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Turnover and Output Measurement for Cleaning and Facility Services in Germany

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1. Definition of the service being collected

The statistical classification of economic activities in the European Community (NACE rev. 2) classifies industries on the basis of the object to be cleaned and the type of cleaning. **Cleaning activities** (81.2) comprise general cleaning of buildings, other building and industrial cleaning activities, including window cleaning and chimney sweeping, and other cleaning activities such as cleaning of means of transport as well as disinfecting and pest control. The classification structure is as follows:

- 81.21 General cleaning of buildings
- 81.22 Other building and industrial cleaning activities
- 81.29 Other cleaning activities

The class general cleaning of buildings (81.21) includes general (non-specialized) cleaning of all types of buildings, such as offices, houses or apartments, factories, shops, institutions, and general (non-specialized) cleaning of other business and professional premises and multiunit residential buildings. These activities are mostly interior cleaning although they may include the cleaning of associated exterior areas such as windows or passageways.

The class other building and industrial cleaning activities (81.22) includes exterior cleaning of buildings of all types, including offices, factories, shops, institutions and other business and professional premises and multiunit residential buildings, specialised cleaning activities for buildings such as window cleaning, chimney cleaning and cleaning of fireplaces, stoves, furnaces, incinerators, boilers, ventilation ducts and exhaust units, cleaning of industrial machinery as well as other building and industrial cleaning activities not classified elsewhere.

The class other cleaning activities (81.29) includes swimming pool cleaning and maintenance activities, cleaning of trains, buses, planes, etc., cleaning of the inside of road and sea tankers, disinfecting and exterminating activities, bottle cleaning, street sweeping and snow and ice removal as well as other cleaning activities not classified elsewhere.

However, agricultural pest control, cleaning of new buildings immediately after construction, steam-cleaning, sand blasting and similar activities for building exteriors, carpet and rug shampooing as well as drapery and curtain cleaning are excluded from the group cleaning activities.

The group **combined facilities support activities** (81.1) consist of only one class (81.10). It includes the provision of a combination of support services within a client's facilities. These services include general interior cleaning, maintenance, trash disposal, guard and security, mail routing, reception, laundry and related services to support operations within facilities. These support activities are performed by operating staff, which is not involved with or responsible for core business or activities of the client.

However, the provision of only one of the support services (e.g. general interior cleaning services) or addressing only to a single function (e.g. heating) are excluded from this class. Likewise the provision of management and operating staff for the complete operation of a client's establishment, such as a hotel, restaurant, mine, or hospital does

not belong to this class. Furthermore, the provision of a site management and operation of a client's computer system and/ or data processing facilities is excluded from this class as well as the operation of correctional facilities on a contract or fee basis.

2. Output measurement in cleaning and facility services

Two surveys collect information on turnover of **cleaning activities**. Structural business statistics are produced annual, short-term statistics quarterly. Information is collected on enterprise level. Statistical units are enterprises. A detailed methodological description of these statistics is given in the following chapter.

Short-term statistics of cleaning services has been produced since the first quarter of 2003. Turnover is measured as index, currently on base year 2005, and indicates trend rather than level information. It is not the goal of short-term statistics to present absolute values. Since the second quarter of 2006 the results have additionally been published in working-day adjusted and seasonally adjusted form.

Concerning structural business statistics turnover of cleaning activities is measured in Euro. These statistics have been produced since 2000. At present turnover has neither been collected by product breakdown nor further output variables about cleaning services have been surveyed according to present legislation.

According to current legislation information on turnover of **facility services** is only collected by structural business statistics. Due to the fact, that facility services were not a specific category in NACE rev. 1.1 and the new classification will be only used in structural business statistics from reference period 2008 onwards¹ this paper focuses mainly on cleaning activities.

3. Turnover/ output data method(s) and criteria for choosing various output/ turnover methods

In the whole service sector short-term business statistics and structural business statistics are very young statistics. Of course, short-term statistics aim to monitor short-term economic trends whereas structural business statistics describe the structure and performance of economic activities to show elementary structural shifts.

3.1. Short-term business statistics

In the period from the first quarter of 2003 to the first quarter of 2007, the quarterly indices of turnover in short-term statistics were determined through a 7.5% stratified random sample survey. Since the second quarter 2007, turnover data in short-term statistics are obtained through a multiple-source mix mode design combining a primary survey conducted among large enterprises with annual turnover of at least 15 million Euro or at least 250 employees with administrative data for small and med-sized enterprises. The latter are provided by tax authorities of the 16 German states (*Länder*), which use data from VAT prepayment notice and payment procedure.

¹ For more details see chapter 5.

