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Information:
Statistisches Bundesamt
General Information Service
D-65180 Wiesbaden

- Phone: + 6 11 / 75 24 05
- Fax: + 6 11 / 75 33 30
- T-Online (Btx): *48484#
- Internet: <http://www.statistik-bund.de>

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The catchword

Library Services offered by the Federal Statistical Office

The main task of the Federal Statistical Office Library is to provide services for the compilation of the official statistics, and obtain, make available or give access to the literature needed for this. As a specialized research library, however, it is of growing importance for interested persons outside the official statistics offices, like students, scholars and research institutions in economics and the social sciences. Hence it is open for external users from Monday to Thursday from 9.00 to 15.00 and on Fridays from 9.00 to 14.00.

The library endeavours to obtain all the relevant statistical publications from Germany and abroad, and this naturally includes the literature on methodology and statistical textbooks. It also has standard reference books on economics and the social sciences, demography and ecology. With its collection of specialist literature on statistics the library enjoys a special place in the Federal Republic of Germany, since, in addition to published books it also obtains official documents and "grey literature", and to do this maintains a lively exchange with a large number of domestic and foreign institutions – at present more than 500. The official literature includes the documents, reports, statistics and so on issued by public authorities and international organizations. The "grey literature" is research and conference reports and individual studies that are not obtainable through the book trade. It also accounts for a high percentage of the inflow. The library now has more than 400,000 volumes, about 1,560 current German and foreign periodicals and 30 daily or weekly newspapers.

In keeping with its interpretation of its role as a modern services facility for the compilation of official statistics, the library works constantly to improve its range and services within its manpower and financial capabilities. Gradually every section of the library is being equipped with a modern automated library administration system and linked to an internal network. This provides users with an on-line catalogue ("OPAC"), with a simple menu system which gives the reader access to a wide range of research facilities in the library. The library has always offered a large number of important services:

- Finding titles: In addition to the alphabetical catalogue on cards the STALIS data bank supported statistical literature information system has been available to help readers since 1982. In the STALIS system on-line searches can be made from key words and formal criteria. The system contains monographs and individual titles of serial publications and selected articles from about 180 scientific periodicals that are constantly being evaluated.
- Lending over the counter and by post: As long as the needs of the Federal Statistical Office are fully met, the library's stock is available to all users, either in the form of over the counter lending or through the mail order lending service run by the German scientific libraries, of which our library is a member. The library can also obtain books which it does not stock itself from other libraries through the mail order service for staff of the Federal Statistical Office.
- Information and Advisory Service: During the library's opening hours qualified members of staff are available to answer all users' queries. This information service is also available for research in the various data banks on-line or on CD-Rom.
- On-line connections: At present the library is connected to the following data banks: the OECD's OLIS data bank, which contains, among other things, documents, conference reports, job advertisements and OECD statistics; the JURIS GmbH data banks, particularly JURIS (jurisdiction and legislation in the Federal Republic of Germany) and CELEX (jurisdiction and legislation in the EC), the library data banks of the German Library Institute (Deutsches Bibliotheksinstitut), with the help of which the library participates in the scientific libraries' mail lending service – e.g. the ZDB periodicals data bank, which lists the periodicals held by the scientific libraries in the Federal Republic of Germany, the joint catalogue of machine-readable catalogue data, which contains the references for monographs, the full list of conference volumes and so on.
- CD-Roms: A number of data banks and catalogues are also available for researchers on CD-Roms. They include the VLB list of available books, the Federal German postcode numbers, the statistical yearbooks for Lower Saxony, North-Rhine Westphalia, Germany and the Statistical Office of the European Communities (EUROSTAT), and the German national bibliography.
- Lists of publications: A special service offered by the library is the monthly list of new acquisitions, "New Books and Articles". This shows the latest acquisitions by the library and the latest articles in scientific periodicals arranged according to subject area. Once a year the list of periodicals is issued with all the periodicals and newspapers to which the library is currently subscribing, in both alphabetical order and arranged according to countries and international organizations.

Methodology of federal statistics – Further development

The introduction of new classifications in the statistics on the producing sector from 1995

At the beginning of 1995 the new Industrial Classification of Economic Activities, 1993 Edition (WZ 93 – Klassifikation der Wirtschaftszweige, Ausgabe 1993) came into use, as did the new Product Classification for Production Statistics, 1995 Edition (GP 95 – Systematisches Güterverzeichnis für Produktionsstatistiken, Ausgabe 1995). These two new national classifications replace the older Industrial Classification of Economic Activities, Version for Statistics of Production Industries (SYPRO – Systematik der Wirtschaftszweige, Fassung für die Statistik im Produzierenden Gewerbe) and the Product Classification for Production Statistics, 1989 Edition (GP 89 – Systematisches Güterverzeichnis für Produktionsstatistiken, Ausgabe 1989). They were derived from European classifications that, after a transition period, must be used in full from 1995 in every EU member state under the NACE Regulation (Council Regulation (EEC) No 3037/90 of 9 October 1990 on the statistical classification of economic activities in the European Community (OJ L 293, p. 1), as modified by Commission Regulation (EEC) No 761/93 of 24 March 1993 (OJ L 83, p. 1) and the PRODCOM Regulation (Council Regulation (EEC) No 3924/91 of 19 December 1991 on the establishment of a Community survey of industrial production (OJ L 374, p. 1). This article summarizes the effects of these changes on the presentation of results in the Monthly Report on Mining and Manufacturing, the Quarterly Survey of Production and the monthly Rapid Production Report from the 1995 reporting year. It may be said that there are no changes to the frequency of the surveys or the reporting procedures.

