

CBI MARKET SURVEY

The software and IT services market for offshore and nearshore outsourcing in the Netherlands

Publication date: December 2007

Report summary

This CBI market survey discusses, among other things, the following highlights for the software and IT services market for offshore and nearshore outsourcing in the Netherlands:

- The Dutch software and IT services market amounts to €12 billion. This means a fifth place in the EU market behind the UK, Germany, France and Italy.
- The software market is the fastest growing segment in the Dutch IT market.
- The Netherlands has a large number of IT services firms, ranging from very small to very large.
- Services firms in The Netherlands primarily cater to the Dutch market.
- The Dutch government announced a special programme to promote the use of Open Standards and Open Source Software within the government.
- The shortage of IT professionals and the high salaries as a result of that in the Dutch ICT market are major reasons for offshoring / nearshoring.
- Companies that currently offshore ICT services spend around 17% of their ICT budget on offshoring. This is expected to rise to 35% in the next five years.
- Activities in the field of software development and maintenance are most likely to be outsourced by Dutch companies.
- At least 35 nations have conducted IT work for Dutch organizations, including Surinam, North Korea and Iran. India is the preferred offshore location.

This survey provides exporters of software and IT services 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 software and IT services market for offshore and nearshore outsourcing in the EU', which covers the EU market in general. That survey also contains an overview and explanation of the selected services 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.eu/marketinfo>.

1 Market description: demand and supply

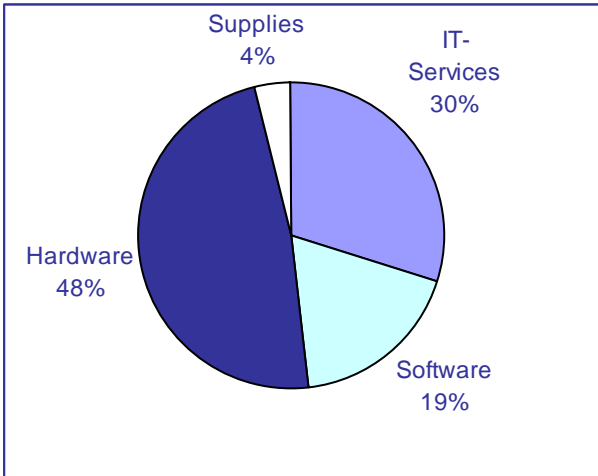
There is a clear relationship between Section 1 and 2 of this survey. Section one, below, will provide information on the end market for software and IT services in the Netherlands. The structure and growth of this end market determine the opportunities for offshore / nearshore outsourcing, which will be the topic of Section 2.

Demand

Estimated at €12 billion in 2006, the Dutch software and IT services market ranks fifth in the EU, ahead of Sweden, Spain and Belgium but behind Germany, France and Italy. In 2006, the Dutch IT sector had grown by 4.9%. Especially the software segment in the corporate market increased sharply by almost 7%. The most important reasons for this increase are the growing interest in IT solutions and new developments in the healthcare sector. For 2007, a growth of 6.4% is predicted for the software segment. The IT services segment increased by 5.5% in 2006. For 2007, a growth of 4.5% is expected. The software and IT-services segment has grown faster than the Dutch economy (+3% in 2006) and is expected to continue to do so in 2007. According to Nederland-ICT, the Dutch ICT sector employed around 279,000 people in

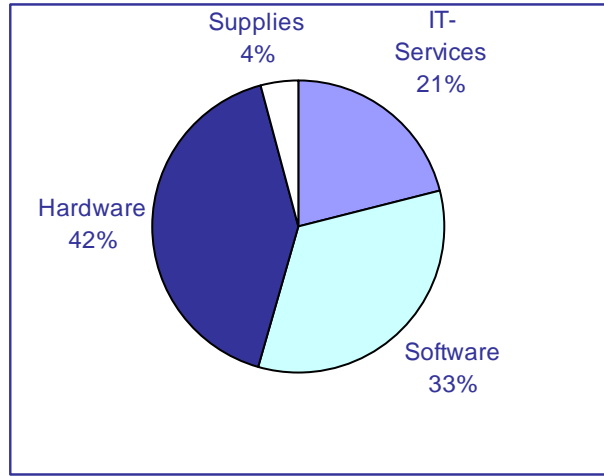
2006. When looking at the Dutch ICT-sector as a whole it can be said that especially the software segment has increased its share drastically since 2000 (+14%). IT-services seem to depend largely on the state of the economy and their share decreased by 9% in the period 2000-2006. Please also refer to Figure 1.1 and 1.2.

