REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND
THE COUNCIL

cconcerning the Implementation of the Council Regulation (EC, Euratom) N° 58/97
On the 20th December 1996 Council Regulation (EC, EURATOM) No 58/97 concerning structural business statistics was adopted. This report, foreseen by the SBS regulation, looks principally at:

- the availability and quality of structural business statistics;
- the efforts to implement the SBS regulation made by Eurostat and the national authorities in Member States responsible for producing Community statistics.

In most cases the main national authority responsible for producing Community statistics is the national statistical authority, although in many Member States some specific statistics are produced by other parts of the public administration. An important example of this is the statistics on insurance services which are often produced by the national insurance regulatory bodies.

MEETING THE OBJECTIVE?

The objective of the SBS regulation according its first Article is to establish a common framework for the collection, compilation, transmission and evaluation of Community statistics on the structure, activity, competitiveness and performance of businesses in the Community. This framework for the production of structural business statistics sets a number of targets in terms of data availability and quality, for example in terms of coverage and freshness of data. All Member States needed to make changes to move towards these targets in order that EU statistics as a whole could progress, although the particular aspects that required improvement in each Member State varied greatly. The effectiveness of the implementation of the SBS regulation must be judged against this objective. The analysis of data availability, quality and burden is based on the situation at the time of writing. In practice it is therefore based on 1995 and 1996 reference year data for which all Member States have sent data. 1997 data is also available for a few Member States.

Data availability

There has been a dramatic improvement in the volume of data available during the early part of the transition period foreseen in the SBS regulation. Practically all countries have seen an overall improvement in their position and availability has more than doubled. By the 1996 reference year more than half of the data foreseen in Annex 1 of the SBS regulation was already being provided.

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1 Data availability is based on the non-confidential data disseminated by 13 January 2000 on Eurostat’s reference database called New Cronos.
The service sectors, which generally started from the worst position, and to a lesser extent construction, have seen the greatest improvements. In the industrial sectors there have also been large improvements across the EU as a whole although in some Member States the position has worsened.

The weakest data availability remains in the energy supply, mining and quarrying and transport and communication sectors with national post activities (NACE Rev. 1 Class 64.11) having the worst data availability amongst the Member States. This weak coverage outside of manufacturing can be seen from the availability of data to produce totals for the EU as a whole based on data for all 15 Member States. Such totals can be calculated for a very restricted number of variables for 7 of the 23 manufacturing Divisions of NACE Rev. 1. However, EU totals can not be calculated, without estimations for any other activities, notably for none of the service activities.

None of the main variables that figure in Annex 1 of the SBS regulation are regarded as being particularly weak in their availability. However the sector specific Annexes 2, 3 and 4 of the SBS regulation show a number of areas of concern, notably indicators of research and development, although it should be noted that data for the last two years of the transition period have in general not yet been transmitted.

Freshness

The freshness of data is one of the key issues of quality but, as the main criticism for the industrial sectors is the deterioration in the freshness of the data, and because this is equally important for services, this particular aspect of quality merits a separate examination. The lack of freshness may be due to data production taking a long time in Member States and the Commission or to changes in estimation methods for data that is missing or slow to be delivered. The delays in data availability should be seen in the light of several countries setting up new survey systems in the service sectors or carrying out major changes to existing systems. Despite this perception of worsening delays in the dissemination of data, delays in data transmission have in general fallen between 1995 and 1996. Eurostat will continue its efforts to speed up the data treatment procedures to make data available to users faster. In addition Eurostat will continue to review its dissemination policy for structural business statistics in order to speed up dissemination and to improve the means of dissemination used.

Data freshness is recognised as one of the greatest concerns of users and this aspect of data availability will need continuous vigilance from Eurostat and Member States in the future. In order to provide data for users quicker than foreseen for final results by the SBS regulation Member States and the Commission will need to make greater efforts to improve the availability of preliminary results which are particularly poor at the present time. In addition the Commission will need to continue to make estimates in manufacturing as it has done for several years and investigate the possibilities to develop estimation techniques in other sectors. The aim of these estimation procedures will be to have a first estimate for key variables within four months of the end of the reference year.

Evaluation of quality and assessment of burden

A great deal of theoretical work has been undertaken to compile a robust definition of quality for structural business statistics with appropriate measures. This has built on work done nationally by Statistics Sweden and the Office for National Statistics in the United Kingdom. Attention has now turned to an evaluation of the feasibility of these measures and the encouragement of their more widespread application and this will continue in the future.
The first stages of development have however taken place recently concerning the measurement of the accuracy of the main SBS variables. Within this context a Commission Regulation has been adopted which lays down the criteria for evaluating quality. A summary for the EU as a whole should be available during 2000 which will represent a significant stage of progress. In this area Eurostat’s wish is to adopt a progressive improvement in the extent to which quality is taken into account. Such an approach is necessary firstly because the measurement of quality is expensive in terms of human and financial resources and secondly because the experience of the national statistical authorities is very varied in this domain. Finally it should be emphasised that the ever greater use of administrative sources as well as the use of more sophisticated statistical methods generally with the aim of reducing the response burden, require major theoretical developments in order to legitimately measure the accuracy of these data.

Eurostat’s wish is to make the monitoring of the quality of structural business statistics and, if necessary, its improvement, one of the main areas of work during the next few years, through a close cooperation with the Member States.

Little progress has been made on the assessment of response burden. Traditionally very few Member States have collected such information on a regular, systematic basis (the Netherlands and the United Kingdom are the main exceptions) although several have done one-off studies. Whilst more quantitative information on response burden may be asked for, the collection of such information is faced by the paradox that the gathering of this information may itself lead to an increase in the response burden. Work to assess burden across the EU which has recently started has underlined the difficulties of providing a relevant quantitative assessment for the EU; the most important difficulty is how an estimate of burden can be connected to information on the availability and quality of the statistical information compiled and disseminated. Future work in this area, which Eurostat feels should be intensified, needs to establish links between statistical response burden, quality (including data availability), user needs and the general administrative burden.

IMPLEMENTATION

National efforts to improve data production

In general a very positive picture of implementation by the Member States and Norway has been observed. The main focus of implementation has been a mixture of extensions of national business statistics to cover parts of the business community for which business statistics were either not available or extremely weak allied to a rationalisation of existing systems. In many cases, when national circumstances are favourable, this has been accompanied by increased efforts to make use of administrative data in order to reduce the response burden, although this may have lead at the same time to increased costs for the statistical offices and the effect on quality is not necessarily positive. The detailed report which accompanies the main report contains information on the position from which each Member State started the implementation as well as the efforts made since the 1995 reference

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2 In the context of structural business statistics there is not a formal definition of administrative data. However it is used here to mean all the data collected regularly by public authorities, other than the statistical authorities, for their own use and not primarily for statistical purposes. For example tax declarations, published accounts and employment data from social security declarations are the most frequently used by the statistical authorities.
year. Three examples however give an indication of the type of efforts made and reflect to some extent the different environments in which structural business statistics are compiled.

Firstly in a number of Member States the existing system of annual structural business statistics did not cover all activities, notably in the service sectors. An example of such a situation is Austria where, on an annual basis, only industrial activities were covered prior to 1995. Services were included in the non-agricultural enterprise census which were carried out infrequently (1976, 1983 and 1988). In 1995 the Austrian statistical office carried out a census covering both industry and services. From the 1997 reference year an annual data collection has been put in place with a sample survey extending the annual survey coverage from industry to include also services.

Secondly a number of Member States have managed to extend the availability of data to meet the requirements of the SBS regulation through a new or greater access to administrative sources. In Finland before 1995 the financial statements surveys was incomplete in sectoral coverage as it excluded some transport and communication activities as well as real estate activities, renting, research and development activities and some business activities. It was also incomplete as it excluded enterprises with less than 50 employees in hotels and restaurants and in one of the transport activities. Administrative data has been used to extend the availability of data to all of the service activities required by the SBS regulation as well as to provide data for the smaller enterprises that were excluded for some activities. In the case of Finland the availability of administrative data has also made it possible to exclude smaller enterprises from the financial statements survey that were previously covered.

Finally, in some Member States the size and sectoral coverage was essentially complete, occasionally with a small number of gaps, and the availability of variables was completed from several different sources. This was the case for example in the United Kingdom where a rationalisation has taken place with the introduction of the Annual business inquiry which has replaced in a coordinated manner the census of production, the census of construction, the retailing, wholesaling and motor trades inquiries, the property inquiry, the catering inquiry and the service trades inquiry as well as integrating a separate employment survey.

On the whole these and similar efforts have brought most Member States a long way towards meeting the compulsory requirements of the SBS regulation. At the time of writing data for the 1997 reference year has only been received from a few Member States, most are close to completing these surveys and the surveys for the 1998 reference year are also well advanced. Hence, although data is not always available as evidence, serious plans have been put in place to ensure that for the 1999 reference period data will be broadly available.

Common implementation activities

Based on the Comitology procedure foreseen in the SBS regulation the Commission has adopted a number of standards relating to the implementation of the SBS regulation. In particular these cover a precise description of the data series to be provided to the Commission, definitions of most of the variables and a list of quality measurement criteria.

Outside of these formal implementing measures and the definition and measurement of quality which has already been mentioned, the methodological areas that have been the subject of the greatest development work and where work will continue in the future centre around i) response burden and ii) the treatment of confidential data.
Response burden

The use of administrative data as a measure to counter response burden can be applied in several ways, for example to:

- exclude part of the population from statistical survey (for example Belgium, Denmark, France, Finland and Sweden);
- reduce the sample size by supplementing statistical surveys with administrative information (for example Italy);
- lighten questionnaires by reducing the number of questions (for example the United Kingdom).

Whilst the production of statistics from administrative data can have a number of benefits, the use of administrative sources can be problematic for a number of reasons, notably concerning the definitions of the administrative units used and the information available in the sources, as well as the quality of the data and ruptures due to administrative changes. The role that Eurostat has played in this area has been to provide an international forum for the discussion of ideas and practices and to document and disseminate best practice in the EEA. In the future Eurostat will continue its work in this area in particular to assist Member States in the development and support of best practice for the reduction of burden, focusing essentially on the use and combination of administrative data, estimations and encouragement of sampling techniques such as rotating or multi-yearly samples.

A related activity practised by some Member States for a long time (for example France and Portugal) and one which others have applied recently (Greece and Sweden) is the development of closer links between the definitions and terminology used in statistical surveys and that used in administrative sources. Refining the terminology and presentation adopted in statistical questionnaires to follow that used for company accounts is one example. More actively contacts with the bodies responsible for administrative standards to try to influence the terminology and structure they use such that reporting requirements can be combined is a further step currently investigated in Finland and Norway. National statistical authorities as well as the Commission need to maintain vigilance to try to avoid unnecessary contradiction between statistical demands and other administrative requirements and to facilitate the compilation of high quality EU structural business statistics.

Whilst the link with administrative standards is often seen primarily as an issue relating to burden, this can not be separated from quality. Business statistics rely to an ever increasing extent on other administrative standards and so the quality of EU business statistics will always depend, amongst other factors, on the degree to which these administrative standards are harmonised. The harmonisation of EU standards is in itself not sufficient as a growing proportion of EU groups, particularly large ones, choose to compile their accounts using non-EU standards to gain access to international finance amongst other reasons and this is likely to have consequences for the type of accounting data availability for enterprise statistics.

3 In most of these countries administrative data is used for small enterprises and in some cases it is also used for particular activities, such as the liberal professions in Belgium.
4 The Italian statistical authority has raised the threshold from 20 to 100 persons employed above which it surveys exhaustively and below which it samples and uses administrative data.
5 The United Kingdom has removed questions on regional data from its statistical survey on employment and used administrative data instead.
Confidentiality

The second area, confidentiality, remains a major concern for EU business statistics despite the obligation under the provisions of the SBS regulation for Member States to transmit confidential data. Data dissemination for the EU as a whole is severely limited by problems of statistical confidentiality. As an example, in 1996 for manufacturing, it was only possible to disseminate 38 of 103 Groups of NACE Rev. 1 for the EU as a whole, even after estimating a certain amount of data that had not been transmitted. This problem is currently particularly acute in manufacturing and less problematic elsewhere as there are few other activities where all 15 Member States provide data or can be reliably estimated. As the implementation efforts of the Member States lead to a greater availability of data this problem will inevitably grow and a solution needs to be found. One possibility is to reassess the balance between the availability of national data and EU totals and between the dissemination of detailed or aggregated data.

A charter on confidentiality for structural business statistics has been adopted with the objective to achieve a compatible treatment of confidentiality in the Member States and in Eurostat. A new agreement on confidential data has to be found between the Member States and Eurostat. Eurostat intends to update the charter on confidentiality to take account of general changes to EU statistical confidentiality and to endeavour to create the conditions to disseminate more EU structural business statistics to users. Without such an agreement the goal of EU structural business statistics may be achieved at a superficial level in that data is provided by Member States and disseminated for each individual Member State but the real goal of disseminating EU data will not be met.

Statistical units and the national implementation of definitions

As well as the areas mentioned above, where a considerable amount of work has already been undertaken, a number of other issues will need to be addressed in the future. Two principal areas of development have been identified which, if progress is not seen, EU structural business statistics will not improve.

A new period of reflection is required on the use in business statistics of different types of statistical units for producing non-regional data, in other words the main series of data. The SBS regulation currently foresees the use of two such units, namely the enterprise and the KAU. Further studies will be needed on these statistical units, their inclusion in statistical business registers and their appropriateness for analytical purposes, based on the experience gained during recent years since the implementation of the regulation on business registers for statistical purposes and the SBS regulation. The problems associated with these non-regional units are three-fold:

– the collection of data on units that are highly homogeneous in terms of the activities that they carry out is difficult but if this is not done the resulting sectoral structural business statistics may contain a large proportion of secondary activities; in other words it is difficult but necessary to break down the activity of multi-activity units into more homogeneous parts;

– groups of legal units that act together need to be treated in a manner that reflects the economic reality that they are not independent of each other;

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6 Eleven of the one hundred and three Groups can not be disseminated because of reasons other than confidentiality.
The business environment between EU Member States is diverse, resulting for example from the organisation of industry over time as well as current fiscal and administrative pressures, and this renders difficult the drafting of a common definition of one or several types of units that will be interpreted in a manner such that comparable EU business statistics can be compiled.

A solution to these problems is necessary if EU business statistics are to be compiled by simple addition of the results expressed for each Member State.

An area that has received very little attention in structural business statistics is the implementation of EU definitions at the national level. Although EU definitions have been drafted with a great deal of care and been adopted only after lengthy discussions with national experts, Eurostat believes that it is necessary to investigate the extent to which differences in major indicators such as turnover, production value, value added and investment can be attributed to different implementations of definitions rather than underlying differences in national business communities.

**DEVELOPMENTS**

The main aim for the medium term is the achievement of the full implementation of the SBS regulation in order to enable the Commission to produce high quality aggregate figures for the European Union within a reasonable time span after the end of the reference period. However, if structural business statistics are to remain up-to-date and relevant they have to adapt. The following elements are required for such development to be undertaken successfully:

- recognition by suppliers and users of data of the necessity of development balanced against a need for some stability;
- attention to the changing needs of users, in EU institutions, nationally and regionally;
- attention to changes in production methods, employment patterns and business relations;
- priority setting within resource constraints.

In a context of limited financial and human resources this principle of adaptation may be considered as conflicting with the concern for the full implementation of the Regulation. The implementation of the SBS regulation should not preclude development of structural business statistics outside of this legal framework. In particular it is necessary to be able to provide a faster, more flexible response to some user needs than is possible with a legal instrument such as the SBS regulation. In order to avoid an ever increasing pressure on response burden and on the workload of national statistical authorities Eurostat will need to regularly review the requirements of the SBS regulation to ensure that areas of decreasing importance and relevance are also removed from the compulsory requirements.

Eurostat will, in cooperation with the national statistical authorities, set up a three year work programme for the development of structural business statistics which will incorporate remaining work on the subjects of the pilot studies foreseen in the SBS regulation as well as other subjects of importance.

The subject areas that have been identified as most important for development work during the next year, include statistics on business services and business demography/employment.
creation. Equally it is hoped that some existing projects that are carried out by Eurostat and the Member States outside of the scope of the SBS regulation can be stopped if the users of statistics from these projects can accept that a large proportion of their data requirements are being met by the SBS regulation. For example it is hoped that by the 1999 reference year this will be the case for special projects set up at the end of the 1980s and the beginning of the 1990s on statistics on small and medium sized enterprises.

During 2000 and 2001 it is intended that the Commission will prepare a number of proposals for amendments to the SBS regulation, notably concerning financial intermediation, pension funding, activities auxiliary to financial intermediation and the strengthening of the list of characteristics to be used to observe business expenditure on environmental protection.

RECOMMENDATIONS

The following recommendations have been identified throughout this main report:

Member States that are not yet fully meeting the requirements of annex 1 of the SBS regulation in terms of activity and size coverage need to concentrate on meeting this first objective;

Eurostat should continue efforts to make data available more rapidly by improving data treatment procedures and the means of dissemination;

The need for EU totals makes it necessary that Eurostat continues the production of estimations for missing data, and tries to extend this to non-manufacturing sectors as well as supporting national statistical authorities in their production of preliminary results; Member States that do not yet respect the timetable for data transmission for the final results required under annex 1 of the SBS regulation need to concentrate on this aspect of quality;

Eurostat and the national statistical authorities must work to establish new practices concerning the identification and treatment of confidentiality in order to improve substantially the availability of EU totals;

Eurostat should maintain a vigilance with respect to the relevance of the statistics required by the SBS Regulation and more generally in structural business statistics to not only ensure that work is started on areas where new or stronger needs are identified but also that areas of decreasing importance are also removed in order to reduce pressure on national statistical authorities and on respondents.

Eurostat and the national statistical authorities need to continue to develop work on the quality of structural business statistics, in particular through further reflection on the most appropriate non-regional statistical units, the implementation of the definitions of variables and further harmonisation of concepts;

Eurostat and the national statistical authorities need to continue work to assess response burden and quality;

The national statistical authorities need to continue their efforts to look for ways to reduce response burden and Eurostat should continue to document and disseminate good and best practice in this area and support and encourage efforts by national statistical authorities.
**Detailed report (January 2000)**

**TABLE OF CONTENTS**

**PART I**

**Implementation of the SBS regulation and the foreseen developments**

1.1 Summary of Part I ................................................................. 11
1.2 Background to the SBS regulation ............................................. 16
1.3 Developments undertaken ....................................................... 19
1.4 Member States’ implementation of the SBS regulation ............... 19
1.5 European implementation ....................................................... 40
1.6 Foreseen developments ........................................................... 52

**PART II**

**Dissemination and use of data**

2.1 Summary of Part II ................................................................. 54
2.2 Data users ............................................................................... 57
2.3 Data ....................................................................................... 59
2.4 Confidentiality and dissemination ............................................. 64
2.5 Data comparability ................................................................. 64

**PART III**

**Quality of the data**

3.1 Summary of Part III ................................................................. 72
3.2 Need and principles for a quality policy ..................................... 72
3.3 First progress ........................................................................ 73
3.4 Accuracy, a progressive implementation ................................. 75

**PART IV**

**The costs for business**

4.1 Summary of Part IV ................................................................. 76
4.2 Response burden ................................................................. 76

**ANNEXES**

Annex 1: NACE Rev. 1 ................................................................. 82
Annex 2: Glossary ................................................................. 86
Annex 3: Tables for Part II ................................................................. 93
PART I

Implementation of the SBS regulation and the foreseen developments

1.1 SUMMARY OF PART I

On the 20th December 1996 the Council Regulation (EC, EURATOM) No 58/97 concerning structural business statistics was adopted. The objective of the SBS regulation according to Article 1 is to establish a common framework for the collection, compilation, transmission and evaluation of Community statistics on the structure, activity, competitiveness and performance of businesses in the Community.

The following summary lists the main actions between the 1995 and 1998 reference years and the major problems remaining in each Member State to implement the SBS regulation. The list of problems concerns mainly the requirements of Annex 1 of the SBS regulation; part 1.4 of this report details country by country the efforts that have been made and gives more information on the remaining problems for a full implementation of all Annexes.

National developments

Belgium: A new survey system has been put into place for the 1995 reference year with a new national legal basis. This meets most of the requirements of the SBS regulation.

Denmark: NACE Rev. 1 Sections C (except for Division 11), D, F and Division 52 have been covered by a new survey since the 1995 reference year referred to as the general accounts statistics. For the 1998 reference year Division 51 of Section G was added.

Germany: Estimations have been made for two variables for Section H for years when the survey is not carried out (1996 and 1998).

Greece: A construction survey has been introduced for the 1997 reference period which includes all variables foreseen by the SBS regulation. In services a completely new system of business statistics needs to be put into place. Starting from the 1995 reference period plans have been put in place for annual enterprise based surveys for the following activities: NACE Rev. 1 Sections G and H, Classes 60.22, 60.23, 60.24, 63.12, Group 63.3, Class 64.12, Division 61, Divisions 65 and 66, Groups 92.1 and 92.2.

Spain: 1998 will be the first reference year for the introduction of a new biannual survey system for the service sector which will, every 2 years, cover all service activities. For the 1998 reference year statistics will be produced for Sections G and H, Group 63.3, Divisions 64 and 72, Class 74.13, Groups 74.4 to 74.7 and parts of section O and the remaining service activities in the following year. The construction survey has been based since 1996 on the same central register as used for industry and services statistics.

France: A new generation of surveys (the 4th) has been progressively phased-in between the 1996 and 1997 reference years. The new construction survey started for the 1997 reference period and the industry and agro-food survey was revised for the 1996 reference period. Starting with the 1996 reference period data for industry cover all enterprises regardless of
size. Since the 1996 reference year all of the missing activities in transport and communications have been covered through extensions to the surveys carried out or through estimations. The activity coverage in services will be increased in the 1998 reference year to cover most of NACE Rev. 1 Group 55.2.

Ireland: In industry, between the 1995 and 1996 reference year questionnaires, the enterprise forms underwent major modifications. In services the main change undertaken was to extend the coverage of the survey on an annual basis to NACE Rev. 1 Sections G, H, I and K from the 1996 reference year.

Italy: Starting with the survey referring to the 1995 reference year, existing surveys for different sized enterprises have been extended where necessary to match the activity coverage of the SBS regulation. For both surveys there was a new questionnaire in the 1996 reference year. Greater use of administrative sources and increased sampling will be used from the 1998 reference year onwards.

Luxembourg: A new survey system was developed for the 1996 reference year which meets most of the requirements of the SBS regulation.

The Netherlands: In industry questionnaires will be extended for NACE Rev. 1 Section C. For Section E enterprises with less than 20 employees will also be covered by a pilot survey in 1998 reference year. Investment data will be collected via sampling for enterprises with less than 20 employees in Sections C to F. Class 52.31 has been added to the sectoral coverage and Group 51.1 will be added.

Austria: For the 1995 reference year a full census was carried out with a new series of questionnaires. Since the 1997 reference year an annual survey has been introduced that is essentially the same as the census carried out in the 1995 reference year but introduces sampling for enterprises.

Portugal: The 1996 reference year saw a new generation of questionnaires covering all sectors. The new annual survey has no size cut-off.

Finland: For the industrial sectors the questionnaire for the 1995 reference year had already been revised based on the Commission’s proposal for the SBS regulation. Data on the construction sector was produced for the 1995 reference year for the first time. Since 1995 administrative data has been available for all service activities covered in a compulsory manner by the SBS regulation hence completing the coverage of Finnish service statistics.

Sweden: For the 1997 reference year two existing surveys have been merged into one. The coverage of this new survey includes construction. For services the financial accounts statistics are exhaustive since the 1996 reference period. The activity coverage was extended for the 1997 reference period to include NACE Rev. 1 Division 70.

The United Kingdom: By the 1995 reference year the size thresholds for industry and construction had been fully eliminated. In the 1996 reference year the services coverage was extended to NACE Rev. 1 Group 60.1 and Divisions 62 and 63. In the 1998 reference year some new variables were added to the questionnaire and the survey coverage was extended to NACE Rev. 1 Class 64.11.

Norway: Structural business statistics will be produced for NACE Rev. 1 Group 40.1 and Division 41 from the 1998 reference period. For the 1995 reference year an enterprise based survey was introduced for Sections G and K of NACE Rev. 1. For the 1996 reference year
existing thresholds were removed and the coverage was extended to Section I of NACE Rev. 1. For the 1997 reference year the coverage was extended to Section H. A major revision of the insurance statistics has been undertaken to fully meet the requirements of the SBS regulation from 1998.

**Remaining problems in Member States**

Belgium: It is unlikely that data will be provided within the 18 month delay for the 1999 reference year.

