

**Towards a Strategy and a Set up of Guidelines for the
Collection of Statistics on the Business Services Sector.**

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1. On the basis of the pilot survey carried out by the member states of EC and the experiences with statistics on the business services sector in Denmark, Finland and Sweden this paper shall present issues for discussion on the meeting of the Voorburg Group in Williamsburg in October 1992 in order to further the development of a strategy and the setting up of guidelines for the future collection of statistics on the business services sector.

2. The three Scandinavian countries, Denmark, Finland and Sweden, have some common features concerning the conditions for collecting statistical information on the business services sector. Firstly, the relative importance of the business services sector in the 3 countries, cf. figure 1.

Figur 1 Business Services Sector 1990.

Country	Denmark	Finland	Sweden
No. of enterprises	51.721	12.802	51.622
% of total population 1)	16,6	9,9	12,3
No of employees	96.310	93.744	171.922
% of total number of employees 1)	5,7	6,8	4,6
Turnover (mio. ECU)	9.849	5.871	16.995
% of total turnover 1)	5,5	3,7	5,3

1) Agriculture and public sector are not included.

Secondly, the basic structures of the business statistics are very similar in the 3 countries. In all 3 countries the statistical production is tied to a business register which basically covers every business unit conducting economic activity. Thirdly administrative data are used in all 3 countries as input for general business statistics, covering structural, economic and employment data.

3. On the other hand there also exists an important difference between the countries, as only Finland and Sweden produces special statistics on the business services sector. In Finland the financial statements statistics on service sector are compiled on a sample basis annually since 1990. These statistics include a great variety of accounting data of enterprises gathered with direct questionnaires. Some special data regarding e.g. breakdown of turnover by products are collected irregularly. In Sweden the different subsectors of business services are surveyed by mail questionnaire every third year. Some subsectors, for example computer services, have been surveyed annually or biannually. The business services sector has no questionnaire based statistical coverage in Denmark. The sector is only covered by the general register based statistics, ie VAT, workplace- and general accounts statistics by which the business services sector can be described in terms of structural data as number of units, location and legal form, turnover and export, no. of employees, value added and a number of other accounts data.¹

4. A fundamental issue is the establishing of a population of enterprises within the business services sector. This is of course an issue of general nature, but of special importance for this sector because firstly the sector is not fully covered by statistics in the different countries, and secondly the sector is characterized by many micro (0-9 employees) or small enterprises (10-99 employees) which causes problems with the coverage. As mentioned, both Denmark, Sweden and Finland have existing business registers which show a (nearly) complete coverage, so we do not have the problem of establishing a population. But we have common problems concerning the maintenance of the business registers, especially the problems of registration of the births and the registration of the kind of activity. These problems are treated in more details below.

5. A characteristics of the services sectors in general and the business services sector especially, is the great number of births of enterprises. In the period 1985-90 in Denmark a little more than 40% of all new businesses were started in the services sector (NACE 8-9). The biggest subsector was business services, which in 1990 counted for 28,4% of all new business start ups in Denmark. The supply of many new firms to a business register gives problems concerning registration of their exact economic activity which might change between the starting/registration point and at a later stage, when the enterprise actually is established in the market.

6. Sweden estimates from a sample survey by questionnaire, how many of the new firms in the Business register (=new registration) really are new starting firms with new activity. The result from that survey was that many firms mentioned business services as their main activity at the registration formula to the tax office. That information goes to the Business Register and form the basis for the survey in Sweden. When the new firms in the questionnaire were asked about their main activity, as many as about 5-10% said their main activity is something else than business services. When the enterprises were contacted concerning the change in their activity, several explain that they never intended to work with that activity at all. As Statistics Sweden became interested in the phenomenon they took contact with several firms and found that this was most common for business services. The main cause seems to be the uncertainty about the approach often experienced at the beginning of operations, perhaps because the business is not developed as planned. Business services was also conceived as an enough undefined sector to include many activities.

