

METHODOLOGICAL AND PRACTICAL IMPLICATIONS OF THE PILOT SURVEY ON  
TRANSPORT SERVICES UNDERTAKEN BY MEMBER STATES OF THE EUROPEAN  
COMMUNITIES 1)

by

*Menno Breijman, Henk Koele en Cees Steenlage  
Statistics Netherlands*

## 1. INTRODUCTION

In 1994 and 1995 the Member States of the European Communities (hereafter called the Member States) have carried out three pilot surveys on transport services. In terms of NACE/Rev.1 the classes *Transport via Railways* (60.10), *Freight transport by road* (60.24) and *Scheduled and Non-scheduled air transport* (62.10 + 62.20) were surveyed.

The main objective in this report is to summarize the experiences and problems of the Member States in carrying out the pilot surveys on transport services. In addition, some proposals from the Member States for future surveys are presented. The report is based on national reports from the institutes conducting the pilot surveys and the experience gained by Statistics Netherlands when analysing the pilot surveys data from the Member States. Also EUROSTAT's *Methodological manual of statistics on service enterprises* has been consulted, viz. the chapters 'General framework' (August, 1993) and 'Transport' (February, 1994). Recently new versions of these chapters came available. Nevertheless the earlier versions have been used, since preparation and realisation of the survey were effected within the framework of these versions.

In this paper the practical experience originated from the pilot surveys is examined together with some purely methodological aspects. In this way it is possible to identify some of the difficulties faced in carrying out the pilot surveys on the transport sector. In the process of developing a suitable methodology for the transport services sector, which can be implemented in the future statistical programme of the national statistical institutes, the empirical results of the pilot surveys must be recognized as an important input.

In chapter 2 the objectives of the pilot survey are briefly introduced. The *sample sources* and the *representativeness of the sample* are discussed in chapter 3. The presentation is made by *transport services subsectors* in chapter 4 and by relevant *demographic, employment and economic variables* in chapter 5.

In the final chapter (6) general conclusions are drawn on the basis of the previous chapters and some proposals for future improvements are mentioned. Since the analyses are still in process, this paper should not be considered as a final report. The final and more exhaustive methodological presentation must be completed by the end of the year.

The experiences and conclusions in this report are based on the state of affairs at the end of July, that is to say that the content of the intermediate and final reports of the Member States could not be incorporated if these reports have been sent to Statistics Netherlands - as the co-ordinator of the pilot surveys - later than mid-July.

The state of affairs concerning the progress of the countries with their report is given in the annex.

## 2. PILOT SURVEY ON TRANSPORT SERVICES BRIEFLY

Like other pilot surveys the pilot survey on the transport services is part of the action plan for the development of services statistics undertaken by EUROSTAT with respect of Council Decision 92/326/EC of 18 June 1992.

In principle the Member States of the EC, except Austria and Finland, should carry out the three pilot surveys under contract by EUROSTAT. One single country, Sweden, only participate in the pilot survey Freight transport by road.

### Objectives

The twofold objective to the pilot survey initially assigned by EUROSTAT was:

- to provide basic statistical information on transport services
- to test and develop a methodology for the regular collection of reliable statistical data on transport services, which have to be provided by all Member States on a harmonized basis;

This paper will concentrate on the *second objective*, namely on the methodological aspects of the pilot survey. The development of adequate and harmonized methodological principles applicable for the Member States is a precondition for the production of comparable and representative data on transport services. In the process of developing harmonized statistics at the national level, the testing of the methodology and definitions as laid down in EUROSTAT's *Methodological manual* is of major importance. The experiences gained in the pilot survey are an considerable input for this testing and revising process

## 3. SURVEY UNIVERSE, SAMPLING AND RESPONSE

According to *Methods for sampling* 2) the sample size per Member State was fixed at 360 to 2 400 enterprises depending on the size of the country concerned. That paper also recommended the way this sample size might be allocated in two steps to NACE-classes and size classes.