Denmark: No major problems foreseen.

Germany: In industry only some variables will be available for enterprises of all sizes until a survey of small enterprises can be put in place and this is dependent upon the completion of the business register. An attempt will be made for the 1999 reference year to extend this list of variables for which statistics are available for small and craft enterprises to the full list required by the SBS regulation. For transport, communications and business services data will only be available for a small number of variables based on administrative data or from existing surveys. This situation is likely to continue at least until the 2000 reference year and maybe later.

Greece: The availability of data for the service sectors is uncertain.

Spain: The ability of the Spanish statistical system to meet all of the requirements for the construction sector is unknown. The availability of statistics for the service sector will depend on the successful implementation of the new integrated system of service statistics for the 1998 and 1999 reference years.

France: No major problems foreseen.

Ireland: There are no proposals yet to remove the thresholds in industry and construction of 3 and 20 persons employed respectively.

Italy: No major problems foreseen.

Luxembourg: It is unlikely that data will be provided within the 18 month delay for the 1999 reference year.

The Netherlands: No major problems foreseen.

Austria: There may be difficulties to meet the delays for the final results because companies often do not close their accounts until 12-15 months after the end of the reference period.

Portugal: Production of KAU and local unit data is uncertain but is currently being studied as is the estimation of data for enterprises with less than 20 persons employed.

Finland: No major problems foreseen.

Sweden: No major problems foreseen.

The United Kingdom: No major problems foreseen.

Norway: No major problems foreseen.
National methodology

During 1999 a common updating of the information contained on the methodological practices in the Member States for industry and services was carried out for the first time. This information is disseminated commercially off-line (CD-ROM) and free of charge via the internet.

Regular contacts will need to be maintained between Eurostat and national statistical authorities in order to monitor the implementation of the SBS regulation and to assist Member States from a methodological standpoint where possible. This will be particularly important for the multi-yearly statistics foreseen in annexes 2, 3 and 4 of the SBS regulation for which the first reference year in all cases is 1997 and also for the compilation of preliminary results.

European implementation

The Commission has introduced a number of standards relating to the implementation of the SBS regulation more details of which are available in part 1.5 of this report. Between the adoption of the text in 1996 and the time of drafting this report\(^7\) standards have been adopted on the following implementation aspects for both the SBS and insurance regulations:

- definitions of the characteristics
- first reference year for the compilation of the preliminary results
- breakdown of results
- frequency of the compilation of the statistics
- appropriate technical format for the transmission of results
- transitional period and derogations from the provisions of the SBS regulation
- criteria for the evaluation of quality

More generally the Commission has worked with the Member States to develop European methodology in a number of areas:

- to devise an extensive list of indicators relevant for the measurement of quality taking account of different collection methods; these can be summarised as: relevance, accuracy, timeliness, accessibility, comparability, coherence, completeness;

- in January 1997 the Commission hosted a seminar on the use of administrative sources for statistical purposes. Eurostat continues to follow developments in European and international standards for administrative information in order to avoid unnecessary contradiction between statistical demands and other administrative requirements;

\(^7\) January 2000
burden on enterprises has been studied in several technical meetings. The difficulties of providing relevant quantitative measures at the European level have been underlined; the most important difficulty is how an estimate of burden can be connected to information on the availability and quality of the statistical information compiled and disseminated;

the provision of national confidential data is a necessary condition for producing EU totals, given that there are confidential data, but that this improvement brought about by the adoption of the SBS regulation was not sufficient to make EU totals available across all activities. A charter on confidentiality for structural business statistics has been adopted with the objective to achieve a compatible treatment of confidentiality in the Member States and in Eurostat;

to provide data for users for those countries that have not been able to provide preliminary results or to respect the required delays for final results Eurostat has continued to develop and perform estimation procedures where sufficiently robust methods are available.

In terms of methodological developments for improving European structural business statistics the following key areas have been recognised:

evaluate the feasibility of the proposed quality indicators and encourage a widespread application of these such that a meaningful assessment of quality can be made;

develop and spread best practice for the reduction of burden, focusing essentially on the use and combination of administrative data, estimations and encouragement of sampling techniques such as rotating or multi-yearly samples;

finalise a number of definitions that have not yet been established for multi-yearly characteristics laid down in the SBS regulation;

update the charter on confidentiality to take account of general changes to European statistical confidentiality.

Pilot studies and future developments

Eurostat has started methodological work with some Member States on a voluntary basis for several of the pilot studies foreseen in the SBS regulation. The current situation for each pilot study is very diverse and ranges from methodological work that is advanced (for example on sub-contracting and on the activities of other financial intermediation) to work that has gone no further than a review of current practices (for example regional investment in the service sectors). A brief summary of each pilot study is provided in part 1.5.

As more than five years have passed since the list of pilot studies was drafted in the Commission’s proposal for the SBS regulation Eurostat has also reopened discussions with users on their feelings on the usefulness of data on these prospective pilot study subjects.

In the light of the above Eurostat proposes to extend the timeframe for the execution of pilot studies beyond the 1998 reference year laid down in the SBS regulation to establish a programme for the execution of pilot studies to be reviewed annually. This rolling work programme should result from a priority list for the development of the Regulation based on user needs for additional data, current availability of data in Member States and the lead time
necessary for the development of certain areas. Such a work programme has been discussed with Member States at the end of October 1999.

The main concern for the future is the achievement of the full implementation of the SBS regulation with the aim of enabling the Commission to produce high quality aggregate figures for the European Union within a reasonable time span after the end of the reference period. However, if structural business statistics are to remain up-to-date and relevant they have to adapt continuously to these changes. The following elements are required for such development to be undertaken successfully:

- recognition by data suppliers and data users of the necessity of development;
- constant attention to the changing needs of users, across the EU, nationally and regionally;
- constant attention to changes in production methods;
- priority setting within resource constraints.

Eurostat will, in cooperation with the national statistical authorities, set up a three year work programme for the development of structural business statistics which will incorporate outstanding work on the subjects of the pilot studies foreseen in the SBS regulation as well as looking at other subjects.

Bearing in mind the present state of progress on pilot studies and other structural business statistics development work it is possible to give a provisional indication of work that is likely to be completed in the near future. During 2000 and 2001 it is intended that the Commission will prepare a number of proposals for amendments to the SBS regulation, notably concerning financial intermediation, pension funding, activities auxiliary to financial intermediation and the strengthening of the list of characteristics to be used to observe business expenditure on environmental protection.

The subject areas that have been identified as most important for development work during the next three years, outside of the pilot studies foreseen in the SBS regulation, include statistics on business services (NACE Rev. 1 Section K) and business demography.

1.2 BACKGROUND TO THE SBS REGULATION

Problems with structural business statistics in the 1980s

Prior to the adoption of the SBS regulation harmonised European structural business statistics had only been available for a limited part of the business community, namely the traditional industrial sectors of energy and water supply and the extraction, manufacturing and construction. The coverage of services in the Member States has been both incomplete and carried out in a non-harmonised format which has severely limited the comparability of the resulting information at a European level. The statistical information available for the industrial sectors was based on two Council Directives8 adopted in 1964 and 1972. The harmonised industrial data were normally published in a number of annual volumes and they

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and the unharmonised services data are still available in part through the SBS domain of New Cronos.

Despite the number of years during which the Directives were in force the production of European industrial structural statistics remained to a greater or lesser extent an annex to most national systems. These statistics become progressively less useful due to economic and technical developments in the intervening years and a combination of the inflexibility of the legal instruments and limited success in development outside of the legal framework. At the end of the 1980s many serious problems were evident in the extent to which the Directives were not being respected and more importantly in the lack of data available for the Commission to reply to user’s data needs. In particular the following points were noted:

– Data covering enterprises of all sizes was only provided every 5 years if it was provided at all.

– Some industrial sectors, notably construction, were ignored by some Member States. Most Member States did not cover fully the service sectors of the economy and some did not cover it at all on an annual basis.

– Some phenomena relevant to structural business statistics were not covered, such as sub-contracting, research and development, environmental protection. Changes in business practices had weakened the usefulness of existing measures, such as the increased incidence of part time employment, the use of leasing and the role of intangible investment.

– Many users complained that the delay in the availability of data was far too great.

– Information was lost due to data being hidden at the national level to avoid the disclosure of confidential data, or through the passage from national nomenclatures to the common NACE 70. This made it close to impossible to calculate data for the EU as a whole.

– The statistics were produced for different statistical units with neither the enterprise nor the kind-of-activity unit being adopted as statistical units by all the national statistical authorities.

– Most national statistical authorities did not collect or supply certain of the required variables.

Some of these difficulties were reduced through the implementation of Council Regulation No 3037 of 9 October 1990\(^9\) on the statistical classification of economic activities in the European Community (NACE Rev. 1) and with the development of other statistical tools such as the harmonisation of business registers\(^10\), however major difficulties remained.

During the technical discussions to resolve some of the remaining difficulties regular, detailed consultations were held with a large number of interested parties representing the primary suppliers of data (businesses), the statistical authorities at the national level and all types of users. These consultations can be categorised in three groups:

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\(^9\) OJ L 293 of 24.10.1990, p. 1

the Commission’s services were informed of the plans at an early stage and individual services contacted regularly thereafter;

the national statistical authorities who remain responsible for the collection of the data, were consulted frequently. They were involved in the very first meetings where Eurostat was trying to analyse in detail the problems of the existing system, through the technical working parties in which the first proposals to make changes were made during which the Commission’s proposals were refined;

businesses and their professional associations were informed of progress on the development of the SBS regulation through presentations to the regular information meetings that Eurostat holds with European trade associations in the area of business statistics.

Adoption of the SBS regulation


Objective of the SBS regulation

The objective of the SBS regulation according to Article 1 is to establish a common framework for the collection, compilation, transmission and evaluation of Community statistics on the structure, activity, competitiveness and performance of businesses in the Community. A full implementation of the SBS regulation will result in the national statistical authorities, who are responsible for data collection, transmitting to Eurostat data which is comparable between the Member States. The SBS regulation lays down or foresees the norms, standards and definitions necessary for producing comparable Community statistics, without detailing the actual collection methods to be used. As such the statistical authorities in each Member State may conduct the data collection exercises in the manner most appropriate to its own situation, for example to take account of national requirements for the presentation of company accounts.

Through its Committee procedure the SBS regulation provides a degree of flexibility whereby measures for adjustment to economic and technical developments can be taken by the Commission after consulting the Member States.

The framework referred to in the first Article of the SBS regulation is made up of a number of broad provisions in the text that are relevant for most or all structural business statistics. These broad provisions are supplemented by more specific provisions in the 4 annexes. The first Annex is a general one relating to the production of a number of standard indicators for all activities covered by the Regulation. The three other annexes cover respectively industry, distributive trades and construction. This modular approach lends itself to relatively simple modifications of the SBS regulation as and when decisions to extend the data collection to cover in more detail any particular aspect of the business community are taken. This was done successfully for the new Annex 5 which covers insurance statistics.
1.3 DEVELOPMENTS UNDERTAKEN

Integration of the SBS regulation into the statistical annex of the EEA treaty

The SBS regulation was incorporated into annex XXI (statistical annex) of the EEA Agreement by Decision 13/1999 of the EEA Joint Committee at its 60th meeting on the 29th of January 1999 and entered into force the next day.

Council Regulation amending the SBS regulation

On the 16th February 1998 Council Regulation (EC, Euratom) No 410/98 amending Regulation (EC, Euratom) No 58/97 concerning structural business statistics (hereafter referred to as the Insurance Regulation) was adopted which added a fifth annex to the SBS regulation. This annex concerns a framework for structural business statistics for life and non-life insurance activities starting with the 1996 reference period.

The current structure combining the SBS regulation and the insurance regulation is summarised in the figure below.

1.4 MEMBER STATES' IMPLEMENTATION OF THE SBS REGULATION

Belgium

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The main sources of Belgian industrial statistics were an industrial survey of local or technical units (local KAU) with questions about value added and an investment survey also directed at local or technical units. A cut-off threshold of 5 manual workers was applied which was raised to 10 or 20 workers in some sectors. The surveys were exhaustive.

There were no surveys in the service sectors for which the only available statistics were derived from the social security register.

Changes and plans for the transition period: 1995-1998 reference years

A new survey system has been put into place for the 1995 reference year with a new national legal basis. This is based around one main compulsory questionnaire supplemented by a series of annexes which are mainly multi-yearly and is a common survey for all activities. The new survey aims to meet a wider range of needs than those covered by the SBS regulation and is hence more extensive.

For the 1995 reference year the survey coverage was extended beyond the traditional industry and construction sectors and covered NACE Rev. 1 Sections C-I and K. In the 1996 reference year this was extended to cover NACE Rev. 1 Group 65.2 of Section J. There is no longer a
size threshold in the new survey other than the limits of the new business register. The main unit is the VAT or social security unit. Sampling has been introduced with exhaustive coverage for enterprises with 20 employees or more or an annual turnover in excess of 200 million BEF (approximately €5 million). The main questionnaire covers employment, income and expenditure (in a profit and loss account type format) and investment. The annual annexes include variables on the breakdown of turnover by activity and the local unit. In addition there are annexes with multi-annual variables.

In addition to the new survey, tax sources are being used for units not covered by the survey, namely the liberal professions that have no paid employees.

Remaining problems after the 1998 reference year

The new survey system is expected to meet almost all of the requirements of the SBS regulation with the question of the delay of data transmission remaining as the main problem; it is unlikely that data will be provided within the 18 month delay for the 1999 reference year and preliminary results are not available. Some multi-yearly variables are not yet collected and there are still some uncertainties concerning the production of KAU data.

Implementation plans for the 1999 reference year and after

Multi-yearly variables will be collected in 1999 by adding annexes specific to certain sectors. It is also planned to extend the use of administrative data by investigating the use of social security registers for some employment measures.

Denmark

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

Prior to the implementation of the SBS regulation the main surveys for industrial statistics were the accounts statistics and the investment survey. The accounts statistics were made up of a mixture of a statistical survey and administrative data.

The surveys covered annually NACE Rev. 1 Sections C-E (except Division 11) for enterprises with 20 persons employed or more. The surveys were exhaustive and the response rate was close to 100%. Information was collected on income and expenditure (in a profit and loss account type format) in the accounts survey. Statistics similar to the accounts survey are compiled annually on enterprises with less than 20 persons employed from administrative sources.

NACE Rev. 1 Section E is made up entirely of public utilities. All of these units were covered by public sector statistics rather than by the general business statistics. There was no size threshold for data collection in these surveys which were exhaustive.

NACE Rev. 1 Section F was not covered since the 1990 reference year.

Data for services were compiled from administrative data from the tax authorities, the VAT register and the register for business employment. The first of these covered all activities and most legal forms and provided information on profit and loss accounts and balance sheets. The second covered all units liable to VAT and provided information on turnover and elements of expenditure. The third source covered all local units in which persons are employed and provided information on employment, labour costs and certain characteristics
of employees. The accounts and employment information was provided annually and the VAT information quarterly.

R&D data was collected separately from the survey carried out in the research ministry's bi-annual survey.

Changes and plans for the transition period: 1995-1998 reference years

NACE Rev. 1 Sections C (except Division 11), D, F and Division 52 have been covered by a new survey since the 1995 reference year referred to as the general accounts statistics. For the 1998 reference year Division 51 of Section G has been added. The survey is a sample survey above 5 employees with the sample rate normally reaching 100% above a threshold of 50 employees. As such this is an extension in terms of the activity coverage and the size coverage of the existing survey. In addition there is a supplementary annex for data by KAU for units with large secondary activities.

Administrative data is used to cover the population below 5 employees including information from the tax records which provides summary data and this is also used to extrapolate the population from the sample that has been drawn.

Whilst the preparations to extend the accounts statistics to cover all service sectors in the 1999 reference year are underway, Statistics Denmark continues to provide Eurostat with statistics on the service sectors based on the registers for accounts information with the tax authorities, the VAT register and the register for employment statistics. It is important to note that these three registers are not used independently but are merged together into an integrated set of business statistics. Whilst these statistics are only used for service sectors within the context of the SBS regulation they are in fact produced for all business sectors and it is intended to continue to develop them alongside the questionnaire/administrative source accounts statistics.

In addition to these mainstream business statistics, special statistics are produced on R&D and environment. The research Ministry carries out a 2-yearly survey on R&D and the intervening years are estimated. A special environment survey has been considered but has not yet been conducted.

Remaining problems after the 1998 reference year

None foreseen due to the extension of the activity coverage planned for 1999.

Implementation plans for the 1999 reference year and after

For the 1999 reference year it is intended to add the remaining services Sections, namely H, I and K as well as Divisions 11 and 50 to the accounts statistics.

Germany

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The data collection for industry was based around two enterprise surveys collecting data on current income and expenditure on one hand and investment on the other as well as a separate survey for investment at the local unit level which did not cover construction. All of these surveys were annual. Separate questionnaires were used for i) the energy and water sector ii)
mining and manufacturing iii) building and construction and iv) building finishing and completion work.

The surveys all had a cut-off threshold except in the energy sector. This cut-off was normally 20 persons employed but was set at 10 persons employed for the building finishing and completion work questionnaires until 1997 when it was raised to 20 persons employed. The income and expenditure survey was a sample survey with exhaustive data collection for units with more than 500 persons employed. The investment survey was exhaustive for units with 20 persons employed or more. The income and expenditure survey collected information on operating income and expenditure as well as on employment.

In services, the statistical surveys were limited to Sections G and H of NACE Rev. 1 with a few Groups excluded. No size threshold was applied. These enterprise surveys were carried out annually for Section G and every 2 years for Section H and provided information on employment, operating income and expenditure and investment. The surveys were stratified samples of around 8-10% of the population with a response rate close to 100%.

In transport there were some enterprise statistics in waterways, road transport and air transport concerning turnover, the number of persons employed and the number of employees. For the remaining activities the only data sources available were derived from VAT and social security declarations. Both of these sources covered all activities with low thresholds and were compulsory.

**Changes and plans for the transition period: 1995-1998 reference years**

The survey on HORECA is conducted every 2 years but information on a small number of variables were estimated for the 1996 reference year and will be again for the 1998 reference year. There have been no significant changes to the sources for distribution and other services.

**Remaining problems after the 1998 reference year**

In industry only some variables will be available for the entire survey population until a survey of small enterprises (those with less than 20 persons employed) can be put in place.

Preliminary results in industry will only cover enterprises with 20 persons employed or more.

The biggest problem expected by StBA for the implementation of the SBS regulation concerns services. For transport and communications and business services data will only be available for a small number of variables based on administrative data or from existing surveys. This situation is likely to continue at least until the 2000 reference year and maybe later. The main technical problem will be to have a high quality register and in addition there are expected to be problems of acceptance of the survey by businesses.

**Implementation plans for the 1999 reference year and after**

As already noted the main problem in industry concerns enterprises with less than 20 persons employed. There are plans to carry out an annual sample survey in the future covering all enterprises with less than 20 persons employed with a reduced list of variables (8 to 10 variables). This will only be possible once the business register is operational at the earliest for the 2000 or 2001 reference year. For the 1999 reference year it is intended to produce some estimates for small industrial enterprises for a limited number of variables. Questions on R & D, part-time employment and apprentices will be added to the main questionnaires in the 1999 reference year for large enterprises. The questionnaire will also be changed in the 1999
From the 1997 reference year onwards the survey is an enterprise based survey and collect information on local units. In addition the list of variables in the questionnaire has been increased.
A construction survey has been introduced for the 1997 reference period (1998 collected at the same time). This survey includes all variables foreseen by the SBS regulation.

In services a completely new system of business statistics is being put into place. Annual enterprise based surveys have been planned or conducted for the following activities of NACE Rev. 1: Section G and Classes 66.01, 66.03 for reference years 1995 and 1996; Section H for reference years 1996 to 1998; Classes 60.22, 60.23, 60.24, 63.12, 64.12 and Group 63.3 for reference years 1996 and 1997; Groups 92.1 and 92.2 for reference years 1995 to 1998; Division 65 for reference years 1995 to 1997. These surveys aim to collect information on business demography, employment, current income and expenditure and investment such that all of the variables required by the SBS regulation are collected. No size threshold is applied other than the very low threshold of the coverage of the business register. Several of the surveys listed above have been delayed or still wait to be carried out. In addition to these surveys data is available for NACE Rev. 1 Group 60.1, Class 60.21, Division 62 and Class 64.11 from nationalised companies.

Remaining problems after the 1998 reference year

The availability of data for the service sectors is uncertain. At the present time no results of the surveys that have been started have yet been transmitted to Eurostat. There are no known plans for covering several parts of transport and communications (60.3, 63.11, 63.2, 63.4) and all of business services.

Implementation plans for the 1999 reference year and after

In industry very small units below 10 employees may no longer be surveyed from the 1999 reference year and administrative sources will be used in order to estimate the whole population. Preliminary results will be introduced for 1999 in industry. In services the aim is to improve the quality of the data and to speed up their dissemination.

Spain

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The industrial statistics were centred around an enterprise based survey. A new questionnaire was introduced in the 1993 reference year. The survey covered enterprises with at least 1 employee. A simplified questionnaire was used for enterprises with less than 20 persons employed. The data collection was exhaustive above 20 persons employed and sampling is used below this threshold. NACE Rev. 1 Sections C, D and E were covered.

Data for Construction were produced by the Ministry for public works. A new questionnaire was introduced in the 1993 reference year. The register used was based on the 1978 census and updated with information from the Ministry. The survey covered enterprises of all sizes with special questionnaires for enterprises with less than 6 employees and unincorporated enterprises.

In services, the only sector treated regularly was passenger transport. This survey was conducted annually since the 1991 reference year and covered all enterprises in an exhaustive manner in NACE Rev. 1 activities 60.1, 60.21, 60.23, 61.1, 62.1, 62.2. Pilot studies on other service sectors were started in the 1992 reference year on a rolling basis covering different sectors each year.
Changes and plans for the transition period: 1995-1998 reference years

INE is setting up an integrated micro-data system for the industrial surveys. The Annual Industrial Survey will be at the heart of this system with a sample of approximately 40 000 units. Satellite surveys will be linked to this. Innovation will be the first to be fully integrated. These satellite surveys will be a sub-sample of the AIS (approximately 10 000 units in the case of innovation). R&D is being integrated in the 1998 reference year. The enterprise is the main statistical unit used for the industrial structural survey. However local unit data is collected for 6 variables from enterprises with more than 20 employees. For enterprises with less than 20 employees but with more than 1 local unit the number of employees is collected. Data is compiled for KAU's by classifying local units by their own principal activity and then merging the results for local units that have the same principal activity.

Since the 1996 reference year the same register has been used in the construction sector as for industry and services. Enterprises with more than 20 employees are surveyed exhaustively and those below this threshold are sampled.

The pilot studies for services started in the 1992 reference year have been continued. For example the following sectors were covered in recent reference years:

- 1995 cleaning services, computer services, telecommunications;
- 1996 legal services, investigation and security services, hotels, taxis, telecommunications and other services;
- 1997 retail trade, personal services, audio-visual, technical services, travel agencies.

These pilot surveys are all enterprise based and cover units of all size, including enterprises with no employees. Starting from the 1998 reference year an integrated system of services statistics will be put into place based on two biannual surveys and other sources. In 1998 this will allow statistics to be produced for approximately half of the service sectors.

Remaining problems after the 1998 reference year

In industry the main outstanding problem that has not yet been addressed is the non-coverage of enterprises with 0 employees. In addition the non-availability of some multi-yearly data needs to be addressed and the coverage of the environment survey in 1999 will be limited.

The availability of preliminary data for the service sectors is uncertain.

The ability of the Spanish statistical system to meet all of the requirements for the construction sector is unknown.

The availability of statistics for the service sector will depend on the successful implementation of the new integrated system of service statistics for the 1998 and 1999 reference years.

Implementation plans for the 1999 reference year and after

For industry a new revised questionnaire will be introduced for the 1999 reference year better reflecting the requirements of the SBS regulation by introducing some new variables. The questionnaire for industrial enterprises with 20 employees or more will change to have two styles, one for mono-regional enterprise and one for multi-regional enterprises. The use of
administrative sources will be investigated to provide information for extrapolating data not collected in the industrial surveys. A first survey on environment is also planned for the 1999 reference year.

The construction sector will have a new questionnaire for the 1999 reference year which will collect all of the necessary information for the SBS regulation based on the Spanish company accounting standards.

From the 1999 reference year the integrated system of service statistics should provide statistics for all service activities.

**France**

**Survey system prior to the implementation of the SBS regulation - up to 1994 reference year**

The main industrial survey was made up of three parts: i) the agro-food industry, ii) industry, iii) building, public works and civil engineering. In addition there was a special survey of small enterprises. All of these surveys used the enterprise as the main observation unit and were carried out annually except for the small enterprise survey which was done in the agro-food and manufacturing industries twice every five years. Together these surveys covered all Divisions within Sections C to F of NACE Rev. 1 except for Division 37 which was surveyed within the service sector’s surveys.

