

# METHODS – APPROACHES – DEVELOPMENTS

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## The Catchword

### The time use survey 2001/02

Data from time use surveys - which cover activities requiring time, their duration and sequence - provide starting points for a wide range of scientific and economic analyses. Such data are more than just the total of individual information on "Who does what at what time". Time use surveys provide detailed insight into the everyday life of households, for example into working time patterns and housework structures of families, into leisure activities and media use of different population groups as well as into a multitude of other areas.

The time use survey of 2001/02 was the second large representative survey on time use in Germany - ten years after the first one had been conducted. It was financed by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth, as was the first one in 1991/92. Using several co-ordinated survey tools (household questionnaires, person-related questionnaires, diaries), the living conditions and time-related activities of the persons living in the household were covered. In this way, the life of the family members becomes visible in its context, with mutual co-ordination and division of labour. It can thus be shown how the various everyday needs of the persons involved interact with each other and how those persons arrange their living together.

#### Survey tools

As was the case in the first survey, the core tool of the time use survey of 2001/02 was a diary. All household members from the age of ten were asked to record in their own words their course of the day on three days (two weekdays and one Saturday or Sunday). In 1991/92, the duration of the individual activities was recorded in 5-minute intervals, whereas in the time use survey of 2001/02, the time axis was modified to show ten-minute intervals. Thus the new survey followed the recommendations on harmonised European time use surveys, thus providing the possibility for international comparative analysis beyond time comparisons at the national level.

In addition to what the respondents considered the primary activity, a secondary activity could be entered in the diary. It was also asked with whom the activities were performed. The location of the activities and the travel time had to be recorded in connection with the primary activity. A separate column was introduced for any means of transport used. The activities described by the respondents in their own words in the diaries were covered by means of an activity list of over 230 activities. That list includes both the experience acquired in the first survey and the list of activities for harmonised European surveys on time use. Compared with the survey of 1991/92, leisure activities such as sport, hobbies and games have been coded more detailed and new activities have been included, e.g. internet surfing and online banking.

Information on the structure and environment of the households and the personal situation of the household members, which were required for the time use survey 2001/02, were obtained by means of separate household and person-related questionnaires. Both tools are based on closed questions and had to be completed by the respondents themselves, generally by marking preset answer categories. The household questionnaire covers, among other things, information on the household composition, the housing and living situation, and the infrastructure of the housing environment. Persons from the age of 10 years were also asked to fill in a person-related questionnaire where more detailed questions were asked on the situation and socio-demographic background. On the initiative of the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth, a special focus was put on possible voluntary and community work as well as on questions for assistance provided by the respondents for persons outside their household. Another important area was occupational and non-occupational qualification. Irrespective of such focuses, however, detailed questions were asked on the framework conditions of labour force participation and on personal ideas regarding time use.

## Conducting the survey

As was the case in the first survey in 1991/92, sampling was based on a quota method. Compared with random sampling, that method has the advantage that it is much easier to implement in terms of survey procedure. What is relevant in the time use survey is results broken down by specific household types, some of which however have just a small share in the overall population - for instance, households of lone parents. Ensuring that informative results are obtained for all household types requires overproportionate coverage of those groups in the sample. In random sampling, such overproportionate coverage would involve considerable efforts. So, for the time use survey of 2001/02, too, the technical-organisational advantages of quota sampling compared with random sampling were considered to be crucial, so that the quota method was chosen.

In the new survey, the sample size was 5400 households with 12600 persons, who provided recordings for a total of 37700 diary days. The population comprises all private households shown in the microcensus at their place of main residence. To avoid seasonal effects in the representation of time use, the field phase was evenly distributed over 12 months, that is from April 2001 to April 2002.

## Publication of results

First results of the time use survey were presented at a press conference held in Berlin on 2 December 2003. The strong response in the media illustrates that the issue is well received by the interested public. Major results have been compiled in the brochure "Wo bleibt die Zeit? Die Zeitverwendung der Bevölkerung in Deutschland 2001/02" (Where has time gone? Time use of the population in Germany, 2001/02). The focus there is on the value of unpaid work and the division of labour between women and men within the household and the family. Other issues examined in that publication are "life-long learning" and "how is leisure time spent". The brochure is available for free download from the website of the Federal Statistical Office (<http://www.destatis.de/presse/deutsch/pk/2003/zeitbudget.htm>).