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2) Doc: S11/93/5 of the Task Force 15-16th November 1993

The pilot survey revealed that the Member States used the enterprise as the statistical unit indeed, yet they had uneven conditions at the start of the pilot survey. Several sources for the number of enterprises in the universe have been used:

- business registers (e.g. Sweden, the Netherlands),
- authorities' registers (e.g. UK), and
- public databases (e.g. Germany - freight transport by road).

Some countries using the business register as sampling frame noticed similar problems - in spite of a frequent up-dating of the register:

- enterprises with another classification than the aim classification can be included in the survey,
- enterprises with the aim classification may not be included in the survey,
- closed enterprises are still included and new started enterprises have not yet been entered into the register.

A particular problem connected with the use of a register emerged from a remark of Danmark that the number of enterprises is defined as the number of enterprises that were active in 1993 and were still active at the end of 1994. If interpreted correctly, this implies that all enterprises closed in the year after the reference year cannot be part of the population.

In some countries it was difficult to create a sample universe. For this reason the sample was not representative to create universe data on the variables (in certain sections) of the questionnaires. The problem of creating universe data on variables was greater the lower the response was (see also the last paragraph of this chapter).

The countries with overseas areas were not always capable to restrict the population to resident enterprises.

In particular in the class Freight transport by road the countries used a sample, mostly stratified by kinds of activity and size classes of enterprise. Some countries, moreover, stratified to the region of establishment of the enterprise. As to the size classes EUROSTAT supports a breakdown by persons employed, while the countries in general indicated to have a specification based on the number of employees (see also paragraph 5.3.1).

Furthermore the national classifications will only occasionally coincide completely with EUROSTAT's classification as laid down in the Manual. So results by size classes will remain restricted to some aggregated size classes.

Countries with advanced business registers were able to produce the majority of the required variables and tables. They could generate data on the level of the total universe, in particular if the register was used in combination with questionnaires that have been used for several years. But even for these countries the possibilities for filling out all variables were restricted. Data in some sections of the Eurostat-questionnaire had to be collected by using a supplementary questionnaire

to the yearly used questionnaire. Mostly it regarded data on the economic and/or financial control by non-resident enterprises and on exports and imports. Not all enterprises in the regular survey were approached with the supplementary questionnaire. All in all the statistical data obtained by the pilot surveys show a rather heterogeneous picture of the transport services in the Member States, if only with a view to population and sample.

The response rates of the sample show very unequal levels, not only between the countries, but also per country. The highest response rates were obtained in France, Sweden and in the Netherlands (about 75%). Low(er) rates were the case in Germany, Denmark and the United Kingdom (about 20 to 40%). In two countries (Spain and the Netherlands) there was a great difference in the response rates between the three surveys, varying from almost 100% for Railways and Air Transport to 60% and 75% for freight transport by road.

From the reports four reasons come up for the low response rates.

- Enterprises and professional organisations mentioned the very large questionnaire with its very detailed questions (see also paragraph 5.1).
- There is a strong relation between low response rates and the voluntariness of the cooperation to the surveys.
- Confidentiality reasons.
- In general the rates were low if the universe and the survey sample are based on private databases.

As a consequence of the heterogeneous sampling procedure used, as well as the low response rates obtained, the possibilities for comparative studies of the data between the Member States will remain rather small. The same applies for summing Member States' results to total EC-results. Another consequence of the low response rate was stated by several countries. They could not raise sample results to population results for Freight transport by road (the U.K. and Italy) and for Air transport (Denmark).

#### 4. DEFINITIONS AND COMMENTS ON THE CLASSIFICATION OF SUBSECTORS

##### 4.1 General comments on the classification

The definitions adopted by EUROSTAT in the pilot survey are laid down in the *Methodological manual of statistics on service enterprises*, chapters 'General framework' and 'Transport'. These definitions fully correspond with the classification NACE/Rev.1. So from the beginning of the survey there was a common definition of the sectors.

The countries only made a few explicit comments on the classification of the enterprises to the sections of NACE/Rev.1. A plausible reason is that the three NACE-sections in view, i.e. Transport via railways,

Freight transport by road and Scheduled and non-scheduled air transport, concern traditional industries with clear activities. On first thoughts therefore it seems reasonable to suppose that the enterprises carrying out one of these activities could be simply classified to the corresponding section. Nevertheless in practice the countries made comments - often casually - worth mentioning. They are often connected with problems of the universe of sample. These comments could have been made in chapter 3 as well.