The new classification of economic activities will determine the definition of the producing sector from the 1995 reporting year. That will affect the group of respondents of the statistics on the producing sector, because some activities in that sector have been regrouped, while some new ones have been added and others excluded. Moreover, the branches of economic activity are now coded according to an entirely new numbering system.

The change from the SYPRO system to the WZ 93 system brought a number of structural changes in the statistics on the producing sector. For instance, the production and assembly of wooden parts made by the builder and the production of prefabricated concrete building parts are now included with manufacturing, whereas under the SYPRO system they were regarded as building activities. Another important change is the inclusion of publishing in manufacturing. On the other hand, the maintenance and repair of motor vehicles and consumer durables is no longer included in the producing sector, it is now in trade. These changes have also resulted in a redefinition of the old main groups (end-use characterisation), under which the figures are given in the Monthly Report, i.e. in the tables of Series 4.1.1, and in the Quarterly Production Survey, in the diagrams and tables 1 to 7 of Series 3.1 in Subject-matter Series 4 (Producing Sector) issued by the Federal Statistical Office.

The figures on enterprises and their local units in the Monthly Report on Mining and Manufacturing in Subject-matter Series 4, Series 4.1.1 will be given in accordance with the new classification of economic activities from reference month January 1995. The figures in the Monthly Report will still be presented at the four-digit level. But while there were only around 210 four-digit headings under the old SYPRO system, there will be more than 250 under the WZ 93 system.

For the Quarterly Production Survey the classifications for the collection and presentation of the data have changed. The results will be shown under different or differently delimited numberings. The numbers in the reports themselves have nine figures. The new GP 95 differs in structure considerably from the old GP 89, and for that reason the figures for many types of products will be not, or not fully, comparable over time. The results obtained under the GP 89 system for 1992 to 1994 will be converted for the European production statistics to the GP 95 or the PRODCOM list, as an initial aid, and these estimates will enable some comparisons to be made of the figures for the above period under the two classifications.

The monthly Rapid Production Report also uses the new classification for the collection of material for the Quarterly Production Survey, that is, the individual items on the "List of Products in the Rapid Production Report" are defined by the nine-digit numbers in the GP 95 system, with the consequences described above for the comparability of the results.

Like all new things, the introduction of the new classifications of economic activities and commodities has required a period of "acclimatization" for both the producers of the statistics and the users, and it has also involved some extensive conversion work for enterprises and their local units, for the statistical offices, and for the users of the data. The use of uniform classifications throughout Europe is, however, essential for the harmonization of the statistical systems of member states. Ultimately it will ensure that the figures in the statistics are fully comparable within the EU, which is of considerable importance for the gradual harmonization of economies within the European Economic Area. The direct application of the definitions of commodities in the Commodity Classification for Foreign Trade Statistics to the types of commodities in the GP 95 system will also make these figures more comparable with the foreign trade statistics.

Testing portable computers for use in price surveys

After a positive test of portable computers for household surveys the official statisticians have carried out a follow-up project and tested a portable computer for use in consumer price surveys. These surveys are carried out monthly in selected municipalities, and they form the basis, among other things, for the rate of price increase as published by the media. A particular consideration in preparing the new test was that the computers would be used under totally different conditions from those in the household surveys. The interviewers carrying out the household surveys could assume that they would be able to sit down while they were asking their questions, so that they could rest their laptops on their knees (as the name implies) or maybe even put them down on a table. The staff collecting data on prices generally have to hold their computers themselves, because they work standing up and can rarely find a suitable place to put down their equipment when carrying out the survey (usually in supermarkets and other shops). So hand-held computers would be more suitable. These are in vertical format (the model used measured 20 x 8 x 3.5 cm) and can easily be held in one hand, leaving the other hand free to enter the data on the keyboard. However, the handy format is not entirely advantageous. The keys are small and close together, and the letters are not arranged as on a typewriter keyboard, they are in alphabetical order; moreover, the display can only show 9 lines of 32 characters each and so very much less than the 25 x 80 characters which a notebook computer, for instance, can show.