In-depth analyses were presented at a special conference held in Wiesbaden in February 2004. To work with the data, a scientific analysis committee has been set up, whose members are scientists of universities and research institutions from various disciplines. In a very early phase of the project, data were made available for the committee's own analyses. The purpose of involving the experts was to present results as early as possible and, at the same time, to ensure that the analyses reflect the current state of scientific discussion within the various thematic areas.

The papers on highly different issues such as "poverty/wealth/time use", "division of labour of couples", "life situations of men", "traffic behaviour and mobility", "media use in the course of a day" and many other topics will be published in autumn 2004 as a *Forum Bundesstatistik* volume entitled

"Alltag in Deutschland - Analysen zur Zeitverwendung" (Everyday life in Germany - analyses on time use). It is also planned to publish a volume of tables containing key data on time use, which will be largely uncommented to allow quick access. As was the case for the first time use survey, the data will be made available to the public as a scientific use file (at the end of 2004) and a public use file (in the course of 2005).

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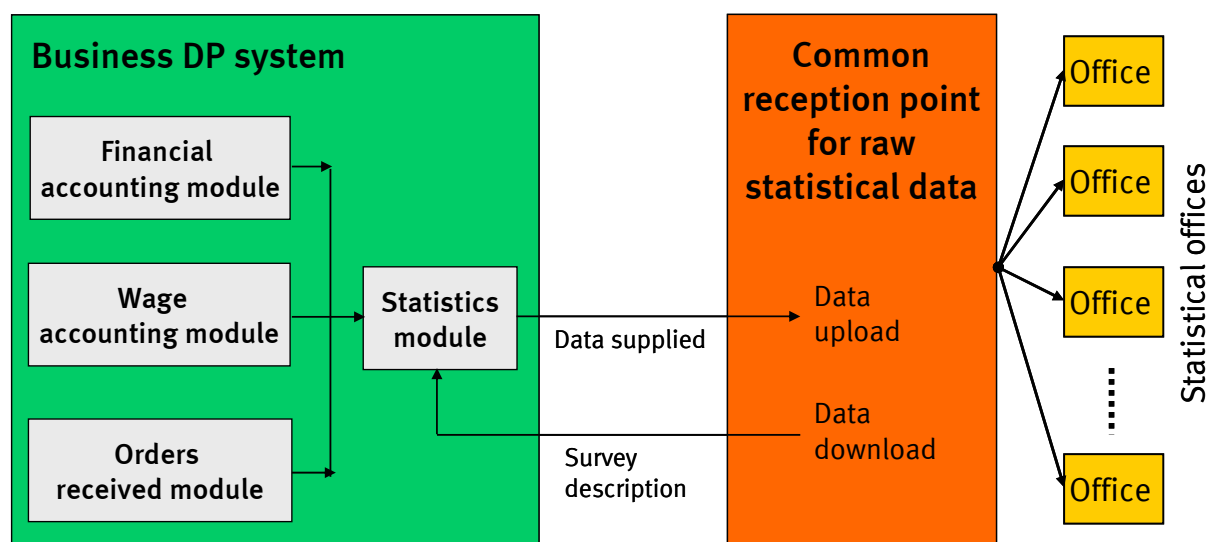
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## Methods of federal statistics – Further development

### Obtaining raw statistical data from the businesses' internal DP systems

For some time already, the statistical offices have offered the respondents the possibility of transmitting their statistical data by means of internet questionnaires. Any respondent with internet access may use that way of data supply. The benefits for respondents are obvious: They no longer have to complete and send paper questionnaires, transmission is direct and generally cheaper.