Figure 1.1 Dutch ICT market 2000



Source: CBS (2007)

Figure 1.2 Dutch ICT market 2006



Source: CBS (2007)

Software

The software market, estimated at €5 billion in 2005 (refer to Table 1.1) has continued to be the fastest growing sector within the Information Technology sector and is expected to reach a value of more than €6 billion in 2008. This means a growth of almost 23% over the period 2005-2008. The Dutch software market primarily depends on imports. Local software development mostly concentrates on business applications and custom made products. Exports of Dutch products are limited.

Table 1.1 Dutch software market in € million, 2004 – 2008

	2004	2005	2006	2007*	2008*
Systems software	2,494	2,675	2,878	3,118	3,354
Application software	2,232	2,321	2,465	2,616	2,772

* forecast

Source: EITO (2007)

Most exports consist of re-exports by local subsidiaries of non-Dutch producers. U.S. companies are the largest suppliers (e.g. Microsoft and other multinational software producers) followed by European software producers in The Netherlands, the United Kingdom and France. The total market is almost equally divided into application software and systems software. Windows is the standard in the consumer and business market, although government and businesses are starting to use Linux as well. While UNIX, closely followed by Windows, is still the most commonly used operating system for servers, Linux' market share is estimated at about 15% and is growing.

The Dutch government promotes the use of Open Standards and Open Source Software within the government. The government and financial sectors traditionally have been major end users of all types of software products. The business market, with an increasing need to streamline business processes, has also been a significant user. More recently the SME market has begun to emerge as an attractive new market for ICT suppliers. The consumer market has grown rapidly in recent years due to increasing use of the Internet, games and online gaming.

The best prospects for the ICT market in The Netherlands are all types of standard software applications, networking software and network security products, e.g. intrusion detection and prevention products, development tools, storage management software, Customer

Relationship Management (CRM), Enterprise Resource Planning (ERP) and Supply Chain Management (SCM) products, application management and content management products, and game software for the consumer market.

IT services

The Netherlands counts a large number of IT services firms ranging from very small to very large, and from hardware vendors to management consultants. Local production/services sales are considerable; they were estimated at approximately €6.5 billion (see Table 1.2) in 2005 and are expected to rise to €7.8 billion in 2008.

The IT services market is expected to continue to grow and benefit from the implementation of new technologies and increasingly complex systems that require the expert knowledge of specialists. Software development, however, is more important in the current market.

Table 1.2 Dutch IT services market in € million, 2004- 2008

	2004	2005	2006	2007*	2008*
Professional services	5,137	5,330	5,713	6,074	6,389
Support services	1,224	1,276	1,340	1,408	1,474

* forecast

Source: EITO (2007)

The driving factors behind the growth in demand for IT services include lack of in-house capacity, focus on core business, security concerns, as well as quality, cost and efficiency considerations. The introduction of new technologies, particularly those related to the Internet and E-Commerce, and the growing complexity of Information and Communication Technology (ICT) systems also contribute to the growth expectations. The growth in the use of the Internet and Internet applications is also expected to increase demand for external services, e.g. in the areas of CRM and procurement implementations. There is an ongoing tendency for larger Dutch services firms to merge or acquire other service companies and become more international. IT offshoring is growing and slowly gaining in importance.

The best prospects in the IT services market include outsourcing, desktop and network management, network consulting and integration, software maintenance and training. Competition in the market is increasing, while mergers and take-overs continue in this sector. As in the nineties, employers are again beginning to experience difficulties in finding qualified staff members. IT services are provided almost exclusively to the business market. The consumer market for these services is small. Important end-users include financial institutions, government, healthcare and utilities.

Supply

The number of IT students in the Netherlands is decreasing. According to Ernst and Young, this trend will continue in the near future. Brain drain is the result of this. Ernst and Young expect serious shortages in the market for IT professionals in the near future if the Dutch do not succeed in increasing the number of IT graduates.

In the software/services segment, the Netherlands has a large number of software and services firms. More than 30% of the services market is in the hands of the top ten providers. These include: Atos-Origin, LogicaCMG, Getronics PinkRocade and CapGemini.

