of companies producing components. Many of these are already operating in niche markets. According to industry experts, these companies will be challenged by a migration of the telecommunication sector eastwards in the coming years. In line with the end users in e.g. automotive and military, the component sector has to specialise in high-tech tailor-made products.

As in the UK, France has clustered technologies in regions, for example photonics technology that is clustered in Opticsvalley (http://www.opticsvalley.org). This Paris Region optics network supports regional and international companies of all sizes, research laboratories and educational institutions in developing partnerships and share experiences. Another example of such a cluster is Minalogic (http://www.inpg.fr). Located in the Rhone-Alpes region this cluster pools research and cooperation in developing miniaturized chips, using micro- and nanotechnology and embedded software education.

Major players

Some major manufacturers of electronic components in France are Altis semiconductor (http://www.altissemiconductor.com; semiconductors), Atmel Nantes (http://www.atmel.com; advanced semiconductors), Photonis (http://www.photonis.com; photo sensor technology) and ST Microelectronics (http://www.st.com; semiconductors). Amphenol Socapex (http://www.amphenol-socapex.com; electrical and optical connectors), Deutsch Connectors (http://www.deutschecd.com), FCI Connectors (http://www.fciconnect.com) and Radiall (http://www.radiall.com; connectors) are major electromechanical components manufacturers. Examples of EMS providers are Cofidur (http://www.groupe-cofidur.com) and CMS (http://www.cmsfrance.fr).

Trends in production

- Local production of components and assemblies continues decreasing. The industry is forced to restructure, and to concentrate on added-value products. Heavy investments are therefore made in research and development.

Opportunities and threats

\+ The French market is one of the largest of the EU.
\+ Market is expected to grow in the coming years.
\+ Growing demand for specialized components.
− Local production decreased in the period 2000-2004.

Interest in developing countries

In February and March 2006, FFF held an indicative online questionnaire among some French buyers of electronic components. It can be roughly concluded that there is an interest in developing countries in all sectors in the industry. Some highlights follow hereafter:

Level of interest

Certainly, there are several larger but also smaller French companies looking for trade opportunities in developing countries. Interviews with 3 buyers of electronic components in the country learn that several companies think they will start doing business with DC companies in the coming years, especially in categories where price is important. One company indicated that it is forced to do so by its customers, who request heavy cost reduction. Another company mentioned that DC manufacturers should especially focus on dealing with industrial actors for small and medium quantities.

Developing countries considered
Countries that the buyers mentioned are (in order of importance) Tunisia, India, Morocco, Bosnia and Herzegovina, Indonesia, the Philippines, South Africa and Thailand.

Products considered
Products and services that have the best opportunities, according to the French buyers, are: sensors and microsystems, PCBs, cables, inductors, assemblies and subsystems, electronic protection devices, electronic design, EMS, interconnection technology and services in the area of certification, engineering and maintenance.

Useful sources

- Association of electronic interconnect, component and sub-system industries - http://www.gixel.fr
- Association of EMS providers - http://www.snese.com
- Association of the semiconductor industry - http://www.sitelesc.fr
- Association of suppliers to the electronics industry - http://www.gfie.fr

2. Trade: imports and exports

Imports

Total imports
In 2005, France was the third largest importer of electronic components in Europe, far behind Germany. Regarding electronic assemblies import, the country is the fifth largest behind Ireland but far ahead of Italy and the Czech Republic. The total import value in France declined fast in recent years: almost 70% in the period 2001-2005. The most important suppliers were Germany, Italy and the UK. Major DC suppliers to France were Morocco, Tunisia, China and South Africa. Compared to 2004, total share of DCs rose 2% to 20%. There weren't very spectacular developments, but most striking is South Africa, whose market share grew to 2% in 2005.

Imports by product group
Table 2.1 shows that all product groups, except electromechanicals, decreased in value between 2001 and 2005. Assemblies decreased as well. China is represented In each product group; only in passives the country is leading. This also goes for Morocco, though this country is leading in actives. Furthermore, Tunisia is leading in electromechanicals while the country has a 3% share in passives. Other DCs with major shares are South Africa (7% in actives) and Thailand (4% in passives). Compared to 2004, most striking is that the DCs' share in assemblies went down 5% to 12%, while in actives it grew 5%. South Africa's market share in actives grew 3%. In the field of assemblies, most striking is that China lost 4% market share compared to 2004.