What the respondents still have to perform, however, is the compilation of the statistical data required. Responding businesses retrieve most of such data from their internal DP system, using suitable business software. In many cases such data are not directly available and have to be processed from the existing data material. Often, the data are even stored in different software systems of the business and have to be combined. It would be ideal if a so-called statistics module were integrated in the business DP system, which would relieve the respondents from the burden of processing and compiling the statistical data and would do so in an automated way "at the push of a button" (see chart).



With such a technological solution, the potential for reducing burdens is enormous because, in the best case, respondents just have to push a "button" in order to trigger the compilation and transmission of a statistical report. In this way, the entire procedure of data acquisition among respondents is automated. However, the statistical offices, too, benefit from that solution. As the raw statistical data are produced in an automated manner, their quality improves considerably and they can undergo standard processing.

Based on this idea, the statistical offices - in co-operation with renowned software producers and the *Arbeitsgemeinschaft für wirtschaftliche Verwaltung e.V.* (Working Party for Economical Administration) developed the concept for a technological solution called "eSTATISTIK.core – supply of raw statistical data to a common data reception point". The solution package comprises the following infrastructure and software components:

1. a common internet-based data reception point for raw statistical data,
2. uniform XML formats for data supply, acknowledgement of receipt, and survey description,
3. electronic XML-based survey descriptions of selected surveys, and

4. free software to support respondents and software producers in implementing statistics modules

### **Common data reception point for raw statistical data**

The common internet-based data reception point for raw statistical data allows any respondent with internet access to supply statistical data in an automated manner to a central federal agency, irrespective of what statistics and what statistical office the supply is intended for. At the data reception point, the incoming data deliveries are checked and distributed to the relevant statistical offices.

### **Uniform XML data formats**

For data transmission between respondents and the common data reception point, only XML formats are used. The XML format **DatML/RAW** is the data format for supplying raw statistical data. That format is used as a standard for any statistics. It supports data deliveries being sent by third parties (e.g. tax consultants) or being received by third parties (e.g. common data reception point). When transmitting a data delivery, the sender may indicate whether an acknowledgement of receipt is requested. Acknowledgements of receipt are given in XML format **DatML/RES** and can thus be evaluated in an automated way. This is interesting especially for computer service providers (e.g. computing centres) which wish to automate the same processes for many customers. The XML format **DatML/SDF** is used for the formal description of a statistics, its properties and its list of characteristics. In that format, the survey descriptions are made available.

### **Survey descriptions**

A survey description describes the number and type of characteristics of a statistics as well as other statistics-specific information such as the reference period and periodicity. Based on the survey description, the raw data supplied for the statistics are compiled and checked. The survey descriptions may be downloaded in the XML format **DatML/SDF** in an automated manner from the common data reception point. Thus they allow generic methods to be applied for compiling and checking statistical reports.

### **Supporting software**

The **CORE.connect** program library has been developed especially for automated acquisition of raw statistical data from business DP systems. That program library supports the respondents and software producers in implementing statistics modules. The function of this software component is to obtain the raw statistical data from the business DP system and to transmit them. The library offers any functions required for compiling a data delivery in XML format **DatML/RAW**, to check it and transmit it to the common data reception point. The PC application **CORE.reporter** has been designed for respondents using only standard office software, rather than branch-specific software. Respondents may use that software to compile data deliveries in XML format **DatML/RAW** from raw statistical data available in a standard office format (e.g. CSV, Excel), as well as to send and manage such deliveries.

### **Outlook**

On the occasion of the CeBIT 2004, a first version of **eSTATISTIK.core** was presented and made available for tests and evaluations. At the end of 2004, a production version will be available, which will be used for regular application in selected wage statistics from the beginning of 2005.

### **Further information**

The common portal of the statistical offices of the Federation and the Länder at [www.statistik-portal.de](http://www.statistik-portal.de) provides current information on all aspects of **eSTATISTIK.core** and offers the software available for download.

