VOORBURG GROUP ON SERVICES STATISTICS

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Purchases of services by enterprises

Results of an European pilot survey

Session 4

Abstract

The paper presents the methodological results of a pilot survey testing a draft proposal for a model questionnaire on the purchases of services by enterprises. The questionnaire includes 8 categories of types of services based on detailed CPA categories. The pilot survey has been carried out by the statistical institutes in Denmark, Spain, Sweden and United Kingdom and the methodological results are presented in this paper together with recommandations for future surveys.

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> > The views expressed in this document are those of the authors and do not engage the statistical institutes.

1. Introduction

The issue of how to measure demand for services in statistical surveys has been on the agenda at the two last meetings of the Voorburg Group. The present paper shall be seen in this context and is a presentation of the results of the testing of the draft model questionnaire presented at last years meeting.¹

Following the discussion of the Voorburg Group meeting 1998 concerning demand for services, Eurostat decided to carry out a pilot survey on purchases of services by enterprises. The pilot action has to be seen in the framework of the Structural Business Statistics Regulation put into force beginning of 1997.² In this regulation, the topic of demand for services is covered solely by the variable *13 11 0 total purchases of goods and services*. But the Regulation has no requirement of a further disaggregation of this variable into a goods and services part, not to mention a further breakdown of the services into types of services. Thus the main purpose of the pilot survey is a test of the feasibility of a detailed breakdown of the purchases variable.

2. The Eurostat pilot survey

The pilot survey co-financed by Eurostat has been carried out winter 1999/2000 in 4 Member States, Denmark, Spain, Sweden and United Kingdom. The draft working programme stated that the number of accepted answers for larger countries (UK and Spain) should be 500, and for smaller countries (Denmark and Sweden) 200. Table 1 shows the sample frame, sample sizes used and actual response rates in each of the participating countries.

The survey covered the following activities in NACE categories:

- 1) 29 Manufacture of machinery and equipment n.e.c.
- 2) 52.1 Retail sale in non-specialised stores
- 3) 52.4 Other retail sale of new goods in specialised stores

The composition of NACE categories in the sample was left to the individual Member States to decide. The pilot survey only included enterprises with more than 20 employees in order not to imply a unnecessary burden on the smaller enterprises.

¹ Cf. Peter Boeegh Nielsen and Gunnel Bengtsson: Purchases of services by enterprises - Draft proposal for

a model questionnaire, paper presented at the Voorburg Group meeting 1999

² Council Regulation No. 58/97

0.1.1.1				
Subject	DK	ES	UK	SE
Sample frame	Business Register	Central Business Directory	Inter Departmental Business Register (IDBR).	Business Register
Sample/census	Census>20 employees.	Sample>20 employees. Stratification by size (number of employees) and activity. All>200 employees included.	and activity. All large (?) enterprises included.	Sample>20 employees. Stratification by size and activity. (proportional allocation). All>500 employees included.
Statistical unit	Enterprise=legal unit	Enterprise=legal unit ?	Reporting units?	Enterprise=legal unit
Number of units	956	982	3.750 ?	500
General response rate	20.0 %	62.12 %	14.6% with usable data.	41% total responses 28% (accepted questionnaires)
Mandatory/ voluntary	Voluntary	Mandatory	Voluntary	Voluntary
Collection of	28 October - 20	February - July	8 October 1999 -	September 1999-
responses	December 1999	1999 ?	January 2000	December 1999
Postal/telephone reminder	1 postal reminder	2 postal reminders	2 postal reminders	2 postal reminders
Weighting	No	Yes?	No ?	No
Divergency from original questionnaire	Data already available from registers were left out of questionnaire.	More questions included: quality and price of services purchased, gender of employed persons	Dataalreadyavailablefromregisterswereleftoutoutofquestionnaire.Rearrangementofquestions.Possibilityforalternativebreakdownofwagesand salaries(bynumberofpersonsemployed).Mainsupplierinsteadofgenerallocation ofsupplier.	Data already available from registers were left out of questionnaire. Rearrangement of questions.

