

CBI MARKET SURVEY

THE ELECTRONIC COMPONENTS MARKET IN THE NETHERLANDS

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Report summary

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

- For the coming years, the Dutch market should maintain a positive trend (2.5%), slightly below those of main other Western European countries.
- Dutch production of components has become highly specialized.
- While import value of components declined in the period 2001-2005, the import value of assemblies increased. This is because the Netherlands developed into a re-exporter of cheap DC assemblies.
- DCs account for large import shares in 2005, especially for assemblies (50%), but also for components (21%). Beside China, other major DC suppliers to the Netherlands were the Philippines, Thailand and Malaysia. Compared to 2004, the total share of DCs rose to 21%.
- An indicative online questionnaire reveals the increasing interest among Dutch buyers to do business with DC suppliers.

This survey provides exporters of electronic components with sector-specific market information related to gaining access to the Netherlands. 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

Total market size

Referring to table 1.1, which shows the Dutch market for electronic components for the years 2003-2010, the Dutch market lost 1.8% in 2005, mainly due to the decline of active and passive components. As with most other major EU markets, demand for electromechanical components will show a slight positive growth. The EU, including The Netherlands, holds a strong position in this sector and relocation of this industry is less likely because the product are more difficult to produce in mass volumes. The Dutch component market is medium-sized, ranking twelfth in the EU, far after Poland and Ireland but ahead of Belgium/Luxembourg. For the coming years, the Dutch market should maintain a positive trend (2.5%) slightly below those of main other Western European countries (3.4%). According to industry experts, major driver of growth is the growing importance of electronics in a wide range of applications.

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

	Market value				Growth rates (%)	
	2003	2004	2005	2010	04/05	05/10 (annual)
Active components	896	983	956	1,133	-2.8	3.5
Passive components	127	126	121	112	-3.8	-1.6
Electromechanical components	390	397	402	430	1.3	1.4
Total	1,414	1,506	1,479	1,675	-1.8	2.5

Source: Decision (July 2006)

Market segmentation

The Dutch electronics industry mainly operates in niche markets, characterized by high-tech and low-volume. Some niche activities that best reflect the Dutch situation are its naval systems industry as well as production of SMDs (surface mount devices). Some examples of end users present in the Netherlands are ASM (<http://www.asm.com>; lithography), FEI (<http://www.feicompany.com>; optotronics), Fico Molding Systems (<http://www.ficomolding.com>; lithography), Océ (<http://www.oce.com>; printers), Philips (<http://www.philips.com>) and Stork (<http://www.stork.com>; industrial and aerospace). The most important applications of components are electronic data processing (EDP; around 40%), industrial (30%) and telecom (25%).

Philips, one of the companies mentioned above, is one of the world's largest electronics companies. It is a global leader in digital technologies for television and displays, wireless communications, speech and video compression. Concentrating on its core businesses, Philips has recently divested itself of a number of business units (in 2006 of the semiconductor unit), but also invested heavily in promising consumer electronics areas. It ranks number 1 in many markets globally like lighting, shavers, DVD recorders and is number two or three in consumer electronics (audio/video), monitors, steam irons, colours picture tubes, medical image equipment and dental care. It continues to have some major production sites in the Netherlands and still subcontracts in its own country. Its presence of course has a positive impact since it advances several R&D programmes.

Trends in consumption

- The growing importance of electronics in a wide range of applications is a major driver for market growth in the coming years.
- Companies focus more and more on innovative products, which consist of high-tech components. For this, they cooperate in networks, together with research institutes and universities, both in the Netherlands as well as in the neighbouring countries Belgium and Germany, annually spending € 500 million on research. Industry and research organisations have been encouraged by the Dutch government to work together within single, international programmes, leading to the spin-off of several programmes, for example NanoNed (<http://www.nanoned.nl>), MicroNed (<http://www.microned.nl>), BioMaDe (<http://www.biomade.nl>), Process on a Chip and the Photonic Devices Innovation Programme.
- The Netherlands also has a reputation in the field of embedded systems development. Bluetooth, WiFi, the CD and the DVD are all (partly) Dutch inventions. About 80 companies specialise in independent embedded systems development. A further 150 regard embedded systems development as an important part of their business, and some thousands more use embedded systems in their products or production processes. Again, many of these companies cooperate closely with research and educational organisations.

