EU MARKET SURVEY 2004

Computer software and IT services

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EU Market Survey
-- annual update --

REPORT SUMMARY

Importance for developing countries
Participation in the global software market and IT services industry provides developing countries a good opportunity for growth. The advantages they have are very attractive for EU companies that continuously look for a reduction of costs.

Objective
The purpose of this guide is to assist small to medium-sized exporters of computer software and IT services from developing countries interested in entering or strengthening a position in European markets. This document is a reference tool. The service provider will need to do his own research to determine if Europe is a suitable market and which country is (countries are) the most promising. Do not assume that what works in the United Kingdom will apply in Germany or France. Although there are many similarities, each country must be treated differently.

Services and countries covered
This study uses the definition for software products and IT services from the European Information Technology Observatory (EITO). Software products include system software and application software. IT services include consulting, implementation, operations management and support services. Outsourcing is by far the most promising segment for developing countries and is a major part of this survey.

The country selection is mainly based on opinions of experts. The countries covered in this survey include:
- Belgium
- France
- Germany
- Sweden
- The Netherlands
- United Kingdom.

Industrial demand

Software products
The total market for software products in the EU amounted to € 61 billion in 2003, increasing 2.1 percent compared to 2002. This market consists of system software (€ 31.6 billion in 2003) and application software (€ 29.3 billion). The largest market was Germany, followed by UK, France, Italy, Netherlands and Sweden. The software market in the eight accessing countries from Central and Eastern Europe has increased 13.2 percent to a value of € 2.0 billion in 2003. The market for software products will grow 10 percent compared to 2003 to a value of € 67.8 billion in 2005.

IT services
The total market for IT services in the EU was worth € 114.8 billion in 2003, increasing slightly since 2002. This market is subdivided into implementation (€ 48 billion), support services (€ 31.7 billion), operations management (€ 24.2 billion) and consulting (€ 10.9 billion). The UK was the largest EU-market for IT services in 2003, Germany was second, followed by France, Italy, the Netherlands and Sweden. The IT services market in the eight accessing countries from Central and Eastern Europe increased 10.0 percent to a value of € 2.9 billion in 2003. The market for IT services will reach a value of € 122 billion in 2005, increasing 6.5 percent compared to 2003.

Outsourcing
The value of European outsourcing contracts signed in 2003 reached a value of € 26.4 billion, increasing 67 percent. In Western Europe. The UK is the largest and most mature market, representing 35 percent of the total European outsourcing market in 2004. Germany, Switzerland and Austria account for 22.8 percent, France represents 12.8 percent, Italy and the Nordic regions represent 7.7 percent and 7.2 percent respectively, while Spain and Portugal have 4.6 percent of the total market.

In the EU, the most important reasons for outsourcing include cost savings, need for specialized skills, and lack of in-house expertise. The most important services that EU companies outsourced in 2003 were among other things:

- software maintenance and support
- hardware maintenance and support
- development and integration.

European companies that do not outsource are in general smaller companies, which claim to have sufficient in-house experience at their disposal.

Outsourcing trends

- Growth opportunities lie in application management and Business Process Outsourcing (BPO)
- New offshore locations
- Smaller and more specialized outsourcing projects

Offshore locations
India is the number one in offshore outsourcing, although other Asian countries and Central and Eastern Europe are emerging as well. They can be judged on government support, labour, infrastructure, education, cost advantage, quality, cultural compatibility, time/distance advantage and proficiency in languages.

Production and imports
Measuring trade in software and software services for business purposes is very complicated, due to limitations in definitions and challenges in measuring the data. Estimations indicate that France is the largest software producing EU-country. In all highlighted countries, large players are active, being potential prospects for developing country exporters.

Access requirements / quality
Trust and competence are very important in the market. Internationally recognised quality standards could be to the advantage of developing country exporters. The most important certifications are ISO 9000 and CMM.

Services are not subject to import duties. In the software and IT services industry, the following general rule applies: VAT is paid in the country where the service is actually performed. This means that service providers from developing countries have a competitive advantage compared to service providers in the EU. At the moment, some discussions are going on within the EU to change this rule. VAT has to be paid on digital goods.

Trade structure developing country exporters
In practice, two sales channels for developing country service providers are most common. First, establishing a sales office in an EU member country could be a very good option to overcome the lack of trust and credibility amongst EU companies. Working with brokers/consultants is another good possibility. An example of a broker is the European Information Technology exchange. It focuses on suppliers from developing countries and buyers from Europe. EuroITX is sponsored and supported by CBI; the website is www.EuroITX.com.

Practice

An important success factor for having one's own sales office is a quality sales manager, who is well motivated and has good contacts in the industry. With regard to handling the contract, a high quality project manager is important.

The most important tools for developing country exporters in the promotion of outsourcing services:

- Certainly for beginning exporters, it could be wise to focus on one area and to specialize in this in order to be able to supply the client with outstanding service. Once the client is satisfied, services could be expanded.
- Focus marketing on core sectors and niches and look to visit specific outsourcing events and seminars rather than big events.
- Always explore possible cooperation with other companies, trade and/or promotion organisations.
- Trade press could be a possibility for free publicity.
- Going online is fundamental for companies in the IT sector. A website proposing well-defined services, clear prices, competitive advantages (e.g. USP, cost reduction and service quality) and a client reference list helps create a trustworthy environment. An exporter could promote his website in such a structured manner that potential business partners will be able to find the website.
- Make company details known with trade associations, promotion organisations and e.g. Chambers of Commerce of your own country and the target export country.
- Service providers could establish strong linkages with overseas diaspora networks, universities, private sector leaders and foreign trade authorities. A foreign national within the client company in the EU could very well favour outsourcing.

INTRODUCTION

This CBI survey consists of two parts: EU Market Information and EU Market Access Requirements (Part A), and Export Marketing Guidelines (Part B).

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Chapters 1 to 9 of Part A profile the EU market for computer software and IT services. The emphasis of the survey lies on those products/services that are of importance to developing country suppliers. The major national markets within the EU for those products/services are highlighted. Furthermore, statistical market information on industrial demand, production and trade, and information on trade structures and opportunities for exporters is provided. Chapter 10 subsequently describes the requirements which have to be fulfilled in order to get market access for the services sector concerned.

Having read Part A, it is important for an exporter to analyse target markets, sales channels and potential customers in order to formulate export marketing plans and strategies. Part B therefore aims to assist (potential) exporters from developing countries in their export-decision making process.

After assessing the external (chapter 11) and internal environment (chapter 12), the (potential) exporter should be able to determine whether there are interesting export markets for his company. In fact, by matching external opportunities and internal capabilities, the exporter should be able to identify suitable target countries, market segments and target product(s)/services within these countries, and possible trade channels to export the selected products/services (chapter 13). Chapter 14 subsequently describes marketing tools which can be of assistance in successfully achieving the identified export objectives.

Participation in the global software market and IT services provides developing countries a big opportunity for growth. The advantages they have, are very attractive for EU companies that continuously look for a reduction of costs. The availability in developing countries of technically trained people and improvements in infrastructure give them business opportunities in exports. Many firms in developing countries are increasingly able to offer skilled IT staff against competitive prices. An appropriate time-zone difference between the customer and vendor and an on-line environment can allow for around-the-clock work, resulting in fast turn-around times. Thanks to state-of-the-art satellite links and wired communication, companies in developing countries can become 'virtual labs'.

Role women
Developing countries can offer a workplace for both male and female workers. Research shows that women in developing countries will benefit relatively more. In Information Technology Enabled services the proportion of women in total employment is relatively high.

The survey is interesting for both starting exporters and entrepreneurs already engaged in exporting (to the EU market). Part B is especially interesting for more experienced exporters starting to export to the EU and exporters looking for new EU markets, sales channels or customers. Starting exporters are advised to read this publication together with the CBI's Export planner, a guide that shows systematically how to set up export activities. Moreover, a new interactive tool is available on the CBI website (www.cbi.nl), a document builder through which you can write your own export marketing plan online. The document builder will assist you by offering an outline, instructions, and examples.

PART A

EU MARKET INFORMATION
AND
MARKET ACCESS REQUIREMENTS

1 PRODUCT CHARACTERISTICS

In this chapter, definitions of the computer software and IT services and their most interesting varieties for developing country exporters will be defined. Section 1.1 discusses the classification of computer software and IT services. Special attention is paid to offshore outsourcing, the most interesting opportunity for developing country exporters in the industry of computer software and IT services. It is followed by the customs/statistical classification in section 1.2.

1.1Product groups

There are many definitions and classifications for software products and IT services. This study uses the definition for software products and IT services from the European Information Technology Observatory (EITO). It is a well-reputed source in the industry that has very detailed and up-to-date information available. Table 1.1 presents the several product groups for software products and IT services.

Table 1.1 Product group definition software products and IT services

Software products	• System software; system infrastructure and application tools • Application software
IT services	• Consulting • Implementation • Operations management • Support services

Source: EITO, 2004

1.1.1 Software products

According to EITO, software products are 'commercially available packaged programmes for sale or lease from systems services and Independent Software Vendors (ISVs). Value includes the packaged software fees plus related non-consulting revenue, such as fees for maintenance and/or support. It includes licence fees partially earmarked for software maintenance, services, and/or support'. Other forms of software support would be counted within the support services category. As mentioned in table 1.1, software can be divided into:

- System software
- Application software.

System software

System software includes system infrastructure software and application tools:

- System infrastructure software includes system management software, network management, security software, storage software, server ware, networking software, and system-level software.
- Application tools include information and data management software, application design and construction tools, application lifecycle management, application deployment platforms, middleware, other development tools and information access and delivery tools. Examples include database engines, 4GL, AMD (Analysis, Modelling and Design) and 3GL.

Application software

Application software includes consumer, commercial, industrial and technical programmes and code sets designed to automate specific sets of business processes in an industry or business function. It is to make groups or individuals in organisations more productive, or to support entertainment, education, or data processing in personal activities. The packaged application market includes the consumer, content, collaboration, and enterprise applications subsegments. The enterprise applications market is made up of the back-office, engineering, and CRM (Customer Relationship Management) applications markets.

The market for software, especially packaged software for the PC, is enormous in Europe. Nevertheless, the opportunities for developing country exporters in this field in Europe are generally minimal. The main problems are credibility and very high marketing costs. In many cases, application software is partly produced in a developing country, but it will be owned and marketed by an (often well-known) American or European company. There are only very few firms in developing countries which are capable of building and marketing application software themselves. Success in their domestic market was essential and without any local market for packaged software it was almost impossible to finance the export marketing. The major opportunity for success is to develop entry into the market with a niche item (a very specialised item).

1.1.2 IT services

As mentioned in table 1.1, IT services can be divided into the following product groups:

- Consulting
- Implementation
- Operations management
- Support services.

Consulting

This product group consists of a wide variety of IT-related planning and design activities that assist advanced clients in making IT-related decisions on business direction or information technology. IT-related business consulting includes corporate strategy assistance, process improvement, capacity planning, best practices, business process re-engineering and change management services for business. Excluded is consulting involving tax, audits, benefits, financial, and/or engineering issues. IT consulting includes information systems strategy assistance, information system and network planning architectural and supplier assessments, product consulting and technical designs for information technology, and maintenance planning.

Implementation

Implementation comprises all activities directly involved with the creation of technical and business IT solutions, specifically with procuring, configuring, installing, developing, moving, testing and managing information technology. Implementation services also include all activities involved with custom application development and work performed on packaged applications. Training and education is also included in this segment. It includes activities required for the transmission of new behaviour, skills or actions that can be used to begin performing job-specific tasks or improve performance in IT-related functions.

Operations management

This involves taking responsibility for managing components of a client's IT infrastructure. Specific activities include help-desk services, asset management services, systems management, network management, software update management, facilities management, back-up and archiving and business recovery services.

Support services

These services include all activities involved with ensuring that hardware, software and networking products are performing properly as a service to clients. Activities include all maintenance contracts for hardware, software and networking products, as well as services, such as telephone support to resolve problems for clients and help with workarounds. Services in this category appear as bundled packages of other services or stand-alone.

Keep in mind that processing services were removed from the scope of IT services as they are provided increasingly by business services players as part of their Business Process Outsourcing (BPO) activities.

1.1.3 Outsourcing

A famous saying states: 'if you want something done right, do it yourself'. This is still true for many industries, but not for the increasingly cost-conscious and core-focused international business of software and IT services. Companies in, 'high-cost' economies are continuously looking to contract out low-level, labour intensive software and IT services work to companies in 'low-cost' developing nations. This service is called outsourcing and is by far the most promising segment for developing countries.

(Offshore) IT outsourcing

According to market research agency Gartner, IT outsourcing involves an 'annuity-based contract that includes at least one management service and one or more of the other IT services (professional and product support), except for business process transaction management'. There is no official country classification for offshore outsourcing. In this study, offshore destinations can be all countries further away than neighbouring countries, for example on other continents than Europe.

The following outsourcings models are applicable for Europe:

Onsite contract worker / projects

In this model, the offshore services company is acting as a staff augmentation firm. They deal with entry visas, ensuring appropriate skills, and repatriation of contract workers. This is the least sophisticated models for offshore services. In an alternative to this model, onsite projects, the teams provided by the offshore company have experience in working as project teams and are responsible for delivering against contract requirements. Both of these models are fairly common in Europe. However, European companies new to offshore services are increasingly opting to use more sophisticated offshore models .

Offshore project

In this model, all the project work is done in the home country of the offshore service provider. The degree of cost savings depends on whether the enterprise contracts directly with the offshore service provider or whether the offshore work is sub-contracted through a local systems integrator. The risk of project failure is large in this model. It is used by smaller, emerging offshore services companies that lack the resources to provide more than local sales support in the client's country.

Onsite-offshore project

In this model, most of the work is still carried out by offshore resources, thereby upholding a significant cost advantage for the client. But some members of the 'offshore' team are located on the client's premises, so they can deal more easily with project management and client needs, and do so with a much shorter response time. This approach is more focused on managing communication and risk. It is better suited to somewhat more complex services than the pure offshore model.

Onsite-onshore-offshore model

Most of the work is carried out offshore; however, this is supported by an onsite team as well as additional development and testing resources at a local office. The onsite team is again focused primarily on project management and requirements definitions/changes, but has the added advantage of local resources to provide on-site testing as well as local development on an as needed basis. This model decreases response time and reduces the risks. For these reasons, this model is best suited for complex development projects.

Near shore outsourcing

Near shore outsourcing is the practice of getting work done or services performed by people in neighbouring countries rather than in your own country, for example when a German company outsources a call centre to Poland.

A combination of the different models is also possible. Most popular is the onsite-offshore model.

IT services
The core interest comprises of custom development solutions, web application development, systems integration, database management and IT consultancy services (re-engineering, localisation, maintenance, testing, coding, IT security services, web enablement, migration).

IT enabled services
The outsourcing services that are IT driven or require the help of IT infrastructure and resources is called IT enabled services. The major part that is outsourced and has added a value to the IT industry is the IT enabled services. The IT enabled services involve medical (legal) transcription, online education, online training, data processing (data entry), data digitization and the call centres.

Business process outsourcing (BPO)
According to Gartner, BPO involves 'the delegation of one or more IT-intensive business processes to an external provider that administrates and manages the selected processes, based on performance metrics'. An increase in BPO will lead enterprises to focus on core business, streamline and integrate processes and reduce operational costs. The risk is a loss of control over processes and in-house expertise. According to the UNCTAD (2002) a precise definition of BPO becomes more and more difficult as its scope expands to integrate various business functions such as human resources, logistics, procurement, engineering, marketing, sales, facility operations and management, legal work, finance and accounting. Frequently, estimates of the BPO market also include software services. A practical definition could be the list in table 1 as included in Appendix 1 that displays typical BPO services, as defined by UNCTAD.

It is important to understand that IT services, IT enabled services and BPO have overlapping areas. Some examples are data centres, network management, desktop PC management, helpdesk support, IT facility management, imaging and engineering.

1.2 Customs / Statistical product classification

Measuring trade in software and software services for business purposes is very complicated, due to limitations in definitions and challenges in measuring the data. There are no well defined classifications in 6 or 8 digit HS-codes, as with trade in goods. To give the exporter a rough idea, the possibilities to measure trade in software and software services are described below.

Software
Although software products are included in international merchandise trade statistics, relevant trade data are difficult to gather. This is because only the trade in the *medium* which contains the software is measured. As this mainly concerns consumer products, software for business purposes, as described in section 1.1, is hardly dealt with. To give an idea, the codes for software on several media are included in table 2 in Appendix 1. Be aware that this covers trade data on the media that carry the software.

Software services
In general, international (trade) statistics of services are hard to measure. This also goes for the imports and exports of software services. As an indication, software services are included in the trade in services statistics of the Balance of Payments (BOP) of many countries. Software services appear in the following sections of the BOP-system (source UNCTAD):

- Computer services (263)
- Royalties and license fees (266).

263 Computer services

3.117 *Computer services* consists of hardware and software related services and data processing services. Included are hardware and software consultancy and implementation services, maintenance and repair of computers and peripheral equipment; disaster recovery services, provision of advice, and assistance on matters related to the management of computer resources; analysis, design and programming of systems ready to use (including web page development and design), and technical consultancy related to software; development, production, supply and documentation of customised software, including operating systems made on order for specific users; systems maintenance and other support services such as training provided as part of consultancy; data processing services such as data entry, tabulation, and processing on a timesharing basis; web page hosting services (i.e., the provision of server space on the internet to host clients' web pages); and computer facilities management.

3.118 Excluded from computer services are the provision of packaged, non-customised software (classified as goods and therefore not included) and non-specific computer training courses (included in other personal, cultural, and recreational services).

3.119 *News agency services*

3.120 *Other information provision services* include database services (both on-line and through magnetic, optical, or printed media) and web search portals. Also included are direct, non-bulk subscriptions to newspapers and periodicals, whether by mail, electronic transmission or other means.

266 Royalties and license fees

3.121 This mostly comprises international payments and receipts of franchising fees and the royalties paid for the use of registered trademarks. Other royalties and license fees includes international payments and receipts for the authorised use of intangible, non-produced, non-financial assets and proprietary rights (such as patents, copyrights, and industrial processes and designs) and with the use, through licensing agreements, of produced originals or prototypes (such as manuscripts, computer programs, and cinematographic works and sound recordings).

Payments and receipts for the outright purchase or sale of these assets and rights are excluded (following BPM5, these are recorded as capital account transactions, not as services). Also excluded are distributive rights for audiovisual products for a limited period or a limited area; these are included in audiovisual and related services.

Appendix 2 contains an example of the Balance of Payment of the UK (2002) for the computer services industry.

Accent on outsourcing

Once again, there are many practical challenges with these definitions. Be aware that the import statistics presented in chapter 5 and the export statistics in chapter 7 just give a very rough indication. In fact, outsourcing could be regarded as a way of importing software services by the EU-countries. For this reason and because of its large opportunity for developing country exporters, chapter 5 is about outsourcing in particular. Where possible and relevant, other chapters deal with outsourcing as well.

2 INTRODUCTION TO THE EU MARKET

The European Union (EU) is the current name for the former European Community. Since 1 January 1995 the EU has consisted of 15 member states. Ten new countries joined the EU in May 2004. They are the Czech Republic, Estonia, Slovak Republic, Cyprus, Latvia, Lithuania, Malta, Slovenia, Poland and Hungary. In this survey, the EU will be referred to as the former EU-15, unless otherwise stated. In 2003, the size of the EU population totalled 379.5 million; the average Gross Domestic Product (GDP) per capita amounted to € 24,496 in 2003. Refer to table 2.1 for more details.

Table 2.1 Overview EU, 2003

Subject	Units
Population	379.5 million
Area	31,443,000 km^2
Density	83 people per km^2
Languages	11 (excl. dialects)
GDP/capita	€ 24,496
Currencies	Euro €, UK £, DKr., SKr.

Source: Eurostat and European Union

Country selection
This study will cover the market for computer software and IT-services in the EU. Out of a possible 15, six member states are researched in more depth.

The challenge, however, is to find reliable import statistics for these services. Most statistical sources such as Eurostat and national offices for statistics in the EU generally deal with products only and do not keep trade data for services. Only some (often general) data is available and this should be regarded as an indication. The opinion of experts in the industry and the market research by Gartner therefore weigh even more in selecting the six most relevant member states. Some experts that have been consulted are, among others, people from industry associations, consultancy organisations and market research agencies. They indicate the following six countries as most interesting for developing country exporters:

- Belgium
- France
- Germany
- Sweden
- The Netherlands
- United Kingdom.

For these six highlighted countries, population, age and GDP are presented in table 2.2. The yearly average exchange rates can be found in table 2.3. Beside the six selected countries, attention is paid to main developments in the accession countries.

Table 2.2 Population and GDP of selected EU-countries, 2003

Countries	Population (x 1 mln)	Age 15-64 (in %)	GDP (€ billion)
Belgium	10.4	65.6	266
France	59.6	65.1	1,548
Germany	82.5	67.3	2,129
Netherlands	16.2	67.9	454
Sweden	8.9	65.0	267
UK	59.3	66.1	1,589

Source: Eurostat and World Factbook

Table 2.3 Average yearly exchange rates of currencies (1 € = x currency)

Country	Currency	1998	1999	2000	2001	2002	2003
Sweden	SKr	8.91	8.81	8.45	9.26	9.16	9.12
United Kingdom	GB£	0.68	0.66	0.61	0.62	0.63	0.69
United States	Dollar $	(ECU) 1.12	1.07	0.92	0.90	0.95	1.13

Source: CBS Statline (February 2004)

Within Western Europe – covering 15 EU member countries, Iceland, Liechtenstein, Norway and Switzerland – there are more than 20 million active enterprises. Small and medium-sized enterprises (SMEs) account for the lion's share. In 2000, the average turnover per enterprise of SMEs and large enterprises amounted to € 600,000 and € 255 million respectively.

EU Harmonisation

The most important aspect of the process of unification (of the former EC countries) to affect trade is the harmonisation of rules in the EU countries. As the unification allows free movement of capital, goods, services and people, the internal borders have disappeared. Goods produced or imported into one member state can be moved around between the other member states without restrictions. A precondition for this free movement is uniformity in the rules and regulations concerning locally produced or imported products. Although the European Union is already a fact, not all the regulations have yet been harmonised. Work is in progress in the fields of environmental pollution, health, safety, quality and education. For more information about the harmonisation of regulations visit AccessGuide, CBI's database on non-tariff trade barriers at www.cbi.nl/accessguide.

Monetary unit: Euro

On 1 January 1999, the Euro became the legal currency within eleven EU member states: Austria, Belgium, Finland, France, Germany, Italy, Ireland, Luxembourg, The Netherlands, Spain, and Portugal. Greece became the 12th member state to adopt the Euro on 1 January 2001. In 2002 circulation of euro coins and banknotes replaced the national currency in these countries. Denmark, the United Kingdom and Sweden have decided not to participate in the Euro (yet). In this market survey, the euro (€) is the basic currency unit used to indicate value.

Trade figures quoted in this survey must be interpreted and used with extreme caution. The collection of data regarding trade flows has become more difficult since the establishment of the single market on 1 January 1993. Until that date, trade was registered by means of compulsory customs procedures at border crossings, but since the elimination of the intra-EU borders, this is no longer done. Statistical bodies like Eurostat can no longer depend on the automatic generation of trade figures. In the case of intra-EU trade, statistical reporting is only compulsory for exporting and importing firms whose trade exceeds a certain annual value. The threshold varies considerably from country to country, but it is typically about € 100,000. As a consequence, although figures for trade between the EU and the rest of the world are accurately represented, trade within the EU is generally underestimated.

Furthermore, the information used in this market survey is obtained from a variety of different sources. Therefore, extreme care must be taken in the qualitative use and interpretation of quantitative data, both in the summary and throughout the text, and also in comparisons of different EU countries with regard to market approach, distribution structure, etc.

For more information on the EU market, please visit the website of the CBI at www.cbi.nl and look for the Manual 'Exporting to the EU'.

3 INDUSTRIAL DEMAND

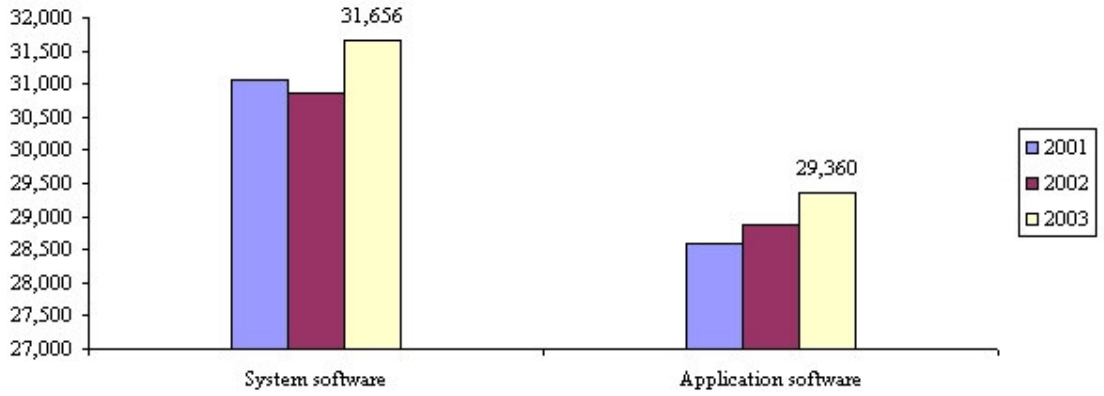
Section 3.1 presents data of industrial demand by the EU and per selected country. All data of this section are included in appendix 2 as well. Section 3.2 discusses the main trends and forecasts in the software and IT services market for the next two years. It is followed by section 3.3 on the opportunities that the internet offers for developing countries in this sector.

3.1 Market size

Software products
According to figure 3.1, the total market for software products in the EU amounted to € 61 billion in 2003, increasing 2.1 percent compared to 2002. This market consists of system software (€ 31.6 billion in 2003) and application software (€ 29.3 billion). The market for system software was the largest growing segment, increasing 2.6 percent compared to 2002. This was caused by a growing demand for infrastructure software, including middleware and web services. The projections for the future are even better, refer to section 3.2.

The application segment increased by 1.7 percent compared to 2002. The growth was slowed down by a decreased demand for Customer Relationship Management (CRM) and ERP in 2003. Moreover, companies are more and more investing in technologies that simplify and integrate their existing infrastructure. …..

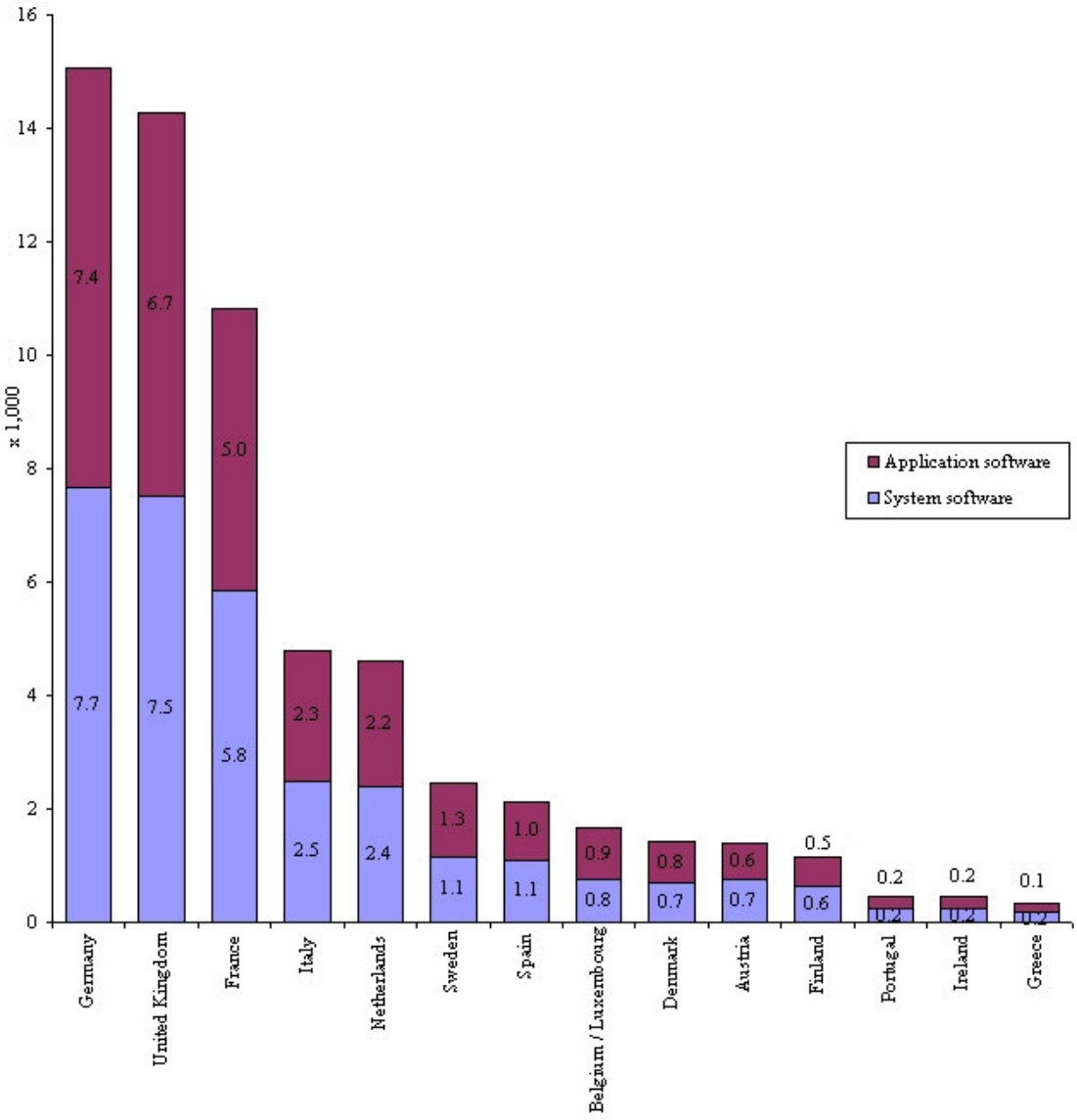
Figure 3.1 EU software market, 2001-2003
EUR million



Source: EITO (2004)

Germany was the largest EU-market for software products in 2003, with an amount of € 15 billion in 2003. This is a small decrease of 0.2 percent compared to 2002, which makes Germany the only EU country that saw its software market decreasing. In size it is followed by the United Kingdom (UK), with a total of € 14.2 billion in 2003, increasing five percent compared to 2002. Ranked third is France (€ 10.8 billion in 2003, increase of 2.6 percent), Italy is fourth (€ 4.8 billion in 2003, increase of 2.2 percent) and the Netherlands had the fifth spot in 2003 (€ 4.6 billion in 2003, increase of 2.4 percent). Refer to figure 3.2 as well. Sections 3.1.1 up to and including 3.1.5 contain more details on the software market by each highlighted EU country.

Figure 3.2 Software market by EU countries, 2003
EUR million (x1000)



Source: EITO (2004)

Future software market

The market for software products will grow to a value of € 67.8 billion in 2005, representing an increase of ten percent compared to 2003. Germany remains the market leader in 2005, with an amount of € 16.4 billion, increasing eight percent compared to 2003. The UK market will grow faster, 10 percent, to reach a value of € 15.9 billion in 2005. Countries that grow fast as well are Austria (13%), Greece (13%), Ireland (11.6%), Portugal (15%), and Spain (14.4%).

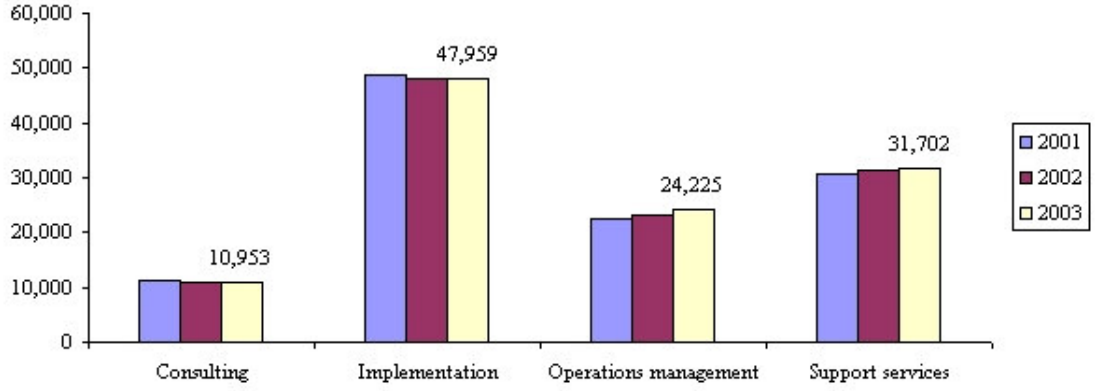
IT services

Figure 3.3 shows that the total market for IT services in the EU was worth € 114.8 billion in 2003. This market is subdivided into implementation (€ 48 billion in 2003, a decrease of 0.5 percent compared to 2002), support services (€ 31.7 billion in 2003, an increase of 0.9 percent), operations management (€ 24.2 billion in 2003, an increase of 5.2 percent) and consulting (€ 10.9 billion in 2003, a decrease of 1.0 percent).

The weak economic situation in Europe had its effect on the EU market for IT services. Decreasing budgets for consulting services and a lack of technological innovation had negative impacts on the market. Mainly due to the increasing demand for operations management, the total market realized a growth of 1.0 percent compared to 2002. This increase in demand for operations management is caused by, among other things:

- Focus on core competences;
- Demand for cost control;
- Complexity of the infrastructure.

Figure 3.3 EU IT services market, 2001-2003
EUR million



Source: EITO (2004)

The opportunities for pre-outsourcing consulting will grow, such as transition planning and implementation schedules. 2003 saw a renewed interest in offshore services, which is expected to cause a fundamental shift in the market for IT and business services. The availability of skills, the possibility to deliver services remotely, and the significantly cheaper rates on offer are all factors boosting offshore working. This is particularly true in the case of custom application development, legacy application maintenance, localisation and application reengineering.

The UK was the largest EU-market for IT services in 2003, amounting to € 28.5 billion, an increase of 1.4 percent compared to 2002. Germany was the second largest market (€ 25.2 billion in 2003, very small increase of 0.02 percent), followed by France (€ 23.3 billion, stable), Italy (€ 9.8 billion, very small decrease of 0.3 percent) and the Netherlands (€ 6.1 billion, increase of 2.5 percent). Refer to figure 3.4 as well.

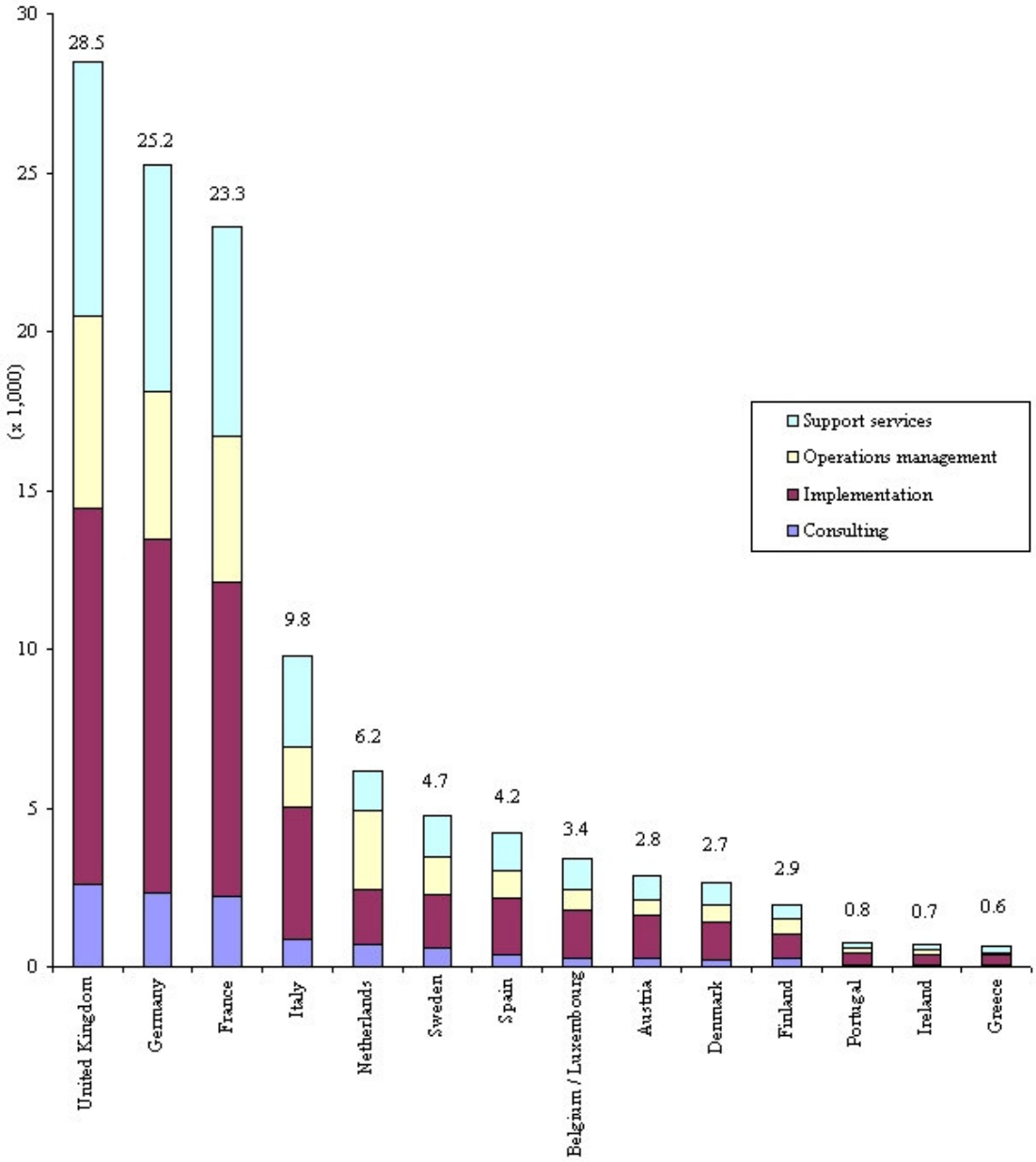
More detailed information on (offshore) outsourcing in the EU and a segmentation of the sectors concerned has been included in section 5.3 of this survey.

Future IT services
The ranking that is shown in figure 3.4 will not change to a large extent. According to data from EITO, the market for IT services will reach a value of € 122 billion in 2005, increasing 6.5 percent compared to 2003. The subsectors are predicted to grow as follows in this period:

- Consulting 5.0%
- Implementation 4.4%
- Operations management 10.8%
- Support services 4.9%

UK will still be the largest market (€ 30.1 billion) and Germany (€ 26.2 billion) will remain second in 2005. Countries that have an average growth rate of more than 10 percent are for example Austria, Greece, Ireland, Portugal and Spain. More future trends by each highlighted EU-country can be found in section 3.2. Refer to appendix 2 for more detailed data.

Figure 3.4 IT services by EU country, 2003
EUR million (x 1000)



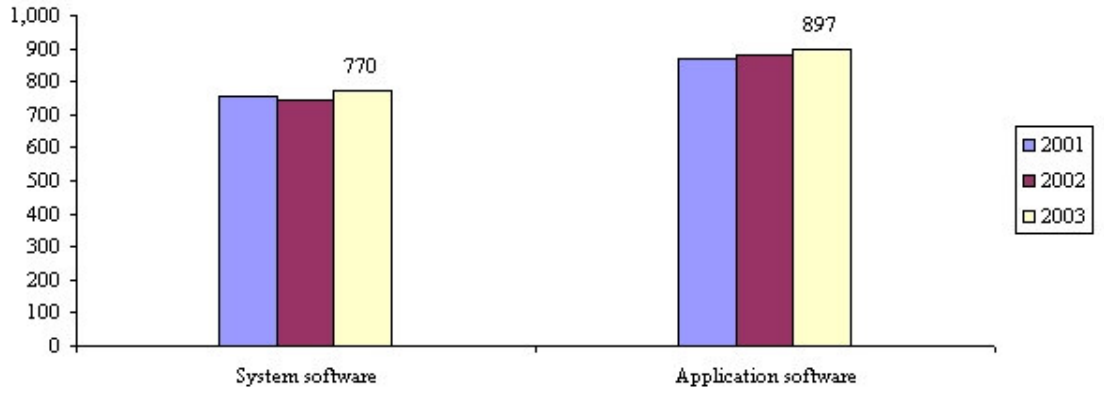
Source: EITO (2004)

3.1.1 Belgium

The Belgian software and services sector has been growing faster than the European average for some years now. Its economy depends to a large extent on large companies and multinationals, which means that decisions are not necessarily made in Belgium. Expenditure on services has increased in the public sector, while a decrease was noticed in the telecom sector, banking and in transport.

As shown in figure 3.5, the Belgian market (Luxembourg included) for software totalled € 1.6 billion in 2003, increasing 2.7 percent compared to 2002. The market for system software has increased 3.6 percent since 2002 to a value of € 770 million, growing at a larger rate than the market for application software, which increased 1.7 percent to € 879 million in 2003.

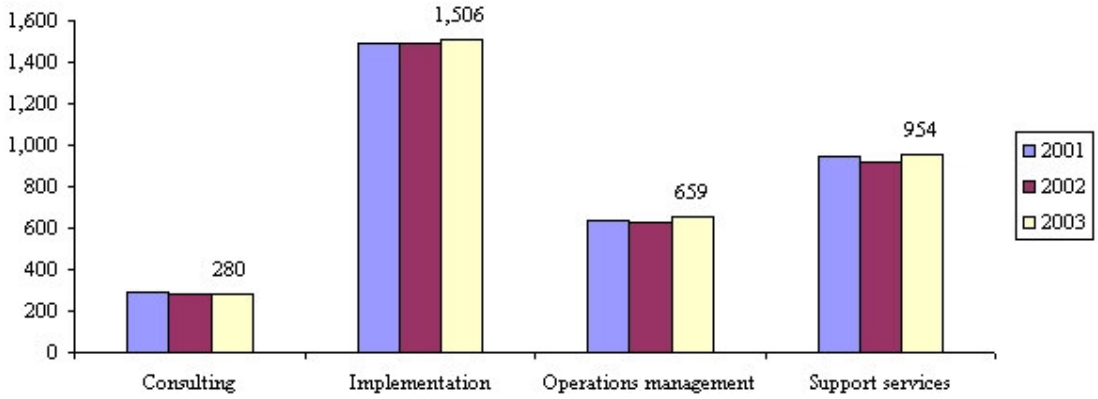
Figure 3.5 Software market in Belgium, 2001-2003
EUR million



Source: EITO (2004)

The total IT services market in Belgium (figure 3.6) was worth € 3.4 billion in 2003, increasing 2.2 percent compared to 2002. This growth was mainly driven by the increasing demand for operations management (+4.7 percent compared to 2002 to € 659 million in 2003) and support services (+3.3 percent to € 954 million). Consulting (€ 280 million) and implementation (€ 1,506 million) only showed marginal growth. For future projections on the Belgian market refer to section 3.2.2.

Figure 3.6 IT Services market in Belgium, 2001-2003
EUR million



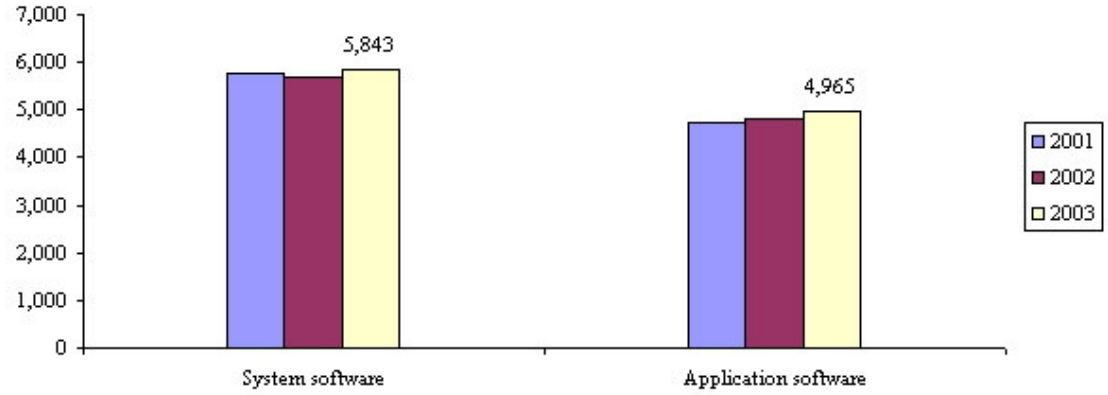
Source: EITO (2004)

3.1.2 France

The total French market for software and services showed some recovery after a decline in 2002, mainly caused by the growth in the software market, and despite a small downturn in the IT services market. This decrease in IT services was caused by the weak economic situation and cutbacks in hardware investment, reducing demand for consulting, implementation and training services. The region North and Pas de Calais offer good opportunities for the sector, since these regions have changed into the most digital parts of France.