Parallel to the hand-held computers notebook and sub-notebook computers were tested. These portable PCs do not have the same disadvantages as hand-held computers, but they are much bigger and heavier (the (sub) notebooks used were in DIN A5 or A4 format and weighed between 1.3 and 3.5 kg; the hand-held computers weighed 540 g.).

The (sub) notebook computers use the DOS system, while the hand-held computers - like the other models available at the time of the purchase - had a proprietary operating system, which differs from the standard defined by the German Federal and Land statistical offices. The survey programme for (sub-)notebooks was provided in programming language C, while an OPL programme was written for the hand-held computers.

Both types were tested by three Land statistical offices. The test generally lasted three months; each Land had one or two computers to use. A member of the Land office staff took his computer and accompanied the person authorized by the municipality (most were larger towns) who collected the data in the conventional way.

It became apparent that - independent of the type of computer used - the electronic collection of the prices took up more time than writing these down on a questionnaire. But it may be assumed that the delays were largely due to initial problems, like lack of practice in handling the computer and its programme, or as yet not optimal programming, and that if the computers were used over a longer period of time the collection of the data would be faster. Acceptance problems on the part of the respondents, which arose occasionally during the test survey and were partly due to delays in entering the data (e.g. typing errors) should thus be reduced. But - especially with the hand-held computers - the disadvantage remains that the electronic equipment does not show the data as clearly as the questionnaire, and this makes it more difficult for the staff in the reporting unit to check quickly through the prices entered by the person collecting the data.

The advantages offered by the electronic collection of the data are firstly that conversions to desired reference figures can be made during the survey (e.g. the price for 200 g of smoked salmon is to be shown, but the shop only has packets of 125 g), and that plausibility checks can be made even at this stage (especially comparisons with the previous month's prices). Secondly, it does save time and has a rationalization cost-saving effect, firstly for the municipal authority responsible for data collection and secondly for the Land statistical offices. The work of transferring the prices on to data collation sheets, which the municipalities have to undertake with the conventional collection method, is not necessary, nor do the Land offices need to record the data. More time could be saved if, as envisaged during the tests but not yet implemented, the data can be sent to the Land office by electronic data transmission.

Altogether, all the three Land offices testing the computers agreed that the hand-held computers were suitable for price surveys. In addition to the handy format other advantages named were the background illumination on the display and the capacity of one battery, which was sufficient for several days' work. The result was less unanimous for the (sub) note-books. Positive qualities like a keyboard that is easy to read and a very legible display could not, according to two of the three testing Länder, compensate for the decisive disadvantage of too great a weight, which was an unacceptable physical strain on the collectors of the data. However, the third Land office called a computer weighing 1.3 kg suitable for price collection, although the staff emphasized that any more computers purchased should, if possible, not weigh more than 1 kg. Another consideration here is that one battery would probably have a maximum output of four to five hours, which would often entail taking a spare, making the total load even heavier. A market development towards lighter computers and/or more efficient batteries would noticeably improve the suitability of sub-notebook computers for price surveys. Alternatively, it would be conceivable to use new types of computers like the pen computer, which does not need a keyboard, and where the data is entered using an electronic pen. One Land office intends to test these computers.

The Census of Crafts on 31 March 1995

Introduction

Censuses of crafts have a long tradition in the Federal Republic of Germany. The first one was conducted as early as 1949. Further censuses were carried out in the years 1956, 1963, 1968, and 1977. The 1995 Census of Crafts, which had originally been planned for 1990, was performed with 31 March 1995 as the census day and thus is already the sixth census in all. At the same time, it is the first census of crafts carried out in united Germany. Consequently, it plays a significant role as it is also the first census to provide reliable data on the crafts sector of the new Länder and Berlin-East.

The present paper will describe the tasks and bases of this important census. It will deal above all with the particularities of a census of crafts in comparison to other economic statistics and include brief explanations of some important terms.

1 Explanation of the terms: Crafts sector, branch of trade and branch of economic activity

Statistics on the crafts sector are often difficult to understand. The difficulties range from the question as to what the term "crafts sector" exactly means to the definition of the term "branch of trade" and its distinction from the term "branch of economic activity". The following paragraphs will therefore provide a detailed explanation.

For purposes of observing and analysing economic processes, it is common international practice to subdivide the economy into branches defined by their output, i.e. by the commodities produced or traded in or, respectively, the services rendered. The production industries, the distributive trade or the service sector may be cited as examples for such branches of economic activity.¹⁾ These branches are homogeneous insofar as they either produce goods, trade in commodities or provide services. The majority of economic statistics, therefore, cover specific branches, as for instance the Census of Distribution and Catering Establishments. These statistics always record data on those units (enterprises or their establishments, as a rule) which belong to a specific branch of economic activity because of their output.