#### 4.2 Comments by classes

##### a. Transport via railways

Definition: 60.10 *Transport via railways*

Marking out class 60.10 did not seem to present any difficulties for the countries. However, it should be noted that outside this class, class 60.21 (Other scheduled passenger land transport) comprises passenger transport via railways too, as far as city undergrounds, tramways and funicular railways are concerned. Several countries remarked this possibility, dealing with it in a different way. The usually chosen solution was restricting in advance the survey in this class to the large national railway companies. The practical problem how to split the variables of enterprises with transport by bus and via railways into separate parts may have contributed to this solution.

##### b. Freight transport by road

Definition: 60.24 *Freight transport by road*

- Sweden took the opportunity of the pilot survey to change its industrial classification to SNI92 harmonised with the NACE/Rev.1.

- Not in all cases it is clear whether an enterprise carries out freight transport by road or forwarding activities, especially if these activities are carried in a combination, as in road haulage terminals. In particular Sweden and Germany reported that the enterprises had some troubles in this context.

- Difficulties also arose for the countries without a business register based on classification of enterprises according to their main activity. Often these countries had to restrict the target group of enterprises in one or two steps. Firstly the group of enterprises with freight transport by road had to be cleaned for enterprises which carry out the activity for own account. A second restriction concerns the enterprises executing the activity as a secondary activity. In terms of a business register based on classification by main activity the freight transport by road in this case belongs to an enterprise with another main activity. Germany and Italy reported this problem of delineation.

- It is surprising that no country made a comment on the classification in relation to the raising of the survey response. As stated in the chapter 'Transport' of the *Methodological manual*: "the enormous importance of class 60.24 (...) for the whole of the economy is not

shown by the modest place it has been given in NACE/Rev.1. This class is very heterogeneous." On the basis of the heterogeneity one should expect that the results of raising sample data to population data are influenced by the sample drawn. At least there is a great difference between the cost structure of enterprises producing furniture removals and the structures of enterprises operating on other submarkets of class 60.24. The reason is the labour-intensive character of removal activities.

### **c. Scheduled and non-scheduled air transport**

Definition: 62.10 *Scheduled air transport*, 62.20 *Non-scheduled air transport*

- In principle the classification to the separate classes 62.10 and 62.20 should experience some problems. The large scheduled air transport companies mostly also carry out non-scheduled flights. Reversely, especially large non-scheduled air transport companies also run scheduled flights. The classification problem has been solved in advance by creating one group Scheduled and non-scheduled air transport to which all air transport enterprises belong, regardless of their main activity at 4-digit level. This also prevents that enterprises have to split up their exploitation and other data into the classes 62.10 and 62.20, which is - in practice - almost impossible without great troubles.

- With respect to Air transport one particular problem is conspicuous: the classification of daughter companies of airline companies having their head office abroad. The activity of these daughter companies mainly consists of selling tickets to passengers. Given the main activity of airline companies (transport of passenger and goods) the question presents itself whether these selling agencies should be classified to airline companies. Denmark is studying the problem. The problem does not occur in the Netherlands, where this group of enterprises is part of NACE/Rev.1 class 63.30 *Activities of travel agencies and tour operators; tourist assistance activities n.e.c.* Apart from the methodological aspect, these selling agencies are not able to fill in questionnaires asking many financial data, since the information is often only available at the head office.

## **5. DEFINITIONS AND COMMENTS BY VARIABLES**

In this chapter selected comments from the Member States are presented. The comments concern the questionnaire on the whole and the variables to be collected. The discussion of the variables will be done in relation to the definitions of the key variables according to the chapter 'General Framework' and 'Transport' of the *Methodological manual of statistics on service enterprises*. The variables are divided into three groupings: demographic, employment and economic variables.

### **5.1 General comments on questionnaire and variables**

Most comments of the Member States are directly related to the variables. However there were some general comments relevant to the evaluation of the questionnaire in its entirety.

