



**Nineth Meeting of the  
International Voorburg Group on Service Statistics**

**Sydney, Australia  
17 - 21 October 1994**

*Session 2*

***Business Services in Europe***

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## roduction and background

of the main features in the economic development in Europe in the last two decades is the importance of the services sectors. Around the Member States of the European Union were characterised by the market services sectors accounting 36 - 42% of the gross value added in the total economy. In all member states the same pattern of growth in market services' share in the total economy in the period from 1970 to 1990 was observed. In 1990 the market services sector was the most important sector in the European economy with between 45% and 55% of the gross value added generated in the economy in 1990, cf. Table 1.1.

However, the growth pattern within the services sector is not uniform as on the one hand the manufacturing sector shows a declining share of

the total gross value added in many Member States and on the other hand the major part of the growth was found in the sector other market services mainly generated by the subsector business services. In several of the Member States the increasing importance of the services sectors is strongly connected with the development of the business services.

More detailed analysis of the performance of different subsectors within for instance business services is hampered by the fact that the statistical coverage of these subsectors are relatively limited in many Member States. The growing importance and limited statistical coverage of the services sectors are the main forces behind the statistical program for the development of the services statistics adopted by the European Council, cf. Council Decision 92/326/EEC.

**Table 1.1**

Breakdown of gross value added at market prices and employment, by sector in per cent of the total economy, 1970-1990.

	Market services				Other market services			
	Gross value added	Employment	Gross value added	Employment	Gross value added	Employment	Gross value added	Employment
	1970	1970	1990	1990	1970	1970	1990	1990
	42.4	36.9	54.4	48.4	13.6	9.7	21.3	18.1
	46.6	34.5	47.8	36.3	13.2	7.1	20.1	16.0
	35.9	30.4	48.8	38.0	13.5	6.6	25.5	17.1
	na	na	39.5*	na	na	na	na	na
	40.3	na	51.2 <sup>5</sup>	38.3	14.9	na	16.2 <sup>5</sup>	14.9
	41.2	32.8	52.2	40.3	16.3	9.2	24.5	13.1
	31.7 <sup>1</sup>	na	40.1	32.3*	11.3 <sup>1</sup>	na	15.1	5.1
	39.2	28.8	51.5	42.6	13.4	5.6	20.7	13.1
Germany	36.2	38.7 <sup>1</sup>	57.4	52.5	12.8	7.7 <sup>1</sup>	16.8	13.1
Netherlands	42.6	41.5	55.8	53.2	15.3	12.6	27.8	21.2
	42.4 <sup>4</sup>	23.1 <sup>2</sup>	47.0	28.8	8.0 <sup>4</sup>	2.5 <sup>2</sup>	8.8	4.1
United Kingdom	42.1 <sup>1</sup>	39.8 <sup>3</sup>	51.3	48.5*	9.3 <sup>1</sup>	13.6 <sup>3</sup>	23.8	16.0

Source: EUROSTAT.

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\*9 (Incl. services of credit and insurance institutions).

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\*9

EUROSTAT. National Accounts ESA. Detailed labels by branch 1970-1984 (1986) and 1985-1991 (1993).

in objectives of this program are:

set out an European reference framework for statistics on services defining the most appropriate concepts and methods for managing and monitoring Community policies, especially the implementation of the Single European Act, and for satisfying the needs of national, regional and local administrations, international organisations, economic operators and professional associations;

establish an European statistical information system for services;

promote and support harmonization of statistics on services in the Member States.

Objectives of the pilot survey on the business services are twofold:

- 1) to provide basic statistical information on business services sector within the Member States
- 2) to test and develop a methodology for regular collection of statistical data on business services to be provided on a harmonized basis by all Member States

This paper is a result of the first objective of the pilot survey on business services, i.e. the provision of basic statistical information on the European business services sector. The results of the test of the methodology was presented at the Voorburg Group Meeting in 1993<sup>1</sup>. The structure of the paper is first to present the methods and definitions used in the pilot survey and secondly to give some basic statistical information on the 8 subsectors surveyed in this study.

## Methods and definitions used in the pilot survey

### Administration of the pilot survey

Pilot survey launched by EUROSTAT has been carried out in all Member States except for Belgium. In other countries the survey was carried out by the national statistical institute under contract to EUROSTAT, and for Ireland and United Kingdom the surveys were carried out by a private institute<sup>2</sup>. The national statistical institutes in Finland and Sweden volunteered to participate in the pilot survey. For the data were mainly compiled by using statistical information in the two countries which did not cover the total range of variables included in the pilot survey.

The national pilot surveys were carried out in 1991 covering the statistical year 1990 except for Greece where the survey was carried out in 1992. The data were then processed in accordance with the guidelines mentioned below and submitted to EUROSTAT for further analysis.

In order to assist the Member States in carrying out the pilot survey and to collect data on a harmonized basis, EUROSTAT decided to develop a set of guidelines for data collection covering practical issues related to the carrying out of the survey<sup>3</sup>. These guidelines included a model questionnaire to be sent to the enterprises within the services sector, cf. paragraph 2.3, sampling procedures, cf. paragraph 2.4 and a number of designed tables to be submitted to EUROSTAT for further analysis.

The methodological manual on the services sector which was elaborated in its first version in autumn 1990 provided the framework for the definition of business services subsectors, cf. paragraph 2.2, and also the definitions of the variables to be collected, cf. paragraph 2.3.

### 2.2 Definition of the business services sector

The business services sector includes

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<sup>1</sup>Bøegh-Nielsen and S. Rikama, Methodological Implications of the pilot survey on business services undertaken by Member States of the European Communities, published in papers and final report of the 8th Meeting on Services Statistics, Oslo 1993.

<sup>2</sup>In Ireland the survey was conducted by Service Industries Research Center, Dublin, and for the United Kingdom by Services Research Center, Portsmouth.