Within each of the surveys simplified questionnaires were used for smaller enterprises. The agro-food industry questionnaire had a size threshold of 10 employees. The industry survey had a threshold of 10 employees up to 1993 and 20 afterwards. The building, public works and civil engineering survey had a threshold of 6 employees. Below these thresholds multi-yearly surveys were conducted to complete the population. Depending upon the survey, sampling was used for collecting data from enterprises with less than 20 employees. All of these surveys collected information on demographic changes, income and expenditure (in a profit and loss format), balance sheet data, employment and investment as well as information on types of statistical units other than the enterprise. Special surveys were conducted annually on environmental protection expenditure (investment only), energy consumption and R&D.

In services the following surveys were traditionally conducted: i) distribution, ii) transport, iii) services. These surveys all used the enterprise as the main observation unit and were conducted as annual, sample surveys. The following service activities within the compulsory scope of the SBS regulation were not covered by any of the surveys: 55.2, part of 60.21, 60.3, 62.3, 63.2, 64.1, 73. Enterprises of all sizes were covered in these surveys except for enterprises with less than 6 employees in certain transport activities. These surveys in services collected similar information to the industrial surveys. The special survey on R&D was also conducted in the service sector.

**Changes and plans for the transition period: 1995-1998 reference years**

A new generation of surveys (the 4th) has been progressively phased-in between the 1996 and 1997 reference years. The new construction survey started for the 1997 reference period and the industry and agro-food survey was revised for the 1996 reference period. These surveys are the main source for preliminary results.

Data for NACE Rev. 1 Division 37 will become available from the 1998 reference year.
Starting with the 1996 reference period data for industry cover all enterprises regardless of size. Although the multi-yearly data collection for small industrial enterprises will continue, data for these enterprises will be provided from administrative sources.

Information on the number of part-time employees, apprentices and hours worked will be taken from the annual declaration of social data (DADS).

For services, since the 1996 reference year, the majority of the remaining missing activities in transport and communications have been covered through extensions to the surveys carried out or through estimations. In addition the small enterprises excluded from the survey for certain transport activities will also be surveyed from this date. From the 1997 reference year small enterprises will only be surveyed within the survey on services every 2 years and estimations based on administrative data will be used to replace these results in the intervening years. The activity coverage in distribution will be increased in the 1998 reference year to cover most of NACE Rev. 1 Group 55.2.

In all sectors, since the 1996 reference year, most of the final results are produced by a system in which survey data and administrative data are compared and integrated.

Remaining problems after the 1998 reference year

There are no plans yet to collect data on i) homeworkers in industry ii) income from sub-contracting in construction and iii) long-term rental.

Implementation plans for the 1999 reference year and after

It is intended to provide regional statistics for construction from the annual declaration of social data (DADS). This will be done for the first time in the 1999 reference year.

Ireland

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

In the industrial sectors the enterprise questionnaire covered enterprises with 3 or more persons employed. There was a special form for smaller enterprises. Of the 4 440 enterprises in this population approximately 200 contained more than one local unit and these received a separate form. In addition an industrial local unit survey was carried out for industrial local units of industry and service enterprises. The surveys were exhaustive above the cut-off thresholds. Administrative sources were only used to substitute late data or where there was no response.

In construction only one form was used and it covered enterprises with 20 persons employed and more. There were approximately 300-350 enterprises who received the questionnaire. This survey was exhaustive above the survey threshold.

Annual surveys were carried out in services from the 1991 reference year, but with a rotating sectoral coverage. These enterprise based surveys covered NACE Rev. 1 Sections G, H and K without any cut-off threshold. The surveys were based on stratified samples which were exhaustive for enterprises with 20 persons employed or more. The surveys collected information on income and expenditure, stocks, investment and employment.
Changes and plans for the transition period: 1995-1998 reference years

Since the 1995 reference year confidential data has been transmitted to Eurostat for the industrial sectors. In industry, between the 1995 and 1996 reference year questionnaires, the enterprise forms underwent major modifications to meet national needs, to meet the needs of national accounts and to implement the SBS regulation. Many of the changes concerned simplifications to the questionnaires. The following extensions were made that increase the availability of data required by the SBS regulation:

– R&D and financial leasing have been added;

– Turnover has been simplified: Exports have been grouped into 1 question and a new question on affiliates has been added;

– A question on agency workers has been added;

– The number of part-time workers and hours worked has been added.

No major changes were made for the 1997 reference period. For the 1998 reference period the question on the number of hours worked was dropped and questions on expenditure on fuels added.

In construction there have been no changes to the questionnaire as most of the requirements for variables from the SBS regulation were already met by the existing survey. The sending of questionnaires to enterprises has been brought forward for both the 1997 and 1998 reference year surveys in order to reduce delays.

In services the main change undertaken has been to extend the coverage of the survey on an annual basis to NACE Rev. 1 Sections G, H, I and K from the 1996 reference year. A large increase in the sample size was made for the 1998 reference period to take account of the revised NUTS geographical classification.

Remaining problems after the 1998 reference year

There are no proposals yet to remove the thresholds in industry and construction of 3 and 20 persons employed respectively.

Preliminary results are not yet planned for services.

Implementation plans for the 1999 reference year and after

It is planned that preliminary results will be in place for industry and construction in 1999.

There is a long running project to improve the quality of the business register and to move from a separate industrial register to a central business register.

Italy

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

In industry the survey of the system of economic accounts of enterprises covered exhaustively enterprises with 20 persons employed or more in Sections C, D and F of NACE Rev. 1. This survey was carried out annually since the 1989 reference year. As well as information on the
profit and loss account and balance sheet of enterprises, information on the regional breakdown of activity was also collected in this survey. A second survey was carried out for small enterprises with between 1 and 19 persons employed covering NACE Rev. 1 Section C (Sub-section CA was added in 1992), Section D (Sub-section DF was added in 1994) and Section F. For enterprises between 10 and 19 persons employed the survey was carried out annually since the 1985 reference year and for enterprises between 1 and 9 persons employed since the 1992 reference year. This survey was carried out using sampling and collected information on a simplified set of accounts for the enterprise.

In services the same surveys were carried out. The survey of the system of economic accounts of enterprises covered exhaustively enterprises with 20 persons employed or more in Sections G, H, I and K (excluding Division 73) of NACE Rev. 1. The sample survey of small enterprises with between 1 and 19 persons employed covered Sections G, H, I, J (excluding Divisions 65 and 66), K, M, N and O (excluding Division 91) of NACE Rev. 1.

Changes and plans for the transition period: 1995-1998 reference years

Starting with the survey referring to the 1995 reference year, both the sample survey of small enterprises and the survey of the system of economic accounts of enterprises have had the same activity coverage (except for Division 67 for the survey of enterprises with 20 persons employed or more). The 1995 reference year surveys were based on a preliminary version of the new business register ASIA and the 1996 reference year surveys used the updated version of ASIA.

For the 1996 reference year there have been new questionnaires for both surveys. The revision was to structure the form closer to the information available at the level of the enterprise (based more on accounting standards) and to include extra variables for the introduction of the SBS regulation. For the 1998 reference year greater use of administrative data is planned. The sample survey will cover enterprises with less than 100 persons employed and the exhaustive survey will cover those with 100 persons employed or more.

A pilot exercise for the 1997 reference year is being conducted in order to observe expenditure on environmental protection. This was done using the “long form” questionnaire of the intermediate census. At the time of writing data collection is still being carried out.

Remaining problems after the 1998 reference year

None foreseen at the present time.

Implementation plans for the 1999 reference year and after

There is a general movement towards a greater use of administrative data and hence a reduction in the number of questionnaires as well as more efficient and coordinated sampling to reduce response burden. There are also plans to try to speed up and improve the quality of results through selective editing of results for individual units that at the same time may contain errors and have a significant impact on the final results.

Luxembourg

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The survey system in industry and construction prior to the implementation of the SBS regulation was the same as it had been since the 1991 reference year. Separate questionnaires
were used for the industrial and construction sectors. Both questionnaires were sent annually to enterprises with 20 persons employed or more and to a sample of enterprises with less than 20 persons employed. The main unit was the enterprise. KAU data was collected in significant sectors (iron and steel, rubber and plastics). As well as other variables the surveys collected information on operating income and expenditure and employment.

In services several sector specific surveys were run with similar methodologies: survey of distribution, survey of hotels, restaurants and cafés, survey of transport activities (including travel agencies), survey of services and the survey of audio-visual services. Some of these date from the 1980s, but those concerning business services were more recently introduced. Most of these surveys were carried out on a multi-yearly basis, approximately every 5 years. None of these surveys used a cut-off threshold and hence enterprises of all sizes were included. The main statistical unit was the enterprise. The information collected concerned accounting data (generation-of-income account, profit-and-loss account), employment and hours actually worked, labour costs and sector specific questions. All of these surveys were carried out on a sample basis.

In addition to the surveys in services there was a special survey of large enterprises which was carried out every year and collected information on twenty or so large enterprises which together represented a large proportion of activity in the Luxembourg services economy (such as telecommunications and audio-visual services).

Changes and plans for the transition period: 1995-1998 reference years

A revised survey is being introduced to meet three requirements: the introduction of the SBS regulation, the new ESA and the planned introduction of a new general accounting plan. The underlying trend of these and other efforts is to ease life for small enterprises.

A new survey system was developed for the 1996 reference year. The questionnaires were different for NACE Rev. 1 Sections C-E, F, G, H, I, K & other services. There were also special questionnaires for non-banking financial activities and for financial auxiliaries. Enterprises of all sizes are covered but reduced questionnaires used for the sampled part of the population made up of enterprises with less than 50 employees or less than 280 million LUF (€7 million) annual turnover. Enterprises have the choice of completing the questionnaires or providing their published accounts to STATEC. This means there is a significant reduction of burden for respondents but a considerable increase in work for STATEC. Note that the introduction of this new survey since the 1996 reference year means that there has been an annual coverage of the service sectors for the first time. The questionnaires collect information on employment, income generation and the profit and loss account, balance sheet and investment. Minor changes to the questionnaire have been made for the 1997 reference year to take account of problems identified with the introduction of the new system in the 1996 reference year.

The annual survey of large enterprises has been retained in the same form as before.
Remaining problems after the 1998 reference year

The new survey system is expected to meet almost all of the requirements of the SBS regulation with only the question of the delay of data transmission remaining; it is unlikely that data will be provided within the 18 month delay for the 1999 reference year.

Implementation plans for the 1999 reference year and after

No changes are planned.

The Netherlands

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The main output/production survey in industry was changed for the 1994 reference year when the product statistics (now collected under PRODCOM) were separated and a new questionnaire introduced. The reporting unit used was the enterprise and the coverage was all activities in Sections D to F of NACE Rev. 1. In most but not all activities the size coverage was enterprises with at least 1 employee. Where this was not the case thresholds varied between 1 and 20 employees. When covered, enterprises with less than 20 employees in Sections D to E of NACE Rev. 1 were sampled as were construction enterprises with less than 50 employees. The survey was carried out annually.

The investment survey covered Sections C to F of NACE Rev. 1 for all enterprises with 10 or more employees. The survey was carried out annually. Sampling was only used for construction enterprises with less than 50 employees.

R&D and environmental protection expenditure were collected in separate surveys.

In services the production statistics covered annually Divisions 50, 51 (excluding Group 51.1), 52 (excluding Class 52.31), 55, 60, 61, 62, 63, 64, 71, 72, 74 (excluding Class 74.11 and Group 74.6). All sizes of enterprises were covered except for enterprises with less than 5 employees in NACE Rev. 1 Class 74.15 (holdings). All of these surveys were carried out annually. The survey unit was the enterprise. Sampling was used for enterprises with less than 20 employees, except for NACE Rev. 1 Class 74.15 where all enterprises with 5 employees or more were covered exhaustively.

In addition to these surveys organised by economic activity, the CBS produced labour account statistics on all activities and also business demography information derived from the business register.

Changes and plans for the transition period: 1995-1998 reference years

In industry questionnaires will be extended to cover NACE Rev. 1 Section C. For Section E enterprises with less than 20 employees will also be covered in a pilot survey to be conducted for the 1998 reference year. Note that in NACE Rev. 1 Section E these smaller units will be covered exhaustively rather than through sampling as used in other activities. Furthermore investment data will be collected via sampling for enterprises with less than 20 employees in Sections C to F.

For services, a number of different actions have been undertaken. A new survey was launched covering 1995 and 1996 reference years for NACE Rev. 1 Class 52.31. Group 51.1 has been included in the annual survey for the 1997 reference year.
Production of regional data started in the 1995 reference year.

The use of labour account statistics and the register for estimating business demographics have been extended in order to provide a complete picture meeting most of the requirements of the SBS regulation.

Remaining problems after the 1998 reference year

Information on the number of apprentices may not be available by the 1999 reference year nor on the births and deaths of enterprises; the level of detail poses problems for the latter two in particular.

Financial leasing is not yet covered for NACE Rev. 1 Divisions 51 and 52.

Sufficiently detailed and reliable preliminary results will only be available after 12 months.

The breakdown of results by the type of owner will not be available by the 1999 reference year.

Implementation plans for the 1999 reference year and after

The survey of small enterprises in NACE Rev. 1 Section E, piloted in 1998, is expected to be carried out as a regular survey from the 1999 reference year.

The questionnaire will be extended for NACE Rev. 1 Division 50 in the 1999 reference year to include extra variables.

The possible sources of data in NACE Rev. 1 Division 70 are a mixture of fiscal data (corporate tax) and annual accounts. The business register is the basis for the population. The latter has required a considerable amount of cleaning in order for it to be operational. Work is advanced on NACE Rev. 1 Group 70.3 and parts of NACE Rev. 1 Group 70.2 are already covered. It is expected that by the reference year 1999 data should be available for the whole Division.

Preliminary results will be available for the 1999 reference year based on early returns to the questionnaires in some activities and on short-term indicators in others, notably in services.

In general there are several ongoing projects related to quality (coherence between sources, common methods and tools) and to response burden (optimal use of administrative data) and these will continue. The aims of these projects are to increase efficiency and reduce burden. These projects will involve a greater use of EDI and replacing/supplementing statistical survey data by administrative data.

Austria

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The industrial data in Austria has been conducted on the basis of three annual surveys: the industrial survey, the construction survey and the electricity survey. There were no size class thresholds in these surveys. The surveys were exhaustive above 20 persons employed and there was sampling below this threshold except for the electricity survey which was exhaustive for all size classes.
These structural business statistics were complemented in the years 1976, 1983 and 1988 by exhaustive surveys (census of non-agricultural enterprises) in: trade, storage; hotels and restaurants; transport, communication; financial intermediation; private insurance and other services. Liberal professions such as the activities of doctors, lawyers, tax consultants, civil engineers and so on were not included. In these same years the annual sample survey in the small business manufacturing sector was also carried out as a complete survey.

The “Betrieb” (KAU/local KAU) was used as the main reporting unit. These surveys collected information on employment, wages and salaries, investment, stocks as well as detailed statistics on consumption.

Changes and plans for the transition period: 1995-1998 reference years

Starting with the 1995 reference year the surveys on industry and services have been treated in a highly coordinated manner. For the 1995 reference year a full census was carried out with a new series of questionnaires. This was done i) to allow adjustment to the ESA 95 ii) for the introduction of a new classification with 6 digits and iii) to establish a new register of enterprises. The new survey system since the 1995 reference year has been based on three units, the enterprise, the Betriebe (local KAU) and the local unit each with their own questionnaire. Different questionnaires are used in industry and construction; financial intermediation and distribution; services. The new questionnaires collect from enterprises all profit and loss information except for extra-ordinary income and expenditure, as well as information on employment, stocks (not for financial intermediation), R&D (industry and construction only), environmental protection expenditure (industry and construction only) and investment. In addition a smaller set of information is collected from local KAUs and local units. These questionnaires provide all of the information required by the SBS regulation.

No survey was carried out in the 1996 reference year and some aggregated estimates for a reduced set of variables were produced. Since the 1997 reference year an annual survey has been introduced that is essentially the same as the census carried out in the 1995 reference year but introduces 20% sampling for enterprises. 40 000 enterprises are included in the sample, depending on the homogeneity of the different strata (NACE Rev. 1 and size classes of persons employed). In order to distribute the response burden as equally as possible a new sample is drawn annually. On the basis of different size classes of turnover and persons employed a restricted set of variables is used for smaller enterprises. The same questionnaire has been used from 1997 as in the 1995 reference year with a small number of modifications.

The requirements of the SBS regulation in the sector of private insurance are entirely met by the data of the insurance supervisory authority. Data for the sector of financial intermediation are largely provided by the banking statistics of the Austrian central bank.

Remaining problems after the 1998 reference year

There are no plans to produce preliminary results.

There may be difficulties to meet the delays for the final results because companies often do not close their accounts until 12-15 months after the end of the reference period.

Implementation plans for the 1999 reference year and after

No changes are planned.
Portugal

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

In industry the Survey system prior to the implementation of the SBS regulation - up to 1994 reference year was based on 21 questionnaires distinguished by size and activity. The annual surveys covered enterprises of all sizes using sampling for enterprises below 20 employees. The surveys were based on the enterprise with additional information collected for other units. Despite the complete coverage results transmitted to Eurostat concerned enterprises with 100 employees or more for Sections C-E of NACE Rev. 1 and for enterprises with 20 employees or more for construction. The questionnaire collected information on income and expenditure in a profit and loss account format, the balance sheet, employment, R&D and environmental protection expenditure. Information was also collected on local units.

In services a similar survey existed to that in industry. Structural business statistics on the service sectors were built up since the 1987 reference year. The annual survey was enterprise based and collected data on income and expenditure in a profit and loss account format, the balance sheet and employment. Information was also collected on local units. Sampling was used for enterprises with less than 20 employees who received a simplified questionnaire.

Changes and plans for the transition period: 1995-1998 reference years

The 1996 reference year saw a new generation of questionnaires covering all sectors (including agriculture) except for financial services. These changes have been made to meet the requirements of the ESA, the SBS regulation, and national needs. The new annual survey has no size cut-off but has different questionnaires for enterprises with 20 employees or more and those below this threshold. These questionnaires have annexes that collect the sector specific information required by the SBS regulation. The survey is exhaustive for the enterprises in the sub-population 100 employees and more while sampling is used below this threshold. The reporting unit is the enterprise but there is also data collection for the establishment and for secondary activities. The information collected is similar to the old questionnaires and covers information on income and expenditure, the balance sheet, employment.

Remaining problems after the 1998 reference year

Production of KAU and local unit data is uncertain and is being studied as is the estimation of data for enterprises with less than 20 persons employed.

Difficulties are expected with the response burden and data quality for a number of variables that are not included in the national accounting plan.

Implementation plans for the 1999 reference year and after

Preliminary results will start as required for the 1999 reference year. R&D and environmental protection expenditure will be covered by the main annual business survey from 1999 as will the variables on “payments to agency workers”, “income from sub-contracting”, “investment in purchased software”.

The feasibility of providing size class breakdowns by employment will be studied, particularly for NACE Rev. 1 Sections G to K as will turnover size class breakdowns for distribution.
Finland

Survey system at the time of the adoption of the SBS regulation

Two parallel surveys operated in the industrial sectors prior to the 1995 reference year. The industrial statistics covered establishments with at least 5 persons employed in Sections C to E of NACE Rev. 1 as well as smaller ones with turnover comparable to units with between 5 and 10 persons employed. The survey was conducted every year. No sampling was used. Information was collected on employment, labour costs, income and expenditure, investment, stocks as well as product breakdowns of output and consumption. The financial statements statistics covered annually NACE Rev. 1 Sections C, D and F as well as NACE Rev. 1 Group 40.1. A size threshold of 5 persons employed was used except in construction where no threshold was used. The survey used sampling with exhaustive coverage starting for units with 100 persons employed in industry and 50 persons employed in construction. Information was collected on employment, the profit and loss statement, the balance sheet, investment and stocks. Separate questionnaires were used for construction and for large and small industrial enterprises. Only the data from the industrial statistics establishment surveys were sent to Eurostat.

Preliminary results were published after 5 months for large enterprises (those with 500 or more persons employed in NACE Rev. 1 Sections C-E and 50 or more persons employed in Section F). Establishment data was calculated after 7 months for some variables.

In the service sectors the only statistical survey used was the financial statements survey. This was an annual survey of enterprises. The activity coverage was NACE Rev. 1 Sections G, H, Classes 60.21, 60.23, 60.24, Division 61, Class 63.11, Groups 63.3, 63.4, 64.2, Division 72, Groups 74.1-74.4, 74.6 and 74.7. Enterprises of all sizes were covered except in Section H where a cut-off threshold of 50 employees was applied. The information collected in the surveys was accounting data (profit and loss account, balance sheet) investments and employment. The survey was exhaustive for the transport activities except for NACE Rev. 1 Class 60.24 (50 employee threshold). For the other activities it was exhaustive above thresholds varying between 20, 50 and 100 employees with sampling used below these thresholds.

In addition to the financial statement statistics administrative data has been used since 1995 to compile results for the service activities not covered by the survey.

Changes and plans for the transition period: 1995-1998 reference years

For the 1995 reference year the industrial statistics and the financial statements survey on industry and construction have been merged into one questionnaire. The questionnaire had already been revised based on the Commission’s proposal for the SBS regulation and so most of the new variables had already been added. For the 1995 reference period the threshold of the survey was 10 persons employed although units with lower employment were covered if their activity was comparable by other measures. The survey was supplemented by administrative data from the tax board. In addition all electricity producing enterprises were covered and industrial establishments of non-industrial enterprises with 20 persons employed or more. The new survey was a legal unit survey although there was an annex collecting information on establishments for multi-establishment units. The questionnaire was based on a profit and loss account and the detailed product statistics were still included. Data on the construction sector was transmitted to Eurostat for the 1995 reference year for the first time. The size threshold has been raised to 20 persons employed in NACE Rev. 1 Sections C-E in
the 1996 reference year. 1997 is the first reference year with a separate PRODCOM survey and hence the detailed product statistics have been removed from the structural survey. In addition an extra breakdown of investment required by the SBS regulation has been added.

Existing R&D statistics are used to provide the R&D variables required in the SBS regulation. These have been provided from the 1996 reference period onwards.

Since 1995 administrative data has been available for all service activities covered in a compulsory manner by the SBS regulation hence completing the coverage of Finnish service statistics. For the 1996 reference year a threshold was introduced for the surveys of 10 persons employed. This threshold has been raised to 20 persons employed for NACE Rev. 1 Section H and part of Section G. Administrative data is used instead of the survey for these small enterprises as well as for activities that are not covered by the survey. These changes in the coverage of the statistical survey mean that sampling is no longer used however a number of variables now need to be imputed.

Preliminary results are produced in a first stage for larger enterprises and in a second stage for enterprises of all sizes. Since 1997 some service activities have been included in these figures.

Remaining problems after the 1998 reference year

None identified at present.

Implementation plans for the 1999 reference year and after

For the 1999 reference year it is planned to extend the contents of the questionnaire in order to introduce the remaining variables required to meet the provisions of the SBS regulation for annual data. The multi-yearly characteristics for annex 3 of the SBS regulation will be added later.

Changes to the national company accounting laws will lead to changes in the questionnaires but are not expected to impact on data availability for structural business statistics. A greater harmonisation of tax and statistics collection is planned in order to allow a greater use of administrative data and hence reduce burden.

Continuous quality developments will be undertaken, particularly relating to imputations based on tax data.

Sweden

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

Two sources of industrial data ran in parallel in Sweden. The industrial statistics based on establishments covered NACE Rev. 1 Sections C and D. In addition there were similar special surveys on construction, gas supply and electricity and district heating. The industrial survey applied a threshold of 5 employees for LKAUs (belonging to enterprises with 10 employees). The electricity and district heating survey had a threshold of between 100 and 400KW capacity. The remaining surveys had no threshold. All surveys were annual. The observation units used were the local KAU for the industrial survey, the KAU for the gas supply survey, individual plants or power stations for electricity and district heating and the enterprise for construction. All of the surveys were exhaustive except for the construction survey where sampling was used for the sub-population of enterprises with less than 50 employees.
The financial accounts statistics were derived from annual reports and statistical questionnaires. All activities in NACE Rev. 1 Sections C-F (as well as others) were covered on an annual basis. The statistics covered all non-financial enterprises in the corporate sector. Sampling was used for enterprises with 20 employees or less. The information collected was on profit and loss accounts, the balance sheet and investment. Questionnaires were used for enterprises with 50 employees or more and published annual reports used for smaller enterprises. These published reports were either provided directly by enterprises themselves or taken from the National board of patents and registrations of trademarks.