Regarding all intra EU imports, most probably part of them are re-exports, but the exact value is unknown, as Eurostat doesn't allow such detailed analysis.

Table 2.1 Leading suppliers of electronic components and electronic assemblies per product group to France, 2005, share in % of value

Product	**2001** € mln	**2005** € mln	**Leading suppliers** (share in %)		**Share** (%)
Active components	6,043	824	Intra EU	: Germany (20), Netherlands (8), Italy (7)	48
			Ext EU excl DC	: Singapore (9), Japan (9), USA (7)	29
			DC	: Morocco (11), South Africa (7), China (3), Malaysia (1), India (1), Mexico (0)	24
Electromechanical components	1,149	1,242	Intra EU	: Germany (26), UK (8), Italy (7)	69
			Ext EU excl DC	: USA (4), Switzerland (2), Japan (2)	10

Product	**2001** € mln	**2005** € mln	**Leading suppliers** (share in %)		**Share** (%)
			DC	: Tunisia (9), China (5), Morocco (4), Indonesia (1), Mexico (0), Turkey (0)	20
Passive components	1,723	668	Intra EU	: Germany (23), UK (9), Italy (8)	69
			Ext EU excl DC	: Japan (4), Switzerland (4), USA (4)	17
			DC	: China (5), Thailand (4), Tunisia (3), India (0), Malaysia (0), Morocco (0)	14
Total electronic components (excl. electronic assemblies)	8,915	2,734	Intra EU	: Germany (24), Italy (7), UK (7)	63
			Ext EU excl DC	: USA (5), Japan (4), Singapore (3)	17
			DC	: Morocco (5), Tunisia (5), China (4), South Africa (2), Thailand (1), Malaysia (0)	20
Electronic assemblies	4,627	2,453	Intra EU	: Netherlands (17), Germany (16), UK (8)	62
			Ext EU excl DC	: USA (10), Taiwan (4), Canada (3)	26
			DC	: China (7), Tunisia (1), Morocco (1), Thailand (0), Mexico (0), Indonesia (0)	12

Source: Eurostat (2006)

Exports

The total export value of France declined fast in recent years: over 65% in the period 2001-2005, totalling € 3.4 billion in 2005. This is in line with the European trend. In total export valueFrance – still one of the large exporters in Europe – ranked second in Europe behind Germany in 2005, but ahead of the UK, The Netherlands and Italy. In the period 2001-2005, electronic assemblies exports also decreased; by almost 60%. While in 2001 actives took 65% of all exports, in 2005 share of this product group had shrunk to 31%. Electromechanical components (55%) took over the leading share in exports in 2005, with the remainder for passives (14%).

Opportunities and threats

+ France is a net importer.
+ Considerable import shares for DCs, especially in components.
+ Compared to 2004, total share of DC countries in 2005 rose 2% to 20%.
− Import value of components has been declining very fast in recent years.
− Export value of components has been declining fast in recent years.

Useful sources

- EU Expanding Exports Helpdesk - http://export-help.cec.eu.int/. Go to: trade statistics.
- Eurostat – official statistical office of the EU - http://epp.eurostat.cec.eu.int. Go to: 'themes' on the left side of the home page - 'external trade' - 'data – full view' - 'external trade - detailed data'.

3. Trade structure

Trade channels

Please refer to the CBI market survey "The Electronic Components market in the EU" for general information on trade structures in Europe. Additional information: in 2005, the share of distributors in the French market ranged between 20-25%. While the large distributor groups have major shares in the distribution of actives (91%) and passives (78%), the independent distributors have a relatively large share in the electromechanical components: 44% in 2005, leaving the balance (56%) for the distributor groups. In general, EMS-providers accounted for more than 35% of the distributors' sales in 2005. France is home to the whole range of large pan-European distributors, such as Arrow (http://www.arrow.com), Avnet (http://www.avnet.com) and Farnell (http://fr.farnell.com). It is also home to a range of national distributors, such as Atlantique (http://www.atlantique-composants.fr), and a large retailer of electronic components (http://www.conrad.fr).

Preferences French buyers

Purchase preferences
Due to the large sales network of a distributor, this is the best trade channel for the DC manufacturer, according to the French buyers interviewed. The French respondents also indicated how they considered buying from developing countries. They consider both 'buying products' as well as 'electronic assembly' as opportunities.

Decision criteria and barriers
According to the French buyers, important decision criteria are price, quality and delivery time. Barriers that prevent these French business people from doing business with DC companies are too specific quality demands, irregular delivery times, uncertainty and cultural differences.