Production

Total production

Table 1.2 shows an indication of the production of electronic components in the Netherlands. Please note that reliability of Eurostat data is limited. However, they can be used to analyse the development over years. Also be aware that the Netherlands based company Philips does not officially reveal its production data. However, its year report indicates that the turnover of Philips Semiconductor was almost € 4.6 billion globally in 2005, of which 28% was from Europe. Without taking Philips' production value into account, the Netherlands was a medium sized producer in the EU in 2004, ranking behind Hungary, Austria and Finland but ahead of Denmark, Poland and Sweden. Contrary to the steep declining trend in Europe in the period 2000-2004, all product groups in the Netherlands together decreased only 7% in value. This is mainly thanks to the passives that increased 49% that period. According to industry experts, the Dutch industry flourished in 2005, and 2006 is expected to become a good year as well.

Table 1.2 Dutch production of electronic components, 2000-2004, € million and million units

	2000		2002		2004	
	value	volume	value	volume	value	volume
Active components	-	-	-	-	-	-
Electromechanical components	200	-	145	-	130	-
Passive components	102	-	133	3	152	3
Electronic components (excl ass)	302	-	278	3	282	3
Electronic assemblies	410	-	127	3	101	6

Source: Eurostat (2006)

Major players

Beside the major manufacturer NXP (former Philips Semiconductors - <http://www.nxp.com>), the Netherlands is home to a number of smaller manufacturers, such as Anteryon (<http://www.anteryon.com>; optic components) and Exendis (<http://www.exendis.com>). Some examples of EMS (electronic manufacturing services) providers are Faber Electronics (<http://www.faber-electronics.nl>), Halin (<http://www.halin.nl>) and Neways (<http://www.neways.nl>; assembly of PCBs).

Trends in production

- Dutch production of components has become highly labour-intensive as a result of outsourcing labour-intensive production and of the use of high-tech machinery of some prominent Dutch machinery producers (e.g. Assembléon <http://www.assembleon.com>).
- According to industry experts, Dutch companies remain competitive, due to several advantages, such as short communication lines and joint development and improvement.

Opportunities and threats

- Local production of components is small, highly specialized and, in average, labour-intensive.

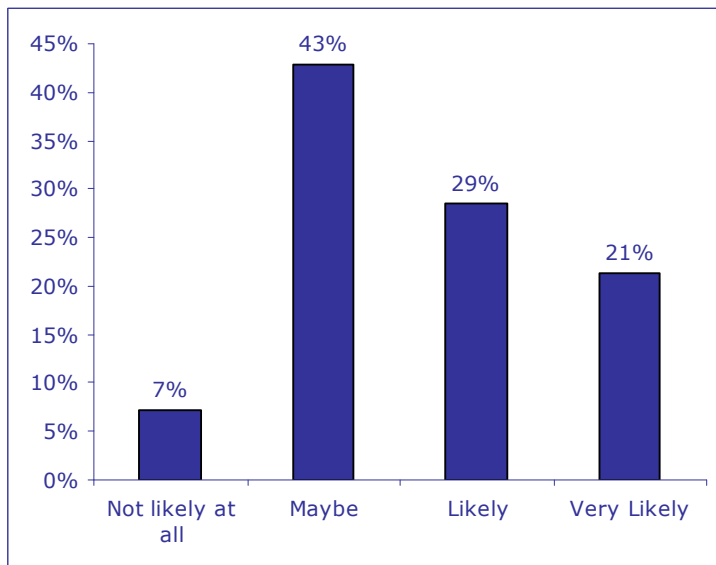
Interest in developing countries

In February and March 2006, FFF held an indicative online questionnaire among 14 Dutch 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

Figure 1.1 shows the level of interest of Dutch buyers in doing business with suppliers of electronic components from developing countries (excl. China). The outcome is quite positive. More than 21% answer 'very likely' and another 29% find it 'likely'. Only 7% do not take it into consideration at all.