The basic difference of the census of crafts is that it is not intended to cover specific economic branches but the whole of the crafts sector. However, the crafts sector is not defined by its output but on the basis of the occupation practised by the owner or manager of a unit. According to the applicable legal definition in Germany, which is included in the Crafts Code²⁾, a business establishment is "...a craft establishment...if it is operated in conformity with the rules of a craft, and if its activities completely or essentially relate to one of the trades listed in Appendix A to this law" (Art. 1, para. 2 of the Crafts Code). Appendix A of the Crafts Code is the "List of the trades which may be practised as a craft". At present, it comprises a total of 127 trades (see Chart 1). They are also referred to as branches of trade and subdivided into seven groups of trade. These trades are occupations, the practice of which involves specific activities which for their part require specific knowledge and skills. These activities, the knowledge and the skills, which are also referred to as trade description, are laid down in ordinances issued by the Federal Ministry of Economics in agreement with the Federal Ministry of Education, Science, Research and Technology.

Pursuant to the "Ordinance on the Trade Description and the Practical and Theoretical Examination Standards for the Master's Certificate of the Cabinet-Makers' Trade (Master Cabinet-Makers' Ordinance)" of 7 September 1987 (Bundesgesetzblatt I, p. 2138), the cabinet-makers' trade thus comprises, inter alia, the following activities:

- "1. ...Installation ... of component parts made of wood...,
2. Design, manufacture, installation, repair and restoration of interior fittings, interior finishing work using wood, wood-based materials and plastics....,
- ...
4. Design, manufacture, repair and restoration of furniture,
- ...
8. Manufacture of coffins."

1) For a concrete explanation of the definition of individual branches of economic activity by means of the goods produced, see Stock, G.: "Das neue Güterverzeichnis für Produktionsstatistiken" in *Wirtschaft und Statistik* 3/1994, pp. 181 ff.

2) Law on the Regulations applying to the Crafts Sector (Crafts Code), as published on 28 December 1965 (Bundesgesetzblatt I [1966], p. 1), last modified by the Law Amending the Crafts Code, other Legal Provisions concerning the Crafts Sector and the Law on Vocational Training of 20 December 1993 (Bundesgesetzblatt I, p. 2256).

Chart 1: The trades according to Appendix A of the Crafts Code¹⁾

No.	Trade	No.	Trade	No.	Trade
Group I: Building and finishing trades					
001	Bricklayer	007	Road builder	012	Well-constructor
002	Concrete and reinforced concrete builder	008	Heat, cold and sound insulator	013	Stone mason and stone sculptor
003	Furnace and chimney builder	009	Tile, paving-stone and mosaic layer	014	Plasterer
004	Bakery oven builder	010	Concrete block and terrazzo producer	015	Painter and lacquerer
005	Carpenter	011	Floor-layer	016	Tile stove and air-heating constructor
006	Roofer			017	Chimney sweeper
Group II: Metal and electrical trades					
018	Metalworker	029	Precision mechanic	041	Engraver
019	Surgical mechanic	030	Gun-smith	042	Chaser
020	Car body and vehicle worker	031	Plumber	043	Galvaniser and metalgrinder
021	Engine mechanic	032	Gas and water installer	044	Brass-founder and metal minter/printer
022	Tool maker	033	Central heating and ventilation constructor	045	Tin-founder
023	Turner	034	Coppersmith	046	Metal moulder and metal founder
024	Bicycle mechanic	035	Electrical installer	047	Bell-founder
200	Refrigeration builder	036	Electrical mechanic	048	Cutting tool mechanic
025	Office electronic information engineer	037	Telecommunication electronics engineer	049	Goldsmith
026	Vehicle mechanic	038	Electrical machine engineer	050	Silversmith
027	Vehicle electrician	039	Radio and TV technician	051	Gold, silver and aluminium-beater
028	Agricultural machine mechanic	040	Watchmaker		
Group III: Wood trades					
052	Cabinet-maker	056	Shipbuilder	060	Umbrella-maker
053	Parquetry layer	057	Pattern-maker	061	Wood carver
054	Rool and Venetian blind maker	058	Cartwright	062	Cooper
055	Boat builder	059	Turner (ivory carver)	063	Brush-maker
		201	Wooden-toy maker	064	Basket-maker
Group IV: Clothing, textile and leather trades					
065	Gentlemen's tailor	071	Weaver	077	Shoemaker
066	Ladies' tailor	072	Ropemaker	079	Tanner
067	Underwear tailor	073	Sailmaker	080	Saddler
068	Embroiderer	074	Furrer	081	Precision bag-maker
069	Knitter	075	Hat and cap maker	082	Interior decorator
070	Milliner	076	Glove maker		
Group V: Food trades					
083	Baker	085	Butcher	087	Brewer and mallster
084	Pastry-cook	086	Miller	088	Cellarman
Group VI: Health and bodycare trades; chemical and cleaning trades					
089	Optician	093	Orthopaedic shoe-maker	096	Textile cleaner
090	Hearing aid technician	094	Mechanical dentist	097	Wax candlemaker
091	Orthopaedic mechanic, bandage and prosthetic constructor	095	Hairdresser	099	Building cleaner
Group VII: Glass, paper, ceramic and other trades					
100	Glazier	109	Lithographer	119	Violin maker
101	Glass-cutter, glass-etcher	110	Screen-printer	203	Bow maker
102	Precision optician	111	Flexographer	120	Brass instrument and percussion maker
103	Glass apparatus maker	112	Chemigrapher	121	Woodwind instrument maker
126	Thermometer maker	113	Stereotyper	122	Plucked string instrument maker
104	Glass and porcelain painter	114	Electrotyper	123	Gilder
105	Gem cutter	115	Potter	124	Heading and neon sign producer
202	Gem engraver	116	Organ and harmonium builder	125	Vulcaniser and tyre mechanic
106	Photographer	117	Piano and harpsichord builder		
107	Book-binder	118	Hand-stop instrument maker		
108	Book-printer: type-setter; printer				