The considerable local production includes services provided by local subsidiaries of companies headquartered outside of The Netherlands. A number of U.S. firms have successfully established themselves in this market, primarily with subsidiaries and through acquisitions. They play a prominent role and are expected to continue to do well, as others successfully enter the open Dutch market for the first time. In addition to these large corporations, there are numerous small and medium-sized Dutch services providers that offer a unique service or a service targeted to a niche market.

While services firms in The Netherlands used to cater primarily to the Dutch market, they are now looking more and more to expand their business outside the Netherlands, particularly in other parts of Europe.

As stated in Section 1, there is an ongoing tendency for larger Dutch services firms to merge or acquire other service companies and become more international. ICT companies focus on their core competencies. The top five software companies, as displayed in Table 1.3, are primarily service providers, based in The Netherlands, incorporating about 30% of the market.

Table 1.3 Software providers on the Dutch market

Company	Internet
Microsoft	http://www.microsoft.com/nl/nl
IBM	http://www.ibm.com/nl
HP	http://welcome.hp.com/country/nl/nl/welcome.html
Cisco systems	http://www.cisco.com/global/NL/index.shtml
Oracle	http://www.oracle.com/global/nl/index.html
Ordina	http://www.ordina.nl

Source: Facts Figures Future (2007)

For a list of 2007's most vibrant ICT companies in the Netherlands please also refer to the "Computable 100". On the website of the Dutch Federation IT (FENIT) an overview of its members can also be found.

Table 1.4 shows the most important IT services providers in the Dutch market

Table 1.4 IT service providers on the Dutch market

Company	Internet
Atos-Origin	http://www.nl.atosorigin.com
CapGemini	http://www.nl.capgemini.com
Getronics PinkRocade	https://www.pki.getronicspinkroccade.nl
LogicaCMG	http://www.logicacmg.com

Source: Facts Figures Future (2007)

For an overview of Dutch IT consultancy services please also refer to the "adviseursgids" that can be found on the Computable website (refer to useful sources).

Trends

- Mergers and acquisitions take place on a regular basis.
- Use of open source software is growing.
- The view on ICT is internationalising in the Netherlands.
- Software is still the fastest growing segment in the IT sector.
- The offshoring market is opening up in the Netherlands.

Opportunities and threats

- + The offshoring market is opening up, also for SME companies. This could be an interesting opportunity for DC exporters.
- + As a result of the internationalising view on ICT, chances for service providers from DCs can increase in the near future.

Useful sources

- Computable 100 - <http://www.computable.nl> - Go to 'strategy' and hit 'computable 100'
- Computable Consultancy Guide - <http://www.computable.nl/adviseursgids>
- Federation Dutch IT (FENIT) - <http://www.fenit.nl>

2 Offshore / nearshore outsourcing

Where section one of this survey focused on the market for software and IT services in the Netherlands in general, this section will zoom in specifically on the market software and IT services offshoring and nearshoring in the Netherlands as this is the market with the best potential for SMEs from DC.

Offshoring / nearshoring by Dutch companies to low-wage countries, especially in Asia, has drawn a lot of attention in the last few years. However, offshoring is not a new phenomenon in the Netherlands. Especially ICT companies and companies with many ICT activities such as banks and insurance companies have been offshoring part of their activities for some time now. In the nineties these were mostly tasks like programming, development of applications, testing software and supporting networks. Later, also service activities like call-centres, data-entry and complete administrations were offshored (refer to CBI market survey "the BPO market in the Netherlands"). Although growth in the number of offshoring/nearshoring projects seems to be stagnating for the moment (especially in the services sector) according to Ernst&Young, the budgets that are available for an offshoring/nearshoring project are still growing. Companies that currently offshore ICT services spend around 17% of their ICT budget on offshoring, according to the Ernst&Young ICT barometer. In the next 5 years, this is expected to double to 35%. Last year Ernst&Young expected a growth towards 25% in 5 years, which indicates that growth in budgets is still accelerating.

Looking at the number of jobs that is outsourced, The Netherlands comes in fourth place in the EU. Experts indicate that the market is opening up to offshoring and nearshoring. The Netherlands has always been an "international" country and once the market has opened up, things can go fast.