For services, use was made entirely of the financial accounts statistics. As with the industrial sectors, questionnaires were used for enterprises with 50 employees or more and administrative records for smaller enterprises. The coverage was all service activities for which data transmission is compulsory in the SBS regulation except for NACE Rev. 1 Division 70. Sampling was used for the sub-population of enterprises with less than 50 employees.

Changes and plans for the transition period: 1995-1998 reference years

For the industrial sectors the detailed product statistics required for the PRODCOM survey were separated from the industrial statistics. A revised industrial statistics questionnaire without product statistics was introduced for the 1996 reference year. For the 1997 reference year the industrial statistics and the financial accounts have been merged into one questionnaire based on the enterprise with an insert sheet for each establishment. The new questionnaire is sent to enterprises with 50 or more employees. Over time the establishment insert will move towards a KAU insert. The coverage of this new survey includes construction. Administrative data continues to be used for small enterprises with less than 50 employees.

The business register is used in order to compile the demographic statistics. Existing surveys on R&D and employment are also used. A pilot study has been carried out to include the information on environmental protection in the main survey.

For services the financial accounts statistics have been exhaustive since the 1996 reference period. The activity coverage has been extended for the 1997 reference period to include NACE Rev. 1 Division 70.

For the 1995 and 1996 reference years preliminary results have been produced from the financial statistics for enterprises with 50 employees which had not undergone restructuration since the previous year. A more complete set of preliminary results are produced after 15 months, two months before the final results. For the 1998 reference year preliminary results will be produced according to the requirements of the SBS regulation.

Remaining problems after the 1998 reference year

None identified at present.

Implementation plans for the 1999 reference year and after

Regional construction and electricity, gas and water supply statistics are not collected. It will probably not be possible to collect these until the register is fully operational for the 1999 reference year.

From 1999 KAU and local KAU data will be collected from service enterprises.
The United Kingdom

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The survey system in industry prior to the implementation of the SBS regulation was based on 2 related surveys for the industrial (ACOP) and construction (ACOC) sectors with some minor differences for particular sectors (such as recycling, shipbuilding). The sectoral coverage of these surveys was NACE Rev. 1 Sections C-F. A size threshold of 20 persons employed had traditionally been applied in both surveys and this was eliminated over time by the introduction of sample surveys for the sub-population below 20 persons employed. Sampling was used below a threshold of 100 persons employed. Simplified questionnaires were used for small units. These questionnaires collected information on operating income and expenditure, employment, investment and stocks. The survey was based on enterprises or, when significant secondary activities exist, KAUs. In addition local unit data was collected from an annex to the main questionnaire.

In services there were surveys on the three main forms of distribution, on the catering industry, the property industry and other services. These surveys together covered NACE Rev. 1 Sections G and H, Groups 60.2, 60.3, Division 63, Class 64.12, Group 64.2 and Section K. Enterprises of all sizes were included. These surveys were all annual. The observation unit for all of them was the enterprise or a list of local units. All surveys used sampling with exhaustive coverage starting for units with an annual turnover of between £2 million and £5 million in services or between £10 million and £30 million in distribution.

Changes and plans for the transition period: 1995-1998 reference years

To meet the needs of the SBS regulation the ONS is creating a new survey called the ABI (Annual Business Inquiry) to replace the ACOP (Annual Census of Production), the ACOC (Annual census of Construction), the distribution survey and the annual surveys in the service sectors, as well as integrating the AES (Annual Employment Survey).

1995 reference year: The size thresholds for the ACOC and ACOP had been fully eliminated and hence these surveys covered enterprises of all sizes.

1996 reference year: The ACOP, ACOC, distribution and related services surveys were renamed the ABI. Information on financial leasing and part-time workers were added. Services coverage was extended to NACE Rev. 1 Group 60.1 and Divisions 62 and 63.

1997 reference year: A new ABI questionnaire was piloted parallel to the main survey which was based on the same questionnaire as the 1996 reference year. The pilot survey’s purpose was to test the new ABI questionnaire including the AES.

1998 reference year: The new ABI questionnaire is used as the main questionnaire. The new ABI in the 1998 reference year is therefore a seamless questionnaire covering industry and services. Some new variables required for the SBS regulation have been added to the questionnaire. The survey coverage was extended to NACE Rev. 1 Class 64.11. Smaller firms are asked to supply less information than larger ones.

In addition to the major work to put in place the ABI for which the timetable is given above, a number of other sources are used to produce SBS data. A specialist environment survey provides data on environmental protection expenditure and the first reference year for this was

11 Other activities were also covered that are not in the list of activities covered by the obligations of the SBS regulation.
1996. Regional data no longer comes from the annual employment survey but is derived from administrative data recorded on the business register.

Remaining problems after the 1998 reference year

There are no plans for the calculation of gross margin on goods for resale.

Implementation plans for the 1999 reference year and after

In the 1999 reference year there will be a further expansion of the data collection in order to introduce the remaining variables required for the SBS regulation. For example questions will be added referring to payments for agency workers, the number of apprentices, hours worked and purchases of energy products and investment in software.

The breakdown of investment by type of investment good will be derived from the quarterly investment surveys benchmarked on the total investment figures available from the ABI from the 1999 reference year. Preliminary results will be available from the 1999 reference year. NACE Rev. 1 Classes 66.01, 66.03 and Division 67 will be covered from 1999 reference year. The sampling techniques used will be refined to improve sampling.

Norway

Survey system prior to the implementation of the SBS regulation - up to 1994 reference year

The main sources of Norwegian industrial statistics were an industrial survey covering mining, quarrying and manufacturing, an electricity survey, district heating survey and a construction survey. The main observation units varied between surveys with the KAU, enterprise and establishment all being used. A threshold of 5 persons employed was used for mining, quarrying, manufacturing and construction. For the electricity survey a threshold of capacity of 100kW was used and in the district heating supply survey the threshold was a capacity of 1 MW. The surveys were all exhaustive except for construction where sampling was used to cover approximately 80% of the employment.

There were small, annual surveys in retail and wholesale trade and business services which provided a limited number of variables concerning employment and turnover.

Changes and plans for the transition period: 1995-1998 reference years

In industry the main change undertaken has been to modify the sampling plan for the construction survey. In addition structural business statistics will be produced from existing statistical and administrative sources for NACE Rev. 1 Group 40.1 and Division 41 from the 1998 reference period.

For the 1995 reference year an enterprise based survey was introduced for Sections G (distribution) and K (business services) of NACE Rev. 1. Published accounts are used instead of the survey for parts of 2 activities within Division 70 (real estate activities). In addition the statistical survey, enterprises are asked to provide a copy of their declaration of accounts for tax purposes. The survey covers distribution enterprises with more than 15 employees and business services with more than 5 employees. For the 1996 reference year the thresholds were removed and the coverage was extended to Section I of NACE Rev. 1 (transport). For the 1997 reference year the coverage was extended to Section H (hotels and restaurants). Throughout these three years modifications have been made to the list of variables.
Due to a major revision of the insurance statistics by the insurance supervisory authority (the Banking, Insurance and Securities Commission) and Statistics Norway, the requirements of the SBS regulation have been met from the 1998 reference year.

Remaining problems after the 1998 reference year

A number of variables specific to industry, such as leasing, environmental protection expenditure and investment in software are not yet available.

Preliminary results have not yet been put into place.

Implementation plans for the 1999 reference year and after

The main aim is to provide statistics for the full list of variables foreseen in the SBS regulation. In addition a greater use of administrative data is foreseen as well as attempts to set up common data collection with other administrations.

1.5 EUROPEAN IMPLEMENTATION

The implementation of the SBS regulation by the Commission has taken two distinct forms. Firstly a number of formal implementing measures have been laid down and secondly a number of actions have been undertaken that may lead to formal implementing measures in the future, that assist the Member States in their implementing efforts or are regarded as being necessary to ensure an effective implementation of the SBS regulation.

**Formal implementing measures**

The SBS regulation includes a procedure whereby the Commission, after consulting the Statistical Programme Committee, can modify provisions of the SBS regulation in the case of economic and technical developments. The SBS regulation lays down a number of specific areas where there are implementing measures to be determined.

Between the adoption of the text in 1996 and the time of drafting this report this procedure has been used for the following implementation aspects:

- definitions of the characteristics
- first reference year for the compilation of the preliminary results
- breakdown of results
- frequency of the compilation of the statistics
- appropriate technical format for the transmission of results
- transitional period and derogations from the provisions of the SBS regulation
- criteria for the evaluation of quality
Measures relating to all of these have been presented to the SPC and adopted as five Commission Regulations during 1998 and 1999.\textsuperscript{12}

Since the adoption of the insurance regulation in 1998 the same procedure has been used for definitions, standard specifications for the transmission of results, the technical transmission format and the derogations and Commission Regulations on these subjects were adopted in 1999.\textsuperscript{13}

**Ongoing implementation work foreseen in the SBS regulation**

**Quality**

Prior to the adoption of the SBS regulation the main concern for European structural business statistics was data availability. Attention to quality was given increased importance through Article 7 of the SBS regulation which requires an evaluation of quality to be carried out. The Commission has worked with the Member States in order to devise an extensive list of indicators relevant for the measurement of quality taking account of different collection methods. More information on the work that has been done in the area of quality can be found in part III of this report.

**Burden**

The SBS regulation explicitly mentions two aspects of response burden, namely reducing burden and assessing it.

Work on efforts to reduce response burden should focus essentially on the use and combination of administrative data, estimations and encouragement of sampling techniques such as rotating or multi-yearly samples. One of the ways of reducing burden is through the use of existing administrative data or by making better use of existing administrative standards. In January 1997 the Commission hosted a seminar on the use of administrative sources for statistical purposes\textsuperscript{14} and methodological work in this area continues.

Part IV of this report provides more information on efforts to reduce response burden and to evaluate it.


\textsuperscript{14} Proceedings of this seminar were published in 1997: ISBN 92-828-1151-4.
Pilot studies

As has already been noted, one of the main reasons for developing a new legal basis for structural business statistics was the lack of flexibility in the existing legal basis for industrial structural statistics. Hence, when the SBS regulation was drafted a broader flexibility was written into the legislation than the Directives that it replaced in order to make it possible for the legal basis to adapt to new requirements. One of the ways in which this was done was to develop the idea of pilot studies. The choice of subjects for pilot studies was based initially on the needs perceived at that time that were not met by the compulsory provisions of the SBS regulation and on the perception of likely needs in the medium term. Whilst these intentions were partially retained in the final list of pilot studies, several pilot studies were added because there was not agreement to include them in the compulsory provisions.

As more than five years have passed since the list of pilot studies was drafted in the Commission’s proposal for the SBS regulation Eurostat has also reopened discussions with users on their feelings on the usefulness of data on these prospective pilot study subjects. For example, developments in the political and economic framework such as the Communication from the Commission to the Council concerning ‘The Contribution of Business Services to Industrial Performance’ or the adoption of the Employment Guidelines have led to additional demands for the collection of data on characteristics that could not and were not foreseen when the Commission’s proposal was originally drafted.

For the pilot study subjects that were laid down in the SBS regulation a two-fold aim was foreseen. The studies were to be an evaluation of the technical feasibility of data collection and at the same time a study of the relation between usefulness on one hand and burden on respondents and costs on the other hand. The first step of the implementation of the pilot studies was laid down in the SBS regulation as a report to be made by all Member States to the Commission on actual data availability for each and every one of the subjects of the foreseen pilot studies. The extent to which this was done is summarised in the table below.

| Reports requested for industry and construction | 23 September 1996 |
| Received from Member States | Between 29/1/97 and 6/5/97 from Belgium, Germany, Greece, Spain, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden and the United Kingdom |
| Reports requested for all sectors | 29/6/98 |
| Received from Member States | Between 11/9/98 and 5/99 from all Member States. |

As can be seen from the table complete reports were only available some considerable time after the adoption of the SBS regulation. Eurostat has started to assess the current availability of data on each of the prospective pilot study subjects based on the information in these reports and from information made available through actions taken specifically for each subject.

Eurostat is discussing with Member States a programme of pilot studies based on the reports on current data availability and the needs expressed by users.

Eurostat has started methodological work with several Member States on a voluntary basis for several of these pilot studies. The current situation is very diverse and ranges from...
methodological work that is advanced (for example on sub-contracting and on the activities of other financial intermediation) to work that has gone no further than a review of current practices (for example regional investment in the service sectors). A brief summary is provided below for each of the pilot studies foreseen in the SBS regulation in the order that they appear in each of its annexes. Where common pilot study subjects appear in several annexes they are treated together.

Other financial intermediation activities (NACE Rev. 1 Group 65.2)

The work on this area started in December 1997 with 8 participating Member States (Austria, Belgium, Denmark, Ireland, Italy, Portugal, Sweden and the United Kingdom) who prepared detailed national reports illustrating the coverage, exhaustiveness, updating, and access to existing registers together with an assessment of compliance with respect to the requirements of the SBS regulation. These were provided at the end of 1998 and the beginning of 1999, an evaluation made and a number of proposals put forward. Amongst the conclusions and proposals are:

- it is feasible to cover NACE Rev. 1 Group 65.2 in structural business statistics and provisions should be prepared to include this Group within the compulsory coverage of the SBS regulation;

- the data requirements on these activities can, at least for the time being, be met by the provision of the common list of variables foreseen within annex 1 of the SBS regulation; moreover not all of these variables are required nor relevant for this Group although a final choice of which variables to be maintained is still to be made;

- more work is required on the definitions of some variables because of the specific nature of these activities;

- a regular voluntary data collection exercised was proposed and set up starting with the 1999 reference year.

Pension funding activities (NACE Rev. 1 Class 66.02)

Methodological work started on pension funding statistics in March 1997. Five Member States (Denmark, Ireland, Italy, the Netherlands and the United Kingdom) took part in identifying sources and developing methodology. A voluntary data collection exercise was undertaken with the participation of all EU and EEA countries except for France based on the 1997 reference year. As a consequence of this work an assessment of information that is available and needed has been made and a detailed specification of statistics on pension fund activities has been drawn up. Amongst the conclusions and proposals made after the evaluation of the data collection exercise the following can be noted:

- it is feasible to cover NACE Rev. 1 Class 66.02 in structural business statistics but it is recommended to restrict the coverage to closed autonomous pension funds in order to achieve a greater degree of homogeneity;

- the compilation of statistics on NACE Rev. 1 Class 66.02 will provide information on the enterprises active in pension funding, but will not be sufficient to provide information on the pension systems; the development of broader statistics on pension systems does not appear to fall within the scope of the SBS regulation.
Financial auxiliaries (NACE Rev. 1 Division 67)

The work on financial auxiliaries has been carried out in two separate phases. The first phase was launched in 1996 with ten participating Member States (Belgium, Denmark, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom) who investigated the availability of information in existing statistics/registers outside of the national statistical authority. After meetings held in 1996 and 1997, the work has been finalised and the results have been summarised in a report. These results show that many registers on financial auxiliaries are available nationally, however they are mainly designed for administrative purposes and hence the quantitative information included is normally low.

The second phase of the action started at the beginning of 1998 with eight participating Member States (the same as the first phase except for France and Germany) and concerned an extension of the first phase to include sources within the national statistics authorities. The main conclusions and proposals of the subsequent report were:

– various administrative registers covering financial auxiliaries do exist though the availability of quantitative information is often poor; it is however feasible to cover NACE Rev. 1 Division 67 in structural business statistics;

– the data requirements on these activities can, at least for the time being, be met by the provision of the common list of variables foreseen within annex 1 of the SBS regulation; moreover variables on the purchases of goods and services are regarded as being of minor relevance for this NACE Rev. 1 Division although a final choice of which variables to be maintained is still to be made;

– more work is required on the definitions of some variables particularly for fund and portfolio management services;

– a regular voluntary data collection exercised was proposed and set up starting with the 1999 reference year.

NACE Rev. 1 Sections M, N and O

It was decided not to restrict the feasibility study to market activities as the relative importance of market and non-market activities varies between Member States. The work has concentrated on an assessment of user needs (including the articulation between structural and functional statistics) and a survey of the availability of data in the Member States. A questionnaire on the subject of data availability has been completed by Denmark, Germany, France, Ireland, Italy, the Netherlands and Sweden. The results of this were analysed in a report presented in April 1999 and the principal conclusions were:

– the coverage in business registers and in particular the coverage of non-profit organisations constitutes the critical point in the development of these statistics;

– coverage of the activities is very uneven ranging from very good to extremely poor;

– the variables observed best across all classes relate to number of local units, number of enterprises, number of persons employed, number of employees and wages and salaries;

15 Section M covers education, Section N covers Health and social work and Section O covers other community, social and personal services. Notably Section O includes most audiovisual activities.
given the mixed character of several sectors (market, non-market and government units), special methodological efforts will have to be made.

The continuation of this work is likely to centre on further evaluation of user needs and data availability and on the need to set priorities for the development of these statistics taking account of developments concerning business registers.

Financial surplus

In 1997 Sweden, the United Kingdom and Norway participated in a meeting to look at the current practices and data availability of these variables in the sectors of industry and construction and discussed related methodological issues. The Norwegian statistics office has also provided a report on the national use of financial accounts statistics. An analysis of current data availability for this variable showed that, depending on the sector of the economy covered, only 3 or 4 of the 15 Member States do not already collect this information. During 1999 Member States have been asked to provide existing information on a voluntary basis in order to allow an assessment of data comparability. It has been recommended that, where data already exists, this aggregate indicator should be broken down into its two constituent parts, namely financial income and financial expenditure.

Breakdown of turnover and purchases of goods and services between intra and extra-Community markets

As the amount of cross-border trade is likely to differ considerably between domestic enterprises and foreign affiliates, the pilot study on these variables was previously linked to the work on Foreign Affiliates Trade Statistics (FATS). This has the disadvantage that results will only be available for Sections G to K of NACE Rev. 1. In the first phase of work on FATS only four Member States provided data on these cross-border variables. Data was limited and no specific evaluation of these cross-border variables was carried out; only summary figures were published. During the second phase of the work on FATS (1999-2000) in which eight Member States (Denmark, Spain, Ireland, Italy, the Netherlands, Finland, Sweden, and the United Kingdom) are participating, closer attention will be paid to the evaluation of the feasibility of collecting data on these four cross-border variables and their analytical potential. The reports on data availability from all Member States show that data on the four cross-border variables is available completely or partially in eight Member States (of which three are not participating in the FATS pilot study). As national availability of data on cross-border variables does not seem to be strongly correlated with data on foreign affiliates trade, a dissociation of the two projects is foreseen in the medium term. This would also allow an extension of the coverage to Sections C to F of NACE Rev. 1 to be considered.

Gross investment in tangible goods (regional data)

Up to now, no work has been carried out on this variable beyond an assessment of the reports provided by Member States concerning the availability of information.

16 Availability is limited in some cases to larger enterprises or certain activities.
Pilot action on FATS: Inward Foreign Affiliates Trade Statistics

Work in this area started in 1995, before the adoption of the SBS regulation, with nine Member States to look at Inward\textsuperscript{17} Foreign Affiliates Trade Statistics. The two main objectives were to test the methodology and the start of voluntary data collection. International Ownership in Trade and Service Activities – First findings of a study on foreign affiliates\textsuperscript{18} was published in 1998. This provided information on the importance of foreign affiliates in the European economy, the relative importance of foreign ownership situated within the EU and outside of the EU and the economic performance of foreign affiliates in comparison to domestic enterprises.

A second round of data collection was launched in 1998 with data supplied and results published during 1999. Eight Member States (Denmark, Spain, Ireland, Italy, the Netherlands, Finland, Sweden, and the United Kingdom) have participated in this second round. The aims were two-fold:

– on the methodological level, it is expected to clarify outstanding issues (such as the treatment of joint ventures) and to achieve a higher level of comparability of data;

– on the analytical level, a more detailed and more policy-oriented analysis was foreseen to address user needs related to the implementation of the GATS agreement, evaluation of the functioning of the internal market and a comparison of the competitiveness of domestic enterprises and foreign affiliates.

It is planned that work will continue on this area during 2000 to improve methodology as well as the analytical usefulness of the data in order to prepare a wider voluntary data collection in 2001. Reports from Member States show that other Member States are currently carrying out preparatory work in this area.

\textit{Income from ordinary activities, gross ordinary surplus, profit or loss for the year, purchase and sales of shares and participating interests}

Work on these characteristics has been done in conjunction with that on financial surplus. As already noted work started in 1997 to look at methods, definitions and data availability in the sectors of industry and construction. An analysis of current data availability showed that income from ordinary activities, gross ordinary surplus and profit or loss for the year were, like financial surplus, available for most of the EU Member States. Hence during 1999 Member States have been asked to provide existing information on a voluntary basis along with the information on financial surplus in order to allow an assessment of data comparability.

The two remaining variables concerning the purchases and sales of shares and participating interests, showed a much weaker data availability. The few Member States that do have this information available will be asked to provide it on a voluntary basis and this existing data will be evaluated before a decision on further work will be taken.

\textsuperscript{17} Inward FATS concerns affiliates in Member States owned/controlled by companies from countries other than where the affiliate is registered. Outward FATS concerns the foreign affiliates owned/controlled by companies resident in EU Member States.

\textsuperscript{18} ISBN 92-828-3683-5
Intangibles (rights, marketing, software)

From the data availability reports it appears that data availability varies greatly between variables and between Member States with the characteristics on marketing expenditure and purchased software being the most readily available.

The majority of the work that has been undertaken in this area relates to defining intangibles for statistical purposes and trying to convert the somewhat theoretical definitions into practical ones that can be used in data collection exercises. A set of definitions for expenditure on individual intangible items was drawn up in 1997 and 1998 and work has started to render these definitions usable by simplification and the adoption of various assumptions. As a complement to this work a report on the definitions of intangibles has been commissioned and provided by Statistics Netherlands 19. The work that remains to be done in this area includes:

– continued reflection and revision of the theoretical concepts underpinning the area of expenditure on intangibles, particularly expenditure of an investment nature;

– further identification of simplifications, restrictions or approximations that need to be made to the definitions in order to make data collection feasible;

– testing of definitions at a national level, notably on marketing and software;

– further clarification of the varied user needs.

Pilot studies on environmental protection

The variables concerning investment in equipment and plant linked to cleaner technology and total current expenditure on environmental protection are subject to pilot studies. Seven Member States (Belgium, Germany, Greece, the Netherlands, Austria, Portugal and Finland), have already implemented regular environmental surveys for these two variables and France has implemented a regular survey for the first of them. Four of the remaining Member States (Spain, Italy, Sweden and the United Kingdom) are expected to have regular specific environmental surveys for these two variables in the future and France has collected the current expenditure variable in a special survey conducted for the 1995 reference year.

Income from subcontracting

Work has been carried out by Eurostat and the national statistical authorities in a number of Member States concentrating mainly on the feasibility of data collection in this area. This has looked in particular at the development of a practical definition of sub-contracting which could be understood in a similar fashion by all parties to subcontracting regardless of the country and the sector concerned. This has been limited to manufacturing industries and hence has not covered the important area of construction where work remains to be done. The result of this work has been the refinement of a definition for statistical purposes which can be used for most industrial sectors and on which there is general agreement. With respect to the feasibility of collecting data on income from sub-contracting, the report on this work notes that the voluntary data collection has revealed that, although sub-contracting is a complex concept and one that is difficult to grasp, the collection of data on the characteristic of

19 Intangible investments: Definition and data source for technological, marketing, IT and organisational activities and rights; Voorburg 1998 (LNM-reeks 9803).
“income from subcontracting” (using a broader definition than labour-only sub-contracting) is a viable proposition from the methodological standpoint. This is subject to some changes in the definitions used and coverage of a few special situations which have been taken into account in the proposed definition. The report goes on to note that the extra cost related to the introduction of the variable on income from sub-contracting should not lead to a major cost increase for the NSIs. It is conceivable that the burden that the collection of this information would place on respondents varies depending on the extent to which sub-contracting is recorded in each Member State’s company accounting standards and the way in which this is done. Judging by the relatively encouraging response rates to the voluntary data collection, the collection of this information does not seem to represent a prohibitive burden for enterprises. A number of doubts about this have been expressed by some statistical authorities which did not take part in the data collection exercise. Clearly a certain number of real difficulties do exist. However the experience of the statistical authorities that have conducted these surveys themselves and the work carried out by private consultants in the context of this data collection exercise show that, despite these difficulties, the collection of the variable on the income from sub-contracting is feasible without a disproportionate increase in costs for the NSI or the burden for surveyed enterprises.