1) The numbering of the trades does not always correspond to the one applied in Appendix A of the Crafts Code, but is, in comparison to the latter, better suited to EDP. Therefore, it is also used for the survey forms of the 1995 Census of Crafts.

A business establishment manufacturing, for instance, coffins in conformity with the rules of a craft – as opposed to industrial manufacturing – ³⁾ thus carries on a trade. Art. 1, para. 1 of the Crafts Code stipulates that "...the independent practice of a trade as a non-itinerant business is only permissible for natural and legal persons and partnerships (self-employed craftsmen) listed in the official crafts register". This means that such a business establishment can be operated lawfully only if it has been entered in the official crafts register. For this reason, the German crafts sector can also be considered from a purely formal point of view, defining it as the whole of all units whose owners or managers are listed in the official crafts register, irrespectively of the branch of economic activity to which a unit belongs and of the number of employees.⁴⁾

The official crafts register, by the way, is kept by the Chambers of Crafts, which also see to it that the entry requirements are fulfilled: "Only those having passed the examination for the master's certificate of the trade to be followed or for a related trade will be entered in the official crafts register" (Art. 7, para. 1 of the Crafts Code).

An individual craft establishment can then be allocated to both a branch of trade and a branch of economic activity. There is no clear connection between the two. Thus, a unit whose owner or manager has been entered as a "cabinet-maker" in the official crafts register can be classified with several branches of economic activity. The classification depends on what product the business establishment actually manufactures or trades in, or, respectively, on the kind of service it provides. If several products are manufactured or traded in and/or several services are provided, the classification is made according to that activity which generates the largest share of the unit's gross value added at factor costs. As far as the above example is concerned, there are, among others, the following possibilities:

- If the largest share of the gross value added originates from the installation of purchased component parts made of wood, the unit belongs to construction (joinery installation).
- If furniture is manufactured exclusively, the unit has to be allocated to manufacturing (Manufacture of furniture).
- The same applies if the unit's main activity is the production of wooden coffins. (Within manufacturing, however, the unit would then belong to another branch than a unit manufacturing furniture, viz. to the manufacture of other products of wood.)
- Finally, if purchased kitchen equipment is sold in combination with the technically competent installation of the kitchens, and if the gross value added originates mainly from the sale, the unit is part of the retail trade.

The classification of the economy into individual economic branches can thus be supplemented by a breakdown into a crafts and a non-crafts sector as shown by Chart 2. The chart also reveals that the crafts census does not focus on a specific economic branch, for instance the production industries, as do most of the other surveys for economic statistics. Crafts censuses rather are statistical surveys comprising several economic branches, while, however, the individual economic branches are not covered exhaustively but only to the extent that the pertinent units are part of the crafts sector. This means that, for instance, bakeries (crafts) are covered, while bread factories (industry) are not.

Chart 2: Examples for the classification of the economy by output and by craft status

Craft status (Legal definition)	Branches of economic activity, defined by output, e.g.			} Scope of the census of crafts
	Production industries	Distributive trade	Services	
Crafts	Bakery (Producing crafts)	Men's clothing shop whose owner is listed as a master tailor in the official crafts register	Hairdresser	}
Non-crafts	Bread factory (Industry)	Department store	Software developer	

As far as international comparisons are concerned, it must be taken into account that most countries either do not classify the economy into a crafts and a non-crafts sector in the above-described meaning or use other criteria for delimitating the term "crafts sector", for example the number of employees. Therefore, the term "industry" at the international level usually stands for the production industries, whereas in Germany it only refers to the non-crafts sector of the production industries.⁵⁾

3) The present paper cannot deal more closely with the question as to when a trade is carried on in conformity with the rules of a craft. See, among others, Stober, R.: "Wirtschaftsverwaltungsrecht", Stuttgart, 1994, pp. 238 ff. for an outline of this very complex subject.