Figure 3.7 shows that the total software market valued € 10.8 billion in 2003, increasing 2.6 percent compared to 2002. Both the segments system software (€ 4.9 billion) and application software (€ 5.8 billion) showed the same growth level. For future projections on the French market refer to section 3.2.3.

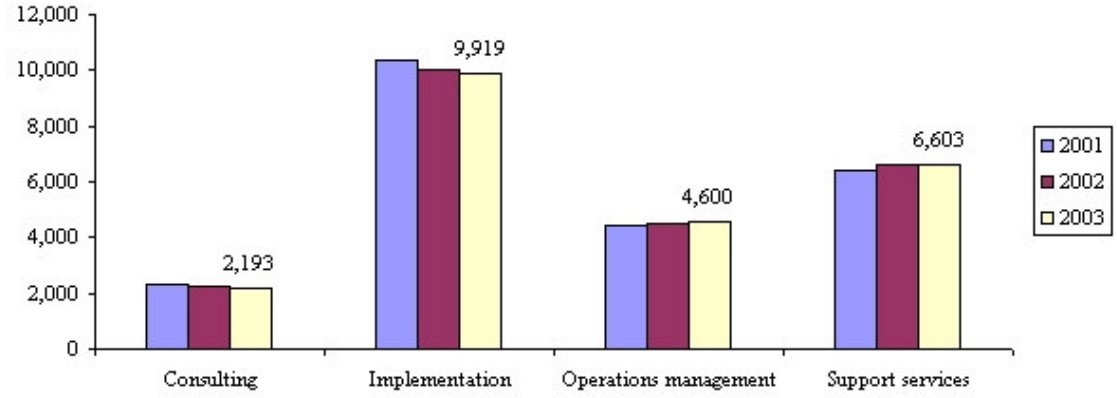
Figure 3.7 Software market in France, 2001-2003
EUR million



Source: EITO (2004)

With reference to figure 3.8, the total IT services market in France showed a very small decline in 2003. The market fell down 0.01 percent to € 23.3 billion in 2003. Decreasing segments were consulting (-1.0 percent to € 2.19 billion in 2003) and implementation (-1.0 percent to € 9.9 billion). This decrease was compensated for by a plus in support services (+0.3 percent to € 6.6 billion) and operations management (+2.3 percent to € 4.6 billion) .

Figure 3.8 IT Services market in France, 2001-2003
EUR million



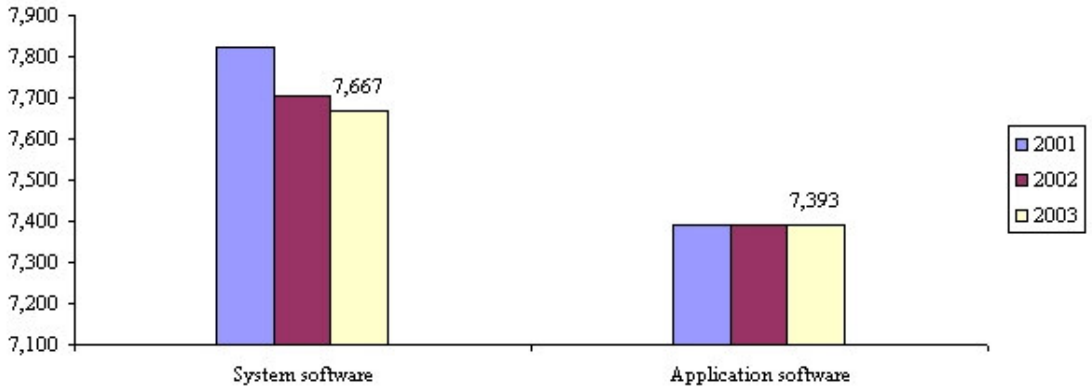
Source: EITO (2004)

3.1.3 Germany

According to figure 3.9, the total software and services market in Germany showed a slight decline in 2003, representing a total value of € 40.2 billion in 2003. Some causes were the global economic situation and a decline in hardware revenues. The software market declined slightly to € 15.0 billion in 2003, which is a slight decrease of 0.25 percent compared to 2002. The market had to deal with shorter contracts, declining license fees and delays of projects, as a consequence affecting sales from application solutions and system infrastructure.

The system software segment showed a small decrease of 0.5 percent, reaching a value of € 7.6 billion in 2003. The demand in this segment was mainly driven by investments in integration and security software. The application software remained stable at € 7.3 billion in 2003.

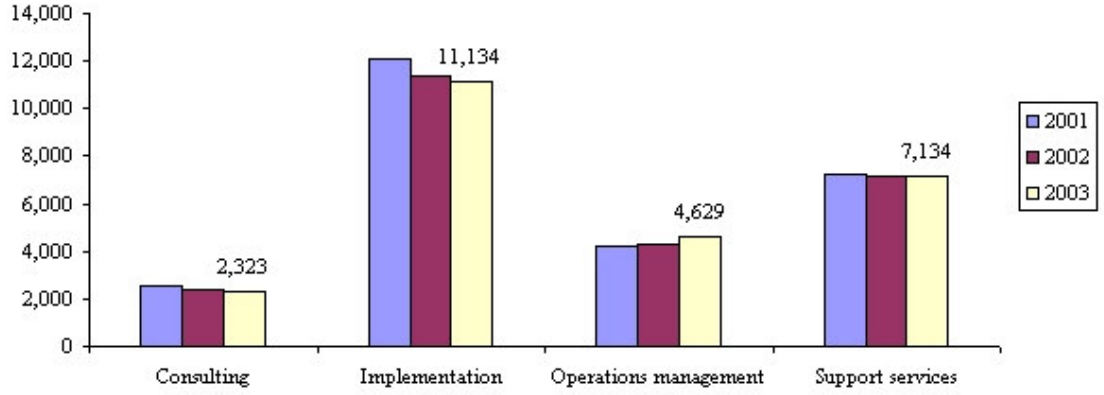
Figure 3.9 Software market in Germany, 2001-2003
EUR million



Source: EITO (2004)

The IT services market in Germany is the second largest in the EU and remained stable in 2003, reaching a value of € 25.2 billion, as shown in figure 3.10. Decreasing segments were support services (-0.1 percent to € 7.1 billion), implementation (-2.0 percent to € 11.1 billion) and consulting (-4.1 percent to € 2.3 billion). In accordance with the general development in other EU-countries, the segment operations management showed a considerable increase (+7.4 percent to 4.6 billion). The areas that drove demand in IT services in Germany were outsourcing and e-government. For future data on the German market refer to section 3.2.4.

Figure 3.10 IT Services market in Germany, 2001-2003
EUR million

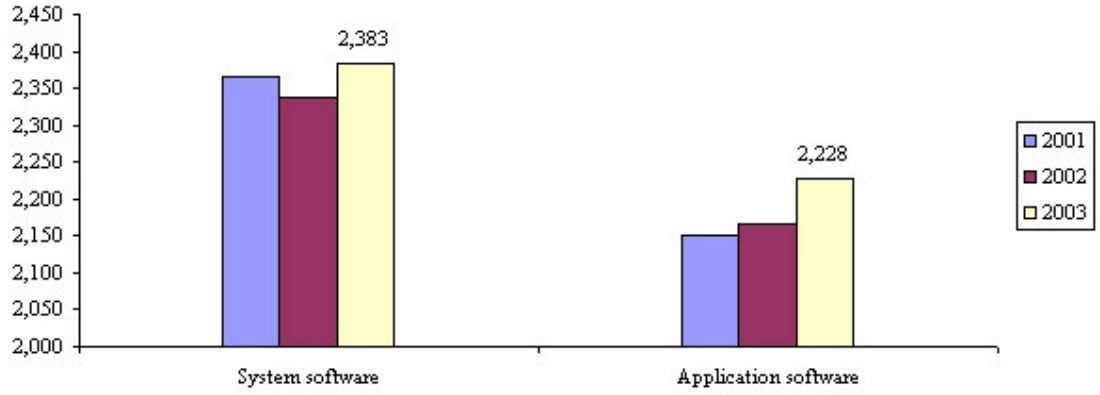


Source: EITO (2004)

3.1.4 Netherlands

After a downfall in 2002, the total market for software products in the Netherlands increased 2.3 percent to € 4.6 billion in 2003. The strongest growth was realized by the segment application software, which increased 2.8 percent to € 2.2 billion in 2003. System software noted a plus of 1.9 percent, reaching a value of € 2.3 billion. Refer to figure 3.11 as well for more details.

Figure 3. 11 Software market in the Netherlands, 2001-2003
EUR million

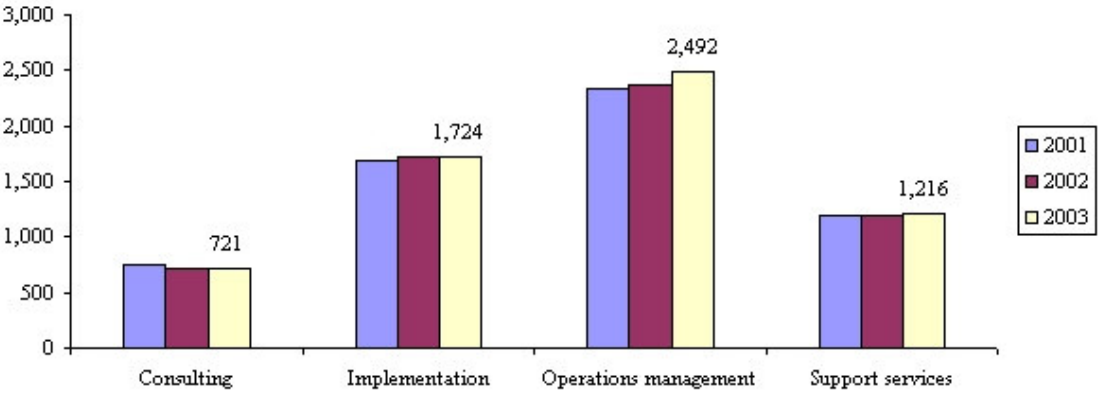


Source: EITO (2004)

The IT services market increased 2.4 percent to € 6.1 billion in 2003, noting increases in support services (+2.3 percent to € 1.2 billion) and operations management (+4.9 percent to € 2.4 billion). As shown in figure 3.12, the segments consulting (€ 721 million) and implementation (€ 1.7 billion) remained stable in 2003.

Some reasons for this growth include lack of in-house capacity, focus on core business, security concerns and focus on quality, cost and efficiency. Moreover, the increasing use of the Internet and E-commerce will have a positive effect on the demand for external services, such as the areas of CRM and procurement implementations. For future data on the Dutch market refer to section 3.2.5.

Figure 3.12 IT Services market in the Netherlands, 2001-2003
EUR million

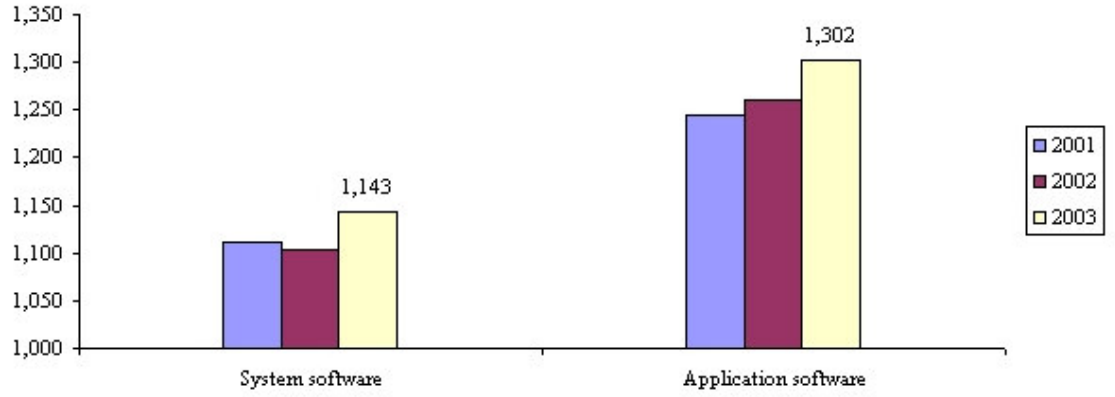


Source: EITO (2004)

3.1.5 Sweden

The market for software in Sweden increased 3.3 percent to € 2.4 billion in 2003, according to figure 3.13. Both the segments application software (+3.2 percent to € 1.3 billion) and system software (+3.5 percent to € 1.1 billion) realized a growth. One of the explanations is that Sweden has a relatively high number of multinational companies. Examples of these include ABB, Electrolux, Ericsson, Ikea, Saab, Scania and Volvo. All of them strive for a high(er) level of efficiency, which could mean opportunities for IT suppliers. Local Swedish software suppliers have had to meet the highest standards in quality, features and service. For future data on the Swedish market refer to section 3.2.6.

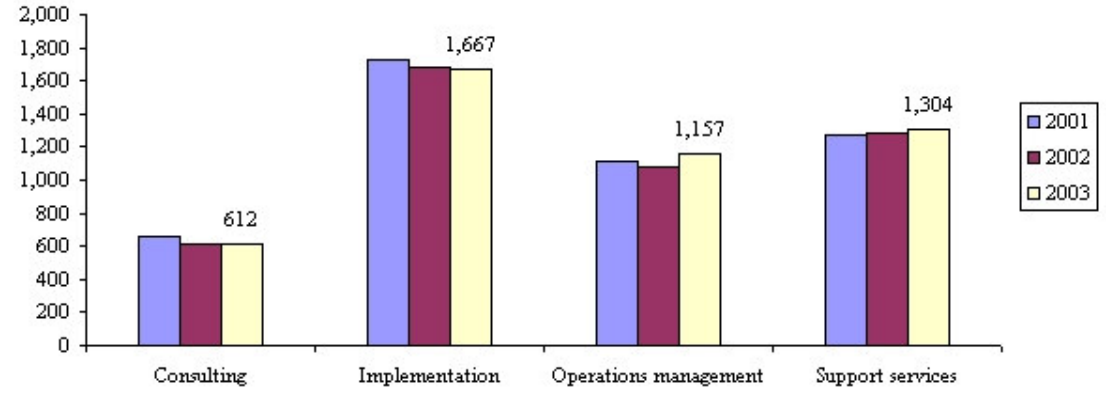
Figure 3.13 Software market in Sweden, 2001-2003
EUR million



Source: EITO (2004)

After the decline in 2002 and despite a decrease in hardware investments, the total Swedish IT services market recovered in 2003, increasing 1.5 percent to € 4.7 billion. This was mainly due to the growth in operations management (+6.7 percent to € 1.1 billion) and in support services (+1.4 percent to € 1.3 billion). The segments consulting (€ 612 million) and implementation (€ 1.7 million) remained at a stable level; refer to figure 3.14 as well.

Figure 3.14 IT Services market in Sweden, 2001-2003
EUR million

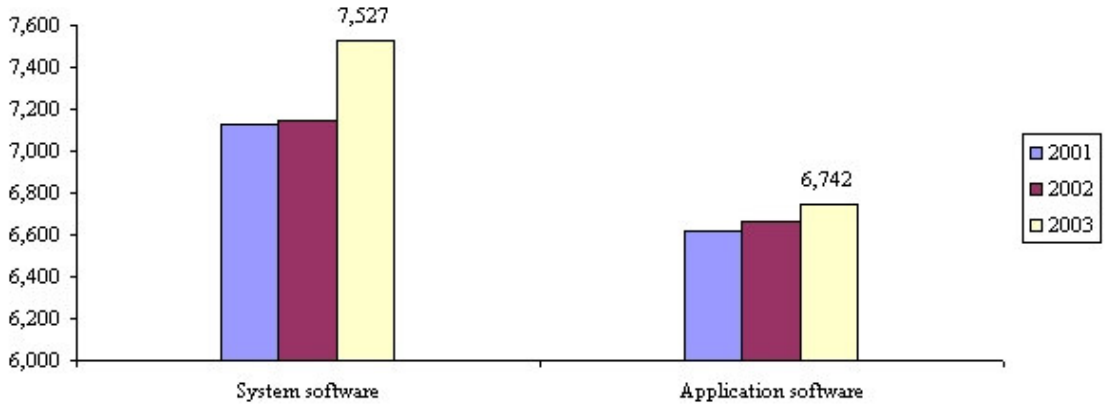


Source: EITO (2004)

3.1.6 United Kingdom

The UK is the largest IT market in the EU in 2003. The total market grew 1.3 percent in 2003, reaching a value of € 42.7 billion. According to figure 3.15, the software market increased 3.2 percent to 14.2 billion in 2003. This can be subdivided into system software (+5.0 percent to € 7.5 billion) and application software (+1.1 percent to € 6.7 billion). Companies look for a reduction in operating costs, while they try to improve their competitive position at the same time. This implies that the interest in analytical tools and CRM applications could be on the increase. For future data on the UK market refer to section 3.2.7.

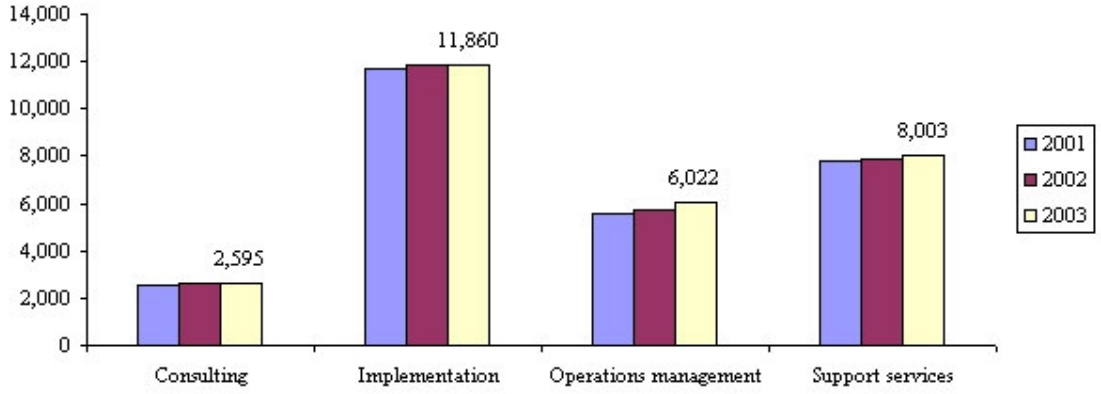
Figure 3.15 Software market in the United Kingdom, 2001-2003
EUR million



Source: EITO (2004)

The total IT services market, as shown in figure 3.16, increased to € 28.4 billion in 2003. in the UK too, the two segments support services (+1.1 percent to € 8.0 billion) and operations management (+4.5 percent to € 6.0 billion) contributed to this growth. Consulting (€ 2.6 billion) and implementation (€ 11.8 billion) remained at the same level.

Figure 3.16 IT Services market in the United Kingdom, 2001-2003
EUR million



Source: EITO (2004)

3.1.7 Accession countries from Eastern Europe

This section provides the highlights of the markets for software and IT services in the accession countries to the EU from Eastern Europe.

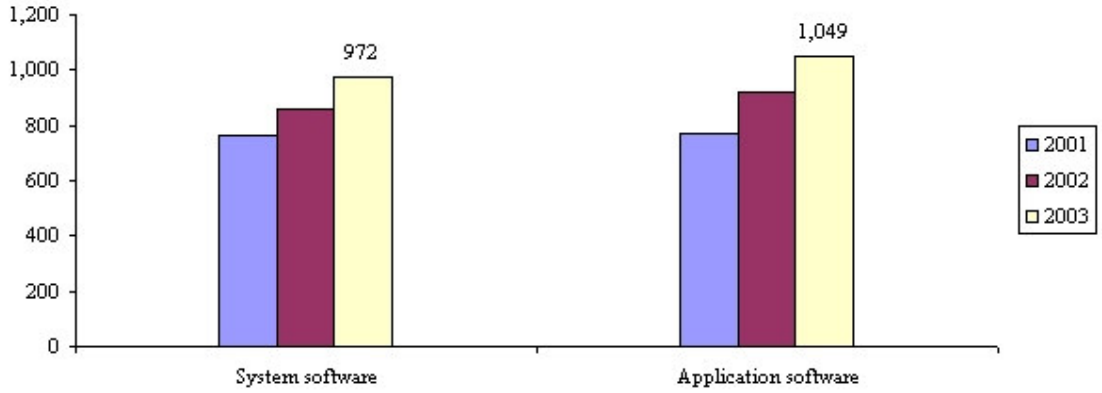
Software products

The Central Eastern Europe countries that acceded to the EU in May 2004 (Czech Republic, Latvia, Hungary, Estonia, Lithuania, Poland, Slovakia, Slovenia) in general shift towards investments in packaged software applications. Users in these countries are increasingly looking for software to expand efficiency and improve business operations. Moreover, falling software piracy rates are also facilitating higher spending on software applications.

The software market in these eight countries has been increasing dramatically; refer to figure 3.17. In 2003 it has increased 13.2 percent and reached a value of € 2.0 billion in 2003. Application software accounted for € 1,049 million (+12 percent) and system software had a value of € 972 million (+12.7 percent). Application software especially includes ERP, Customer Relationship Management (CRM), Supply Chain Management (SCM), Business Intelligence (BI), data warehousing, mobility, document and content management and E-commerce.

In 2003, the market for integrated and non-integrated ERP applications continued to show solid growth. There has been a growing demand as well for applications related to technology management such as tools for systems management, network management and job management. System management, in particular, is drawing more attention as users seek to enhance efficiency and reduce costs. Consistent with a higher investment in storage hardware and solutions has been a strong growth in the market for storage management applications. A growing emphasis on high availability and disaster recovery in IT planning and operations has led to greater demand for sophisticated tools to manage increasingly complex network storage configurations.

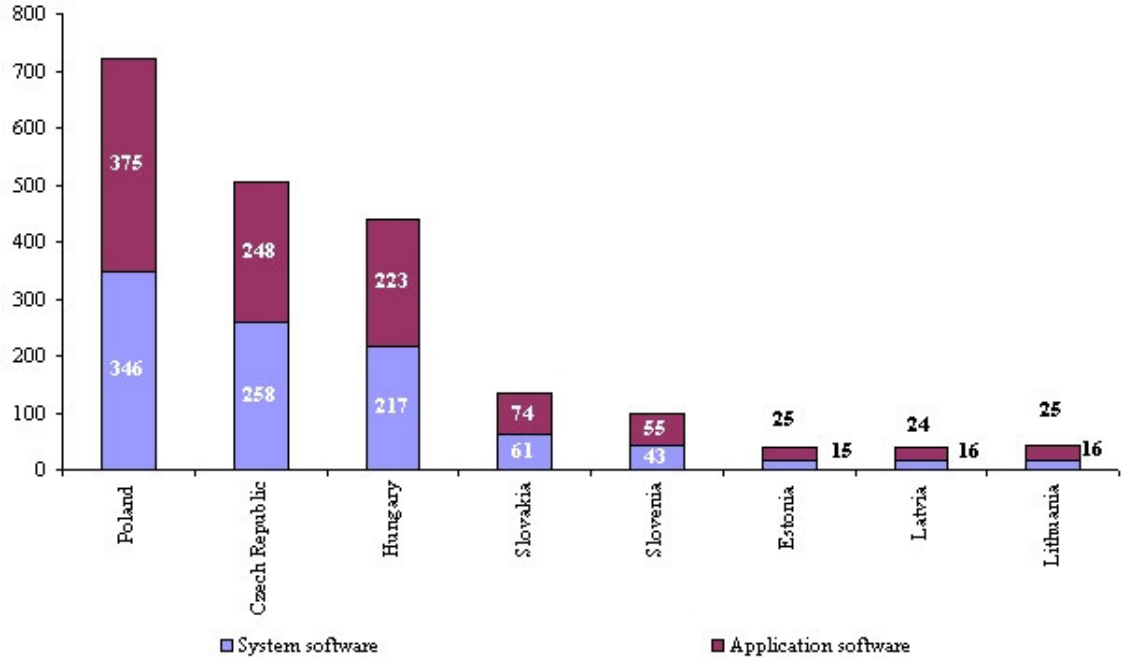
Figure 3.17 Software market accessing countries Eastern Europe, 2001-2003
EUR million



Source: EITO (2004)

Of the eight Eastern European accession countries, Poland was the largest software market in 2003 with a total value of € 721 million. This was a total increase of 11.5 percent, subdivided into application software (+10.6 percent to € 375 million) and system software (+12.4 percent to 346 million). The Czech Republic was the number two with a total market of € 505 million in 2003, of which € 258 million was system software (+12.0 percent) and € 248 million was application software (+12.9 percent). The number three in 2003was Hungary, with a value of € 440 million, an increase of +11.1 percent, followed by Slovakia (€ 135 million) and Slovenia (€ 98 million). More details can be found in figure 3.18.

Figure 3.18 Software market accessing countries Eastern Europe, by country, 2003
EUR million



Source: EITO (2004)

IT services

The IT services market has also increased in the eight accession countries from Central and Eastern Europe. This total market increased 10.0 percent to a value of € 2.9 billion in 2003 (refer figure 3.19). Some reasons for this growth were a solid demand for IT services in larger countries of Central Europe, positive effects of privatisation in countries like Slovakia and liberalisation of key industry sectors like telecommunications.

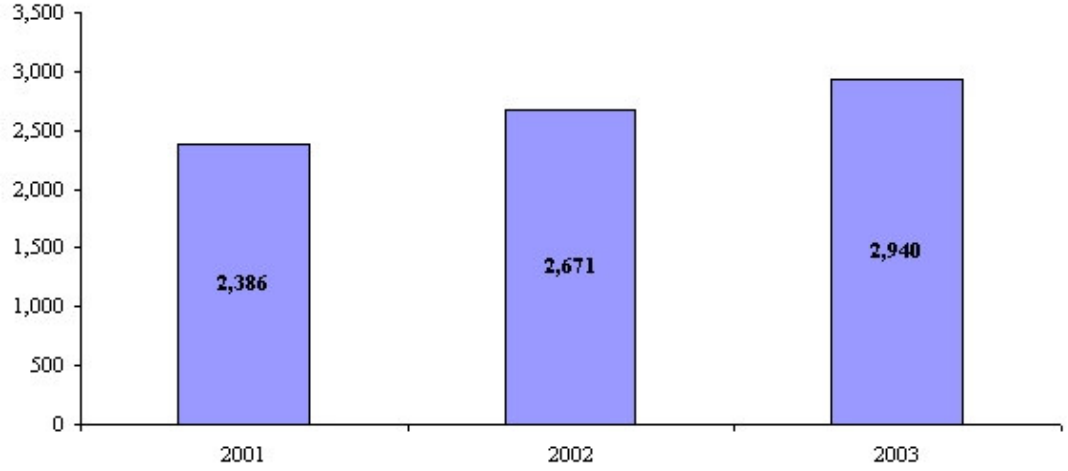
The IT services market in the CEE region is characterized by a considerable diversity. On the one hand, countries such as Hungary and the Czech Republic are showing signs of maturation with significant spending on services but with modest growth rates. On the other hand, emerging markets like Slovakia have relatively small markets and are showing above average growth rates.

The breakdown of individual service categories reflects the evolving state of the region's economies. While maintenance and support services represent more than a quarter of the total services related spending, at 28 percent in 2003, their relative importance within the market is falling. Implementation services remain the largest category with around 48 percent of the market. Their share in CEE is significantly higher than the global average of 23 percent. There are two reasons:

(1) The IT services market is still heavily dependent on large projects initiated both by government investments and by private sector investments following privatisation of an industry.

(2) A reluctant attitude toward outsourcing or managed services in CEE. While operations management (outsourcing) represents 6 percent of the services expenditure in the profiled countries, with 20 percent it is the category with the fastest growth rate. In more mature markets, particularly in the Czech Republic, Hungary and Poland, services are increasingly being demanded as a one-stop solution for a particular business problem. That solution inherently requires both infrastructure services and business solutions. One cannot exist without the other, because a business application needs to rest on a solid IT infrastructure that guarantees security, business recovery functionality, and storage services.

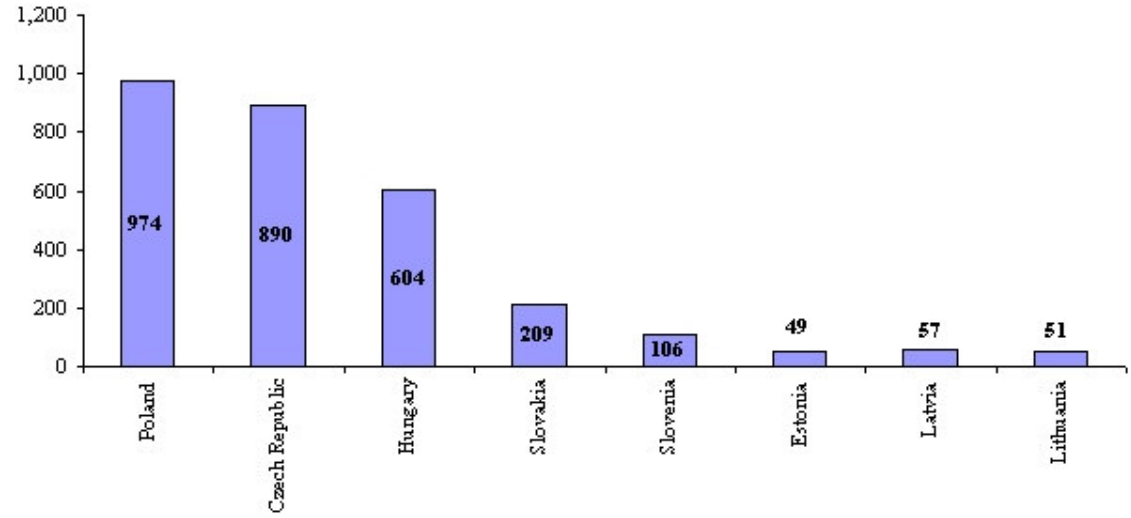
Figure 3.19 IT services market accessing countries Eastern Europe, 2001-2003
EUR million



Source: EITO (2004)

In this segment too, Poland is the largest market of the eight accession countries from Eastern Europe. Its total market value was € 974 million in 2003, an increase of 10.8 percent. The Czech Republic is again second, representing a market of € 890 million (+8.5 percent). It is followed by Hungary (€ 604 million, +5.7 percent), Slovakia (€ 209 million, +11.0 percent) and Slovenia (€ 106 million, +8.4 percent). Refer to figure 3.20 as well for more details. More detailed information of the ICT market of each of the accession countries is given below.

Figure 3.20 IT services market accessing countries Eastern Europe by country, 2003
EUR million



Source: EITO (2004)

Baltic States

The total ICT market of the three Baltic States Estonia, Latvia and Lithuania reached a value of € 2.7 billion in 2003, representing a growth of 8.1 percent. This growth has, for one, been driven by a sustained economic expansion in all three countries. The Baltic States are among the most technologically advanced IT markets in CEE. The general population's knowledge and comfort with the Internet and online technologies is considerable. Regional banks are finding it a prerequisite to offer online banking services.

In recent years, the demand for software and related IT services in Estonia has increased. As a result, the number of international vendors present on the Estonian market has increased substantially. As the focus continues to shift toward support for the government's Information Society programmes, growth should be seen in the areas of IT services and software applications, such as the Web-based citizens' IT centre.

Lithuania is experiencing a healthy economic growth, which is advancing the country's IT market. The availability of highly qualified professionals and the relatively low labour costs has boosted the IT environment and has made it attractive for foreign investment. Several leading IT companies have received foreign investments from the European Bank for Reconstruction and Development (EBRD), the Baltic Investment Fund and Equitec.

The Latvian software industry and market is well developed and organized. All major international software companies such as Microsoft, Linux, Unix, Oracle and Novell are present directly through their sales offices or through local distributors. Latvia is also well known for its achievements and competitiveness in software development. The main local players in software development are DATI, Fortek, Lursoft, IT Alise and Exigen Latvia.

Czech Republic
The ICT market in the Czech Republic continues to be the most advanced in Central and Eastern Europe. The fact that the Czech ICT market was the slowest growing among the EU accession countries in 2003; this is partly a result of maturity. However, other factors which negatively influenced the market included delayed IT investments by local subsidiaries of Western companies and a continuing hold on government IT spending due to budgetary difficulties. While the country's IT hardware market remained flat in 2003, services and software spending continued to grow strongly as Czech firms increasingly use IT to modernise their business practices.

Hungary
The Hungarian ICT market has now entered a more mature phase than the majority of the EU accession countries, with slower overall growth (9.5 percent resulting in an total value of a € 6.0 billion) and a continuing shift in its composition.

Poland
Growth in the Polish ICT market, the largest in Central and Eastern Europe, recovered in 2003 from a slowdown in the previous year. The market reached a value of € 14.8 billion in 2003, representing an expansion of 8.1 percent. The software and services segments are showing much higher rates of growth. Packaged application solutions and operations management services are among the most dynamic segments.

Slovakia
The Slovakian ICT market experienced a growth of 6.9 percent in 2003, a significant slowdown from the previous year. Overall spending totalled nearly € 2 billion. A significant change was a fall in value of the fixed-line telecommunications services market.

Slovenia
With its high GDP per capita, Slovenia has one of the most mature ICT markets and has a relatively high growth in IT services and software.

3.2 Trends

This section discusses some main trends for the software and services market. Furthermore, some technical trends will be given and the main developments for the market in the EU as a whole and for each highlighted country are included as well.

EITO indicates some key trends in its 2004 publication for both the application and system software markets and the IT services market.

Main trends application software market

- Product lines are restructured for rapid implementation, industry specific pre-configuration, open standards and simple exchange of data, and, ultimately, high return of investment.
- The ERP umbrella now covers CRM, SRM, Supply Chain Management and business analytics. It is heading towards Product Lifecycle Management and Services Automation.
- Lower ERP spending: while the market is maturing in some European countries, the proliferation of open integration technology such as Web services architecture and new licensing and delivery models will slow down ERP spending growth in the years ahead. However, healthy demand in the mid market coupled with greater industry-specific coverage will boost spending in the short term.
- Weaker demand for CRM, but increasing demand for CRM systems tied to the back office.
- The increasing demand for data analytics and Business Intelligence solutions, to get real value from CRM investments and multi channel strategy, and to streamline financial processes.
- Basel II and International Accounting Standards (IAS) are expected to drive demand for accounting and treasury management applications, primarily within the finance sector in Europe.
- Increasing demand for SCM, SRM and PLM applications to streamline business processes along companies' value chain and enhance collaboration.
- The emergence of enterprise-application components based on a 'de facto' or 'de jure' standard Web services architecture.

Main trends system software market

- Major technology trends that will stimulate growth in the application server system platform market are:
  - the dependence of higher level functionality on an underlying application server;
  - a return to limited in-house development as new Java development environments make this a cost-effective option.
- Adoption of grid computing will require the availability of application platforms adapted to the requirement for dynamic reconfiguration.
- The need for business agility and the increasing requirement for regulatory compliance will have a positive impact on the integration market.
- The adoption of Web services standards throughout the industry will commoditise a portion of the integration market (the connector/adapter market). Furthermore, it will reduce the consultancy and customized coding element of future integration projects, with an overall positive impact on the integration technology market.
- The growing complexity of software systems will fuel demand for improved management of the software development and deployment process. Full-featured, cross-platform data warehousing software will increasingly be required to manage the complexities of data warehousing environments.
- There is continued demand for Business Intelligence (BI) and this will fuel growth in the data mining market and enable companies to enhance their CRM and SCM solutions.

Main trends IT services sector

In 2004, growth in the services market is expected to remain moderate and reach 2.2 percent. The most important trend for developing countries is the offshore market. This market is evolving and expanding beyond its traditional activity of custom application development services to offer a wider range of IT services as well as business services. While the demand for offshore services remains largely driven by pricing considerations, the ongoing build-up of intellectual capital among the

offshore providers will increasingly enable a more quality- or feature driven offshore proposition. Refer to chapter 5 for more information on outsourcing and trends in outsourcing as well. More information on offshore locations is included in chapter 6.

Main technology trends

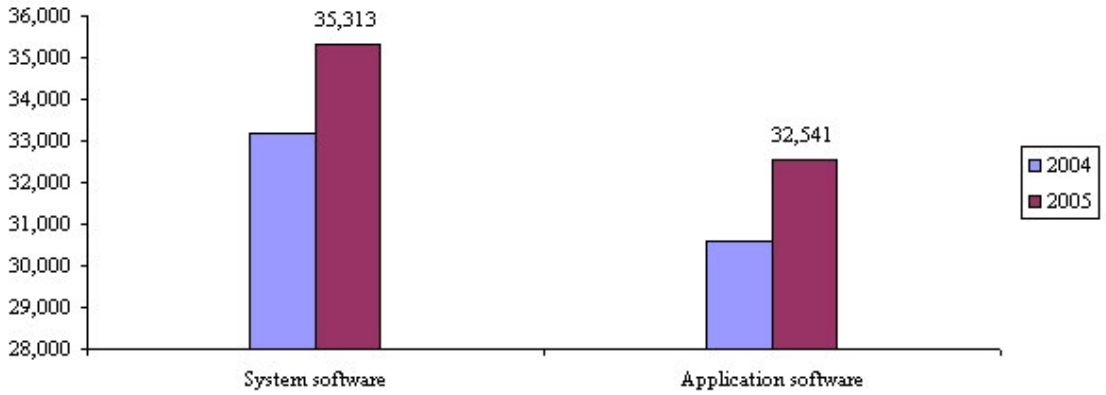
- Content Management Systems
- Security and privacy
- Web services
- Mobile and Wireless
- Radio Frequency Identification (RFID) and Electronic Product Code (EPC)

More information about technology trends, programming and the most important players in the IT market can be found in appendix 5. Interesting as well is the part of the EITO 2004 study 'The technological evolution of ICT", on page 91 – 139.

3.2.1 European Union

The total EU market for software, according to figure 3.21, is predicted to reach a value of € 67.8 billion in 2005, increasing 11.2 percent compared to 2003. The market for system software is forecast to grow 11.5 percent to € 35.3 billion in 2005. It slightly outpaces the growth in the market for application software, which will increase 10.8 percent to € 32.5 billion in 2005.

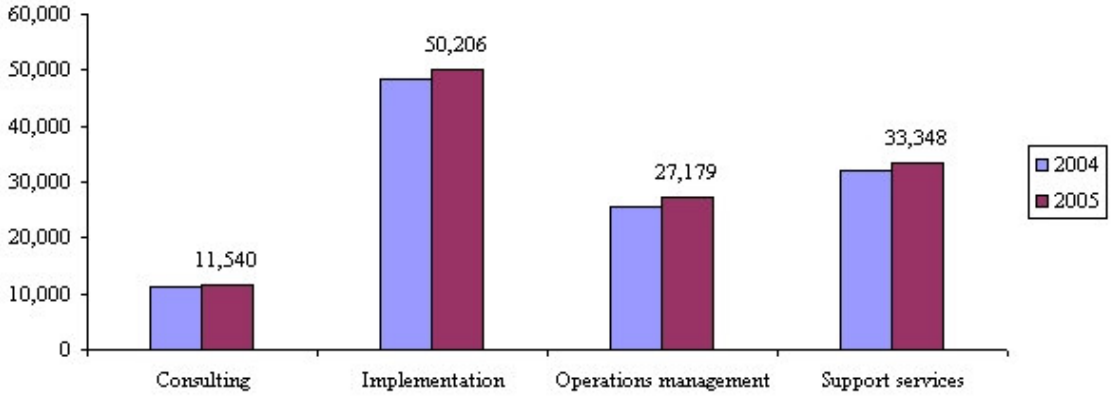
Figure 3.21 EU Software market, 2004-2005
EUR million



Source: EITO (2004)

The IT services market in the EU is not growing as fast as the software market, according to figure 3.22. The total increase is expected to be 6.4 percent for the period 2003 – 2005, valuing € 122.2 billion in 2005. The largest growth rate can be noted in the segment of operations management, which is predicted to be 12.1 percent, reaching a value of € 27.1 billion in 2005. The largest segment of the IT services market, implementation, will have the lowest growth rate, 4.6 percent, to reach a value of € 50.2 billion in 2005. Support services will have a total value of € 33.3 billion in 2005, increasing 5.1 percent. The fourth segment, consulting, will represent a value of € 11.5 billon in 2005, increasing 5.3 percent.

Figure 3.22 EU IT Services market, 2004-2005
EUR million

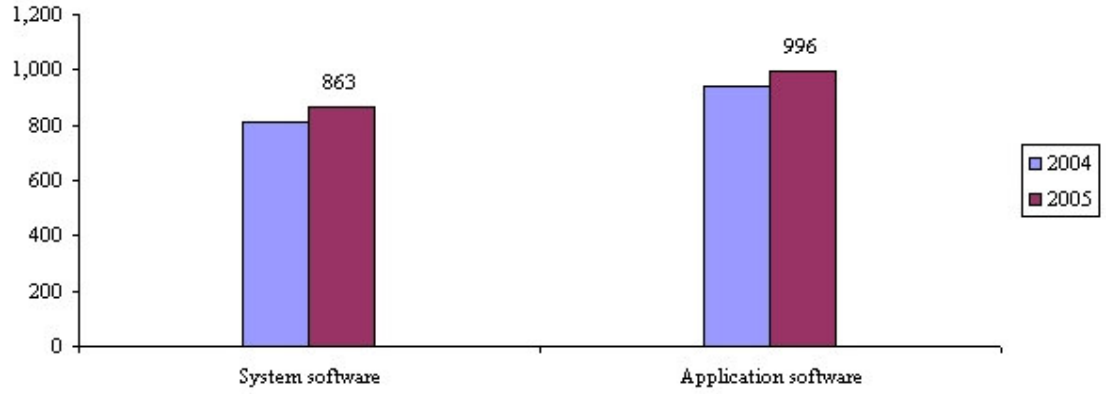


Source: EITO (2004)

3.2.2 Belgium

Figure 3.23 displays the future development for the software market in Belgium. The market is expected to represent € 1.86 billion in 2005, which is an increase of 11.5 percent compared to 2003. The segment application software is larger than the segment system software, contrary to the situation for the whole EU. The application software will reach a value of € 996 million in 2005 (+11.0 percent) with a predicted € 863 million for system software (+12.0 percent).

Figure 3.23 Software market in Belgium, 2004-2005
EUR million

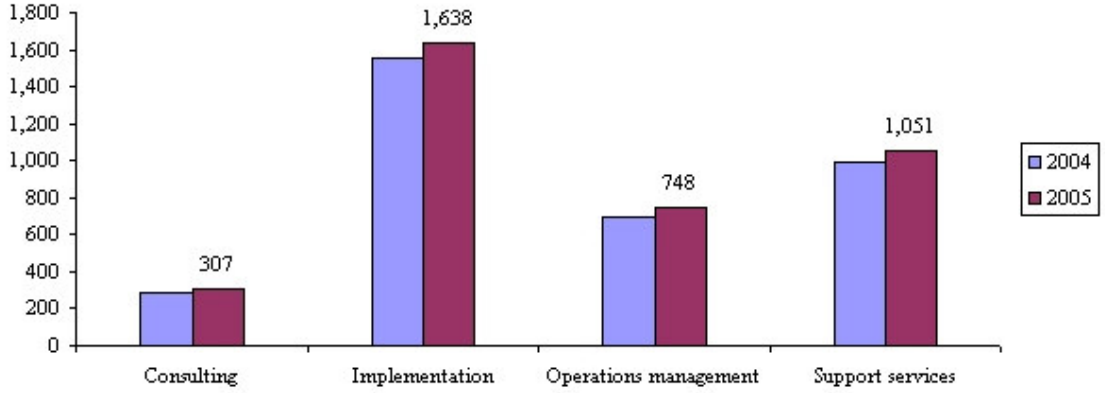


Source: EITO (2004)

The market for IT services in Belgium will grow at a faster rate than the EU-average. The total market is expected to increase 10.1 percent to € 3.7 billion in 2005. This is mainly driven by the increase in operations management, which will grow at a rate of 13.5 percent to a value of € 748 million in 2005. Implementation will have a value of € 1.63 billion in 2005 (+8.7 percent), support services will grow to € 1.0 billion (+10.1 percent) and consulting will have a value of € 307 million (+9.6 percent). Refer to figure 3.24 as well.