From the reports on data availability sent by the Member States three countries do not have data on income from subcontracting. Five countries have this data available and six countries have partial coverage or have information on a similar characteristics but with a different definition. Voluntary data collection of existing data was launched for industrial activities for the 1999 reference year with the proposal that this information should be broken down by size class. A decision on further work in this field will be taken after the analysis of this data.

Breakdown of operating cost

These characteristics which are specific to distributive trades are listed in annex 3 of the SBS regulation as optional multi-yearly characteristics and as subjects for pilot studies. Definitions have been established for these characteristics and laid down in the appropriate Commission Regulation. No specific actions have been taken to develop methodological work in this area.

Information on trading forms and on types of suppliers and customers

These characteristics which are specific to distributive trades are listed in annex 3 of the SBS regulation as optional multi-yearly characteristics and as subjects for pilot studies. A detailed study of the feasibility of data collection in these areas was launched in eight Member States (Denmark, Germany, Greece, Spain, France, the Netherlands, Sweden and the United Kingdom) at the beginning of 1999. The results of these studies were available by the second half of 1999 and these reports will be studied before a decision is made on the need or otherwise for further methodological work.

Conclusions on pilot studies

In the light of the above, Eurostat proposes to extend the timeframe for the execution of pilot studies beyond the 1998 reference year laid down in the SBS regulation to establish programme for the execution of pilot studies to be reviewed annually. This rolling work programme should result from a priority list for the development of the Regulation based on user needs for additional data, current availability of data in Member States and the lead time necessary for the development of certain areas. Such a work programme has been discussed with Member States at the end of October 1999.
Definitions

Definitions have not yet been established for a number of the multi-yearly characteristics laid down in the SBS regulation.

The work on definitions for rights and software started in 1997 as part of a wider methodological work on intangible expenditure. Definitions have been drafted but have not been finalised. Data collection should have taken place in all Member States for the 1997 reference period although several Member States have derogations for these characteristics. The results of the data collection will need to be evaluated and it is likely that the definitions will need to be revised before they can be adopted.

Plans for establishing an operational definition of sub-contracting to be used in the construction activities have been laid down during 1999 and it is expected that this work should be completed during the course of 2000.

Work on the development of a definition for the breakdown of turnover by product for distribution activities started in 1997. A provisional definition was agreed with the national statistical authorities for retail trade. Data collection for this sector has started in a large number of countries for reference year 1997 with support from the Commission. In 1999 a provisional definition was agreed for wholesale trade and data collection for the 1998 reference year will now take place. Once the data collection exercises have been completed the feasibility of these provisional definitions will be assessed and they will be refined before definitive definitions are adopted. A similar exercise is planned for the motor trade sector with collection in the 2000 reference period.

National implementation of definitions

As shown in part 2.3 of this report the availability of data has improved considerably since the adoption of the SBS regulation. For the compulsory, annual statistics much of the attention of Eurostat will be redirected from implementation and availability towards an assessment of the comparability between Member States’ data. One aspect of this that merits particular attention is the definition of variables. This impacts on data comparability in two distinct ways. Firstly, an evaluation of the degree to which definitions have been applied or whether there are still discrepancies between the agreed European definitions and the ones used nationally can be performed. Secondly, a more complicated analysis of socio-economic differences between countries may show that the underlying concepts being measured by seemingly comparable definitions are in fact different. A further discussion of these problems is raised in part 2.5 of this report.

Monitoring of implementation

Regular contacts will need to be maintained with Member States in order to monitor the implementation nationally of the SBS regulation and to assist them from a methodological standpoint where possible. This will be particularly important for the multi-yearly statistics foreseen in annexes 2, 3 and 4 of the SBS regulation for which the first reference year in all cases is 1997. Several Member States have required derogations for each of these characteristics. Whereas most attention since the adoption of the SBS regulation has been paid to the implementation of the annual characteristics greater attention will be needed during the next three years to ensure that these multi-yearly characteristics are properly implemented.
Documentation of methodology

In the early 1990’s Eurostat set up a project to document in detail the data collection practices in industrial structural statistics. In the mid 1990’s a parallel exercise was developed for services structural statistics. As a consequence of the implementation of the SBS regulation covering in a similar fashion all business sectors these two projects have been harmonised in terms of the methodological information collected and have been subsequently integrated. During 1999 a common updating of the information contained on the methodological practices in the Member States was carried out for the first time. This information is disseminated commercially off-line (CD-ROM) and free of charge via the internet. The information collected through these exercises has contributed towards providing the information contained in part 1.4 of this report.

General implementation work

Estimations

The SBS regulation acknowledges a wide range of user’s needs for structural business statistics data and also that these data should be drawn up with speed. At the same time it permits a four year transition period during which derogations are possible. In practice it has proved necessary for all Member States to use derogations to a greater or lesser extent. Whilst the derogations that have been granted to Member States have covered many different provisions of the SBS regulation, the provision of preliminary results and the 18 months delay for final results have figured in most countries derogations. In order to provide data for users for those countries that have not been able to provide preliminary results or to respect the required delays for final results Eurostat has continued to develop and perform estimation procedures where sufficiently robust methods are available. Although these estimates have not been produced within six months of the end of the reference period as planned they have been produced within the 10 month delay foreseen for preliminary results. These estimates (or nowcasts\(^{20}\)) are made for 7 variables for the most recent completed reference period for manufacturing industry to the 3-digit level of NACE Rev. 1 for most EU Member States where necessary, the EU-15 total and for US and Japan. These nowcasts will be extended to other activities (for example distributive trades and services) according to the availability of the auxiliary information which is needed. Some Member States have also acknowledged the need to provide data earlier and transmit provisional results which are later revised.

Methodology on preliminary results

At the time of the adoption of the SBS regulation the importance and difficulties of providing the preliminary results required by the SBS Regulation was recognised by many of the national statistical authorities and by Eurostat. However, despite starting work to develop and diffuse best practice in this area, Eurostat has not succeeded in providing the methodological support requested by Member States. It is likely that Eurostat will need to relaunch efforts in this area during the next few years if significant progress is to be made in this important area.

\(^{20}\) The term nowcast is used here to describe an estimate of the recent past for which data (in this case final structural data) is not yet available. As such these nowcasts of SBS data often rely on the availability of monthly or quarterly data for the reference period being nowcasted. Nowcasts differ from forecasts as the former refer to the recent past and the latter are concerned with the future.
Confidentiality

One of Eurostat’s main objectives is the publication of data for the EU as a whole. Before the implementation of the Regulation concerning structural business statistics, only six Member States used to transmit confidential data to Eurostat (count as of 1994 reference period). The introduction of the SBS regulation obliged Member States to transmit confidential data to Eurostat, thus solving in theory the problem of calculation of EU totals although the question of accidental disclosure through derivation (non treatment of secondary confidential data) still needs to be addressed. The problem of confidentiality in the case of structural business statistics is complicated due to the fact that data for all levels of NACE Rev. 1 are published and NACE Rev. 1 is a hierarchical classification (the data of the higher levels being sub-totals of the levels below). In the case of the cross classification of enterprises by principal activity, country and size with totals being calculated for each dimension the treatment of confidentiality becomes very complex and the calculation of EU totals remains difficult. Hence it can be said that the provision of nationally confidential data was a necessary condition for producing EU-15 totals, given that there are confidential data, but that this improvement brought about by the adoption of the SBS regulation was not sufficient to make EU totals available across all activities.\(^2^1\)

Eurostat has continued work on confidentiality which had started prior to the adoption of the SBS regulation. This work has culminated in a draft charter on confidentiality for structural business statistics. The objectives of the charter are to achieve a compatible treatment of confidentiality in the Member States and in Eurostat and so to define rules concerning the publication of EU totals in order to avoid accidental disclosure in the combination of national and European publications. The work on methods for identifying primary and secondary confidentiality will continue and it is intended to update the charter on confidentiality to take account of general changes to European statistical confidentiality. Eurostat’s intention is to propose a new agreement to the Member States, taking into account national rules of confidentiality, with the aim of increasing noticeably the amount of information published. In the context of such an agreement one possibility is to reassess the balance between the availability of national data and EU totals and between the dissemination of detailed or aggregated data.

Statistical units

Statistical units play a central role in all business statistics as well as in national accounts and some social statistics. This is reflected in the SBS regulation where the scope of the regulation is determined jointly by the classification of activities and reference to a list of types of statistical units. For the compilation of non-regional statistics two types of unit are used, namely the enterprise which is used in all annexes of the SBS regulation and the kind-of-activity unit used in annexes 2 and 4 for industry and construction. The use of these two units, and the extent to which high quality statistics are compiled for them, has been a topic of discussion and methodological work for some time. This work will continue. A more detailed discussion of these problems is raised in part 2.5 of this report.

\(^2^1\) For a quantitative assessment of the impact of confidential data on data availability refer to part 2.4 of this report.
1.6 FORESEEN DEVELOPMENTS

The main concern for the near future is the achievement of the full implementation of the SBS regulation with the aim of enabling the Commission to produce high quality aggregate figures for the European Union within a reasonable time span after the end of the reference period. However, if structural business statistics are to remain up-to-date and relevant they have to adapt continuously to changes. This principle was recognised in Article 12 of the SBS regulation, which explicitly refers to “measures for adjustment to economic and technical developments”. In a context of limited financial and human resources this principle need for adaptation may be considered as conflicting with the concern for the full implementation of the Regulation.

The developments of structural business statistics in response to economic and technical developments that have been made in the past and that can be foreseen in the future can be achieved in several ways. The first is through a non binding agreement which is the traditional method that has been used for a great deal of development in industrial and services structural statistics in the past. The second is through the Comitology procedure laid down in the SBS regulation. The third is via an amendment to the SBS regulation by another Council Regulation (as has already been used to add annex 5 on insurance statistics). These three solutions need not be mutually exclusive and it is possible to imagine a first stage of development through a non-binding agreement, followed at a later stage, if necessary, by a legal basis for those developments that concern long-term, stable data needs.

The following elements are required for such development to be undertaken successfully:

– recognition by suppliers and users of data of the necessity of development;
– constant attention to the changing needs of users, in EU institutions, nationally and regionally;
– constant attention to changes in production methods, employment patterns and business relations;
– priority setting within resource constraints.

Eurostat will, in cooperation with the national statistical authorities, set up a three year work programme for the development of structural business statistics based on an assessment of user needs which will incorporate remaining work on the subjects of the pilot studies foreseen in the SBS regulation as well as looking at other subjects of importance. The work on each subject to be treated starts with an inventory of existing data, followed by a voluntary collection of existing data and information on methodology which will be evaluated with a view to determining the degree of existing coverage and comparability in comparison to users’ needs. Based on this analysis, and wherever appropriate, the methodology for a harmonised voluntary data collection will be drawn up in collaboration with Member States and tested via a feasibility study in as many Member States as possible. In the event of a positive outcome a harmonised voluntary data collection will be undertaken in all Member States. As a last step, a legal basis could be created, if considered desirable by the Member States.
The subject areas that have been identified as most important for development work during the next year, include statistics on business services and business demography\textsuperscript{22}.

Bearing in mind the present state of progress on pilot studies and other structural business statistics development work it is possible to give a provisional indication of work that is likely to be completed in the near future. During 2000 and 2001 it is intended that the Commission will prepare a number of proposals for amendments to the SBS regulation, notably concerning financial intermediation, pension funding, activities auxiliary to financial intermediation and the strengthening of the list of characteristics to be used to observe business expenditure on environmental protection.

\textsuperscript{22} Characteristics relating to the dynamics of the business community, such as start-up rates and survival rates as well as the impact on employment of business demographic events.
PART II

Dissemination and use of data

2.1 SUMMARY OF PART II

Users

The central objective of European structural business statistics is to supply information on the structure, activity, competitiveness and performance of the European business community. Enterprise policies and policies on industry at the Community level are the main users of these statistics. The design and effectiveness of the instruments employed will depend on detailed sectoral monitoring of structural variables with a view, in particular, to assessing the various aspects of the competitiveness and economic viability of Community businesses. Other policy areas that need structural business statistics are:

- employment policies
- environment policy

Businesses use information on the competitive situation of their own industrial sector and information on the industrial sectors of their suppliers and clients. Trade and professional associations play an influential role in the transmission of information from statistical institutions to their members. In addition to these Commission and business users, structural business statistics are used by research bodies, often to provide information to influence policy development and to measure the impact of planned and existing policies as well as for professional research. Educational institutes also use business data for academic research.

Ability of the SBS regulation to meet the needs of users

The main criticism for the industrial sectors is the freshness of the data. This may be due to data production taking longer in Member States and the Commission or to changes in estimation methods for data that is missing or slow to be delivered. In services the SBS regulation has improved the situation in all ways: data is available for more countries, there is greater coverage of service activities, more variables available, fresher data.

Dissemination

Eurostat disseminates structural business statistics through on-line databases (notably the SBS domain of New Cronos), off-line electronic dissemination (CD-ROM) and paper. A number of changes to the dissemination have been undertaken because of wider changes in Eurostat’s dissemination policy, technological advances and the arrival of larger volumes of data through the SBS regulation. The most notable change has been the replacement of paper publications containing standardised tabulations by electronic dissemination through Eurostat’s reference database. The Commission has been able to develop more analytical paper publications derived from the SBS data.

Data for industrial sectors continues to be published within the Monthly Panorama of European Business as was done prior to the SBS regulation. In the service sectors, the first results from the SBS regulation were published in Services in Europe 1998. This has been
produced again in 1999 along with Distributive trades in Europe, Insurance in Europe, Banking in Europe and Business services in Europe. Since the beginning of 1997 Eurostat has also published over 20 small publications, known as Statistics in Focus. Structural business statistics data are also included in a number of other publications, notably the annual Panorama of European Business. Germany and the United Kingdom are known to use European structural business statistics in their national publications and Eurostat will encourage a wider use nationally of European structural business statistics.

Data availability

There has been a dramatic improvement in the volume of data available during the early part of the transition period foreseen in the SBS regulation. All countries have seen an overall improvement in their position. With only one exception availability has more than doubled in each country between 1994 and 1996. By the 1996 reference year every country except one was already providing more than half of the data foreseen in annex 1 of the SBS regulation. The following analysis was carried out in January 2000, approximately three years after the end of the 1996 reference period.

Mining and quarrying: data availability improved in all countries except for Italy where it stayed stable at a figure which is still above the median value for the EU. Manufacturing: the percentage of results published are high across all countries. The lowest figures tend to be in smaller countries that have relatively large number of confidential data. Energy supply: data availability has generally improved, particularly so in Denmark but the situation has worsened in France and Italy.

Construction: no data is published for any of these key variables for four countries, Greece, Spain, Sweden and Norway, but data availability has improved in every other country. Distribution: no data was available in 1996 for Greece and Spain. Data availability for Belgium, France, Ireland, Italy, Luxembourg, Austria, Finland and Norway has also made significant progress.

Hotels and restaurants: improvements in several countries. No data is available for Denmark, Greece and Norway.

Transport and communication: no data for Greece and Norway. All other countries have seen improvements in their data availability between 1994 and 1996 particularly Italy, Austria and Finland which have gone from no data to more than 70% data availability. Financial intermediation: availability is particularly good with Belgium, Denmark and Portugal providing all of the data.

Business services: greater improvement than some sections but still two countries, Denmark and Greece for which no data is available.

Despite these great improvements in the volume of data that is publicly available it is still extremely rare for data to be available for all 15 EU Member States at the same time. In 1996 EU totals were available for 7 of 23 manufacturing Divisions of NACE Rev. 1 for turnover and production value. Data for at least one Member State is always unavailable at the more detailed Group and Class levels within manufacturing and at all levels of the Sections other than manufacturing.

The NACE Rev. 1 Sections where there are the largest proportion of weak Classes in terms of data being available for only a few Member States are energy supply, mining and quarrying.
and transport and communication. The weakest activity of all is the Class of national post activities (NACE Rev. 1 Class 64.11).

None of the SBS regulation annex 1 variables are regarded as being weak. However in the annexes 2, 3 and 4 of the SBS regulation the following variables are rarely available:

- R&D expenditure and R&D personnel;
- number of apprentices.

**Freshness**

Delays in data transmission should be seen in the light of several countries setting up new survey systems in the service sectors or carrying out major changes to existing systems. Despite this, delays have in general fallen between 1995 and 1996.

**Confidentiality**

The problem of confidentiality is currently particularly acute in manufacturing and less problematic elsewhere as there are few other activities where all 15 Member States provide data or can be reliable estimated. An evaluation of the manufacturing Groups (3-digit level of the classification) for 1996 data has shown that, for a variable such as value added, generally less than 50% of the Groups can be disseminated, not because of data unavailability, but just because of confidentiality. Solutions require reflection on the balance between the availability of national data and EU totals and between the dissemination of detailed or aggregated data. A new agreement on confidential data has to be found between the Member States and Eurostat in order to improve substantially the amount of information which can be disseminated to users.

**Methodological problems**

A number of methodological questions still need to be addressed in order to improve the comparability of data. Amongst these the following are recognised as particularly important:

- the definition of and distinction between legal units, enterprises and KAUs and their availability in statistical business registers and use in administrative data and standards;
- use of cut-off thresholds excluding parts of the business population from statistical results;
- availability of employment information to classify units by size;
- implementation and application of definitions of variables;
- comparisons of similar data compiled for different sources, notably for short-term business statistics and social statistics.
2.2 DATA USERS

Community policies

The central objective of European business statistics is to supply necessary information on the structure, activity, competitiveness and performance of the European business community in order to permit accurate, up-to-date analyses of performance and economic trends in sectors. Enterprise policies and policies on industry at Community level are both general and sectoral in scope. The key objective of these policies is to promote the competitiveness of European industry. Based on the priorities of the White Paper on Growth, Competitiveness and Employment, the main areas of action are intangible investment, industrial cooperation and strengthening of competition. The design and effectiveness of the instruments employed will depend on detailed sectoral monitoring of structural variables with a view, in particular, to assessing the various aspects of the competitiveness and economic viability of Community businesses.

Commerce is a good example of a sector for which specific actions are foreseen which are laid down in the White Paper on Commerce adopted in January 1999\(^{23}\). The actions proposed for this sector, which fall within the general context of enterprise policy, concern i) improving policy instruments to assist commerce ii) improving the administrative, legislative and financial environment iii) strengthening competitiveness and promoting entrepreneurship and iv) encouraging internationalisation. The domains in which these are of particular interest are electronic commerce and regional and urban commercial infrastructure. The use of statistics is mainly to try to observe change in the way commerce is carried out and to look at the employment impact. In order to do this information is required on the relation between commercial enterprises and also between commercial enterprises and producers.

As well as these basic industry and enterprise policies structural business statistics are used in policy development and monitoring in a number of other more specific areas.

The environment framework programmes concerning sustainable development inevitably link business statistics and environment statistics both in terms of the environmental impact of businesses and the effort made by businesses to limit or reduce the effects on the environment of their activity. Sustainable development also depends to an extent on the use of different fuel types. Some of the most intensive energy consumers are found in the industrial sectors. Finally eco-products and eco-industries are seen as areas that have the potential to create employment and information on the size of their markets and activity are needed.

A statistical analysis focusing on a comparison between domestic enterprises on the one hand and foreign affiliates owned from outside the EU on the other hand can shed light on the functioning of the internal market, the extent of the globalisation of the economy, on the degree of implementation of the GATS\(^{24}\) and the competitiveness of EU-owned enterprises with enterprises owned by the European Union’s main trading partners. In its annual report on the Functioning of product, services and capital markets in the European Union (so-called Cardiff I report), the European Commission was asked to evaluate the effectiveness of the legal framework with a particular view to detecting problem areas. This report concentrates on an evaluation of the actual situation (rather than the legal aspects) and thus needs to draw heavily on statistical information.

\(^{23}\) COM(1999) 6 final of 27.1.1999
\(^{24}\) General agreement on trade in services
Use by business and business associations

Businesses require information on the competitive situation of their own industrial sector and information on the industrial sectors of their suppliers and clients. Businesses may access European structural business statistics directly from Commission products (databases, off-line electronic products and paper products) or via intermediaries. In the latter case European trade associations play an influential role in the transmission of statistical information from statistical institutions to their members. Many have a statistical capability through which they compile data from many sources, including structural business statistics, and provide their members with information specific to their activity. The main reasons for European trade associations to use Eurostat data are that they are relatively standardised and available for a large number of countries. Alternative sources used by some trade associations are OECD and United Nations data.

Assessing the impact of the introduction of the SBS regulation on the usefulness of the data for the business community is different in industry and in services. In the view of several European trade associations that have recently been consulted, the position concerning the availability of European structural business statistics in industry has not improved considerably since the introduction of the SBS regulation. The extent to which this can be attributed to temporary problems related to disruption to production and dissemination methods will only be clear once the implementation phase has been completed\(^25\), although it already appears that these problems are reducing. In particular the main criticism, which has been a lack of freshness in the data, has been addressed in that the speed of data delivery from Member States (see table 4 in annex 3) and the time taken for quality checking and data treatment by the Commission are improving. In addition a greater availability of data in terms of variables and activities covered can be noticed. There have been further improvements which are less readily observed by users, notably a greater comparability of data as most size thresholds have now been removed and also better quality of the data due to more rigorous data controls.

Prior to the introduction of the SBS regulation there were no harmonised services statistics. Hence the SBS regulation has improved the situation in all ways: data is available for more countries, there is greater coverage of service activities, more variables available, fresher data. Allied with changes in data treatment and dissemination within the Commission there has also been an improvement in access to databases and in the quantity and quality of descriptive analysis of the service sectors as well as more transparency in methods through better documentation of methods. Problems do remain, mainly due to several countries not having yet fully implemented the SBS regulation. Hence it is never possible to create EU totals for service activities and data for some countries is still provided very late.

One general criticism that is often made of structural business statistics, regardless of whether it concerns industry or services, and which is not directly related to the SBS regulation, is the interest of analysis in similar data for countries outside of the EU.

Dissemination to respondents

A number of Member States return aggregated results to enterprises than have participated in surveys on a systematic basis or on request. In Germany respondents receive tabular results in

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\(^{25}\) Table 4 of annex 3 of this report gives an indication of how delivery delays from Member States have changed over recent years.
industry, construction and transport. In Denmark, Greece and Norway information is returned to respondents only on request. In Spain, respondents to the main industrial inquiry receive personalised information comparing themselves to similar units; in 1999 seven thousand units received this information. A similar system has been in place in Finland since 1989. In Sweden and Ireland some key indicators are provided to respondents. Both Austria and Portugal both have plans to introduce such a dissemination scheme in the future. France is progressively implementing a policy of systematically returning information, either personalised or statistical, to every enterprise responding to every statistical survey; this started many years ago in the manufacturing industry.

2.3 DATA

Data dissemination

The SBS regulation acknowledged the need for structural business statistics from many different users. The adoption of this Regulation has provided an opportunity to review the dissemination of structural business statistics to these users and its implementation has made this necessary through the increased availability of data. This review has taken place during a period in which the possibilities for dissemination have changed significantly and in which the dissemination policy of Eurostat as a whole has been reviewed. In business statistics the use of paper publications has been studied and to a more limited extent also off-line electronic publications. One of the main conclusions of this review was that there was a lack of a clear differentiation and clear structure of the publications, notably distinguishing between statistical publications, methodological manuals and other publications. The aim in the future is to differentiate products between generalists and specialists on one hand and between methodological publications or data/analysis publications on the other.

In practice, since the adoption of the Regulation, data has been received for the 1995 and 1996 reference years from all Member States and for 1997 from most of them. Eurostat has disseminated this data through 3 media which were on-line databases, off-line electronic dissemination (CD-ROM) and paper. Significant changes have been made in all three of these media to provide an efficient dissemination of structural business statistics data and these changes have coincided with the implementation of the SBS regulation. The most notable change has been the replacement of paper publications containing standardised tabulations by electronic dissemination through Eurostat’s reference database called New Cronos which is accessible on-line via the internet and off-line through regular CD-ROM publications. This reduced need for bulky publications of tabulations has allowed room for the Commission to develop more analytical paper publications derived from the SBS data.

The data for the industrial sectors continues to be published within the Monthly Panorama of European Business as was done prior to the SBS regulation. A few activities are covered each month on a rotating basis with most activities being selected once during the course of a year. During 1998 this publication was enlarged to cover also the service activities.

In the service sectors, based on the 1995 results, Eurostat produced in cooperation with other Commission services one analytical publication, namely Services in Europe 1998. This has been produced again in 1999 and Distributive trades in Europe 1999, Insurance in Europe 1999, Banking in Europe 1999 and Business services in Europe 1999 have been added to this series using data from 1996 and 1997 reference years. These services and distributive trades publications generally replace earlier publications based on unharmonised data which concentrated on analysing individual countries rather than making sectoral comparisons between countries. The new series of publications provide users with an interpretation of the
data and a small amount of carefully chosen data. The analysis is sometimes also available on CD-ROM accompanied by a more complete database.