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## **Integrated environmental investments: The new survey concept from reporting year 2003**

### **EU Regulation concerning structural business statistics as the driving force**

By publication of Regulation (EC) No 2056/2002 of the European Parliament and of the Council of 5 November 2002 amending Council Regulation (EC, Euratom) No 58/97 concerning structural business statistics in the Official Journal of the European Communities, variable 21 11 0 “investment in equipment and plant for pollution control, and special anti-pollution accessories – mainly end-of-pipe equipment“, for which data had to be provided, was supplemented by characteristic 21 12 0 “investment in equipment and plant linked to cleaner technology (integrated technology)“.

The reason was also indicated in the considerations of the Regulation (9): “Decision No 2179/98/EC of the European Parliament and of the Council of 24 September 1998 on the review of the European Community programme of policy action in relation to the environment and sustainable development [...] reiterated the need for reliable and comparable data, statistics and indicators as a key tool for the evaluation of the cost of compliance with environmental regulations.“

The following is an outline of the additions to the official survey concept required to cover integrated environmental investments.

### **Experience of German environment statistics with environmental investments**

Additional (end-of-pipe) environmental investments in German industry as recorded by the bodies of official statistics on the basis of the Environmental Statistics Law of 1994 went down steadily in recent years. While over EUR 2.5 billion of environmental investments could still be shown for 1996, the amount declined to just under EUR 1.6 billion in 2002. In addition to a generally reduced economic capacity and the related decrease in investment activity also in the environmental protection sector, this is due to the steady and unbroken trend towards preventive environmental protection. Environment statistics have so far not adequately reflected this technological change away from additional end-of-pipe environmental techniques towards integrated environmental techniques with production processes being right away designed in such a way as to avoid the production of numerous emissions. This information gap in environment statistics has been closed by including the variable of integrated environmental investment into the survey of environmental investments in industry from reporting year 2003.

### **Conceptual bases**

For German environment statistics, a coherent concept has been prepared consisting of survey documents, definitions, explanations and examples relating to integrated environmental investments. The concept is based upon two mainstays: At the end of 2001 the German Association of Engineers (Verein deutscher Ingenieure - VDI) published its guideline 3800 on the “Determination of costs for industrial environmental protection measures“ in co-operation with German industry. This guideline is meant to support enterprises and local units of industry in the internal recording of expenses for environmental protection and comprises both additional and integrated environmental investments as well as current expenditure. At the same time, the Statistical Office of the European Union (Eurostat) prepared an “Environmental expenditure statistics – Industry data collection guidebook“ in co-operation with the member states. This manual, which so far is regrettably available only as an English draft version, contains definitions and examples of additional and integrated environmental protection expenditures from the European point of view. German experts in environmental statistics had previously participated in the work on both concepts. When the EC Regulation concerning structural business statistics had entered into force in November 2002, the explanatory notes of the European statistics manual and the definitions and examples of the VDI guideline could therefore be developed further in the following year in line with German requirements and special features.

## **Additions to the questionnaire**

**In keeping with the Environmental Statistics Law of 1994**, only additional environmental protection measures were covered in the reporting years 1996 to 2002. Examples are sorting facilities for the re-utilisation of waste, shredders/crushers for waste disposal, protective walls and vibration isolation for noise abatement, sewage sludge treatment facilities for water protection and desulphurization and denitrification plants for air quality control. These additional environmental protection measures are taken subsequent to the production process in order to reduce emissions which have already been caused.

Starting with reporting year 2003, additions of environmental protection equipment regarded as an integral part of production facilities are recorded, too. Such integrated environmental investments reduce the burden on the environment during production. Examples are techniques for the re-utilisation of waste in the production process, noise absorption of aggregates, closed water purification systems and low NO<sub>x</sub> burners or airtight conveyor belts. To record these values, the questionnaire used to collect information on environmental protection investments was supplemented by a page with questions and by explanations and examples. To provide additional help to respondents in enterprises and local units, an attached checklist illustrates the definitions and differences between additional and integrated environmental investments. To keep the burden on the respondents as low as possible, only one value has to be entered for integrated investments per environmental area (waste management, water protection, air quality control, noise control, nature protection & landscape conservation and decontamination of the soil). Plant integrated and process integrated measures are not covered separately.