This growth in the services industry is acknowledged by the Belgian ICT industry trade association, Agoria (www.agoria.be). They believe there is a trend toward fixed-sum contracts in the industry. Another important trend is the choice of IT managers for web-centreed activities. Due to many company mergers, investments in activities focused on 'enterprise application integration' are growing in significance.

Figure 3.24 IT Services market in Belgium, 2004 - 2005
EUR million

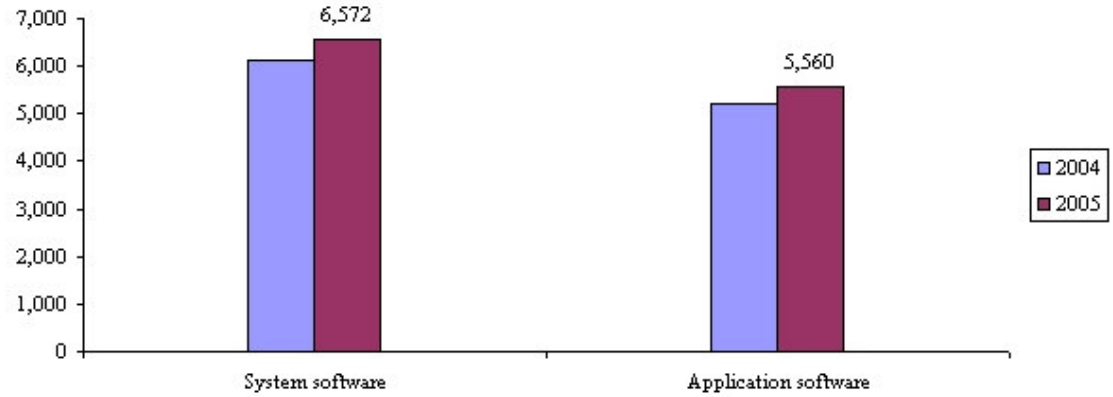


Source: EITO (2004)

3.2.3 France

Figure 3.25 shows that the total software market in France will represent a value of € 12.1 billion in 2005, increasing 12.2 percent compared to 2003. The market will be subdivided into system software, representing a value of € 6.5 billion (+12.4 percent) and application software, valuing € 5.5 billion (+11.9 percent). Within this segment, it is especially deployment tools, including middleware, which is estimated to experience the highest growth.

Figure 3.25 Software market in France, 2004-2005
EUR million



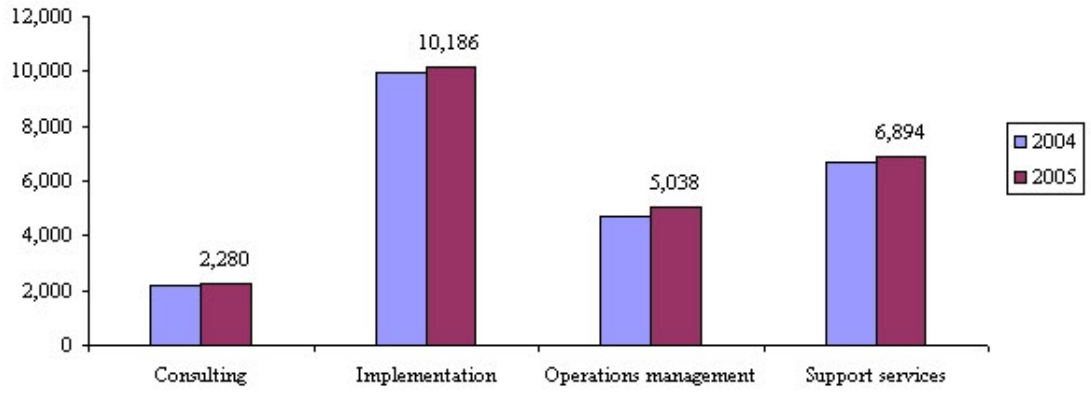
Source: EITO (2004)

The projections for the IT services market are displayed in figure 3.26. The total market will reach a value of € 24.3 billion in 2005, increasing 4.6 percent compared to 2003. The French market is recovering, following some indicators like decreasing pressure on prices, shorter non-productive periods between contracts, acceleration of corporate replacements, new projects and renewed growth of chips sales.

In conformity with the EU situation, operations management is mainly responsible for this growth. It will increase 9.5 percent to € 5.0 billion. The other segments will increase at a lower rate: implementation will grow 2.6 percent to € 10.1 billion, support services will increase 4.4 percent to € 6.8 billion and consulting will grow 3.9 percent to € 2.2 billion in 2005.

French industry association Syntec Informatique adds to these forecasts that expectations for the future vary per sector. Public administration, energy and public services continue to grow, as do outsourcing, material and software development activities. On the other hand, as shown in figure 3.26 as well, consulting and systems integration are the segments with the least positive expectations.

Figure 3.26 IT Services market in France, 2004-2005
EUR million



Source: EITO (2004)

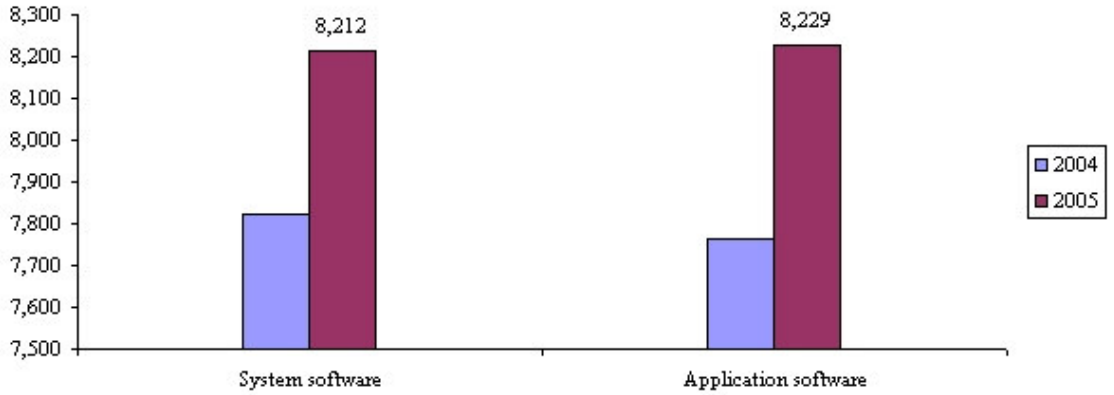
3.2.4 Germany

Germany will remain the largest software market of of all EU member countries, valuing € 16.4 billion in 2005. This is a growth of 9.1 percent compared to 2003. This growth is largely caused by the 11.3 percent increase of the application software to € 8,229 million, slightly outpacing the system software in terms of value in 2005. The value of this segment will increase 7.1 percent to € 8,212 million. Refer to figure 3.27 as well. The German trade association BITKOM (www.bitkom.org) is of the same opinion and forecasts a growth for 2004 and (especially) 2005, confirming the structural recovery of the industry after the recent downfall.

A surge in demand is expected for applications solutions, for example in the areas of Supply Chain Management (SCM), Supplier Relationship Management (SRM) and Product Lifecycle Management (PLM). In combination with the large Enterprise Resource Planning (ERP) base in Germany, the move towards automating the entire value chain through the adoption of these solutions is seen as the logical step forward for German organisations.

Especially the growth in the market for banking software (and services as well) is expected to be faster than other areas in the IT industry. Some reasons for this are consolidation processes, the expansion of the European Union as a single financial market place, the implementation of Basel II and the upgrade and replacement of outdated equipment The expected growth rate for banking software in 2004 alone is about 13 percent.

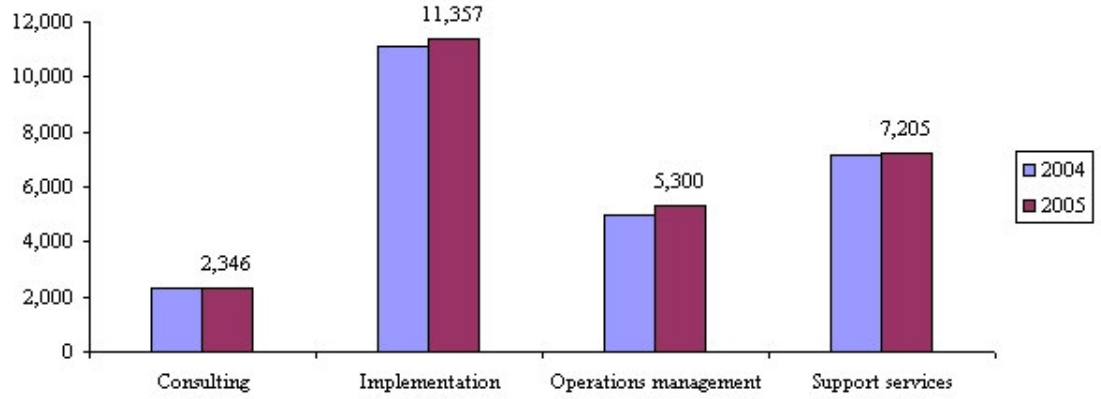
Figure 3.27 Software market in Germany, 2004-2005
EUR million



Source: EITO (2004)

Figure 3.28 displays the future market for IT services in Germany, indicating a total market value of € 26.2 billion in 2005, which is an increase of 3.9 percent compared to 2003. The importance of the segment implementation becomes obvious as well, since it totals € 11.3 billion in 2005 (+2.0 percent). The largest growing segment is, once again, operations management, with an increase of 14.4 percent to € 5.3 billion in 2005. Other segments are support services (€ 7.2 billion, +0.9 percent) and consulting (€ 2.3 billion, +0.9 percent).

Figure 3.28 IT Services market in Germany, 2004 - 2005
EUR million



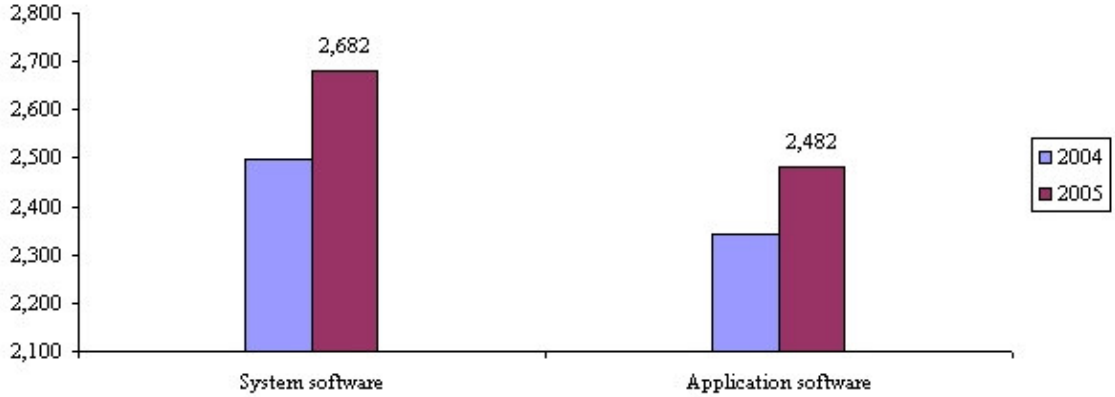
Source: EITO (2004)

3.2.5 Netherlands

The Dutch market for software will reach a total value of € 5.1 billion in 2005, according to figure 3.29. This is an increase of 11.9 percent, subdivided into system software (€ 2.6 billion, +12.5 percent) and application software (€ 2.4 billion, +11.4 percent). The best opportunities are offered by all types of standard applications, Internet-, intra- and extranet software, networking software, network security products, development tools, Windows and UNIX-based products, storage management software, CRM, ERP, and SCM products, and game software for the consumer market.

As indicated by an industry association, the expectations vary among buyers and manufacturers. Buyers say they expect to spend more on software, while manufacturers expect a decrease in turnover. Manufacturers expect a higher growth in standard software than in development software.

Figure 3.29 Software market in the Netherlands, 2004-2005
EUR million

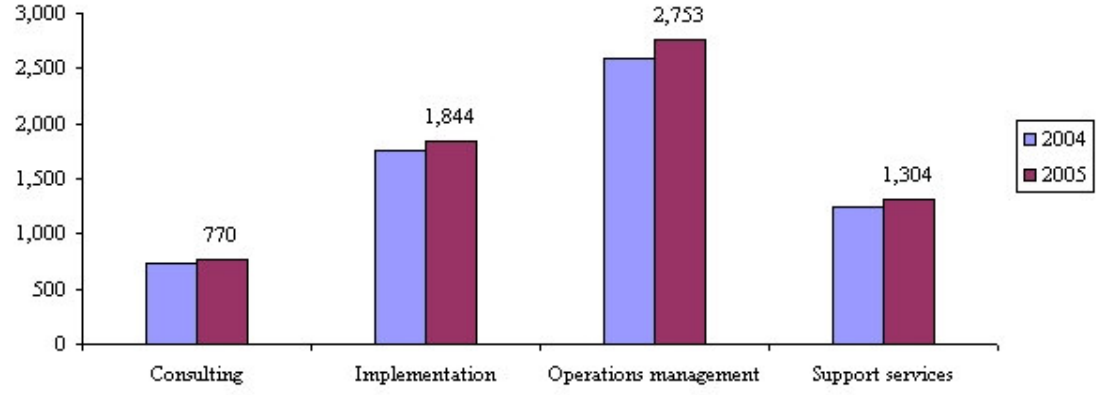


Source: EITO (2004)

Figure 3.30 shows that the IT services market in the Netherlands will increase to € 6.6 billion in 2005. Compared to 2003, this means a growth of 8.4 percent. Operations management is the largest segment, both in terms of growth (+10.4 percent) and value (€ 2.7 billion). This latter is in contrast to most other EU member states, where implementation is generally the largest segment. In the Netherlands, this is the second largest segment, representing a value of € 1.8 billion in 2005 (+6.9 percent compared to 2003). Other segments are support services (€ 1.3 billion, +7.2 percent) and consulting (0.7 billion, +6.7 percent).

The best opportunities in this segment are offered by desktop and network management, outsourcing, security services (assessments, scans), software maintenance and training, network consulting and integration and all types of Internet and e-commerce related services.

Figure 3.30 IT Services market in the Netherlands, 2004-2005
EUR million



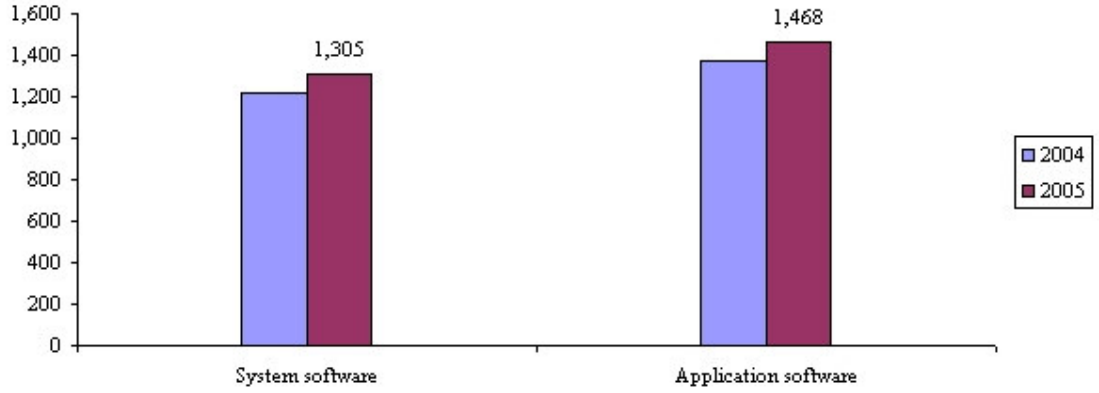
Source: EITO (2004)

3.2.6 Sweden

Figure 3.31 shows the future market for software in Sweden, indicating a total value of € 2.7 billion in 2005, which is an increase of 13.4 percent compared to 2003. Application software is the largest segment, valuing € 1.4 billion in 2005 (+12.7 percent). System software will grow even faster, 14.1 percent, reaching a value of € 1.3 billion in 2005. In general, Swedish users are early adopters of new technology, which makes Sweden a good test market for new IT products.

Traditionally, business systems have been an important part of the Swedish software industry, although the sector is not making large profits at this moment. This development is not favourable for some major suppliers of these business systems, like Intentia, IFS and IBS and Hogia. Better chances lie within niche software markets. Swedish companies have, for example, built up a world leading position in games and gambling software. Other good opportunities can be found in the aerospace industry software support, production critical software and IT security software with biometrics. Other strong segments are software for wireless applications, intelligent home communications and applications for the health-, process control-, automotive (i.e. telematics)- and forestry sectors.

Figure 3.31 Software market in Sweden, 2004-2005
EUR million

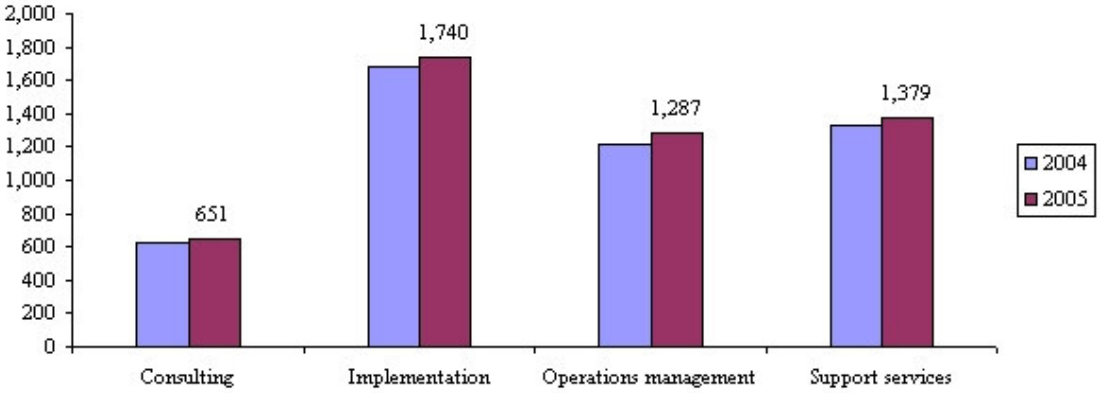


Source: EITO (2004)

According to figure 3.32, the Swedish market for IT services will reach a value of € 5.0 billion in 2005. This would mean a below EU-average growth of 6.6 percent compared to 2003. Operations management is the main cause for this increase, growing 11.2 percent to € 1.2 billion in 2005. Other segments are implementation, the largest one, with a value of € 1.7 billion (+4.3 percent), support services (€ 1.3 billion, + 5.7 percent) and consulting (€ 651 million, +6.3 percent).

A positive development for the industry is that the systems of some organizations are at the end of their life cycle and investments in this field are therefore to be expected shortly. Market research agency IDC estimates that the market situation in Sweden will improve during the second half of 2004. Spending in the services industry, in general, will be 3-6 months behind a general economic recovery.

Figure 3.32 IT Services in Sweden, 2004 - 2005
EUR million

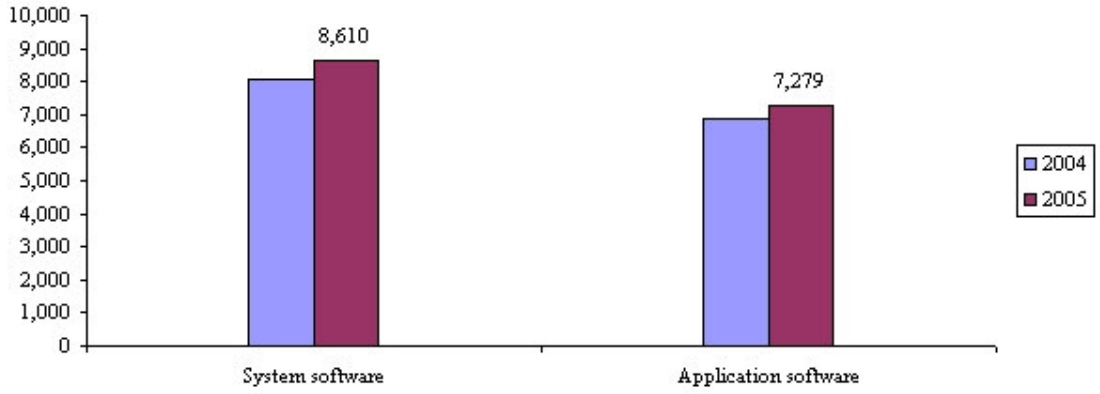


Source: EITO (2004)

3.2.7 United Kingdom

The software market for the years 2004 and 2005 for the UK can be found in figure 3.33. It reveals the total expected market value for 2005, which is€ 15.8 billion in 2005. This value makes the UK the number two software market in the EU. Compared to 2003, the market increases 11.3 percent. This growth figure is brought about by an increase in the demand for system software, 14.3 percent, reaching a value of € 8.6 billion in 2005. The growth in application software is expected to be 7.9 percent, to € 7.2 billion.

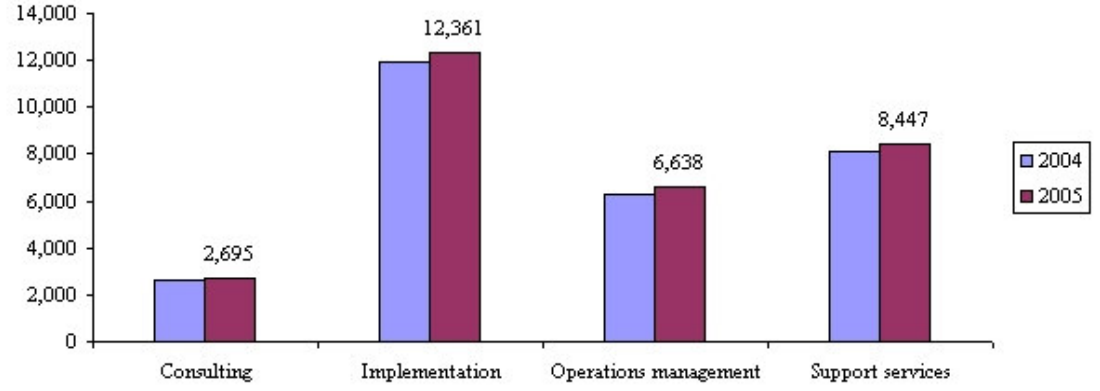
Figure 3.33 Software market in the United Kingdom, 2004-2005
EUR million



Source: EITO (2004)

The IT services market in the UK (figure 3.34) is predicted to remain the number one in the EU, representing a value of € 30.1 billion in 2005. This is an increase of 5.8 percent compared to 2003, mainly caused by a 10.2 percent increase in operations management (total value € 6.6 billion in 2005). Other sectors are expected to show smaller growth rates. Implementation will reach a value of € 1.7 billion in 2005 (+4.3 percent), support services will have a value of € 8.4 billion (+5.5 percent) and consulting will have a value of € 2.6 billion in 2005 (+3.8 percent). Major growth areas in the UK IT services industry include the shift toward services, implementation and customisation of 'out-of-the-box' software, outsourcing and turnkey projects.

Figure 3.34 IT Services in the United Kingdom, 2004 - 2005
EUR million



Source: EITO (2004)

3.2.8 Accession countries Eastern Europe

In this section, the market expectations for the accession countries to the EU from Central and Eastern Europe (CEE) will be described. All data only involve the eight countries from this region that actually joined the EU in May 2004. They could therefore differ from data that cover the whole CEE.

Software market

The growth in the software market in the accession countries is expected to be 26.5 percent for 2005, compared to 2003. The market for system software will grow 25.1 percent to 1.2 billion, while the market for application software will increase 27.2 percent to 1.3 billion in 2005. According to research company Gartner, this growth has two primary reasons. First, the demand for relatively basic software packages in the least developed economies in the CEE region will increase due to the need to comply with corporate governance rules set by the EU, causing a demand for software that supports financial management. Secondly, organisations that already use enterprise resource planning (ERP) software will switch to customer relationship management (CRM) functionalities.

The most important software markets in this segment, according to figure 3.35, will be Poland (total market € 933 million in 2005), the Czech Republic (€ 651 million), Hungary (€ 538 million), Slovakia (€ 166 million) and Slovenia (€ 122 million). Refer to appendix 2 for more detailed data.

The main trends in the software market in this region are:

1) Strong demand for software solutions

This is caused by, among other things, foreign direct investment (FDI) in the manufacturing sector, infrastructure upgrades in the banking sector and greater IT investment in the SME segment.

2) Switch to integrated solutions

A number of mid-market users in CEE are switching from locally developed ERP or basic accounting packages to integrated solutions provided by international vendors.

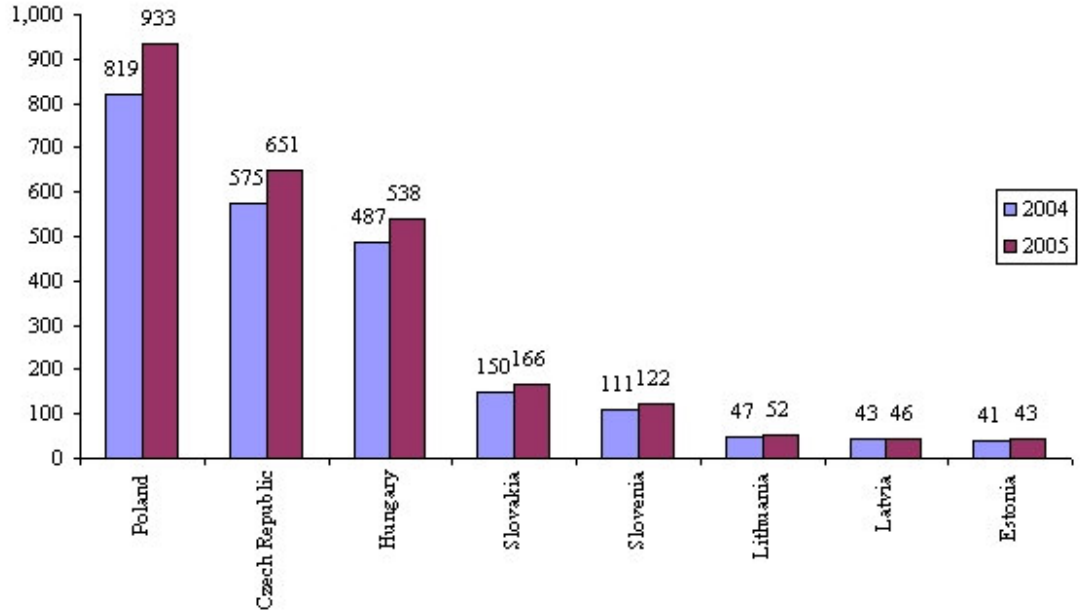
3) Growing awareness of IT security issues

Growing awareness of IT security issues will increase spending on applications for information and transaction security and business continuity. Overall expenditure on such applications is still small, but sales in these segments show very strong growth rates.

4) Increasing importance content and document management

The content and document management segments have become a key area of software investment in CEE. This is especially true in the sectors of government administration, banking and financial services and telecommunications. The accession to the EU will lead to additional investments in such applications as the region's governments launch E-government services.

Figure 3.35 Software market accessing countries Eastern Europe, 2004-2005



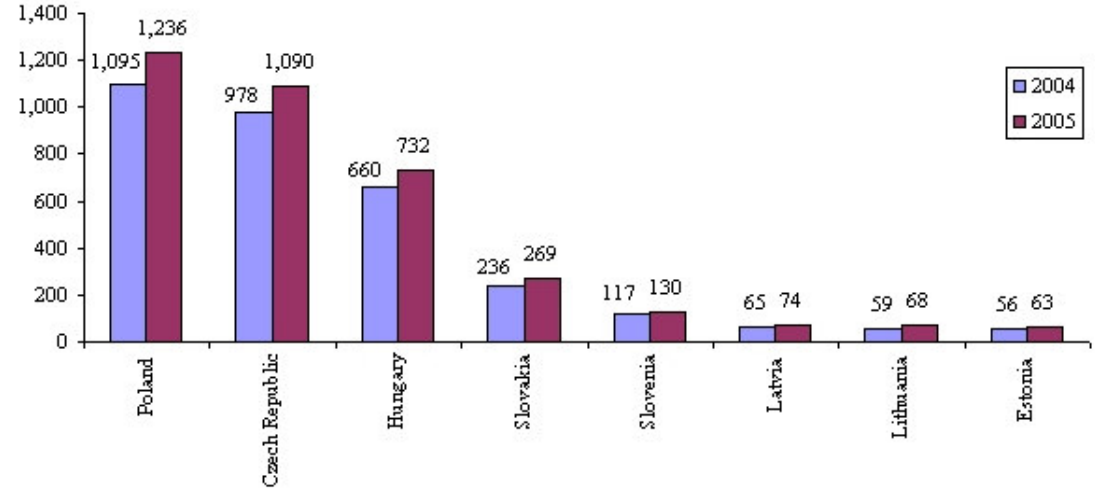
Source: EITO (2004)

IT services

The IT services market in the eight accession countries from the CEE region will grow 24.5 percent in 2005, compared to 2003. The total market will grow to a value of € 3.6 billion in 2005. According to figure 3.36, the largest markets in the CEE region for IT services will be Poland (€ 1,236 million in 2005), the Czech Republic (€ 1,090 million), Hungary (€ 732 million), Slovakia (€ 269 million) and Slovenia (€ 130 million).

The growth in the region differs per country and region. On the one hand there are markets that show signs of maturation with significant spending on services but with rather modest growth rates. Examples of these countries are Hungary and the Czech Republic. On the other hand there are emerging markets with growth rates between 12 and 19 percent per year. Examples are Lithuania and Slovakia. More information about the CEE region with regard to offshore outsourcing can be found in section 6.7.

Figure 3.36 IT services accessing countries Eastern Europe, 2004 – 2005



Source: EITO (2004)

3.3 Internet

This medium is very important in this industry and will be even more so in the future. Many of the current issues faced by the software industry are directly related to the Internet and the possibilities it offers. Some developments in the applications of the Internet in the software and IT services industry are:

- New forms of software delivery

Examples: downloading, software services enabled by the Internet, software updates.

- Concepts related to Application Service Providing (ASP)

Examples: the role of web browsers in using software; users will be billed according to usage.

- An increasing demand for outsourcing ICT services.

The outsourcing industry has also seen an increasing demand recently. First of all, the management strategy of focusing on core competencies has led many companies to outsource those parts of their IT infrastructure that they consider not to be of strategic importance. Second, the Internet has decreased the costs of some forms of outsourcing, especially for smaller projects. More information on outsourcing is included in chapter 5.

- The spread of Free and Open Source Software (FOSS)

FOSS became popular through operating systems such as Linux and through Internet software such as the Apache web server. Open Source software can be read, compiled and modified by everybody, subject to certain conditions. It is usually made available for free via the Internet and coded by groups of volunteers, who co-ordinate their activities over the Internet.

The UNCTAD has published a study 'E-commerce and Development'. It states that 'FOSS is here to stay for the foreseeable future' as it has some advantages:
1) FOSS provides, by definition, an improved approach to security issues and to the need for public and open standards.
2) The increasing adoption of FOSS in the developed world is creating export opportunities for customized software from IT industries in developing countries.

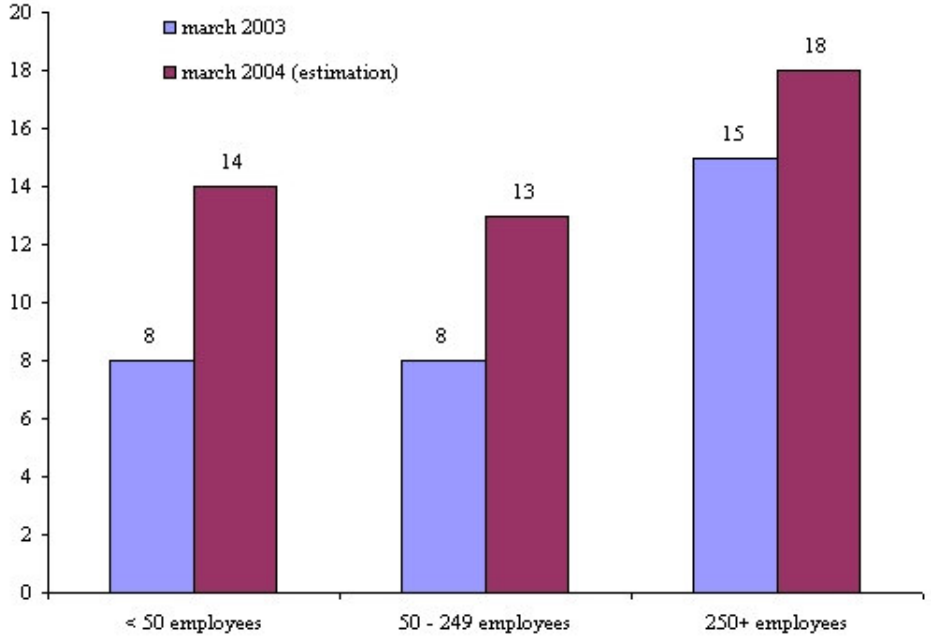
- B2B e-marketplaces

E-marketplaces can be described as virtual online markets where buyers, suppliers, distributors and sellers find and exchange information, conduct trade, and collaborate with each other through a collection of information portals, trading exchanges and collaboration tools. E-marketplaces could be e-commerce only (when they offer only transaction facilities), but can also be e-business tools when solutions for integration with other internal processes are provided. A business-to-business e-marketplace:

- is open to several buyers and several sellers
- has a focus on business to business or business to government
- is a trading platform, while the e-marketplace itself does not sell nor buy goods or services traded on the platform
- has at least one trading function

The use of online e-marketplaces is above average in the ICT services industry (refer figure 3.37 as well). Eight percent of companies in the ICT services sector said they used e-marketplaces in March 2003. This was already four times as many as on average. An additional six percent planned to do so by March 2004. Large companies are more active in marketplaces than small and medium-sized companies. Of companies with 250 employees or more, 18 percent stated to be using e-marketplaces by March 2004.

Figure 3.37 Participation in B2B e-marketplaces ICT services, March 2003 and March 2004
In %



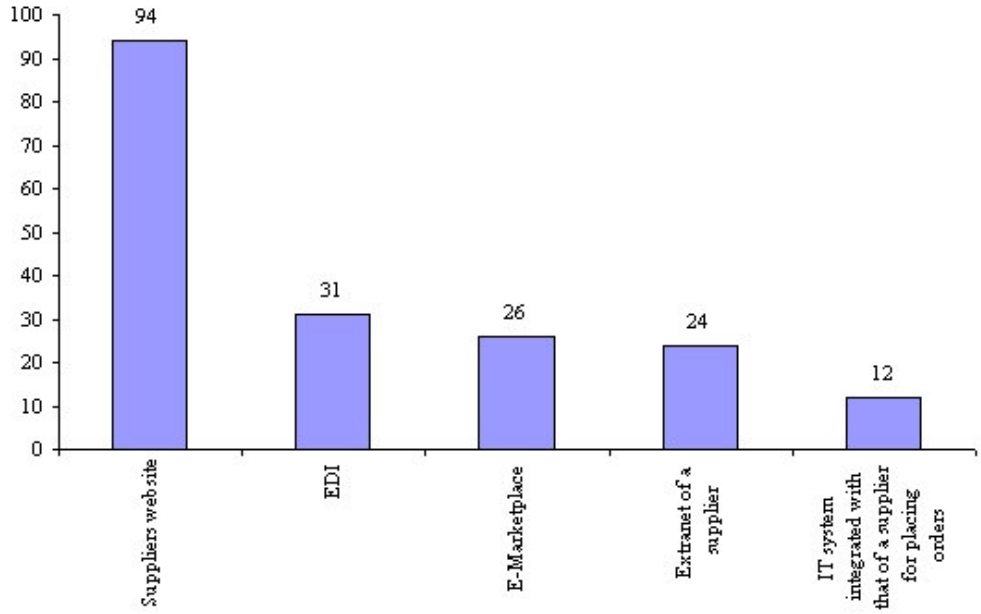
Source: e-Business W@tch (2003)

In the EU, participation in e-marketplaces in March 2004 was highest among companies in Germany (18 percent), France (18 percent), Spain (16 percent) and Italy (13 percent).

There are many marketplaces, industry- and country specific, fee based or open to everyone. In the IT services sector, the most interesting market places would feature the following areas:
1) Software-related marketplaces for expert knowledge and software programming services
2) Intermediaries for software and research
3) Purchasing
4) Online purchasing channels

Of these four, the most important one is the online purchasing channel. Regardless of the size of the company, 94 percent of the ICT services firms that purchase online, do so on a supplier's website, compared to 83 percent over all sectors. According to figure 3.38, 31 percent of all companies use EDI for online purchases and 26 percent purchase online through e-marketplaces. Significant differences in size exist, though, when it comes to more integrated purchasing solutions. For example, only 24 percent of the small but 57 percent of the large companies purchases online via the extranet of a supplier. Similarly, only 12 percent of the small but 43 percent of the large companies has their IT system integrated with that of a supplier for the purpose of placing orders. More information on marketplaces within the IT services industry has been included in section 14.5.3.

Figure 3.38 ICT services: Channels used for purchasing online



Source: e-Business W@tch (2003)

4 PRODUCTION

4.1 Total production

As with imports statistics, detailed production data are very hard to provide on software and IT services. Only some rough indications can be given. The main goal remains to give the exporters from developing countries an idea of the local capacities. Table 4.1 contains data on the production of computer software, showing that France is the number one in terms of production, followed by Germany. It must be said that data from the UK are not available.

Table 4.1 Estimated production computer software, 2001-2003
EUR million

Country	2001	2002	2003
Belgium	942	880	850
France	35,000	35,158	na
Germany	12,124	11,579	9,705
Netherlands	2,161	2,189	1,969
Sweden	2,629	2,865	na
United Kingdom	na	na	na

Source: www.emich.edu

Table 4.2 provides information on the local sales of computer services for the EU as a whole and for each of the six highlighted countries. These sales are exclusive of the sales by US companies, which do have a large market position in each country. Therefore, these figures give a relatively 'clean' image of the local sales.

Table 4.2 Estimated total local sales computer services, 2001-2003*
EUR million

Country	2001	2002	2003
Belgium	1,949	1,626	1,611
France	na	na	na
Germany	12,483	11,196	9,784
Netherlands	3,228	3,089	2,673
Sweden	3,793	3,842	na
United Kingdom	na	na	na

Source: www.emich.edu
* sales minus sales by US firms

4.2 Production per EU country

This section contains a short description on the structure of the local software and IT services sector for each of the highlighted EU countries. This includes a selection of major companies for each of the sectors. This selection serves two purposes for exporters from developing countries: on the one hand it gives an indication of the competition in the EU member states, on the other hand these local companies could be potential business partners, as they might be looking for partners to outsource some services.

4.2.1 Belgium

Belgium does not have global software developers, but it has about 120 niche players that develop software, specialising in vertical markets of technical software (network security, technical software). A few of them are international players, e.g. Arinso, Capco, Callataÿ & Wouters, Real Software and Ubizen. Distributors, developers and systems integrators are expected to customize their product to a

certain degree. Many of them have developed products for niche markets such as software for banking, logistics and human resource management.

Because of insufficient financial resources, many Belgian software houses have been taken over. The country has an extensive network of highly qualified packaged computer product distributors, like for example Ingram Micro and Tech Data. Types of distributors range from those with large dealer networks to small, value-added resellers who focus on a specialized market. Other utilized channels of distribution are specialized computer shops and mail-order houses. Most Belgian software and computer service (SCS) companies tend to specialise in niches like utilities, HRM software, ERP integration, retailing projects, and the public sector, and will often need to enter into alliances. Table 4.3 contains a selection of major Belgian software companies, while table 4.4 gives an overview of some major Belgian SCS companies.

Table 4.3 Major Belgian software companies

Company	Main services	Internet
Artwork Systems	Pre-press graphic software	www.artwork-systems.be
AXI	Systems integrator (Lotus Notes and ERP)	www.axi.be
Bizibit	CRM Software	www.bizibit.be
Callatay & Wouters	Accounting software (banking)	www.c-w.be
Compex – IT Plant	Order processing software (manufacturing)	www.compex.be
Computer Associates	Enterprise management, data storage, BI/portal software	www.ca.com
IBS	Systems integrator (Lotus Notes and ERP)	www.ibsbe.be
IRIS	Document management; text recognition	http://www.iris-software.com/
Isabel	Multi-bank payment platform for business applications	www.isabel.be
Keyware	Access control software and security	www.keyware.com
LMS International	Test / analysis software automotive industry	www.lmsintl.com
Microsoft	Operating systems/ tools, end-user application, ERP	www.microsoft.be
Oracle Belgium	Database and ERP software	www.oracle.com/be
SAP Belgium	Business solutions (ERP)	www.sap.com/belux
Selligent	Software management (CRM)	www.selligent.be
Tele Atlas	Mapping and navigation software	www.teleatlas.be
Vasco	Transaction/network security software (financial sector)	www.vasco.com

Source: our own internet research

Table 4.4 Major Belgian software and computer service companies

Company	Main services	Internet
Accenture	International IT consultants	www.accenture.com
Banksys	Card transactions clearing house, supplier of POS terminals, network operators	www.banksys.be
CGEY	International IT consultants	www.cgey.be
Compaq	Micro computers, printer software	www.hp.be
Dolemn Computer	Retailers	www.dolmen.be
Econocom Group	Leading corporate hardware and VAR	www.econocom.com
EDS	International IT consultants	www.eds.be
IBM	Hardware, software and services	www.ibm.com/be
Siemens Business Services	Systems Integrators	www.siemens.be/ic
Systemat	Corporate VAR and service company, also accounting software developer	www.systemat.com
Real Software	Business applications, ERP systems integrators	www.realsoftware.com

Source: our own internet research

More information
Agoria - http://www.agoria.be
- Trade association. Select the memberlist and use the advanced search option.

Computable 100 - http://www.computable.nl/computable100/
Computable Consultancy Guide - http://www.computable.nl/adviseursgids /
Europages - www.europages.com
- Select industry, activity and size of potential business partners.

4.2.2 France

There is a fierce competition among the more than 6,000 French companies specializing in software services. 2,000 of these firms have 10 employees or more. The key activities in the French software and IT market are:

- Engineering and integration (23.5 percent)
- Software development and technical assistance (22.5 percent)
- Packaged software (21.5 percent)
- Facilities management and on-line services (18 percent)
- Consulting services (7 percent)
- Training services (2 percent) and
- Third-party maintenance (2 percent).

French software developers have a good reputation in various high-tech fields like defence, aeronautics, telecommunications and nuclear power generation. However, they are not as good in designing packaged software: most software purchased in France is from foreign origin, usually the U.S. Table 4.5, 4.6 and 4.7 contain an overview of major French software companies, major French software and computer service companies and giants that offer all types of products and services.

Table 4.5 Major French software companies

Company	Main services	Internet
Business Objects	Many types	www.businessobjects.com
CCMX	Many types	www.ccmx.fr
CEGID	Advanced Progs	www.cegid.fr
Computer Associates	Advanced Progs	www.ca.com
Dassault Systems	Advanced Programming	www.dassault.fr
Microsoft France	OS & Desktop	www.microsft.com/france
Oracle France	Database	www.oracle.fr
Sage	Financial	www.sage.fr
Sap France	ERP	www.sap.fr
Siebel Systems	Xml / Crm	www.siebel.com.fr

Source: our own internet research

Table 4.6 Major French software and computer service companies

Company	Internet
Econocom	www.econocom.fr
Sopra	www.sopragroup.com
Steria	www.steria.comsdfsdf
Transiciel	www.transiciel.com
Unilog	www.unilog.com

Source: our own internet research

Table 4.7 Giants with all types of products and services

Company	Internet
Accenture	www.accenture.com
Ares	www.ares.fr
Atos	www.astos.fr
Cap Gemini	www.capgemini.fr
ECS	www.ecs.fr
EDS	www.eds.fr
IBM France	www.ibm.com/fr
Schlumberger	www.schlumberger.com
Siemens I and C	www.siemens.fr
Thales	www.thalesgroup.com

Source: our own internet research

More specific information:
Europages - www.europages.com
Syntec Informatique - www.syntec-informatique.fr

4.2.3 Germany

As in other sectors, German firms merge as well or acquire other software producers. This has led to consolidation in the software business; ten major suppliers control 30 per cent of the SCS market. Over 60 percent of sales is realized by small-and-medium sized suppliers, most of which target the manufacturing industry, leaving opportunities in the financial and other services industry. The major suppliers, like SAP and EDS, are extending their product range to focus on mid-sized customers. Experts estimate that approximately 80 percent of software products in Germany is imported, mainly from the United States.