Figure 1.1 Likelihood Dutch buyers doing business with DC suppliers (excl. China) in next two years (n=14)



Source: Online questionnaire FFF (March 2006)

Developing countries considered

When looking at the likelihood that the Dutch buyers will do business with suppliers of electronic components in the next two years, the following countries score the best: India (mentioned 5 times out of 14 respondents), Indonesia (4), the Philippines (4), South Africa (3), Thailand (2), Bosnia and Herzegovina (2), Georgia (2) and Tunisia (2).

Products considered

The product categories that are considered most by the respondents to source in DCs include sensors and microsystems, power supplies, cables, capacitors, electronic protection devices and resistors. Two respondents indicate that on the whole there are good opportunities for high end components, while another respondent expects good opportunities for passive components in general, provided that quality improves.

Useful sources

- Association of Subcontracting Industries (Nevat) - <http://www.nevat.nl>
- Federation of the Electronic Industry (FME-CWM) - <http://www.fme.nl>
- NanoNed - <http://www.nanoned.nl>
- MicroNed - <http://www.microned.nl>
- Photonics Cluster - <http://www.stichting-ptc.nl>
- Technology Federation (FHI) - <http://www.fhi.nl>

2. Trade: imports and exports

Imports

Total imports

In 2005, the Netherlands was a large importer of electronic components in Europe, ranking seventh just after Hungary and Spain but far ahead of the Czech Republic. Regarding electronic assemblies imports, the country is actually the leader in Europe, with a remarkable growth of 26% in the period 2001-2005, due to growing imports of cheap assemblies from DCs. In line with the market trend, total import value of components in the Netherlands declined fast in recent years: more than 80% in the period 2001-2005. The most important suppliers were Germany, Japan, the USA and China. In addition, Germany, as well as the UK

and France, were leading EU suppliers to the Netherlands. Beside China, other major DC suppliers to the Netherlands were the Philippines, Thailand and Malaysia. Compared to 2004, the total share of DCs rose 4% to 21%. China and the Philippines gained an import market share of respectively 2 and 3%.

Imports by product group

Table 2.1 shows that actives in particular decreased dramatically in value between 2001 and 2005, except for assemblies. Relatively, electromechanicals were least hit. China was a leading DC supplier in all product groups as well as in electronic assemblies. Only in actives China was second after the Philippines. Furthermore, Thailand was a large supplier of actives and passives, while Malaysia and Mexico had noteworthy shares in all product groups. Compared to 2004, most striking is that DCs' shares in actives and passives grew 8 and 3% respectively. The Philippines doubled its share in actives. China and Thailand also gained share in this group. Furthermore, Mexico doubled its share in electromechanicals to 2% in 2005. In passives, Thailand gained even more share, from 0-1% in 2004 to 4% in 2005. In the field of assemblies, most striking is that the share of DCs more than doubled to 50%. Costa Rica accounted for the largest growth: from 0-1% in 2004 to 11% in 2005. Other countries that gained market share were the Philippines (6%) and China and Malaysia (both 5%).

Regarding all intra EU imports, most probably part of these 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 the Netherlands, 2005, share in % of value

Product	2001 € mln	2005 € mln	Leading suppliers (share in %)	Share (%)
Active components	8,946	688	Intra EU : Germany (16), UK (3), France (2) Ext EU excl DC : Japan (25), USA (8), Hong Kong (6) DC : Philippines (14), China (12), Thailand (3), Malaysia (2), Mexico (0), Bosnia and Herz, (0)	24 45 31
Electromechanical components	959	805	Intra EU : Germany (27), France (6), UK (5) Ext EU excl DC : USA (15), Japan (12), Switzerland (4) DC : China (9), Malaysia (2), Mexico (2), India (1), Thailand (1), Indonesia (0)	50 35 15
Passive components	664	335	Intra EU : Germany (29), UK (5), Belgium (3) Ext EU excl DC : Japan (30), USA (5), Switzerland (2) DC : China (5), Thailand (4), Mexico (2), Malaysia (2), Indonesia (1), Vietnam (0)	44 42 14
Electronic comp (excl elec ass)	10,569	1,828	Intra EU : Germany (23), UK (4), France (4) Ext EU excl DC : Japan (20), USA (11), Hong Kong (3) DC : China (10), Philippines (5), Thailand (2), Malaysia (2), Mexico (1), India (0)	39 40 21
Electronic assemblies	5,960	7,496	Intra EU : Germany (4), UK (4), France (2) Ext EU excl DC : USA (15), Taiwan (7), Singapore (5) DC : China (22), Costa Rica (11), Malaysia (8), Philippines (7), Thailand (1), Dominican R.(0)	17 32 50