This is because most integrated environmental investments are so-called plant integrated measures. They are related to the production process but may be identified individually as technical elements. What has to be entered into the questionnaire are the additional expenses for the integrated environmental protection measure. In practice, this may be either the subsequent improvement of existing plants or new facilities for environmental protection. The identification and evaluation within the enterprise is facilitated by marking these parts of the plant and registering them in a plant inventory in the stage of investment planning already. This is done on the basis of the appropriation request, lists of orders and design drawings. If such information is not available, the values may be determined by comparison with the expenditures for plants which serve the same purpose but do not have the technical environmental protection equipment or by determining the expenses incurred for the subsequent installation into an existing facility. In cases where it is not possible to determine precise figures for the integrated environmental investments from the company's cost accounting or the plant inventory, qualified estimated may be made.

## **Outlook**

As a result of this work, the variable of 'integrated environmental protection investments in industry' has been covered for German environment statistics since reporting year 2003, thus implementing the European statistics regulation. The standardised survey documents of this decentralised statistics were sent to the enterprises and local units by the statistical offices of the Länder in spring 2004. The bodies of official statistics also give respondents the opportunity to report the data online via the internet. After the survey has been conducted and the results been processed, the federal results will be published in summer 2005. Then results relating to integrated environmental protection investments of the year 2003 in industry will be available as a free online publication.

It will then be possible to comment on the absolute amounts spent on integrated environmental investments in industry in Germany and on the percentage relation of integrated environmental investments to the overall investments of enterprises and local units or on the relation of additional to integrated investments. Furthermore, the comparison of environmental investments at European level is of great interest which from the German viewpoint can at present be drawn only for additional environmental investments on account of the data situation.



## Literature:

Becker, Grundmann: "Additive Investitionen für den Umweltschutz – Ergebnisse im Produzierenden Gewerbe von 1991 bis 2000" in *Wirtschaft und Statistik* 5/2002, pp. 410-423.

Federal Statistical Office: Subject-Matter Series 19 Umwelt (Environment), Series 3.1 Investitionen für den Umweltschutz im Produzierenden Gewerbe (Investments for environmental protection in industry), published annually.

Verein Deutscher Ingenieure: "Ermittlung der Aufwendungen für Maßnahmen zum betrieblichen Umweltschutz" (Determination of costs for industrial environmental protection measures), VDI guideline 3800, December 2001.

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## Implementation of Article 47 of the Law against Restraints of Competition (GWB) with regard to sections C and D for the reference year 2001

### I. Introduction

Since the end of the 1980s, the number of mergers and acquisitions has maintained a steady high level in Germany, resulting in an increase in the number and size of enterprise groups. This development has had a growing influence on the quality of concentration calculations because enterprise groups have thus far not been taken into account by official statistics.

To make allowance for this development, Article 47 of the Law against Restraints of Competition (GWB) was amended in 2000. The amended Article 47 lays down that the official statistical data on enterprises which are collected for the regular concentration reports of the German Monopolies Commission are to be processed by the Federal Statistical Office in such a way as to take into account the enterprises' affiliation to enterprise groups. A work-sharing process has been established to carry out the first steps of this. The Monopolies Commission supplies the information about the enterprises' affiliation to enterprise groups which is not yet available from official statistics. Afterwards, the following tasks have to be met by the official statistics agencies:

- to identify within the stock of official statistical data the enterprises reported by the Monopolies Commission as being affiliated to a group,
- to match the enterprises which are affiliated to the same group and
- to compute concentration rates while taking this affiliation into account.

Based on the above legal provisions and in close cooperation with the Monopolies Commission and the statistical offices of the Länder, the Federal Statistical Office has implemented a new method for including enterprise groups in concentration calculations. For the specific purpose of the XV<sup>th</sup> Main Report 2004 of the Monopolies Commission and with the Commission's agreement, the above task was confined to sections C (Mining and quarrying) and D (Manufacturing) of the German Classification of Economic Activities (WZ 93), which represent an important sector of the German national economy.