The computer software market in Germany is very competitive and is dominated by large, multi-service suppliers. This offers opportunities for smaller companies that are highly specialized. The top ten suppliers hold, as in the software industry, approximately 30 percent of the market, mainly with sales of standard software. Medium-sized vendors account for more than 60 percent of total sales. Table 4.8 provides a selection of German suppliers of computer & IT services, while table 4.9 gives a top 10 of German computer software companies.

Table 4.8 Major German suppliers computer & IT services

Company	Internet
Accenture	www.andersberaten.com
CAP Gemini Ernst & Young	www.de.cgeyc.com
CSC Ploenzke	www.cscploenzke.com
Gedas	www.gedas.net
PwC	www.pwcglobal.com/de

Source: our own internet research

Approximately 60 percent of the IT-services market is attributed to German subsidiaries of U.S. firms. This is because of the presence of German local competitors. U.S. firms are often perceived as having more experience in the IT environment and, therefore, have a head start in the business.

Table 4.9 Top 10 German computer software companies

Company	Internet
CA Computer Assoc	www.ca.com/offices/germany/english
Ixos Software	www.ixos.com/local/de
Mensch u. Maschine Soft	www.mum.de
Microsoft	www.microsoft.de
Nemetschek AG	www.nemetschek.de
Oracle	www.oracle.com/de
Sap	www.sap.com/germany
SAS Institute	www.sas.de
SER Systeme AG	www.ser.de
Software AG	www.softwareag.com

Source: our own internet research

More information
Bitkom - http://www.bitkom.org/
- Select 'mitgliederliste' for an overview of companies

BI Special: Business Intelligence- http://www.isis-bi.de/
Europages - www.europages.com
ISIS Datenbanken - http://www.software-marktplatz.de/germantop500/index_isis.php
- 10.000 IT firms and software products
- Top 500 IT firms included

VSI - Association of the German Software industry- http://www.vsi.de/
- Select 'mitglieder'

4.2.4 Sweden

There are approximately 500 software companies in the Swedish SCS sector, representing an estimated turnover of € 62 billion in 2002. Among these companies are suppliers of large business systems like Intentia, IFS and IBS. Hogia is the leading supplier of small to medium sized systems. As described in section 3.2.6, Swedish companies are well reputed and leading in some niche markets, lsuch as the entertainment industry, aerospace industry software support, production critical software and IT security software with biometrics. They also have good positions in segments like software for wireless applications, intelligent home communications, applications for the health, process control, automotive (i.e. telematics) and forestry sectors. The Swedish industry has but a small domestic market, which stresses the importance of adopting the newest technologies in order to be internationally competitive Table 4.10 provides a list of the major software companies in Sweden, followed by table 4.11 with a selection of major SCS companies in Sweden.

Table 4.10 Major Swedish software companies

Company	Main services	Internet
IBS	Business systems	www.ibs.se
IFS	Business systems	www.ifsworld.com
Intentia	Business systems	www.intentia.se
OM	Financial systems solutions	www.om.se
Industri-Matematik	Distribution-intensive operations, supply-chain solutions	www.im.se
ProAct IT Group	Consultants, systems integrators	www.proact.se
TAC Holding	Software for process control	www.tac.se
Technology Nexus	Storage, recovery, security, networks.	www.nexus.se
Telelogic	Solutions software development	www.telelogic.com
TietoEnator	Overall supplier	www.tietoenator.se

Source: own internet research

Table 4.11 Major Swedish computer service companies

Company	Services	Internet
Cap Gemini Ernst & Young	Leading management consultants	www.cgey.se
Cell Networks	IT Solutions	www.cellnetwork.se
IBM	Overall supplier	www.ibm.com
Icon Medialab	IT Consultants, support, security, data storage, server solutions	www.dimension.se
Sigma	IT consultants E-Commerce, E-Learning, information design	www.sigma.se
Teleca	Consultants providing IT Services	www.teleca.se
TietoEnator	Major IT consultants	www.tietoenator.se
WM-data	Leading Nordic provider of design and IT-related Services	www.wmdata.se

Source: own internet research

More information
Europages - www.europages.com
IT-Företagen - http://www.itforetagen.se
- Select 'member'

4.2.5 Netherlands

The Netherlands has quite a number of software and services firms, varying from very small, often serving niche markets, to very large firms. There are only a few large software companies:

- Baan (now owned by British Invensys), specializing in Enterprise Resource Planning (ERP) software products
- Exact, for e-business and ERP/financial software.

An estimated 65-70 percent of software products are imported, mostly from the United States. Other suppliers are European software producers in Germany, the United Kingdom and France. In the business software market, Windows is the standard. However, some smaller companies start using Linux on a small scale. UNIX is the most commonly used operating system for servers, its market share is estimated at 10-15 percent and is increasing. The Dutch government has announced a special programme to promote the use of Open Standards and Open Source Software within the government.

There is a large number of service companies present in the country, varying in size from very small to very large and ranging from hardware vendors to management consultants. Several companies have successfully entered the market with services related to the Internet and E-commerce. An example is the fast growing area of web hosting services. Primary end-users for these services are smaller companies, as well as educational and government institutions with less than 100 employees. The top five companies, as displayed in table 4.12, are mostly service providers, based in the Netherlands, holding about 30 percent of the market.

Table 4.12 Major Dutch computer service companies

Company	Internet
Atos-Origin,	www.nl.atosorigin.com
Cap Gemini/Ernst&Young	www.nl.capgemini.com
Getronics	www.getronics.nl
LogicaCMG	www.logicmg.com
PinkRoccade	www.pinkroccade.com

Source: our own internet research

More information
Computable 100 - http://www.computable.nl/computable100/
Computable Consultancy Guide - http://www.computable.nl/adviseursgids /
Europages - www.europages.com
- Select industry, activity and size of potential business partners.

4.2.6 United Kingdom

The UK software sector is highly concentrated and the top twenty companies account for an important market share. Beside these large companies, about 130,000 smaller software companies operate the market. The top players in the UK software and services market have been included in table 4.13. In the market, European and US companies are well represented, both software companies and second-tier providers. Many companies are located in a forty-mile long corridor extending from London in a westerly direction along the M4 motorway. There are many software engineers present in the UK market, trained by the British Universities. All of them look for a job or start their own company, seeking some niche market opportunities.

Table 4.13 Major UK software and services companies

Company	Main services	Internet
Accenture	Project services	www.accenture.org.uk
Capita	Outsourcing	www.capita.co.uk
Computacenter	Support services	www.computacenter.com
Computer Associates	Packaged software,	www.ca.com/offices/uk
CSC	Support services	www.country.csc.com
EDS	Outsourcing	www.eds.co.uk
Fujitsu Services	Project services, support services	www.uk.fujitsu.com
HP	Support services	www.hp.co.uk
IBM	Packaged software, project services	www.ibm.co.uk
LogicaCMG	Project services	www.logicacmg.com.uk
Microsoft	Packaged software	www.microsoft.com/uk
Oracle	Packaged software	www.oracle.co.uk
SAP	Packaged software	www.sap.co.uk
Sun	Support services	www.sun.co.uk
Synstar	Support services	www.synstar.co.uk

Source: our own internet research

For possibilities of finding a foreign partner is the UK Trade Invest partnering service, refer to the websites mentioned below.

More information
Europages - www.europages.com
- Select industry, activity and size of potential business partners.

Intellect - http://www.intellectuk.org/
- Select 'member database'

Kelleysearch - http://www.kellysearch.com/

UK Trade Invest - The Global Partnerships
http://www.invest.uktradeinvest.gov.uk/wweurope/site_ire/uploads/pdfs/GP%20Harnessing.pdf
- UK programme to help overseas organisations of any size to find partners, especially suited to smaller organizations operating in a technology or knowledge intensive sector.

5 IMPORTS / OUTSOURCING

The major part of this chapter is about outsourcing. As mentioned in chapter 1 , reliable and recent statistics on imports of IT services are hardly available, although some indications are given in section 5.1. As outsourcing is in fact a form of importing services from foreign countries, as EU companies 'buy' services in foreign countries, this topic is dealt with in sections 5.2 up to and including 5.5.

5.1 Total imports

By using the balance of payments of countries, it is possible to get a very rough indication on the imports of IT services. According to table 5.1, Germany was by far the largest importer of IT services from non-EU countries, representing a value of € 3,060 millions in 2002. When intra-EU trade is taken into account as well, the total imports of IT services amounted over € 6.3 billion in 2002. The major part of the extra-EU imports is from the USA. The category that remains is all other countries except the USA, Canada and Japan. This includes all developing countries (DC), but other countries as well. These group countries supplied € 1,151 millions to Germany in 2002. Second importer of IT services, according this table, is the UK, accounting for € 186 million in 2002. It is followed by Sweden (€ 136 million), Belgium (€ 103 million), the Netherlands (€ 79 million in 2000) and France (€ 24 million in 2000).

Table 5.1 Imports computer services in six highlighted EU countries, 2002
EUR million

	Imports from					
Country	**intra EU**	**extra EU**	**USA**	**Canada**	**Japan**	**Others (DC incl)**
Belgium	888	530	421	2	4	103
Germany	3,276	3,060	1,751	45	113	1,151
France*	248	404	376	3	1	24
Netherlands*	589	316	225	7	5	79
Sweden	511	230	87	7	na	136
United Kingdom	973	561	314	15	45	186

Source: balances of payments member states, Eurostat (May 2004)
* Note: figures from 2000

Table 5.2 gives a rough indication on the imports of royalties and license fees by the six highlighted countries in 2002. It gives an idea of the market for software and services in these member states. The UK was the largest importer of royalties and license fees, which amounted to € 6.0 billion in total in 2002. Non-EU countries accounted for € 5.2 billion. Germany was the second largest importer, representing a total of € 5.3 billion, of which € 3.7 billion came from non-EU countries. The major part of these imports is, once again, from the USA (€ 2.2 billion). The group that includes developing countries supplied € 1.2 billion to Germany in 2002. The Netherlands imported for a value of € 2.7 billion, France € 2.0 billion, Sweden 0.9 billion and Belgium 0.8 billion in 2002.

Table 5.2 Imports royalties in six highlighted EU countries, 2002
EUR million

	Imports from					
Country	**intra EU**	**extra EU**	**USA**	**Canada**	**Japan**	**Others (DC incl)**
Belgium	333	487	380	1	25	81
Germany	1,625	3,766	2,292	75	174	1,225
France	1,063	998	632	15	17	334
Netherlands	937	1,798	826	20	35	917
Sweden	524	425	312	9	39	65
United Kingdom	1,814	5,246	na	na	na	na

Source: balances of payments member states, Eurostat (May 2004)

5.2 EU outsourcing market

As with import statistics, it is just as difficult to give an exact size of the market for outsourcing. There are a number of sources that give estimations. Almost all sources agree: the European outsourcing market is booming. Even more so, it is about to equal the large market in the USA. According to market research organization TPI, the value of European outsourcing contracts signed in 2003 reached a value of € 26.4 billion, increasing a spectacular 67 percent from € 15.8 billion in 2002. In this same period, the market in the USA dropped from € 45 billion to € 38 billion. A reason could be that European companies are turning to outsourcing as a way of controlling costs; while total IT spending remains low. The number of contracts signed in Europe that was worth more than € 1 billion more than doubled as well. In 2003, there were nine of these deals, worth € 13.3 billion, compared to only four in 2002, valued at € 6 billion.

In Western Europe, the UK is the largest and most mature market, representing 35 percent of the total European outsourcing market in 2004. Germany/Switzerland/Austria account for 22.8 percent and France for 12.8 percent. Italy and the Nordic regions represent 7.7 percent and 7.2 percent respectively, while Spain and Portugal have 4.6 percent of the total market. Overall, spending in the IT services market in Western Europe is expected to be unchanged in 2004 compared with 2003.

This section also discusses the outsourcing situation for each of the EU member states. It will give a general idea of EU-opinions and developments in outsourcing, e.g. IT skills shortage, outsourcing responsibilities and the main benefits and disadvantages of outsourcing.

2003 IT Toolbox Outsourcing Survey

The 2003 IT Toolbox Outsourcing Survey (http://www.ittoolbox.com) is an extensive worldwide survey on outsourcing. For the EU part of the study, 100 managers of IT companies were interviewed. They answered, for one, the following questions:

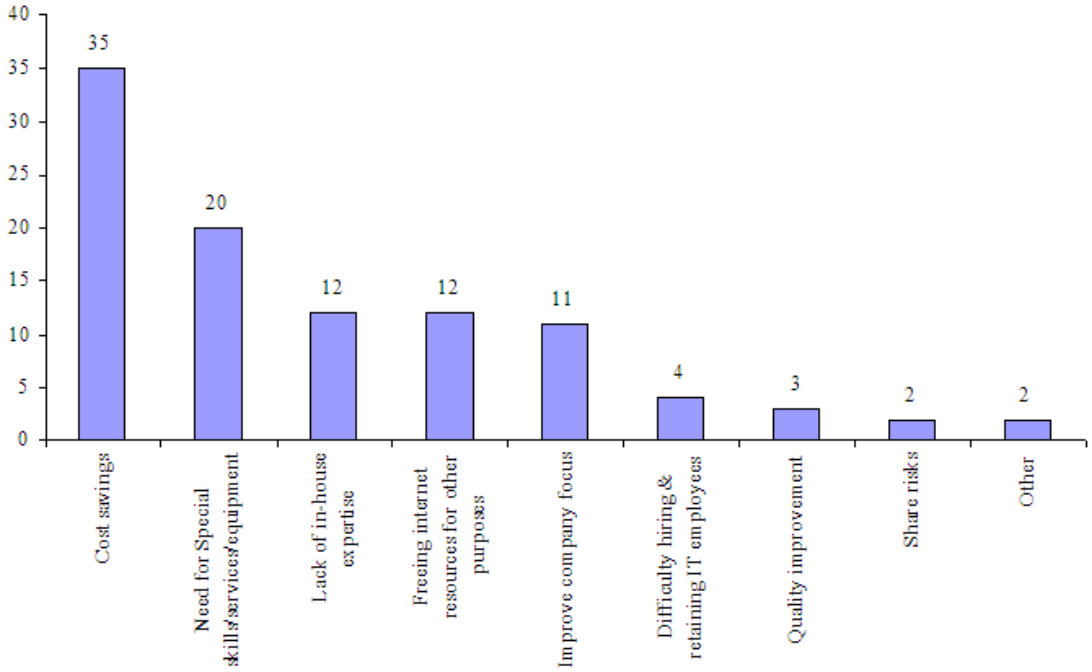
- What are your strategic reasons for outsourcing?
- What size is your company?
- To which countries does your company outsource?
- Which technology functions does your company plan to outsource the next two years?
- What criteria does your company use in selecting an outsourcing provider?

The results stress the growing trend among companies to outsource some or even all of their IT functions, often selecting providers abroad. The survey reveals as well that outsourcing will increase even more in the future.

Advantages and disadvantages of outsourcing

Figure 5.1 shows the main reasons for outsourcing in European companies. The most important ones include cost savings (35 percent), need for specialized skills (20 percent), lack of in-house expertise and freeing internet resources for other purposes (12 percent). More reasons to choose outsourcing are discussed in section 8.3. In contrast to all the advantages, according to the Pressure Point Index (PPI III, 2003) there are some mixed feelings on outsourcing as well. 56 percent of EU companies feel it is difficult to control large outsourcing contracts, 33 percent are concerned about the danger of losing intellectual property through outsourcing and 11 percent of EU companies see outsourcing as a threat to job security.

Figure 5.1 Reasons outsourcing EU companies (2003)

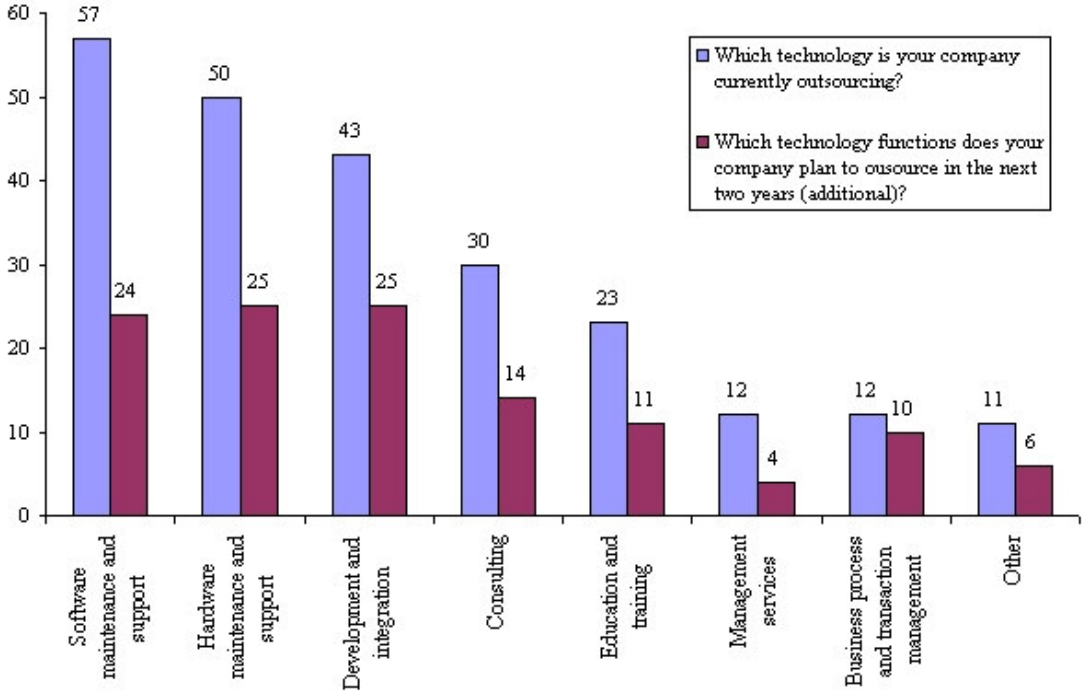


Source: IT Toolbox, 2003

Outsourced services

Among the most important services that EU companies outsourced in 2003 were software maintenance and support (57 percent), hardware maintenance and support (50 percent), and development and integration (43 percent). More details are found in figure 5.2. It includes expectations for the future as well. When asked which services EU companies plan to outsource additionally, another 24 percent say to start outsourcing software maintenance and support as well. Other services that companies plan to outsource beside the actual services are hardware maintenance and support (25 percent), and development and integration (25 percent). Services are outsourced to e.g. India (20 percent), the UK (8 percent), USA (8 percent), Asia (7 percent) and Africa (3 percent).

Figure 5.2 Outsourced technology functions in the EU, 2003 and within next two years

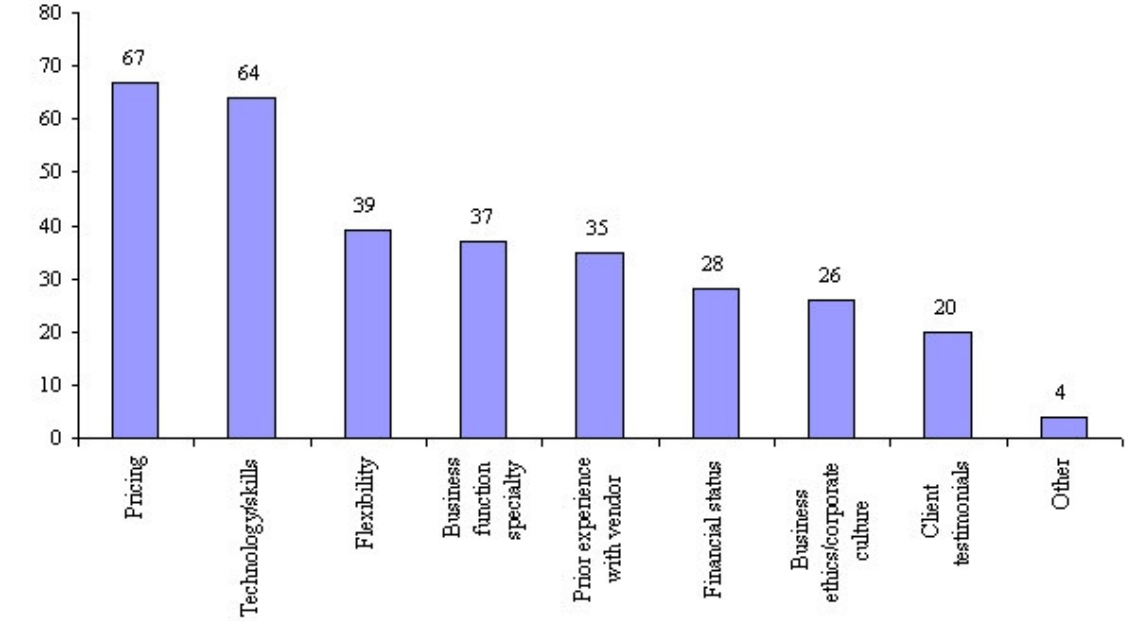


Source: IT Toolbox, 2003

Selection process

Figure 5.3 makes clear what demands EU companies have with regard to outsourcing. The price is the most important criterion (67 percent), as are technology and skills (64 percent). Flexibility (39 percent), business function specialty (37 percent) and experience with the vendor (35 percent) are important too.

Figure 5.3 Selection criteria

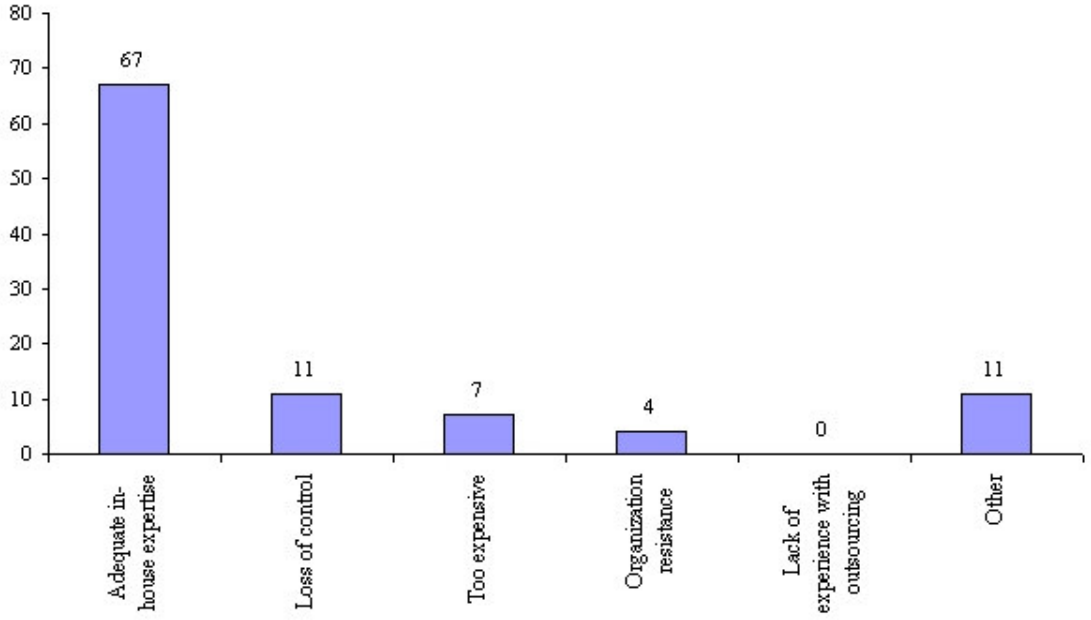


Source: IT Toolbox, 2003

European companies that do NOT outsource

European companies that do not outsource are generally smaller companies, as 54 percent have fewer than 100 employees. Figure 5.4 shows the most important reasons why European companies choose not to outsource. 67 percent claim to have sufficient in-house experience at their disposal, which is the most important reason by far. 11 percent fear the lack of control and 7 percent do not have sufficient funds available. The larger part has only a small annual IT budget: 35 percent have less than € 100,000 available.

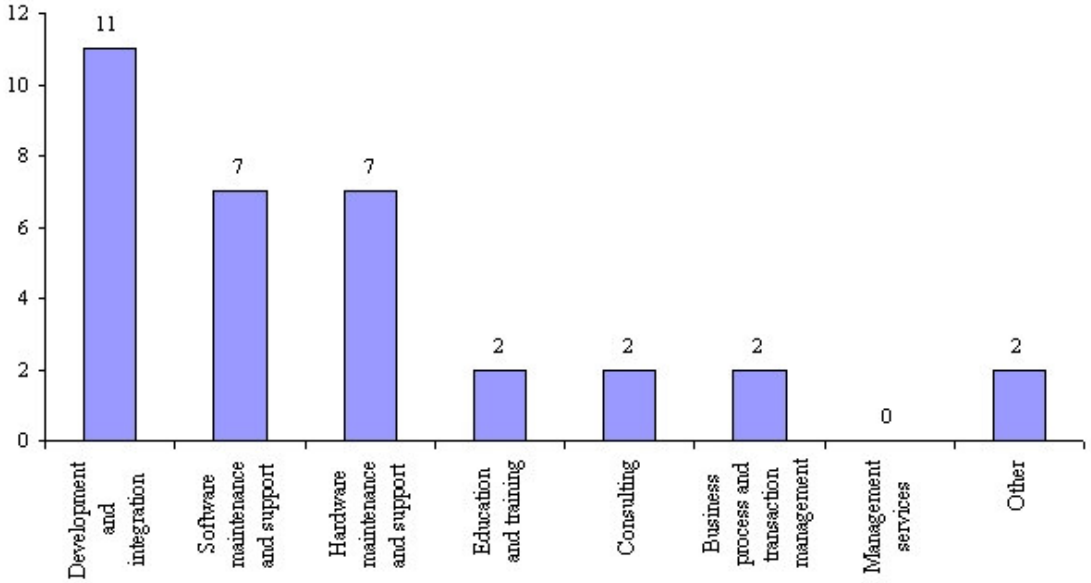
Figure 5.4 Reason for not outsourcing (2003)



Source: IT Toolbox

It is interesting is to analyze what technology functions these companies will outsource in the next two years, once they were to decide to switch to outsourcing. Figure 5.5 shows these services would include development and integration (11 percent), software maintenance and support (7 percent), hardware maintenance and support (7 percent). According to the IT Toolbox, criteria that would apply when selecting a foreign provider would include the price (17 percent), technology and skills (17 percent), business function specialty (13 percent), flexibility (11 percent) and client testimonials (11 percent).

Figure 5.5 Outsourced technology functions, 2003 and the next two years



Source: IT Toolbox, 2003

Spending and budgets
The PPI survey shows that IT budgets for 2004 are the same or even lower than 2003 for 71 percent of EU-organisations. IT companies therefore need to spend their budget carefully. According to IT Toolbox, more than 80 percent of the European companies that do outsource, outsources less than 50 percent of their IT function. More than 50 percent of them has an annual IT budget of more than € 1 million.

IT skills shortage
IT directors show mixed feelings on whether there is a skills shortage. 48 percent say 'yes', while 52 percent say 'no'. However, concern over job security is higher than in previous years, with 59 percent admitting this.

5.2.1 Belgium

The PPI survey by Synstar (2003) indicates that the most outsourced service by Belgian companies was infrastructure support and maintenance (38 percent). Other services that are outsourced include user support (21 percent) and IT strategy (16 percent). The most important advantages of outsourcing, according to Belgian companies, include access to skills that are not available in house (41 percent), guaranteed service levels (23 percent) and value for money (20 percent). Some disadvantages are difficulties to control costs and service levels (66 percent) and fear of loss of intellectual property (23 percent). 58 percent of the IT directors believe that there is an IT skills shortage in Belgium. Network management (26 percent) and systems integration (24 percent) are skills that are believed to be are in short supply.

5.2.2 France

According to a survey by SAP AG and Kearney Interactive in September 2003, it is mostly the largest French companies that have had experiences with offshore outsourcing. 36 percent of French IT companies outsourced (some) IT work, of which only four percent used offshore vendors. Responsibilities that were outsourced in 2003 by French companies included primarily infrastructure support and maintenance (41 percent), user support (27 percent) and IT strategy (11 percent). The most important advantages of outsourcing, according to French companies, include access to skills that are not available in house (37 percent), value for money (23 percent) and guaranteed service levels (23 percent). Some disadvantages are difficulties to control costs and service levels (55 percent) and fear of loss of intellectual property (37 percent).

In 2003, 56 percent of French IT directors agreed that there is an IT skills shortage. Skills in short supply included IT business strategy (26 percent), network management (26 percent) and systems integration (19 percent).

5.2.3 Germany

In 2003, the total outsourcing market in Germany was worth around € 7.0 billion. This will increase 143 percent to € 10.0 billion in 2008, according to Jürgen Schaaf of Deutsche Bank Research. Especially the banking and insurance companies are about to increase their demand, as they are focusing on their core business.

Outsourcing in banking sector

The outsourcing market in the banking sector is still at a relatively lower level than in the industrial sectors. However, banks are more and more looking to cut fixed costs and try to focus on core competencies. As a consequence, banks are expected to leave more IT services to third parties in the future, offering opportunities for outsourcing providers. Some market research companies expect growth rates of around 20 percent in this segment in the period 2003-2006. In 2002, one of the largest outsourcing deals was completed between Deutsche Bank and IBM. Another deal with Commerzbank is currently under discussion. This potential deal could set a signal in the entire banking industry.

Opportunities in Application-Management

Apart from BPO, Application-Management (AM) is expected to be one of the major engines of outsourcing in Germany. AM includes both the whole life cycle of the application process, and the development of an application. Consultancy organization IDC expects an annual growth rate of 12.8 percent, increasing to € 969 million in 2007. Another consultancy organization, Pierre Audoin Consultants (PAC), even predicts a growth of 20 to 30 percent.

The most outsourced responsibilities in 2003 in Germany were infrastructure support and maintenance (44 percent), user support (17 percent) and staff management (15 percent). IT strategy was outsourced by only 2 percent of German companies. The most important reasons for outsourcing in Germany are the possibility to focus on jobs in the company (31 percent), guaranteed service levels (24 percent) and access to specialized skills that were not available in their own company. Some disadvantages are difficulties to control costs and service levels (31 percent) and fear of loss of intellectual property (41 percent). 37 percent of the IT directors in Germany share the opinion that there is an IT skills shortage in the country. Systems integration (43 percent), network management (23 percent) and application development (16 percent) are believed to be in short supply.

More information

Branchenbuch Outsourcing Deutschland - http://www.way2business.de/b8652

- German outsourcing companies

Archiv Industrienet - http://archiv.industrienet.de

- Archive trade magazines in IT industry. Very powerful, but in German language.

5.2.4 Netherlands

An estimation of the Dutch outsourcing market amounts to € 100 million. About 5,000 IT employees from developing countries are working for about 200 Dutch companies. This number will grow in the future. The large companies will outsource more projects and the small and medium sized companies will start with outsourcing. Companies like Getronics, ING Group, KPN Telecom, KLM, Baan and Phillips outsource much.

Companies in The Netherlands have been using foreign IT-suppliers for more than 20 years already. India is the market leader by far and is very successful as an outsourcing services provider. More than 200 Dutch organisations have had software projects executed in this country. It is estimated that more than 75 percent of Dutch offshore activities are located in India.

Although India is the most important destination, software orders have also gone to other Asian developing countries, like Pakistan, Bangladesh, Nepal, China, Indonesia and the Philippines. Compared with India, however, these projects are much more limited in size and in number. An important reason is that the IT-sectors of most of these countries are not really recognised (yet) in Holland.

Although Asia is the most important destination region for outsourcing projects, the importance of the Central and Eastern European region is rising as well, as IT companies in e.g. the Czech Republic, Romania, Bulgaria and Russia have already had tens of Dutch clients. Moreover, service providers from Latin-America, North-Africa and the Middle-East are now targeting The Netherlands as well. Table 5.3 has an overview of countries that perform outsourcing projects for Dutch companies.

Table 5.3 Countries with Dutch outsourcing projects

Central and Eastern Europe	Developing countries
Lithuania	Turkey
Latvia	Iran
Czech Republic	Pakistan
Slovakia	India
Hungary	Sri Lanka
Poland	Bangladesh
Romania	Nepal
Bulgaria	Thailand
Yugoslavia	Malaysia
Belarus	Vietnam
Ukraine	North-Korea
	Philippines
	Indonesia
	Egypt
	Lebanon
	Ghana
	South Africa
	Suriname
	Colombia
	China

Source: GPI Consultancy, February 2004

Opportunities outsourcing
IT companies in The Netherlands are also expected to turn more and more to external resources. In 2004, most IT budgets of large companies will be cut slightly compared to 2003, although no significant changes are expected. This is supported by a research by Giarte, based on 160 decision makers, which states that internal IT departments of companies will continue decreasing in size. Furthermore, Dutch companies will strive for protection of their Return on Investment (ROI) and added value of IT, increasing efficiency and lower costs. (Off shore) outsourcing fits very well in this and could help reach these objectives. The growing demand for external services and outsourcing of ICT activities in particular is strongest in financial organizations, the telecommunications industry, central government, Dutch multinationals and the public utility and healthcare sectors.

The competition in the market is increasing, as mergers continue to take place. There is a trend not to place all outsourced activities in the hands of one services company, but to use various service providers for different tasks. Especially the well developed ICT infrastructure and liberalized telecommunications market in the Netherlands could offer opportunities for service providers.

Dutch companies are expected to spend more on outsourcing and software packages and less on custom software development and new IT staff. However, there are differences per sector and per company. Investments and new projects are expected in the areas of ERP and EAI for 2004. Many companies still use older systems and will most probably switch to newer platforms and systems. CRM projects will not gain high priority, as adaptation of new technology, like VoIP or wireless applications, will be slow.

Overall, there are good opportunities for foreign IT service providers, as the advantages of global IT outsourcing are not well-known in the Netherlands yet. Many large and medium-sized companies are not sufficiently informed on the opportunities that outsourcing can offer them.

Responsibilities that were outsourced by Dutch companies in 2003 include infrastructure support and maintenance (28 percent), user support, and IT strategy (both 11 percent). With offshore outsourcing, software development is still the most important item, not only including administrative software but technical and embedded software as well. Other possibilities with offshore outsourcing are:

- Data entry
- Internet (web design and e-commerce)
- Geographical Information Systems
- Computer games, animations and cartoons
- Business Process Outsourcing (back office activities like call centres and help desks)
- Infrastructure management (relatively new).

Case examples
As an example, Publisher Reed Elsevier (www.reedelsevier.com) is digitalising its magazines from the last hundred years. This whole project has been outsourced to a service provider, setting 1,100 people to work. Westland Energie (http://www.westlandenergie.nl/), UPC (www.upc.com), NUON (www.nuon.nl) and Staatsbosbeheer (www.staatsbosbeheer.nl) have their data conversion work done at Rolta in Mumbai, India. This mainly concerns CAD, GIS and document management.

According to a Dutch IT consulting expert, there have been two major reasons for global software outsourcing:

- possibility to reduce costs and
- the availability of IT-skills abroad.

The Synstar survey confirms this, as Dutch companies have their services outsourced because of access to specialized skills that were not available in their own company (59 percent), guaranteed service levels (18 percent) and value for money (12 percent). The main disadvantages were difficulties to control costs and service levels (47 percent) and fear of loss of intellectual property (46 percent). 57 percent of Dutch IT directors believe that there was an IT skills shortage in 2003. Skills in short supply include: IT business/strategy (31 percent), network management (26 percent) and systems integration (23 percent).

5.2.5 Sweden

The market for offshore outsourcing in Sweden offers good opportunities as well. As in other EU member states, companies are looking for possibilities to reduce costs. Market research company IDC believes that the Swedish IT outsourcing services market will grow at an average rate of 11 percent per year from 2002 up to and including 2007. Especially the demand in companies with more than 5,000 employees and in county councils is expected to increase. The expected increase for the whole Nordic region is even higher, about 17 percent in that period.

Many of them would have difficulties separating software design (high added value activity, which, at first, they would not want to outsource), coding (low added value, labour intensive process), customer service and support. This indicates a serious problem for process maturity with a number of organizations.

The expected growth is caused by several factors. First, the Swedish economy has also suffered from an economic slowdown. Second, outsourcing has become more and more common and is more and more accepted by small and medium-sized organizations. Finally, large Swedish companies are expected to move their IT departments externally, since they need to cuts costs. This is confirmed by the Swedish business weekly Affarsvarlden. It even forecasts another trend, as smaller companies will also follow, hereby creating a new service, called 'out-tasking'. This means that small companies will buy various services, e.g. financial systems per use and storage per megabyte. Some services will be charged on a monthly basis.

The top vendors in Swedish IT outsourcing are IBM, WM-data, and EDS; refer to table 5.4 for some examples of outsourcing deals in Sweden. There is room for growth, as the top 10 covers only about 60 percent of the market, compared to 89 percent in neighbouring country Finland. However, the developments in the offshore market force these local providers to review total offerings and conditions. For example, vendors such as HP, IBM and Accenture have already added an offshore component to their outsourcing range to be able to offer competitive prices.

Traditionally, custom application development services have been the most outsourced area in Sweden. At the moment, the offshore market is expanding and offers a wider range of IT services, including, for example, business services.

The level of knowledge and understanding of off-shore IT outsourcing shows a mixed picture. Companies get most information from IT magazines, general press and from each other. India, China and the Eastern European Countries (Baltic States, Bulgaria, Poland) are mentioned as known outsourcing destinations. Information is not available on countries and opportunities. Companies often do not know about specialized on-line information sources on off-shore IT outsourcing. However, they are very positive on learning about such an information source and receiving information on the subject on a regular basis. An area of particular interest was information on the risks involved in off-shore outsourcing. Many companies mentioned that they are frequently approached by companies from low income countries with an IT outsourcing offer. However, the information they get is based exclusively on the positive aspects of outsourcing and the countries providing this. Only a few companies have structured and reliable information on the risks involved and the way risks can be mitigated.

Banking and insurance market
IT-production in the banking and insurance sector is, generally speaking, a standard service and easy to specify in contracts, which positively affects outsourcing decisions. Application management and development in insurance and banking companies is bordering on the core business and should not be outsourced. However, some parts in the development process are standard and could be outsourced if the company can build a good and competitive purchase organisation. On the contrary, application development is very complex and might warrant a joint venture with an IT-supplier in the future.

Examples
Swedish outsourcing companies are experiencing difficulties in competing. Outsourcing deals usually take considerable time to sew together with quite a number of people involved full-time. Investment figures per deal are worth around € 700,000 to well over a € 1 million for potential suppliers. As an alternative, local companies are looking for niches where they can compete or sometimes partner with large companies. The Swedish government pharmacy chain, Apoteket, is in the process of procuring outsourcing services, a deal worth around € 116.8 million (2003).

Table 5.4 Examples outsourcing deals in Sweden

Company	Supplier	Value (€)
Nordea	IBM	2.3 billion over ten years
Ericsson	HP, IBM	442-531 million
ABB	IBM	1.1 billion over ten years
ISS	CSC	385 million over ten years
Electrolux	IBM	238 million
The Post Office	IBM	238 million over six years
Vin & Sprit	CSC	27 million over ten years
Telia Sonera	Tieto Enator	26 million

Source: www.zdnet.com

5.2.6 United Kingdom

Outsourcing has been a major growth area in the UK, increasing far more than the total mature software and IT services market. Most of this is infrastructure and global outsourcing, but it also includes application management, processing, application outsourcing and ASPs. Project services like consulting, development systems integration and training have suffered most from this trend.

The expected UK sales in offshore outsourcing are not expected to reach £1 billion until 2006 (€ 1.45 billion converted at 2003 rate). The UK outsourcing market is therefore quite mature and outsourcing is a recognized strategy for many companies. Many large companies and public sector organizations have turned to outsourcing and many lucrative contracts have been awarded since. It is expected that the public sector's total IT budget will exceed € 13 billion during 2003.

According to research by Ovum Holway, the UK market for business process outsourcing (BPO) grew 12.1 percent in 2003 to reach € 5.8 billion. This growth rate was even higher in 2002, when the BPO market in the UK expanded by 17.5 percent. This growth illustrates that the BPO market is far from saturated, with unexploited demand in the public sector likely to drive sustained growth in the next few years. The market is expected to keep up double-digit growth until at least 2007. The UK BPO market will reach a value of € 15.8 billion in 2005, representing some 24 percent of the total IT services market, compared to 15 percent in 2002.

Outsourcing obviously has some benefits for the outsourcing company. However, some challenges still have to be overcome. Especially companies that have a turnover of € 300 million or more are finding that offshore outsourcing is not always as cheap as might be expected, due to:

- hidden overheads include management time;
- cultural challenges (refer to section 8.3);
- lower productivity;
- more expensive communications links.

But most experts agree that these challenges are exceeded by all the advantages of, for example, lower costs and specialized skills.

Responsibilities that were outsourced by British companies in 2003 include infrastructure support and maintenance (46 percent), user support (23 percent) and staff management (6 percent). British companies that choose outsourcing do so because of access to specialized skills that were not available in their own company (34 percent), guaranteed service levels, and the opportunity to focus on jobs within the company (both 24 percent)). The main disadvantages were difficulties to control costs and service levels (59 percent) and fear of loss of intellectual property (21 percent). 45 percent of the IT directors in the UK believe that there is still an IT skills shortage. Skills in short supply are systems integration (33 percent), IT business/strategy (22 percent), network management and application development (both 19 percent).

Code of Practice
Recently, an Offshore Code of Practice has been devised, protecting all users and potential users of offshore software & services. It was initiated by Intellect's Offshore Group. Should a client of any of the Group members feel that a vendor's actions are in any way a breech of this Code, they have a recourse to lodge a formal complaint to Intellect. Intellect will then play a role in helping to resolve the issue. In extreme circumstances, Intellect may ask a member company to give up its membership of the Association. More information: www.intellectuk.org

Examples
Here are some examples of major BPO deals in the UK in 2003. Xansa struck a € 362 million agreement to take over BT's financial operations, Liberata sealed a contract with Barclays/Woolwich, and Capita secured a € 232 million win at Lincoln Financial. The Scottish Parliament and the National Health Service (NHS) look overseas for IT skills in 2004. Members of the Scottish Parliament use office software and internet facilities , provided by a small group of IT specialists from the company Wipro Technologies, based in Bangalore. New projects in modernising the NHS have startedas well.

5.3 Outsourcing sector comparisons

Outsourcing per sector
According to Datamonitor, outsourcing will increase more and more within the years to come. The confidence in outsourcing is increasing in the financial services sector. Within this segment, BPO looks like it is developing into the biggest single outsourcing market. The whole application outsourcing segment will experience significant growth. Moreover, especially the expenditure on outsourcing in the insurance sector will be propelling the growth.

Outsourcing responsibilities
The Pressure Point Index (PPI III, 2003) from Synstar (www.synstar.com) reveals the results of a comprehensive survey among IT managers of 700 European organisations in industries like banking, insurance, retail, telecommunications and the public sector with more than 200 employees. Table 5.5 shows a sector comparison between telecoms, the public sector, retail, insurance and banking. It shows the responsibilities that are preferably outsourced in the EU for each of these sectors. In all sectors, infrastructure support/maintenance is the most favourite outsourcing responsibility. The highest preference for this is found within the telecoms, insurance and banking industry. User support is ranked number two.

Table 5.5 Outsourcing responsibilities

	Infrastructure support/maintenance	**User support**	**Staff management**	**It strategy**	**None**
Telecoms	46%	14%	9%	7%	24%
Public sector	39%	27%	6%	12%	16%
Retail	39%	22%	3%	14%	22%
Insurance	48%	22%	10%	3%	17%
Banking	49%	24%	14%	2%	11%

Source: Synstar 2003

Advantages and disadvantages of outsourcing
The survey also gives the main advantages for outsourcing; refer to table 5.6. In all sectors the following benefits more or less apply:
- value for money can be measured;
- service level is guaranteed;
- It gives access to skills that are not in house;
- It allows focusing on the job in hand.