When Statistics Sweden followed up on the new started firms after three and five years to estimate the survival, they found a widespread change in main activity for business services. To some extent it is a real change of activity and often between different subsectors within business services. The frequent buying and selling of limited companies in recent years has also resulted in a too old activity classification. This phenomenon also seems to be very frequent in business services.

7. The heterogeneity of the economic activities of the enterprises within the sector also causes problems concerning registration of kind of economic activity. Several of the economic activity groups, which constitute the sector, contain untraditional activities of an innovative and/or changing character. Especially the classification of enterprises with services of a more or less constantly changing nature, e.g. computer services, marketing or professional services, gives problems. These changes are one to the service/product itself or the flexibility of many small firms concerning their activity. So even if you have a business register, the information about the activity classification may be problematic - and so the establishing of the population in question.

8. The methods used to define the activity class of an enterprise or an establishment have an impact on results of survey and the international comparability of statistics. Statistician should know the main product produced by the units in order to give the right activity class to them. In many countries regularly surveys are made at least to the newcomers and frequently to all units included in business registers to check the activity code of enterprises and establishments.

9. The problems of the heterogeneity of functions and modes of the activities of the enterprises in the business services sector² can be illustrated by some preliminary results of the ongoing recording of the Danish Activity Classification to NACE Rev.1, cf. annex 1.

The services and activities of business and management consultancy (Nace Rev.1. 7414) includes one mode of services meeting several functions of the businesses which again is reflected in the big number of enterprises coming from other old Danish classification classes than the "mother class" (83295). Not surprisingly, the biggest number of enterprises come from the "ragbag" of business services (83299), because the activity of the enterprise has been too difficult to classify. The many enterprises coming from technical services n.e.c. (83249) probably illustrates the problem of change of activity over time - activities which might be very interrelated. On the other hand, the main number of enterprises classified in advertising and marketing which meets a single function of a business - marketing and sales - seem more easy to classify as they mainly come from the old "mother class" (83250). Two reasons for this might be that the activities of this class is not so complex as business and management consultancy, and secondly the activities do not over time change character in the same way as for business and management consultancy.

10. Another problem refers to applying the activity classification to the case of multi-establishment enterprise. How should the main activity be determined? In Finland the main activity of multi-establishment enterprise is determined with the help of activities of its establishments on the basis of personnel size and value-added per person. The activity code of an enterprise varies according to the criteria used. The same enterprise will get different activity codes if e.g. only turnover figures or personnel size are used as a main criteria.

This problem is bigger to small countries and the results of an inquiry might be very sensitive in case that there are only one or two big multiestablishments enterprises dominating the production of some branches. E.g. the biggest computer company in Finland has been a borderline case selling computer hardware as well as computer services, mainly repair and maintenance services. As the unit of study is an enterprise, the decision of including/excluding this company from population of pilot survey on services makes the figures look quite different.

11. This paragraph contains some more detailed comments to the variables included in the pilot survey³. It is very difficult to define "business start up" (1.3) - is it the year when the economic activity was first performed by the unit or the year when the existing owner started this activity? "Breakdown of turnover" (3.1.2.). We find the categories too broad. If one should get a deeper insight into the activity, it is necessary to send out a detailed questionnaire for each subsector, cf. par. 13. "Breakdown of turnover by national client group" (5.1.2.). We found that for many of the micro enterprises these information were not available in their accounts systems. On the other hand for bigger enterprises these information about their clients were often part of their edp - client file or accounts systems. So this question might not be put to the micro enterprises.

12. Both Denmark, Finland and Sweden are countries of a smaller size with often only very few big companies. This gives confidentiality problems, if the size classes are too detailed - and especially in the larger size classes.

13. There also exists is a methodological problem regarding sampling procedure. If one does not know the total population of the sector and therefore no stratification is used in sampling procedures, it is impossible to make estimations for the total population of the subsectors. This means that we shall look at the results of the pilot survey as a testing of the methodology used and not as statistical data as such.