Table 1. Presentation of the national pilot surveys

3. Questionnaire design

The objective of the questionnaire is mainly to provide quantitative data on the purchases of services by enterprises broken down by type of services. The model has been constructed in a general way enabling the questionnaire, in principal, to be applied in any activity. These kind of data could be used as supplement information e.g. when compiling input-output tables for national accounts purposes. The secondary objective is to get some more qualitative and indicate information about the behaviour of the enterprises and operational changes in terms of increasing purchases of services partly due to increasing outsourcing and the geographical extention of relations to service providers. The general structure of the model questionnaire is briefly shown below in box 1. As the structure of the questionnaire and the reasoning behind was described in the paper presented at last year's meeting, no further description is included in this paper.³

Box 1. The general structure of the model questionnaire

1. General information

- 1.1 General identification
- 1.2 Legal form
- 1.3 Main activity of the enterprises
- 1.4 Ownership and group affiliation

2. Quantitative information

- 2.1 Employment information
- 2.2 Economic information
- 2.3 Breakdown of purchases by type of services
- 2.4 In which services areas does your company expect to increase purchases of services?
- Breakdown of wages and salaries/employment by type of services (excluding hired in personal)
- 2.6 What is a typical location of your supplier?
- 2.7 Changes in business structure

4. Methodological results

The main challenge in this exercise is to identify and describe the services products in such a manner that the proposed categories on the one hand can be understood - and data subsequently delivered - by the respondents and on the other hand used by the statisticians. The pilot action focus on the purchased services in principle supplied by services sector enterprises. The purchases include once-off purchases of services, such as a specific legal service for a specific purpose and constant ongoing purchases of services, such as telecommunication services.

For defining the types of services to be included in the draft questionnaire a range of services consumed by the enterprises have been identified and then defined in terms of the Statistical Classification of Products by Activity in the European Community (hereafter called CPA). But in order to translate the language of the statisticians to the language of the enterprises, the CPA groups have been regrouped in line with the organisation of the different business processes within the enterprises, see box 2⁴.

³ Please note that the questionnaire is presented in full in annex 1

⁴ The exact CPA groups are listed in annex 2

Box 2. Grouping of types of services

Production related services
Transport and distribution
ICT-services
Human resources related services
Financial related services
Administration
Marketing services
Auxiliary services

Altogether 3 levels of services used are identified in the questionnaire. Firstly, the total of services purchased by the enterprises, secondly the 8 groups each including more than one CPA class (4 digit) and thirdly the individual CPA classes included in the groups.

The testing of the feasibility of this grouping was the essential aim of the pilot survey and this paper shall reflect the main findings of the participating institutes related to this purpose.

Statistics Denmark states that

Many of the respondents have made remarks pointing out problems with certain questions. These reactions were mainly concentrated on:

Lack of information in the accounting system. Many enterprises reported that their accounting system is not geared to extract this kind of information on inputs to the enterprises' activities/production. To enable the deduction of reasonable answers would take many hours of work, going through a massive no. of invoices etc.

Especially, some of the smaller enterprises expressed that the issue of purchases of services was not relevant for their own business strategy plans.

Mean time used to fill in the questionnaire was 30 minutes.

INE, the Spanish statistical institute, states in its report;

In general the main problem for the enterprises has been that the questionnaire does not adjust to the General Accounting Plan. Therefore, the enterprises have had problems in filling out the questionnaire.

Another problem has been the detailed breakdown of services in some questions. The most difficult ones have been the breakdown of wages and salaries by type of services and the breakdown of purchases by type of services.

Mean time used to fill in the questionnaire was 2 hours (Notice that the questionnaire included more questions than the proposed questionnaire).

Statistics Sweden underlines in its report the following comments from the responding enterprises;

The accounts of the enterprises are not adjusted for this type of questionnaire, implying that the enterprises often had to investigate every single invoice in order to answer the questionnaire. Thus, the questionnaire took very long time to answer.

Especially the enterprises within retail trade found the questionnaire difficult to answer as the questions raised were not so relevant for this activity.