Source: Eurostat (2006)

Exports

The total export value of the Netherlands declined fast in recent years: over 80% in the period 2001-2005, amounting € 2.2 billion in 2005. This is in line with the European trend. In total export value, the Netherlands – still one of the large exporters in Europe – ranked fourth in Europe behind the UK and France in 2005, but ahead of Italy, Austria and the Czech Republic. Electronic assemblies exports show a remarkable trend: in the period 2001-2005 these increased 11%. This is caused by an increase in re-exported assemblies imported from DCs. While in 2001 actives took almost 90% of all exports, in 2005 shares of the three product groups were equally divided: actives with 36%, passives with 29% and electromechanicals with 35%.

Opportunities and threats

- + Large import shares for DCs, especially for assemblies (50%), but also for components (21%).
- + Import value as well as export value of assemblies has been increasing in recent years.
- Import 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: beside the large multinational distributors such as Acal (<http://www.acalplc.co.uk>), Arrow (<http://www.arrow.com>) and Avnet (<http://www.avnet.com>), the Netherlands is also home to many smaller distributors such as German based Leuze (<http://www.leuze.nl>), S-Products (<http://www.s-products.com>), Telerex (<http://www.telerex-europe.com>) and TPC (<http://www.tpc-electronics.nl>). Furthermore, the country is home to a large retailer of electronic components (<http://www.conrad.nl>) and several agents and sales offices.

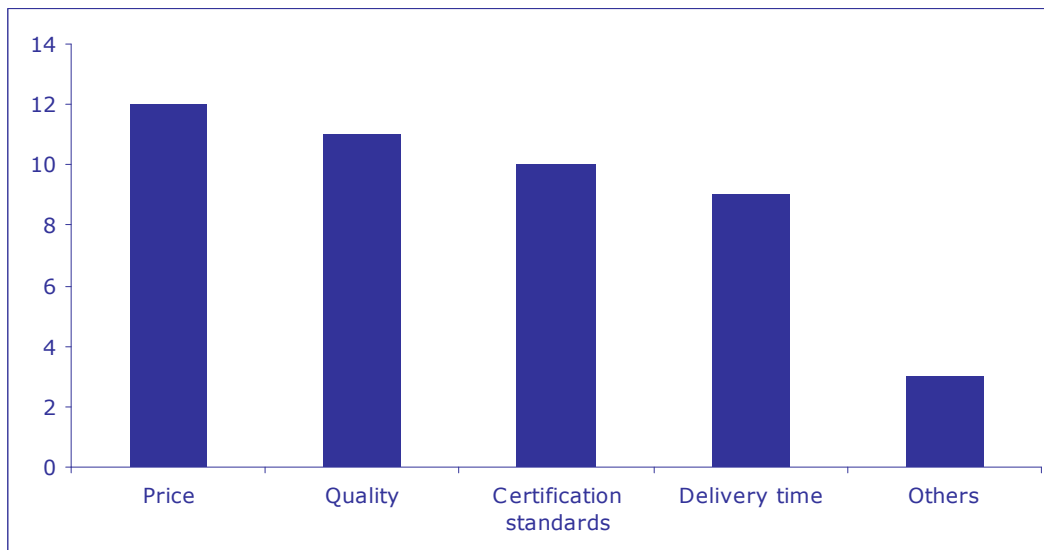
Preferences Dutch buyers***Purchase preferences***

The Dutch respondents to the questionnaire also indicated how they consider purchases from developing countries. Most respondents will buy directly (69%), while some 15% will buy via local agents. As a rule, direct buying is only done when the shipment value exceeds € 10,000, because of relatively high customs clearance fees. Again, clear communication is mentioned as an important success factor.