<sup>3</sup>EUROSTAT: Guidelines for a Pilot Survey on the business services sector, document SO/91/06 EN, Meeting of 13-14 March 1991.

ctoral level to give a meaningful appreciation of different activities constituting the sector. Thus the sector has been divided into eight subsectors which are defined by four digit classes of the activity

classification NACE.Rev1. The eight subsectors are presented in table 2.1 and a more detailed description is given in annex I.

**Table 2.1**

Definition of the business services sector by NACE.Rev1

Computer and computer related services	(NACE.Rev1: 72.10 - 72.60)
Professional services	(NACE.Rev1: 74.11, 74.12, 74.14)
Marketing services	(NACE.Rev1: 74.13, 74.40)
Technical services	(NACE.Rev1: 74.20, 74.30)
Renting and leasing services	(NACE.Rev1: 71.10 - 71.30)
Labour recruitment and provision of personnel	(NACE.Rev1: 74.50)
Operational services	(NACE.Rev1: 74.60, 74.70)
Other business services	(NACE.Rev1: 74.81 - 74.84)

time when the pilot survey was carried out the activity classification, NACE.Rev1, had not been implemented in the Member States which were using their own national nomenclatures of economic activity. In order to arrive at a common definition of the business services sector and the eight subsectors each Member State needed to:

1) list the various activities making up the business services subsectors

2) identify these activities in terms of NACE.Rev1 classification and in terms of the country's own national nomenclature

3) regroup these activities into the subsectors defined in the pilot survey

## Definition of the collected variables

As mentioned above the variables collected in the pilot survey have been defined by the Methodological Manual elaborated by EUROSTAT which gives a detailed classification and definition of variables to be collected<sup>4</sup>. The variables in the manual relevant for a detailed description of the services industries can be divided into three groups:

<sup>4</sup> Cf. EUROSTAT. Methodological Manual of Statistics on Services Enterprises.

- 1) demographic and structural variables (activity, age, size class, legal status)
- 2) economic variables (turnover, gross value added, labour costs, investments)
- 3) employment variables (number of persons employed, part-time employees)

## 2.4 Survey universe and identification methods

### 2.4.1 Identification of the universe

According to the recommendations laid down in the data collection guidelines, the Member States should survey a sample of 1 500 or 3 000 enterprises within the business services sector depending on the size of the Member State.

The pilot survey revealed that the Member States had relatively uneven conditions for identifying the universe as only a few Member States had business registers with a full coverage of all enterprises within the business services sector. In broad terms, three kinds of survey frames were used in the pilot survey for identifying the universe;

business registers with a total and updated coverage as in Denmark, France and the Netherlands - and also in Finland and Sweden statistical registers used for specific statistical purposes, i. e. production or accounts statistics, with a limited sectoral or size coverage as in Germany, Spain, Greece, Italy, Luxembourg and Portugal

private data bases with only a limited coverage and updating as in Ireland and United Kingdom

### the surveyed population by nationality

problem of inadequate registers combined with non-mandatory status of the pilot survey resulted in a low response rate of 46.8%, cf. table 2.2. In many countries the response rate was even lower, e.g. the United Kingdom (12.8%) and Ireland (24.6%). Altogether the pilot surveys

consisted of 44 084 enterprises - or about 3% of total estimated universe of enterprises within business services sector.

As a consequence of the heterogeneous sampling procedures and the response rates obtained the possibilities for comparative studies of the collected data between the Member States remain rather modest. Only for France and Germany the data were raised to the level of the total business services sector. For all other Member States the data could give information about the responding population in the sample. Due to the raised data the French population constituted nearly two thirds of the total number of surveyed enterprises, thus making analysis on the EUR(11) level impossible due to the unequal national distribution in the pilot survey.

**Tabel 2.2**

Size of samples and accepted responses in the pilot survey in each Member State.

	Number of surveyed enterprises	Number of accepted responses	%-share of total number of accepted responses	Response rate (%)
	na	na	na	
	1715	925	2.1	5
	16954	4169	9.5	2
	2500	1108	2.5	4
	10589	3037	6.9	2
	38567	27856	63.2	7
	3008	426	1.0	1
	4860	1564	3.5	3
urg	1097	470	1.1	4
etherlands	1500	1500	3.4	10
	3307	1500	3.4	4
d Kingdom	10189	1301	3.0	1
	94286	44084	100.0	4

EUROSTAT. Pilot survey data.

The statistical results of the pilot survey give no impression of the total magnitude of the European business services. The best statistical information on the issue are found in the EUROSTAT publication "Enterprises in Europe". In this publication the total European universe of business services enterprises is estimated to 1.9 million employing 8.4 million

people. In 1990 a little more than half of the enterprises and two thirds of the employment within the business services sector are found in the three largest economies of the European Community: Germany, France and The United Kingdom, the latter being the main contributor, cf. table 2.3.

**Table 2.3**

The national shares of the total business services sector at EUR(12) level, 1990, %-share.

	Enterprises	Employed	Turnover
	3.5	2.3	
	1.2	1.7	
	19.6	16.3	2
	3.2	1.4	
	15.1	8.6	
	12.5	19.3	1
	na	na	
	0.6	2.4	
urg	0.1	0.1	
erlands	2.3	3.0	
	2.4	1.1	
d Kingdom	20.6	30.5	3

EUROSTAT. Enterprises in Europe (1994).

### the surveyed population by size-class

Differences in the coverage of the sample frames in the different Member States are also studied by analyzing the size distribution of the surveyed enterprise population. Generally, the surveyed samples show a bias towards the larger enterprises (100+ persons employed) as 1.2% of the surveyed enterprises belongs to medium-sized (100-499 employees) or large enterprises (500+ employees) compared to 0.3% at the EUR(12) level studied in the study by EUROSTAT "Enterprises in Europe", cf. table 2.4. Especially the sample

populations in Italy, the Netherlands and the United Kingdom show high shares of larger enterprises. Also the small enterprises (10-99 employees) showed a high share of the surveyed enterprises in the three above mentioned countries and in further three Member States; Denmark, Spain and Ireland. The micro enterprises (0-9 employees) were particularly dominant in Germany, Greece and France, but as the self-employed persons were included in the sample population in all Member States the national differences in the proportions of micro enterprises are difficult to interpret.