Further rationalisation of the paper publications programme is planned for 2000 when data for 1997 and 1998 reference years will be published. This may include an extension of the annual publications to cover industry as well as services.

Eurostat also publishes a large number of small publications (maximum 8 pages) on specific subjects, known as Statistics in Focus. These short publications provide either a detailed study of a narrow range of activities or a general overview of the latest data which will then normally be analysed in greater depth in one of the annual analytical publications. The production of these small publications based on structural business statistics has increased since 1997 when only five were produced. Eight of these publications were produced in 1998 and nine in 1999.

Structural business statistics data are also included in a number of other publications, notably the annual Panorama of European Business.

Germany and the United Kingdom are known to use European structural business statistics in their national publications. Eurostat will encourage other Member States to follow this approach and to disseminate non-confidential EU structural business statistics data alongside national data.

Data availability

Volume of data

A simple count of the number of records available in New Cronos does not provide a satisfactory measure of data availability, however changes in the volume can give a first impression of major changes in data availability. Table 1 in annex 3 shows the percentage of records which can be published for each EU Member State and for Norway after confidentiality has been treated. This information is provided for each NACE Rev. 1 Section for the years 1994 and 1996, in other words prior to the SBS regulation and two years into its implementation. The final row shows the percentage availability for all relevant Sections combined. In order to ensure a representative comparison between years these calculations of the volume of data have been based on the list of annual enterprise characteristics contained in annex 1 of the SBS regulation, for the list of activities specified in Section 9 of the same annex. Note that the table shows data availability after treatment for errors and for confidentiality; countries may provide more data that can not be published. This analysis was carried out in January 2000, a little more than three years after the end of the 1996 reference period.

The simple analysis provided by table 1 of annex 3 of this report displays clearly that there has been a dramatic improvement in data availability during the early part of the transition period foreseen in the SBS regulation. All countries have seen an overall improvement in their position. With one exception availability has more than doubled in each country between 1994 and 1996 and by the 1996 reference year every country except one was already providing more than half of the data foreseen in annex 1. Italy, Finland and Austria occupy

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26 All data referred to below concern an extraction made from the relevant Eurostat data bases on 13 January 2000. Data availability may have improved since that date.
the top three places at the moment. Looking at individual NACE Rev. 1 Sections some observations can be made.

In mining and quarrying data availability improved in all countries except for Italy where it stayed relatively stable at a figure which is still above the median value for the EU.

In manufacturing, which is the largest Section in terms of the potential number of records that could be published, the percentage of results published are high across all countries. This reflects the fact that these activities have been covered by structural business statistics for a very long time. Nevertheless there have been large improvements in these activities, notably in Germany where the introduction of NACE Rev. 1 as the collection classification in 1995 will have had an impact. The lowest figures tend to be in smaller countries that have relatively large number of confidential data.

In energy supply we can see a complete absence of data for two countries, namely Sweden and Norway. Although data availability has generally improved, particularly so in Denmark, the situation has worsened in France and Italy. In Germany, Spain and Austria data availability has improved such that all of the data requested is published for these countries. In construction no data is published for any of these key variables for four countries, Greece, Spain, Sweden and Norway, but data availability has improved in every other country. Again German and Austrian data is available for all variables in all activities.

Distribution generally has the most data available for the service Sections apart from the special case of financial intermediation. No data was available for several countries in 1994 but by 1996 this had been reduced to just two, Greece and Spain. Amongst those for which nothing was available in 1994 Italy and Austria are worth noting as close to all of what is required for these key variables is now publicly available. Data availability for Belgium, France, Ireland, Luxembourg, Finland and Norway has made significant progress.

Data on hotels and restaurants has seen improvements in several countries. No data is publicly available for Denmark, Greece, Ireland and Norway\(^27\). With these improvements more than half of the required data is publicly available for most member States.

Data availability for transport and communication is generally not as good as for distribution. There is no publicly available data for Greece and Norway at the present time. All other countries have seen improvements in their data availability between 1994 and 1996 particularly Italy, Austria and Finland which have all gone from nothing to more than 70% data availability.

Financial intermediation is the smallest activity with only three separate activities identified in annex 1 of the SBS regulation and only a reduced number of standard variables required for these activities. Data is often provided from regulatory bodies rather than statistical authorities. Availability for these activities is particularly good for a service activity with Belgium, Denmark and Portugal providing all of the data and only for Greece and Ireland is less than half of the data available.

Business services contains a similar number of activities as transport and communication and data availability was comparable to that for transport and communication in 1994 but overall showed a greater improvement by 1996. However there are still two countries, Denmark and Greece for which no data is available\(^28\).

**EU wide data**

One of the problems of a simple count of the number of records available is that it does not reflect the availability of similar data for all EU Member States and hence a lot of data may be available but not yet published.

\(^27\) Data for the Netherlands has been received by Eurostat but is not yet available on New Cronos.

\(^28\) Data for the Netherlands has been received by Eurostat but is not yet available on New Cronos.
available for different activities or variables and can not be compared. An indicator that
reflects the extreme case of data availability is the proportion of activities for which data is
available for ALL 15 EU Member States. This can be calculated at each level of the NACE
Rev. 1 activity classification. In 1994 not a single activity had data available for all 15 EU
Member States for any of the key variables listed in annex 1 of the SBS regulation. By 1996
the situation had improved.

For manufacturing at the Subsection level (for example manufacture of transport equipment)
EU totals were available for 11 of 14 Subsections. At the Division level (for example
manufacture of motor vehicles, trailers and semi-trailers) EU totals were available for 7 of 23
Divisions. Data for at least one Member State is always unavailable at the more detailed
Group and Class levels within manufacturing and at all levels of the Sections other than
manufacturing. These results are valid for the production value and turnover variables; for all
other variables data is always unavailable for at least one Member State.

These results are based on data availability after treatment for confidentiality; it should be
noted that a greater proportion of EU totals is in fact available in Eurostat databases because
of estimations and through combining results for several countries whose data is confidential.

Activities for which data availability is poor

The two analyses presented above try to give an impression of the size of the whole data set
available for users on New Cronos. A more detailed analysis of the data highlights a number
of areas where there are particular weaknesses. Table 2 in annex 3 shows the NACE Rev. 1
Classes for which only half or less of the 16 countries (EU plus Norway) do provide at least 5
of the 10 compulsory annual enterprise variables required in annex 1 of the SBS regulation in
1996. Such boundaries, half of the countries, half of the variables, are clearly arbitrary, but
give an impression of the weakest areas of the data set.

The number of countries that provide data for at least 5 of the 10 variables is given in Table 2
for 1994 and 1996 for comparison.

A further analysis of table 2 shows that the NACE Rev. 1 Sections where there are the largest
proportion of weak Classes (using the arbitrary criteria defined above) are energy supply
(which is also the smallest Section), mining and quarrying and transport and communication.
The weakest activity of all is national post activities for which data is only available for two
countries for at least half of the compulsory variables; this is one of the services activities that
suffers most from confidentiality with only a small number of units operating in this activity
with, very often, one large unit dominating.

Variables for which data availability is poor

Table 3 in annex 3 shows the weakest variables, in other words those variables for which data
is available on New Cronos in 1996 for less than four (one-quarter) of the 16 countries (EU
Member States plus Norway). A variable is regarded as being available if it is present for at
least half of the activities required. As with the previous analysis the boundaries of four
countries and half of the activities are clearly arbitrary, but give an impression of the weakest
variables in the data set. The number of countries for which data is available for at least half
of the activities is given for each variable for 1995 and 1996 for comparison; 1995 is used for
comparison as these variables are all new variables introduced to European structural business
statistics by the SBS regulation and hence no information is available for 1994.
The most noticeable point about the list of variables derived in this manner is that the variables in annex 1 of the SBS regulation do not figure. Hence there are no particularly weak variables for the service activities outside of distribution. Looking in more detail at this list we can identify two categories of particular interest. The first includes variables that appear as being weak for all activities for which they are required by the SBS regulation and these include:

- R&D expenditure and R&D personnel;
- number of apprentices.

The second category is made up of those variables that are required for several activities but are particularly weak in just one of them:

- payments for agency workers in construction;
- breakdown of investment by type of investment category in distributive trades;
- number of hours worked by employees in construction.

**Availability of regional data.**

Data availability for regional data is at the present time particularly poor outside of the industrial sectors. Whilst 11 Member States have provided regional data for 1996 for industry, only 8 have provided this data for construction, 6 for distribution and 4 for the remaining services. In addition Norway had provided some regional data for all of these sectors in 1996 and Austria has also done so for 1995 and 1997.

**Timeliness**

Timeliness is an important aspect of the quality of data. The legislation under which industrial structural statistics were collected up to 1994 did not fix a deadline within which data should be transmitted to the Commission. The SBS regulation laid down a time limit of 18 months from the end of each reference year. Many Member States have needed a derogation concerning this provision but progress can already be seen. Table 4 of annex 3 shows the extra time, in months, that Member States needed to provide data to the Commission for 1995 and 1996 reference year data.

These delays in data transmission should be seen in the light of several countries setting up new survey systems in the service sectors or carrying out major changes to existing systems. In general the delays have fallen between 1995 and 1996. Neither figure for Austria is representative as the 1995 figure concerns a census and 1996 concerns a small amount of data that were drawn from registers or estimated and as such a clear idea of the real delays in this Member State will only be seen from 1997 or 1998 reference year data.

**Meta data dissemination**

Unlike its predecessors for industrial statistics, the SBS regulation acknowledged the need for documentation to accompany data in order to render methods more transparent. Article 10 of the SBS regulation requires Member States to provide the Commission with information relating to implementation. The Commission has used this to build upon work done prior to the SBS regulation to study and document systematically the data production methods used nationally. During 1997 (industry) and 1998 (services) detailed methodological reports were
collected from each of the EU Member States as well as from Norway and Switzerland on the sources used by them to provide the data foreseen in the SBS regulation. This methodology was updated for all activities during 1999. As well as providing detailed methodological information to users of the data and to the Commission officials responsible for processing national data within the Commission, the information collected in these exercises, and those that preceded them on a voluntary basis, have proved invaluable when drafting this report. The methodological information is provided in both on-line (internet) and off-line (CD-ROM) formats.

2.4 CONFIDENTIALITY AND DISSEMINATION

One of the criticisms levelled at European structural business statistics is the lack of data for the EU as a whole. In order to make these calculations the Commission requires data for all 15 Member States (or to make estimates). However such availability is not a sufficient condition as in numerous cases data is available but can not be published because one or more of the countries’ data is confidential. This problem is currently particularly acute in manufacturing and less problematic elsewhere as there are few other activities where all 15 Member States provide data.29

An evaluation of the manufacturing Groups (3-digit level of the classification) for 1996 data has shown that, for a variable such as value added, generally less than 50% of the Groups can be disseminated for the EU as a whole, not because of a lack of data availability, but because of confidentiality. This is the case when only one Member State’s data are confidential or when one of a group of Member States whose data is confidential dominates the confidential sub-total by more than 85%. Whilst the proportion of data for individual Member States that can be disseminated remains quite high, confidential national data has a huge impact on the availability of EU totals.

Possible solutions to these problems for EU data have been put forward including:

– suppressing non-confidential national data at a detailed level of activity (4-digit Class level) in order to make the Group data non-confidential;

– suppressing non-confidential data at the group level in two EU Member States in order to protect confidential data in another.

A solution to the severe problems of confidentiality is necessary and this may involve a reassessment of the balance between national data and EU totals and between the dissemination of detailed or aggregated data. As already mentioned a new agreement on the identification, processing and dissemination of confidential data has to be found between the Member States and Eurostat in order to improve substantially the amount of information which can be disseminated to users.

2.5 DATA COMPARABILITY

This part of the report introduces a number of methodological problems that are relevant for the comparability of structural business statistics. Some of them have already been mentioned earlier in the report as areas where the Commission intends to continue work to improve the implementation of the SBS regulation.

29 See part 2.3 for an evaluation of data availability by activity.
Methodological problems of units

The definition and use of statistical units is fundamental to the quality of structural business statistics, as it is in other statistical fields. A great deal of progress has been made in this area during the last 10 years, directly in terms of defining units and determining principles for classifying them and indirectly in terms of the use of units within various areas of business statistics, including structural business statistics. The system that has emerged is however not entirely coherent but reflects the conflict between the desire to produce harmonised, comparable, meaningful data and the reality of the different environments in which businesses operate and hence the availability of data. Notably the use of different statistical units in the business register, structural business statistics and short-term statistics has been called into question several times. From the perspective of structural business statistics, there are four principal concerns which will be discussed in more detail in turn:

- the use of more than one non-regional unit in industry and construction, namely the enterprise and the kind-of-activity unit (KAU);
- the non-existence of a distinction in practice between the KAU and the enterprise in several Member States evidenced by the provision of data for only one of the units or of identical data for the two units;
- the non-availability of the KAU in most business registers and hence the non-harmonisation of interpretations of the KAU applied in each Member State;
- the different interpretations of the enterprise applied in each Member State in the business register and hence in the compilation of structural business statistics, particularly concerning the differentiation of the enterprise and the legal unit.

The first of these concerns is a fine example of the conflict between user needs and data availability. One of the requirements of users of structural business statistics is comparable data that is homogeneous in terms of the activity. In other words when data is provided for example for value added for a particular activity it is desirable that the statistics reflect the value added in the activity given and not in other activities. The fact that businesses may carry out several activities means that, in an ideal situation, the information needed about each multi-activity business should be separated according to the main activities being conducted, in other words be provided for each KAU. Whilst it is relatively easy to make such a statement it could in fact often be difficult for some businesses to provide precise data broken down according to statistical classifications.

The current definitions of statistical units provide a compromise stating that separate KAUs can be identified if a limited amount of information on the elements of value added and tangible investment is available. If this definition is applied in practice statistical information would only be available for far fewer variables than those that users need.

The SBS reflects this conflict whereby, for the industrial and construction sectors, a small number of variables are requested for the KAU and a larger list for the enterprise. The first list reflects users needs for homogeneous data and the second their needs for data on a wide range of subjects, going beyond the elements of value added and tangible investment, to look at areas such as specific types of costs and atypical employment.

This situation is undesirable essentially because of the overlap between the information provided for both statistical units:
– there is a problem of confusion amongst users that are presented with data compiled for the same industries using both units and hence arriving at values that may vary considerably;

– the costs for all parties involved in the production chain, from providing the raw information (the business community) to processing and disseminating the information (national and European statistical authorities).

The second concern, relating to the lack of differentiation between the KAU and the enterprise in the structural business statistics supplied by Member States can easily be seen by looking at the availability of the two different data sets for manufacturing.

Four of the Member States (Belgium, Finland, Sweden and the United Kingdom) do not provide KAU data at all as they have been granted a derogation. Of the remaining eleven Member States the same data is delivered for both the KAU and the enterprise data in two Member States (France and the Netherlands). Of the Member States that have requested a derogation it is known that at the end of the transition period the United Kingdom also intends to deliver data that is essentially the same for both series.

The third concern has a number of origins but principally, in view of the different stage of development in Member States of business registers when Council Regulation No 2186/93 on business registers for statistical purposes was drafted, Member States were not obliged to cover all types of statistical units used or planned to be used in the European business statistics system. Clearly this relates to the cost for the authority responsible for setting up and maintaining the business register with several units. The units chosen were the legal unit, the enterprise and the local unit.

The business registers contain generally information on secondary activities for enterprises but it is unclear the extent to which these correspond to KAU. This will often not be the case, given the current definitions of the KAU, because of the strict data availability requirements previously mentioned. Furthermore, the experience with harmonising the enterprise has shown that the application of the definition of the KAU is likely to be very different between Member States without the methodological guidelines and refinement that results from their inclusion in a business register. Hence the comparability of data that is produced on the basis of the KAU must be brought into question.

Considering the first three concerns together it can be concluded that the balance between the need for comparable statistics that represent homogeneous activities on one hand and the difficulties of the business community to provide the basic information on the other has not yet been achieved. Hence the need for statistics on both the KAU and the enterprise, as well as their current definitions will continue to be examined.

The fourth concern is similar to the third in that a poor application in business registers of definitions of statistical units impacts heavily on the comparability of the resulting structural business statistics. Despite the efforts made to record the enterprise and the legal unit in the business register the definitions used for these two types of units are still far from harmonised. Seven Member States have indicated that they register the enterprise and the legal unit without making a distinction between the two.

The importance of harmonisation can be shown with some simple examples. The question of whether separate legal units should be combined into an enterprise (so called complex unit) influences:

– the number of enterprises measured;

– the size of the enterprise which has an impact on sampling plans;
– the classification of a unit to its main/secondary activities;
– the measurement of certain economic variables which may be affected by consolidation.

All of these influences will be felt at any moment and will also evolve over time.

A study was carried out in November 1997 in which three Member States were involved, which showed that the effects of differences in the application of the definition of the enterprise on variables such as turnover and employment are very important.

The reasons for the differences in the application of the definitions of the enterprise, and also the KAU which was discussed in the third point, are diverse but they essentially reflect different statistical traditions built up in response to different administrative environments which have not been harmonised. The necessity of addressing the problems of the relation between legal units and the enterprise as well as between the enterprise and the KAU will remain and grow as long as:

– single legal units carry out several activities;
– enterprises organise themselves into several independent legal units for administrative or legal purposes such that each legal unit is not autonomous in terms of carrying out an activity with an input of products, a production process and an output of products.

Whilst the occurrence of these two problems may be relatively rare, their impact is significant as they tend to concern principally large units whose importance in statistical results is very high.

Harmonising these practices is difficult especially as business registers and structural business statistics rely more and more heavily on administrative sources which themselves are unharmonised internationally in order to reduce the response burden on the business community and to reduce the operational costs of statistical authorities.

Nevertheless this methodological problem will have to be solved in the coming years in order to improve the comparability and reliability of European business statistics. It can be expected that some simplifications will be needed: firstly by keeping only one non-regional unit; secondly by assuming that for the vast majority of cases the legal unit corresponds closely to the enterprise and the KAU. Only for a small number of units (complex units and/or multi-activity units) would it be necessary to adapt the data collection methods.

**Methodological problems of cut-off thresholds**

Prior to the adoption and implementation of the SBS regulation European industrial structural statistics covered a sub-population of enterprises with 20 persons employed or more and services covered enterprises of all size classes. In practice there were exceptions to this, notably in services, where a number of countries excluded very small enterprises with no employees. The use of a threshold of 20 persons employed is clearly arbitrary. In addition it introduced a bias into the results when comparing different countries where the proportion of units excluded from the population, and more particularly their impact on the main economic aggregates, differed between countries. Equally comparisons between different activities were affected insofar that the importance of smaller enterprises below the threshold was greater in some activities (such as construction) than in others (such as processing of nuclear fuel).
At a national level there was a greater diversity of thresholds used. For industrial statistics, many countries maintained a threshold of 20 persons employed while others lowered this to 10, 5, 3 or 1, in the last case covering therefore the entire population. Some countries supplemented these annual surveys by less frequent surveys of smaller enterprises below the thresholds. In services it was common to find results produced for enterprises of all sizes or excluding only those with no employees.

The SBS regulation does not foresee excluding any part of the population from the statistics on the grounds of their size. Hence, since the 1995 reference year the aim has been to compile comparable results in both industry and service for the whole population. Whilst this will in the long term provide users with greater comparability when comparing results for different countries and between activities, in the short and medium term there is a need to maintain a consistent time series for analysis of structural change. Hence Eurostat produces and will continue to produce a series of data for industrial structural statistics covering only enterprises with 20 persons employed or more which runs in parallel to the series covering enterprises of all sizes.

The removal of the threshold is clearly difficult for some countries to apply. The production of results for a part of the population previously excluded is a relatively difficult exercise. Firstly it depends on the existence of a business register of a satisfactory quality for the new part of the population and this for example is known to be a problem in Germany.

Table 5 in annex 3 shows the current use of employment thresholds in different countries as well as the situation prior to the 1995 reference year.

The main changes that have been seen in the use of size thresholds are therefore:

- B threshold removed for industry and construction;
- I better coverage of SME surveys, notably for NACE Rev. 1 Sections E and K;
- NL removal of very low thresholds in industry and mining and quarrying, manufacturing and construction;
- S thresholds removed in all activities;
- UK threshold removed in construction and multi-yearly survey for industry.

Whilst clearly a lot of progress has been made in this area there are still countries where high thresholds remain which makes the comparison of data difficult. Notably this is the case in Germany and Ireland for the industry and construction sectors. Smaller difficulties exist in Spain and Portugal.

The Commission will continue to follow progress on this point in these Member States during the remainder of the transition period and beyond.

**Methodological problems of size class thresholds**

The SBS regulation foresees that data should be provided broken down by the size of the enterprise. Commission Regulation No 2701/98 specifies the size class boundaries to be used and the variables which are to be broken down. For all activities except for financial intermediation employment should be used to delimit the size classes and turnover/gross premiums should also be used for distributive trades and insurance.
Main variables that measure size

The choice of these variables is practical rather than theoretical. Value added is not used as a size class measure but would have a number of advantages. Its main advantage is that it is not biased between capital and labour intensive activities or the skill level of a workforce. The importance of a unit involving very highly skilled workers, such as a unit active in the cutting of precious stones, will be understated when measured in employment terms. Employment measures tend to overstate the importance of units which use a large amount of low skilled labour or activities that have a high amount of labour relative to capital. Secondly, value added size classes are not affected by the degree to which units are vertically integrated. Turnover measures on the other hand exaggerate the size of units that buy in many components or semi-finished products and only carry out a minimum of production. The extreme case of this is in distribution where the same product is resold without modification and the value added comes from the services provided (For example storage, break of bulk, transport and sales). These two advantages mean that size class data produced using value added can be compared for all sectors. However, value added does have a number of major disadvantages. Firstly it is relatively difficult to collect when compared to some of the measures described below, such as employment and turnover. Secondly it can be conceptually difficult to interpret. It is hard to accept that an inefficient unit employing many thousands of workers can be ‘smaller’ than an SME employing a handful of highly skilled craftsmen. Thirdly, the use of value added for determining size classes for international and time series analysis introduces problems of exchange rate conversions and inflation. Constant changes in the size class boundaries to take account of these problems also makes their interpretation difficult for analysts.

Turnover classes must be included in the records of certain enterprises held in the business register according to Council Regulation No 2186/93. Turnover values, like value added, need to be updated regularly to stay in line with inflation, and the question of how to do this needs to be addressed before this variable can be used in a comparable manner between Member States and over time. Turnover has the advantage over value added in that it is easier to collect and more readily understood by users.

Employment is the most commonly used variable for determining the size of a unit and as we have already noted, is the main one adopted for European structural business statistics. Measures of employment are relatively easy to obtain from administrative declarations and are normally included in business registers. Compared to measures that are expressed in monetary terms, such as value added, turnover and balance sheet total, employment measures have the advantage for international comparisons that they are not distorted by currency fluctuations, purchasing power or inflation. Employment measures based simply on a count of the number of persons working in a unit do suffer from several other problems. They have the disadvantage that they can be unrepresentative of the size of the unit because of the difficulty of measuring the service derived from the employment factor. Various possible measures of employment can be considered to try to solve this problem but they tend to require more complicated data collection. The most commonly used are to calculate the number of hours worked or to convert employment figures into full-time equivalent units (FTE). Whilst this takes out some distortions concerning the volume of work it does not of course reflect the qualifications or skills of the staff.

Choosing measures of employment

Whilst the argument for adopting employment as the main measure of size is quite clear for practical reasons the choice of which measure of employment to apply is less clear. The main
choices are the number of employees, which in simplified terms means workers with a contract and a regular wage or salary, and the number of persons employed which includes, in addition to employees, unpaid working proprietors and unpaid family workers.

From the point of view of developing sampling frames, it is not always possible to find the number of working proprietors and family workers in administrative registers. In these cases the updating of statistical registers with information on these unpaid workers is difficult, and hence sampling is often based on the number of employees. For the purposes of analysis, the number of persons employed is generally the most appropriate employment measure as it gives a better indication of the labour factor input and is more easily understood by users. It creates size classes that should be more homogeneous in terms of the use of inputs and measures of output. Table 6 in annex 3 indicates which employment measures are primarily used nationally for drawing samples and for publishing results.

For the 1996 reference year seven Member States used the number of persons employed for drawing samples and eight used employees. For the publication of results there is also an even split between the use of the two methods across the EU with eight Member States using principally persons employed and six using principally the number of employees. No information is available for the remaining Member States.