Decision criteria

Dutch buyers base their purchasing decisions on a set of elements (figure 3.1). Not only price is important, but the whole package is considered. The fact that not all respondents have mentioned certification as a major criterion, can be explained by the fact that it is seen as a basic prerequisite in the industry. All suppliers are expected to have it.

Figure 3.1 Decision criteria Dutch buyers in selecting DC suppliers (n=14)

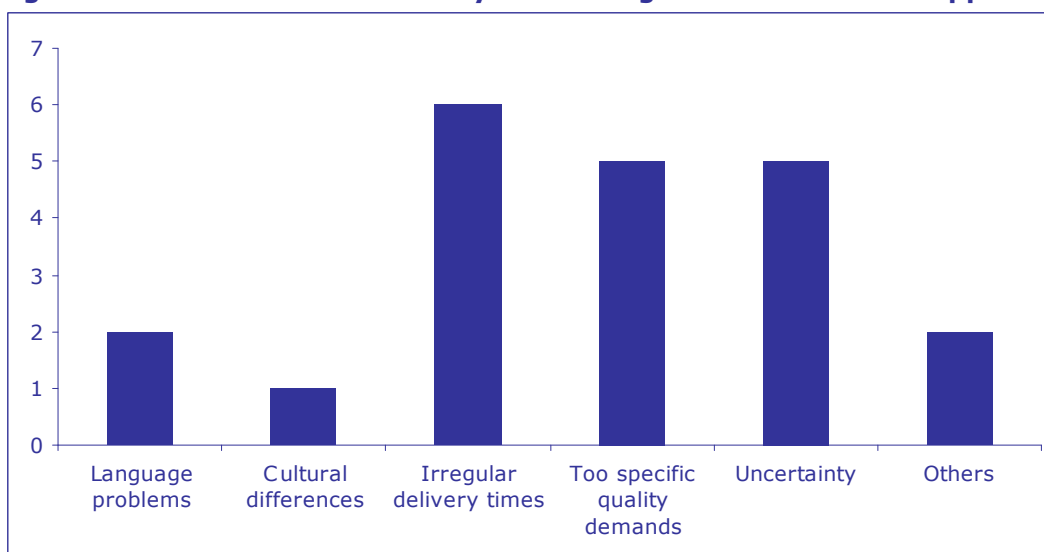


Source: Online questionnaire FFF (March 2006)

Barriers

Especially irregular delivery times, too specific quality demands and uncertainty are barriers to doing business with developing countries (figure 3.2).

Figure 3.2 Barriers for Dutch buyers in doing business with DC suppliers (n=14)



Source: Online questionnaire FFF (March 2006)

Trends

- Companies tend to order components more and more via delivery services such as DHL and UPS.

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 and 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 the Netherlands, you should be aware of the market access requirements of your trading partners and the Dutch 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 the Netherlands, 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 the Netherlands.

Useful sources

- European Customs in the Netherlands - <http://www.belastingdienst.nl>
- Export Helpdesk for Developing Countries - <http://export-help.cec.eu.int>
- Taric database - http://ec.europa.eu/taxation_customs/dds/en/tarhome.htm
- In the Netherlands, the VAT tariff is 19%. For more VAT tariffs, consult <http://www.expatax.nl/vatrates>.