Chances for offshoring and nearshoring

A trend in the Dutch market is the fact that the work that is offshored or nearshored is increasing in complexity. Offshore and nearshore software development is now bigger than helpdesk activities. As the knowledge level in the projects is increasing, the amount of money that is involved will also become higher. The right service with the right quality will be an important criterion in choosing an offshore / nearshore supplier. The chances for offshoring and nearshoring in the different services groups in the Netherlands will now be discussed. Please refer to Appendix A of the CBI survey "The software and IT services market for offshore and nearshore outsourcing in the EU" for more information on the service groups.

Software applications

Chances for offshoring and nearshoring are high in this segment, according to Dutch experts Mr. IJmker –Consultant at Quint Wellington Redwood a Dutch management consultancy firm specialized in IT- and Mr. Messer –Director at Bridge-int, a Dutch intermediary for offshore outsourcing of web and software development.

Consumer applications offer the best chances, says Mr. IJmker. Often companies in DCs are very good at developing an application but they lack experience in how to market a product. A good example is packaging. Packaging of the products is often not suited to the EU market. Certification can be important to give EU companies an overview of what the DC company is capable of. Especially industrial and technical applications have a lower chance in offshoring as they are simply too technical and too specialist.

Systems software

Chances for offshoring and nearshoring in systems software are low. Knowledge that is needed is too specialised and these things are too close to the core of a companies IT system. For infrastructure systems, better chances exist in nearshore destinations, according to Mr. IJmker. Most offshore destinations are still very application centred. This is beginning to change but for now, nearshore destinations have better chances in this field.

Professionals services

There are good chances for implementation services, as they become more and more generic and thus easier to provide for companies in offshore and nearshore destinations. According to Mr. IJmker, operations management (especially in Telecom) has a high potential for offshoring but it is still not done very often. Quint Wellington Redwood specialises in this segment and sees a good potential for the future where operations management is concerned.

Chances for consultancy offshoring or nearshoring are still low. Many Indian companies have a large number of consultants but Dutch companies still prefer to use EU consultants as they are more equal in cultural understanding. Nearshoring offers a better perspective because of greater cultural compatibility, but still the number of offshored consultancy projects is low. Trust is a major issue here.

Support services

For many support services, the language will be a problem. However, if DC companies do not speak Dutch, mostly they can serve the Dutch companies in English. The other option is to set up an office in the EU and hire people that can speak EU languages. Nearshoring has good potential when a project needs another language than English.

Who is offshoring / nearshoring

Most large Dutch companies already offshore / nearshore part of their software and IT services. For SMEs this is not yet the case. Offshoring and nearshoring can have major advantages for SMEs in the Netherlands. Often SMEs think that they are too small and that offshoring/nearshoring is too expensive. SMEs try to observe their larger counterparts first. SMEs should learn from each other. Moreover, SME organisations such as VNO-NCW and MKB Netherlands should help SMEs in this field. However, while these organisations also have many Dutch software and IT services companies as their members, they are still hesitant, according to Mr. IJmker.

For SMEs from the Netherlands, nearshoring might be more interesting than offshoring, as nearshoring gives them a sense of closeness, better cultural understanding and it seems somewhat more intimate. On the other hand, nearshoring can also be confusing because of the spread of companies over so many small countries.

Reasons for offshoring / nearshoring

Both experts (Mr. IJmker and Mr. Messer) indicate that the most important reason for offshoring and nearshoring is still reducing costs. A driver that is growing in importance is the access to skilled personnel and production capacity. However, according to Mr. IJmker, this also boils down to cost reduction as the shortage of skilled professionals increases the salaries in the Netherlands and forces Dutch companies to start looking for professionals in offshore or nearshore destinations.

According to Mr. Messer, flexibility is also an important driver for offshoring and nearshoring, especially when software and IT services are offshored or nearshored per project. Companies are then less tied to a contract.

Other drivers for offshoring and nearshoring are:

- Improved quality of processes and products / services.
- Knowledge potential and innovative power in certain offshore countries.
- Work attitude.
- Possibility to specialise further.
- Speeding up company processes, shortening time-to-market.
- Following customers or setting up a business in a country where a large market is expected in the future.
- Tasks that are considered to be non-core business (although this does not have to lead to offshoring immediately).