### II. Elements of the method

The data basis for the concentration calculations is provided, on the one hand, by the survey of investments, which is taken at enterprises with 20 or more employees. For the reference year 2001, data on turnover, employees and investments were collected from 38,198 enterprises. On the other hand, the Monopolies Commission supplied a file containing information on the group affiliation of some 400,000 enterprises from all economic sectors. To obtain information on the

group affiliation of enterprises covered by the investment survey, the enterprises listed by the Monopolies Commission as belonging to groups had to be identified within the stock of official statistical data. The data environment of the statistical business register (URS 95) was employed for this purpose. For the sake of simplicity, the method can be subdivided into two elements: the electronic matching of the Monopolies Commission's file with the stocks of official statistical data and the follow-up processing to produce final concentration calculations on the basis of the enterprises' affiliation to enterprise groups.

#### **a. Electronic matching of the file of the Monopolies Commission with the stocks of official statistical data**

Because of the lack of a unique numerical identifier in the file of the Monopolies Commission and in the official statistical data, the datasets were matched using, as far as possible, the trade register number and name/address of the enterprises. To this end, so-called test environments were established in the business registers of the statistical offices of the Länder. Within these environments, the trade register numbers from the files of the Chambers of Industry and Commerce were assigned to the enterprises covered by the investment survey, using the tax numbers as a link. Of the 38,198 enterprises covered by the investment survey, trade register numbers were assigned to 22,511 enterprises.

In a first step, the enterprises from the Monopolies Commission's file were matched to those covered by the investment survey with the aid of the trade register numbers. In this way, 9,117 enterprises from the Monopolies Commission's file could be identified within the data stock of the investment survey. This accounted for 42% of the enterprises with a trade register number, while it amounted to about 24% of the total of enterprises covered by the investment survey.

To make up for the lack of an additional numerical identifier, the matching software generally employed by the statistical offices was used in a second step to link the enterprises via their address or name. This resulted in another 6,813 enterprises being identified so that the percentage of identified enterprises in the total of enterprises covered by the investment survey increased to about 42%.

#### **b. Follow-up processing and final concentration calculations**

To achieve optimal concentration results, the data obtained from the electronic matching were subjected to a manual follow-up processing at the statistical offices of the Länder. The aim of this follow-up processing was to find out whether or not unmatched enterprises of the investment survey were dependent on an enterprise group. *Dependent on an enterprise group* means that an enterprise covered by the investment survey can be matched with one of those contained in the Monopolies Commission's file and can ultimately be assigned to an owner. The follow-up processing was done in two ways: the largest unmatched enterprises were processed at the statistical offices of the Länder, while the remaining unmatched enterprises were given to external experts for investigation.

The largest and as-yet unmatched enterprises of the investment survey were ascertained in two different ways. First of all, the 500 unmatched enterprises with the biggest turnover were chosen. In addition, those 900 unmatched enterprises were selected which achieved their largest relative share of turnover in one of the 26 divisions included in the sections of mining and manufacturing in the WZ 93.

The subsequent manual processing made it possible to match an additional 360 enterprises out of the 1,400 units examined. While the proportion of matched enterprises rose only insignificantly from about 42% to 43%, it was a substantial increase from about 75% to some 81% when measured in terms of the turnover of the matched enterprises. The external experts made use of a comprehensive file of reference in their follow-up processing in order to assign trade register numbers to, and to match, as many enterprises as possible. Thus it was possible to identify another 1,301 enterprises of the investment survey as being dependent on groups.

### III. Results

In 2001, about 46% of all enterprises with 20 or more employees in the sections of mining and manufacturing (a total of 38,198 enterprises) were affiliated with other enterprises and thus formed part of an enterprise group. These affiliated enterprises accounted for about 82% of the total turnover and for about 74% of all persons employed in enterprises with 20 or more employees in mining and manufacturing.