4) Frequently, the assumption is made that craft establishments *exclusively* are small-sized establishments (e.g. establishments with less than 20 employees). The legal definition of the crafts sector proves this to be untrue. Although the majority of craft establishments are small-sized, there are also enterprises with more than 1,000 (mainly part-time) employees in the building cleaners' trade.

5) In everyday usage, however, the term "industry" is often used as a synonym for "production industries" in Germany as well.

2 Tasks of the 1995 Census of Crafts

The 1995 Census of Crafts is to fulfill three tasks in particular. The major one is to provide up-to-date structural data on the German crafts sector in a detailed systematic and regional breakdown, including individual administrative districts (Kreise) and communities. Especially important is the fact that the 1995 Census of Crafts will for the first time also provide reliable data on the crafts sector in the new Länder and Berlin-East, where the crafts sector has been booming since the German unification.

The crafts census thus resembles a stock-taking of the crafts sector which, consisting mainly of small and medium-sized establishments, is one of the large and typical sectors of the German "Mittelstand". The results of this "stock-taking" can be utilized for many purposes: The legislator may, for example, take them as a basis for economic and social policies. The craft organizations, as for instance the Central Association of German Crafts or the Craft Guilds, also depend on up-to-date and reliable information for their work in the political sphere, the objective of which is to stress the importance of the crafts sector for employment and the training of apprentices. At last, the economy as such can make use of the data available from the crafts census, for example, for drawing up market analyses.

Moreover, the crafts census is traditionally employed as a sampling frame. Among other things, the quarterly reports on crafts, which originate from a sample survey aiming at the observation of business trends in the crafts sector, are completely restructured on the basis of the results of the 1995 Census of Crafts. The restructuring goes along with a replacement of those enterprises which partly have submitted data for the reports on crafts since 1978 already, provided that the recording of reliable data is not affected.

Finally, the 1995 Census of Crafts plays a significant role for the setting up of the German business register as stipulated by the Council Regulation (EEC) No 2 186/93 of 22 July 1993 on Community coordination in drawing up business registers for statistical purposes.⁶⁾ In this context, the 1995 Census of Crafts is an indispensable source of addresses especially of the small-sized craft enterprises, most of which are not yet listed in the already existing internal statistical registers, such as the register of production industries.⁷⁾ Furthermore, the census provides up-to-date information on the number of employees, the turnover and the branch of economic activity of the craft enterprises, which is also needed for the business register.

3 Legal basis

The legal basis for the crafts census is the Law on Statistics on the Crafts Sector (Crafts Statistics Law) of 7 March 1994 (Bundesgesetzblatt I, p. 417). It lays down the scope of the survey, the statistical units, the auxiliary and survey characteristics, the census day and other important framework conditions of the survey. At the same time, it is the new legal basis for the quarterly reports on crafts.

The legislative procedure took as much as two legislative terms. This was due to the fact that the Bundestag and the Bundesrat took different views on the question whether the trades resembling crafts, as they are called, should be included in the crafts census. The total of 50 trades resembling crafts are listed in Appendix B to the Crafts Code, i.e. in the "List of trades which may be operated according to rules similar to those of a craft". In contrast to the crafts sector, the practice of such a trade does not require a master's certificate. It is sufficient to notify the trade to the Chambers of Crafts.

The Bundesrat, in agreement with the craft organizations, requested that the trades resembling crafts be included for the first time in the crafts census, whereas the Federal Government and the Bundestag rejected this demand. The first bill submitted in the eleventh legislative term of the Bundestag was voted down in 1990 because of this issue, although the mediation committee had already worked out an agreement. The law could not be passed until a new compromise had been reached during the twelfth legislative term, which provided that a survey of the trades resembling crafts should be taken at another time than the crafts census.⁸⁾ The long duration of the legislative procedure was also the reason for the extraordinarily large interval of 18 years between the previous census of crafts in 1977 and the 1995 one. Incidentally, Art. 4, para. 1 of the Crafts Statistics Law stipulates that future censuses of crafts shall be implemented at intervals of eight to ten years.

6) See the section Kurznachrichten: "Verordnung über die innergemeinschaftliche Koordinierung des Aufbaus von Unternehmensregistern verabschiedet" in *Wirtschaft und Statistik* 9/1993, pp. 605 ff.

7) As for the conceptual problems involved with establishing a business register, see Schnorr-Bäcker, S./Schmidt, P.: "Rahmenbedingungen für ein umfassendes statistikinternes Unternehmensregister" in *Wirtschaft und Statistik* 8/1992 pp. 500 ff.

8) Art. 9, para. 2 of the law authorizes the Federal Ministry of Economics with the consent of the Bundesrat to order a census of the trades resembling crafts to be taken separately from the crafts censuses.

4 Methodological bases

The following paragraphs will set out the methodological bases of the 1995 Census of Crafts.