Table 2.4

The surveyed enterprises broken down by size class in 1990, %-share.

	0 employees	1-9 employees	10-99 employees	100-499 employees	500+ employees
	na	na	na	na	
	18	52	28	2	
	28	59	12	1	
	na	94	6	1	
	na	66	30	3	
	3	85	11	1	
	1	64	32	3	
	na	na	87	11	
g	2	75	23 <sup>1</sup>	.1	
erlands	36	26	31	5	
	na	77	20	2	
d Kingdom	1	38	46	11	
	60	36	4	0	
	na	88	11	1	

mbourg the largest size class is 10+ due to confidentiality.

UROSTAT. Pilot survey data.

g at the size structures broken down by  
ctors, the pilot survey showed that the large  
ises mainly were found in the subsectors  
recruitment and provision of personnel and  
onal services. On the other hand all the other  
showed a uniform size structure with the  
enterprises constituting 85 - 90% of the total  
r of enterprises; only computer services  
l slightly from this pattern with 82%. The  
ctors labour recruitment and provision of  
al and operational services were also  
ding in their share of small enterprises which  
out 32 respectively 22% on the EUR(11)

ly, the size structure of the sample is also  
d by the importance of the different Member  
concerning the employment in the business  
s. Thus the employment of the surveyed  
ises in the Netherlands and the United  
m is dominated by the large enterprises with  
respectively 59% of the total employment, cf.

table 2.5. Remarkably, the large Italian enterpri  
only accounted for 26% of the total employmen  
the Italian population compared to the average sh  
of 32% for the large enterprises at the EUR(  
level.

The importance of the employment in the la  
enterprises can be traced back to the importance  
the two subsectors labour recruitment and provis  
of personal and operational services represen  
three quarters of the total employment in this s  
class. The large enterprises in all the of  
subsectors only accounted for less than 20% of  
total employment in their respective subsector.

The medium sized enterprises were characterise  
a pattern of most subsectors showing a share arou  
the EUR(11) average of 22%. Operational servi  
is the only subsector with a significant higher sh  
(32%) and professional and technical servi  
showed a considerably lower share (1  
respectively 12%).

Table 2.5

Employment in the surveyed enterprises broken down by size class, 1990, %-share.

	0-9 employees	10-99 employees	100-499 employees	500+ employees
	na	na	na	na
	10	38	15	37
	26	25	21	28
	36	42	23	0
	1	34	28	38
	26	30	16	28
	10	30	26	34
	na	38	36	26
burg	20	80	na	na
erlands	2	19	19	61
	16	26	28	30
ed Kingdom	2	14	25	60
	27	30	18	25
	25	35	40	na

EUROSTAT. Pilot survey data.

small enterprises also showed a rather uniform share with a share around 38% for all subsectors, except for professional services with a relatively high share (48%) and labour recruitment and provision of personnel and operational services with a significant lower employment share (11% and 12%).

Micro enterprises which employed the smallest number of employees were dominated by the three subsectors professional services (36%), technical services (34%) and other business services (33%). At the other end the employment shares of the subsectors labour recruitment and provision of personnel and operational services are neglectable (1% and 1% respectively).

Number of local units per enterprise is another indicator about the demographic structure of the surveyed enterprises. On average, the surveyed

enterprises consisted of 1.5 local unit per enterprise (cf. table 2.6). The main deviations with 2.3 local units per enterprise are found in the sample population of Italy and the United Kingdom which were characterized by a relatively huge amount of large enterprises in the surveyed population.

The structural pattern is rather uniform when broken down by subsectors as 5 subsectors (commerce, services, professional services, marketing services, technical services and operational services) show an average number of local units amounting to 1.5. The subsector showing the highest average number of local units per enterprise is renting and leasing services (1.8 local units). This is mainly due to the relatively high numbers in Italy (3.9 local units) and the United Kingdom (4.1 local units).



Table 2.6

Number of local units per enterprise, 1990.

Computer services	Professional services	Marketing services	Technical services	Renting and leasing services	Recruitment and provision of personnel	Operational services	Other business services	All subsectors
na	na	na	na	na	na	na	na	na
1.3	1.1	1.1	1.5	1.1	na	1.4	2.3	1
1.1	1.1	1.0	1.1	1.2	2.6	1.2	1.0	1
1.0	1.0	1.0	1.0	1.2	1.3	1.0	1.0	1
2.3	1.4	1.7	1.7	2.2	1.3	2.3	1.4	1
1.1	1.1	1.1	1.1	1.2	2.8	1.2	1.1	1
1.1	1.0	1.3	1.2	1.2	1.4	1.8	2.5	1
2.0	2.4	4.2	2.0	3.9	na	1.5	1.8	2
1.1	1.0	1.0	1.0	1.2	1.2	1.1	1.1	1
1.1	2.0	1.3	1.7	1.1	1.9	1.9	1.1	1
1.2	1.1	1.2	1.1	1.8	1.2	1.3	1.2	1
2.3	2.3	0.9	2.2	4.1	1.7	1.5	2.9	2
1.1	1.1	1.0	1.1	1.0	na	1.7	1.1	1
1.2	1.1	1.0	1.1	1.3	1.1	1.2	1.0	1

EUROSTAT. Pilot survey data.

### The surveyed population by legal status

One demographic variable to be analysed is the legal status of the surveyed enterprises, cf. table 2.7. The general pattern can be found as the legal status of sole proprietorship is the most frequent among the surveyed enterprises in 7 Member States (Denmark, Spain, Germany, Italy, Luxembourg, the Netherlands and the United Kingdom). But in 3 Member States (Greece, Ireland and France) the sole partnership is the most frequent legal status, and in the Netherlands partnership is the dominant legal status in all. The differences between the national pilot survey and the general pattern may reflect real differences between Member States due to e.g. the legislative conditions or a number of cases the recorded differences may be caused by the sample frame e.g. Italy and the

United Kingdom which both were dominated by large enterprises and consequently by companies (61% and 83% respectively).