- There was a great difference in the judgement of the enterprises as to the clarity of the variables. On the one hand they did not seem to have great difficulties in understanding the questionnaire (Denmark - Air transport), on the other a lot of time had to be spent to explain what was meant by certain variables (Sweden - Freight transport by road).

- Without exception the Member States, which sent in any report, indicated that the questionnaire is very large and that the information asked is very detailed.

Some countries developed a new questionnaire. Professional organisations were consulted during the phase of design; these organisations also commented the questionnaire as too long.

Some countries needed supplementary information of the enterprises in addition to the questionnaire used on behalf of the regular national surveys. Even in the Netherlands this was the case, despite the very extensive questionnaire within the frame of the annual production statistics in the field of transport services. Most countries collected the additional information by telephone, which is very time-consuming. The remarks of the Member States regarding this subject must be taken very seriously.

- Many Member States stated that they have formulated the questions according to the final draft of the EUROSTAT's questionnaires. However the addition of the countries "but adjusted to national accounting system/to the national situation" complicates the analysis very much. It is often hard to determine what the exact differences are. As a consequence the possibilities of comparing the countries' results and summing these results to EC-results are restricted. For other reasons this has also been noticed in chapter 3, last paragraph.

## 5.2 Demographic variables

### Code 3: Variables concerning the characteristics and demography of enterprises (or local units)

*Definition: factors explaining the characteristics and demography of the enterprises (or local units)*

In strict sense the demography of the enterprises can be measured by looking at the change in the number of enterprises (= code 1 in the 'General Framework'). This gives no explanation of the changing demography of service units. Therefore on behalf of an operational elaboration of the definition, data on other variables should be collected, among others:

- a. number of business start-ups,
- b. number of business closures,
- c. date of the business start-up
- d. legal status of the enterprise,

- e. number of local units belonging to the enterprise,
- f. (mono-)regionality variables,
- g. control by non-residents,
- h. number of establishments abroad.

The pilot survey questionnaires contain sections in which data on the above-mentioned items d up to and including h are asked. Information on the items a, b and c will mostly originate from the same source as the population. In most countries this is a kind of business register or licence register. However this information was not asked for in the tables.

There were not many comments from the Member States to the basic information in this variable.

The Member States with a business register reported that they have possibilities to provide the relevant information to a certain extent. The possibilities of the countries without a business register seems to be very limited.

Probably simple regionality variables do not cause many problems. Examples of such variables are the number of enterprises and local units in relation to the regions in which they are established. If available, this numerical information can be interpreted easily. Problems occur if numerical information on local units is related to financial and/or employment data. These problems concern the allocation of enterprise data to the regions in which the local units are established. The problems may partly be solved by considering (according to the chapter 'General Framework') an enterprise as mono-regional if at least 80% of its employees are in a single region. But the division of data of real multi-regional enterprises to the regions will not succeed without far-reaching provisions in the business registers. Without data on - for instance - the number and size class of the local units per regio, regionalizing of enterprise data will not differ very much from allocation to the region with the head office. France and the Netherlands will do so.

Demographic variables should not be seen separately the implementation of a regulation concerning harmonisation of business registers. That implies that discussion and definition of demographic variables should be geared to such a regulation.

### 5.3 Employment variables

#### Code 22: Number of persons employed

*Definition: The number of persons employed is defined as the total number of persons who work in the enquiry unit (inclusive of working proprietors, partners working regularly in the enterprise and unpaid family workers), as well as persons who work outside the unit but who belong to it (e.g. sales representatives, delivery personnel, repair and maintenance teams). It includes persons absent for a short period (e.g. sick leave, paid leave or special leave), and also those on strike, but not those absent for an indefinite period. It also includes part-time*

workers who are regarded as such under the laws of the country concerned and who are on the pay-roll, as well as seasonal workers, apprentices and home workers on the pay-roll.