Critical success factors

A critical factor for software applications is the fact that the DC company needs to be able to show that it works according to standards, processes and protocols that are common in the EU. The Capability Maturity Model (CMM) is important here. Certification (especially ISO 20000) is important in operations management. For IT services, multiple languages need to be spoken. For this kind of services it is also important to work with EU standards (e.g. Tools such as Remedy and Open View).

In general, DC companies should understand that a contract needs to be specified. Dutch companies are very business-like and contracts are not based on friendliness. Conditions in a contract should also be properly defined. It is important for DC companies to get acquainted with the business culture in the Netherlands.

Sectors

According to Mr. IJmker, governmental projects are not suitable for offshoring / nearshoring to DC companies as they are much too complicated and demands are too high. The industrial and telecom sectors are much more interesting. These companies are often more experienced in foreign trade. The projects they want to offshore / nearshore are also better suited to DC companies because of their size.

The banking sector is only interesting if it concerns small scale projects. For the large projects Dutch banks will contract large companies. In general, the Dutch market works in a way that large companies will most often work with large outsourcing providers and smaller companies will work with smaller providers.

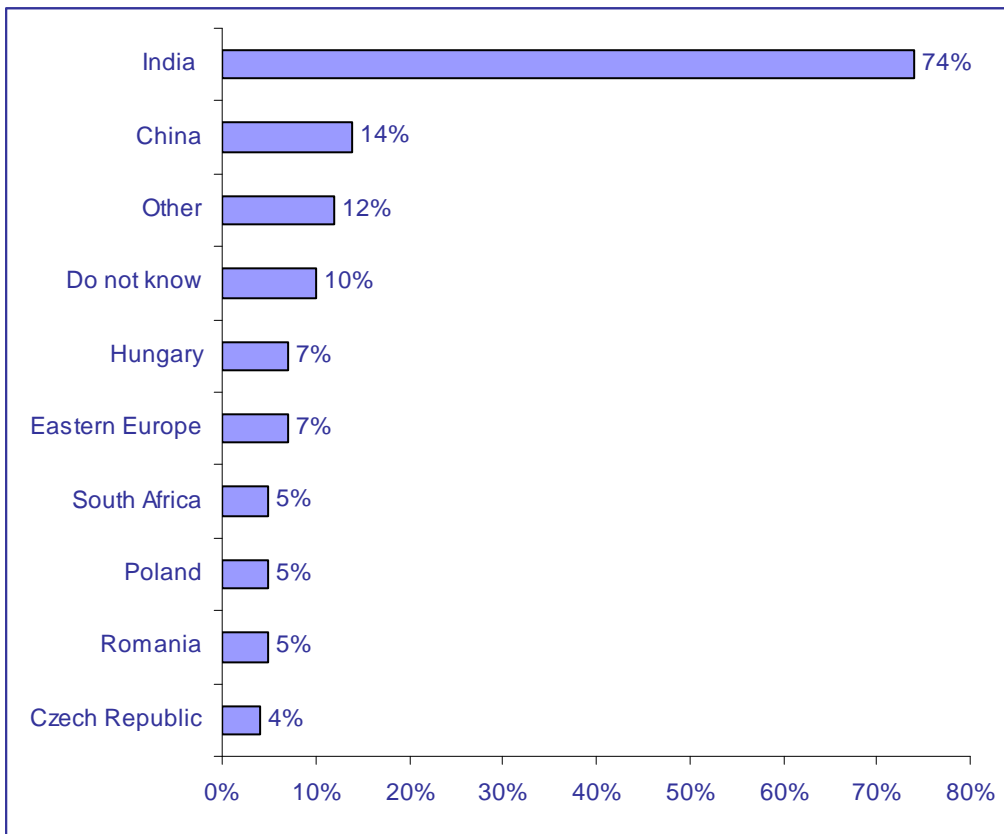
Offshore / nearshore destinations

As in most EU countries, India is the most important offshore destination for the Netherlands. According to Mr. Messer, the Philippines are another interesting offshore destination. Nearshore destinations that are interesting are Poland, Romania, the Czech Republic, Ukraine and Belarus.

Mr. IJmker states that China is coming up as an offshore destination, but due to language and cultural problems the country has not yet been able to catch up. The infrastructure (networks, bandwidth and speed) is especially good in China. Mr. IJmker expects China to catch up with India within the next 3 to 7 years.