The subsectors showed distributions which differ from the general pattern of legal status. The subsector of computer services is dominated by companies in all Member States except Germany and Portugal. In renting and leasing services companies were dominant in all Member States except for Portugal where partnerships were the most frequent legal status - as for all other subsectors. On the other hand sole proprietors were the most frequent legal status in professional services in 6 Member States (Denmark, Germany, Greece, Spain, France and Ireland).

Table 2.7

The surveyed enterprises broken down by legal status, 1990, %-share

	Sole proprietorship	Partnership	Company	Other
	na	na	na	
	42	na	58	
	76	14	9	
	70	14	16	
	41	na	54	
	52	11	35	
	30	18	50	
	8	11	67	
urg	33	4	62	
erlands	37	6	46	
	12	81	6	
d Kingdom	4	11	83	
	25	14	60	
	11	29	59	

EUROSTAT. Pilot survey data.

## Statistical results of the pilot survey

mentioned above the statistical results obtained from the pilot survey cannot be characterised as representative so the possibilities of comparability between Member States are rather limited. In this section a number of basic variables are compared between subsectors in order to try to identify the most basic structures and differences in the different subsectors in the Member

States. Keeping the quality of the data in mind the comparisons will mainly be done by ranking subsectors in the different Member States in relation to a number of basic demographic, employment and economic variables, cf. table 3.1<sup>5</sup>.

The surveyed enterprises showed a clear pattern concerning distribution of enterprises among subsectors as professional services was the most numerous subsector in 8 of the Member States, came second in 2. Only in the sample of the United Kingdom the subsector professional services was of minor importance. Also technical services showed frequent representation in the samples as this subsector ranked second in 8 Member States, cf. table 3.1. Altogether the two most frequent subsectors stood for nearly 55% of all the surveyed enterprises. In France and the United Kingdom the subsector other business services was the most numerous and in Italy computer services ranked number one.

Due to the skewness in the national distribution in the total of surveyed enterprises at the EUR(11) level the following method has been used for profiling the subsectors and the total services sector at the European level;

In the first step in the analysis each subsector is ranked within each Member State in terms of number of enterprises, employees, turnover (table 3.1.1), turnover per employee, gross value added per employee, labour costs per employee, investments per employee, and sales per enterprise (tables 3.1.1-3.8.1), exports and types of products (tables 3.1.2-3.8.2).

In the second step the EUR(11) average has been calculated as the weighted average of the national rankings for each analysed

The structural pattern is more scattered when investigating the importance of the subsectors regarding employment. In general the subsector operational services showed the highest ranking in most countries, in Germany, Luxembourg and

lands and Portugal and becoming the second subsector in Denmark, Greece, Spain and Technical services was the most important in Denmark, Spain, Ireland and the second important in the Netherlands. Totally the two sectors operational and technical services added to half the employment registered in the other enterprises. Professional services which

showed the highest number of enterprises was the second most important subsector in 4 Member States concerning employment. France showed a different pattern with the subsector recruitment and provision of personnel as the most important subsector with nearly 20% of the total employment in the business services sector in France.

Table 3.1

Ranking of number of enterprises, employees and turnover by subsector and member state, 1990.

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR (11)
<b>Business services</b>													
Business services	na	6	5	4	6	5	4	1	3	5	6	2	
Technical services	na	1	1	1	1	2	1	2	1	1	1	4	
Professional services	na	5	3	5	3	4	6	5	4	7	4	5	
Administrative services	na	2	2	2	2	3	2	3	2	2	2	3	
Rental and leasing	na	7	7	6	5	7	8	7	7	4	5	7	
Recruitment and provision of personnel	na	na	8	8	8	8	5	na	8	8	8	8	
Information services	na	3	6	7	7	6	7	4	5	6	7	6	
Business services	na	4	4	3	4	1	3	6	6	3	3	1	
<b>Other services</b>													
Other services	na	3	5	5	4	6	5	1	3	5	8	2	
Technical services	na	4	2	6	3	2	4	4	2	4	2	4	
Professional services	na	6	6	1	5	7	6	5	5	6	4	8	
Administrative services	na	1	3	3	1	5	1	3	4	2	3	3	
Rental and leasing	na	7	8	7	6	8	8	7	8	7	6	6	
Recruitment and provision of personnel	na	na	4	8	8	1	7	na	7	8	7	7	
Information services	na	2	1	2	2	3	3	2	1	1	1	5	
Business services	na	5	7	4	7	4	2	6	6	3	5	1	
<b>Other services</b>													
Other services	na	2	5	2	4	5	7	3	1	5	7	3	
Technical services	na	4	1	7	3	2	5	4	2	3	4	4	
Professional services	na	3	4	1	2	1	6	2	5	6	1	7	
Administrative services	na	1	2	6	1	3	1	1	3	1	2	5	
Rental and leasing	na	7	3	5	6	7	8	6	6	7	3	1	
Recruitment and provision of personnel	na	na	8	8	8	6	4	na	8	8	8	8	
Information services	na	5	7	3	5	8	3	5	4	3	5	6	
Business services	na	6	6	3	7	4	2	7	7	2	6	2	

studying the third basic variable, turnover, the subsector technical services again shows a high position, being at first place in 5 Member States and in additional 2 Member States. The subsector showing the highest amount of turnover is the subsector of computer services, standing at first place in 3 Member States and number two in Italy and Spain. Two subsectors stood for a little less than half the registered turnover in the pilot survey. Not surprisingly, the subsector operational services which has the highest employment showed only a minor turnover (8%) of the total turnover of the surveyed subsectors.

## **Computer and related services**

The subsector computer services accounted for 11 - 15% of the total number of enterprises, employment and turnover in the pilot survey. The computer and related services are characterised by being one of the fastest growing subsectors in the industries. The enterprises producing computer services are also often involved in the sale of computer hardware/software sales and thus causing confusion in the definition of the principal activity of the enterprise. This is the case in the case of Luxembourg NACE.Rev1 51.64 Wholesale of office machinery and equipment was also included in the sample and taken into account if the enterprises received more than

10% of their turnover from computer services activities.