ONS, the UK statistical office, concluded in their report;

The main comment which came back on forms with data was that the form was too time consuming, either because of the detail of questions being asked or the layout of the form. The median time taken to complete the form for all businesses was 1 hour, which is higher than our initial estimate of 35 minutes.

Problems arose concerning the breakdown of purchases by type of services question. The two main problems were that the detail of breakdown required was too fine, and the headings themselves were not consistent with the figures immediately available from a set of company accounts. Enterprises of all sizes felt that they either needed professional help to complete the form or that they had difficulty in matching the questions to their accounts as some of the data asked for were not kept as standard accounting items.

The question on breakdown of employees by type of service was answered badly as many businesses misinterpreted this question and recorded all their employment in their core business activity.

Large and small businesses said that they would prefer to give actual values than percentages. Retailers of all sizes questioned the relevance of the form to their type of business as they felt that they purchased very few services. Some manufacturers stated that they had suppliers located all over the country and could not work out where the main supplier was located.

The feasibility of the different questions can also be illustrated by an analysis of the itemnon responses in the survey. The Danish figures are shown below in table 2. Table 2 shows that most of the questions have reasonably high response rates. The table also shows that the core question on breakdown of purchases into a detailed breakdown had a relatively high response rate. The largest non-response is found in the questions asking for a detailed breakdown of salaries by type of services, where only half of the enterprises have filled in both the total wages/salaries and the breakdown into subcategories. It has to be noticed that the Swedish and Danish figures are not quite comparable since the Swedish data only include respondents that had completed the question 2.3 Breakdown of purchases by types of services. But the comparisons of the Danish response rates for the breakdown of purchases respectively wages and salaries by groupings show feasibility for the purchases but nearly impossibility for wages and salaries.

Table 2. No.	of responses	broken down	by c	uestions.
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Per cent			Denma NACE				Swede NACE		
		29	52.1	52.4	All	29	52.1	52.4	AI
Total		100	100	100	100	100	100	100	100
1.4 Ownership	Responded	95	95	97	95	98	100	92	97
	Not responded	5	5	3	5	2	0	8	3
2.1.3 Expected no. of persons employed end of		94	95	97	95	97	82	97	93
1999	Not responded	6	5	3	5	3	18	3	7
2.2.3 Total purchases of goods and services in		84	64	80	80	70	56	66	65
1998	Not responded	16	36	20	20	30	44	34	35
2.3 Breakdown of purchase by types of	Responded	83	73	76	80	100	100	100	100
services in 1998	Not responded	17	27	24	20 (Only questionnaires with this question completed were defined as respon-dents in the Swedish survey)				
2.4 In which services areas does your company		91	91	93	92	100	100	100	100
expect to increase purchases of ser- vices	•	9	9	7	8	0	0	0	C
2.5.1 Total wages and salaries in 1998	Responded	65	64	66	65	97	97	89	95
	Not responded	35	36	34	35	3	3	11	5
2.5.2 Breakdown of wages and salaries by type of services		58	41	54	55	78	64	63	70
	Not responded	42	59	46	45	22	36	37	30
2.6 What is the typical location of your supplier	Responded	90	86	88	89	100	100	100	100
	Not responded	10	14	12	11				

Table 3 shows the distribution of responses in the Danish survey on groups of services and CPA classes. The enterprises were asked to state the value amount of the purchases at the group level, whereas they were asked to give the percentage share within each group of the individuel CPA-classes, cf. annex I for questionnaire used.

It is obvious from the table that a considerably larger share of enterprises have been able to respond to the questions on the group level than on the breakdown on CPA classes, indicating that a breakdown of services seems feasible if a certain level of aggregation is used. The results indicate - that a number af services seems to be purchased - or is expected to be purchased in only minor amounts that the difficulties in collecting these detailed services can question the reason behind such a detailed breakdown for all services categories.