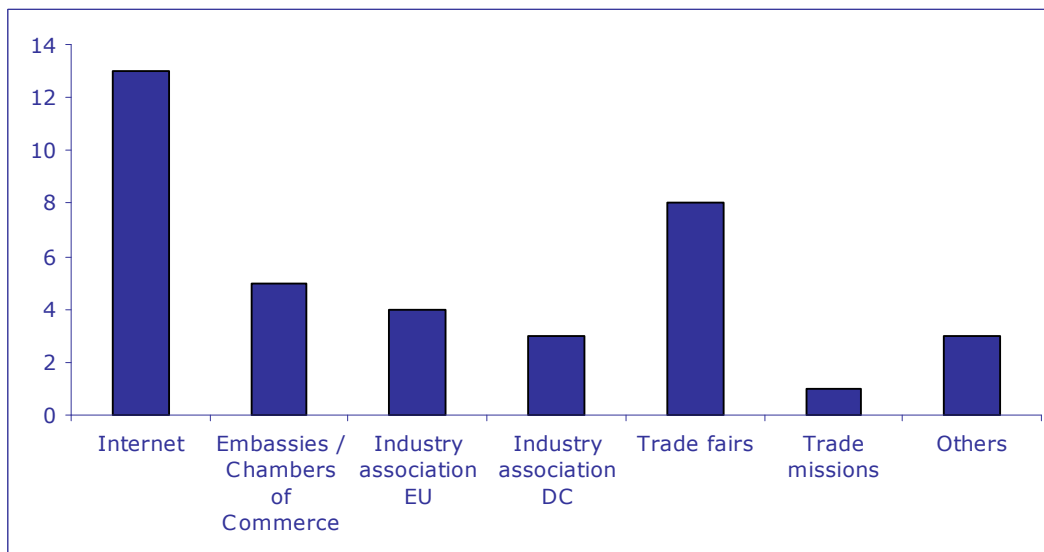
6. Business practices

Selecting a suitable trading partner

Information sources

Figure 6.1 shows that the internet (100%) and trade fairs (62%) are by far the two most important information sources for Dutch buyers when they look for information about possible new suppliers.

Figure 6.1 Preferred information sources Dutch buyers (n=14)



Source: Online questionnaire FFF (March 2006)

The Netherlands has a variety of experienced importers, sales agents, and distributors. In selecting a local representative, it is important, as a minimum, to initially visit the market and

meet with potential partners on a personal basis. If the representative is a well-qualified and experienced firm, an exclusive distributorship often yields the best results. Moreover, success in the Dutch market requires a long-term commitment to market development and sales back up services. A Dutch representative can sometimes provide an excellent starting point for exporting to other European markets. Furthermore, the "golden key" of customary business is courtesy, especially replying promptly to requests for price offers and to orders.

There are three major ways to find prospects in the Netherlands, which are the internet, sources in the developing country and sources in the Netherlands:

Internet

There are some very useful websites that can be used to identify potential prospects (or competitors) in the Netherlands. 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.
- Company database with a focus on the Netherlands - <http://www.abcdirect.nl>
- 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 be taken during the export process to the EU market.

In the developing country

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

In the Netherlands

- Member list of the Dutch Technology Federation - <http://www.fhi.nl/fhi/leden>
- Dutch association of intermediaries - <http://www.vnt.org> ((commercial agents directory)
- Chamber of Commerce - <http://www.kvk.nl>.

Reaching an agreement with your trade partner

Drawing up an offer

In general, Dutch business people appreciate offers that are according to specs and honest. Enrich your offer as much as possible with datasheets, examples and samples. Reply quickly to requests, at least within 48 hours. Be assertive when it comes to decision moments (call 1-2 days before the customer will make a decision).

Method of payment

Common methods for export payments to the Netherlands are payment in advance, bank guarantees, letters of credit and documentary collections. Based on interviews, payment for exports to the country are often done by open invoice. Dutch buyers will typically ask for 30 days credit (starting at arrival in the Dutch harbour), but larger companies will sometimes ask for 60 or 90 days credit. A 2% to 3% cash discount is commonly 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. Dutch buyers appreciate quality and service and are also interested in delivery price. Care must be taken to assure that delivery dates will be met and that after-sales service will be promptly honoured.

Sales promotion

One of the major critical success factors for exporters of electronic components and electronic assemblies to the Netherlands is attention to customer requirements and the ability to maintain good relationships with their Dutch 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 the Netherlands are:

- A&B (describes developments in the market and technology of electronics) - <http://www.engineersonline.nl>
- Bits and Chips (embedded software, electronic components and system technology) - <http://www.bits-chips.nl>
- Elektro-Data - <http://elektronica.profpages.nl>
- Electronica + Embedded systems - <http://www.embedded.nl>
- Elektuur - <http://www.elektuur.nl>

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 the Netherlands are:

- A,B & E - <http://www.evenementenhal.net>
- Electronics & Automation – <http://www.eabeurs.nl>
- Elektrotechniek – <http://www.elektrotechniek-online.nl>
- Het Instrument – <http://www.hetinstrument.nl>
- Infosecurity.nl – <http://www.infosecurity.nl>
- Integrated Systems Europe - <http://www.iseurope.org>

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

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