This definition is clearly reflected in the collected data as turnover per employee in Luxembourg exceeds the amount of all other Member States. In general, the subsector computer services was ranked as the third or fourth highest subsector concerning turnover per employee (Denmark, Germany, Spain, France, Italy, Netherlands, Portugal and the United Kingdom) concerning gross value added per employee (Denmark, Germany, Greece, Spain, Italy, Netherlands and Portugal), cf. table 3.1.1. Only the surveyed enterprises in Ireland showed figures remarkably different from the other European countries.

Computer services showed in 5 (Germany, Greece, France, Luxembourg and the Netherlands) out of 12 Member States the highest labour costs per employee. The same pattern was registered in Finland and Sweden. Concerning investments there is no clear pattern but on average the subsector computer services is the subsector ranking third concerning investments per employee. Nor concerning number of employees per enterprise a uniform pattern across the Member States is found. Especially the United Kingdom sample differs with a very high average employment per enterprise - more than 10 employees per enterprise.

Table 3.1.1

Computer services. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	
	3	4	2	2	
	4	4	1	2	
	2	3	1	3	
	4	3	2	5	
	3	2	1	2	
	7	7	7	7	
	4	4	4	5	
urg	2	2	1	na	
erlands	4	3	1	5	
	3	3	3	4	
ed Kingdom	3	2	2	3	
	3	2	1	3	
	3	2	1	2	
	2	4	1	3	

EUROSTAT. Pilot survey data.

lot survey also included a breakdown of the  
er into domestic sales, exports to other EC  
es and exports to countries outside the EC. In  
mber States (Denmark, Germany, France,  
i and the United Kingdom) computer services  
e subsector with the highest exports share to  
EC countries, cf. tabel 3.1.2. Especially  
ter services in Ireland (15% of the total  
er in computer services) and the United

Kingdom (7%) showed high exports shares; altho  
the highest share was found in Luxembourg (2  
even if computer services only ranked second  
Luxembourg. Concerning exports to extra  
countries the pattern was different. Only in Port  
computer services was ranked at the first pl  
Extra EC exports came out with relatively  
shares in Denmark (9%), Ireland (9%) and Port  
(9%).

Table 3.1.2

Ranking of turnover in computer services broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	1	4	5	
	1	4	8	
	8	3	6	
	5	2	na	
	1	4	6	
	1	2	6	
	5	5	2	
rg	2	5	6	
orlands	2	3	5	
	4	1	5	
d Kingdom	1	5	7	
	1	4	8	

UROSTAT. Pilot survey data.

ot survey also included a breakdown of the r by type of clients, i.e. enterprises, olds and government. Computer services was erised by only minor sales to households ed to the other subsectors, cf. table 3.1.2. ception was computer services in Italy which ed 6% of the total turnover sold to households nking second in the Italian survey. In all other r States the computer services showed a share of turnover sold to households than in an survey.

ter services also ranked medium concerning ment as client in comparison with the other tors. But both for computer services ises in Greece (22%) and Italy (31%) ment constituted an important client. Thus in early 40% of the turnover generated in er services derived from other clients than ises.

## Professional services

ubsector professional services was the most us subsector and accounted for about 1/3 of pondent enterprises in the pilot surveys. One

reason for this high number of enterprises might found in the licensing system for lawyers and accountants in the Member States which implies existence of identification sources of a good updated coverage compared to many of the other subsectors.

The subsector of professional services showed clear performance concerning the selected variables cf. tabel 3.2.1. Not surprisingly, the subsector showed a low ranking concerning turnover and investments per employee and also a low employment per enterprise. More surprisingly enterprises within the professional services also showed relatively low labour costs per employee which must be seen as a consequence of frequent appointment of partners amongst professional educated employees leaving a relatively high share of non academic employees or young professionals. Only the United Kingdom which was dominated by a high number of larger enterprises with a relatively larger part of employees compared to partners showed a different pattern concerning labour costs per employee as professional services in the UK ranked number one.

Table 3.2.1

Professional services. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	
	6	3	4	5	
	6	6	6	6	
	7	7	8	7	
	6	6	5	3	
	5	3	3	6	
	5	6	6	4	
	5	5	5	2	
urg	6	3	2	na	
erlands	6	6	4	6	
	6	5	5	3	
ed Kingdom	4	3	1	5	
	7	5	5	5	
	5	5	5	5	
	4	2	3	2	

EUROSTAT. Pilot survey data.

Surprisingly, professional services only showed low rankings for export shares. In all Member States the exports shares to other EC countries were less than 5% of the total turnover, except for Luxembourg (12%) and the United Kingdom (7%), cf. Table 3.2.2.

On the other hand professional services was the subsector with the highest export shares to extra-EC countries in Denmark (18%), Luxembourg (8%) and Portugal (9%).

Table 3.2.2

Ranking of turnover in professional services broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	6	1	2	
	5	2	2	
	4	6	1	
	2	4	2	
	5	2	1	
	6	6	1	
	4	4	3	
urg	3	1	2	
erlands	3	4	2	
	4	1	3	
d Kingdom	1	2	2	
	4	2	1	

EUROSTAT. Pilot survey data.

sional services was characterised by being the  
tor which generated the highest share of  
er from households, cf. table 3.2.2. In 9 of 11  
er States professional services was ranking  
second. In Greece (37%), France (21%),  
ny (18%) and Denmark (17%) the households  
uted a considerable share of the turnover.

sional services showed secondary rankings  
ning government as clients. Only in Spain  
and the United Kingdom (15%) more than 10%  
generated turnover derived from government  
nts.

### Marketing services

ing services is in most of the Member States  
erised by a large volume in turnover caused  
large amount of purchases coming from  
ement space and time sales invoiced by the  
ing enterprises. In Denmark, Greece, Spain,  
nd Portugal where marketing services ranked  
e turnover per employee in this subsector was  
n 2.5 - 5 times the national average turnover  
mployee in the business services sector, cf.  
3.3.1.