Table 3 Response rate. Breakdown of purchases by	NACE		
	29	52.1	52.4
Production related services	72	64	53
Research and experimental development on natural sciences and engineering	13	0	0
- Engineering and related technical consultancy	29	18	2
- Technical testing and analysis	36	9	0
Transport and distribution:	77	64	58
- Storage and warehousing	9	14	10
- Transport services	67	32	44
 Other transport supporting services 	14	0	10
- Packaging services	14	5	7
ICT-services:	80	64	66
- Software expenditures	61	27	49
- Other computer related services	51	23	41
- Telecommunication services	53	18	44
Human resources related services:	74	68	58
- Training and educational services	54	27	31
- Labour recruitment and provision. of personnel	23	5	12
- Health and medical services	16	5	5
Financial related services:	69	59	53
- Financial auxiliary services	17	9	8
- Financial leasing services	16	5	10
Administration:	82	73	69
- Legal services	58	41	51
 Accounting, book-keeping and auditing 	75	55	59
 Business management and consultancy 	35	23	14
- Secretarial and translation services	17	5	3
Marketing services:	80	68	69
- Market research	15	9	12
- Advertising	64	59	63
- Direct marketing	16	9	19
- Other marketing services (of which exhibition and fairs etc.)	50	18	34
Auxiliary services:	75	55	63
- Canteen and catering	21	5	3
- Management of real estate	13	5	3
 Investigation and security 	15	14	22
- Industrial cleaning	56	27	31
Other services	2	0	5

Table 3 Response rate Breakdown of nurchases by type of services in 1998 DK

Furthermore manufacturing industry generally seems to purchase a wider range of services: of the 27 CPA classes only 5 are mentioned by less than 15 per cent of manufacturing industry: *Research and development, Storage and warehousing, Other transport supporting, Packaging services* and *Management of real estate.* In retail sale the picture is different: only 12 CPA classes are mentioned by more than 15 per cent of

the enterprises in 52.1 Retail sale in non-specialised stores, and 52.4 Other retail sale of new goods in specialised stores.

For retail trade information on the breakdown into CPA classes of *Production related* services, *Transport and distribution*, *Human resource related services* and *Financial related services* seems less important/difficult to obtain, as they are either dominated by one of the CPA class or only responded to by very few enterprises. This is also to a large extent supported by the actual values of the purchases reported by the enterprises, cf. 5. Statistical results.

Almost the same tendency is shown when analyzing the responses to the question of *Expected future increase in purchase of services*, where the enterprises had the possibility of ticking the box 'do not know/not relevant'. The total of responses of this type + item non-response is shown in table 4 below, where percentages exceeding 50 for 'do not know/not relevant' + item non-response is marked with an underscore. In *29 Manufacturing* only 2 CPA classes have a rate above 50 per cent, while 15 CPA classes for *52.1 Retail sale in non-specialised stores* and 11 CPA classes for *52.4 Other retail sale of new goods in specialised stores* have a rate exceeding 50 per cent.

For retail sale, the classes with high not relevant + item non-response levels are concentrated in *Production related services*, *Transport and distribution*, *Human resource related services* and *Financial related services*. Also the two classes *Canteen and catering* and *Management of real estate* in *Auxiliary services* have high rates.

Table 4. Frequency of not relevant/do not know + item non-response concerning
Expected future increase in purcahse of services. DK