Trends
For 2006, the French Industry Association of Electronics Distributors (SPDEI) forecast a growth of 2 to 5% for the independent distributors' share of electromechanicals.

Useful sources
- French Industry Association of Electronics Distributors - http://www.spdei.fr

4. Prices and margins

Prices of electronic components and assemblies continue decreasing year after year. While electromechanicals and assemblies are down by 5-10% annually, semiconductors and most passive components decrease 10-30% annually. However, there are some, often temporary, exceptions. The factor material costs is the first variable in these. For example, in the early years of this decennium, prices of tantalum capacitors temporarily increased due to a shortage of tantalum. Another example concerns connectors with golden pins. The increasing gold price in 2005-2006 severely inflates the price of these components.
Another factor is the combination of supply and demand, also with regard to individual products. For several products, such as D-ram and flash memory, both demand an supply can fluctuate much. As a result, prices of these products are very volatile.

Regarding the future, according to industry experts, the continuing rise in the cost of energy as well as the implementation of the Restriction on Hazardous Substances (RoHS) directive is driving up the manufacturing costs in the components industry. For example, between January and April 2006, crude oil prices rose over 21%. In addition, metal prices, such as that of gold, aluminium, nickel, tin and copper increased 18, 21, 37, 41, and 59%, respectively. As a result, industry analysts forecast rising prices of PCBs, as manufacturers are expected to pass on the costs to their customers.

Useful sources
- Refer to https://www.em.avnet.com and http://www.farnell.com to search for component prices.
- Another example is the site of Spoerle (http://www.spoerle.com), where prices can be found as well (click at the icon of the shopping cart).

5. Market access requirements

As a manufacturer in a developing country preparing to access France, you should be aware of the market access requirements of your trading partners and the French government. Requirements are demanded through legislation and through labels, codes and management systems. These requirements are based on environmental, consumer health and safety and social concerns.

Legislative requirements

National legislation in EU countries is compulsory for all products traded within the country concerned. Therefore, as an exporter in a developing country you have to comply with the legislative requirements that are applicable to your products. For information on legislation for electronic components go to 'Search CBI database' at http://www.cbi.nl/marketinfo, select your market sector, and the EU country of your interest in the category search, click on the search button and click on legislative requirements for an overview of all documents on legislation in your country of interest.

Non-legislative requirements

Social, environmental and quality related market requirements are of growing importance in international trade and are often requested by European buyers through labels, codes of conduct and management systems. For information on non-legislative requirements applicable to electronic components, go to 'Search CBI database' at http://www.cbi.nl/marketinfo, select your market sector and the EU country of your interest in the category search, click on the search button and click on your subject of interest under non-legislative requirements for an overview of all documents on the subject concerned in your country of interest.

Packaging, marking and labelling

Special transport packaging is not necessary for most electronic components. Packaging is used to protect against mechanical damage and for certain products additional antistatic protection is needed. The packaging has to satisfy conditions in the field of handling. Most electronic components are made of heavy copper cores, so the use of firm carton boxes is recommended in order to avoid breaking and/or shifting.

If an import duty -no matter the country of origin- applies to a component that enters France, the exporter should be able to show a certificate of origin. Furthermore, a Bill of Lading (B/L) and a commercial invoice are obligatory. If a 0% duty applies, the so called Eur 1 Form for ACP countries for customs tax exemption is common.

Tariffs and quota

Developing countries benefit from several trade preferences. The most important one is called 'Generalised System of Preferences' (GSP). Following this system, most import tariffs from developing countries of electronic components are zero. To determine import duties and/or quota for your own product(s) and from your specific country, consult the Taric database. Refer to the EU survey for more information. Another useful contact is the European Customs in France.

Useful sources

- European Customs in France - http://www.douane.gouv.fr
- Export Helpdesk for Developing Countries - http://export-help.cec.eu.int
- Taric database - http://ec.europa.eu/taxation_customs/dds/en/tarhome.htm
- In France, the VAT tariff is 19.6%. For more VAT tariffs, consult http://www.expatax.nl/vatrates.