Research by Ernst & Young for their ICT barometer indicated the countries in Figure 2.1 as being the most popular in the Netherlands for offshoring and nearshoring software and IT services.

Figure 2.1 Offshore destinations for The Netherlands, 2007



Source: ICT monitor May 2007 Ernst & Young (2007)

Trends

- Cost cutting is still the most important reason for offshoring / nearshoring.
- Companies that offshore / nearshore are mostly large companies.
- Offshoring / nearshoring by SMEs is still not catching up with the larger Dutch companies.
- Large companies mostly work with large offshore/nearshore providers and small companies work with smaller offshore/nearshore providers

Opportunities and threats

- + As cost cutting is still the most important reason for offshoring / nearshoring, it is still a very good option for Dutch companies. This is of course advantageous for DC companies that can offer good prices for high quality services.
- Chances for SMEs from DCs are highest with Dutch SMEs, as the bigger companies in the Netherlands mostly work with large offshore / nearshore providers. Offshoring and nearshoring has not really taken off among Dutch SMEs. This can be a disadvantage for DC companies that want to enter the Dutch market.

Useful sources

- CEBIT Trade Fair - <http://www.cebit.de>
- Ernst & Young - <http://www.trends-in-ict.nl>
- EUROITX - http://www.euroitx.com/content/focus_2004.php - Have a look at the ICT barometers and trends in ICT (unfortunately only in Dutch). An English summary can be downloaded.

3 Trade structure

In this paragraph, the general distribution channel for software and IT-services will be discussed. These channels apply to each EU-market and, therefore, also to the the Dutch market.

The most important channels for software related services are:

1. Establishing your own sales office.
2. Consultant/broker.
3. Direct contact with Dutch software manufacturer.
4. Partnership with a Dutch (software) company.
5. Dutch software manufacturer setting up his own factory in a developing country.

The most important channels for IT services are:

1. Establishing your own sales office.
2. Consultant/broker.
3. Partnerships with large service providers (system integrators) in The Netherlands.
4. Contacting end-user organisations directly.
5. Contacting local offices of multinationals in the home country of the services provider.

Entry strategy

Dutch SMEs that want to offshore / nearshore part of their software and IT services usually do this via intermediaries. For DC companies it is therefore best to try and find an agent or another kind of intermediary in the Dutch market to work with. To find these intermediaries, trade fair visits or trade fair participation are important market entry activities, according to Mr. Messer. This is where people in the software and IT services world in the Netherlands meet. For more information about trade fairs please refer to Section 6.

Specific trade structure facts for The Netherlands

- The Dutch are traders by nature.
- Because of the size, accessibility and competitive nature of the Dutch market, importers usually insist on an exclusive distributorship.
- If the importer is well qualified and experienced, an exclusive distributorship often yields the best results.
- Success in the Dutch market requires a long-term commitment to marketing and market development.
- Setting up your own business in the Netherlands can be advantageous. To Dutch customers this ensures a way of doing business under Dutch law. It is important, however, to hire a person who speaks Dutch. This inspires trust even more.
- An intermediary can also be a good way to do business; however, according to Mr. Israels, this intermediary needs to be more than just a middleman, he also needs to function as a contact person for the Dutch customer.

For more information about the trade structure for outsourcing of software and IT services, please refer to the CBI market survey "The software and IT services market for offshore and nearshore outsourcing in the EU".

Useful sources

- Chamber of Commerce - <http://www.kvk.nl>
- EUROITX - Internet: <http://www.EuroITX.com>

4 Prices and margins

It is quite difficult for suppliers of software related services and IT services to give exact prices, and it is also hard to obtain information about current price levels. Licence prices for software can often be found on the websites of the software suppliers. Information on

implementation costs can be found in reports concerning business software, which also give ranges of costs for software and implementations.

What is known is that Dutch ICT employees are relatively expensive, also in a European perspective. This could be a good reason for a company to start offshoring. Industry experts say prices in the Netherlands are going up as the market intensifies. This means that the gap between offshoring to DC and keeping the work in the Netherlands becomes bigger and bigger. Therefore it becomes more and more interesting for Dutch companies to start offshoring. Prices in those offshoring destinations are beginning to increase as soon as development increases, but not at the same pace as in the Netherlands.