Table 5.6 Main benefits of outsourcing

	Value for money can be measured	Service level is guaranteed	Access to skills that are not in house	Allows focusing on the job in hand
Telecoms	16%	27%	31%	26%
Public sector	19%	24%	39%	18%
Retail	3%	25%	35%	37%
Insurance	24%	22%	38%	16%
Banking	20%	28%	26%	27%

Source: Synstar, 2003

Measuring value for money is in none of the sectors the most important benefit; in the retail sector, only 3 percent of the companies state that this is the main benefit. In telecoms, insurance and the public sector, the most important advantage is 'access to skill that we lack in house'. In the retail industry, the most important benefit is the possibility to focus on the job in hand, while in the banking sector the advantage mentioned most is the guaranteed service level. In all sectors some factors apply that puts IT directors off outsourcing, including the most important one: the difficulty to control costs and service levels with large outsourcing projects. Other disadvantages are:

- losing control of intellectual property;
- threat to job security for IT staff.

PPI IV shows that IT directors would like to outsource the management of daily tasks such as infrastructure support (41 percent) and user support (21 percent) which detract them from more strategic thinking and activities.

IT skills shortage

In all sectors, the IT directors believe that there is an IT skills shortage. This is especially true within the telecoms industry, the public sector and the retail sector. Table 5.7 shows in what area skills are said to be in short supply.

Table 5.7 Areas of skills shortage

	Systems integration	IT/business strategy	Help desk/ trouble shooting	Network management	Application development	Other
Telecoms	28%	27%	6%	17%	21%	1%
Public sector	27%	18%	14	24%	16%	1%
Retail	19%	22%	17%	22%	18%	1%
Insurance	39%	13%	13%	7%	27%	1%
Banking	40%	14%	7%	18%	20%	1%

Source: Synstar, 2003

5.4 Trends

All major research companies like Gartner, Forrester Research, Giga Information Group, IDC and Nucleus Research say offshore outsourcing is hot. Some trends can be distinguished for offshore outsourcing, divided by I) the markets, II) the buyers and III) the suppliers.

Ad I) The markets

- One to many model

Although the one-to-one BPO business model (one supplier undertaking a process for one customer) is most used at present, it is the one-to-many model (one BPO player undertaking the same process for many customers by the sharing of resources) which will offer the greatest opportunity, says Ovum Holway.

- Extension services portfolio

Offshore providers will continue to expand their range of services to be able to offer higher added value to customers and to take away the prejudice of only offering labour. Examples are application implementation (ERP, CRM, SCM), enterprise application integration and data warehousing/business intelligence as well as application management and business process outsourcing.

- Application Management and BPO fastest growers

The two fastest growing segments of the offshore services market over the next three to four years will be the areas of application management and business process outsourcing. Business Process Outsourcing will be a significant force in Eastern Europe for managing things such as medical billing, back-office accounting, marketing/call centre sales and technical support services.

Although the number of BPO-deals that exceeded a value of € 50 million dropped from 16 in 2002 to 14 in 2003, the total value of these deals increased almost 50 percent to a value of € 3.8 billion in 2003. The number of contracts higher than € 200 million increased 83 percent. Financial services and manufacturing accounted for 55 percent of all BPO contracts. In the US, the number of deals over € 50 million dropped to 33, decreasing in total value from € 11 billion in 2002 to € 7.4 billion in 2003.

Deals valued at more than € 1 billion were on the rise as well in Europe. Although big players like IBM, EDS CsC and Hewlett Packard continue to dominate the offshore market, a large number of new players enter the market, feeding the trend to smaller deals. Companies that have an increasing number of deals in the wallet are e.g. Hewlett Packard, Cap Gemini Ernst & Young and Xchanging. Market research organization TPI noticed a shift from front-end call-centre type business process outsourcing deals to more back-end HR, and finance and accounting arrangements.

- New offshore locations

Following the success of India in outsourcing, new offshore capabilities arise. Several other governments support the developing of capabilities in their economies. New low-cost markets are emerging, including China, Hungary, Poland, the Czech Republic, the Philippines, Brazil, Argentina and Russia. Refer chapter 6 on offshore locations as well.

- Need for partnering skills

The role of project managers becomes more and more important in integrating global resources. Managers that have experience and skills in managing global resources and partners will benefit largely and will be in greater demand.

- Specialized consultants

The increase in outsourcing causes a demand for specific information and expertise on offshore markets. This could mean an increase in consulting firms that specialize in this area. It is expected that over 25 percent of offshore transactions will use such an advisor.

- Areas of growth

Especially in areas such as call centres, BPO, and infrastructure outsourcing there is a large opportunity for growth. There is less opportunity in three other areas like application maintenance and management, application migration, and legacy application development. Four other services (new application development, enterprise application integration, implementation of application packages, and business integration) offer small areas of opportunity because, while they currently have low penetration, they also require higher onshore resources.

- High technology

The technological development will speed up the capacities of computers, leading to increased spending in database and online applications demand.

Ad II) The buyers

- Multisourcing

Companies used to outsource to one supplier only for all of their software development requirements. Now, buyers are looking increasingly at multiple suppliers in different countries, depending on the skills and price.

- Offshore adoption

More and more companies will turn to offshore outsourcing, as it becomes more and more accepted. Not only very large companies, but also companies in the range € 500 million - € 1 billion will look for outsourcing possibilities. Most will probably start with a smaller project in the area of legacy application development, conversions/migrations, or management.

- Data security and intellectual property protection

There is a growing concern for security among companies, providing opportunities for companies with offshore operations.

- Multiple partner

The multiple partner model is today's standard. Companies that outsource most of their IT generally use between two and five companies.

Ad III) The suppliers

- Increasing supplier sophistication

Suppliers will need to respond to the requirement of fulfilling individual customers' needs instead of only stressing the element of cutting costs.

- Smaller and more specialized outsourcing projects

According to Gartner, there is a trend towards smaller contracts, which has important implications for external service providers (ESPs), because a greater number of specialised outsourcing deals will create new opportunities for smaller niche vendors. Many new enterprises will enter into small projects first before moving into larger global contracts with vendors.

- Outsourcer's offshore outsourcing

In a completely new twist on the outsourcing trend, large offshore outsourcing vendors, particularly Indians, are subcontracting IT work to new, lower-cost software developers in China, Vietnam and other parts of Asia.

- Multi-country strategies

The offshore leaders are adopting a multi-country strategy, moving operations to multiple locations as a way to diversify risks.

- Issues and concerns

Offshore service providers will have to address the main objections against outsourcing: issues of security, real cost savings, cultural compatibility and excellent communication. If these can be taken away, the market will be open even more.

- Offshore providers could be entering the IT consulting space.

6 OFFSHORE LOCATIONS

This section provides an overview of the leading and emerging offshore countries for IT & business process outsourcing. India is the number one in the offshore market, but many other locations are emerging fast. The main characteristics of not only India, but also of China, the Philippines, Russia, Vietnam, Mexico and the Eastern European countries will be discussed in chapter 6. Exporters from developing countries could use this information to determine their competitive environment in an indicative way. In the sections 6.2 up to and including 6.7, the five most important offshore locations according to NeoIT will be discussed. Eastern Europe is an emerging offshore location and is included as well. Although Canada is an important offshore location, it is not included in this section as it mainly supplies services to companies in the United States.

6.1 Overview offshore locations

This subsection shows a global overview of offshore locations by providing

- A scheme from Gartner;
- A.T. Kearney's offshore location Attractiveness Index;
- The offshore map from NeoIT.

Table 6.1 shows a global overview of the main offshore countries, based on studies by Gartner and A.T. Kearney. Research company Gartner divided the most promising offshore countries into a 'leader', 'challengers', 'beginners' and 'up and comers'. A.T. Kearney's 'offshore location attractiveness index' is a tool to help companies understand and compare the factors that make countries attractive as a potential location for offshore services. It is measured by the financial structure, people skills and availability, and business environment. The numbers refer to the global market position that the corresponding country occupies on the virtual 'offshore outsourcing chart'. The index is not the only tool used in deciding where to put offshore services: final country selections will vary for each company.

The matrix has picked the highlights of both studies and is not meant to provide a full and complete overview of all possible offshore locations. It could assist developing country exporters in determining their competitive position. To do so, two important questions to be solved are:

- How do these locations compare to each other?
- Who are your direct competitors and what can you learn from your competition?

In other words: Learn from success factors of competitors and avoid their fail factors!

India is the star in both studies. China is the number two, while Malaysia as the number three is a rising alternative. Number four, the Czech Republic, offers low costs, good language skills, cultural similarities, competitive infrastructure and a stable political and economic environment. Fifth place in the index went to Singapore, a favoured destination for regional service functions due to its excellent education and language skills, superior infrastructure and pro-business tax environment.

Table 6.1 Overview offshore locations, 2004

Leader	**Beginners**
• India (1)	• Argentina (15) • Bangladesh • Cuba • Ghana • Korea • Malaysia (3) • Mauritius • Nepal • Senegal • Sri Lanka • Taiwan • Thailand (13) • Turkey (25) • Vietnam (20)
Challengers	**Up and comers**
• Australia (18) • Canada (8) • Chile (9) • China (2) • Czech Republic (4) • Hungary (11) • Ireland (23) • Israel (24) • Mexico (14) • Northern Ireland • Philippines (6) • Poland (10) • Portugal (19) • Russia (21) • South Africa (17) • Spain (22)	• Belarus • Brazil (7) • Caribbean • Egypt • Estonia • Latvia • Lithuania • New Zealand (12) • Singapore (5) • Ukraine • Venezuela

Source: combining Garner (2003) and A.T. Kearny (2004)

As an addition to this, NeoIT developed the 'offshore location map' for 2003. It compared the ten most important offshore locations on their strengths and weaknesses. Each location has been judged on nine criteria and the level of their availability. Table 6.2 contains the data for outsourcing in general, while 6.3 is especially about BPO. Both tables make clear why India has become the number one in outsourcing. It has developed many pros in comparison with its competitors. Its success factors include strong government support, good labour and high quality.

Table 6.2 Offshore locations compared (all outsourcing)

	India	**Philippines**	**China**	**Russia**	**Ireland**
Government support	high	medium	low	low	high
Labour	high	medium	medium	high	low
Infrastructure	medium	high	low	low	high
Education	high	medium	high	high	high
Cost advantage	high	high	high	high	low
Quality	high	medium	low	medium	medium
Cultural compatibility	medium	high	low	medium	high
Time/distance advantage	high	high	high	medium	low
English proficiency	high	high	low	low	high

Source: NeoIT, 2003

Table 6.3 Offshore locations compared (BPO)

	India	Philippines	China	Russia	Ireland
Government support	high	medium	low	low	high
Labour	high	medium	low	low	low
Infrastructure	medium	high	medium	low	high
Education	high	medium	high	high	high
Cost advantage	high	high	high	high	low
Quality	high	high	low	low	high
Cultural compatibility	medium	high	low	low	high
Time/distance advantage	high	high	high	medium	low
English proficiency	high	high	low	low	high

Source: NeoIT, 2003

In January 2004, NeoIT published a poll on its website (www.neoit.com) on the following question: 'Which countries would you consider for managing your IT and BPO contracts?'

The visitors answered as follows:

- India 29%
- Russia 26%
- Philippines 18%
- China 13%
- Eastern Europe 3%
- Canada 3%
- Mexico 3%
- Combination of above 3%
- None of above 3%

6.2 India

As described in section 6.1, the overall climate in India is very good. Its exports in software and IT services increased 26 percent to almost € 9.0 billion in 2003. Indian software companies initially concentrated their efforts on providing low level design, coding, testing, maintenance and support services for the export market. Now, Indian companies have moved up the value chain into areas such as systems integration, network and infrastructure management, and system planning and design work. Core competencies of Indian companies are application maintenance and support, application development, contact centres, and financial processing services. The share of software exports to Europe decreased during 2002-2003 because of lowered IT spending by companies in this market. The trend is likely to continue in 2003-2004. The Indian software and services industry has around 2,810 companies and is characterized by players of varying size. The industry is mainly clustered around Bangalore, Hydarabad and Mumbai.

According to trade association NASSCOM, (www.nasscom.org), the most important vertical segments include banking and insurance, health, retail, telecom, manufacturing, utilities, government, and travel. Indian companies are now focussing on:

- Enterprise integration

The market opportunity in this segment is expected to go up to almost € 16 billion in 2005. Indian companies, particularly those with experience in large enterprise projects, have an edge in this market

- Consulting
- Package implementation and support.

ERP and CRM applications are expected to see high growth.

Government support

The central government has given top priority to the software services industry by setting up a Ministry of Information Technology. Indian state governments have also played an active role in the development and promotion of the software services industry in India. Software Technology Parks of India (STPI, www.stpi.soft.net) provides infrastructure services in over 15 cities around the country.

Labour
The Indian software industry has over 500,000 IT professionals, with 75,000 new entrants anually.

Infrastructure
India has one of the lowest levels of telephone density in the world. It is the only Asian-Pacific nation with a single-digit home Internet access rate. However, in the IT parks, infrastructure is adequate.

Education
One of India's core strengths is its education system, both at University level (The Indian Institute of Technology) and through its technical schools and IT training companies, such as NIIT and APTECH.

Cost advantage
The wages for Indian software engineers are low compared to their Western counterparts. However, Indian firms now face the threat of lower cost software developers from developing nations such as Romania, China and Russia.

Quality
In software development there is a globally recognized standard, CMM (refer section 10.1), which exists beside ISO. It is a model which prescribes standards in different stages of software development; refer to chapter 10 for more information. All the top-tier Indian vendors are certified at CMM Level 5, the highest level. Over 50 companies have been awarded CMM-5, out of a total of 74 around the world.

Cultural compatibility
Compatibility is good in the major metropolitan areas of the country.

Time / distance advantage
There is a 12-hour time difference, enabling overnight delivery of services.

English proficiency
English proficiency is excellent in the major metropolitan areas.

Major suppliers
- Tata
- Wipro
- Infosys
- Satyam
- HCL Technologies.

Key players in BPO
- eFunds
- Spectramind
- eXL Services
- Daksh
- e-Serve.

More information
NASSCOM - www.nasscom.org

6.3 The Philippines

The overall rating of the Philippines is high for BPO and medium for IT. The country is considered to be as attractive for BPO as India. Its core competencies are call centres, transcriptions, animation, BPO (shared services, finance and accounting, human resources, logistics, and sales).

Government support
Government support consists of tax favours and a task force focusing on the development of five specific areas:

- BPO (shared services)
- ASM/ADM
- Animation services
- Transcription services
- Contact centres.

Labour
The country has a labour force of over 75,000 people focused on IT and BPO exports with 15,000 new entrants yearly.

Infrastructure
The past presence of USA military bases left behind a solid telecom infrastructure.

Education
The university system is very good and includes top universities.

Cost advantage
Average IT salaries are relatively low compared to Europe and the USA.

Quality
Not many Philippine companies have focused on SEI-CMM, although some ISO certifications exist. The government is setting up a programme to offer incentives for certification.

Cultural compatibility
As with the telecom infrastructure, influence from a USA presence since the 1930s has enabled good cultural compatibility.

Time / distance advantage
Like India, The Philippines offer an overnight delivery of services because of the time zone.

English proficiency
Influence from a USA presence since the 1930s has also resulted in very good English proficiency.

Major IT suppliers are:

- SVI
- SPI Technologies
- Innodata.

Top BPO suppliers are:

- CCC (C3)
- ePDLT
- SVI
- ETelecare (SPI)
- ADEC
- Sykes Asia
- People Support.

More information
Digital Philippine Foundation - www.digitalphilippines.org
Outsourcephillipines - http://www.outsourcephilippines.org/

6.4 China

The overall climate is low at this moment, but expectations for the future are very good. The outsource software services sector market is worth €1.15 billion (2003) and is growing at an annual growth rate of 30 percent. The sector has a large supply of low cost workers and a huge internal market. China has a lack of domestic experience in designing complex software systems. This directly leads to a lack of experience in undertaking large international software outsourcing projects for international companies. China's software services industry's main international success has been obtaining software outsourcing contracts from Japan.

The Chinese industry would like to see the Indians outsource their cheaper work to China. According to the latest survey report released by Gartner, Chinese software outsourcing earnings are expected to catch up with those of India in 2006 (ExpressIndia.com, 2002). If this trend continues, China will become a major competitor in the global outsourcing market (Thiagarajan, 2002). Moreover, China is also a software consuming market with a population of more than 1.3 billion and with many middle-sized and small-sized domestic firms, which are adapting to the world market, particularly since China became a member of WTO.

Government support
The Chinese government has identified software as essential to economic progress and national security. In China's Five-Year economic plan there is a growth target of more than 30 percent annually for the software and IT industry. 19 software parks have been opened so far and in November 2003 the China Offshore Software Engineering Project (COSEP) was launched. Its target is to provide outsourcing services from China to overseas corporate customers. The COSEP program will select a number of Chinese software companies from regional software parks. Another important issue that the government will have to address is the problem of widespread piracy of software.

Labour
The Chinese software industry has a resource of 400,000 IT professionals, with approximately 50,000 new entrants every year. The IT industry's main labour problem is that there is a real shortage of high-level system architects, designers and project managers. The country has a limited supply of project managers who are experienced in large software project management and even fewer professionals that are able to combine technologies with industry experience.

Infrastructure
Infrastructure is a problem outside the IT zones. China has made very good developments in telecommunications, especially in the major metropolitan areas such as Beijing. Nevertheless, the infrastructure could still use some improvements in the heartland of China.

Education
Universities graduate very competent technical graduates.

Cost advantage
Labour rates are very low.

Quality
Chinese companies have not established formal procedures, processes and quality control systems that, for instance, Indian firms have. Nevertheless, close to 58,000 ISO 9000 certifications have been handed out. China has only one company that has reached CMM Level 5, but it does have a number of companies certified at CMM Level 3.

Cultural compatibility
China has no strong affinity with western culture.

Time / distance advantage
China operates on a single time zone.

English proficiency
One of the biggest barriers that Chinese companies face is the English language. The Olympic Games in 2008 will probably give a boost to the solution for this problem.

Regional IT cluster and suppliers
In China, software firms and employment in the software industry are heavily clustered around Beijing, Shanghai and the Guangdong region along the eastern coast of China. China's top 10 software companies:

- Huawei Technologies
- ZTE Corp
- Eastcom Group
- Digital China
- Beijing Ericsson
- Beida Founder
- Microsoft China
- Neusoft
- CS&S
- Datang Telecom.

Other tier I technology companies:

- UFSoft
- Kingdee Software
- Asiainfo
- Computer & Technologies (C&T)
- Datacraft
- Digital China
- ECS China
- Legend Group
- Commverge Solutions
- Esoftbank.

Two firms, UFSoft and Kingdee Software, control about 60 percent of China's software market.

More information
China Software Industry Association (CSIA) - www.csia.org.cn
China's software industry – current status and development (PDF file)
http://zlin.ba.ttu.edu/papers/Outgoing/GITM-ITC-3.pdf

6.5 Russia

The overall climate for Russia is medium. Russia is a promising new entrant in the field of offshore outsourcing. The Russian outsource software services sector has grown to € 175 million at an annual rate of 50 percent.

Government support
Instead of providing valuable support, like India or China, Russia hinders development by a complex bureaucracy and restrictive tax, customs and immigration laws. Corruption and a lack of protection of intellectual property is still an issue.

Labour
Russia has a large, well-educated and low-cost workforce. It avails of one million specialists who are capable of quickly joining the IT sector and have excellent skills.

Infrastructure
The Russian telecommunications infrastructure remains underdeveloped and out of date, except in IT parks.

Education
Russia has top universities and top research firms.

Cost advantage
Labour costs are moderate and infrastructure costs are high.

Quality
The industry has not developed an industry infrastructure to certify software quality. ISO adoption is widespread but only 3 SEI/CMM certified companies exist.

Cultural compatibility
Cultural compatibility is still a problem.

Time / distance advantage
Russia has 11 time zones.

English proficiency
Russia has a short supply of English-language skills. Top managers have a level of proficiency in English, but mid-level and lower-level staff has little proficiency.

Regional IT Cluster and suppliers
The vast majority of Russia's offshore software services firms is located in three major cities which are geographically and culturally close to Europe: Moscow, St. Petersburg and Novosibirsk. Major suppliers are:

- Luxoft
- Novosoft
- EPAM
- Vested Development.

More information
National Software Development Association - www.russoft.com

Outsourcing-Russia - www.outsourcing-russia.com

- Select 'database of Russian Offshore Software Development companies' for an overview of companies.

6.6 Ireland

The overall climate for Ireland is relatively good, except for cost savings. Ireland is a very attractive option for European shared services centres with core competencies like application development, application maintenance, call centres, customization, translation, production and distribution and technical support, product customization, software testing and fulfilment.

Government support
The Irish government established a Technology Education Investment and favourable tax laws.

Labour
The number of technical graduates is too low compared to the demand from the big IT firms.

Infrastructure
Ireland has a very good infrastructure.

Education
The country has the availability of excellent universities.

Cost advantage
Labour rates are relatively high compared to wages in developing countries.

Quality
Irish companies have ISO certification but have not invested in CMM certification to the levels that India has.

Cultural compatibility
Very good.

Time / distance advantage
Ireland is in the Greenwich Mean Time zone, which is close to most other Western European countries.

English Proficiency
Ireland is an English speaking country.

Regional IT cluster and suppliers
The industry itself is concentrated mainly in the Dublin region and smaller clusters in Limerick, Galway and Cork. Major global players and local companies include Baltimore Technologies, Altamedius and Eontec.

More information
Irish Development Authority - www.ida.ie
Irish Software Association - www.software.ie

6.7 Eastern and Central Europe

In 2004, the European Union (EU) has expanded with 10 new members: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. As described in section 3.2.8, most of these nations, along with Romania, Bulgaria and the Ukraine, make up the Eastern and Central European offshore software industry. Combined, they exported almost € 460 million in offshore software services in 2003. The majority of these exports come from Romania, Hungary, the Czech Republic, Poland and Bulgaria. Each of them exports approximately € 58 to 70 million annually. These countries focus entirely on low-level maintenance and coding of software on a contract basis. In these areas, the price is a very important decision factor. Core competencies are application development, product development and application maintenance.

According to Gartner, Russia and Poland are already considered challenging outsourcing powers, while the Baltic countries are viable newcomers in the application outsourcing market. In Hungary, 12 software development companies have formed a private association, called the Hungarian Software Alliance to provide one-stop shopping for offshore outsourcing contracts. These 12 companies involve some 1,000 software engineers and have a combined annual revenue of € 85 million.

In Latvia, IS Cluster, a group of 20 software companies, is working with the university of Latvia (the Riga Technical University) and the Baltic Computer Academy to attract offshore software development business. In a later newcomer in the EU, Romania, technology companies are in the process of building a website called www.outsourceromania.com, which promotes the country's software-development skills.

Eastern and Central European countries have a big incentive for bringing in software development business from abroad. Most technology companies do not have enough resources to physically expand internationally and domestic markets are tiny. In fact, the size of the IT markets in all 10 of the accession countries is no bigger than € 8 billion combined.

Government support
Most governments in Eastern and Central Europe lack a comprehensive vision and strategy for supporting their nations' outsource software services sector. Instead, the governments of this region have concentrated on gaining acceptance into the EU. There are some positive exceptions, however. The Hungarian government is one of the most aggressive in targeting the outsource software services sector. Some of its initiatives include tax incentives to encourage corporations to provide IT equipment to workers, a partnership with small businesses to support IT training, support for broadband networks and job creation subsidies to encourage training of the unemployed in basic IT skills.

The Czech Republic, number four in the offshore location attractiveness index (refer section 6.1), is offering big subsidies to UK businesses to relocate their IT services to the country. CzechInvest, the Czech government's foreign investment agency, will cover to 50 per cent of investment costs for companies looking to relocate software development, call centres and IT outsourcing centres to the republic. High-tech automotive, biotechnology and aerospace manufacturers are also being targeted, with the Czech government promising to foot the bill for up to 60 per cent of training and re-educating costs for the first five years. Other governments have now started to show support for the IT sector through tax incentives and IT training support. However, they still lag far behind in other areas in terms of support provided.

Labour
Polish, Hungarian and Czech software services companies have access to a talented supply of low-cost engineers. The vast majority of these nations has only about 10,000 to 15,000 people working in each software export market, with 5,000 to 7,000 new recruits each year. These numbers are not enough to gain a large market share from more established players. These countries will have to produce more software developers if they want to increase their market share.

Infrastructure
Eastern European countries don't have an infrastructure that is equipped to handle complex, large scale jobs from multinationals. The telecommunications infrastructure is good in countries such as Hungary and the Czech Republic. Generally, the telecommunications infrastructure is not as advanced as in Western Europe. Internet usage is still limited in Eastern and Central Europe, due to issues of hardware costs and lack of competition in the marketplace. With the entry into the EU, most of these countries will see new providers entering the market and costs are expected to come down rapidly.

Education
The CEE region is known for a traditionally very good education.

Cost advantage
The Eastern Europe nations have combined their strength of low-cost programmers. The average annual salary for a programmer in a larger exporting nation such as the Czech Republic is approximately € 6.000 a year.

Quality
Certification is an issue, which is increasing in importance and awareness among companies.

Cultural compatibility
The region is located close to Western Europe and is relatively familiar with Western culture.

Time /distance advantage
Within Eastern Europe, there are minimal time distances compared with most other EU member states.

English proficiency / language
Most of them have European language skills, most German and English. But the level and quality differs!

Regional IT cluster
Almost all of the IT outsource software clusters are located in the major cities of Eastern and Central Europe, like Budapest, Prague and Warsaw. The common theme that these areas have is a relatively well established telecommunications infrastructure, location near a major university or government centre, a large technical talent base and sources of funding for the nascent marketplace.

Nearshore companies
Alna, Aplana, Assert, Computerland, Delphi Software, DatiGroupa, Fort-Ross IT Services, Luxoft, IndexNet, Mastech, Microlink, Novosoft, Prokom, Sonex, Synergon and Vested Development (VDI).

More information
- Hungary - www.hif.hu
- Poland - www.piit.org.pl
- Romania - www.atic.org.ro
- Bulgaria - www.bait.bg
- Czech Republic - www.asocpor.cz

More information about offshore locations can be found at:

AT Kearney 'Making Offshore decisions'
http://www.atkearney.com/shared_res/pdf/Making_Offshore_S.pdf (PDF)

EuroITX - http://www.euroitx.com/content/countries.php

Forbes 'Best Countries For Outsourcing' –
http://www.forbes.com/2003/08/27/cx_ld_0827bestcountries.html

NeoIT - http://www.neoit.com/pdfs/whitepapers/Sep-03-OffshoreOutsourcingPart-1.pdf (PDF file)

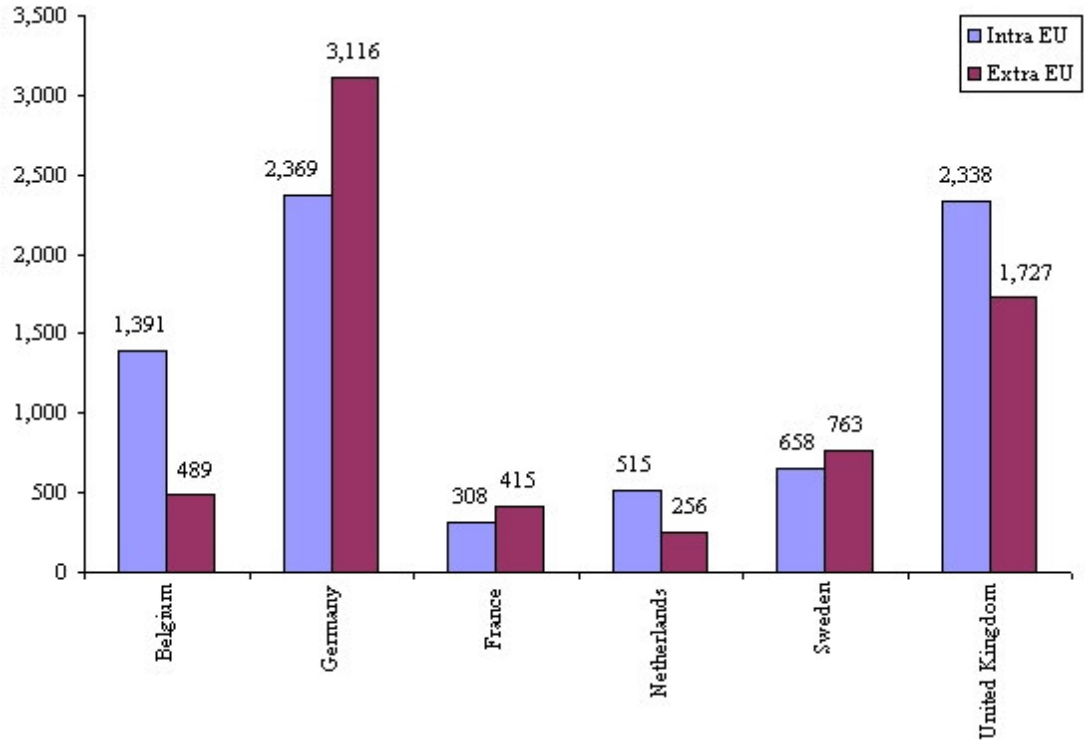
Neo IT White Paper - http://www.neoit.com/pdfs/whitepapers/Mapping-Offshore-Markets.pdf (PDF file)

Shared Services and Business Process Outsourcing Association (SBPOA) –
http://www.sharedxpertise.org
- Select 'locations'

7 EXPORTS

This section gives an idea of the exports of IT services by the six highlighted EU countries to other countries. As with the imports, it is very difficult to get reliable statistics. However, by using the balance of payments of these countries, a very rough indication of the exports can be obtained. According to figure 7.1 Germany exported € 5.4 billion in 2002 in IT services, of which € 3.1 billion went to destinations outside the EU. A large part of these exports went to the USA, accounting for € 1.1 billion. The UK was the second largest exporting country, accounting for more than € 4.0 billion (€ 0.8 billion to USA).

Figure 7.1 Exports IT services of six highlighted EU-countries (2002)*



Source: Eurostat (May 2004)
* Netherlands and France figures from 2000

Table 7.1 shows the exports of royalties by the EU countries, indicating that the UK is the largest exporter of royalties of the six highlighted countries. It exported more than € 9.1 billion in 2002, of which € 6.0 billion to destinations outside the EU. Germany accounted for € 3.9 billion, followed by France (€ 3.4 billion) and the Netherlands (€ 2.0 billion).

Table 7.1 Exports royalties six highlighted EU-countries, 2002
EUR million

Country	Intra EU	Extra EU	USA
Belgium	333	487	380
Germany	1,188	2,789	1,185
France	1,039	2,369	1,491
Netherlands	1,107	910	375
Sweden	845	755	416
United Kingdom	3,185	6,000	na

Source: Eurostat (May 2004)

8 TRADE STRUCTURE

Section 8 discusses the EU trade structure for software and computer services. Section 8.1 is about EU trade channels in general, section 8.2 contains information on the trade structure for developing countries in particular. The distribution channels for software and computer services have been separated in this chapter, although in practice, these channels mix. This is because some major companies provide both software and services to their customers. For the purpose of this survey, both channels have been separated to give the developing country exporter an idea of the possible distribution channels.

8.1 EU trade channels

Figure 8.1 displays the general trade structure for B2B software products in the EU. It is very diverse, because of the large number of varieties and players in the market. Moreover, the situation differs per EU-country and sometimes per region within them.

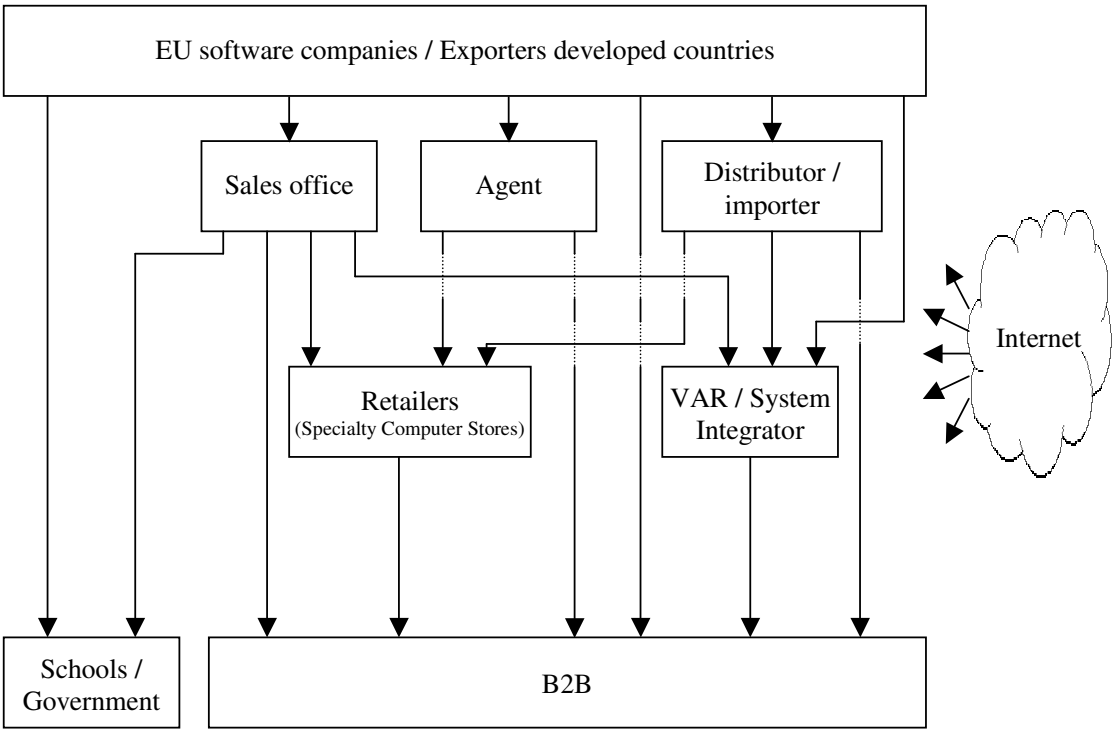
It all starts with companies that develop the software. They could use both direct and indirect channels to outlet the products. The direct channel includes a direct link to the B2B end user or the educational users (schools/governments). The internet and direct mailing are some important instruments in this channel. Exporters from developed countries have been mentioned next to the software companies in the schedule as their place in the distribution channel, on a logistic level, is more or less equal to that of software companies.

The indirect channel has many possibilities. Software companies could set up a sales office in the target country, supplying the end-user or some other indirect channels. Most global companies do so, e.g. Microsoft and IBM. Agents and distributors/importers could both supply the software products to the end user or supply them to another link in the distribution channel. Retailers include specialty computer stores that supply the end user with products. The Value Added Reseller (VAR) and the System Integrator are other possible links to the end user. They are middle men, selling a number of products from different sources as a system to the end users. These could both more or less be regarded as dealers. The Internet plays an important role in the distribution process, as it is used by virtually all of the mentioned links in the distribution channel both as a direct sales channel and as sales supporting channel. Refer to section 3.3.

In order to remain competitive, most parties are providing extra added value. They need to be well informed about their customers and market, making use of information sources and the available infrastructures. Some extra added value could include, for example:

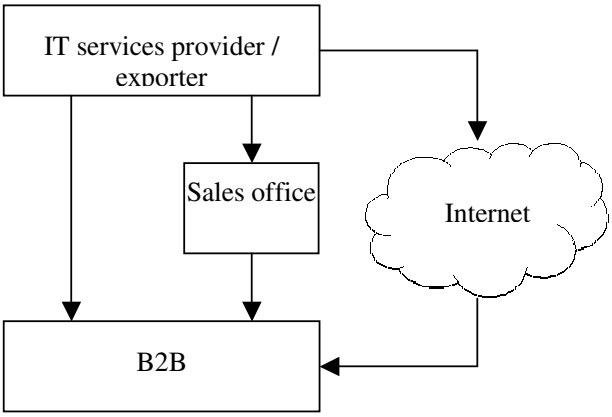
- Quality assurance
- Sourcing knowledge
- Transfer of knowledge
- Project management with sub-contracting implementation (software development and other IT services)
- Offering different methods of financing.

Figure 8.1 EU trade structure software



IT services are supplied both directly by services providers and by sales offices; refer to figure 8.2. It is common practice to co-operate with other service companies when the available resources within one's own organisation fall short. ICT specialists working for an end-user while representing several different service companies and/or recruitment agencies are no exception. It is obvious that margins slink fast in these cases, unless the end-user is willing to pay the price. The Internet is important here as well, as it could be used as a sales channel. Think of direct sales via the website of a service provider or offering services by using marketplaces.

Figure 8.2 Trade structure ICT services, Europe



8.2 Distribution channels for developing country exporters

In general, the best possibilities for developing country exporters definitely lie in outsourcing. Supplying software products on the EU market would demand such a huge investment of resources and marketing costs that no company or group of companies could afford this. It is very difficult to build distribution and support channels. There is one small exception to this. In the software industry lie some chances, based around niche supply. A specialist firm that can supply a specific piece of software for a key sector could have a chance of success. But even then, marketing costs will be huge. Some important success factors would include:

- Specialised software for a niche market
- Solid and proven global client base
- Competitive (price, features, quality, reliability, etc.) against global market leaders in their own category

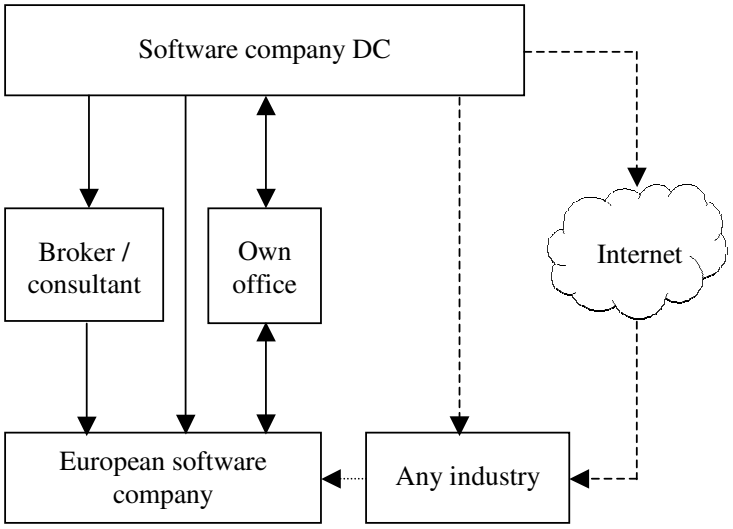
Some distinctions in the trade structure for developing countries in outsourcing software and IT services outsourcing can be made. First, the level of education differs. Developing software generally requires an advanced technical knowledge, while only basic training is needed for IT services. Furthermore, language proficiency is a requirement in IT services. For example, employees in call centres must be able to speak with an accent that can be easily understood. The Philippines ha excelled in the call centre business because of its reputation for people who are very caring, who have an accent that is easy to comprehend and who are skilled at speaking empathetically when answering a customer complaint. Although English is the primary language in demand, the demand of outsourcing services in languages such as German and France is increasing. Other examples of the need for language proficiency are on-line support and transcription services (e.g. medical notes that are poorly handwritten may require some degree of familiarity with different scripts of the local language).

Second, the nature of both areas of outsourcing differs. Outsourcing is a communication intensive business: some programmers spend about 50 percent of their time interacting with others. It involves an interactive process of building, checking, revising and testing. Almost every project is unique, requiring the same time-intensive attention. This differs for IT services, where the complexity is in the start-up process. Once the process is established, there is far less need for communications.

Trade structure software outsourcing

Figure 8.3 shows the most common distribution channel for developing country outsourcing service providers in the software industry.

Figure 8.3 Distribution channel outsourcing software

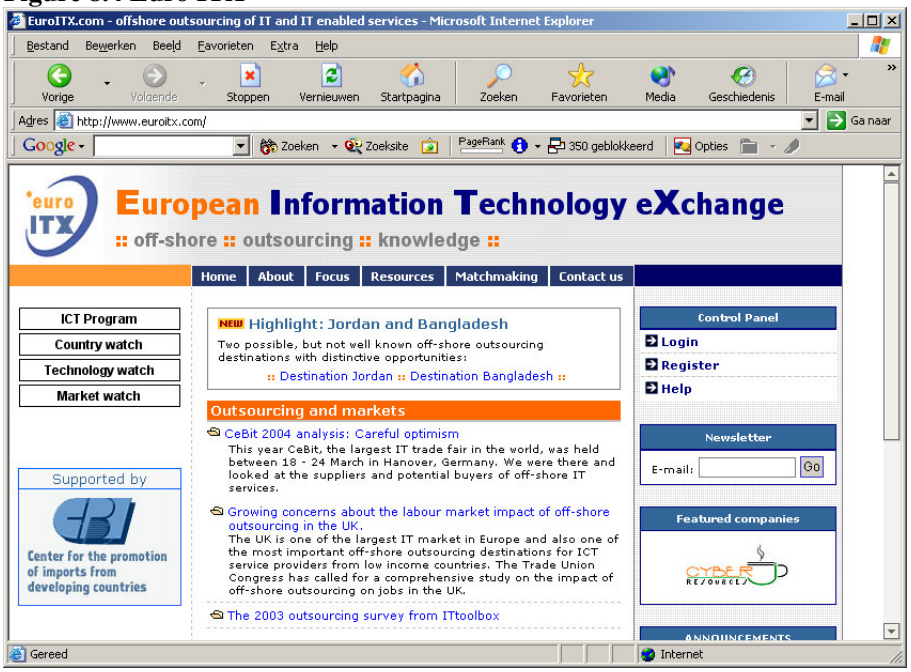


Outsourcing service providers in developing countries that look to enter the EU market usually have four options. Establishing a sales office in an EU member country is the first option. It could be wise to do this in a joint effort. For example, the government or the industry association contribute to such a presence, allowing several companies at the time to profit from the office and facilities.

Another possibility is to cooperate with a middle man, a specialized broker and/or outsourcing consultant. In practice, there may be a difference between them, as brokers more or less focus on matchmaking. They typically establish relationships with multiple offshore providers, and then channel work to these firms as they acquire business. These solution providers tend to have a deep knowledge of the outsourcing business, as well as extensive business networks that they utilize to secure new contracts. Beside matchmaking, consultants advise and provide a wide range of support services on the whole outsourcing process. More information on brokers and consultants can be found in section 11.3.

An interesting example of a broker is the European Information Technology exchange. It is a European one-stop-shop that provides information for both buyers and suppliers of off-shore IT (enabled) services outsourcing. Their website www.EuroITX.com has three units: Intelligence, Marketing and Supply-Demand. The Intelligence unit contains, creates and maintains all the information, papers, external resources and news. The Marketing unit promotes the associated service providers from developing countries. The Supply-Demand unit manages and develops the database of company profiles. This database contains both suppliers and buyers. It focuses on suppliers from developing countries and buyers from Europe. EuroITX is sponsored and supported by CBI (www.cbi.nl), refer to figure 8.4.

Figure 8.4 Euro ITX



Source: http://www.euroitx.com

The first two options are most common in practice. However, there are two further options. The first would include working with EU software companies directly. Although almost any industry could be a potential outsourcer of software development projects, European software companies themselves are the most interesting target group for the exporter from developing countries. Industries in Europe do not turn directly to service providers in developing countries very often. Most commonly, EU industries contact a EU software company that sometimes outsources the project partially or fully to developing countries. Refer to chapter 4 and appendix 5 for websites to localize possible partners.

The second option is that European software companies set up businesses in developing countries themselves. In this model, European companies establish subsidiaries abroad. This is useful if large amounts of software need to be created. For this purpose, enterprises such as Philips, Vanenburg and Invensys/Baan have set up subsidiary companies in India. The ABN Amro Bank operated a software facility in Lahore (Pakistan). Another IT- firm recently set up an office in Kathmandu (Nepal).

Trade structure IT services outsourcing
Figure 8.5 contains the most common distribution channels for developing countries within the IT services outsourcing industry. They have the same options, although some differences and extra possibilities occur. For outsourcing IT services, local presence by having one's own office or using brokers/consultants are the two most common channels as well. For example, Tata Consultancy Services, one of the big five Indian firms, has offices in many European cities (and more). Refer to the case study of Preciss Patrol Kenya as well.