14. Concerning the future strategy for data collection for the business services sector one important element is the structure of the sector. The sector mainly consists of micro or small enterprises which gives problems to the statistical institutes due to the policy of not increasing the respondent burden - especially not for the small enterprises. So the basic idea for the strategy of future data collection for the NSI's in Denmark, Finland and Sweden is the use of administrative registers. As shown in annex 2, a long range of structural, economic and employment variables can be extracted from the administrative sources. **So we argue for the establishing of a set of key variables which can be extracted from the administrative data on an annual basis.** This method was used in the Danish Pilot survey where all data were extracted from administrative sources, except breakdown of turnover by products, turnover by country category of clients and turnover by national client group. By asking only these few questions, there was a response rate of nearly 2/3 in Denmark though the survey was voluntary.

15. **As a supplement to the administrative data, questionnaire-based surveys shall be carried out.** Firstly a breakdown of turnover into types of services are required to get more detailed information about the sector. In the surveys in Finland and Sweden and in the pilot survey in Denmark the breakdown was more detailed than required by EUROSTAT, for instance concerning the subgroup marketing and technical services, cf. annex 3. **We advocate a more detailed breakdown of turnover than required in the pilot survey.** The differences in the categories of breakdown indicate the difficulties of establishing a set of both informative, adequate and international comparable product categories. The ongoing work with the CPC will be of help for setting the future guidelines for categories of product breakdown.

16. As a consequence of the discussion in paragraph 10 concerning the criteria for activity classification, **we find that a breakdown of employment should be discussed as a part of future surveys.** Especially for the services sector which is relatively labour intensive, a breakdown of employment into types of services offered can give useful information about the structure of the different subsectors.

17. A further element in the definition of a strategy for the statistics covering the business services sector is **the proces of giving priority to different subsectors.** In the current financial situation of at least the NSI's in Denmark, Finland and Sweden, there are no possibilities of introducing new questionnaire-based statistics for all subsectors at the same time. It is important to discuss the criteria for priority, one criteria could be the importance of the subsector for the economy or the innovative character of the subsector. From the subsector surveyed we suggest **priority be given to computer and related services, marketing and technical services.**

18. **Also the time intervals shall be discussed.** The variables which can be extracted from administrative sources, can be collected on an annual basis for all the subsectors, while the supplementary questionnaire-based data can be included in satellite surveys for different sectors and/or variables to be conducted with a certain multi - yearly period. The guidelines for the setting up of a strategy by Statistics Canada seem to be a very constructive and inspiring way of proceeding with the discussions on the future data collection of business services statistics.⁴

1. For further information: P. Bøegh-Nielsen and K. Stetkar: Use of administrative registers in the production of service statistics - the Danish case. Paper presented at the 6. Voorburg Group Meeting on Service Statistics, Helsinki October 1991.

2. For further description and definition of the functions and modes, see M. Martini: Statistical Implications of the Business Services Market Analysis, Identification and Classification

Criteria, Paper presented at the 6th Voorburg Group Meeting on Service Statistics, Helsinki October 1991.

3.The number of the variables refer to the numbers in the model questionnaire in EUROSTAT: Guidelines for a pilot survey on the business services sector. March 1991.

4.Statistics Canada: A strategy for the collection of Services Statistics. Paper presented at OECD Meeting on Services Statistics in June 92 in Paris.

Annex 1. Examples of reclassification within the business services sector.

Existing Danish Activity Classification		NACE Rev.1				Total
		7413	7414	7440	7484	
83249	Technical services n.e.c.	0	28	4	6	38
83250	Advertising and marketing services	4	15	128	14	161
83295	Rationalization and planning consultancy	0	39	4	0	43
83299	Other business services n.e.c.	3	41	11	58	113
Other 83XXX	Rest of business services	0	7	0	2	9
3XXXX	Manufacturing industries	0	0	4	2	6
5XXXX	Construction	0	0	0	0	0
61XXX	Retail trade	0	6	4	3	13
62XXX	Wholesale	0	1	0	0	1
63XXX	Hotel and Restaurants	0	1	0	0	1
7XXXX	Transport	0	0	2	0	2
9XXXX	Other services	0	10	0	6	16
Total		7	148	157	91	403

Sign: ☐ = "Mother class"

Annex 2. Administrative sources and their data contents.