It excludes manpower supplied to the unit by other enterprises, persons carrying out repair and maintenance in the enquiry unit on behalf of other enterprises, as well as those on compulsory military service (adapted from Industry Manual, VI, 1 and quoted from Methodological annual of statistics on service enterprises, chapter 'Transport')

It is asked to the Member States to give their specific comments on the variables in the final reports. Due to the fact that only a few final reports on some classes were available at the time this report was written, there was a limited number of such comments. Nevertheless a provisional conclusion with regard to this code may be drawn.

Generally, the problems that arose in the pilot surveys as to the number of persons employed, were of the following types:

- concerning employment size classification,
- variables used and their definition.
- the influence of part-time workers on key figures per employee.

### 5.3.1 National applications of employment size classes

- As was already stated in chapter 3 most countries have a classification in their register on the basis of the enterprises' number of employees. This means that the enterprises will have a higher size class in practice if non-salary earners have been taken into account. EUROSTAT uses a classification based on persons employed. Especially in the lowest size class up to 3 persons employed this may give a distorted view if comparing the results of countries with a different basis. In the questionnaires is asked for the number of persons employed, so in principle it is possible to make a post-stratification on the basis of this variable. Together with the original grossing factors of the enterprises this procedure might deliver population estimations of acceptable quality. However without further investigation it is unknown to what extent this sample is representative for the population.

- The difference between EUROSTAT and the Member States in the delimitation of the size classes is a serious problem. The countries usually applied their own boundaries which - as was also stated in chapter 3 - only occasionally coincide with EUROSTAT's ones. Therefore the possibilities of comparison of the results broken down by size classes will probably be very poor. Even a more aggregated breakdown to seven classes - as the Methodological Manual prescribes for the publication of the NACE 3 and 4 digits - will not solve the problem. This breakdown will also be faced with the national applications of the delimitation of size classes. In the table programme it has been tried to solve the problem by distinguishing three main categories of size classes for the main variables, each divided according to EUROSTAT's

size classes. It is too early for a definite judgement, but it seems that the creation of the three categories have mitigated the problems, because the classes are quite logical: up to 9, 10 to 99 and 100 or more (persons employed).

- In the transport sector many enterprises do not have employees. That would justify the availability of data on this group of enterprises. Therefore the main variables are also broken down by the 0 employee size class. This has been done supplementary to the *Manual*, which has a lowest size class up to 3 persons employed. Not in all countries, however, the lowest size class consists of 0 employees. For instance in Spain the lowest class is 0-3 employees.

- Almost all countries reported the problem of confidentiality in the highest size classes, which implies that the results must be hidden before publication. As a consequence EUROSTAT's upper range of the classification (5 000 persons employed or more) cannot be followed. In order to illustrate the problem: Portugal's highest size class is 20 persons employed or more.

### 5.3.2 Variables used and their definition

Although it seemed that the used employment variables were clear as well as their definitions in the Methodological manual, the countries were confronted with difficulties during the survey and the phase of filling out of the tables.

- Several Member States commented the specific date of 30 September to which the employment data have to related to. They often have end of the year data. The underlying reason for asking September data was that these data are probably more stable than end of the year data.

- Not all countries work with the variable number of employees, but with an average number during the reference year.

- One single country reported that the employment data of the class Air transport could not be restricted to resident enterprises: employees of tickets selling agencies abroad are included.

### 5.3.3. Part-time workers

In the table programme of the pilot survey on transport services one table includes the accounting ratios *Investments per person employed* and *Labour costs per wage and salary earner*. Other variables may be calculated, as turnover per wage and salary earner and gross value added per wage and salary earner. Basically, these important relationships should be included in a description of the classes. The denominator of the variables per employee or per employed person, however, include the total number of employees whether or not they are working on a full-time or part-time basis.

The provisional conclusion of the pilot survey is that the share of part-time workers, active in the NACE-classes in view, substantially differs, not only between the countries but also between the classes. For instance: in *Freight transport by road* in Sweden 11 829 part-time workers were active in 1993, in the Netherlands 265.

In order to calculate useful accounting ratios, it is necessary to have a full time equivalent for the number of employees. Some countries indicated they have such data.