Case study

Preciss Patrol Kenya (http://www.precisspatrol.biz/kenya.htm)

One of the key success factors for the Kenian company Preciss Patrol was to open a small liaison office in Massachusetts (USA). At the start, it was a company specialized in simple data mining and specialized research on the internet. The existence of an office in Massachusetts greatly facilitated various operations such as marketing, banking and communicating with potential clients. In four or five months, PrecissPatrol was able to cover its operating costs.
Source: Unctad 2003

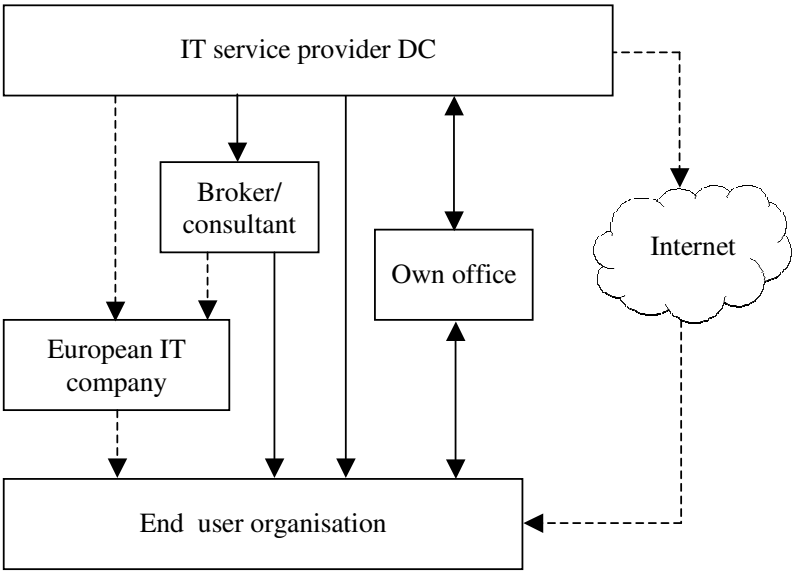
The third option would be to enter into partnerships with large service providers (system integrators) in Europe directly, such as CMG and Cap Gemini or other large professional services companies like Accenture, Ernst & Young, Dimension Data, EDS, IBM, PwC Consulting, Unisys and Xansa.
In general, this has proven to be difficult for companies in developing countries. Although these companies may not actively promote their offshore capabilities, they will certainly make use of them in order to reduce project costs and shorten delivery time scales.

Contrary to the software outsourcing industry, service exporters from developing countries could contact the end-user organisations directly, such as banks and financial institutions. This is the fourth option. Some of them already use services from developing countries. These include, for example, companies that outsource data entry and other services. They also tend to be larger and are often multinational corporations. However, this is probably not a viable model for new entrants into the outsourcing field since most European companies enter into their outsourcing relationships through a European-based company. This is especially true for smaller companies. Refer to section 5.3 for a sector comparison on the responsibilities that EU companies would like to outsource and in what way this differs by sector.

As an addition, outsourcing service providers of software and IT services could use the following model as well. Local offices of multinationals in the home country of the service provider could be used as a bridge to get in contact with its other offices that are spread over the world. For example: once a service provider has worked for Shell in developing country X, it could do the same job for Shell in EU country Y.

The Internet plays an important role in this process, being an intermediate in business-to-business contracts between European clients and foreign providers. An important remark here is that it appears to have largely failed in the software market, due to the complexity of software development and all of the other factors that enter into the decision-making process. It could work for many other IT services, where the requirements are relatively straightforward. But be aware: even though online software sales should increase substantially, the majority of European firms desire local support.

Figure 8.5 Distribution channel outsourcing IT computer services



Beside these most common distribution channels, some other possibilities may be used. They follow below.

1 Joint ventures
The first is a joint venture of EU companies with foreign IT companies. This will intensify the relationship between the two organizations. An example of this is OTS (Orange Telecom Software), a joint venture that was started in 1991 between the Dutch KPN Telecom and TCIL of India. Joint ventures in the field of software development are still very rare; OTS has been created very recently.

2 Employees working in the EU
Foreign IT specialists are employed directly in the EU in this model. This is not often used but, because of the scarcity of certain qualified personnel, some Indians are living and working in Europe.

Section 11.3 contains more information on assessing the sales channel and on the process of selecting outsourcing partners by EU organizations.

8.3 Outsourcing decision making process EU companies

To give the exporter an idea of how decisions are made by EU companies that outsource, the following section highlights some major factors that play a role in the decision making process. In section 5.2, the major reasons for outsourcing have been mentioned for each of the highlighted EU countries. They include cost savings, need for specialized skills and lack of in-house expertise. In addition, this section discusses some more important factors why and which location EU companies choose for offshore outsourcing. They are divided into country-specific and vendor-specific elements. They include, among other things:

Ad I) Country-specific elements

1 Cost savings
As mentioned in chapter 3, most EU companies look for cost cutting in order to survive and overcome the recession. Therefore, the price is an important factor, although this does depend on the nature of the service. For example, language proficiency is important for language-based IT services (e.g. call centres). It has to be realized that people at call centres are often the first and only touch point between the customer and the company. Therefore, aspects like the employee's accent and friendliness over the phone are of paramount importance. All this has its price. On the other hand, data entry outsourcing is becoming a commoditized market with business moving to the lower cost providers, according to some industry experts.

2 Availability of skilled professionals
Software outsourcing clearly demands a large supply of highly skilled professionals. Most software development tasks, however, do not require a college degree in computer science. In fact, most Indian programmers are quite overqualified for their jobs. The training involved for most other IT services is nowhere near as demanding. Basic skills' training is necessary, but typically these skills can be taught relatively quickly by the companies hiring the employees.

3 European-based operations
The number of outsourcing service providers has become that large, that EU companies are often approached by service providers from various countries, which takes away the need to travel to offshore locations. This underlines (refer to section 8.2) the necessity of a European presence for countries/companies seeking to provide an alternative to India and the other well established countries. European companies are simply not used to doing business with Pakistan, Nepal, Sri Lanka and other countries that do not have a track record in this industry.

4 Personal connection
One of the most important factors affecting outsourcing decisions is the existence of a personal connection between the European client company and a foreign country. A foreign national within the client company in the EU could very well favour outsourcing (diaspora, refer section 14.5.5).

5 Project management skills and quality certification
In practice, coordination between the client and the overseas provider is a critical success factor. Although ISO and CMM (refer to section 10.1) are referred to as critical for the outsourcing provider, flexibility is sometimes more important. The quality factor differs for the several IT services. For the services that do no involve interaction with a client company's consumers (e.g. data entry), the relevant quality indicators are accuracy and speed. For tasks that involve customer interaction (e.g. call centres), language, accent, and other communications skills are the measure of quality (refer to ad I as well).

6 Language & culture
Language is important for both the provider and the client to communicate efficiently. Moreover, programmers will need to communicate with the client during the project. Furthermore, culture is a very important issue. In the past, differences in culture have led to problems during the execution of projects. As mentioned before, in some IT-enabled services (e.g. call centres) language is a tremendous asset for service providers. For some other IT services it is not an issue at all, e.g. Cambodians that digitize the Harvard Crimson and Ghanaians inputting data for insurance companies are not English speakers.

IT service companies in Romania, for example, provide services to French companies. They can communicate with French customers in their own language. English-speaking service providers from India, Ireland, Northern Ireland and South Africa are suitable partners, from a linguistic point of view, for markets in the United Kingdom and United States. German companies will find outsourcers willing to speak German in the Czech Republic and Poland.

7 Western business practices
Closely related to the factors mentioned previously, EU companies tend to select companies whose management is trained and adept at conducting business within Western business practices and norms.

8 Telecommunications infrastructure
Almost all IT services depend on voice- and data telecommunications services. An EU company will be looking for an outsourcing provider that has the availability of a reliable infrastructure. Moreover, the bandwidth and its cost are important factors as well.

9 Intellectual property rights protection
For some EU companies this is a serious issue, for some it is a condition to work only with providers from countries that have legitimate Intellectual Property Rights (IPR) protection enforcement regimes. China has serious problems for this reason.

10 Political stability & diversification
Political stability is an important factor in their outsourcing decisions. Especially for IT services this is often a criterion, as the contractual relationships often are for a longer term.

11 Time zone difference
In projects where communication is important, as in software development projects, time zone differences could be an obstacle. This is the opposite for IT services, where it is viewed as one of the major benefits. Most hotel reservation and customer service centres are open 24 hours a day. Since operating these night shifts is expensive, offshore options have become increasingly attractive.

12 Country image
One of the largest barriers (or opportunities) for a developing country to establish a presence in IT services may be its country image.

13 Government support
India has become such an important player in the outsourcing industry because the Indian government has supported and stimulated it to a large extent. This ranges from providing education, investment (in e.g.) infrastructure facilities and technology parks, setting up a Ministry of Information Technology, and promoting the sector in a structured way.

14 Software and hardware resources
The availability of software and hardware is another important factor. For some services, as for example specific software development, the availability of some soft- or hardware is necessary.

Ad II) Vendor-specific elements
Next to these country-specific elements, some elements apply when it comes to selecting the offshore partner (or vendor) in the chosen country. These include:

- Decision authority

One of the major issues that EU companies could consider is where the decision-making authority resides within the offshore company. For example, many Indian firms still are Indian-centric, forcing delays when major decisions must be made. Some customers may consider it necessary to get fast decisions under certain circumstances without having to wait for eight or 16 hours.

- Domain expertise

Expertise in specialized technologies can be an important asset for some providers.

- Superior service delivery

Refer to the decision authority as well. Service and flexibility are more and more important for the client.

- Global presence

This will become increasingly important in the future.

Other elements that play a role include:

- Ongoing Research & Development (R&D)
- Specialities
- Proven offshore methodologies
- Considerable project expertise
- End-user vs. product expertise
- Staff retention
- Strategic plan and vision
- Processes methodologies
- Marketing and sales capability
- Financial stability
- Customer references
- Innovative solutions
- Commitment
- Size of vendor
- Flexibility on contract terms
- References and reputation

9 PRICES

9.1 Price developments

The market is characterized by price erosion, on which both EITO and IDC agree. According to EITO, price decreases started in 2002, resulting in two main developments. First, they lead to pressure on margins and second, they force service providers to look for cheaper alternatives. In other words, the opportunities for offshore outsourcing are being researched. This development is expected to lead to a structural change in the market for IT services the coming years.

A 2004 study by IDC confirms that offshore outsourcing supply will increase in size, having a downward effect on prices for IT services in the future. Of course this is good for all buyers of IT services but a real challenge for providers of these services. For example, workers in the information technology in India had a double-digit salary growth in 2003, compared to a relatively stable level of salaries for similar workers within the USA. During 2004, prices for Indian labour will stabilize as demand increases. After the deflation in prices in the Indian outsourcing market during 2003, the increased demand in 2004 will stabilize this deflation. Few vendors will be able to support the increased wage requirements in India if their prices continue to drop. The continued pressure on prices in system development and technology prices is, among others, a result of oversupply in India and emerging competition from Malaysia and Shanghai, Taiwan and Russia. These countries add more supply and differentiate as they offer services in for example Cobol, Assembler, C Code and Event Driven Programming.

Labour prices of software engineers, IT consultants and IT teamleaders for five highlighted EU countries are included in table 11.1.

9.2 Sources of price information

As it is quite difficult for suppliers of software and IT services to give exact prices, it is also hard to obtain information about current price levels. Software products can be broken down into licence prices per module and number of current or named users. The licence prices can usually 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.

Outsourcers / exporters have access to this information by using several sources. The main ones are:

- industry associations (appendix 3.3)
- offices for statistics (per country) (appendix 3.2)
- trade press (appendix 3.3)
- websites of competitors
- visiting trade fairs.

10 EU MARKET ACCESS REQUIREMENTS

Section 10.1 discusses non tariff trade barriers in the EU, and in particular the two most important quality standards in the computer software and IT services industry: ISOO 9000 and CMM. Another aspect the exporter has to consider is quality and the political concerns in the EU for losing IT jobs to developing countries. Section 10.2 contains information about tariffs and quotas and the Value Added Tax (VAT).

10.1 Non-tariff trade barriers

Quality standards

Trust and competence are very important in the market and therefore it could be to the exporter's advantage to have some form of internationally recognised quality certification. Every exporter from developing countries could consider looking at the quality standards required in the potential target market(s) in the European Union. There are many quality standards, but the two most important quality standards in the European Union are:

1 ISO 9000
2 Capability Maturity Model (CMM)

Ad 1) ISO 9000

According to the International Organization for Standardization, the ISO 9000 family of standards represents an international consensus on good management practices with the aim of ensuring that the organization can time and time again deliver the product or services that:

- Meet the customer's quality requirements and
- Applicable regulatory requirements, while aiming to
- Enhance customer satisfaction and
- Achieve continual improvement of its performance in pursuit of these objectives.

These good practices have been transformed into a set of standardized requirements for a quality management system. The five standards are ISO 9000, ISO 9001, ISO 9002, ISO 9003 and ISO 9004. A new ISO standard for software development is ISO 15504. Industry experts confirm that in the European computer software and IT services market, ISO is a very important quality standard. It may save exporters in developing countries many hours and efforts in proving their capability to EU clients.

The ISO 9000 programme highlights management and system deficiencies and will improve the capability to produce a quality service. However, although a useful framework for guiding quality improvement, ISO 9000 is an inadequate instrument to measure the quality level of an organisation. Many software companies mistakenly focus exclusively on the production side of their business and on the tools and methodologies they use. They ignore the fact that quality is a cultural issue. Please refer to www.iso.ch and to the CBI publication 'Exporting to the European Union' for more detailed and up-to date information on ISO standards.

Ad 2) Capability Maturity Model (CMM)
There are two different Capability Maturity Models:
1 The Capability Maturity Model for Software (SW-CMM)
2 The IT Service Capability Maturity Model (IT service-CMM)

The Capability Maturity Model for Software has been a model for judging the maturity of the software processes of an organization for many years. It has become a standard for assessing and improving software processes. The CMM is organized into five maturity levels. The more an organization moves up these levels, the more the predictability, effectiveness and control of an organization's software processes are believed to improve. Except for level 1, each level of the CMM is subdivided into several key process areas, which follow below.

Level 1 Initial
The software process is characterized as ad hoc and occasionally even chaotic. Few processes are defined and success often depends on individual efforts.

Level 2 Repeatable
Basic project management processes are established to track cost, schedule and functionality. The necessary process discipline is in place to repeat earlier successes on projects with similar applications. The key process areas focus on the software project's concerns related to establishing basic project management controls. They are Requirements Management, Software Project Planning, Software Project Tracking and Oversight, Software Subcontract Management, Software Quality Assurance, and Software Configuration Management.

Level 3 Defined
The software process for both management and engineering activities is documented, standardized and integrated into a standard software process. All projects use an approved, tailored version of the organization's standard software process for developing and maintaining software. The key process areas address both project and organizational issues, as the organization establishes an infrastructure that institutionalizes effective software engineering and management processes across all projects. They are Organization Process Focus, Organization Process Definition, Training Program, Integrated Software Management, Software Product Engineering, Intergroup Coordination, and Peer Reviews.

Level 4 Managed
Detailed measures of the software process and product quality are collected. Both the software process and products are quantitatively understood and controlled. The key process areas focus on establishing a quantitative understanding of both the software process and the software work products being built. They are Quantitative Process Management and Software Quality Management.

Level 5 Optimizing
Continuous process improvement is enabled by quantitative feedback from the process and from piloting innovative ideas and technologies. The key process areas at this level cover the issues that both the organization and the projects must address to implement continual, measurable software process improvement. They are Defect Prevention, Technology Change Management and Process Change Management.

The IT Service Capability Maturity Model (IT Service CMM) is a model in progress aimed at providers of IT services like management of hardware and software, operations, software and maintenance. The structure of the model is equal to that of the Software CMM. Its contents, however, are key process areas needed for mature IT service provision.

Be aware that most important is that your client in the European Union must be familiar with the standard. A local standard could be very useful within a country, but might be unknown for European clients.

These quality standards are expensive. There are, however, some initiatives to obtain these quality standards in a less expensive way. Industry associations sometimes contribute, as well as some governments. Checking this may be worthwhile!

The Center for Internet Studies found some proof that these certifications are less important for smaller companies. For them, flexibility is the most important issue. The Indian company Wipro Limited was the first company to obtain both a SEI-CMM and PCMM level 5 rating. Refer to its website http://www.wipro.com/ for more information.

CMMI

Some leading software companies in the USA, India, Europe, and the Asia-Pacific region are currently upgrading to the CMMI standard. It stands for Capability Maturity Model Integration. More information can be found at: http://www.sei.cmu.edu/cmmi/.

Threat of unemployment and CSR

The issue of moving jobs overseas has raised much concern in some member countries of the EU, as they fear loss of employment in the IT sector. Research and government statistics reveal that about 270,000 jobs in the UK will move offshore by 2010. This includes around 80,000 IT services jobs and about 130,000 business process outsourcing jobs. Two British trade unions, Amicus and Unifi, expressed their concern over the issue and set up a commission to address the growing threat of companies outsourcing positions. In Germany, the discussions about this topic are very hot at this moment as well. Labour unions are pressuring the German government to take protective actions. Exporters from developing countries could be adversely hit if for example protective measures were to be taken. Although this is not very likely to happen in the very short term, exporters could stay alert and remain informed, for example by contacting industry associations on a regular basis.

Another issue that is gaining importance is Corporate Social Responsibility (CSR). Consumers are more and more conscious of the ethical behaviour of companies and the products/services they acquire. In the IT business, health and social issues are becoming important, e.g. work space for employees, pension plans and health insurance.

More information
Appendix 3.2 (websites of organizations that provide information on EU standards)
Capability Maturity Model for Software - http://www.sei.cmu.edu/cmm/
IT Service Capability Maturity Model - http://www.itservicecmm.org/
Software certifications - http://www.softwarecertifications.com/

10.2Tariffs and quotas

Tariffs and quotas

Computer software and IT services are services, so they are not submitted to import duties. VAT taxes and outsourcing are a hot issue in the EU. VAT is a tax, levied by the individual member countries in the European Union. It is added to the price of products and services and will therefore influence the price consumers and companies have to pay. These VAT-rates differ per EU-country and are shown in table 10.1.

Table 10.1 VAT-rates applied in the EU-member states (2004)

Country	Standard rate (%)
Austria	20
Belgium	21
Cyprus	15
Czech Republic	19
Denmark	25
Estonia	18
Germany	16
Greece	18
Spain	16
France	19.6
Hungary	25
Ireland	21
Italy	20
Lithuania	18
Luxembourg	15
Malta	18
Netherlands	19
Poland	22
Portugal	19
Finland	22
Slovak Republic	19
Slovenia	20
Sweden	25
United Kingdom	17.5

Source: European Union 2004

In the software and IT services industry, the following general rule applies:
1) VAT is paid in the country where the service is actually performed
- Example 1) UK company that outsources the helpdesk activities to a local UK company, should pay VAT;
- Example 2) UK company that outsources the helpdesk activities to a service provider in India, does not have to pay VAT. The rules within India apply for the service provider with regard to VAT.

This means that service providers from developing countries have a competitive advantage compared to service providers in the EU. At the moment, some discussions are going on within the EU to change this rule.

Electronic services
In 2002, the Council of the European Union adopted a VAT directive containing a regulation on the levy of VAT with regard to electronic services. These so called 'digital goods' include:
- Broadcasting
- Web-hosting
- Distance maintenance
- Software
- Images
- Databases
- News services
- Music, films and games
- Online gambling
- Distance learning

Under this regulation, effective from 1 July 2003, electronically supplied services are taxed in the country where the service is consumed. The regulation affects suppliers of electronic services both in EU countries and in non-EU countries.

More information
Belastingdienst - http://www.belastingdienst.nl/buitenland_uk/download/index.htm
Click the following:
- Directive 2002/38/EC;
- Regulation 792/2002;
- Guidelines on Electronically Supplied Services.

Digital Sales and the European Union (PDF)
http://www.ford-peacock.com/inc/content/files/Digital%20Sales%20032603-42f68.pdf

Directive relating to VAT on certain electronic services -
http://europa.eu.int/comm/taxation_customs/taxation/ecommerce/vat_en.htm

This concludes part A of this study. Having analyzed the information about the industrial demand, trends, outsourcing and access barriers of the computer software and IT services market in the EU, exporters will have to be able to make decisions in the export process. Part B is about this topic and will present some guidelines on entering the EU market.

PART B

EXPORT MARKETING GUIDELINES: ANALYSIS AND STRATEGY

To export or not to export to the EU?

Should developing country exporters of computer software and IT services get involved in the EU trade? If so, how should they do this? Part B of this study assists exporters in answering these questions.

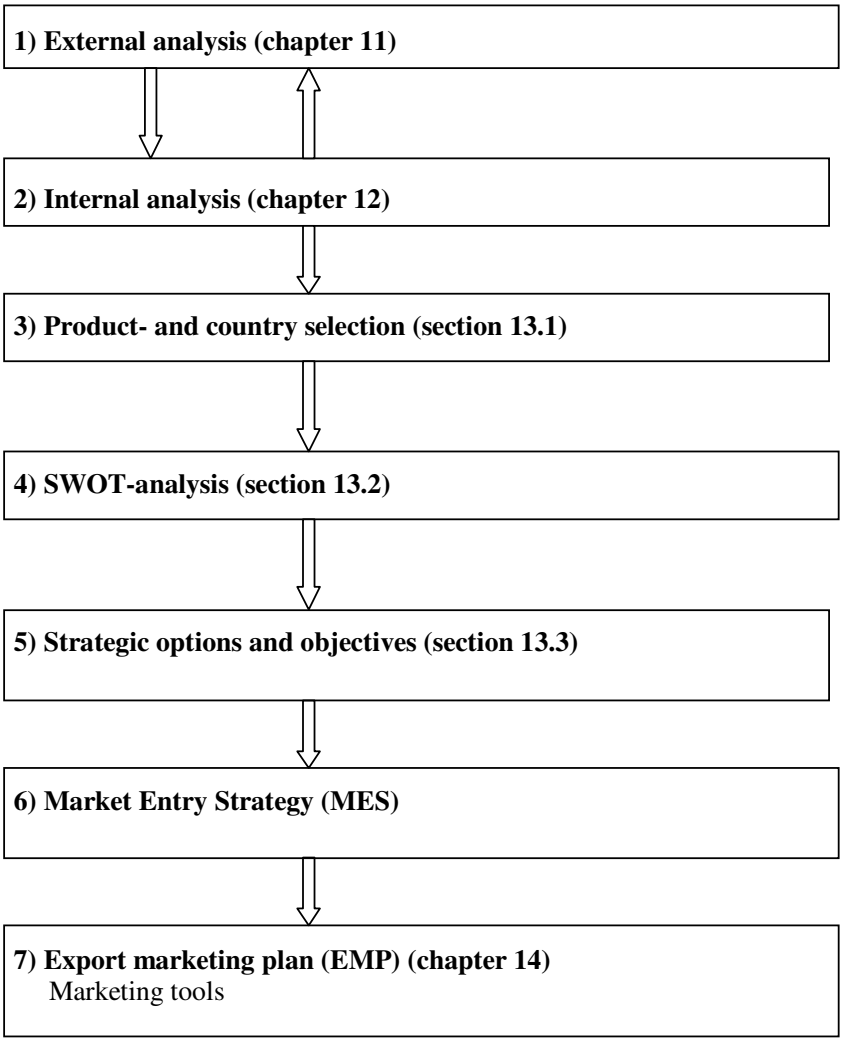
Exporters should be able to determine:

- What are the best opportunities within the EU;
- The most promising destination countries within the EU;
- The best sales channels;
- Their market position;
- Their possibilities to assess their competitiveness;
- A possible export strategy to the EU;
- Whether or not to export.

An analysis of the existing opportunities and threats in the EU-markets could help the exporter with the process. This will be the subject of chapter 11. The internal possibilities and limitations of the company and how they influence the export process are described in chapter 12. Having completed this analysis, the exporter is able to make a decision whether or not to export. If he decides to export, the SWOT matrix could assist the exporter in setting his strategic options and objectives (section 13.3). Chapter 14 gives exporters information on the marketing tools they could use in order to build successful relationships, once an entry strategy has been chosen. This whole decision-making process is shown in figure I.

The information provided in Part A of this study could be helpful in conducting the analysis and formulating a well defined export strategy. Where applicable, reference will be made to the sections concerned in Part A.

Figure I Decision-making process developing country exporter



11 EXTERNAL ANALYSIS: MARKET AUDIT

A good preparation is very important for a successful penetration of the EU-markets. Market research plays a key-role in this, since it gives a clear idea of the chances and limitations there are in these markets. This chapter hands exporters a structure for analyzing the external environment and gives procedures and sources based upon which they can do this all themselves. Section 11.1 is about market development and opportunities, the competitive analysis is the subject of section 11.2. The assessment of relevant sales channels follows in section 11.3, while the price structure is discussed in section 11.4. Section 11.5 concludes this chapter with two product/service profiles.

11.1 Market developments and opportunities

Part A has described the actual and future market situation for the EU market for software and IT computer services. From the data of chapters 3, 4, 5 and 6 some main conclusions can be drawn. For exporters from developing countries, industrial demand and the market for outsourcing in the member countries of the EU are very important indicators. There has to be a certain market and acceptance of the service, as exporters from developing countries generally cannot create a demand themselves. Some important developments can be seen in the software and computer software business:

- There is a market recovery for the whole European IT industry
- There is a trend for cutting costs in EU
- (Offshore) outsourcing is on the increase
- BPO is booming
- There are more emerging offshore locations (refer chapter 6)
- There is severe competition from Central and Eastern Europe (refer section 6.7)

Market research

For exporters of developing countries, an analysis of the opportunities and threats in EU-markets is very important before making decisions. Exporters would at least want to have data on:

I The market for software and IT services
II The outsourcing market EU
III The outsourcing market by member state

Ad I) The Market for software and IT services

The market for software and IT services in an EU country gives an idea of the market size for outsourcing, as it is a derived demand. Perhaps even more important is its development, as for example an increasing market offers more opportunities than a stagnating or decreasing one. These data can be used as indicators of the market potential for outsourcing services.

Moreover, exporters would like to have information on the type of IT services that are popular in the EU and in each country. Some of these data and projections are*** available in chapter 3 and appendix 2 of this study. More details are available in the EITO study. Industry associations could have specific data as well, including important trends.

More information

- Chapter 3
- Appendix 2 and 5
- EITO (http://www.eito.com/, cost € 80)
- Industry associations (appendix 3.3)

Ad II) The Outsourcing market EU

Chapter 5 of this study gives data on the outsourcing market and includes some projections as well. Moreover, the main reasons for EU companies to outsource are highlighted, as are the main technology functions that are outsourced and a sector comparison for outsourcing. Information on the

selection criteria can also be found in this chapter. All this gives exporters the opportunity to analyze main market developments and motivations for EU companies to choose outsourcing.

More information
- Chapter 5 (market and trends)
- Chapter 6 (offshore locations)
- Appendix 5 (websites on outsourcing)

Ad III) The Outsourcing market by EU member state
Beside the general EU figures, data on outsourcing by each member state would be welcome too. It enables exporters to compare the highlighted member countries. Again, chapter 5 gives information on motivations for outsourcing by member state, main technology functions that are outsourced and the main advantages and disadvantages of outsourcing. Chapter 4 could be used to find some data on the production by each country and the main players in the local markets. Developing country exporters could use this information to look at the competitive environment, or to find potential prospects in terms of outsourcing.

The new CBI Manual 'Your guide to market research' gives exporters information on conducting market research and how to find reliable sources.

More information
- Chapter 4 (main players (potential prospects) by EU member state)
- Chapter 5 (outsourcing market)
- Appendix 3.3 (industry associations)
- Appendix 3.4 (trade fairs)
- Appendix 5 (websites on outsourcing)

11.2 Competitive analysis
Exporters would want to have information on competition as well. When looking at the offshore outsourcing market, not only domestic companies, but other offshore locations are also important to look at, since the Central and Eastern European region and Asian areas are emerging as well. Not only is the price important. Other factors such as government support, availability of labour, education level, infrastructure, quality, cultural compatibility, proficiency in languages within the EU and time/distance also play an important role. Chapter 4 highlights the main players within the IT industry by each EU-country and chapter 6 profiles the main offshore locations and their pros and cons. Furthermore, visiting trade fairs could supply an exporter with very useful information. Trade associations, both in the EU and in other offshore locations, could be valuable as well by providing information on trends and member lists, for example.

Questions
A - Determine direct competitors
1) Which other developing countries and/or from Central and Eastern Europe have comparable software or IT computer services?
2) What are other companies in your country that offer a comparable product/service as well?

B – Analyze these competitors
3) What are their marketing policies?
Try to get information on their price-, product-, promotion- and distribution policy.

4) Which are the reasons for the (non-)success of their services?

C – Determine your own strengths and weaknesses (refer chapter 12)
5) Use this information to compare: exploit the strengths and eliminate the weaknesses.
6) Prioritize strengths and weaknesses; some are (far) more relevant than others.

More information
- Analysis offshore locations (chapter 6)
- Find websites of competitors (chapter 4 for EU and chapter 6 for offshore locations)
- Visit trade fairs (appendix 3.4)
- Trade associations (appendix 3.3)

11.3 Sales channel assessment

The choice for the most relevant sales channel is different for each individual exporter as several factors play a role. The outsourcing decision making process by an EU company, as described in section 8.3, gives exporters of developing countries a good insight into what criteria are used to select an outsourcing partner and how important they are.

According to the trade structure in section 8.2, the most relevant distribution channels for developing country exporters are, generally speaking, having their own sales office in a EU member country and using a specialized broker/consultant. The reasons to choose for either will be discussed below.

Sales office in a EU member country
The most important benefits of establishing an office within a member country within the EU follow below.

- Improved credibility

Local presence gives especially small DC companies more credibility, it helps them overcome a lack of brand recognition and it shows commitment to the market. This is a response to the observation by industry experts that report some reluctance among end-users in Europe to foreign firms that want to sell a service without a local presence.

- Strengthening of long-term relationship

Establishing a long term relationship with an EU partner takes time and can be done much more easily via a local presence. A local firm might, for example, either have the necessary relationships already in the country and/or is better situated in terms of language, culture, and logistics to develop new ones.

- Improved communication and service

Communicating with clients is very important. A local presence simplifies this process, especially if after-sales service should be available 24 hours a day.

- No time difference

A local presence makes current and potential customers more comfortable knowing that they will not need to call the DC (which are sometimes many time zones away) for their questions, problems, technical, or customer support.

- Trust

As with the improved credibility, local customers tend to trust a local firm more because it is subject to local legal liabilities.

- Better understanding of market

The local DC company has more and faster access to important knowledge about the local market structure, developments, sales cycles, economic trends, regulatory issues, and cultural factors and tastes.

- Face to face

A local presence is particularly important in Southern Europe as business in these countries is very relationship oriented. Face-to-face interactions are much more important than in, for example, Anglo-Saxon cultures such as the United Kingdom or Germany.
Establishing an office in the EU requires an investment in resources. It takes more than money alone. Investment in time and commitment are examples of other conditions as well.

Starting one's own office in the EU does, however, not necessarily imply a very large and luxurious office. The most important elements include an office, a relevant IT specialist and an administrative assistant. The costs for these vary per each highlighted member state. The salaries as displayed in table 11.1 vary per job and per country. Be aware that the figures in table are a rough indication. The sample of the population of the research is relatively small, but still, these figures are an interesting indicator.

Table 11.1 Average salary by job in five EU-countries, April 2004
EUR

Salary by job	Belgium	France	Germany	Netherlands	UK
1 Software engineer / developer / engineer	27,640	33,210	49,534	56,530	40,664
2 Team leader, IT	36,970	75,571	67,294	71,862	67,602
3 Consultant, IT	48,257	33,210	40,498	56,530	70,117
4 Administrative assistant	34,277	27,975	25,431	25,817	25,530
5 Office manager	40,690	35,604	49,548	na	32,790

Source: www.payscale.com
Exchange rate 24 April 2004 1$ = 0.84 EUR

Other interesting costs are the annual office occupancy costs per country. Table 11.2 shows an overview for five highlighted EU-countries. The data mainly cover the most expensive city within a country. An office in London (UK) would be most expensive, costing € 1,478 per square metre in 2003 on average.

Table 11.2 Total average annual office occupancy costs, 2003

Country	City	*€ PER SQ/M*
1 Belgium	Brussels	418
2 France	Paris	961
3 Germany	na	685
4 Netherlands	Amsterdam	418
5 United Kingdom	London (West End)	1,478

Source: Cushwakeasia

Another indicator could be the time it takes to start a sales office within the EU. According to table 11.3, this is completed the fastest in the Netherlands, taking 11 days to complete the process. The same process would require 56 days in Belgium.

Table 11.3 Time to start a private limited company (PLC) in EU (2003)

Country	Days
Belgium	56
France	53
Germany	45
Netherlands	11
United Kingdom	18

Source: Institut der Deutschen Witschaft

As stated in section 8.2, it could be wise to set up an office in a joint effort. For example, the government or the industry association might contribute to such a presence, allowing several companies at once to profit from the office and facilities. Before starting such an operation, a thorough marketing plan should be drawn, discussing in detail questions like: what are the expected revenues? What are the costs? Who is responsible for which activities? One of the great challenges is to find the right manager: the human factor is decisive. A good project manager leads the process and makes it run smoothly. Take into consideration as well that it generally takes several years to reach Break Even Point.

Part of the process is the decision where to locate a European office. Which country? Which region? Which city? The country selection in section 13.1 could assist in choosing a target country and most suitable region within a country.

Broker / specialized consultant
If establishing and maintaining a sales office in the EU is not a feasible option, working with a broker and/or consultant could be the second option. In fact, it is an alternative European presence, although there are some main differences. In general, brokers and consultants serve the less experienced or starting EU-customers moving offshore. Consultants provide, among other things, the following range of services, although some may focus on specific areas only:

- Advise EU-customers on their offshoring strategy
- Help the customers identify offshorable projects
- Identify vendors for the concerned project
- Conduct vendor audits
- Monitor the Request for Information (RFI) / Request for Proposal (RFP) process
- Help the customer negotiate the best price from the vendors
- Monitor the delivery process for quality and timeliness of delivery.

Exporters have to give up some margins as the services of these brokers/consultants have to be paid for, refer to section 11.4 as well. Once again, brokers focus more on matchmaking, although the working area of brokers and consultants sometimes overlap. Some benefits of working with brokers/consultants are:

- Improved credibility and trust (probably the most important benefit for developing country exporters).
- Lower sales & marketing costs (compared to one's own sales office)
- Easier access to the global markets
- Face to face contact
- Good local knowledge of the market
- Better visibility when recommended by the broker/consultant, thereby increasing chances of getting short-listed in the RFP.

Often, brokers/consultants advise customers to have several vendor channels for best pricing. Though such brokers/consultants act as the agent of the customer, they often require the vendors to register with them and pass through a pre-qualification process involving an audit. Some large outsourcing consultants are neoIT, McKinsey and GartnerConsulting, with an increasing focus on the Indian market. Outsourcing consultants currently facilitate less than 10 percent of the total revenues of the Indian IT sector.

The credibility and trustworthiness of the broker/consultant are very important in this process. An example of a broker has been mentioned in section 8.2. It is the European Information Technology exchange. Their website www.EuroITX.com aims to bring IT service providers of developing countries in contact with (potential) EU clients. The services offered are for free.

The choice for the distribution channel will vary per exporter. As a summary: seriously considering a local presence would be really recommended, regarding the common practice in the market, the market developments and the opinions of experts. If possible, this could be done by combining forces (industry associations or other service providers join the effort). Carefully look at the pros, cons, expected costs and revenues, speak to colleagues/experts and take a decision. Working with a broker/consultant is an option when resources are not sufficient to establish your own sales office and/or a lack of credibility or trust. Although the main goal would be to establish a sales office, a possibility could very well be to start by working with a broker/consultant and gain some experience with the market. If they are good, the next step could be the sales office.

As described in section 8.2, other potential sales channels include European software companies, European companies establishing subsidiaries in developing countries, partnerships with large EU service providers and contacting end users directly, although these options are theoretically for most service providers in developing countries. Please refer to section 8.2 for a description and in what situations these options happen. Of course, these target groups are more within range when a sales office has been established.

11.4 Price structure

As with prices, it is hard to give a detailed picture of the price structure in the software and services industry. The price structure varies by project, per client and per sales channel. Below follows an indication of prices and margins for the two most relevant sales channels.

Sales office
In general, margins will be higher when a middle man will be cut out. But, once again, price is not the only argument, as credibility and trust play an important role as well.

Brokers / consultants
The contracts that these brokers and especially consultants negotiate could, generally speaking, have tight pricing and somewhat lower margins than the current industry levels. These brokers/consultants have a clear understanding of the detailed cost structure of the provider and, moreover, have relationships with several vendors. As a consequence, they are in a position to negotiate the best deal for the client in the EU. In most cases, service providers are asked to work out their breakeven costs excluding the sales and marketing overheads), and offer a 20-25 percent mark-up on these costs, meaning a net margin of 17-20 percent on sales. The pipeline of contracts being negotiated through such brokers is expanding.

Some examples in practice: in general, consultant NeoIT is known as price aggressive and will negotiate the lowest possible price for its clients. On the other hand, consultants McKinsey and Gartner are more likely to emphasise the qualitative aspects of the vendors. As mentioned in section 11.3, brokers/consultants often recommend clients to adopt a multi-vendor strategy to have at least one leading customer and one mid-size vendor, in order to keep pressure on the pricing from both vendors.

Refer to section 14.3 for drawing up an offer.

11.5 Product profiles

This subsection gives a structure for setting up a product profile for a Computer Software product, (CRM) and Business Process Outsourcing (BPO). For each service, the exporter will find information on market requirements, market structure and practical tips on improving the quality of the products/services. They are examples and are meant to give the exporter an idea of how to improve or develop a service.

PRODUCT PROFILE CRM (focus Germany)

1 Product name
Customer Relationship Management Solution

2 Market requirements
European quality standards
ISO 9000 and ISO 15504

Dimensions
Specify in a table which functionality areas are covered (e.g. marketing, relationship management, sales, service, other), and per area the dimensions and restrictions in the functionality. Also specify relations of the product with hard- and software platforms (operating systems, network architecture etc.) and other software the CRM solution can communicate with (e.g. ERP software, business intelligence programmes, product configurators). In the CRM software market, it is not only important to have a clear understanding of the IT market but it is also essential to have a good knowledge of the business management process. As a result, outsourcing works best for customer management processes that enterprises can easily isolate from the rest of their business. "It's great when the requirements are very well known and the process doesn't change much and the outsourced application is fairly isolated from the rest of the enterprise operations."

Size
Specify the size in a table, in a minimum and maximum number of users, number of sites and purchase costs related to the modules and the number of current or named users.

3 Market structure
Main markets
The main EU markets for computer software and IT services are Germany and the UK. Refer to chapter 3 of this market survey for more details. Specify per country the market size, based on relevant segments in the markets. The total German application software market, among which CRM, remained at € 7.3 billion in 2003. CRM software was estimated at $2.3 billion in 2001, a year considered as one of the most difficult ones in years. One of the causes for the decline in CRM software is considered to be the difficulty of linking CRM to the previously installed software systems in companies. Outsourcing of customer relationship management is particularly popular. The market research firm Dataquest found in 2001 that 45 percent of Western Europe's total outsourcing CRM revenues came from Germany.

Average prices: (retail)
Since there are many solutions and there are per solution many variations in price (different sets of modules, different ranges of users, multi-site environments), we refer to the Internet sites of the different CRM suppliers for current price information. Software companies are mentioned in section 4, company databases included. Price will continue to be a key factor in the German software market. According to analysts, companies increasingly prefer fixed-price projects.

Market trends
Specify for the particular market and market segmentations history and trends in size, demands, successful solutions and distribution, prices and technology. For the coming years, various research institutes are predicting a new boom in the CRM market in Germany. Forrester Research predicts average growth rates of 11.5 percent until 2007. Many companies are still planning to implement CRM. A trend in Germany is CRM outsourcing companies which help business speed up the implementation process. Another trend in end-users behaviour is a niche approach. The enterprise focus on the aspect of CRM that is most important to them. Outsourcing trends are:

- A focus on bottom line, return on investment and maximizing financial resources.
- Continuing consolidation among suppliers. As the economy strengthens, there will be more buyers and opportunities.
- The requirement of CRM intelligence for eCommerce sites to grow and be profitable

End-users
The most important end-users of CRM systems have been the manufacturing industry and banking and insurance. Others are the telecommunications industry, utilities, retail, services and public organizations and transportation companies. Major users are very large companies but the SME market is expecting to grow. Decisions concerning CRM are typically made by CEOs, in conjunction with their marketing and IT departments, the latter being responsible for recommendation of the software. One of the most important considerations in determining whether to outsource is the intensity of the customer relationship, which translates to the frequency of contact with the customers and their economic value to the company. Service-oriented companies, such as financial services, that live and die by maximizing the value of their customer relationships shouldn't outsource. Outsourcing is better-suited to small and medium-sized companies that lack the requisite expertise. Larger companies often have more ambitious and complex customer management programs that don't lend themselves to outsourcing.

4 Main suppliers
Specify the operating competitors in the relevant market segments. Take a special interest in successful new arrivals in the market. East European developers are emerging in software development. In Germany, more than 120 CRM providers are currently active on the market. The biggest suppliers in Germany can be found in table 11.4.

Table 11.4 main suppliers CRM Germany

Company	Country of origin	Market share 2001
1 Siebel	USA	32
1 SAP	Germany	32
3 Oracle	USA	3.6
4 PeopleSoft	USA	3.2
5 Applix	USA	2.8
5 CAS Pirmasens	Germany	2.8

Source: Handelsblatt, 18 September 2002

In addition to the relatively large IT service consulting firms, there is an increasing number of smaller companies, e.g., Syskoplan, KabelTeam4, SHS, and Extraprise, which specialize in this complex area and are expected to have positive growth potential through their product and specific industry knowledge.

5 How to improve the quality
CRM implementations
Special emphasis should be given to selecting high standard implementation partners, and the communication with them.

More information
BITKOM - www.bitkom.org
Limesearch - http://www.limesearch.co.uk/c/r/crm/
Outsourcing center - http://www.outsourcing-center.com/ (search by CRM)

SERVICE PROFILE BPO (United Kingdom)

1 Service name
Business Process Outsourcing

2 Market requirements
Quality
Building trust by emphasis on high-quality services. ISO and CMM are very good options.

Good communication
Good comprehension of the tasks to be accomplished is a key factor for succeeding in business. Providers should make sure that project work requirements are well known, and success criteria and outcomes are clearly defined, communicated and understood. Furthermore, these should be measurable.

Agreement
Agreements should include a definition of the actual services to be performed, the performance requirements and service levels, the framework of a change management process, the organizational structures of the vendor and client, and dynamics management and review meetings.

Internet presence
A comprehensive website proposing well-defined services, clear prices, competitive advantages in terms of cost reduction and service quality for clients, and a client reference list helps create a trustworthy environment.

3 Market structure
Main markets
The main EU market for BPO is the UK. In 2001 the BPO total market value within the top tier of the British economy amounted to € 9.4 billion in 2001. Banks, telecommunications and oil & gas are the most important sectors. The financial services segment is the fastest growing one. According to Data monitor, the UK is by far the largest market in terms of growth and outsourcing expenditure, followed by France and Germany. Refer to appendix 2 for an example of BPO-services as defined by UNCTAD.

Contract
BPO contracts (6.4 years) are relatively longer than ICT-only contracts (5.3 years). The value of the deals varies a lot. A shared risk and reward business model is being adopted by increasing numbers of corporations as they become more adept at managing partnerships. Deals with a value of € 50 million dropped from 16 in 2002 to 14 in 2003, while the number of contracts higher than € 200 million increased 83 percent. Deals valued at more than € 1 billion were on the rise as well in Europe.

Market trends
The BPO market will grow fast. Predicted BPO growth will range from 22 percent to 30 percent per year. Expectations are that other sectors like pharmaceuticals, aerospace, and food and drug retailers will follow. Smaller outsourcers are winning contracts for specific services.

4 Main suppliers
The UK BPO market includes the following key providers:
- EDS
- Accenture
- Unisys (almost exclusively BPO)
- PWC

5 How to improve customer satisfaction

Security, availability, customer service and overall reliability are key items in the search for a high quality of service level.

More information

- Appendix 5 (websites on outsourcing)
- CW360 Outsourcing report - http://www.cw360ms.com/outsourcing/index.asp
- Outsourcing BPO - http://www.outsourcing-bpo.com/

12 INTERNAL ANALYSIS: COMPANY AUDIT

Having analyzed all relevant external factors, exporters could assess whether they are able to meet these requirements and will be able to respond adequately to the existing opportunities. Internal factors such as standards, quality and USP (section 12.1), marketing and sales (section 12.2), financing (section 12.3) and capabilities (section 12.4) are discussed in this chapter.