Methodological problems of comparability of definitions

In its Regulation No. 2700/98 the Commission adopted definitions for most of the compulsory variables laid down in the SBS regulation. In most cases these definitions are quite precise indicating items that should be included or excluded for each variable. However the definitions currently suffer from two weaknesses.

Firstly, the treatment of a small number of items is imprecise because there is no clear view on the best methodology to follow. An example of this is the treatment of voluntary workers in employment.

Secondly, although the definitions have been drafted as precisely as possible, their application in each Member State’s national environment is subject to the forces of national standards. Accounting standards and employment regulations are simple examples. In the first case the distinction between ordinary and extra-ordinary items is not the same between countries and in the second case the definition of an apprentice can vary greatly. However the business environment which business statistics attempts to report on is not just the result of regulatory pressures; historical traditions and business practices can also have an impact. An example where a lot of work has been done by Eurostat and Member States to overcome different national interpretations is the concept of sub-contracting. This is a fine example as the understanding of the business community of this word varies not only between countries but also between sectors where a car manufacturer and a construction company for example would interpret it differently. Not only do these national environments differ, they may also be unstable, changing over time and hence being responsible for some of the perceived structural shifts in the results.

In order to improve the comparability between the Member States and to make European totals more reliable and more relevant work needs to continue on definitions.
**Inter source comparisons**

Coherency between different data sources is an important element of a statistical system as a whole. In the field of structural business statistics such inter source comparisons should be made with short-term business statistics and some sources of social statistics.

Even if it seems that each source is related to the same data an inter source comparison is never easy to do because each has its own aim and perspective. This observation is due to the fact that many events/phenomena can have a major impact on the results and not all of these events can be taken into account at the same time for each source. This is particularly clear concerning changes to the principal activity of a given unit. Generally such a change is observed only by the structural survey (this observation is one of the aim of these survey) and almost never by infra-annual survey (the interest of these survey is to provide main results very quickly).

Nevertheless coherency between different data sources has to be examined very precisely and as a greater volume of structural business statistics becomes available such a study will be carried out.
PART III

Quality of the data

3.1 SUMMARY OF PART III

A major effort has been undertaken during the last few years by Eurostat and a number of Member States concerning the quality of structural business statistics. To a large extent the theoretical work on the definition of statistical quality and its measurement have been completed. Beyond the measurement of accuracy, statistical quality needs also to take account of a number of other criteria, such as relevance, timeliness, accessibility, coherence and so on. Concerning these other criteria a great deal of progress has been made recently or can be foreseen for the SBS data in the near future, even if the follow-up and improvement of the quality of structural business statistics should still be considered as a major development area for Eurostat and the Member States in the next few years.

Article 7 of the SBS regulation foresees the necessity of evaluating the quality of structural business statistics. In order for such an evaluation to be conducted the Commission adopted in July 1999 a new Regulation defining the criteria for the measurement of accuracy of structural business statistics. From this basis a first quantitative measure of the accuracy of the main variables can be made during 2000 for the EU as a whole. This first effort should be seen as a significant step forward in this area given that the measurement of accuracy is difficult and resource consuming. Equally, the increasing use of administrative sources, as well as the implementation of more sophisticated statistical techniques than in the past - mainly to limit the response burden on businesses - requires further theoretical developments in order to correctly approach the quantitative measurement of accuracy. Eurostat should contribute to such a development within the EU during the next few years.

The objective followed by Eurostat has been to supply users of SBS data with sufficient information to be able to understand the limits within which this statistical data can justifiably be used.

3.2 NEED AND PRINCIPLES FOR A QUALITY POLICY

Eurostat has worked for many years with the Member States in order to devise an extensive list of indicators relevant for the measurement of quality taking account of different collection methods. These can be summarised as:

- Relevance: an inquiry is relevant if it meets users’ needs. The identification of users and their expectations is therefore necessary.

- Accuracy: accuracy is defined as the closeness between the estimated value and the (unknown) true value.

- Timeliness and punctuality in disseminating results: most users want up-to-date figures which are published frequently and on time at pre-established dates.

- Accessibility and clarity of the information: statistical data have most value when they are easily accessible by users, are available in the forms users desire and are adequately documented.
– Comparability: statistics for a given characteristic have the greatest usefulness when they enable reliable comparisons of values taken by the characteristic across space and time. The comparability component stresses the comparison of the same statistics between countries in order to evaluate the meaning of aggregated statistics at the European level.

– Coherence: when originating from a single source, statistics are coherent in that elementary concepts can be combined reliably in more complex ways. When originating from different sources, and in particular from statistical surveys of different frequencies, statistics are coherent in so far as they are based on common definitions, classifications and methodological standards.

– Completeness: domains for which statistics are available should reflect the needs and priorities expressed by the users of the European Statistical System.

Prior to the adoption of the SBS regulation the main concern for European structural business statistics was data availability. Attention to quality was given increased importance recently and particularly through Article 7 of the SBS regulation which requires an evaluation of quality to be carried out.

A number of studies have been undertaken in individual Member States (Statistics Sweden and the Office for National Statistics in the United Kingdom) to evaluate the feasibility of the extensive list of measures proposed. This feasibility testing is still underway and will continue.

3.3 FIRST PROGRESS

Concerning several of the seven previously mentioned aspects of quality, significant progress has been observed recently or short-term objectives defined for structural business statistics.

Relevance

Regular meetings with European trade and professional associations are organised by Eurostat which is one of the best places for confronting these users’ needs with, amongst other items, the latest developments of business statistics. Various seminars, for example those that have taken place on trade statistics and that planned for services in 2000, allow the extent to which the main user needs are met by the structural business statistics that are supplied and moreover to look at necessary developments. More generally Eurostat’s aim to develop a multi-yearly programme for the development of structural business statistics follows this approach (see part 1.6). Eurostat plans to examine with Member States whether possible reductions can be made to the SBS regulation due to some variables being less relevant today than when the SBS regulation was drafted.

Timeliness and punctuality

As has been previously emphasised the implementation of the SBS regulation has brought initially an increase in delays for providing structural data, mainly due to changes that have been necessary in Member States and in Eurostat. Nevertheless very significant improvements have taken place recently which will continue in the coming years; the end of the transition period (1999 reference year) during which Member States have benefited from derogations notably concerning the period within which data should be transmitted should lead to a reduction in the time taken to disseminate structural business statistics. At the same time Eurostat has put in place an organisational structure in order to provide a more efficient
Although further progress needs to be made in this area. In this respect, Eurostat has fixed for itself the objective of disseminating all structural business statistics transmitted to it by Member States (via the New Cronos reference database) within a maximum delay of two weeks from reception.

In a related area, the use of estimation procedures should allow the implementation in the short-term of a dissemination timetable for structural business statistics. The following is foreseen based on the number of months after the end of the reference period “T”:

- T+3 months - first estimates of principal variables of the EU total;
- T+10 months - preliminary national results and EU totals (principal variables, based on preliminary data transmitted by Member States);
- T+18 months - final national results and corresponding EU totals.

### Accessibility

Concerning accessibility two levels of users should be identified for structural business statistics:

- internal Commission users and national statistical offices. Complete and immediate access to non-confidential data should be available via New Cronos. It should be noted that the organisation, aspect and ergonomics of this data base is constantly being improved in order to provide an easier, more rapid and functional access through the use of modern technologies.

- other users. The dissemination products of the Data Shops are the primary access to structural business statistics for other users. The regular production of CD-ROMs, for example those containing the whole of New Cronos, makes access to this data relatively simple.

Progress does however need to be made notably concerning businesses as users themselves in order to support a greater use of structural business statistics through a more direct access. Such progress is even more necessary in so far that it represents some form of return for the effort required of businesses to supply the primary data without which structural business statistics would not be possible.

### Comparability

Of the two types of comparability mentioned before, spatial comparability between Member States is the one that is of the greatest importance for European business statistics. In fact one of the main goals in the development of the European business statistics system is the provision of European statistics, in other words statistics relating to the European economy as a whole. Obtained by aggregation of national statistics, EU totals would have an even greater sense if national statistics were more homogeneous and therefore comparable between themselves. Work has started on this area which will require in particular the Member States and Eurostat to examine in detail the problems related to observation units and the transposition into each national environment of the definitions of the variables in the SBS regulation. The growing importance of enterprise groups with activities spread across the EU will require a serious reflection on their inclusion in national statistics and furthermore their aggregation towards a European statistic.
Coherence

Eurostat has started work to examine the coherence between infra-annual statistics (from the short-term statistics Regulation\textsuperscript{30}) and structural business statistics for the variables that are common to both Regulations. Even though these two Regulations do not have the same objective and despite the fact that the statistics resulting from their application are often compiled by quite different methods (survey strategies, estimation procedures and so forth) a minimum level of coherence between these two statistics is necessary because short-term statistics play a leading indicator role with respect to structural business statistics. Reflection is needed on the coherence between the two Regulations in terms of the observation units chosen. The first studies made in this respect have however indicated a good enough coherence between these two statistics for EU totals at the 2-digit (Divisions) level of NACE Rev. 1.

3.4 ACCURACY, A PROGRESSIVE IMPLEMENTATION

The measurement of the accuracy of a statistic requires several phenomena to be taken into account ranging from the sampling plan through the correction for non-response, the impact of the misclassification of the activity of observation units to the production of the final results, to list only the most obvious. During the last few years Eurostat has developed several documents aimed at providing a general guide to measuring accuracy. It should nevertheless be emphasised that the regular and systematic measurement of the accuracy of business statistics is not widespread amongst the national statistical authorities, mainly because this requires significant resources, both human and financial. At the same time the ever more sophisticated statistical methods implemented by Member States as well as the use of administrative data, both to limit the response burden, have required and will continue to require, great developments in the methods to be applied to measure the accuracy of these statistics in a legitimate manner.

However, in order to be able to provide in the forthcoming months some information on the quality of European structural business statistics a very small number of indicators have been selected for use (coefficients of variation, non-response rate, item non-response rate for the most important variables) taking into account just some factors which have a great impact on quality. This list figures in the aforementioned Commission Regulation on criteria for the evaluation of quality for structural business statistics. The first transmission of data relating to quality in respect of the provisions of this new Commission Regulation will have been undertaken by the end of 1999. A first summary for EU totals should be available during 2000. Also during 2000 Eurostat will initiate development work aiming principally to identify the main areas for improving accuracy and to encourage an exchange of experience between Member States.

Eurostat’s intention is to provide users of the data with sufficient information in order to improve their understanding of the limits of the data available for the EU as a whole and to provide decision-makers with information to allow them to evaluate the development of structural business statistics.

PART IV

The costs for business

4.1 SUMMARY OF PART IV

One of the major challenges that the European statistical system has had to face for many years is to reply as well as possible to users needs - particularly needs for new information - while trying at the same time to limit or even decrease response burden. In this context the most efficient way used by the majority of the Member States to reduce the response burden is the use of administrative sources, even if this approach can be expensive in terms of financial and human resources for the statistical authorities. However it has to be underlined that not all of the Member States have equally easy access to administrative sources. In some cases the national statistical authorities can not gain access at all. Hence the efforts made by the Member States do not have the same impact concerning the reduction of response burden. Alongside the use of administrative data, other methods have been applied by the statistical authorities to limit the response burden amongst which can be noted sampling instead of exhaustive surveys, the rotation of samples, optimal drawing of samples, significant revision of existing questionnaires, estimation of statistical variables from administrative variables.

Although it appears quite impossible to achieve an EU-wide quantitative assessment of the development of response burden in the foreseeable future, a first attempt at such a measure is proposed in this report. This measure has to be considered as a very rough indicator at the EU level which means that this indicator does not reflect the current state within each Member State nor within any specific Member State but across the EU as a whole. Hence this indicator should not be used to contrast with the efforts made by a given Member State. On the other hand this indicator does not provide a global measure of the development of response burden due to the implementation of the SBS Regulation. It is clear that there has been an increase of response burden at least due to the significantly increased activity and size-class coverage of the SBS regulation. That is notably true for some countries where enterprises above a certain size threshold and/or where only certain activities were covered by structural business statistics before the adoption of the SBS regulation.

In this very limited context, this indicator reflects very strongly the consequences of the new methods applied by statistical authorities for a constant amount of information provided to users. The overall impact of these new methods is very strong as it represents a marked decrease (about 40%) in the number of businesses surveyed, even if this impact is naturally particularly strong for small enterprises. It has to be noted that this indicator is only related to the number of businesses surveyed; in other words this indicator does not present information on the time taken to fill in the statistical questionnaires by respondents. Hence this indicator has not to be considered as an indicator of response burden but only as an indicator of the impact of the efforts made by the Member States in limiting or reducing the number of businesses surveyed.

4.2 RESPONSE BURDEN

For a number of years the Member States have tried to reduce the statistical response burden on the business community or at least, not to increase it at the same time as trying to meet ever-growing information needs. This is in fact a major challenge faced by the whole
European statistical system: to limit or even decrease significantly the costs borne by businesses due to statistical operations while trying to reply as well as possible to users needs - first among them the needs of the public administration whether national or European - and also to the needs of businesses themselves whether expressed directly or indirectly through their representatives. These needs are mainly expressed along one of three lines of thought all of which are generally burdensome: more information, shorter dissemination delays and a higher accuracy of the data provided.

These growing demands are particularly directed towards a greater coverage of the economy (principally service activities but also to represent enterprises regardless of their size) or the inclusion of new variables such as intangible investment (research and development for example). The implementation of the SBS regulation has made it possible to meet some of these new demands to a certain extent which has lead to an increase in the response burden simply by the extension of the coverage.

The insistence on shorter delays for disseminating information, notably for the EU as a whole, sometimes contradicts the substitution of administrative data for statistical survey data due to the generally high delays to obtain and treat such administrative sources, although their use is synonymous with a strong reduction in response burden.

The requirement for a high level of accuracy in the published data itself slows down a wide-scale implementation of estimation procedures which would be efficient in terms of reducing business costs. This requirement also tends to limit the scope for a more intensive use of administrative sources which do not always provide information that corresponds to that which is required and hence necessitates the use of adjustment procedures which have a cost in terms of accuracy. Furthermore the possibility to reduce sample sizes is severely limited by the necessity to maintain a certain level of quality.

Finally it should be underlined that statistical methods which reduce or limit the response burden are often expensive in terms of financial and human resources for the national statistical authorities. These costs are particularly significant at a time of developing new survey methods or new estimation procedures, to analyse the quality of potentially interesting administrative sources or to lead to the identification of units that are “observed” by administrative declarations. The current environment across the EU which aims to reduce a little the resources provided to statistical authorities handicaps to some degree the room for developing innovative solutions with respect to controlling the response burden.

Despite these difficulties and the various, seemingly contradictory aspects outlined above, significant progress has been accomplished in recent years in all Member States, sometimes provoked by Eurostat, notably concerning the use of administrative data (see part 1.5). Furthermore, in the majority of Member States a continuation of this progress is foreseen in the coming years. Finally it should be noted that the majority of Member States would like in the future to see new variables only added to the lists already in the SBS regulation in response to new information needs after an examination of possible reductions through the suppression of existing variables which are regarded as of less importance than when the SBS regulation was drafted.

**Main implementation methods in the Member States**

Of all the implementation methods used or foreseen in the Member States the use of administrative data is the one that is currently seeing the greatest developments and the one therefore whose impact in terms of reducing response burden is the greatest. More and more
statistical authorities use only this source for covering enterprises with employment levels below 20 and in some cases this threshold can be as high as 50. Such an approach generally leads to a total reduction in the response burden for all or the vast majority of the businesses in question. In fact it is sometimes necessary to retain a reduced sample for these size classes in order to estimate the data required under the provisions of the SBS regulation that are not available from administrative sources. In a similar vein some Member States have developed survey strategies which only keep in the statistical questionnaires the variables that can not be obtained from administrative sources. In the particular case of the financial sector the response burden is generally close to zero and it is almost exclusively administrative data that is used.

In order to reinforce the use of administrative data, several initiatives have been undertaken in a number of Member States in order that various administrative sources take account directly of certain statistical requirements often through a harmonisation of administrative and statistical definitions. Even though this may represent a transfer of burden from the statistical system to another part of the administration such actions are nevertheless accompanied by a reduction in response burden as the businesses concerned need only complete one declaration. Furthermore certain Member States are trying to eliminate all employment variables from statistical questionnaires and are making use of information in administrative employment declarations for all businesses. Such a measure often has only a very weak impact on response burden, as employment data is generally readily available within businesses. Moreover such a strategy may turn out to be dangerous in terms of the quality of the statistics. It should be underlined that such an alignment of administrative and statistical requirements should not be done at too great a cost for the quality of the statistics. The relevance of the statistical information and hence the satisfaction of users’ requirements could severely suffer from a simple replacement of statistical variables by administrative ones. The use of administrative data, if it is to continue to be supported by Eurostat, should nevertheless be the subject of a well-defined development in terms of quality and more importantly in terms of the capacity to provide the information actually required.

In addition it has to be emphasised that the use of administrative data may involve some complications for the statistical authorities; this is particularly true if there is not a unique means of identification or if administrative and statistical variables and are not very closely defined. Furthermore the ability to access administrative sources or the delay within which such data are provided to the statistical authorities vary strongly from a Member State to another one.

More generally efforts have been made by national statistical authorities to bring closer together the definitions of variables actually required from businesses and those available from the company accounting practices or at least those which businesses use to follow their own work. In this framework, it is important that the work linking company accounts and structural business statistics at the European level, which started with the reflections on the drafting of the SBS regulation, be continued. Eurostat follow developments in European and international standards for administrative information with the objective of trying to avoid unnecessary contradiction between statistical demands and other administrative requirements. This is particularly true of company accounting standards and VAT declarations. Changes to such standards or their application, for example the widely publicised choice of several large European businesses to elaborate their company accounts according to standards other than European ones - normally in the US - may impact the European business statistics system in several ways. Eurostat and the national statistical authorities need to be particularly aware of this and to act accordingly. Secondly the quality of business statistics based directly or indirectly on administrative data and standards may be affected positively or negatively.
The implementation of the SBS regulation in some Member States has involved a significant revision of existing questionnaires leading sometimes to the deletion of variables previously requested for national purposes; these actions have been undertaken with the objective of maintaining a reasonable response burden. These revisions have in some cases involved the introduction of simplified questionnaires for smaller businesses where either it has been judged that they would have no real impact on certain variables at an aggregated level or where estimation procedures had been developed for these variables.

Alongside the actions undertaken for a larger use of administrative sources, several Member States have significantly reduced the number of enterprises directly surveyed through a more optimal drawing of samples or by using sampling where previously exhaustive surveys had been carried out. These actions have often had a great impact in terms of reducing the response burden even if this only affects small enterprises (most often enterprises with employment below 20 and occasionally larger enterprises). Where sampling is used, rotating samples or partial renewal of the sample are two procedures that are more and more applied or planned. Such methods provide businesses which have been surveyed in a particular year with a very weak probability (in some cases, zero) of being surveyed again for several years thereafter.

Finally first attempts have been made or are planned with electronic questionnaires (incorporating control/verification procedures) or the use of EDI for electronic transmission of data between the national statistical administration and the enterprise. These initiatives are still being tested and are part of a more widespread strategy concerning the exchange of administrative data. It is still difficult to judge the impact that they will have on reducing response burden.

**A limited indicator**

The second aspect of response burden is its assessment. The aim here is to achieve a quantitative assessment of the development of enterprises’ response burden at the European level due to the SBS regulation. It is unclear whether it will be possible to achieve such an aim in the foreseeable future. This subject has been studied in several technical meetings between Eurostat and the Member States. The difficulty of providing a relevant quantitative assessment of enterprises’ response burden at the European level due to the implementation of the SBS regulation has been underlined. The most important difficulties or questions that have been identified are:

- the increasing use of administrative sources makes it particularly difficult to estimate the statistical burden when the contents of this source, at least partially, have been defined according to statistical requirements;

- nearly all Member States combine several statistical surveys to comply with the provisions of the SBS regulation as well as using the results of these surveys for other purposes; how the response burden of each one of these surveys can be attributed to the implementation of the SBS regulation is unclear;

- structural business surveys can, in certain cases, play a central role in the compilation of other statistics, consequently decreasing the overall response burden due to official statistics; how such a strategy can be taken into account for estimating the response burden strictly connected with the SBS regulation is unclear;
the large heterogeneity of the data collection methods among the Member States would render an average burden at the European level of little interest as well as making decreases or increases in its level meaningless;

not all Member States are in the same situation with respect to two elements strongly influencing the response burden, namely the access to and quality of administrative sources and the implementation of a standard accounting plan more or less consistent with the SBS regulation characteristics;

the most important difficulty is how an estimate of burden can be connected to information on the availability, usefulness and quality of the statistical information compiled and disseminated.

Eurostat should continue these reflections with Member States in order to have available in the forthcoming years a summary indicator allowing progress to be reported on the reduction of response while at the same time taking account of the constraints mentioned above.

Nevertheless a first attempt at such an indicator can be put forward. Although extremely limited in that this only measures response burden in terms of the number of enterprises required to complete statistical questionnaires, and therefore not taking account of several reservations made earlier, this first attempt at an indicator does at least allow the impact to be measured of the Member States’ efforts in reducing the number of enterprises questioned, even if this is only done in a very broad manner.

This indicator has been calculated from information for the vast majority of Member States (as well as Norway). It measures developments between 1990, 1995 and 2000 of the number of enterprises surveyed by statistical questionnaires. This indicator does not take account of the significantly increased coverage of the SBS regulation. A gross indicator calculated independently of the coverage of the economy over the period analysed would, by definition, have indicated an increase in the number of enterprises surveyed because one of the major strengths of the SBS regulation was precisely to expand coverage to the full range of economic activities; previously, in the majority of Member States, comprehensive, annual information had only been available for industry and to a lesser degree construction. Such an indicator would therefore not have provided any information on the achievements of recent years.

However, even limiting the indicator to a constant coverage – defined individually for each Member State – as outlined above, the indicator provided does not take account of the significant increase through the implementation of the SBS regulation in the quantity of information provided to users nor its quality including data freshness. Equally it does not take account of the improvements that have been made in the drafting of questionnaires (headings, explanatory notes, links to accounting standards and so on) nor even the use made of administrative data for some variables. In this sense it under reports the reduction of the response burden resulting from initiatives made by Member States as it is not compiled for a fixed quantity of information supplied.

This indicator should therefore be considered rather as an indicator of the impact of measures taken by Member States to reduce response burden limited only to the number of enterprises questioned. There are several limits to the meaning of this indicator:

as it is calculated as a global indicator from the information provided by several Member States it does not show the diversity of national situations. In some cases the
impact of national measures is significantly greater that that shown by this global indicator;

– the extent to which Member States have access to administrative data strongly influences the possible impact of the efforts made by each one;

– as this indicator is a very rough indicator it can not describe the very complicated survey strategies which are implemented by some Member States for example when several statistical surveys are combined with different administrative sources. In some cases only a few variables have been taken into account and not necessarily all of those in annex 1 of the SBS regulation;

– this indicator takes into account all the efforts made when considering a constant coverage during the reference periods 1990 to 1995 to 2000 and it is not strictly connected with the response burden that results from the SBS Regulation. As has already been mentioned the implementation of the SBS Regulation has lead, in some countries, to an increase in the response burden simply by the extension of the coverage, for example to the service activities;

– finally, it would be meaningless and possibly misleading to try to compare this indicator with the situation in any individual Member State.

Global indicator of the number of businesses subject to questionnaire based surveys for a constant economic coverage (1990 = 100. Enterprise characteristics from annex 1 of the SBS regulation.

<table>
<thead>
<tr>
<th>Employment size class</th>
<th>Year</th>
<th>1990</th>
<th>1995</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td></td>
<td>100</td>
<td>86</td>
<td>49</td>
</tr>
<tr>
<td>20-99</td>
<td></td>
<td>100</td>
<td>101</td>
<td>69</td>
</tr>
<tr>
<td>100 and more</td>
<td></td>
<td>100</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>95</td>
<td>61</td>
</tr>
</tbody>
</table>

It should be noted that before 1995 Member States were not requested to transmit data related to the enterprises with less than 20 persons employed on an annual basis. However several Member States carried out structural surveys on this sub-population.

The figures relating to 2000 take account of changes in survey strategies that are foreseen at the present time by Member States.