#### 5.4 Economic variables

##### Code 8: Turnover

*Definition: Turnover comprises the totals invoiced by the enterprise (or by local unit) during the reference period, and this corresponds to market sales of goods and services supplied to third parties. Turnover includes all duties and taxes on the goods or services invoiced by the unit (or the local unit) with the exception of the VAT invoiced by the unit vis-à-vis its customer, even if these charges are listed separately in the invoice. Reduction in prices, rebates and discounts as well as the value of returned packing must be deducted, but not cash discounts.*

*Turnover does not include sales of fixed assets. Operating subsidies received from public authorities or the EC are also excluded. (adapted from Industry Manual, VI, 18c and quoted from Methodological annual of statistics on service enterprises, chapter 'Transport')*

The comments can be divided into 5 categories:

- subcontracting,
- breakdown of turnover,
- crossing of turnover with other aspects,
- exports (and imports),
- turnover netted out with costs.

##### 5.4.1 Subcontracting

By far the most comments were on subcontracting. That is not surprising, since the variable has not been recorded in the *Manual*. In order to overcome this, during the preparation of the survey a document was composed about this phenomenon on behalf of the Member States.

Revenue from subcontracting is the revenue of an enterprise from activities ran on account and under the responsibility of a third enterprise. An enterprise can also have revenues as a result of the use of transport equipment with operating personnel hired from a third enterprise. This is not regarded as subcontracting. The essential

difference is the place of the responsibility of the transport.

Revenues and costs related to the use of transport equipment with operating personnel from a third enterprise are not treated in an uniform way by the enterprises. When regarded as subcontracting, only the margin is considered as turnover. When regarded as hire of transport equipment with personnel, the transport revenues are registered as turnover and the payments for hiring as costs. Obviously, the results of the survey depend on the interpretation of the enterprises concerning the use of transport equipment with operating personnel of a third enterprise. This may lead to incomparable results between countries and to instable results in time, especially in the case of sample surveys.

Moreover, considering the transactions from subcontracting as turnover and costs, this will inflate the economic activity of the class in question, because they will be part of the production value and intermediate consumption (in terms of ESA).

In another phrasing, this problem was earlier recognized in a report on the pilot survey on business services.

In order to overcome these problems, a gross/net path for the variable turnover has been created, which was not inconsistent with the description of turnover in the *Manual*.

Gross turnover could be described as:

"The revenue from delivery of goods and services exclusive of value added tax (VAT)",

and

Net turnover as:

"Gross turnover excluding:

- payments with regard to subcontracting (or other services, e.g. disbursement payments)."

Despite the document on subcontracting, some countries reported that the definition was not quite clear. For instance United Kingdom wondered whether it concerned subcontracting to or by the enterprise. Furthermore the countries indicated that it cost a lot of time to convey to the enterprises what was meant with the variable subcontracting. It cost a lot of time, too, to help the enterprises with the calculation mostly estimations, of the amounts of subcontracting.

#### 5.4.2. Breakdown of turnover

Apparently the breakdown formulated in the questionnaire did not fit to the accounting of the enterprises, or produced much work to the enterprises, for the countries reported difficulties of various types.

- The breakdown of net turnover is too detailed.

- No information on the breakdown of turnover.
- No information on the breakdown of turnover from main activities.
- No information on the breakdown of turnover from secondary activities.
- No information on the breakdown of turnover by kind of transported goods.

#### 5.4.3 Crossing of turnover with other aspects

The purpose of some tables is to provide information on one of the main variables, turnover, in combination with other interesting characteristics of the enterprises, such as legal status of the enterprise, age class of the enterprise, size class of the enterprise and enterprises with or without secondary activities.

From the reports may be concluded that - except Sweden - almost all countries are or will be confronted with problems leading to incomplete tables. On the one hand no information is available on variables with which turnover is crossed. In other cases, the chosen division for the "cross" variables does not always fit to the national division.

#### 5.4.3 Exports (and imports)

Within the context of the variable in view, Turnover, only the exports of goods and services, being a part of the turnover, would be relevant. Nevertheless the imports are also involved into consideration, since they are subject to the same practical problems. The methodological problems deal with the exports.