According to the Salary Expert (<http://www.salaryexpert.com>), the software engineer working in the Netherlands now earns an average annual salary of between €66,000 and €67,000. When benefits and bonuses are added to this salary, the average total compensation for this position would be between €68,000 and €69,000.

Useful sources

- Trade associations such as the Federation Dutch IT (FENIT) - <http://www.fenit.nl>.
- Trade press (please refer to Section 6 for relevant trade press in the Netherlands).
- Trade fairs (please refer to Section 6 for relevant trade fairs in the Netherlands).
- Websites of competitors.

Names of some main players and their websites can be found in Section 1. For more information, please also refer to the CBI market survey "The software and IT services market for offshore and nearshore outsourcing in the EU".

5 Market access requirements

As a service provider in a developing country preparing to access the Netherlands, you should be aware of the market access requirements of your trading partners and the German government. Requirements are demanded through legislation and through labels, codes and management systems. These requirements are based on working conditions, health and safety and social concerns. You need to comply with EU legislation and have to be aware of the additional non-legislative requirements that your trading partners in the EU might request.

For information on legislative and non-legislative requirements, go to 'Search CBI database' at <http://www.cbi.eu/marketinfo>, select ITO and the Netherlands in the category search, click on the search button and click on market access requirements.

A few specific Dutch facts

In The Netherlands, there are no specific barriers for IT offshoring. Important issues are the intellectual property right security and the feeling that offshoring is going to cost a lot of jobs.

6 Doing business

General information on doing business, like approaching potential business partners, building up a relationship, drawing up an offer, handling the contract (methods of payment, and terms of delivery) can be found in CBI's export manuals 'Export Planner' and 'Your image builder'. Furthermore, cultural awareness is a critical skill in securing success as an exporter. Information on cultural differences in the EU can be found in Section 3 of CBI's export manual 'Exporting to the EU'. The CBI manuals can be downloaded from <http://www.cbi.eu/marketinfo> - go to search publications.

Sales promotion

Software and IT services can be promoted through several sources. Below some of the most important trade press and trade fairs can be found.

Trade press

The following Dutch magazines are specifically focussed on software and IT services:

- Automatisering Gids - <http://www.automatiseringgids.nl> - magazine on automation
- Baaz – <http://www.baaz.nl> - technological magazine
- Computable - <http://www.computable.nl>
- Software release magazine - <http://www.release.nl>

An interesting website is NLUUG (<http://www.nluug.nl>).

Trade fairs

An excellent promotion tool is participating in a major trade fair in Europe. Exhibiting at a fair is not only an effective opportunity to promote your company and services, it is also an effective instrument for benchmarking with your competitors. The most important trade fairs for software and IT services in the Netherlands are:

- Building and ICT – <http://www.bouw-en-ict.org> - Annually, date differs, Utrecht
- Education and ICT – <http://www.onderwijs-en-ict.org> - Annually, date differs, Utrecht
- Government and ICT – <http://www.overheid-en-ict.org> - Annually, date differs, Utrecht
- Healthcare and ICT – <http://www.zorg-en-ict.org> - Annually, date differs, Utrecht
- ICT and logistics – <http://www.ict-en-logistiek.org> - Annually, date differs, Utrecht
- ICT Delta – <http://www.ictdelta.nu> - Annually, May, Utrecht – trade fair on innovation in IT
- Industry and ICT- <http://www.industrie-en-ict.org> - Annually, date differs, Utrecht
- Infosecurity – <http://www.infosecurity.nl> - Annually, date differs, Utrecht
- Linuxworld – <http://www.linuxworldexpo.nl> - Annually, October, Utrecht
- Processing and ICT – <http://www.processing-en-ict.org> - Annually, date differs, Utrecht
- Storage expo – <http://www.storage-expo.nl> - Annually, October, Utrecht

An interesting conference in the Netherlands is SANE (<http://www.sane.nl>). The conference is held bi-annually in different places in the Netherlands.

Others

These days, it is an absolute must to have a professional website, which is aimed at your main target groups. Make it interactive and promote it in the proper way. More information can be found in the CBI Export Manual 'Website Promotion', available at <http://www.cbi.eu/marketinfo>. Furthermore, participating in conventions or congresses may also be a promotional tool.

This survey was compiled for CBI by Facts Figures Future.

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