This indicator translates very strongly the consequences of the more wide spread application of the use of administrative data as well as the more frequent use of sampling instead of exhaustive surveys. The global impact is very strong as it represents a marked decrease (about 40%) in the number of businesses surveyed. This impact is naturally particularly strong for enterprises with employment levels below 20 and is non existent for larger enterprises.
ANNEXES

Annex 1

NACE Rev. 1

NACE Rev. 1 levels

17 Sections - letters A to Q (shown below)

31 Subsections - 2-character alphabetical codes (shown below)

60 Divisions - 2-digit (shown below)

222 Groups - 3-digit

503 Classes - 4-digit

Section A Agriculture, hunting and forestry

01 Agriculture, hunting and related service activities

02 Forestry, logging and related service activities

Section B Fishing

05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing

Section C Mining and quarrying

Subsection CA Mining and quarrying of energy producing materials

10 Mining of coal and lignite; extraction of peat

11 Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying

12 Mining of uranium and thorium ores

Subsection CB Mining and quarrying, except of energy producing materials

13 Mining of metal ores

14 Other mining and quarrying

Section D Manufacturing

Subsection DA Manufacture of food products, beverages and tobacco

15 Manufacture of food products and beverages
16 Manufacture of tobacco products

Subsection DB Manufacture of textiles and textile products

17 Manufacture of textiles

18 Manufacture of wearing apparel; dressing and dyeing of fur

Subsection DC Manufacture of leather and leather products

19 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear

Subsection DD Manufacture of wood and wood products

20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials

Subsection DE Manufacture of pulp, paper and paper products; publishing and printing

21 Manufacture of pulp, paper and paper products

22 Publishing, printing and reproduction of recorded media

Subsection DF Manufacture of coke, refined petroleum products and nuclear fuel

23 Manufacture of coke, refined petroleum products and nuclear fuel

Subsection DG Manufacture of chemicals, chemical products and man-made fibres

24 Manufacture of chemicals and chemical products

Subsection DH Manufacture of rubber and plastic products

25 Manufacture of rubber and plastic products

Subsection DI Manufacture of other non-metallic mineral products

26 Manufacture of other non-metallic mineral products

Subsection DJ Manufacture of basic metals and fabricated metal products

27 Manufacture of basic metals

28 Manufacture of fabricated metal products, except machinery and equipment

Subsection DK Manufacture of machinery and equipment n.e.c.

29 Manufacture of machinery and equipment n.e.c.

Subsection DL Manufacture of electrical and optical equipment

30 Manufacture of office machinery and computers

31 Manufacture of electrical machinery and apparatus n.e.c.
32 Manufacture of radio, television and communication equipment and apparatus
33 Manufacture of medical, precision and optical instruments, watches and clocks

Subsection DM Manufacture of transport equipment
34 Manufacture of motor vehicles, trailers and semi-trailers
35 Manufacture of other transport equipment

Subsection DN Manufacturing n.e.c.
36 Manufacture of furniture; manufacturing n.e.c.
37 Recycling

Section E Electricity, gas and water supply
40 Electricity, gas, steam and hot water supply
41 Collection, purification and distribution of water

Section F Construction
45 Construction

Section G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
51 Wholesale trade and commission trade, except of motor vehicles and motorcycles
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods

Section H Hotels and restaurants
55 Hotels and restaurants

Section I Transport, storage and communication
60 Land transport; transport via pipelines
61 Water transport
62 Air transport
63 Supporting and auxiliary transport activities; activities of travel agencies
64 Post and telecommunications

Section J Financial intermediation
65 Financial intermediation, except insurance and pension funding
66 Insurance and pension funding, except compulsory social security
67 Activities auxiliary to financial intermediation

Section K Real estate, renting and business activities
70 Real estate activities
71 Renting of machinery and equipment without operator and of personal and household goods
72 Computer and related activities
73 Research and development
74 Other business activities

Section L Public administration and defence; compulsory social security
75 Public administration and defence; compulsory social security

Section M Education
80 Education

Section N Health and social work
85 Health and social work

Section O Other community, social and personal service activities
90 Sewage and refuse disposal, sanitation and similar activities
91 Activities of membership organizations n.e.c.
92 Recreational, cultural and sporting activities
93 Other service activities

Section P Private households with employed persons
95 Private households with employed persons

Section Q Extra-territorial organizations and bodies
99 Extra-territorial organizations and bodies
Annex 2

GLOSSARY

Activity

An activity is said to take place when resources such as equipment, labour, manufacturing techniques, information networks or products are combined, leading to the creation of specific goods or services. An activity is characterised by an input of products (goods or services), a production process and an output of products.

In practice the majority of units carry on activities of a mixed character. One can distinguish between three types of economic activity:

— Principal activity: The principal activity is identified by the topdown method as the activity which contributes most to the total value added of the entity under consideration. The principal activity so identified does not necessarily account for 50% or more of the entity's total value added.

— Secondary activity: A secondary activity is any other activity of the entity that produces goods or services.

— Ancillary activity: Principal and secondary activities are generally carried out with the support of a number of "ancillary activities", such as accounting, transportation, storage, purchasing, sales promotion, repair and maintenance etc. Thus ancillary activities are those that exist solely to support the main productive activities of an entity by providing non-durable goods or services for the use of that entity.

Class

see: NACE Rev. 1

Confidential cells

The cells of a table which are non-publishable due to the risk of statistical disclosure are referred to as confidential cells. By definition there are three types of confidential data where disclosure might happen and therefore cells that are confidential:

— Small counts. A tabular cell is confidential if less than a certain number of entities contribute to the total of that cell.

— Dominance or case of predominance. (a) dominance rule, concentration rule, (n,k) rule: A cell is regarded as confidential, if the n largest units contribute more than k% to the cell total. The n and k are given by the statistical authority and differ quite a lot. (b) prior posterior ambiguity rule, p/q rule: it is assumed that out of publicly available information the contribution of one individual to the cell total can be estimated to within p per cent (p=error before publication); after the publication of the statistic the value can be estimated to within q percent (q=error after publication). In the p/q rule the ratio p/q represents the information gain through publication and in the prior posterior ambiguity rule the difference p-q. If the information gain is unacceptable the cell is declared as confidential. P and q are given by the statistical authority and thus the definition of the acceptable level of information gain.
— Secondary confidentiality/derivation: Even if all confidential cells containing small counts or cases of predominance are protected by disclosure control methods (=primary protection), disclosure might be possible by recalculating confidential cells as the difference between a total and the sum of cells corresponding to that total. This recalculation of primary protected cells is called derivation. Derivation can occur (a) within one two-dimensional table or higher-dimensional tables, when margin totals are given in the lines, the columns or in a set of lines or columns; (b) between tables and subtables in the case of three or more dimensions e.g. between geographic levels or between aggregation levels (total economy, sector); (c) between different tables on the same aggregation or geographical level containing different sorts of information.

Note: Small counts and dominance are collectively primary confidentiality.

Division

see: NACE Rev. 1

EEA

European Economic Area

Employees

Employees are defined as those persons who work for an employer and who have a contract of employment and receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind.

The relationship of employer to employee exists when there is an agreement, which may be formal or informal, between an enterprise and a person, normally entered into voluntarily by both parties, whereby the person works for the enterprise in return for remuneration in cash or in kind.

A worker is considered to be a wage or salary earner of a particular unit if he or she receives a wage or salary from the unit regardless of where the work is done (in or outside the production unit). A worker from a temporary employment agency is considered to be an employee of the temporary employment agency and not of the unit (customer) in which they work.

In particular the following are considered as employees:

— paid working proprietors;
— students who have a formal commitment whereby they contribute to the unit’s process of production in return for remuneration and/or education services;
— employees engaged under a contract specifically designed to encourage the recruitment of unemployed persons;
— homeworkers if there is an explicit agreement that the homeworker is remunerated on the basis of the work done and they are included on the pay-roll.
Employees includes part-time workers, seasonal workers, persons on strike or on short-term leave, but excludes those persons on long-term leave. Employees does not include voluntary workers.

**Enterprise**

The enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit.

**EUROSTAT**

Statistical Office of the European Communities

**Group**

see: NACE Rev. 1

**KAU**

Kind of Activity Unit

**Kind-of-activity unit**

The kind of activity unit (KAU) groups all the parts of an enterprise contributing to the performance of an activity at class level (4-digits) of NACE Rev. 1 and corresponds to one or more operational subdivisions of the enterprise. The enterprise's information system must be capable of indicating or calculating for each KAU at least the production value, intermediate consumption, manpower costs, the operating surplus and employment and gross fixed capital formation.

**Legal unit**

Legal units include:

— legal persons whose existence is recognised by law independently of the individuals or institutions which may own them or are members of them.

— natural persons who are engaged in an economic activity in their own right.

The legal unit always forms, either by itself or sometimes in combination with other legal units, the legal basis for the statistical unit known as the ‘enterprise’.

**Local unit**

The local unit is an enterprise or part thereof (e.g. a workshop, factory, warehouse, office, mine or depot) situated in a geographically identified place. At or from this place economic activity is carried out for which - save for certain exceptions - one or more persons work (even if only part-time) for one and the same enterprise.

**NACE Rev. 1**

Statistical Classification of Economic Activities in the European Community
NACE Rev. 1 ("Nomenclature générale des Activités économiques dans les Communautés Européennes" - Statistical classification of economic activities in the European Community) was adopted in order to establish a common statistical classification of economic activities within the European Community in order to ensure comparability between national and community classifications and hence national and community statistics.

NACE Rev. 1 replaced NACE 1970. In so doing it established a direct link between the European classification and the internationally recognised ISIC Rev. 3 developed under the auspices of the United Nations. These two classifications are directly compatible at the 2-digit level and more detailed levels of ISIC Rev. 3 can be calculated by aggregating the more detailed levels from NACE Rev. 1.

NACE Rev. 1

17 Sections - letters A to Q
31 Subsections - 2-character alphabetical codes
60 Divisions - 2-digit codes
222 Groups - 3-digit codes
503 Classes - 4-digit codes

ISIC Rev. 3

17 Sections
(subsections are not used)
60 Divisions
159 Groups
292 Classes

The NACE Rev. 1 Regulation was amended by a Commission Regulation in 1993 which modified the classification and a corrigendum was published in 1995.

New Cronos

A Eurostat reference database (replaces CRONOS) - all EU macro-economic, regional, business, social, and demographic data.

The New Cronos reference database contains around 100 million statistical data covering every economic and social sector. The information normally covers all European Union Member States; in many cases it is also available for Japan, the United States of America and other Union trade partners.

NSI

National Statistical Institute
**Number of persons employed**

The number of persons employed is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by 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.

The number of persons employed excludes manpower supplied to the unit by other enterprises, persons carrying out repair and maintenance work in the enquiry unit on behalf of other enterprises, as well as those on compulsory military service.

Unpaid family workers refer to persons who live with the proprietor of the unit and work regularly for the unit, but do not have a contract of service and do not receive a fixed sum for the work they perform. This is limited to those persons who are not included on the payroll of another unit as their principal occupation.

Note: In order to check the comparability of data, it is necessary to indicate whether voluntary workers have been included under this heading or not.

**NUTS**

Nomenclature of Territorial Units for Statistics

**Principal activity**

The principal (or main) activity is identified as the activity which contributes most to the total value added of a unit under consideration. The principal activity so identified does not necessarily account for 50% or more of the unit's total value added. The classification of principal activity is determined by reference to NACE Rev. 1, first at the highest level of classification and then at more detailed levels ("top-down" method).

**Quality**

Quality is defined in the ISO 8402 - 1986 as: ‘the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs’.

Quality of statistics can be defined with reference to several criteria.

— Relevance: an inquiry is relevant if it meets users’ needs. The identification of users and their expectations is therefore necessary.

— Accuracy: accuracy is defined as the closeness between the estimated value and the (unknown) true value.

— Timeliness and punctuality in disseminating results: most users want up-to-date figures which are published frequently and on time at pre-established dates.
— Accessibility and clarity of the information: statistical data have most value when they are easily accessible by users, are available in the forms users desire and are adequately documented.

— Comparability: statistics for a given characteristic have the greatest usefulness when they enable reliable comparisons of values taken by the characteristic across space and time. The comparability component stresses the comparison of the same statistics between countries in order to evaluate the meaning of aggregated statistics at the European level.

— Coherence: when originating from a single source, statistics are coherent in that elementary concepts can be combined reliably in more complex ways. When originating from different sources, and in particular from statistical surveys of different frequencies, statistics are coherent in so far as they are based on common definitions, classifications and methodological standards.

— Completeness: domains for which statistics are available should reflect the needs and priorities expressed by the users of the European Statistical System.

**SBS**

Structural Business Statistics

**Section**

see: NACE Rev. 1

**SME**

Small and Medium-sized Enterprises

**Statistical unit**

The Council Regulation ((EEC), No. 696/93 of 15 March 1993) on statistical units for the observation and analysis of the production system in the Community lays down a list of eight (types of) statistical units:

— the Enterprise;
— the Institutional Unit;
— the Enterprise Group;
— the Kind-of-activity Unit (KAU);
— the Unit of Homogeneous Production (UHP);
— the Local Unit;
— the Local Kind-of-Activity Unit (local KAU);
— the Local Unit of Homogeneous Production (local UHP).
Statistical units are defined on the basis of three criteria:
— Legal, accounting or organisational criteria;
— Geographical criteria;
— Activity criteria.

The relationship between different types of statistical units can be summarised in the following way:
— Units with one or more activities and one or more locations
  Enterprise,
  Institutional unit;
— Units with one or more activities and a single location
  Local unit;
— Units with one single activity and one or more locations
  KAU,
  UHP;
— Units with one single activity and one single location
  Local KAU,
  Local UHP.

**Sub-section**

see: NACE Rev. 1

**Unpaid family workers**

Unpaid family workers refer to persons who live with the proprietor of the unit and work regularly for the unit, but do not have a contract of service and do not receive a fixed sum for the work they perform. This is limited to those persons who are not included on the payroll of another unit as their principal occupation.
Annex 3

TABLES FOR PART II

Tables 1, 2 and 3 concern data availability for users. The figures presented are based entirely on data availability in New Cronos, Eurostat’s reference database. Nearly all Member States transmit more data to Eurostat than is disseminated, the difference being essentially data which may not be disclosed for reasons of statistical confidentiality. This analysis was carried out in January 2000, a little more than three years after the end of the 1996 reference period.

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31 The values given for Germany for Section H for 1996 in fact refer to 1995. Germany did not carry out a survey for this Section in 1996 and so a comparison would be meaningless. Data availability for 1995 is regarded as being representative of data availability for 1997, 1999 and subsequent years.

32 The values given for the volume of data sent for Austria in 1996 in fact refer to 1995. Austria did not carry out a survey in 1996 and so a comparison between 1994 and 1996 would be meaningless. Data availability for 1995 is regarded as being representative of data availability for 1997 and subsequent years.
Table 2:

NACE Rev. 1 activities for which data is available in New Cronos for only half or less of the countries (EU Member States plus Norway). For the purposes of this analysis an activity is considered to be available for a country if at least half of the compulsory variables of SBS regulation annex 1 are available in New Cronos for that activity. The exact number of countries available for each activity is indicated for 1994 and 1996 (ranked).

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<th>1996</th>
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<td>Extraction of crude petroleum and natural gas (11.10)</td>
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<td>Service activities incidental to oil and gas extraction, excluding surveying (11.20)</td>
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<td>Manufacture of prepared unrecorded media (24.65)</td>
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<td>Preparation and spinning of flax-type fibres (17.14)</td>
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<td>Manufacture of ceramic insulators and insulator fittings (26.23)</td>
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<td>Manufacture of refined oils and fats (15.42)</td>
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<td>Manufacture of margarine and similar edible fats (15.43)</td>
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<td>Woolen-type weaving (17.22)</td>
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<td>Manufacture of essential oils (24.63)</td>
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<td>Manufacture of cement (26.51)</td>
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<td>Processing of tea and coffee (15.86)</td>
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<td>Manufacture of fruit and vegetable juice (15.32)</td>
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<tr>
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<td>Manufacture of distilled potable alcoholic beverages (15.91)</td>
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<tr>
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<td>Production of ethyl alcohol from fermented materials (15.92)</td>
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<td>Manufacture of malt (15.97)</td>
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<tr>
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<td>Preparation and spinning of other textile fibres (17.17)</td>
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<td>Worsted-type weaving (17.23)</td>
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<tr>
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<td>Manufacture of coke oven products (23.10)</td>
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<tr>
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<td>Manufacture of industrial gases (24.11)</td>
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<td>Manufacture of photographic chemical material (24.64)</td>
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<td>Manufacture of rubber tyres and tubes (25.11)</td>
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<td>Manufacture of cast iron tubes (27.21)</td>
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<td>Manufacture of steel tubes (27.22)</td>
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<td>Wire drawing (27.34)</td>
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<td>Manufacture of invalid carriages (35.43)</td>
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<td>Energy supply 4</td>
<td>Manufacture of gas; distribution of gaseous fuels through mains (40.20)</td>
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<tr>
<td></td>
<td>Steam and hot water supply (40.30)</td>
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<td>Production and distribution of electricity (40.10)</td>
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<td>Construction 17</td>
<td>Test drilling and boring (45.12)</td>
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<tr>
<td></td>
<td>Demolition and wrecking of buildings; earth moving (45.11)</td>
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<td>Construction of water projects (45.24)</td>
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<td>Agents involved in the sale of agricultural raw materials live animals, textile raw materials and semi-finished goods (51.11)</td>
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<td>Agents involved in the sale of machinery, industrial equipment ships and aircraft (51.14)</td>
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<td>Wholesale of live animals (51.23)</td>
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<tr>
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<td>Wholesale of hides, skins and leather (51.24)</td>
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<td>Wholesale of unmanufactured tobacco (51.25)</td>
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<td>Wholesale of coffee, tea, cocoa and spices (51.37)</td>
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<td></td>
<td>Wholesale of machinery for the textile industry and of sewing and knitting machines (51.63)</td>
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<td></td>
<td>Repair of electrical household goods (52.72)</td>
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<tr>
<td>Hotels; restaurants 9</td>
<td>Hotels; Camping sites and other provision of short-stay accommodation (55.10+55.21+55.22+55.23)</td>
<td>1</td>
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</table>
Table 3:

Variables for which data is available in New Cronos for only four or less countries. For the purpose of this analysis a variable is considered available for a country if it is available in New Cronos for the majority of the activities for which it is requested. The exact number of countries whose data is available for each variable is listed for 1995 and 1996 (ranked).

<table>
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<tr>
<th>Sector</th>
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<td><strong>Mining</strong></td>
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<td></td>
</tr>
<tr>
<td>Number of part-time employees</td>
<td>(16 13 1)</td>
<td>4</td>
</tr>
<tr>
<td>Number of births of enterprises</td>
<td>(11 12 0)</td>
<td>3</td>
</tr>
<tr>
<td>Payments for long term rental and operational leasing of goods</td>
<td>(13 41 1)</td>
<td>4</td>
</tr>
<tr>
<td>Value of tangible goods acquired through financial leasing</td>
<td>(15 31 0)</td>
<td>4</td>
</tr>
<tr>
<td>Number of apprentices</td>
<td>(16 13 2)</td>
<td>2</td>
</tr>
<tr>
<td>Number of employees in full-time equivalents</td>
<td>(16 14 0)</td>
<td>2</td>
</tr>
<tr>
<td>Turnover from the principal activity at the NACE Rev. 1 4-digit level</td>
<td>(18 11 0)</td>
<td>4</td>
</tr>
<tr>
<td>Total intra-mural R&amp;D expenditure</td>
<td>(22 11 0)</td>
<td>2</td>
</tr>
<tr>
<td>Total number of R&amp;D personnel</td>
<td>(22 12 0)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of apprentices</td>
<td>(16 13 2)</td>
<td>2</td>
</tr>
<tr>
<td>Turnover from the principal activity at the NACE Rev. 1 4-digit level</td>
<td>(18 11 0)</td>
<td>4</td>
</tr>
<tr>
<td>Total intra-mural R&amp;D expenditure</td>
<td>(22 11 0)</td>
<td>2</td>
</tr>
<tr>
<td>Total number of R&amp;D personnel</td>
<td>(22 12 0)</td>
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</tr>
<tr>
<td><strong>Energy supply</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments for long term rental and operational leasing of goods</td>
<td>(13 41 1)</td>
<td>4</td>
</tr>
<tr>
<td>Number of apprentices</td>
<td>(16 13 2)</td>
<td>2</td>
</tr>
<tr>
<td>Number of employees in full-time equivalents</td>
<td>(16 14 0)</td>
<td>3</td>
</tr>
<tr>
<td>Turnover from the principal activity at the NACE Rev. 1 4-digit level</td>
<td>(18 11 0)</td>
<td>4</td>
</tr>
<tr>
<td>Total intra-mural R&amp;D expenditure</td>
<td>(22 11 0)</td>
<td>3</td>
</tr>
<tr>
<td>Total number of R&amp;D personnel</td>
<td>(22 12 0)</td>
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</tr>
<tr>
<td><strong>Construction</strong></td>
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<td></td>
</tr>
<tr>
<td>Number of births of enterprises</td>
<td>(11 12 0)</td>
<td>2</td>
</tr>
<tr>
<td>Number of deaths of enterprises</td>
<td>(11 13 0)</td>
<td>2</td>
</tr>
<tr>
<td>Value of tangible goods acquired through financial leasing</td>
<td>(15 31 0)</td>
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</tr>
<tr>
<td>Turnover from industrial activities excluding construction</td>
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<tr>
<td>Turnover from construction activities</td>
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<tr>
<td>Payments for agency workers</td>
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<tr>
<td>Payments for long term rental and operational leasing of goods</td>
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<tr>
<td>Number of employees in full-time equivalents</td>
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<tr>
<td>Number of hours worked by employees</td>
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Only 3 of these NACE Rev. 1 Classes are required by the SBS regulation
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<tr>
<th></th>
<th>(18 31 0)</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>(18 32 0)</td>
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<td>2</td>
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<tr>
<td>Total intra-mural R&amp;D expenditure</td>
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<td>1</td>
</tr>
<tr>
<td>Total number of R&amp;D personnel</td>
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<table>
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<td>Turnover from agriculture, forestry, fishing and industrial activities</td>
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<tr>
<td>Gross investment in existing buildings and structures</td>
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<tr>
<td>Gross investment in construction and alteration of buildings</td>
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<td>Gross investment in machinery and equipment</td>
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<tr>
<td>Value of tangible goods acquired through financial leasing</td>
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</table>

**Table 4:**

Delay in months for data transmission over and above the 18 months from the end of the reference year foreseen by the SBS regulation. A “-” indicates that no data was transmitted by the Member State concerned. “NA” indicates that data has been transmitted but precise information on the delay within which this was done is unknown.

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<td>Mining and quarrying; manufacturing; energy and water supply</td>
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### Table 5:

Size thresholds used for data collection in EU Member States prior to the SBS regulation and in 1996. All thresholds are expressed in terms of the number of persons employed unless otherwise stated.

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<td><strong>B</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry: generally 5+ manual workers</td>
<td>No threshold</td>
<td>5+ employees</td>
<td>No threshold</td>
<td>5+ employees</td>
<td></td>
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<tr>
<td>Construction: generally 10+ or 20+ manual workers</td>
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<td>Smaller enterprises are covered by administrative data</td>
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<tr>
<td>Investment survey: generally 20+ manual workers</td>
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<td>No threshold in distribution and HORECA</td>
<td>No threshold in distribution and HORECA</td>
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<td>No threshold except some transport activities 6+</td>
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<td>No threshold in distribution, HORECA, transport and communication</td>
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<td>10-19 persons employed excluded in business services</td>
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<td>Agro-food 10 + employees</td>
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<td>10-19 persons employed excluded in business services</td>
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<td>10-19 persons employed excluded in business services</td>
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<td>20+ in HORECA and in some distribution activities</td>
<td>No threshold except holding companies (74.15) 5+ employees</td>
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<td>20+ in HORECA and in some distribution activities</td>
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<tr>
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<td>Smaller enterprises are covered by administrative data</td>
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<tr>
<td>Gas and electricity supply and construction – no threshold</td>
<td>No threshold</td>
<td>No threshold</td>
<td>No threshold</td>
<td>No threshold</td>
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<td><strong>UK</strong></td>
<td>Industry 10+ employees</td>
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<td>Construction – no threshold</td>
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34 Information relates to 1995 as the Austrian statistical office carried out a census in 1995 and did not conduct a survey for 1996. The coverage of 1995 is regarded as representative of plans for 1997 and following years.

35 There have been no annual surveys in services in Austria before 1995 but a census was carried out every 5-7 years.

36 In Finland two parallel surveys were conducted in the past. The sector specific surveys that were conducted in industry and in construction have been stopped and only the financial statistics remain that cover all activities. Hence the thresholds have changed greatly in the industrial sectors.
Table 6:

Primary employment measure used for drawing samples and disseminating size class data in the EU Member States. Note that in some Member States these are expressed in “full-time equivalent” units whereby allowance is made for certain atypical employment situations such as part-time employment.

<table>
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<th>Publishing results</th>
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