The structure is more distorted when analyzing gr  
value added per employee. On the one h  
marketing services is ranked one or two in Germa  
Greece, Spain, Ireland and Portugal; on the o  
hand marketing services appear to have  
comparably low generation of gross value added  
Denmark, France, Luxembourg and the Un  
Kingdom.

The marketing services in Spain and Portugal  
characterised by having the highest labour costs  
employee of all the surveyed subsectors in these  
countries. The 4 above mentioned Member Sta  
with a relatively low gross value added also show  
relatively low labour costs per employee below  
national averages in the business services sector.

Except for Greece and Italy the subsector marke  
services showed a number of employees  
enterprise below the national averages.  
investments per employee had a general trend  
marketing services being one of the three subsec  
with the highest investments except for Germa  
France and the United Kingdom.



Table 3.3.1

Marketing services. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	
	1	6	6	3	
	2	2	4	4	
	1	1	2	2	
	1	1	1	2	
	2	5	5	5	
	3	1	3	1	
	1	3	2	3	
rg	3	6	6	na	
erlands	3	4	2	3	
	1	2	1	2	
d Kingdom	5	6	8	7	
	2	2	3	6	
	2	3	2	3	
	3	1	2	4	

EUROSTAT. Pilot survey data.

s were of no major importance in marketing s, cf. table 3.3.2. The subsector showed n ranking in most Member States. The highest shares to other EC countries were found in (6%), Ireland (12%), Luxembourg (12%) and ted Kingdom (6%). The exports to extra EC es were without significance except for Ireland d the United Kingdom (7%).

Marketing services was - together with lab recruitment and provision of personnel - subsector with the least share of households client. In all Member States the share was less than 3%, table 3.3.2. Neither government clients were greater importance for the marketing services sector compared to the other subsectors as marketing services only showed secondary rankings except Spain.

Table 3.3.2

Ranking of turnover in marketing services broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	5	7	7	
	4	5	7	
	3	7	8	
	4	4	3	
	3	5	6	
	2	4	6	
	7	5	7	
urg	3	3	6	
erlands	6	7	7	
	6	7	6	
ed Kingdom	4	2	6	
	6	7	7	

EUROSTAT. Pilot survey data.

## Technical services

Technical services was one of the most important sectors on the total European level ranking in all basic variables (number of enterprises, employment and turnover) analysed in section 3.1. The picture changes somewhat when looking at the economic variables per employee as technical

services then in most of the Member States got a medium ranking, cf. table 3.4.1.

Enterprises within the technical services show relatively high labour costs per employee as the subsector ranked first or second in Denmark, Germany, France, Ireland, Italy and Portugal; only in Greece the labour costs per employee were low.

Table 3.4.1

Technical services. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	na
	4	2	1	6	
	5	5	2	5	
	5	5	6	5	
	3	4	3	4	
	4	4	2	4	
	6	4	2	6	
	3	2	1	6	
rg	5	5	4	na	
lands	5	5	3	7	
	4	4	2	5	
l Kingdom	8	5	3	6	
	4	4	2	6	
	4	4	3	4	
	5	3	4	1	

EUROSTAT. Pilot survey data.

Technical services showed a relatively high ranking in exports to other EC countries as the subsector was in first or second position in 6 Member States (Denmark, France, Italy, the Netherlands, Portugal and the United Kingdom), cf. table 3.4.2. Especially in Portugal (16%) and in the Netherlands (14%) the subsector was showing high exports as a share of the total turnover.

Technical services was in 4 Member states (Spain, France, Italy and the Netherlands) the subsector showing highest shares of exports to extra EC countries, and the subsector was ranking second in 3 Member States (Denmark, Germany and the United Kingdom).

Technical services was the only subsector in the Netherlands with any significant exports to extra EC countries (8%). But also in Denmark (17%), Italy (14%) and France (13%) technical services showed a considerable share of exports to extra EC countries. In total, technical services was the most export oriented sector as the enterprises within technical services in Portugal received 21% of their turnover from other countries, the Danish enterprises received 20% and the Dutch enterprises 18% of their turnover from exports. The major exception was Luxembourg where technical services showed the smallest exports share of the surveyed subsectors.

Table 3.4.2

Ranking of turnover in technical services broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	2	2	6	
	3	1	1	
	6	4	3	
	3	1	4	
	2	1	4	
	6	6	4	
	2	1	5	
urg	5	3	1	
erlands	1	1	6	
	2	3	4	
d Kingdom	1	5	5	
	2	1	4	

EUROSTAT. Pilot survey data.

cal services showed no clear pattern in the ranking breakdown of turnover by type of clients, see Table 3.4.2. In Germany (19%) and Luxembourg technical services ranked first concerning households as clients and also in Greece (28%) the households constituted an import client group. In the other Member States households were of minor importance.

On the other hand the pilot survey clearly showed that in all Member States technical services is ranked second regarding government as clients. Furthermore in Denmark (43%), Greece (38%) and Ireland (33%) government made up a relatively large share of the total turnover in technical services.

### Renting and leasing services

The subsector renting and leasing services is one of the major subsectors in terms of total volume of the business services sector. The number of enterprises in the subsector represented about 5% of the total number of surveyed enterprises, only in the Netherlands the subsector represent a larger share. Concerning the total employment in the business services sector the subsector renting and leasing services represents an even minor share

The precondition for carrying out renting and leasing activities is a considerable amount of capital available. In contrast to most of the other subsectors within the business services. Thus the investments per employee is exceptionally high compared to the other subsectors. The results of the pilot survey clearly stresses the high investments share. The subsector renting and leasing services is ranked in first place in all the Member states except for Ireland, cf. Table 3.5.1.

The subsector also comes in first or second place concerning gross value added per employee in all Member States again except for Ireland. This also goes for the ratio of turnover per employee where the only exception is Greece. On the other hand the enterprises within the subsector bear relatively high labour costs per employee and the subsector is also employing the least number of employees per enterprise in the business services sector except for professional services. The overall pattern when analyzing the data per Member state also shows relatively low rankings, except for Greece where the surveyed units were of a relatively larger size than the other Member States.