Source	Denmark	Finland	Sweden
1. Business Register			
1.1 Activity classification	yes	yes	yes
1.2 Location	yes	yes	yes
1.3 Legal Form	yes	yes	yes
1.4 Year of start up	no	yes	no
1.5 Size (employment)	yes	yes	yes
2 VAT Register			
2.1 No. of units	yes	no	yes
2.2 Turnover	yes	no	yes
2.3 Export	yes	no	yes
2.4 Purchases	yes	no	no
3. Employment Register			
3.1 No. of local units	yes	yes	yes
3.2 No. of employers	yes	yes	yes
3.3 No. of employees	yes	yes	yes
3.4 No. of man years	yes	yes	yes
3.5 Wages and salaries	yes	yes	yes
3.6 Occupation	yes	yes	yes
3.7 Sex of employees	yes	yes	yes
3.8 Age of employees	yes	yes	yes
4. Accounts Register			
4.1 Turnover	yes	yes	yes
4.2 Purchases of goods and services	yes	yes	no
4.3 Value Added	yes	yes	yes
4.4 Intangible assets	yes	yes	yes
4.5 Tangible assets	yes	yes	yes
4.6 Stocks	yes	yes	yes
4.7 Depreciations	yes	yes	yes
4.8 Capital and reserves	yes	yes	yes
4.9 Wages and salaries	yes	yes	yes

Annex 3. Categories for breakdown of turnover in marketing and technical services.

Denmark	Finland	Sweden
1. Marketing services 1.1 Advertising and public relations work 1.2 Direct marketing 1.3 Market analysis and research 1.4 Opinion polls 1.5 Exhibitions 1.6 Other marketing-related activities 1.7 Other activities of which: technical production 2. Technical services 2.1 Building consultancy 2.2 Consultancy in the field of environmental protection 2.3 Consultancy in the field of energy planning and energy efficiency 2.4 Transport consultancy 2.5 Consultancy in the field of production and processing technology 2.6 Consultancy in the field of product development and industrial design 2.7 Other technical consultancy 2.8 Food inspection 2.9 Technical testing and analysis 2.10 Other measuring and technical analysis 2.11 Architectural (building) activity 2.12 Landscape gardening activity 2.13 Interior design activity 2.14 Heating and energy consultancy 2.15 Industrial design consultancy 2.16 Land surveying activity 2.17 Other technical consultancy 2.18 Other activities	1. Marketing services 1.1 Sale or leasing services of advertising space or time 1.2 Purchased production 1.3 Planning, creating and placement services of advertising 1.4 Other advertising services 2. Technical services 2.1 Architectural services and interior design services 2.2 Urban planning and landscape architectural services 2.3 Engineering services related to building construction 2.4 Engineering services related to civil engineering 2.5 Engineering services related to machinery and process design 2.6 Cartographic, soil-mechanical and hydrological services 2.7 Technical testing and analysing services 2.8 Management consulting services 2.9 Services n.e.c. 2.10 Other revenues	1. Marketing services 1.1 Service on advertising and direct marketing 1.2 Intermediary service on advertising and direct marketing 1.3 Consultancy, market analysis and opinion polls 1.4 Revenues from goods 1.5 Other revenues 2. Technical services 2.1 Advisory (in general) 2.2 Engineering and architectural design services 2.3 Urban planning and landscape architectural services 2.4 Engineering design services for the construction of foundation and building structures 2.5 Engineering design services for the construction of civil engineering works including transportation, infrastructure projects etc. 2.6 Engineering design for industrial process and production 2.7 Integrated engineering services (turnkey projects) within transportation, watersupply and sanitation, manufacturing and other projects 2.8 Other engineering projects 2.9 Constructing services within specialized areas; acoustics, traffic control system, construction of new products 2.10 Related scientific and technical consulting services 2.11 Technical testing and analysis services 2.12 Development and consulting services within electronic and computer systems 2.13 Services n.e.s.