		NACE	
	29	52.1	52.4
Production related:			
Research and experimental development on natural sciences and	<u>58,2</u>	<u>81,8</u>	<u>93,2</u>
engineering	40.0	~~~~	
Architectural, engineering and related technical consultancy	40,0	<u>68,2</u>	<u>81,4</u>
Technical testing and analysis	29,1	<u>77,3</u>	<u>91,5</u>
Transport and distribution:			
Storage and warehousing	46,4	<u>59,1</u>	37,3
Transport services	18,2	45,5	23,7
Other Transport supporting services	45,5	<u>72,7</u>	<u>57,6</u>
Packaging services	45,5	<u>72,7</u>	<u>61,0</u>
<u>ICT – services:</u> Software expenditures	11,8	27,3	16,9
Other computer related services	17,3	27,3 36,4	23,7
Telecommunication services	14,5	30,4 31,8	16,9
	14,0	01,0	10,5
Human resources:			
Training and educational services	15,5	22,7	28,8
Labour recruitment and provision. of personnel	45,5	<u>63,6</u>	49,2
Health and medical services	37,3	<u>50,0</u>	<u>52,5</u>
Financial related services:			
Financial auxiliary services	40,0	<u>54,5</u>	<u>62,7</u>
Financial leasing services	41,8	63,6	61,0
Administration:			
Legal services	14,5	27,3	15,3
Accounting, book-keeping and auditing	11,8	18,2	13,6
Business management and consultancy	30,0	36,4	37,3
Secretarial and translation services	38,2	<u>68,2</u>	<u>69,5</u>
Marketing and sales:			
Market Research	32,7	40,9	45,8
Advertising	17,3	13,6	10,2
Direct marketing services	40,0	<u>54,5</u>	47,5
Other marketing or sales services (exhibition and fairs etc.)	23,6	54,5	35,6
Auxiliary services:			
Canteen and catering	41,8	<u>63,6</u>	<u>62,7</u>
management of real estate	38,2	<u>59,1</u>	<u>64,4</u>
Investigation and security	<u>51,8</u>	36,4	44,1
Industrial cleaning	19,1	9,1	30,5
Other services	98,2	100,0	93,2
	50,Z	100,0	00,2

5. Statistical results

As mentioned above, the main purpose of the pilot survey was the testing of the feasibility of surveying enterprises about their purchases of services. As the samples were relatively small, the sampling methods not harmonised and the response rate also relatively small the statistical results of the survey can only be interpreted with utmost caution. In this paper the overall breakdown of the purchases of services into service groups is shown, cf. table 5.

Purchases by type of service per cent		Denm NAC			Sweden NACE			Spain NACE				
•	29.	52.1	52.4	All	29.	52.1	52.4	All	29.	52.1	52.4	All
Production related services	7	2	0	4	22	1	0	16	10	1	1	4
Transport and distribution	26	7	14	20	18	3	18	17	30	14	20	20
ICT services	22	6	12	17	18	9	5	15	10	19	11	14
Human resource related services	6	11	2	5	5	5	7	6	13	6	5	8
Financial related services	4	1	3	3	1	4	0	1	6	5	10	6
Administration	9	19	6	9	12	5	8	11	8	11	9	10
Marketing services	17	46	60	35	9	56	54	22	16	32	34	27
Auxiliary services	7	8	3	6	7	46	7	7	5	13	9	10
Other services	1	0	0	0	8	0	0	6	1	1	1	1
All	100	100	100	100	100	100	100	100	100	100	100	100

Table 5. Distribution of purchases of service by sector

The results of the pilot surveys carried out in Denmark, Spain and Sweden reflect to a large extent similarities. Purchases of transport and distribution services, marketing services and ICT-services are in general the most important services groups purchased. For all activities (expect NACE 29 in Sweden) marketing services constitute a large share of total purchases, especially advertising. For Manufacturing of machinery and equipment n.e.c. (NACE 29) the purchases of transport services are considerable in all three countries. Purchases of transport services are also relatively important in retail trade but in these activities the purchases are restricted nearly alone to transport services and not storage and warehouse services which also are important for manufacturing industries.

6. New Swedish initiative

The experiences from this pilot survey and from some other activities concerning statistics on purchased goods and services carried out in Sweden during the last years will be used as input in two actions that Statistics Sweden carries out this year. The objective is to get data for compiling input-output tables for national accounts. The common approach for the two actions is that the variables of services should as far as possible be adapted to the accounting system even if the definitions have to diverge from the user needs. The first action is a sample survey of 700 manufacturing industries concerning breakdowns of purchases of goods and services for the reference year 1999. The variables on purchased services are defined in terms of the general accounting plan