4.1. Survey method

Crafts censuses are exhaustive surveys for which the legislator has stipulated an obligation to provide information (Art. 6 Crafts Statistics Law) in order to ensure complete and reliable results. The survey forms of the 1995 Census of Crafts were mailed to the craftsmen and also had to be returned by mail to the respective Statistical Office of the Land. In accordance with Art. 8 of the Crafts Statistics Law, the statistical offices of the Länder had obtained the craftsmen's addresses from the Chambers of Crafts.

4.2. Scope of the survey

As described in paragraph 1 of this paper, the scope of the crafts census embraces the crafts sector according to the delimitation by the formal criterion of a unit's entry into the official crafts register. The census is to cover not only independent craft businesses but also the dependent crafts sector, i.e. so-called subsidiary craft establishments. This term will be explained in detail in the following paragraph.

Within the framework of the crafts census, by the way, it is not checked whether an individual unit's entry in the official crafts register is (still) legally correct. That is not the task of official statistics.

4.3. Units of survey and presentation

Art. 2 of the Crafts Statistics Law provides that the survey units of the crafts census are "establishments and enterprises of self-employed craftsmen who are listed in the official crafts register, and subsidiary craft establishments whose owners are listed in the official crafts register".

As far as the independent crafts sector is concerned, the crafts census basically is a survey of enterprises. An enterprise in this context is defined as the smallest legal unit which for commercial and/or tax reasons keeps books and draws up a balance sheet. Establishments, i.e. the regional units of which an enterprise is composed, only serve as statistical units in order to avoid double counting.

Double counts may occur with craft enterprises consisting of several establishments, all of which are listed in the official crafts register. In these cases, the addresses provided by the Chambers of Crafts do not always permit to distinguish clearly between the central office of an enterprise and a branch establishment. Thus, it cannot be excluded that several establishments of an enterprise receive a questionnaire and that each of these establishments provides information on the whole of the enterprise. The first question in the survey form, therefore, is whether the establishment contacted is the central office of the enterprise. If not, the branch establishment only needs to indicate the address of the central office and then can return the questionnaire without completing it further.

The subsidiary craft establishments are another particularity of the crafts census since it is the only survey of official statistics which collects data on these establishments. A subsidiary craft establishment is a dependent part of an enterprise, which performs activities according to Appendix A of the Crafts Code.⁹⁾ The enterprise as a whole may be engaged in a completely different activity. A department store which has a dependent butchery of its own can be cited as an example here. Subsidiary craft establishments, just as self-employed craftsmen, are listed in the official crafts register.

The traditional inclusion of subsidiary craft establishments in the crafts census is to ensure that the whole of the crafts sector is covered, not just self-employed craftsmen. In order to avoid double counts, however, subsidiary craft establishments of craft enterprises are not covered by the survey since their data are already reported by the craft enterprise concerned.

The tabulation units of the crafts census are enterprises and subsidiary craft establishments. There are no data recorded for establishments as such.

The results of the crafts census are published separately for enterprises and for subsidiary craft establishments as well as for both kinds of units together. Due to the highly differing significance of the units – 95% of the 494,243 units which were covered by the 1977 Census of Crafts and had existed for the whole of the year 1976 were enterprises, while just 5% were subsidiary craft establishments – the publication will focus on the craft enterprises.

9) For the exact definition of subsidiary craft establishments see Stober, R., loc. cit., p. 285.

4.4. Survey characteristics

The programme of the 1995 Census of Crafts puts emphasis on some few characteristics, with the survey programme for craft enterprises being more comprehensive than the one for subsidiary craft establishments. This is also the reason why different survey forms are used for enterprises and subsidiary establishments.

Chart 3 shows the individual characteristics included in the survey programme. Main emphasis is placed on questions concerning the employees, the gross wages and salaries, the statutory social costs and the turnover. The number of employees was recorded as at the census day and, in an additional breakdown by sex and by the position in the enterprise, as at 30 September 1994.

The data collected from enterprises and subsidiary establishments are complemented by a question relating to the main trade carried on, which must be indicated by means of the relevant number from Chart 1 (for example, 052 for cabinet-makers). Furthermore, enterprises have to provide information on the number of local units, the legal organization and the year of formation/takeover as well as on the main economic activity. In this context, the commodities produced or traded in, or, respectively, the services rendered have to be described in as much detail as possible. In addition, subsidiary establishments just have to state the type of the enterprise they belong to, as defined by the latter's economic activity.

Chart 3: The survey characteristics of the 1995 Census of Crafts, by statistical units

Survey characteristics	Statistical unit	
	Craft enterprise	Subsidiary craft establishment
Number of local units	X	
Legal organization	X	
Year of formation/year of takeover	X	
Main trade carried on, according to Appendix A of the Crafts Code	X	X
Economic activity (for subsidiary establishments: type of the enterprise to which the subsidiary establishment belongs)	X	X
Number of employees on 31 March 1995	X	X
Number of employees on 30 September 1994, in a breakdown by sex and by the position in the enterprise	X	X
Gross wages paid in 1994	X	X
Gross salaries paid in 1994	X	X
Statutory social costs in 1994	X	X
Turnover in 1994, by kinds of turnover	X	X
Destination of goods sold	X	X

By confining the catalogue to these few characteristics, the burden imposed on a craftsman through the completion of the questionnaire is to be kept as small as possible. This was also the reason why other interesting topics such as the number of part-time employees or the number of foreign employees were not included in the survey programme, even though a need for this kind of data certainly does exist.