Table 3.5.1

Renting and leasing services. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	
	2	1	5	1	
	1	1	3	1	
	3	2	3	1	
	2	2	6	1	
	1	1	4	1	
	2	3	4	2	
	2	1	3	1	
rg	1	1	5	na	
rilands	2	2	6	1	
	2	1	3	1	
d Kingdom	1	1	5	1	
	1	1	4	1	
	1	1	4	1	
	1	na	5	na	

EUROSTAT. Pilot survey data.

enterprises within renting and leasing services. There is no clear pattern concerning exports shares, see Table 3.5.2. In Italy (8%) and Portugal (27%) the sector received a considerable higher share of turnover from exports to other EC countries than other subsectors, and also in Greece the exports

share was very high (27%). On the other hand, the exports share in Germany, Spain and France was less than 2%. The exports to extra EC countries were of minor importance in most Member States, with Greece (8%), Ireland (9%) and Italy (4%) as exceptions.

Table 3.5.2

Ranking of turnover in renting and leasing services broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	3	4	1	
	7	6	3	
	2	2	4	
	6	6	na	
	7	8	3	
	4	2	8	
	1	2	1	
burg	na	na	2	
erlands	5	5	1	
	1	5	2	
ed Kingdom	7	8	1	
	4	6	2	

EUROSTAT. Pilot survey data.

Surprisingly, households were relatively important for enterprises within renting and leasing services compared to the other subsectors as the sector was ranking first or second in 6 Member States, cf. table 3.5.2. In Denmark, Greece and the Netherlands households constituted about one fourth of the total turnover in renting and leasing services.

On the other hand government was only of minor importance as a client in the Member States except France and Italy with 22% respectively 32% of the turnover generated by renting and leasing services.

### Labour recruitment and provision of personnel

The pilot survey revealed that the subsector of labour recruitment and provision of personnel in general in the Member States huge problems of identification of the population in question. Firstly, in Denmark and Italy the subsector constitutes no independent subsector and thus cannot be analysed. Secondly, in three Member States (Greece, Luxembourg and Portugal) the total number of surveyed enterprises was less than 20. In general the subsector played the least important role concerning number of enterprises with only 1% of the total number of surveyed enterprises.

Also concerning employment the subsector labour recruitment and provision of personnel was of minor importance with the exception of France where the subsector is the major contributor to the employment of the business services sector (18%). France was also the only Member State where the turnover in labour recruitment and provision of personnel was of any importance.

One reason for the low coverage of this subsector in the business services sector is probably the fact that in many countries provision of personnel has traditionally been produced by public or semi public bodies. As a consequence of this structure the number of private enterprises in this subsector is limited.

As the total number of surveyed enterprises was limited to a total of less than 3 500 the data for the subsector should be interpreted with utmost caution. The results of the pilot survey show only minor values for the calculated ratios concerning economic data, cf. table 3.6.1, except for Luxembourg (turnover and labour costs per employee) and the Netherlands (turnover, gross value added and labour costs per employee). On the other hand the subsector showed the highest or the second highest number of employees per enterprise in Germany, France, Luxembourg, Portugal and the United Kingdom.

Table 3.6.1

Recruitment and provision of personnel. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	
	na	na	na	na	
	7	7	7	7	
	6	4	5	7	
	5	5	4	7	
	7	7	6	8	
	1	5	1	4	
	na	na	na	na	
arg	8	7	7	na	
erlands	1	1	5	2	
	7	7	7	7	
d Kingdom	6	7	6	8	
	6	7	8	7	
	na	na	na	na	
	8	na	6	na	

EUROSTAT. Pilot survey data.

recruitment and provision of personnel and a rather blurred pattern concerning exports (cf. table 3.6.2). The subsector ranked first in Germany (33%) and Spain (3%), but ranked last in France and the United Kingdom.

The subsector also showed an indistinct pattern concerning exports to extra EC countries as the subsector ranked first in Greece (38%), Ireland

(10%) and the United Kingdom (8%) but ranked last in Germany and Spain. The Greek enterprises showed exports as the major part of the turnover. Enterprises within labour recruitment and provision of personnel. But as the number of surveyed enterprises in Greece was very limited the results shall be interpreted with the utmost caution.

Table 3.6.2

Ranking of turnover in labour recruitment and provision of personnel broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	na	na	na	
	8	6	6	
	1	1	7	
	1	6	na	
	4	6	8	
	3	1	5	
	na	na	na	
urg	na	na	6	
erlands	7	6	8	
	7	6	8	
ed Kingdom	6	1	8	
	7	5	8	

EUROSTAT. Pilot survey data

er with computer services, labour recruitment provision of personnel is the subsector where holds showed the least importance, cf. tabel The pattern is uniform across Member States. ame goes for government as clients where recruitment and provision of personnel also d only secondary rankings.

## operational services

urprisingly, operational services was the ctor which showed the largest employment ating for about 30% of the total employment in pilot survey. Concerning the other basic es, number of enterprises and turnover, onal services was of minor importance in all er States except perhaps for the Netherlands the subsector generated a relatively high of the turnover of the total number of surveyed rises.

The enterprises within operational services showe performance of a rather uniform character as subsector in all countries showed the lowest ra concerning the economic variables as turnover, gr value added, labour costs or investments employee. Only the enterprises in operati services in the United Kingdom showed a q different pattern with relatively high value added investments per employee, cf. table 3.7.1.

On the other hand operational services was ranke first or second place concerning the employm again with the surveyed enterprises in the Ur Kingdom as an exception. In 7 of the Men States (Germany, Greece, Spain, Irek Luxembourg'; the Netherlands and Portugal) number of employees per enterprise was 5 - times higher in operational services than the nati average in business services. The major reaso the very high number of employees in operati services is found in the very large number of p time employees in this subsector.