In the chapter 'Transport' of the Manual extensive attention has been paid to the methodological aspects of the concept. They will not be fully repeated here. Summarizing, exports of goods transport services consist of all goods transport services rendered by residents to non-residents (adapted from ESA, October 1994). The value of exports of goods transport services is very narrowly related to the valuation of the goods transported and will - in most cases - differ methodologically from the amount mentioned in invoices to a considerable extent. The data of the enterprises will be based on invoices. In fact the enterprises will give their turnover from international transport.

None of the Member States reported about the methodological aspects of the problem.

All countries had practical problems with the collection of data on both exports and imports:

- no information on exports and imports at all,
- no information on imports,
- no information on the breakdown to intra- and extra-community deliveries/exports and acquisitions/imports of goods and services.

#### 5.4.4 Netting of turnover

In a footnote UK noticed that turnover of Air transport has been

calculated as operating revenue with some costs netted out. The importance of the comment is twofold.

- UK used existing sources for the provision of the data. In general, in such cases there is the possibility that the definitions of the variables in those sources differ from the definitions in the pilot survey. Especially if the source consists of annual reports and underlying data, in which it is not unusual that certain costs are netted out with the corresponding turnover. It is difficult to get an idea of the scale of the discrepancy, because

- Mostly it will be unclear what specific costs were netted out and to what extent, as it was in the case of UK.

## 6. CONCLUSION

The reports and the statistical results from the Member States clearly reflects the immature state of the statistical coverage of the transport services sector in most of the Member States. On the other hand, as a statistical institute recognized, the work with the survey was, and still is, very instructive and interesting in view of the establishment of methods for statistical coverage leading to comparable results.

This report has mentioned the major basic problems of establishing the survey population and a representative sample for many of the Member States and the problems with the low response rate. As a consequence these countries are not able to gross sample results to population results. One way to overcome the response problem is of course to carry out compulsory surveys. Moreover the implementation of business registers will contribute to appropriate survey populations and representative samples.

As to the questionnaire, the complaints of the enterprises that the questionnaire was too long and the information asked too detailed, must be taken seriously. Within this context Sweden suggested that the ambition for the future ought to be a less detailed survey. Another suggestion implied a yearly survey with a few key variables which do not cause a lot of problems, and a multi-yearly survey with more detailed variables to obtain more specific information of the classes.

One of the variables which caused many problems was subcontracting. The possibilities of the countries to fulfil according to the meaning of the survey were rather unequal. Consequently, it will probably be difficult to obtain comparable results for turnover, which is one of the main variables. Anyway the number of variables with comparable results will be small as it is, due to problems with the population, the sample and the response rate.

The preparation and the execution of the survey has amounted to more than two years. Nevertheless, apparently the time schedule for realisation of the survey and the report was short: only a few countries were able to finish their reports according to the planning.

The experiences with the interpretation of the definition of the variables and the practical data collection give valuable feedback for the improvement of the methodological manual and the future set up of a reference framework for harmonised transport sector statistics - although a lot of work still has to be done to achieve this object.

Annex to METHODOLOGICAL IMPLICATIONS OF THE PILOT SURVEY ON TRANSPORT SERVICES

**State of affairs mid-July**

So far reports have been received from the following countries.

- Denmark : - intermediate report Transport via railways, Freight transport by road and Air transport  
- final report Air transport
- Germany : - intermediate report Transport via railways, Freight transport by road and Air transport
- France : - intermediate report Transport via railways, Freight transport by road and Air transport
- Italy : - intermediate report Freight transport by road
- Portugal : - intermediate report Transport via railways, Freight transport by road and Air transport
- Spain : - intermediate report Transport via railways, freight transport by road and Air transport  
- final report Air transport
- Sweden : - intermediate report Freight transport by road  
- final report Freight transport by road
- The Netherlands: - intermediate report Transport via railways, Freight transport by road and Air transport  
- final report Transport via railways  
final report Freight transport by road  
final report Air transport
- United Kingdom : - intermediate report Transport via railways, Freight transport by road and Air transport  
- final report Air transport