For the final concentration calculations, the turnover and employees of the enterprises belonging to the same enterprise groups were aggregated at the respective WZ 93 classification levels. On this basis, the Federal Statistical Office calculated concentration rates (CR rates) and Herfindahl indices (HHI) for the divisions, groups and classes of the WZ 93 for the purposes of the Monopolies Commission. A comparison with the concentration results for enterprises partly revealed significant increases in the respective concentration measures.

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## Publications

### **New volume of the series "Methodological reports": Component decomposition and seasonal adjustment of economic time series using the BV4.1 method**

With the aim to provide a tool for the assessment of the cyclical situation, the Federal Statistical Office publishes i.a. the results of time series analyses using the Berlin method for a variety of economic time series. In volume 3 of the series "Methodological reports", the mathematical models and estimation methods of the most recent version of the Berlin method, BV4.1, are described in detail. In addition, the features of the BV4.1 software are described, which can be obtained by anyone interested from the Federal Statistical Office free of charge (bv4.1@destatis.de).

BV4.1 is an upgrade of the BV4 method, which has successfully been used in German official statistics for more than 20 years. BV4.1 distinguishes itself from the previous version in particular by methodological improvements in identifying and estimating outliers in time series and in estimating the calendar component.

The publication is available online on the web at  
<http://www-ec.destatis.de/csp/shop/sfg/vollanzeige.csp?ID=1014122>.

## Events

### **Q2004 – European Conference on Quality and Methodology in Official Statistics in Mainz**

In co-operation with the Statistical Office of the European Communities (Eurostat), the Federal Statistical Office held the European Conference on Quality and Methodology in Official Statistics (Q2004) in the Castle of the Prince Elector („Kurfürstliches Schloss“) in Mainz from 24 to 26 May 2004. The goal of the Conference was to bring together the leading protagonists in the areas of statistical methods and quality in statistics and thereby to contribute to an intensified international co-operation. Fortunately, numerous representatives of academic research participated in the event, too, so that Q2004 gave an important impetus to the future co-operation between academia and official statistics.

Q2004 is the follow-up conference of the International Conference on Quality in Official Statistics (Q2001), which took place in Stockholm in May 2001. As Johann Hahlen, President of the Federal Statistical Office, underlined in his welcome address, that first Quality Conference gave already major impetus to a systematic quality management in the statistical offices. Success has been achieved in a number of areas since. For example, research in the area of non-sampling errors has been considerably intensified, which is impressively evidenced not least by the multitude of papers on this subject area. Likewise, numerous tools for measuring and assessing quality in statistics have been developed, which now have to be implemented step by step.

The importance the issue of „quality“ has gained in the area of official statistics by now was highlighted also by the response to the call for papers: more than 260 abstracts were submitted, which prompted the Programme Committee to raise the number of Contributed Sessions to 32. As much as 128 papers were presented orally, while about 100 papers were integrated in the Conference Programme as „associated papers“. In addition, a number of Invited Sessions was held featuring especially distinguished lecturers. All in all, more than 140 papers were read in 41 Sessions, including also contributions by internationally leading experts. As an example of one of the many highlights of the Conference, special mention should be made here of the Keynote Address by Norman Bradburn (University of Chicago) entitled „Statistics in an Age of Information Overload“. Close to 500 participants from more than 50 countries took part in the Conference.

Approximately 180 participants seized the opportunity and attended one of the three full-day Training Courses that were offered on the first Conference day. These courses dealt with the subjects „Introduction to Survey Quality“ (course leaders: Lars Lyberg and Paul Biemer), „Quality Management in Statistical Agencies“ (course leaders: Mats Bergdahl and Maria João Zilhao) and „Variance Estimation in Complex Surveys“ (course leaders: Chris Skinner, Anthony Davison and Ralf Münnich). In addition, the closing conference of the DACSEIS-project (Data Quality in Complex Surveys within the new European Information Society) was integrated in the form of three Sessions in the Conference Programme. This, too, can be regarded as an evidence of the intensive co-operation between academia and official statistics.

Both participants and organisers called the Conference a big success. The programme and abstracts of the Conference are available on the internet at <http://q2004.destatis.de>. The next conference of the series of Q-conferences is scheduled for the year 2006.