(EU-bas 99)⁵ and are the same in all surveyed activities in manufacturing. EU-BAS is a chart of accounts, which is completely dominating in the Swedish business. About 95 per cent of all enterprises in Sweden use some form of the BAS-plan. The account codes are shown in annex III. The variables on purchased goods are expressed in the combined nomenclature (CN), which is used for trades of goods in the European Union. The reason to choose CN and not CPA is that manufacturing industries are familiar with the CN-nomenclature since this nomenclature is also used for collection of production data that afterwards are transformed to the Prodcom nomenclature. Due to the huge number of different goods used as input in the surveyed industries specific questionnaires have been designed. The other action consists of a developing work on how to collect data on purchased goods and services in four service sectors: Hotel and restaurants, Transports on roads and some Business service activities will be started in the next future. The approach will be to select a few enterprises in each sector and study them in depth in order to see if a stable sector breakdown structure could be found and used for breakdown of total purchases of goods and service.

Interestingly, the categories used do not differ significantly from the groupings used in the European pilot survey. The Swedish categories are a little more detailed than the level of CPA groupings. Perhaps somewhat surprisingly, marketing services, which is the most frequent group of services purchased is not specified in the Swedish survey. But as mentioned above, the Swedish questionnaire is based on the general accounting scheme used in Sweden and at the same time very similar to the breakdown of purchased services used in the European pilot survey. So the answers from many Swedish enterprises that the proposed breakdown does not fit to their accounting system might not be reflecting the whole truth. Probably the answers indicate that the organisation of cost side information implies that information on purchases are not as easily available as for turnover information. It might also indicate that the information are available but due to residence of the enterprises this kind of information can only be collected on a mandatory basis.

7. Conclusions and future perspective

The draft model questionnaire on demand for services and the pilot survey on purchases of services do not capture data from the traditional source used in enterprise statistics, ie the supply side. The underlying idea has been that by surveying the demand side, it would be possible to collect information which on one hand could indicate possible impacts of consumed services on the performance of the enterprises, and on the other hand add detailed and valuable information to the input-output tabulations.

But the feedback from the enterprises in all 4 participating countries clearly show the problem of identifying the proposed service categories in the accounting system of the enterprises - at least at the most detailed level. One conclusion is that the enterprises much easier are able to break down their turnover than their purchases. Traditionally the purchases/ cost side seem to have had less attention than the output from their main activity in the accounting systems within the enterprises.

The design of the questionnaire took its starting point in a nomenclature of services (CPA) established for the purpose of statistical production. INE, in their report stresses the fact that only services groups as Research and Development, transport services, banking charges, renting and advertising costs can be identified in the Spanish general

⁵ An extract of the questionnaire is presented in Annex 3

accounting plan. But the Swedish design of their new survey indicates that the most aggregated grouping of CPA does not seem to be very remote from the general accounting scheme. Confronted with the difficulties met by the responding enterprises, a conclusion of future surveys must be to take the starting point in the general accounting plans valid in the different countries and then establish a feasible, harmonised level of services to be surveyed and finally translate these categories into the language of the statisticians.

There seem to be two different approaches for future surveys of demand for business services:

A. a less detailed questionnaire. The result of the pilot survey shows that the level of groupings of CPA categories in approx. 8 service categories seems feasible, especially for the enterprises within manufacturing industry. The advantage of this being that it would be easier for the respondents to fill in, and also less time-consuming. Using less detailed questionnaires for the smaller enterprises is also a possibility, which is traditionally used in many other surveys. In the case of this particular pilot survey though, the largest non-response is found amongst the larger enterprises as the example of Sweden.

B. more sector specific questionnaires. If the questionnaires more directly adressed the different sectors, the questions would be more relevant for the enterprises. This approach necessitates more detailed studies of the sectors beforehand in order to target the questions posed, especially concerning the services sector itself. Probably detailed case studies are required for future development.

For the retail activities it does not seem to serve any purpose to specify *Production related services* into CPA classes, which is also demonstrated both by the response level and by the actual values of the purchases reported. For *Transport and distribution services* the case is somewhat different: these services constitute a rather large part of the total purchases of services, but at the same time one type of service dominates (*Transport services*). This indicates that a further breakdown might not be neccesary. For *Financial related services* the picture is the same as for Production related services, and no further breakdown seems neccesary.