4.5 Classification

Two nomenclatures are employed for the 1995 Census of Crafts, both of which serve for collecting as well as for presenting the results. The first one is the classification of trades as shown by Appendix A of the Crafts Code (see Chart 1). It permits to draw up that kind of presentation which is chiefly required, for instance, by the craft organizations, i.e. a presentation allocating the data provided by an enterprise or a subsidiary establishment to the main trade carried on.

Restricting the survey to this classification would, however, mean that the crafts census' results could not be used by official economic statistics, which, in principle, present results on the basis of the classification of economic activities, since the data on branches of trade cannot be clearly attributed to individual branches of economic activity as explained in paragraph 1. Moreover, the results would not be internationally comparable either, because the classification of trades is exclusively employed at the national level.

Therefore, crafts censuses are traditionally based on a second classification, i.e. a classification of economic activities. In the case of the 1995 Census of Crafts, the WZ 93 Classification of Economic Activities, Edition 1993 is applied. It is based on NACE Rev. 1 which has been the obligatory classification for collecting and publishing economic statistics within the European Union as of reference year 1995.¹⁰⁾

Contrary to former surveys, no special version of the classification of economic activities was set up for the 1995 Census of Crafts. Such special versions of a general classification, which were drawn up for individual statistics, made allowance for particularities of the relevant statistics through combinations of items. As these combinations, however, modified the classification's structure, such versions have no longer been permissible after NACE Rev. 1 was introduced, because they would impair the international comparability of the results.

Basically, WZ 93 thus has to be applied to its full extent. Some sectors, however, in which craft enterprises cannot operate in any case, can be excluded from the outset (for example, at the level of sections in WZ 93, section P "Private households with employed persons" and section Q "Extra-territorial organizations and bodies"). Nevertheless, there is still a total of 473 possible classes and sub-classes to which a craft enterprise may be allocated, even though the branches of economic activity are allocated only down to the level of classes in WZ 93 (except for construction [section F of WZ 93] to which sub-classes are applied). As regards the census of crafts conducted back in 1977, which was based on the WZ Classification of Economic Activities, Revised Edition, Version for the 1977 Crafts Census, just 200 headings had to be taken into account.¹¹⁾

The very complex WZ 93 is therefore exclusively applied to the craft enterprises. The data provided by subsidiary craft establishments on the economic activity of the enterprises to which they belong (type of the enterprise) are only broken down according to the following items:

- Industrial enterprises (incl. building industry)
- Commercial enterprises
- Transport enterprises (incl. Federal Railways or Federal Postal Administration) and
- Other enterprises (e.g. agricultural enterprises, power supply enterprises).

5 Processing of the results

The statistical offices of the Länder carry out a first visual inspection of the mailed-back survey forms, among others, to check whether the data are complete. Besides, the branch of economic activity is indicated by a code number in the survey forms for craft enterprises according to the information provided by a craftsman on the enterprise's economic activity. The data are then recorded on machine readable data carriers and, after passing extensive plausibility checks, aggregated to a Land result. Finally, the Federal results are compiled from the results of the 16 Länder.

At federal as well as at Land level, the publication of the results of the 1995 Census of Crafts will focus on the information gathered for units which had employees on 30 September 1994. This will ensure that the tabular data recorded for 1994 concerning the total of wages and salaries, the statutory social costs and the turnover, can be correlated in an appropriate way with the employees.

Prior to publishing the tables, they are submitted to a comprehensive procedure for safeguarding statistical confidentiality. First of all, every cell of a table is checked for individual data in order to protect the data obtained from the respondents who were liable to provide information. If a cell contains individual data, it is covered so that, after the table has been printed, the cell does not show a figure but just a dot. The second step of work is to check whether the additive relations between the individual rows and columns of a table permit to re-identify the covered figures by means of subtraction. If so, further cells of the table must be covered. The 1995 Census of Crafts is the first one for which these large-scale checks are to be carried out exclusively by means of machine processes.

The results of the census of crafts are now available in Subject-Matter-Series 4 (production industries).

10) See Mai, H.: "NACE Rev. 1 - Die neue europäische Wirtschaftszweigsystematik" in *Wirtschaft und Statistik* 1/1991, pp. 7 ff.

11) See Roemer, P.: "Handwerkszählung 1977 - Methode der Zählung und Strukturdaten nach Wirtschaftszweigen" in *Wirtschaft und Statistik* 8/1978, pp. 481 ff.