12.1 Standards, quality and USP

Standards
Trustworthiness and competence are very important in the market and therefore it could be to the company's advantage to have some form of internationally recognised quality certification. The two most important quality standards in the computer software and IT services industry:

1. ISO 9000
2. Capability Maturity Model (CMM, preferably at least level 3)

Section 10.1 discusses these standards in more detail.

Quality of service
Of course, quality is always very important when supplying services to a client. But in this case it is even more vital as it attributes to the trustworthiness of a developing country service provider. Some EU companies do not know that developing countries offer IT services. In other words: the image of the country could be improved. By providing superb quality, this prejudice is (slowly) removed. Practice shows that an excellent project manager is a critical condition for success.

In order to guarantee or even improve quality, providers could make sure that project requirements are well known and clearly defined, communicated, understood and measurable. This could mean clear and concise process requirements, work descriptions and agreements. Furthermore, a contact list and action plan could be drawn in case a problem cannot be resolved immediately.

Certainly for beginning exporters, it could be wise to focus on one area and to specialize in this to be able to supply the client with an outstanding service. Once the client is satisfied, the services could be expanded.

> *Case: ensuring quality first*
> One of the key success factors of the Cambodian company Digital Divide Data (http://www.digitaldividedata.com/) was a focus on only a few projects to ensure quality results. The staff members have undergone continuous training to provide quality services and ensure client satisfaction. The manager of DDD has undergone training at Cyberdata, a BPO company in New Delhi that specializes in data conversion and digitization. Now, it provides services to many well reputed clients, among which Harvard Crimson.
> Source: Unctad 2003

Flexibility is important as well, although this may sometimes be contrary to ISO or CMM. This is because most standards, by definition, require an exact description of the methods of the project. This sometimes limits the flexibility of a company, as it is attached to the in-house standards.

Data security
Worries about data security are another element service providers could take into account. EU organizations evaluate outsourcing vendors on whether they have sufficiently robust security practices and in what way vendors can meet the security requirements clients have in their own organisation. Most EU companies would not risk security breaks or the loss of intellectual property. Exporters should therefore fully address privacy concerns. One way to do this is by documenting the requirements and the methods, refer to section 14.3 as well.

USP
The more unique the product or service , the more chance of success and profit exporters will have. If the product has some special characteristics which the competition will have a hard time copying, exporters have an advantage. This is called a USP, a unique selling proposition. Be sure to communicate this to the client, as it is a strategic advantage. In this USP lies the negotiating power of service providers. Remember, the main benefits of outsourcing are perceived to be:

- The ability to measure value for money
- guaranteed service levels
- access to a greater skills pool
- the ability to focus on the job in hand.

More information
- Refer to section 10.1 for more information on quality standards
- Refer to section 5.3 for the differences in perceived outsourcing advantages by EU-country

Questions quality and standards
- Are there any subsidies for getting standards? For example trade associations and/or government of developing countries sometimes subsidize the process of getting certified.
- Does your client appreciate a standard?
- Do your competitors (both foreign and local) have standards? If yes, which ones?
- Do you have a (or several) very good project manager(s) at your disposal?
- Are you sufficiently flexible, if necessary?
- Are procedures and project requirements well defined and communicated?

Questions Unique Selling Proposition (USP)
- What are typical characteristics of the service compared to the competition's service (especially in Western Europe)?
- Which of these are not easily imitated by competitors?
- How will you communicate this message?
- Which of these factors are most important to the buyers and end users of your business or brand?

12.2 Marketing and sales

There are many ways an exporter could make use of marketing techniques. If an exporter opts for a structural export of his services, his organisation has to be adapted to this objective. He has to set a policy and choose instruments to achieve his goals. Some main items to be evaluated are:

- Sales office in EU
- 4 P's: price, promotion, place (distribution) and product (service).

Questions sales office in EU

- Does the sales manager have sufficient relevant contacts in the target country?
- Is he capable of speaking the local language and dealing with the business culture?
- Is he able to obtain information on the DMU within the potential client's organisation?

Questions 4 P's (price, promotion, place (distribution), and product (service) (section 12.1))

Price

- What is an effective price strategy? Fixed or time and materials contracts ? Refer 14.3 as well)?

Promotion

- Which main trade fairs do you (have to) visit and are you able do so (refer section 14.5.1)?
- What are possibilities for advertisements in relevant trade magazines and can you afford them (refer section 14.5.2)?
- What are the possibilities for free publicity and are you capable of writing a press release (refer section 14.5.2)?
- Do you have a good quality website (refer section 14.5.3)?
- What are Direct Marketing possibilities and can you find the relevant contact persons (refer section 14.5.4)?
- What are relevant international business events on outsourcing and can you afford this? (refer section 14.5.5)?
- Are your company details known with referrers like Embassies, Chambers of Commerce and trade associations?
- How frequent should your visits to the customer be and can you afford this?
- Are you able to localize a foreign national within the potential client company (diaspora, refer section 14.5.5)

Place (distribution)

- Can you afford your own sales office?
- Is a joint effort an option in establishing the office and are you able to initiate this?

The selection of the sales channel (section 11.3) will influence the way these instruments are used. For example, the sales support materials for your own office can differ from the materials for a broker/consultant.

12.3 Financing

The management has to be willing to allocate sufficient funds and create an adequate budget for export activities. Exporters who want to break into exporting will need funds for working capital, product/service modification, medium term credits to overseas customers, and operations such as staffing, communications and travel budgets. If internal funds are not available, think about securing funds through commercial banks and other financial services providers who can help you meet your long-term objectives.

Questions

- What would be the minimum budget to establish a sales office in an EU member country and would it be available?
- Do you need external funds?
- If yes, which resources are willing to fund?
- Are there any subsidies, in your own or the destination country?

12.4 Capabilities

Operating foreign markets has consequences for the whole organization. Not only sales and administration are involved, the management plays an important role as well. Typical for the outsourcing industry, there are some requirements on the basis of which EU companies decide to work with an offshore service provider (refer section 8.3 as well).

Questions

- Do you have sufficiently skilled personnel available?
- Is there a personnel connection with you and a potential prospect in the EU?
- Are you able to supply the client with a high quality service (refer section 12.1)?
- Is your staff able to deal with foreign languages and cultures?
- Has your staff adapted to Western business practices and norms?
- Is the telecommunications infrastructure within your company of sufficient quality?
- Do you dispose of a legitimate Intellectual Property Rights (IPR) protection enforcement?
- Does your organization have access to sufficient software and hardware resources?
- Are you able to react fast when a client would demand a decision?

13 DECISION MAKING

Having evaluated the external opportunities and the internal strengths or weaknesses, exporters can now determine a strategy. It is time to select a main EU target country with the help of a country selection. This is described in section 13.1. Once this has been determined, this market can be investigated thoroughly. In order to do this in a structured manner, a SWOT-analysis could be helpful. This analysis of strengths and weaknesses, opportunities and threats (SWOT, section 13.2) will help exporters make their main decisions. Section 13.3 is about the strategic options & objectives.

13.1 Country selection

Exporters should be aware that Europe is a continent and not one market. The EU consists of 25 individual member states with their own characteristics. For this reason, making a country selection could be very useful. Even within one member state there could be significant differences. For example, Italy can be divided into two parts (North and South) and Germany is very decentralized. The 16 states are quite different from each other. In Germany, large IT firms and software companies have been clustered around Munich, neighbouring Stuttgart and Heidelberg. The presence of SAP, for example, has resulted in the birth of thousands of smaller IT firms in this region. In contrast to Germany, France has one business centre: Paris. In fact, nearly all French companies have their headquarters in Paris (60 to 65 percent). Lyon and Marseille account for approximately another 10 percent each.

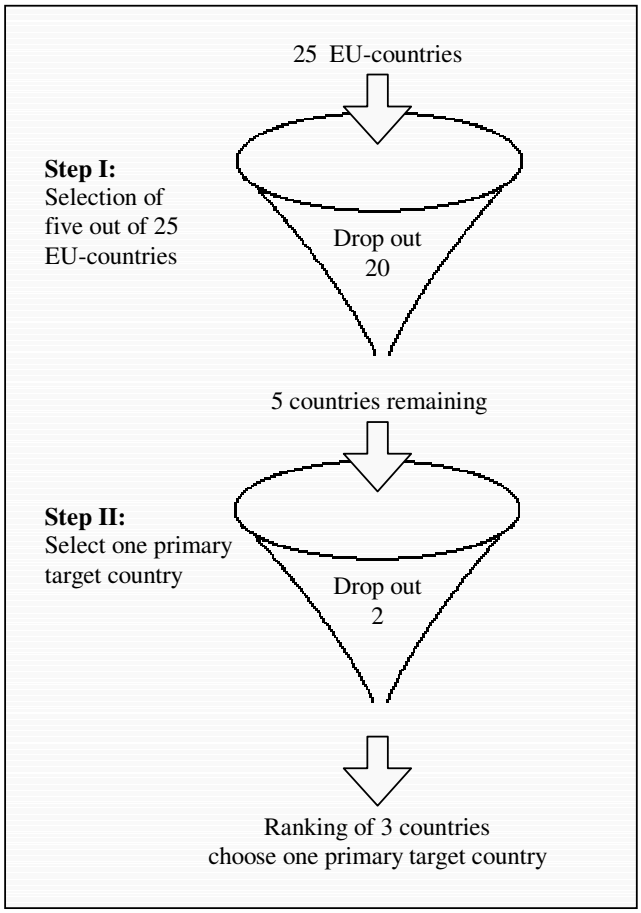
A developing country exporter could prioritise the EU destination countries and then choose one main target country. Individual service providers from developing countries could use the following general tips on how to perform such a country selection.

EU-country selection

When a company chooses a country to export to, extremely trivial criteria often turn out to play a crucial role. The foreign language spoken by the secretary or a coincidental meeting with a foreign importer at a camp site may be decisive factors. In practice, there are many companies that use these criteria when choosing a suitable exporting country. Logically, the important question is: is there another, more appropriate way of choosing the most suitable target country

We recommend you approach market selection as a two-step process. The first step would be to select the most interesting countries from all EU-15, followed by an in-depth survey of the chosen market(s). A rough country selection (I) is followed by a selection of one most promising country (II). Figure 13.1 graphically illustrates the country selection.

Figure 13.1 Country selection



Source: Exportmanagement (2004)

Step I: Selection of five out of 25 EU-countries
Apply some very pertinent questions to a broad range of markets – the questions you ask will depend on specific aspects of the software and/or IT services you are offering. At this stage you, as an offshore service provider, would want to find out about:

- The demand for your service;
  - Collect the statistics on industrial demand (section 3.1 and appendix 2) for software and IT services as an indication for the demand for outsourcing
  - Collect relevant data on outsourcing (section 5.2 and 5.3)
- Look at the trends for these specific services (sections 3.2 and 5.4, and perform research).The availability of appropriate distribution channels for your service (sections 8.2 and 11.3);
- The possibilities and business climate to establish a sales office
- The environment for doing business (e.g. image of your country in EU-target country, language, culture and political environment);
- The opinion of software and IT computer service experts.

From these results, narrow your selection down to five markets by comparing data.

Step II: Select one primary target country
From these five countries, three will remain as most interesting, including a ranking. From these three you can choose the most promising one. To make this final selection, more in-depth research is necessary, especially in relation with the exported product/service. After data are collected from the countries, the most promising country can be chosen. Some of the questions you may want to ask at this stage are:

- The criteria mentioned in step I (again);
- What are the (estimated) costs of your own sales office (refer section 11.3)?
- Are there some specialized brokers/consultants available?
- Competitor research (strengths, success factors, price level). Who would be your major competitor(s)?
- In what way is your service unique in the target country (USP) ?
- Are there any niche markets, and if so, how big are they?
- What are the prices or margins in different parts of the market?
- Are there any significant trade fairs or other events where you can promote your product?
- Will you need to translate promotional material and is it culturally acceptable?
- In what way is it possible to compile a quality long list with relevant potential partners like software companies, IT service firms and/or end users?

During this process, there are ome subjects to consider:

- The filtering criteria must be quantifiable wherever possible, that is to say expressed in money or numbers.
- Weigh the relative importance of some factors over others.

From the results of this research, an exporter can make his decision about which EU-country (or region) is the most promising export country (region). After this has been done, the selected market can be investigated thoroughly (SWOT, section 13.2). Please remember that this is a general approach, in practice it may differ.

Sources of information
Exporters can gather much information from a variety of sources at little or no cost. Sources of information include:

- Part A of this study;
- Trade fairs;
- Talking to colleagues and other service providers;
- Industry associations of the exporters' country but also organizations like the CBI (AccessGuide included) (appendix 3.3);
- Trade journals;
- EITO (appendix 2);
- Internet. There are many websites and databases available on outsourcing. Refer to appendix 3 and 5 for (web) addresses of these sources.

Finally, the CBI has recently released 'Your guide to market research', in which low cost methodologies are presented for performing market research on EU markets.

13.2 SWOT- and situation analysis

A SWOT analysis looks at the company's:

- Strengths (to build on)
- Weaknesses (to cover)
- Opportunities (to capture)
- Threats (to defend against).

A tailor-made checklist could assist exporters in determining the specific strengths, weaknesses, opportunities and threats for their own situation. This checklist for the software and computer service industry can be found in appendix 6. Mark the box which shows how each issue will affect your organization, and whether it has a high or low influence on the company's performance. The final analysis should help the exporter develop short and long term business goals and action plans, a business plan, an export plan and an annual marketing plan.

13.3 Strategic options and objectives

Having completed the checklist in Appendix 6 for your own situation, determine the most important (for instance three) Strengths, Weaknesses, Opportunities and Threats items. Your own internal situation is now combined with the external environment in such a way that adequate strategies can arise. As a summary, table 13.1 shows the SWOT-combinations and the strategies in general.

Table 13.1 SWOT-combinations and strategies

	Strengths	**Weaknesses**
Opportunities	Grow	Improve
Threats	Defend	Problems

Now, insert them in the appropriate box in the matrix below, in the so-called SWOT-matrix (figure 13.2). The cells S, W, O and T are now completed and appropriate strategies can be thought of in the other cells.

- Strengths+Opportunities (S+O)

Use strengths to take advantage of opportunities. The strategies that result from combining these two should be exploited as much as possible. It may provide a sustainable competitor advantage.

Example
Assume the following situation for a service provider:
S= The exporter has a good technological knowledge.
O= Increasing use of Internet

S+O strategy= Develop a quality website

- Weaknesses+Opportunities (W+O)

Try to improve your internal weaknesses and consequently you should be able to take advantage of the existing opportunities.

Example
Assume the following situation for a service provider:
W= Little knowledge of EU-market and potential partners
O= Availability of 2 or 3 trade fairs, which are visited by the major part of the industry

W + O strategy = Visit relevant trade fair(s), for example the CEEBIT

- Strengths+Threats (S+T)

Try to defend against threats by using your strengths.

Example
Assume the following situation for a service provider:
S= Low labour costs and highly skilled workers
T= Lack of credibility and trust

S + T strategy = Establish your own sales office in EU country

- Weaknesses+Threats (W+T)

Minimize weaknesses and avoid threats. This is the worst scenario a service provider could face. Try to avoid this situation or withdraw from it.

Example
Assume the following situation for a service provider:
W= Low financial resources
T= Lack of credibility and trust

W + T strategy = contact brokers/consultants

Figure 13.2 Example confrontation matrix

Strengths (S)	List strengths	**Opportunities (O)**	List opportunities
Weaknesses (W)	List weaknesses	**Threat (T)**	List threats

	Strengths – S	**Weaknesses – W**
	S1 Exporter has good technological knowledge	W1 Small player
	S2 Low labor costs and high skilled workers	W2 Little knowledge on EU-market and potential partners
	S3 Unique Selling Proposition (USP)	W3 Low financial resources available for marketing efforts
Opportunities – O	**S+O Strategies**	**W+O Strategies**
O1 Increasing use of Internet	1 Develop quality website (combination S1+O1)	1 Visit relevant trade fair(s) (combination O2+W2)
O2 Availability trade fairs, visited by major part of industry	2 …… ……	2 …… ……
O3 EU software companies outsource directly	3 …… ……	3 …… ……
Threats – T	**S+T Strategies**	**W+T Strategies**
T1 Image / lack of credibility and trust	1 Establish your own sales office in EU country (combination S2 + T1)	1 Contact broker/consultant (combination T1+W3)
T2.1 Large IT service companies controlling the market	2 …… ……	2 …… ……
T2.2 Tough competition and very high marketing expenses	3 …… ……	3 …… ……

Defining options
Having defined his strategies by performing the SWOT-analysis, the service provider can divide them into three categories:

1) strategies which are a must and which are carried out
2) optional strategies, of which some are selected: choices have to be made by the service provider!
3) combination of several strategies, if possible

Subsequently, the service provider can make an overview of his various strategic export options, then formulate his business/export objectives and choose his strategies. Elements of the SWOT can be used as well as an input for the export marketing policy.

An export plan gives some necessary guidelines and direction to reach your goals. It helps define where you are now, where you will go, how fast this goes, what to do to accomplish your goals and how to deal with uncertainties and change. It does not always guarantee success, but it helps to face important issues inside and outside the business. It allows developing strategies that should be built on strengths of the company and the opportunities that exist in the market and, moreover, it should reduce the risks.

Summarizing, for the decision whether or not to export, the following strategic steps should be reviewed:
1 external analysis (market audit, chapter 11) and internal analysis (company audit, chapter 12);
2 SWOT (section 13.2);
3 decision making & formulation of objectives (chapter 13);
4 elements which can be used as inputs for the Market Entry Strategy (MES, as eg. level of risk, price level) and Export Marketing Plan (EMP, next chapter 14).

In this situation, the service provider could choose between establishing his own sales office in an EU member country and between working with a broker/consultant as a sales channel. A very good website is a must in this process.

Generally, the market entry strategy (MES) is determined after the external and internal analysis and the decision to export have been made. Then an export marketing plan (EMP) is made. It contains details on how the service provider will export the chosen service to the chosen market(s) and by the chosen channels.

For more information on writing an export marketing plan, please refer to the CBI Export Planner at www.cbi.nl. The new CBI Manual 'Your guide to market research' gives service providers information on conducting market research.

14 EXPORT MARKETING

Having determined the strategic objectives, the exporter has to make an export marketing plan, which includes a selection of marketing tools. It works out the strategies that have been selected in more detail, containing elements like targets, timelines, budgets and personal tasks. It often requires quite an investment, which is ongoing. A well-structured and detailed marketing plan is a necessary condition for surviving the very competitive EU market.

This chapter discusses matching services and service range (14.1), a long-term partnership with a business partner (14.2), drawing up an offer (14.3), handling the contract (14.4) and sales promotion (14.5). More information on export marketing can be found in the CBI's Export Marketing Plan (www.cbi.nl).

14.1 Matching services and service range

First of all, exporters could adapt the service to the demands of the market and thus the buyer. As described in section 10.1, quality standards ISO and CMM play an important role in this as they will provide credibility to potential clients. Furthermore, especially for starting exporters, the quality of the service is a very important issue, refer to section 12.1. As mentioned in section 12.1, it could be wise, certainly for beginning exporters, to focus on one area and to specialize in this to be able to supply the client with an outstanding service. Once the client is satisfied, the services could be expanded

More information
- Section 10.1 (quality standards)
- Section 12.1 (quality of service)

14.2 Building up a relationship with a suitable trading partner

Having evaluated the most suitable trade channel (section 11.3), it is time to put it to use. Business partners have to be found and, if the relationship is satisfactory for both business partners, it has to be maintained on a long term basis. The approach for the two most common trade channels differs in some areas.

Establishing sales office in EU member country

If the choice of an exporter is to set up an office in the EU, the first focus would be to find clients (acquisition). With reference to section 8.2, these could be both end-users, like for example companies in the banking-, telecommunications- or insurance industry, and software companies that might be looking for offshore service providers.

The companies and websites mentioned in chapter 4 could be a good starting point. Also have a look at www.emich.edu/ict_usa/. It contains overviews of possible prospects for exporters from developing countries. It has links to, for example, banks, airlines, telecommunications and other players in the IT-industry.

More information
- Chapter 4
- www.europages.com
- Appendix 3 and 5 for more websites, for EU as a whole and by member country

Finding broker(s)/consultants
Selecting the right partner to be your trade partner in-market is vital to your export success. Inappropriate partners and distribution structures can be very difficult to change once you are in the market. It can take weeks, sometimes months, before exporters find a business partner with whom they are willing to face the future. Obviously, the process is difficult enough to allow sound preparations.

As mentioned, the European Information Technology exchange (www.EuroITX.com) could be a very good broker to work with. It is supported by CBI and aims at matching service providers from developing countries and EU clients.

More brokers/consultants could be found by asking colleagues in the industry, visiting trade fairs, contacting industry associations and / or using the Internet. For example, as referred to in section 3.3, the UK Trade Invest programme helps overseas organisations of any size to find partners in the UK.

More information
- www.euroitx.com
- Appendix 3 and 5 for websites
- Business Link - http://www.businesslink.gov.uk/
  - Select Learn about Consultants and/or offshore consultants (UK)
- National Outsourcing Association - http://www.noa.co.uk/suppliersdir.html
  select 'consultants' (UK)

Dealing and communicating with business partners in the long term
Once a relationship has been established, it has to be maintained. Personal contact is essential. After establishing a list of possible trade partners you might need to visit the market to meet them and assess their various merits. Take cultural differences into account when communicating with your trade partner. For example, trade partners from some cultures may initially tell you what they think you want to hear. Cultural traits can vary, even per EU-country. Refer to section 8.3 for this as well.

Business culture
Business diners, as an example are very common in the UK. In Germany, diners are just to enjoy; foreigners will not be invited too quickly to join them. If this occurs, such an invitation indicates a very good relationship between the parties. Contrarily, in Italy a warm welcome is essential. Guests should initially insist on paying the bill, but should finally concede to the host. In France, there are two sorts of diners. The first one is the one to generally build up a relationship, with no strings attached. The second one is a diner where transactions are not really concluded, but are discussed, in order to prepare the final deal. Handshakes are common in almost all EU-countries. Especially in France this is important. It is common to shake hands with all the people present in the room.

In general business practice, Europeans appreciate a follow-up. Confirm appointments and thank them for attending meetings. The French are impatient, be prompt in answering their requests. Send back a fax or an e-mail, just to let them know that the problem has your full attention and that you are working on the problem. In the German market, e-mail and (especially) fax are important. Be on time when visiting the German client; this is extremely important. When targeting the UK market, it could be useful stating distances in kilometres and miles.

For more information on how to build a business relationship, please also refer to the recently published CBI manual 'Your image builder'.

14.3 Drawing up an offer

The following section gives an example of how an offer in software development and software related services could be made. The example could be used as a framework for exporters' own offers, both in the software and in the services industry.

According to industry expert Laszlo Klucs, there are three specific areas of importance with respect to software development:
1 Specifying what is wanted (requirements)
2 Ownership
3 Pricing software development.

Ad 1) Specifying what is wanted (requirements)
The definition of what is exactly being purchased is very important. It is essential for the purchaser to be able to set out what they want and for the supplier to be able to provide a detailed price. The purchaser could therefore specify:

- The functionality of the software itself;
- The standards that the software is required to conform to;
- The environment the software will operate in;
- The performance of the software in the chosen environment.

These things may have been done already at the Request for Proposal (RFP) stage. If not, they need to be identified before a final agreement is established.

Ad 2) Ownership
The second area of importance relates to the difficult question of ownership of the completed product. There are a number of options and implications for both parties here. Service providers have a range of approaches to this issue including:

- building the software for the purchaser's specific needs.

In this case the client owns the software and it is used only by his/her company. The software is so specific to the purchaser's organisation that it has no market value outside the company.

- the supplier owns the developed software, licences it back to the purchaser and reserves the right to licence it to others.
- the purchaser owns the software and licences it back to the supplier, who is allowed to market it as well.
- the purchaser and the supplier participate in a joint venture to market the software.

Ad 3) Pricing software development
The third area concerns the methods of payment for the software. There are, in general, two common ways to price software development:

- fixed price
- time and materials

Fixed price
A fixed price is the price for the whole project, no matter the extra materials or time it may take. In most cases, suppliers are likely to build in a much more controlled process to address changes of any sort to the originally specified system. This is done for their own protection. The supplier will deliver what was contracted for, even if the buyer were to decide it is not what he wants, unless the purchaser follows an appropriate change control procedure. This procedure could be defined in the agreement.

Moreover, the service provider, most probably, will charge a premium for a fixed price relative to the risks involved. The more defined the project to be delivered, the less the risk. The less the risk, the lower the premium. Despite this premium, the buyer may still prefer the apparent extra cost of the fixed price as it provides a degree of certainty.

Time and materials
The second method of payment would be a project based on time and materials. This allows more flexibility, but may lead to a less disciplined approach to the project. The supplier may not be formally bound to produce what the purchaser has asked for within a set cost and time. The risk for the buyer lies in the fact that the supplier may charge some extras, for example by adjusting the original requirements. The purchaser has therefore much more responsibility to ensure that the costs do not grow significantly. It may be wise to include some change control procedures. This could be specified in the agreement as well.

Furthermore, the time and materials agreement could deal with other variable issues such the acceptable level of daily allowances and travelling. Both parties need to consider when payment for services will occur. Will this be in one amount at the end of the project, as the expenses are incurred, or some other staged approach? If this latter method were adopted, then typically the agreement would include a payment schedule that sets out the agreed milestones and the payments that become due upon their achievement. The agreement could also take into account what happens if any of the software development key parameters changes. Are there extra payments to be made? How will the financial issues dealt with?

Most contracts are being written for shorter periods of time now than they were five or 10 years ago. It is now uncommon to enter into a 10-year contract; most contracts are being written for periods of between five and seven years. While it is possible to get contracts for shorter terms, such as three years, this is less desirable for both the outsourcer and the vendor.

The long term of a contract may give a feeling of certainty to the service provider. But it has a main disadvantage as well, as markets and the economic climate may change. For example, some contracts signed in the late 1990s have been renegotiated and adapted to the new market situation. Including a benchmark clause could therefore be an idea. This allows reassessing and adjusting contract terms.

Selecting price methods
In IT outsourcing, two benchmarking methods have emerged in terms of pricing: the price-down approach and the cost-up approach. The price-down method compares prices paid by the client against real market prices paid by other customers who buy similar services. This method works as long as price data for similar services is readily available. Where price data is available, but for different services, adjustments must be calculated to produce a fair market price.

The cost-up method calculates a fair market price by simulating the outsourcer's costs, based on the known costs of organisations delivering similar services in-house. These costs are supplemented by an extra premium to represent the outsourcer's overheads, profit, and risk. This process appears more complex than the price-down method, but is the only option when comparable market prices are not available. In practice, both methods are common. Selecting the appropriate method depends on a number of factors, summarised in table 14.1 below.

Table 14.1 Selecting price method

Price down method	**Cost up method**
Vendor's pricing is detailed	Vendor pricing is too high level
Services are commodities and vendors price the service in similar ways	Large multi-service contracts in which some services may have cross-subsidised others
Comparable price points are available	Insufficient comparable price points are available
	Contracts include a high proportion of intangible 'value add'

Source: http://www.compassmc.com

Currency
The most commonly used currency is the US dollar. But a good alternative would be the Euro (€).

Other possible issues

- What documentation is to be produced, to what standard, in which language, and who provides it? Who installs the software and at what cost?
- What actions must be performed as a condition of acceptance (e.g. what tests will be carried out) and who does them?
- What data conversion is required and who does this?
- What defect/issue resolution support is to be provided during the warranty period?
- What quality assurance tasks are required and who performs them?
- All the offshore contracts could specifically highlight the system of dispute settlement. Although there are international dispute settlement groups situated in London, Brussels and Geneva, it is recommended to clarify the legal aspects of dispute settlement in the outsourcing contract itself.
- Risk/reward sharing deals can become more common.

Some practical suggestions

Some suggestions for successful proposals:

- Make the offer as personalized as possible. Show that you understand the buyer's specific needs by asking specific questions before stating the offer.
- Prove your expertise. As the 'expert' you could present solutions and outline your approach. Mention relevant experience and include some names of well known clients.
- Quote a fair price. Inaccurate and unrealistic offers lower your credibility.
- Be aware that in the EU, a client may expect too much of the savings of the project. Some clients expect too much cost reduction in offshore outsourcing. To overcome this, describe why you're worth the price and what additional value you'll deliver. Mention some hidden costs and your USP as well (refer section 12.1).
- Study your competition. Find out about awarded projects in the past to find out what the winners did differently and adjust accordingly.
- Make a telephone call to ask whether the offer (and the brochures, if applicable) has arrived and ask whether additional information is needed. This allows an extra contact moment with the client.
- Also take the cultural differences into account when sending an offer. For example, always approach a German in a very polite and formal way. In France, the relationship with a client is very important. Terms and conditions are discussed later; first the buyer and seller have to have a good relationship. First get to know each other! Refer to section 14.2 as well.

Please refer to the CBI's Export Planner for more detailed information and definitions of payment methods.

More information

Compass MC White Paper - http://www.compassmc.com/white_papers/FairMarketA4doc.pdf

- PDF file: 'Fair market price using benchmarks to establish rates for outsourcing services'

Contracts, models and drafting - http://www.intracen.org/laft/

- Collection of more than 160 model contracts and users' guides

Strategic outsourcing services - http://www.itssonline.co.uk/2003/march/article7.asp

- Contracts (Part 1) ITSS March 2003

Working effectively with standard outsourcing contracts – http://wp.bitpipe.com/resource/org_973204426_74/working_effectively.pdf

- Problem areas according the Robert Frances Group are discussed, fees, service levels, ownerships and termination

14.4 Handling the contract

Once the agreement is signed, both buyer and supplier will have invested significant time and effort in completing negotiations and assembling all the required schedules into the final document. Both parties should now put this investment to work for them to ensure that all stages of the delivery, installation and acceptance are completed in accordance with their agreement and as agreed by both parties.

From practice, a very important success factor could be for both parties to appoint one or more project managers. They will be responsible for managing the agreement and monitoring progress through each stage. They should each have a clear understanding of the contractual requirements and processes. In any software development, the project managers need to exercise strict control of changes to the requirements to ensure that costs, quality and time-scale are controlled. Communication between the other members of the project groups from the buying and supplying company should be stimulated. Cooperation could be optimized by the internet, intranet, groupware and videoconferencing.

Example: chatting as main communication instrument
The Dutch IT company Decos, specialized in document management, owns a company in India. 10 out of 30 employees are working in India. Their communication runs by chatting. The experience is a very effective communication because most of the communication is written communication in stead of talking. Writing is much more direct form of communication and there are much less culture problems.

In practice, the following ratio between the staff executing an offshore project is common:

- 15 percent of the client staff are retained to provide strategy, architecture and governance.
- 15 percent of the supplier's resources are co-located (onshore) with the client to provide liaison, functional, and technical assistance and project management.
- 70 percent of the supplier staff are offshore.

More staff are onshore at the beginning of the transition. The ratio may also be adjusted based on complexity of the work and risk factors. Strategy, solutions architecture, prototyping, and design work are performed at the client site. Development and testing are performed offshore. User acceptance testing and implementation are performed both onsite and offshore.

More information
Compass 'The three year itch - Adjusting Outsourcing Relationships to a New Economic Reality (PDF file) - http://www.compassmc.com/white_papers/1ThreeYearItch.pdf

Elance – contract agreements – http://www.elance.com/c/static/main/displayhtml.pl?file=signing_the_deal.html

Legal Issues in Offshore Outsourcing | Business - http://www.offshoreoutsourcing.org/legal-issues-offshore-outsourcing.asp

14.5 Sales promotion

There are numerous tools to promote outsourcing services. Developing country exporters could focus their marketing on core sectors and niches and look to run special events and seminars rather than big events. In general, a specialist seminar on a core topic area would bring in more benefit than attending a wider exhibition. Always explore cooperation with other companies, trade and/or promotion organisations.

14.5.1 Trade fairs

Trade fairs play a major role in product and service marketing in Europe. Participation in trade promotion events is highly recommended as one of the most efficient methods of testing market receptivity and finding prospective business partners in Europe and beyond. Experience in the Netherlands shows, however, that in the software and IT services sector, the success of trade fairs differs. In general trade fairs will be not successful in the short run. They are certainly a good way to promote the country. Experience shows that developing country exporters in the IT industry generally profit more from visiting a trade fair than from participating.

Appendix 3.4 lists some of the most important exhibitions and trade fair organisers in Europe in this industry. Note that every European country has its own IT fair, mainly targeting the local market. Exporters could ask European sources (e.g. software industry associations, local partners) for details. Internet is also a valuable source of information. Attendance at trade fairs and publishing in trade press (Appendix 3.5) could be a first step to get into contact with potential business partners. A new quarterly outsource magazine has been launched in 2004 by EMP MEDIA in association with the National Outsourcing Association. (http://www.noa.co.uk/).

A thorough preparation is a key element in successful trade fair participation. The CBI manuals 'Your showmaster, a guide for preparation and participation in European trade fairs' and 'Your image builder' are very useful. Recently, the 'Expo Coach' has been developed as well, helping to plan, prepare for and participate in exhibitions more effectively and efficiently. They can all be downloaded at www.cbi.nl.

More information
Association of German Trade Fair Industry – www.auma.de select 'worldwide' for database
CBI – www.cbi.nl

14.5.2 Trade press

An advertisement in a trade magazine could be another possibility. Appendix 3.5 can be helpful in selecting the appropriate trade magazine. The trade press could be used for free publicity as well, as outsourcing is a hot issue in the European markets. A press release is the most common method to contact the press. Make them short and punctual and send them well in advance, depending on the target group. Remember that it is a neutral message with information, it is not an advertisement! Some practical suggestions for press releases include:

- Write it as if you were the journalist (saves time for the receiving person!)
- A tailor made press release may be worth considering: a journalist of a magazine may write another text than a national newspaper journalist
- Mind the timing! Newspapers will be interested in recent events, while supplements and event listings are written weeks (or sometimes months) in advance. Some monthly magazines are even planned up to a year in advance.
- Pay special attention to the introduction (lead). It should briefly answer who, what, where, why and when
- Put the most important information at the beginning, followed by less important details
- An attractive quote may make the information even more interesting for the readers
- Maximum length 1 A4 (in general)
- Include contact details of yourself or your staff (e-mail and mobile phone number)

When sending it by e-mail, please mind the following:

- Put all e-mail addresses in the Blind Carbon Copy (BCC) address field of the message so the receivers cannot see to which other parties (competitors) the e-mail has been sent.
- Always refer to your website.

A big advantage of a press release is that the information is much more reliable for readers than, for example, an advertisement. An advantage of an online press release is that you can reinforce your article with hyperlinks that will contain interesting background information.

More information
Press release template - http://www.prweb.com/pressreleasetips.php

- How to write a press release that gets noticed by the media.

The care and feeding of the press - http://www.netpress.org/careandfeeding.html

Writing a press release & free publicity for your website – http://www.internetbasedmoms.com/press-releases/

14.5.3 Internet

As mentioned in section 3.3, the internet offers many opportunities for developing country exporters, also in terms of sales promotion. The communication can be fast, at low cost, independent of distance and timeline and unlimited in size.

Website
Going online is fundamental for companies in the IT sector. Since trust and credibility are major challenges for developing country exporters, the website could go a long way in helping establish these. A website proposing well-defined services, clear prices, competitive advantages (e.g. USP, cost reduction and service quality) and a client reference list helps create a trustworthy environment.

When developing a website, developing countries could take into consideration some suggestions:

- Include local content as this can stress the unique pros of the destination.
- Use both local languages and the languages of the most important EU regions of origin.
- Mind the privacy of consumers. An increasing number of countries enforce legislation to protect consumers against misuse of personal data. Pay attention to a solid data protection and especially avoid spamming (sending unsolicited e-mail / business proposals).

Having a local-language website is an excellent advertising tool to attract relevant visitors. The website's content and structure (including "look and feel") could be localized to the target market/country. Hiring people who have a native understanding of the target country's culture to localize the website could probably be the best strategy. However, for websites, particularly those used for e-commerce, language issues can have many hidden costs. Native-language staff needs to maintain the sites, answer customers' questions, and fulfil orders generated electronically, if this is desired.

Marketing the website
Last but not least, an exporter should promote his website in a structured manner, so that potential business partners will be able to find the website. Two pieces of advice on promoting websites are:

1 Determine website goals
First of all, determine the concrete goal for your website. Who are your main target groups: software companies, brokers/consultants and/or end users like banks? What are the actions you want them to take? Each target group may require a different approach.

2 Submit the website

- Why submit the site?

More than 50 percent of the visits of a website come from a search engine. Surfers on the web use these services to find and select the information they need out of billions of pages that are available on the web. Therefore it is necessary that owners of websites inform the search engines about their websites. This can be done by submitting your website to the search engines or directories of choice. The name of the website should be 'logical' for the target group. Some people only type the name of an organization without using a search engine. Making use of several domain names for your website may be useful in this case.

- How to submit the site?

Manual submission has certain advantages over automated submission. The most important one is that you will submit your website to a search engine according to the procedures of that search engine, and you can monitor the progression of your listing. The disadvantage is that you can not do as many search engine submissions as an automated service does. Look upon it as a difference between quality and quantity.

- Manual submission

For manual submission of your website, you need to take some actions. Whitelines (http://www.whitelines.nl/html/regional-search-engines.html) helps you in this process by offering the direct links, listed on the country pages, to the submission pages of the search engines. Follow the procedures of a submission form of a certain search engine.

- Most important tip

The page title is the most important factor that influences the ranking of your website within a search engine. The title should not be longer than 60 characters (including spaces), and appear in the top of the HTML code of your page delimited by the <TITLE> and </TITLE> directives. Make sure your title covers the content of your page. Avoid using titles like "Welcome at ……". It does not cover the content.

M@nual Website promotion

The M@nual Website promotion 'how to promote your website in the EU' contains more detailed information on marketing the website. It is available at CBI.

More information
Searchenginewatch - www.searchenginewatch.com
Whitelines - http://www.whitelines.net

Marketplaces

In the ICT industry, marketplaces are used relatively much, according to section 3.3, certainly in the future. The most important strategic questions for you are:

1 Are you ready to use an E-marketplace?

Even if e-marketplaces are relevant to your business, your company may not be ready for this step. You have to consider whether the cultural environment within your company is suitable to be able to accommodate change.

2 Which are the good E-marketplaces?

If you have decided that an e-marketplace may be of interest to your company, we recommend the checklist of www.E-marketservices.com. According to this website, there are 39 specialized e-marketplaces for the IT sector. It includes more useful information on marketplaces and gives practical suggestions.

More information
E-marketservices - www.emarketservices.com
- Select, for example, 'eMarket Basics', 'case studies', 'reports'
- Select 'search directory' and then for example 'IT Products & Services' and 'IT services'

Software-related marketplaces
There are also some specialized marketplaces that concentrate on matching potential buyers and sellers of software development. These electronic marketplaces follow the outsourcing model, where a company is not required to commit resources to meet short/medium term software development project outcomes. Some examples are:
http://www.smarterwork.com/
http://www.onestopclick.com/

Brokers/consultants
Some brokers/consultants in the EU use the internet as a possibility to get into contact with suppliers and possible European clients. This stresses once again the need for a good online marketing policy. Refer to section 8.2 as well for more information on brokers/consultants.

14.5.4 Communication / direct marketing

Exporters could use the following tips for developing good communication / direct mail with prospects:
- Get to know the decision makers in the EU-company. Only then do you send a personalized letter.
- Take good care of existing contacts. This includes for example expressions of thanks to business partners, regular information on the company developments like services range and quality improvements.
- Standardise all printed paper used outside the company (letterheads, visiting cards, fax form, e-mail).
- A brochure of your company (including photos of offices) can be useful for promoting new contacts and sales.
- Be prompt in answering the buyer's communication. Even if you don't have an answer at hand you should inform him that you have received his message and will reply ASAP.
- Always be available by (mobile) phone, fax and/or e-mail at office hours. Do not forget the time difference between your country and the EU countries.

Client database
Always keep your client information up to date in details: name, address, telephone numbers, e-mail. Additional information could be insights in the Decision Making Unit (DMU). This could be a software based program (Microsoft Acces or Excel) but a database with file cards as well.

Refer to section 14.2 for more information on building up a relationship and finding potential prospects.

More information
American Marketing Association - http://www.marketingpower.com

14.5.5 Other tools

Beside the tools mentioned, some more relevant tools to reach EU prospects could be mentioned briefly. They include:

International business events
Participating in international business events, like the conferences organized by the Outsourcing Institute could also be regarded as a way to find potential clients and learn about strategies and good practice.

Brochures
Some guidelines for an effective brochure:

- Learn from brochures of competitors!
- Stress the strengths of your service (USP)
- Include a map, including the region within the country as not all clients know your country.
- Do not mention prices in the catalogue but stress the tailor made character of your services

Video, DVD and CD-rom
This could be a low cost medium to reach clients directly. When preparing a video, make sure it is in PAL format and not in NTSC.

Trade missions / referrers
The effectiveness of trade missions shows a mixed result. The exporter could join a trade mission of his country or a sales mission organized by the government. Sometimes they lead to good sales leads, sometimes they do not.

Sales missions may also be organized as by European companies looking for offshore providers in, for example, developing countries. Often, trade associations, Chambers of Commerce and/or Embassies are asked for more information or long-lists of potential service providers. Make sure you are known with these organizations.

Business cards
Calling cards are part of international trade. Some practical tips

- Make it easy to store or scan the business card for future reference by only using the standard format (approx 9cm x 5cm).
- In non-English speaking countries it pays to print full details on the reverse side of the card in the local language.
- Provide international telephone contact details.
- Display logo CMM / ISO if applicable

Diaspora
Executives originally from, for example, Bangladesh or India, might be motivated to outsource
to their respective home countries. Service providers could establish strong linkages with overseas diaspora networks, universities, private-sector leaders, and consular and foreign trade authorities in their governments.

Country branding
Some EU companies do not know the existence of some developing countries, let alone that they offer high quality IT services. However this can not be solved by one individual exporter. Trade associations and/or government could play an important role in this matter (refer the success of India). The exporter himself could include a country map on for example his website and/or brochure.

APPENDIX 1 DETAILED HS CODES

Table 1 Typical BPO services

Banking services	**Insurance services**	**Human resources services**
Account opening services	Policy owner services	Payroll and benefits processing
Account information capture	Claims processing	Training and development
Customer queries	Transaction & re-insurance	Retirement investment and benefits
Check clearing	Accounting	management
Check payment reconciliation	Statutory reporting	Hiring and staffing
Statement processing	Annuities processing	Recruitment screening,
ATM reconciliation	Benefit administration	Administration and relocation
Investment account management	Customer information	services
Management reporting	capture	Payroll processing
Loan administration	Risk assessment and	Compensation administration
Credit debits card services	premium computation	Benefits planning
Check processing	Policy processing and	Administration and regulating
Collections	account monitoring	compliance
Customer Account Management	Claims management	
	Payment reconciliation	**Web-related services**
Mortgage services		Website management
Application verification and	**Asset management services**	Site personalization
processing	Account creation	Site marketing
Disbursals and collections	Account maintenance	Search Engine, directory
Payment reconciliation	Transfers and additions	Optimization and
Account information updates	Dividend payments	Positioning services
Mortgage loan servicing	Brokerage payment	Catalogue / content management
	MIS reporting	Web analytics
Finance Services	Customer service	Electronic bill presentment and
Document management		payment services
Billing	**Health care**	Web-based email processing
Shareholder services	Medical transcription	Web-based help desk
Claims processing	Services	Web-based chat support
Accounts receivable		e-Learning: web based online
Accounts payable	**Customer care**	education
General ledger	Customer service	services 4
Accounting services	Customer analysis	e-publishing
Treasury operations	Call centres	
Management	Consumer information	
	services	
Credit card services	Customer relationship mgt	
Applications screening and card		
issuance	**Sales and marketing**	
Customer account management	**services**	
Collections and customer	Telemarketing services	
follow-up	Direct marketing and sales	
Account queries and limit	campaigns	
enhancements		
Accounting and payment		
reconciliation		

Source: Unctad (2003) and own adjustment

Table 2 HS codes software

Programs or data	**8524 3100 00**
• Word processing, spreadsheets, desk top publishing, painting or drawing programs, route planners, encyclopaedia, business or phone directories, catalogues.	
Sound and music discs	
• Language courses, wildlife recordings, train buffs' sound bites, talking books	
on Minidisc	8524 3210 00
on other disc e.g. CD, SACD, DVD	8524 3290 00
Computer games	
• Flight simulators, shoot 'em ups, golf, football, car racing, strategy games etc.	8524 3910 00
Films, pictures, image files; games for video games consoles	
• On DVD	8524 3920 00
• On other laser-read disc	8524 3980 00
Software on magnetic tape	
Classified according to the width of the tape rather than the content:	
WIDTH NOT EXCEEDING 4 MM E.G. COMPACT CASSETTE	8524 5100 00
• Exceeding 4 mm but not exceeding 6.5 m	8524 5200 00
• Exceeding 6.5 mm e.g. VHS, 8mm	8524 5300 00
Software on floppy disk	
Classification depends on the type of material recorded on the disc:	
• Word processing, spreadsheets, desk top publishing, painting or drawing programs, route planners, encyclopaedia, business or phone directories, catalogues.	8524 9100 00
• Computer games	8524 9910 00
• Films, pictures and image files	8524 9990 00
Software on magnetic stripe cards	8524 6000 00
Software cartridges for video games consoles	9504
Software on memory cards	8524 9990 00

Source: http://www.abacusuk.co.uk/

APPENDIX 2 DETAILED STATISTICS

This appendix is divided into an example of the detailed balance of payment for the computer services industry of the UK (appendix 2.1), which can be used as a very rough indication to determine import statistics of IT services. It is mainly used as an example, showing the method how these statistics for other EU member states could be retrieved. Appendix 2.2 contains the relevant statistics of EITO 2004.