Table 3.7.1

Operational services. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	
	7	7	7	7	
	8	8	8	8	
	8	8	4	6	
	8	8	8	8	
	8	8	8	7	
	8	8	8	8	
	7	7	7	7	
urg	7	7	8	na	
erlands	8	8	8	8	
	8	8	8	8	
nd Kingdom	7	3	7	2	
	8	8	8	8	
	7	6	6	7	
	7	5	8	5	

EUROSTAT. Pilot survey data.

surprisingly, operational services was the  
factor in which exports had the least importance,  
e 3.7.2. The same pattern is also found in the

exports to extra EC countries where operati  
services only showed secondary rankings in  
Member States.

Table 3.7.2

Ranking of turnover in operational services broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	7	6	4	
	6	8	4	
	7	8	5	
	8	6	na	
	7	7	5	
	6	6	3	
	5	7	6	
urg	na	na	2	
erlands	8	7	4	
	8	8	7	
nd Kingdom	8	5	3	
	8	8	5	

EUROSTAT. Pilot survey data

general, households were only of minor importance as clients for enterprises within operational services, cf. table 3.7.2. The only exception is Luxembourg where operational services ranked second regarding households as clients. On the other hand operational services ranked high relative to the other subsectors concerning government as clients as only technical services obtained a higher ranking. In 7 Member States operational services ranked in first or second place. Furthermore, government made up a considerable share of the total turnover generated in enterprises within operational services in the Netherlands (47%) and Denmark (40%).

### Other business services

The subsector other business services showed a heterogeneous character being the residual of business services. This is partly due to the fact that the activity classes in NACE.Rev1 constituting the subsector have very different characteristics, e. g. photographic activities and secretarial translation activities, partly due to the fact that

the Member States have classified differently for the subsector as for instance in the case of Denmark where labour recruitment and provision of personnel are classified in this subsector as well.

The subsector constituted a major part of the turnover of surveyed enterprises in Greece, France, Ireland, the Netherlands and the United Kingdom (between 10% and 25% in these 5 countries) and also a considerable share of the total employment and turnover in the same countries, cf. table 3.8.1.

Not surprisingly, due to the above mentioned heterogeneity of this subsector the Member States showed no general pattern in other business services. The EUR(11) level shows a relatively stable ranking for all the economic variables except investments per employee. On the other hand the subsector showed very small labour costs per employee; especially in the Member States of Southern Europe. At the EUR(11) level only the subsector operational services showed a lower level of labour costs per employee.

Table 3.8.1

Other business services. Ranking of economic key variables 1990.

	Turnover per employee	Gross value added per employee	Labour costs per employee	Investments per employee	Employees per enterprise
	na	na	na	na	
	5	5	3	4	
	3	3	5	3	
	4	6	7	4	
	7	7	7	6	
	6	6	7	3	
	4	2	5	3	
	6	6	6	4	
urg	4	4	3	na	
erlands	7	7	7	4	
	5	6	6	6	
d Kingdom	2	8	4	4	
	5	6	7	4	
	6	7	7	6	
	6	na	7	na	

EUROSTAT. Pilot survey data.

subsector other business services showed no pattern concerning exports, cf. table 3.8.2. In 1990, the subsector was ranked medium in most Member States, but in Luxembourg the enterprises of other business services ranked first with a considerable share of their turnover (34%) generated by exports to other EC countries.

In general, households seemed to be rather important as clients in most of the Member States, cf.

table 3.8.2. Especially in Spain, Portugal, Greece and the Netherlands households made up relatively large shares of the turnover generated in other business services. On the other hand the other business services showed a medium ranking compared to other sectors regarding government as clients group. But concludingly, due to the residual character of the subsector further analysis of the performance of the subsector is not meaningful.

Table 3.8.2

Ranking of turnover in other business services broken down by exports and type of clients, 1990.

	Exports		Type of clients	
	Other EC countries	Extra EC	Households	Government
	na	na	na	
	3	3	3	
	2	3	5	
	5	5	2	
	6	2	1	
	5	3	2	
	5	5	2	
	3	3	4	
urg	1	2	5	
erlands	3	2	2	
	3	4	1	
d Kingdom	4	2	3	
	3	3	3	

EUROSTAT. Pilot survey data.

## Conclusion

Collected data in the pilot survey on business services can - due to the low response rates and biases in sampling frames implying skewness in regional distribution of the surveyed enterprises - be raised to the total EUR(11) level.

Results of the pilot survey are mainly found in the methodological feedback reported on the Voorburg Meeting in 1993<sup>6</sup> and the possible statistical mapping of the business services sector and the 8 factors constituting the business services sector, presented in this paper, partly in the forthcoming EUROSTAT publication "Business services in Europe".

Keeping the data quality in mind, the pilot survey data after all give a first comparable picture of the basic structures of the European business services sector with a level of detail which has not been possible to present statistically before. The above analysis have revealed a number of uniform patterns across the Member States for the variables studied.

The pilot survey has also shown a number of shortcomings which have to be dealt with in future co-operation within the European Union in order to reach the level where data raised to national totals can be compared and analysed within an European context on a harmonised basis.

## **Classification of business services by NACE.Rev.1**

### **Sector: Computer and related services**

Hardware consultancy

Software consultancy and supply

Data processing

Data base activities

Maintenance and repair of office, accounting and computing machinery

Other computer related activities

### **Sector: Professional services**

Legal activities

Accounting, book-keeping and auditing activities; tax consultancy

Business and management consultancy activities

### **Sector: Marketing services**

Market research and public opinion polling

Advertising

### **Sector: Technical services**

Architectural and engineering activities and related technical consultancy

Technical testing and analysis

## **ector: Renting and leasing services**

Renting of automobiles

Renting of other transport equipments

Renting of other machinery and equipments

## **ector: Labour recruitment and provision of personnel**

Labour recruitment and provision of personnel

## **ector: Operational services**

Investigation and security activities

Industrial cleaning

## **ector: Other business services**

Photographic activities

Packaging activities

Secretarial and translation activities

Other business activities n.e.c.