6. Business practices

Selecting a suitable trading partner

According to the French buyers interviewed, the best ways for exporters in developing countries to approach potential trading partners in the French electronic components market are trade fairs and industry associations in the EU. Furthermore, they also mentioned internet and trade missions. In general, French companies prefer to do business with DC companies that outperform in the area of quality, reliability and credibility. There are three major ways to find prospects in France, which are the internet, sources in the developing country and sources in France:

Internet

There are some very useful websites that can be used to identify prospects (or competitors) in France. Some highlights follow below; these are:

- Company databases such as Europages - http://www.europages.com, KellySearch - http://www.kellysearch.co.uk, Kompass - http://www.kompass.com and Thomas Global Register - http://www.trem.biz. Refer to the manual "Digging for Gold" for guidelines for searching with these databases.
- European Component Source Directory (http://www.componentssource.com) is a directory containing more than 5,000 addresses of manufacturers, distributors, brokers and importers of electronic components in Europe. Online access only costs € 49.
- Exhibitor database of Electronica 2006 - http://www.global-electronics.net, click on "Unternehmensindex." The database of trade fair Electronica can be used to identify key manufacturers worldwide that are active in the electronic components industry, searchable by detailed product.

Also refer to CBI's Export Planner (http://www.cbi.nl), an export manual that provides information on the different steps to take during the export process to the EU market.

In the developing country

- The foreign-trade chamber of commerce of France. Find the relevant chamber of commerce at http://www.worldchambers.com.
- The Economic Affairs departments of the official representative (Embassy or Consulate) of France. Find the French embassy in your country at http://www.embassyworld.com.

In France

- Industry Association of Electronics Distributors (SPDEI) - http://www.spdei.fr. Click "Le salon permanent de la distribution" and search the database to find distributors, importers and agents.
- Chamber of Commerce - http://www.acfci.cci.fr
- Federation of French Commercial Agents – http://www.comagent.com
- Juridical information about commercial agents - http://www.acojur.com
- "Commercial route" (provides a list of sites where agents can be found: click 'sites utiles') – http://www.laroutedescommerciaux.com

Reaching an agreement with your trade partner

Drawing up an offer

Trade interviews learn that offers should include technical features, prices as well as other issues such as lead times, stock levels etc. In general, French companies prefer quick and serious responses to offers, which means within a week.

Method of payment

Common methods for export payments to France are commercial letters of credit, documentary collections, bank transfers and certified checks. Based on interviews, payment for exports are mostly done by open invoice. Letter of credit payment is normal until a trading pattern has been established. While 30 days credit should be usual, there are examples that

French groups ask for 90 days credit – with exceptions of even 180 days -, while independents might ask for 75 days credit. Further, a 2% to 3% cash discount may be granted for payment received within ten or fourteen days.

Terms of delivery

According to industry specialists, deliveries are usually ex-works, but CIF and FOB conditions are no exceptions. In principle, customer wishes are decisive.

Sales promotion

One of the major critical success factors for exporters of electronic components and electronic assemblies to France is attention to customer requirements and the ability to maintain good relationships with their French business partners. Sales promotion revolves around developing and expanding these customer relations and thereby maintaining and increasing sales volume. For more information also refer to CBI's Export Planner and Your Image Builder – http://www.cbi.nl.

Trade press

An interesting story on your company or new product introduction will boost the company's image and increase user awareness. In that respect, building up contacts with the trade press will be helpful and should be used whenever possible.

Some relevant magazines for France are:

- Daily electronics newsletter (in French) - http://www.vipress.net
- Electronique International Hebdo (http://www.electronique.biz) is a magazine for all engineers working in industries integrating electronics; senior management in electronics industry, suppliers of components.

Trade fairs

Visiting and participating in a trade fair abroad can be an efficient tool to communicate with prospective customers. It provides more facilities for bringing across the message than any other trade promotional tool. It can also be an important source of information on market development, production techniques and interesting varieties. Beside the largest components trade fair in Europe (Electronica - http://www.global-electronics.net – held in Germany every other year), other relevant trade fairs in France are:

- Astelab–CEM Expo - http://www.cemexpo.com
- Cartes (a special fair for smart cards and identification techniques) - http://www.cartes.com
- Display - http://www.birp.com
- Elec Industrie - http://www.exposium.com
- Forum de l'Electronique - http://www.forum-electronique.com
- Midest (industrial subcontracting) - http://www.midest.com
- RF & HYPER EUROPE (RF, microwaves, wireless, optical fibre and their applications) - http://www.rfhyper.com
- Smart Systems Integration - http://www.mesago.de

This survey was compiled for CBI by Facts Figures Future in collaboration with Mr. G. Fandrich.