2.1 Balance of payment UK 2002

Table 3 UK computer services industry analysed by continent and countries 2002 in £ (x1 mln)

	Exports	Imports
Europe		
European Union (EU)		
Austria	30	6
Belgium / Luxembourg	162	17
Denmark	44	7
Finland	66	2
France	211	60
Germany	331	194
Greece	12	3
Irish Republic	750	114
Italy	99	10
Netherlands	237	52
Portugal	22	2
Spain	55	6
Sweden	96	52
EU Institutions	-	-
Total European Union (EU)	2,115	526
European Free Trade Association (EFTA)		
Iceland		
Liechtenstein		
Norway	39	9
Switzerland	233	21
Total EFTA	272	30
Other Europe		
Czech Republic	10	7
Poland	42	2
Russia	13	5
Channel Islands	47	1
Isle of Man	2	-
Turkey	5	2
Rest of Europe	76	62
Europe Unallocated	64	8
Total Europe	**2,647**	**641**
America		
Brazil	9	
Canada	20	24
Mexico	2	1
United States of America	1,309	499
Rest of America	99	2
America Unallocated	17	3
Total America	**1,456**	**529**

Asia		
China [1)]	9	2
Hong Kong	16	2
India	9	97
Israel	25	
Japan	106	72
Malaysia	5	-
Philippines	3	1
Saudi Arabia	10	3
Singapore	33	17
South Korea	43	2
Taiwan	17	1
Thailand	2	-
Indonesia	2	
Pakistan	3	
Rest of Asia	68	7
Asia Unallocated	5	1
Total Asia	**358**	**205**
Australasia and Oceania		
Australia	32	26
New Zealand		3
Rest of Australasia and Oceania	2	2
Oceania Unallocated	-	-
Total Australasia and Oceania	**35**	**30**
Africa		
South Africa	27	5
Rest of Africa	12	1
Africa Unallocated	2	-
Total Africa	**41**	**6**
Total Unallocated	**7**	**5**
International Organisations	**-**	**-**
Total computer services industry	**4,544**	**1,417**

.. Denotes disclosive data

[1)] Totals for China exclude Hong Kong

2.2 EITO 2004 Statistics

EU Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	31,053	30,859	31,656	33,177	35,313
Application software	28,596	28,880	29,360	30,581	32,541
Total	**59,649**	**59,739**	**61,017**	**63,758**	**67,854**

EU IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	11,336	11,062	10,953	11,114	11,540
Implementation	48,872	48,177	47,959	48,530	50,206
Operations management	22,452	23,027	24,225	25,451	27,179
Support services	30,845	31,422	31,702	32,206	33,348
Total	**113,505**	**113,687**	**114,838**	**117,301**	**122,272**

Austria Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	739	728	743	781	832
Application software	625	637	649	675	717
Total	**1,364**	**1,365**	**1,392**	**1,456**	**1,548**

Austria IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	260	264	276	295	317
Implementation	1,228	1,300	1,357	1,446	1,540
Operations management	432	444	486	529	578
Support services	698	692	729	782	839
Total	**2,618**	**2,699**	**2,848**	**3,052**	**3,275**

Belgium / Luxembourg Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	754	742	770	808	863
Application software	867	881	897	939	996
Total	**1,621**	**1,624**	**1,668**	**1,747**	**1,860**

Belgium / Luxembourg IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	292	278	280	291	307
Implementation	1,490	1,495	1,506	1,556	1,638
Operations management	635	628	659	693	748
Support services	943	922	954	995	1,051
Total	**3,360**	**3,323**	**3,400**	**3,536**	**3,745**

Denmark Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	664	659	687	728	778
Application software	737	740	751	789	842
Total	**1,401**	**1,399**	**1,437**	**1,517**	**1,620**

Denmark IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	224	220	217	226	238
Implementation	1,166	1,169	1,162	1,192	1,234
Operations management	495	504	572	626	674
Support services	655	669	699	728	762
Total	**2,540**	**2,562**	**2,650**	**2,772**	**2,908**

Finland Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	614	610	627	659	704
Application software	498	514	536	571	610
Total	**1,112**	**1,124**	**1,164**	**1,231**	**1,314**

Finland IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	239	260	266	276	293
Implementation	614	728	742	761	802
Operations management	409	448	487	520	553
Support services	443	434	449	460	476
Total	**1,706**	**1,870**	**1,945**	**2,017**	**2,123**

France Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	5,780	5,694	5,843	6,134	6,572
Application software	4,750	4,832	4,965	5,207	5,560
Total	**10,529**	**10,526**	**10,808**	**11,341**	**12,133**

France IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	2,345	2,217	2,193	2,208	2,280
Implementation	10,358	10,027	9,919	9,941	10,186
Operations management	4,408	4,492	4,600	4,734	5,038
Support services	6,386	6,581	6,603	6,670	6,894
Total	**23,497**	**23,317**	**23,314**	**23,553**	**24,398**

Germany Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	7,823	7,706	7,667	7,821	8,212
Application software	7,393	7,393	7,393	7,763	8,229
Total	**15,217**	**15,099**	**15,061**	**15,584**	**16,440**

Germany IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	2,547	2,419	2,323	2,323	2,346
Implementation	12,087	11,361	11,134	11,134	11,357
Operations management	4,182	4,286	4,629	4,953	5,300
Support services	7,218	7,146	7,134	7,134	7,205
Total	**26,033**	**25,213**	**25,220**	**25,544**	**26,208**

Greece Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	189	186	193	203	220
Application software	135	138	141	149	162
Total	**324**	**324**	**334**	**352**	**383**

Greece IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	55	57	63	70	76
Implementation	292	298	328	363	397
Operations management	30	32	35	39	43
Support services	188	198	216	238	260
Total	**565**	**585**	**642**	**710**	**776**

Ireland Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	230	227	232	244	256
Application software	228	226	228	239	254
Total	**458**	**453**	**460**	**484**	**509**

Ireland IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	62	63	66	69	75
Implementation	278	286	298	312	336
Operations management	149	153	164	175	192
Support services	159	171	177	182	193
Total	**647**	**674**	**704**	**739**	**797**

Italy Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	2,464	2,438	2,492	2,602	2,747
Application software	2,235	2,249	2,301	2,385	2,553
Total	**4,699**	**4,687**	**4,793**	**4,987**	**5,300**

Italy IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	875	890	875	895	937
Implementation	4,099	4,171	4,146	4,208	4,346
Operations management	1,781	1,845	1,880	1,952	2,077
Support services	2,659	2,895	2,868	2,906	2,998
Total	**9,415**	**9,802**	**9,770**	**9,961**	**10,358**

Netherlands Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	2,366	2,338	2,383	2,499	2,682
Application software	2,151	2,165	2,228	2,341	2,482
Total	**4,517**	**4,503**	**4,612**	**4,840**	**5,164**

Netherlands IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	753	721	721	733	770
Implementation	1,696	1,723	1,724	1,758	1,844
Operations management	2,333	2,370	2,492	2,584	2,753
Support services	1,194	1,188	1,216	1,247	1,304
Total	**5,977**	**6,002**	**6,153**	**6,323**	**6,671**

Portugal Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	237	235	245	260	283
Application software	216	215	218	228	249
Total	**453**	**449**	**463**	**489**	**533**

Portugal IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	67	71	76	81	90
Implementation	282	311	332	354	382
Operations management	146	158	179	199	225
Support services	174	179	194	207	222
Total	**669**	**719**	**780**	**841**	**918**

Spain Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	957	1,044	1,104	1,167	1,250
Application software	899	967	1,007	1,058	1,139
Total	**1,856**	**2,011**	**2,112**	**2,226**	**2,389**

Spain IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	409	388	391	420	464
Implementation	1,885	1,782	1,783	1,888	2,043
Operations management	774	841	862	951	1,072
Support services	1,080	1,154	1,157	1,223	1,318
Total	**4,148**	**4,164**	**4,192**	**4,482**	**4,897**

Sweden Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	1,111	1,103	1,143	1,220	1,305
Application software	1,245	1,260	1,302	1,377	1,468
Total	**2,356**	**2,364**	**2,445**	**2,597**	**2,773**

Sweden IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	656	616	612	622	651
Implementation	1,723	1,683	1,667	1,681	1,740
Operations management	1,108	1,079	1,157	1,215	1,287
Support services	1,269	1,285	1,304	1,328	1,379
Total	**4,756**	**4,664**	**4,739**	**4,845**	**5,056**

United Kingdom Software market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	7,128	7,149	7,527	8,050	8,610
Application software	6,616	6,663	6,742	6,857	7,279
Total	**13,744**	**13,811**	**14,269**	**14,907**	**15,888**

United Kingdom IT Services market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
Consulting	2,554	2,595	2,595	2,605	2,695
Implementation	11,674	11,843	11,860	11,935	12,361
Operations management	5,569	5,747	6,022	6,280	6,638
Support services	7,779	7,908	8,003	8,106	8,447
Total	**27,576**	**28,093**	**28,480**	**28,926**	**30,142**

Czech Republic Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	200	227	258	290	327
Application software	187	216	248	284	324
Total Software products	387	443	505	575	651
IT services	731	814	890	978	1,090

Estonia Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	13	14	15	15	16
Application software	19	22	25	26	27
Total Software products	32	37	40	41	43
IT services	38	43	49	56	63

Hungary Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	174	196	217	238	260
Application software	171	195	223	249	278
Total Software products	345	391	440	487	538
IT services	519	569	604	660	732

Latvia Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	13	14	16	17	18
Application software	17	21	24	27	28
Total Software products	30	36	40	43	46
IT services	43	50	57	65	74

Lithuania Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	13	14	16	18	20
Application software	17	21	25	29	32
Total Software products	30	35	40	47	52
IT services	38	44	51	59	68

Poland Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	266	303	346	394	448
Application software	277	335	375	425	485
Total Software products	543	638	721	819	933
IT services	770	868	974	1,095	1,236

Slovakia Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	50	55	61	68	75
Application software	57	65	74	82	91
Total Software products	108	121	135	150	166
IT services	160	186	209	236	269

Slovenia Software & IT market, 2001 - 2005 (€ million x 1000)

	2001	2002	2003	2004	2005
System software	35	39	43	48	52
Application software	41	48	55	63	70
Total Software products	76	86	98	111	122
IT services	87	97	106	117	130

APPENDIX 3 USEFUL ADDRESSES

3.1Standards organisations

INTERNATIONAL

Capability Maturity Model for Software (CMM)
E-mail: customer-relations@sei.cmu.edu
Internet: http://www.sei.cmu.edu/cmm/

International Organisation for Standardisation (ISO)
E-mail: central@iso.ch
Internet: www.iso.ch

IT Service Capability Maturity Model®
E-mail: info@itservicecmm.org
Internet: http://www.itservicecmm.org/

EUROPEAN UNION

Comité Européen de Normalisation (CEN)
E-mail: infodesk@cenorm.be
Internet: www.cenorm.be

BELGIUM
Belgisch Instituut voor Normalisatie (BIN)
E-mail: info@ibn.be
Internet: www.ibn.be

FRANCE
Association Française de Normalisation (AFNOR)
E-mail: norminfo@afnor.fr
Internet: www.afnor.fr

GERMANY
Deutsches Institut für Normung e.V. (DIN)
E-mail: webmaster@din.de
Internet: www.din.de

NETHERLANDS
Nederlands Normalisatie-instituut (NEN)
E-mail: info@nen.nl
Internet: www.nen.nl

UNITED KINGDOM
British Standards Institution (BSI)
E-mail: info@bsi-global.com
Internet: www.bsi-global.com

SWEDEN
Swedish Standards Institute (SIS)
E-mail: info@sis.se
Internet: www.sis.se

3.2 Sources of price information

Price information can be obtained through trade organisations, trade press or trade fairs. Other possibilities include checking for prices on the Internet, asking for prices at distributors, agents and other distribution channels. Please refer to the other appendices for details.

European Information Technology Observatory (EITO)
E-mail: info@eito.com
Internet: www.eito.com

Overview Offices of Statistics by county
Internet: http://www.cbs.nl/nl/service/links/default.asp

3.3 Trade associations

EUROPE
European Information and Communications Technology Industry Association (EICTA)
E-mail: info@eicta.org
Internet: http://www.eicta.org/

European Outsourcing Association
E-mail: admin@noa.co.uk
Internet: http://www.e-oa.net/

BELGIUM
Agoria (technology federation, ICT included)
E-mail luc.simons@agoria.be
Internet: http://www.fabrimetal.be

Belgian Software Industry Group
E-mail: marie-paule.podevijn@fabrimetal.be
Internet: http://www.besig.be/

Information Services Association (INSEA)
E-mail: info@insea.be
Internet: www.insea.be

Federatie van Belgische verenigingen voor informatica (BFIA)
Extensive listing of IT associations and users groups from BFIA
E-mail: webmaster@www.bfia.be
Internet : http://www.bfia.be/

FRANCE
Association Française des Sciences et Technologies de l'Information
E-mail : asti.asso@infonie.fr
Internet : http://asti.asso.fr

Syntec Informatique
E-mail jpeybert@syntec.fr
Internet www.syntec-informatique.fr

GERMANY

BITKOM Bundesverband Informationswirtschaft, Telekommunikation und neue Medien e.V., Berlin
E-mail: bitkom@bitkom.org
Internet: http://www.bitkom.org

EDV-Berater e.V. (IT-services Association)
E-mail: kontakt@vdeb.de
Internet: http://www.vdeb.de

Spitzenverband der deutschen softwareindustrie
Largest European alliance of software organizations
E-mail: info@dmmv.de
Internet: www.svds.de

Verband der Softwareindustrie Deutschlands e.V. (VSI)
E-mail: http://www.vsi.de/ (select 'Kontakt')
Internet: http://www.vsi.de/

NETHERLANDS

Federation Dutch IT (FENIT)
E-mail bureau@fenit.nl
Internet www.fenit.nl

Vereniging ICT Nederland
E-mail info@v-ict.nl
Internet www.v-ict.nl

VIFKANTEC
Represents more than one hundred companies working as importers, suppliers and manufacturers of office equipment, systems and supplies in the Netherlands.
E-mail: info@vifkantec.nl
Internet: http://www.vifkantec.nl/index.php

SWEDEN

IT-Företagen
E-mail: info@itforetagen.se
Internet http://www.itforetagen.se/

Swedish Association for Software Testing SAST
E-mail: webmaster@sast.net
Internet: http://www.sast.net/

UNITED KINGDOM

Information Technology Telecommunications and Electronics Association (Intellect)
E-mail: info@intellectuk.org
Internet: http://www.intellectuk.org/

International growth - Business Advice for the UK Computer and Software Computer Services by the Department of Trade and Industry
E-mail: http://www.internationalgrowth.org (Select 'contacts' at bottom of page)
Internet: http://www.internationalgrowth.org

OFFSHORE LOCATIONS

CHINA
China Software Industry Association (CSIA)
E-mail: csia@css.com.cn
Internet: www.csia.org.cn

INDIA
NASSCOM
E-mail: http://www.nasscom.org/ select 'contact us'
Internet: http://www.nasscom.org/ view 'company directory' and 'market studies'

IRELAND
Irish Software Association
E-mail: isa@ibec.ie
Internet: www.software.ie

PHILIPINES
Digital Philippines - Bridging the Philippines Today
E-mail: info@digitalphilippines.org
Internet: http://www.digitalphilippines.org/

E-Services Philippines: IT Services and Outsourcing Portal
Market information and company list included
E-mail: itservices@citem.com.ph
Internet: http://www.e-servicesphils.com/main.php

European IT Service Center-EITSC
E-mail: info@eitsc.com
Internet: http://www.eitsc.com/

Outsource Philippines: Your Outsourcing Destination of Choice
E-mail: http://www.outsourcephilippines.org/ select 'contact us'
Internet: http://www.outsourcephilippines.org/ view 'partner organisations'

RUSSIA
National Software Development Association
Internet: http://www.russoft.org/

Outsourcing-Russia - Knowledge Base - Outsourcing
Select database of Russian Offshore Software Development companies
E-mail: info@outsourcing-russia.com
Internet: www.outsourcing-russia.com

3.4 Trade fair organisers

This appendix gives an overview of the most important international trade fairs/exhibitions in Europe and some national trade fair organisers. Note that every European country has its own IT fairs, mainly targeting the local market. Ask European sources (e.g. software industry associations, your local partners) for details.

EUROPE
Association of German Trade Fair industry
Extensive database with information on various exhibitions in Europe
Internet: www.auma.de select 'worldwide'

BELGIUM

Siexpo

E-mail: si_expo@bab.be
Internet: www.siexpo.lu

Telecom cITy - The Marketplace for ICT-solutions

E-mail: info@tmab.be
Internet: http://www.tmab.be/

FRANCE

Infopromotions

E-mail: info@infopromotions.fr
Internet: http://www.groupesolutions.com

Le Salon de la Sécurité InformatiqueLocation

France's top computer security exhibition
E-mail: caroline_moulin@reedexpo.fr
Internet: www.infosecurity.com.fr

MILIA, World Interactive Content Forum

An important annual fair in Europe on multimedia, interactive entertainment and digital media distribution.
E-mail: laurine.garaude@reedmidem.com
Internet: www.milia.com

SETI (European IT Week) (COMDEX IT)

The SETI, the "European IT Week," represents Europe's third largest IT event after CeBIT (Hanover) and SMAU (Milan)
E-mail: http://www.seti2004.com/fr/index.php select 'contact'
Internet: http://www.seti2004.com/fr/index.php

GERMANY

CeBIT

The CeBIT is the largest IT exhibition in the world. It takes place on an annual basis (February/March) at the Hannover fair ground.
E-mail cebit@messe.de
Internet: www.cebit.de

Channel World Expo

Trade fair for ICT distributors and resellers
E-mail: info@channelworldexpo.de
Internet: www.channelworldexpo.de

European Banking & Insurance Fair (EBIF), Frankfurt

E-mail: http://www.ebif.com/de/kontakt/
Internet: http://www.ebif.com/

Systems

This popular fair is the second largest IT exhibition in Germany, and not as crowded as the CeBIT. It takes place on an annual basis in October in Munich.
E-mail: info@systems.de
Internet: www.systems.de

NETHERLANDS
Jaarbeurs
Select 'agenda'
E-mail: info@jaarbeursutrecht.nl
Internet: www.jaarbeursutrecht.nl

RAI
Search in 'Fairs and Events'
E-mail: mail@rai.nl
Internet: www.rai.nl

UNITED KINGDOM
Online Information
The largest information industry event in the world.
E-mail: sales@learned.co.uk
Internet: www.online-information.co.uk

UK Trade fairs
Information on various types of exhibitions in the UK.
E-mail: info@aeo.org.uk
Internet: www.exhibitions.co.uk

SWEDEN
Comdex
E-mail: pia.nyzell@exponova.se
Internet: www.comdex.se

Stockholm International Fair
E-mail: http://www.stockholmsmassan.se/stockholmsmassan_eng/ select 'contact us'
Internet: http://www.stockholmsmassan.se/stockholmsmassan_eng/

ITALY
SMAU
E-mail: info@smau.it
Internet: http://www.smau.it

3.5 Trade press

A very large number of IT magazines is available in Europe. Most of these magazines are mainly aimed at local markets; there are hardly pan-European IT magazines on the market. The names of the popular magazines can be requested at the various European software industry organisations. Below you will find the most popular magazines for the selected EU countries.

EUROPE
International Data Group (IDG)
IDG is the world's leading technology media, research, and event company with more than 300 publications in 85 countries (Belgium, France, Germany, Netherlands, Sweden and United Kingdom included). Select your country of interest.
E-mail: questions@idg.com
Internet: http://www.idg.com

National Outsourcing Association
A newly launched outsourcing magazine
E-mail: admin@noa.co.uk
Internet: http://www.noa.co.uk

VNU-net in Europe
Magazines of publisher VNU in Belgium, France, Germany, Netherlands, (Spain) and the United Kingdom.
E-mail: http://www.vnunet.com/Aboutvnu/au_team.jsp
Internet: www.vnunet.net

BELGIUM
Datanews
E-mail: kf@datanews.be
Internet: http://www.datanews.be

FRANCE
CIO France
E-mail: ciocontact@idg.fr
Internet: http://www.idg.fr/cio/

Informatique
E-mail: redaction@01informatique.presse.fr
Internet: http://www.01net.com/01informatique

Informatique, decision informatique, l'ordinateur individuel
E-mail: j.weiss@groupetests.fr
Internet: www.01net.com

Le monde informatique
Daily news on ICT industry
E-mail : http://www.weblmi.com/ select 'contacts'
Internet: http://www.weblmi.com/

GERMANY
Computer Reseller News
Internet: **www.crn-online.de**

InformationWeek Germany
E-mail: http://www.informationweek.de/ select 'redaction'
Internet: www.informationweek.de

IT Banken und Versicherungen
E-mail: www.bauve.de select 'Kontakt'
Internet: www.bauve.de

NETHERLANDS
Automatisering Gids
E-mail: www.automatiseringgids.nl select 'contact'
Internet: www.automatiseringgids.nl

Computable
E-mail: redactie@computable.nl
Internet: www.computable.nl

Software release magazine
Tel: +31-172-469030
Internet: http://www.array.nl/release/

UNITED KINGDOM

Call Centre Focus Magazine
E-mail: http://www.callcentre.co.uk/contact/
Internet: www.callcentre.co.uk

Computing
E-mail: www.computing.co.uk select 'contact us'
Internet: www.computing.co.uk

Infomatics
E-mail: www.infomaticsonline.co.uk select 'contact us'
Internet: www.infomaticsonline.co.uk

ITWeek
E-mail: www.itweek.co.uk select 'contact us'
Internet: www.itweek.co.uk

SWEDEN

Computer Sweden (of IDG)
E-mail: Lars.dahmen@idg.se
Internet: www.computersweden.se

NyTeknik - The largest technical weekly magazine in Sweden
E-mail: info@affarsvarlden.se
Internet: http://www.nyteknik.se/

APPENDIX 4 LIST OF DEVELOPING COUNTRIES

Please note that the OECD list of developing countries, as applied in this market survey, may include countries that are usually not considered as developing countries.

Afghanistan
Albania
Algeria
Angola
Anguilla
Antigua and Barbuda
Argentina
Armenia
Azerbaijan
Bahrain
Bangladesh
Barbados
Belize
Benin
Bhutan
Bolivia
Bosnia & Herzegovina
Botswana
Brazil
Burkina Faso
Burundi
Cambodia
Cameroon
Cape Verde
Central African rep.
Chad
Chile
China
Colombia
Comoros
Congo Dem. Rep.
Congo Rep.
Cook Islands
Costa Rica
Côte d'Ivoire
Croatia
Cuba
Djibouti
Dominica
Dominican republic
Ecuador
East Timor
Egypt
El Salvador
Equatorial Guinea
Eritrea
Ethiopia
Fiji
Gabon
Gambia
Georgia
Ghana
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
India
Indonesia
Iran
Iraq
Jamaica
Jordan
Kazakhstan
Kenya
Kiribati
Korea, rep of
Kyrghyz Rep.
Laos
Lebanon
Lesotho
Liberia
Macedonia
Madagascar
Malawi
Malaysia
Maldives
Mali
Marshall Islands
Mauritania
Mauritius
Mayotte
Mexico
Micronesia, Fed. States
Moldova
Mongolia
Montserrat
Morocco
Mozambique
Myanmar
Namibia
Nauru
Nepal
Nicaragua
Niger
Nigeria
Niue
Oman
Pakistan
Palau Islands
Palestinian Admin. Areas
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Rwanda
Samoa
São Tomé & Principe
Saudi Arabia
Senegal
Serbia and Montenegro
Seychelles
Sierra Leone
Solomon Islands
Somalia
South Africa
Sri Lanka
St. Helena
St. Kitts-Nevis
St. Lucia
St. Vincent and Grenadines
Sudan
Surinam
Swaziland
Syria
Tajikistan
Tanzania
Thailand
Togo
Tokelau
Tonga
Trinidad & Tobago
Tunisia
Turkey
Turkmenistan
Turks & Caicos Islands
Tuvalu
Uganda
Uruguay
Uzbekistan
Vanuatu
Venezuela
Vietnam
Wallis & Futuna
Yemen
Zambia
Zimbabwe

January 2003

APPENDIX 5 USEFUL INTERNET SITES

Ad 1) ICT AND E-COMMERCE

Aberdeen Group: The Trusted Advisor to the Global 5000 and Their Solution Providers for Technology
E-mail: www.aberdeen.com select 'about us'
Internet: www.aberdeen.com

Association for Information Systems, developing countries page
E-mail: isrobert@cityu.edu.hk
Internet : http://www.is.cityu.edu.hk/research/resources/isworld/developingcountries/

Bigworld
E-mail: info@big-world.org
Internet: www.big-world.org

Bitpipe
Technology White Papers, Webcasts, Case Studies and IT Product Information
E-mail: info@bitpipe.com
Internet: http://www.bitpipe.com

Development Gateway ICTs and Development site
E-mail: info@developmentgateway.org
Internet: http://www.developmentgateway.org/node/133831/

Eastern Michigan University's ICT
E-mail: Paul.Litton@mail.doc.gov
Internet: http://www.emich.edu/ict_usa/

Ebusiness forum
E-commerce statistics: forms and growth of e-commerce and e-readiness ranking. Select 'doing e-business in …'
E-mail: www.ebusinessforum.com select 'contact us'
Internet: www.ebusinessforum.com

EbusinessLex
Information on most relevant European and national legislations on e-business.
E-mail: http://www.ebusinesslex.net/ select 'e-mail'
Internet: http://www.ebusinesslex.net/

Electranet
ICT Information about the ten newcomers in the European Union
E-mail: icel@pophost.eunet.be
Interenet: http://www.electranet.org/

Eldis
Gateway to Development Information. Select 'ICT for development and E-commerce'
E-mail: http://www.eldis.org/ select 'contact eldis'
Internet : http://www.eldis.org/

Electronic Journal of Information Systems in Developing Countries
Articles about outsourcing and software export included
E-mail: robert@ejisdc.org
Internet: http://www.ejisdc.org/

E-marketservices
Select for example: 'eMarket Basics', 'case studies', 'reports' and 'search directory' for an overview of marketplaces and auctions by industry and/or country.
E-mail: www.emarketservices.com select 'contact us'
Internet: www.emarketservices.com select for example 'IT Products & Services' and 'IT services'

Enterprise - E-business - Information and Communication Technologies industries and services
E-mail: entr-ict-e-commerce@cec.eu.int
Internet: http://europa.eu.int/comm/enterprise/ict/

European ICT observatory (EITO)
The EITO 2004 study is to be orderer at the website for € 80,- (CD rom)
E-mail: info@eito.com
Internet: http://www.eito.com/

E-trade-center
E-mail: infocenter@berlin.dihk.de
Internet: www.e-trade-center.com / www.dihk.de

European e-Business Market Watch
E-mail: mailto:info@ebusiness-watch.org
Internet: http://www.ebusiness-watch.org

Globalisation and poverty research programme
E-commerce for developing countries: impact, obstacles and policies
E-mail: gapresearch@ids.ac.uk
Internet: http://www.gapresearch.org/production/ecommerce.html

Google – most used searchengine worldwide
Refer to m@nual 'Digging for Gold' for suggestions and how to optimize search results. Available at CBI.
Internet: www.google.com

iConnect Online - Applyting Knowledge to Development
E-mail: editor@iconnect-online.org
Internet: http://www.iconnect-online.org/

IDPM - Institute for Development Policy and Management, University of Manchester
E-mail: idpm@man.ac.uk
Internet: http://idpm.man.ac.uk/index.shtml

Infoconomy
E-mail: edit@infoconomy.com
Internet: http://www.infoconomy.com/
Infodev: The Information for Development Program
E-mail: infodev@worldbank.org
Internet: http://www.infodev.org/

International Institute for Communication and Development (IICD)
E-mail: information@iicd.org
Internet: http://www.iicd.org/

International Trade Centre (ITC)
E-mail: http://www.intracen.org/ select 'contact'
Internet: http://www.intracen.org/

Intellect UK
Special interest offshore group included
E-mail: info@intellectuk.org
Internet: http://www.intellectuk.org

ITEuropa
E-mail: http://www.iteuropa.com select 'contact us'
Internet : http://www.iteuropa.com

ITPortal
E-mail: enquiries@net-communities.co.uk
Internet: www.theitportal.com

Landscape of I.T. in Nations
Select 'outsourcing report' and more
Internet: http://www.american.edu/academic.depts/ksb/mogit/country.html

Line56.com | The e-Business Executive Daily
E-mail: info@line56.com
Internet: http://www.line56.com/

New Media Review
Up to date information about new media
E-mail: info@etcnewmedia.com
Internet http://www.etcnewmedia.com/review/ .

Online internet surveys, demographics, statistics and market research - Nua Internet surveys
E-mail: nuafeedback@jupitermedia.com
Internet: http://www.nua.com/surveys/index.cgi

Team der Wirtschafts- und Beschäftigungsförderung der GTZ
Team of GTZ's Economic and Employment Promotion Division, dealing with questions related to "E-business by SMEs in Developing Countries"
E-mail: joachim.prey@gtz.de
Internet: http://www.gtz.de/e-business/

UNCTAD Electronic Commerce Branch
- ICT and Internet powered trade and economic development.
- Select 'E-Commerce and Development Report'. Chapter 5 (outsourcing) is interesting as well.

E-mail: ecommerce@unctad.org
Internet: http://r0.unctad.org/ecommerce/

UK Online for Business
E-mail: http://www.ukonlineforbusiness.gov.uk/ select 'ask an expert'
Internet: http://www.ukonlineforbusiness.gov.uk/

Whitelines
Search engines, search engine optimization and marketing
E-mail: info@whitelines.net
Internet: http://www.whitelines.net

World Economic Forum - Global Information Technology Report
E-mail: gcp@weforum.org
Internet: www.weforum.org/gitr

World Information Technology and Services Alliance
E-mail: ahalvorsen@itaa.org
Internet: www.witsa.org

ZDNet - Information resources for IT professionals
E-mail: http://www.zdnet.com/ select 'feedback'
Internet: http://www.zdnet.com/

Ad 2) BY COUNTRY

EUROPE
Business Advice for the UK Computer and Software Computer Services – InternationalGrowth.org
E-mail: Jane.Eardley@dti.gsi.gov.uk
Internet: http://www.internationalgrowth.org/index.asp

Europages
Company information/EU business directory. Select an industry and then company by activity and/or size.
E-mail: info@europages,com
Internet : www.europages.com

Enterprise - E-business - Surveys and statistics European Union
E-mail: entr-ict-e-commerce@cec.eu.int
Internet: http://europa.eu.int/comm/enterprise/ict/statistics/e-commerce.htm

Information Technology Industries
E-mail: ecommerce@ita.doc.gov
Internet: http://web.ita.doc.gov/ITI/itiHome.nsf/(HotNews)/HotNews

The Thomas Global Register (TGR) Europe
Directory of more than 200,000 manufacturers and distributors from 17 European countries
E-mail: http://www.tipcoeurope.be/ select 'contact us'
Internet: http://www.tipcoeurope.be/

Trade Partners UK
Database with companies and market studies. Send requirements direct to British suppliers using this service
E-mail: info@tradeuk.com
Internet: http://www.tradeuk.com

BELGIUM

FEDICT
Fedict is the Belgian Federal Government's e-business drive
E-mail: info@fedict.be
Internet: http://www.fedict.be

FRANCE
Club for Large French Companies
E-mail: cigref@cigref.fr
Internet: www.cigref.fr

GERMANY
Archiv Industrienet
E-mail: webmaster@konradin.de
Internet: http://archiv.industrienet.de

BI Special: Business Intelligence Software
E-mail: bi@nomina.de
Internet: http://www.isis-bi.de/

Empirica - Gesellschaft für Kommunikations- und Technologieforschung mbH
E-mail: info@empirica.com
Internet: http://www.empirica.com/

German Agency for Technical Cooperation
E-mail : postmaster@gtz.de
Internet : www.gtz.de

Handelsblatt
- Select outsourcing special

E-mail: www.handelsblatt.com select 'Kontakt'
Internet: www.handelsblatt.com

ISIS Datenbanken with 10.000 IT firms and Software product, top 500 IT firms included
E-mail: mendl@nomina.de
Internet: http://www.software-marktplatz.de/germantop500/index_isis.php

VDMA software
E-mail: http://www2.vdma.de/software/ select 'Kontakt'
Internet: http://www2.vdma.de/software/

UNITED KINGDOM
Applegate Directory for IT and more
E-mail: http://www.applegate.co.uk/ select contact form
Internet: http://www.applegate.co.uk/

UK Directory – LimeSearch
E-mail: contact2@limesearch.co.uk
Internet: http://www.limesearch.co.uk

Ad 3) OUTSOURCING

Center for global outsourcing
E-mail: admin@outsourceglobal.org
Internet: entr-ict-e-commerce@cec.eu.int

Computerworld
Search by outsourcing, a specific outsourcing knowledge centre included
E-mail : www.computerworld.com select 'contacts'
Internet: www.computerworld.com

E-Business Strategies - Offshore Outsourcing Portal
E-mail: contact@ebstrategy.com
Internet: http://www.ebstrategy.com/Outsourcing/

ECODE - Offshore Outsourcing Consultancy and Project Management
eCODE provides and promotes offshore outsourcing for both users and providers of offshore services
E-mail: admin@ecode.org.uk
Internet: http://www.ecode.org.uk/

Elance: The Better Way to Buy and Manage Services (US focus)
E-mail: http://www.elance.com/ select 'contact'
Internet: http://www.elance.com/

European Centre for Offshore Development
E-mail: admin@ecode.org.uk
Internet: http://www.ecode.org.uk

****European Information Technology Exchange :: off-shore :: outsourcing :: knowledge ::**
EuroITX.com - the European Information Technology Exchange - is a European one-stop-shop that provides information for both buyers and suppliers of off-shore IT and IT enabled services outsourcing. EuroITX.com has three units: intelligence, marketing and supply-demand.
E-mail: euroitx@euroitx.com
Internet: http://www.euroitx.com/

Firmbuilder
Outsourcing - Firmbuilder.com: Europe
E-mail: CustomerService@Firmbuilder.com
Internet: http://www.firmbuilder.com

Information for Outsourcing - IT, BPO, HR, Finance & Accounting from CorbettAssociates.Com
E-mail: info@CorbettAssociates.com
Internet: http://www.corbettassociates.com/

IT Services & Solutions
IT Services & Solutions focuses on IT services issues each quarter.
E-mail: meerab@pmp.co.uk
Internet: http://www.itssonline.co.uk/

ITtoolbox Emerging Technologies
Select 2003 ITtoolbox Outsourcing Survey and/or the 2003 ITtoolbox Salary Survey
E-mail: Info@ITtoolbox.com
Internet: http://emergingtech.ittoolbox.com/

IT Trends 2004: Offshore Outsourcing (PDF)
Internet: http://www.satyam.com/homenews/documents/it2004_giga.pdf

Morgan Chambers - Strategic Outsourcing Consultants
E-mail: linda.pollard@morgan-chambers.com
Internet: http://www.morgan-chambers.com/

NeoIT - Global Offshoring Advisors | Offshore Outsourcing Consulting and Program Governance
select 'offshore knowledge'
E-mail: info@neoIT.com
Internet : http://www.neoit.com

Offshore IT Outsourcing :: Your Premiere Destination for IT Outsourcing (location in USA and India)
E-mail: http://www.offshoreitoutsourcing.com/ select contact us
Internet: http://www.offshoreitoutsourcing.com/

Offshore Outsourcing | Information on Offshore Resources Process Issues | Indian IT
E-mail: http://www.offshoreoutsourcing.org/ select 'contact us'
Internet: http://www.offshoreoutsourcing.org/

Outsourcing offshore outsourcing companies outsource outsourcing IT outsourcing services
E-mail: http://www.ezgoal.com/outsourcing select contact us at the bottom left
Internet: http://www.ezgoal.com/outsourcing

Outsourcing Information and Resources
E-mail: info@outsourcing-center.com forum included
Internet: http://www.outsourcing-center.com/

Outsourcing - A Buyer's Guide To Offshore Outsourcing
E-mail: thorgan@cio.com
Internet: http://www.cio.com/offshoremap/

SBPOA
Information on Shared Services and BPO
E-mail: info@sharedxpertise.org
Internet: http://www.sharedxpertise.org/

TPI.net
Global sourcing advisors
E-mail: duncan.aitchison@tpi.net
Internet: http://www.tpi.net/

The Outsourcing Institute - Resource for the Outsourcing Industry
E-mail: request@outsourcing.com
Internet: http://www.outsourcing.com/

Ad 4) TECHNOLOGY

BBC News
E-mail: http://news.bbc.co.uk/1/hi/technology/default.stm select 'feedback'
Internet: http://news.bbc.co.uk/1/hi/technology/default.stm

Builder.com
E-mail : http://builder.com.com/ select 'help/contact us'
Internet: http://builder.com.com/

Bitpipe, Technology White Papers, Webcasts, Case Studies and IT Product Information
E-mail: info@bitpipe.com
Internet : http://www.bitpipe.com/

CNET News.com -- Technology news and business reports
E-mail: http://news.com.com/ select 'contact us'
Internet: http://news.com.com/

Computerworld
E-mail: http://www.computerworld.com/ select 'about us' and 'contacts'
Internet: http://www.computerworld.com/

Darwin - Information Technology for Executives
E-mail: http://www.darwinmag.com/ select 'contact us'
Internet: http://www.darwinmag.com/

Infoworld
E-mail: customerservice@infoworld.com
Internet: http://www.infoworld.com/techindex/

Inter.com the Internet and IT Network from Jupitermedia Corp
E-mail: http://www.internet.com/ select give us your feedback
Interent: http://www.internet.com/

Technology Evaluation.Com (TEC)
E-mail: http://technologyevaluation.com/ select 'contact'
Internet: http://technologyevaluation.com/

TechWeb: The Business Technology Network
E-mail : http://www.techweb.com/media/contactus/
Internet : http://www.techweb.com/

TMCnet.com - CRM, VoIP, Communications, Call Centers, Teleservices, Wi-Fi and Biometrics
E-mail : tmc@tmcnet.com
Intenret : http://www.tmcnet.com/

Yahoo! News - Technology - Enterprise
E-mail: http://help.yahoo.com/help/news/
Internet: http://news.yahoo.com/news?tmpl=index&cid=1208

WebServices.Org - The Web Services Industry Portal
E-mail : editor@webservices.org
Internet : http://www.webservices.org/

Zdnet, Information resources for IT professionals
E-mail : info@zdnet.com/
Internet : http://www.zdnet.com/

PROGRAMMING - JAVA

IBM Java developerswork
E-mail: https://www-136.ibm.com/developerworks/secure/feedback.jsp
Internet: http://www-136.ibm.com/developerworks/java/

Freewarejava.com
- Find free Java applets, tutorials, references, Java books

Internet: http://www.freewarejava.com/

Javaworld
E-mail: http://www.javaworld.com/feedback
Internet: http://www.javaworld.com/

The Java Community Process(SM) Program
Internet: http://www.jcp.org/en/home/index

PROGRAMMING - DOTNET

net101: Home of .NET Knowledge Base. ASP.NET, ADO.NET, C#, VB.NET, SOAP and Web Services
E-mail: http://www.dotnet101.com/siteinfo/contactus.asp
Internet: http://www.dotnet101.com/

Dotnetwire, The Source For Microsoft .NET News
E-mail: http://www.dotnetwire.com/siteinfo/contactus.asp
Internet: http://www.dotnetwire.com/

Microsoft .NET Information
E-mail: www.microsoft.com/net select 'contact us'
Internet: www.microsoft.com/net

PROGRAMMING - XML

ebXML - Enabling A Global Electronic Market
E-mail: http://www.ebxml.org/contacts.htm
Internet: http://www.ebxml.org/

The CoverPages
E-mail: robin.cover@oasis-open.org
Internet: http://www.oasis-open.org/cover/sgml-xml.html

XML.org, Focus Areas provide domain-specific content on XML standards
E-mail: http://www.xml.org/xml/contactus.shtml
Internet : http://www.xml.org/

XML Files - Extensible Markup Language
Internet: http://www.xmlfiles.com/

OPEN SOURCE / LINUX

Ecommerce and Development Report 2003, Unctad
- Open source software: Implications for ICT policy and development

Internet: http://www.unctad.org/en/docs/ecdr2003ch4_en.pdf (PDF)

GCC Home Page - GNU Project - Free Software Foundation (FSF)
E-mail: gnu@gnu.org
Internet: http://gcc.gnu.org

Linux Platform Survey
Internet: http://gmi-mr.com/20/survey/s.phtml?sn=17027

Linux Today - Linux News On Internet Time (quality links included)
Internet: http://linuxtoday.com/

MIMOS Open Source
Internet: http://opensource.mimos.my/

Opensource initiative
E-mail: webmaster@opensource.org
Internet: http://www.opensource.org/

Open source portal
Internet: http://opensource.pagina.nl

Yahoo! News - Linux/Open Source
E-mail: http://help.yahoo.com/help/news/
Internet: http://news.yahoo.com/news?tmpl=index&cid=1817

APPENDIX 6 CHECKLIST SWOT

In chapter 13, the SWOT analysis is described. The following checklist in table 4 could assist exporters in determining their own strengths, weaknesses, opportunities and threats.

Table 4 Checklist SWOT Analysis (to be adapted to exporter's own situation)

	Effect for your company			Influence on performance	
Strengths/Weaknesses	**Strength**	**Neutral**	**Weakness**	**High**	**Low**
1 Quality					
Quality standards (ISO and CMM)					
Project manager					
USP					
Safety / security					
2 Marketing and sales					
Sales office					
Qualified staff (especially sales manager)					
Price					
Pricing strategy					
Promotion					
Trade fairs					
Promotional materials in several languages					
Trade magazines (advertisement and free publicity)					
Internet opportunities (website)					
Direct Marketing					
International business events					
Referrers					
Visits to clients					
Foreign nationals within EU client company (diaspora)					
Distribution					
Sales office in EU country					
Cooperation					
3 Financial					
Financial stability (budget)					
Access to external funds					
Subsidies					
4 Capabilities					
Skilled personnel					
High quality service					
Dealing with foreign languages and cultures					
Telecommunications infrastructure					
Intellectual Property Rights protection enforcement					
Access to soft- and hardware					
Flexibility					
5 Others					

Opportunities/threats	Effect for your company			Influence on performance	
	Opportunity	Neutral	Threat	High	Low
1 Offshore outsourcing					
Demand Growth Trends • internet • BPO • Other Price level Technology					
2 Economics					
Business culture / language Stability exchange rate					
3 Competition					
Offshore locations (from developing countries and Central and Eastern Europe)					
4 Distribution					
Sales office Broker/consultant					
5 Others					

APPENDIX 7 REFERENCES

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EITO Task Force experts and leading market research companies (March 2004), *European Information Technology Observatory 2004*

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Zwart, Cok de (2003). *Offsourcing blijft ver weg,* Computable