Even if the results of the pilot survey by first glance do not look too successful, the pilot survey showed the feasibility of carrying out surveys on the purchases of services by enterprises. The pilot survey indicated a number of similarities across the countries involved, and the general result of the survey is that it is possible to collect these kind of useful information for understanding the input and use of services in other industries.

Annex 1

DRAFT QUESTIONNAIRE

PURCHASES OF

SERVICES BY ENTERPRISES

Version 3 Statistics Denmark

1. General Information

1.1 General Identification:	
Name:	
Address:	
Name of contact person:	
Telephone:	_
Fax:	_
E-mail:	_
1.2 Legal form	
Partnership:	
Limited company:	
Sole proprietorship:	
Other (description):	_
1.3 Main activity of the enterprise (description)	
1.2.1 Primary activity:	
1.4 Ownership and group affiliation	
1.3.1 The enterprise belongs to a group: yes:	no:
If yes	
1.3.2 Is the company head of the group:	_ subsidiary:
If subsidiary, location of head of the group (<i>country</i>):	

2. Quantitative Information

2.1 Employment information

2.1.1 No. of persons employed end of 1998:	
2.1.2 No. of persons employed end of 1997:	
2.1.3 Expected no.of persons employed end of 1999:	

2.2 Economic information

2.2.1 Total turnover in year 1998:	
2.2.2 Total turnover in year 1997:	
2.2.3 Total purchases of goods and service in year 1998:	

2.2.4 Total purchases of goods and service in year 1997:

2.3 Breakdown of purchases by type of services in 1998

Type of services	Purchases (In national	Per cent (estimated)
	currency)	(cstinuteu)
Production related services:		100 %
- Research and experimental development on natural sciences and engineering		
- Architectural, engineering and related technical consultancy		
- Technical testing and analysis		
Transport and distribution:		100 %
- Storage and warehousing		
- Transport services		
- Other transport supporting services		
- Packaging services		

ICT-services:		100 %
- Software expenditures		
- Other computer related services		
- Telecommunication services		
Human resources related services:		100 %
- Training and educational services		
- Labour recruitment and provision. of personnel		
- Health and medical services		
Financial related services:		100 %
- Financial auxiliary services		
- Financial leasing services		
Administration:		100 %
- Legal services		
- Accounting, book-keeping and auditing		
- Business management and consultancy		
- Secretarial and translation services		
Marketing services:		100 %
- Market research		
- Advertising		
- Direct marketing services		
- Other marketing or sales services (exhibition and fairs etc.)		
Auxiliary services:		100 %
- Canteen and catering		
- Management of real estate		
- Investigation and security		
- Industrial cleaning		
Other services: (Please		
specify)		
		100 %

2.4 In which services areas does your company expect to increase purchases of services?

Type of services	The next 2 years				
	Not at all	Somewhat	Conside- rably	Not relevant	Do not know
Production related:			Tably	Televant	KIIUW
 Research and experimental development on natural sciences and engineering 	_	-	-	-	_
- Architectural, engineering and related technical					
consultancy					
- Technical testing and analysis					
Transport and distribution:	_	_	_	_	_
 Storage and warehousing Transport services 					
- Other transport supporting services					
- Packaging services					
ICT – services:					
- Software expenditures					
- Other computer related services					
- Telecommunication services					
Human resources:	_	_	-	-	_
 Training and educational services Labour recruitment and provision. of personnel 					
- Health and medical services					
Financial related services:					
- Financial auxiliary services					
- Financial leasing services					
Administration:					
- Legal services					
 Accounting, book-keeping and auditing Business management and consultancy 					
- Secretarial and translation services					
Marketing and sales:					
- Market research					
- Advertising					
- Direct marketing services					
- Other marketing or sales services (exhibition and fairs etc.)					
Auxiliary services:	_	_	_	_	_
 Canteen and catering Management of real estate 					
- Investigation and security					
- Industrial cleaning					
Other services: (Please specify)					
× ¥ ¥⁄					
	-				

2.5 Breakdown of wages and salaries/employment by type of services (excluding hired in personal)

2.5.1 Total wages and salaries in 1998:

2.5.2 Please estimate the breakdown of the total wages and salaries into the following categories:

Type of services	Per cent (estimated)	or	No. of full-time heads
Main activity of the enterprise			
Production related services			
Transport and distribution			
ICT – services			
Human resources related services			
Administration			
Marketing services			
Auxiliary services			
Other activities			

2.6 What is a typical location of your supplier?

Type of services

Location

	Same region	Same country	Within EU	Outside EU	Not re- levant	Do not know
Production related:						
- Research and experimental development						
on natural sciences and engineering						
- Architectural, engineering and related technical						
consultancy						
- Technical testing and analysis						
Transport and distribution:						
- Storage and warehousing						
- Transport services						
- Other transport supporting services						
- Packaging services						
ICT – services:						
- Software expenditures						
- Other computer related services						
- Telecommunication services						
Human resources:						
- Training and educational services						
- Labour recruitment and provision. of personnel						
- Health and medical services						
Financial related services:						
- Financial auxiliary services						
- Financial leasing services						
Administration:						
- Legal services						
- Accounting, book-keeping and auditing						
- Business management and consultancy						
- Secretarial and translation services						
Marketing and sales:						
- Market research						
- Advertising						
- Direct marketing services						
- Other marketing or sales services (exhibition and fairs etc)						
Auxiliary services:						
- Canteen and catering					_	
- Management of real estate						
- Investigation and security						
- Industrial cleaning						
Other services: (please specify)						

2.7 Changes in business structure

If your company in the last three years has undergone structural changes which could influence the comparability of the answers , please specify the changes

2.8 How long time did you spend on filling out this questionnaire?	Min.		
			_
2.9 Did you encounter difficulties in filling out this questionnaire?	Yes I	□ No	
If yes, please specify			

ANNEX 2: Services included by CPA

Production related services

Group 73.1	Research and experimental development services on natural sciences and engineering
Class 74.20	Architectural, engineering and related technical consultancy services
Class 74.30	Technical testing and analysis services

Transport and distribution

Part of section I	Transport, storage and communication services
Class 74.82	Packaging services

ICT-services

Class 64.20	Telecommunications services
Division 72	Computer and related services

Human resources

Class 74.50	Labour recruitment and provision of personnel services
Class 80.42	Adult education services
Class 85.12	Medical practice services

Financial related services

Division 67	Services auxiliary to financial intermediation
Class 65.21	Financial leasing services

Administration

Class 74.11	Legal services
Class 74.12	Accounting, book-keeping and auditing
Class 74.14	Business and management consultancy services
Class 74.83	Secretarial and translation services

Marketing and Sales

Part of Section G	Wholesale and retail trade services
Part of Class 74.13	Market research and public opinion polling services
Class 74.40	Advertising services
Part of Class 74.84	Other business services (Exhibition and fairs)

Auxiliary

Group 55.5	Canteen and catering services
Class 70.32	Management services of real estate on a fee or contract basis
Class 74.60	Investigation and security services
Class 74.70	Industrial cleaning services

Other services: all services not mentioned in the above categories

ANNEX 3: Services included in the questionnaire of the Swedish survey:

Consumption of purchased goods and services in manufacturing industry 1999

Specification of other operating costs

	Account code according EU- BAS 99	Value, KSEK
Costs of transport carriers - Gasoline and gas oil - Insurances and taxes - Repair and maintenance - Leasing fees Costs of administration and other services -Costs of administration - IT-services - Financial auxiliary services - Accounting services, legal services - Purchased research and developing services - Industrial cleaning -Computer program -Consumable supplies - Repair and maintenance of machinery and equipment - Hired cars - Board and lodging - Travel expenses - Office supplies, printed matter - Telecommunication services - Post services - Guarantee - Investigation and	 5060,5160 5420 5460,5480,5490	
security - Packing material		