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Administrative data does not meet demands of short-term statistics completely, but weaknesses of administrative data can be eliminated in sufficient quality by estimates and additional information from Business Register. First, definition of turnover within the tax prepayment notice differs in some respect from statistical definition of turnover. Some extraordinary receipts such as rental income for company-owned machinery, dwelling or land use by third parties or sales of land or used machines are not included in the statistical definition. But they are included in the tax prepayment notice under the same heading as statistically relevant goods and services are. In addition, in tax legislation a number of enterprises can be combined in an integrated VAT group. Internal turnover between members of a VAT group is not taxable. Secondly, in case of already mentioned VAT groups breakdown of turnover makes difficulties because only the controlling company will report total turnover to fiscal agency and data supplier do not provide any information about division of turnover among different enterprises in the VAT group. Thirdly, activity code in VAT data does not entirely meet statistical requirements. This is less a problem of standardisation, because classifications used are more or less the same. But test showed that the allocated codes for a single unit differ depending on the source.²

The implementation of the multiple-source mix model involves a clear reduction of the statistical reporting duties of small and medium-sized enterprises. For instance, to produce short-term statistics of present year only 1.4% of the population in cleaning activities are directly surveyed. Enterprises are obligated by national law³ to provide information. At the time of first unrevised results genuine non-responses are approximately 5-6% in the whole service sector. Preliminary results are available 60 days after the end of reporting quarter according to Council Regulation (EC) No 1165/98 and (EC) No 1158/2005 of the European Parliament and of the Council.

3.2. Structural business statistics

Since reference period 2000 structural business statistics is annually carried out in service sector according to Council Regulation (EC, EURATOM) No 58/97, the following European regulatory developments concerning structural business statistics and the national legislation. The recast of the STS Regulation (EC) No 295/2008 of the European Parliament and the Council will be applicable for the first time on 2008 data.

Sample selection is based on information in the Business Register which contains identifier, activity code, beginning and end of economic activity, turnover and number of persons employed. Those enterprises that are drawn are obliged to provide information about their principal economic activity, their legal form, the number of local units, the number of persons employed, wages and salaries, social security costs, turnover, material expenses, stocks, taxes, subsidies, investments and so on. To reduce response burden small enterprises with an annual turnover of less than 250,000 Euro in the reporting year are surveyed only with a shortened questionnaire. Those enterprises that have establishments in several *Länder* have to itemise turnover, wages and salaries,

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² Lorenz, Robin (2010): The integrated system of editing administrative data for STS in Germany, ESSnet Administrative data, Seminar in Rome

³ Dienstleistungskonjunkturstatistikgesetz

⁴ Dienstleistungsstatistikgesetz

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investments and number of persons employed by *Länder*. Thus, results of structure and economic performance for each *Land* can be determined by the Statistical Offices of the *Länder*. The survey is conducted decentralized by Statistical Offices of the *Länder* in close cooperation with the Federal Statistical Office. Final results are available 18 months after the end of the reporting period.

In a stratified random sample at most 15% of the total number of enterprises with an annual turnover of more than EUR 17,500 (until 2002 above EUR 16,620) being active in services are surveyed. Mentioned quota is stipulated in the national statistical act concerning structural business statistics in the services sector. Due to the number of enterprises in a stratum and the statistical spread in turnover classes sample size varies between service activities. For instance, only 8.2% of enterprises in chimney sweeping were part of the sample in structural business statistics in 2007. In contrast, more than 18% of the other cleaning activities (cleaning of buildings, rooms and equipment, cleaning of means of transport and disinfecting and pest control) were included in the sample of the mentioned survey. The *Länder*, the economic activity at four-digit level and size classes of turnover or number of employed are stratification criteria.

In the reporting year 2007, quota of false non-responses that means units which are not part of the survey population and hence not obliged to provide information was about 39% in industrial cleaning,⁵ nearly 10% by reason of changing their field of economic activity. The highest false non-response quota was in cleaning of means of transport with about 43% of the sample. Approximately 33% of them changed their main economic activity. Concerning chimney sweeping, false non-response is slow in comparison with the other activities in industrial cleaning. There only a small number of changes of economic activity took place. In industrial cleaning nearly 5% of sampling units refused to respond. False and genuine non-response rates of the several activities in industrial cleaning are given in table 1.

Table 1: False and genuine non-responses in industrial cleaning in 2007

WZ 2003 ⁶	Kind of business	False non- responses	Genuine non- responses	Change of economic activity as share of false non-response
74.7	Industrial cleaning	38.76%	5.42%	10.2%
74.70.1	Cleaning of buildings, rooms and equipment	40.91%	5.54%	10.0%
74.70.2	Chimney sweeping	20.38%	3.29%	1.5%
74.70.3	Cleaning of means of transport	43.01%	8.06%	32.5%
74.70.4	Disinfecting and pest control	33.14%	6.86%	6.9%

⁵ In previous version of classification of economic activity NACE rev. 1.1 cleaning activities were called industrial cleaning – for more details see chapter 5.

⁶ This is the previous German classification of economic activity – see chapter 5.

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4. Market conditions and constraints

In 2007, round about 23,000 enterprises providing industrial cleaning employed more than 808,000 persons and achieved an annual turnover of about 13,326 million Euro – see table 2. Nearly a quarter (23%) of those enterprises generated an annual turnover of 250,000 Euro and above, but they realised approximately 86% of the total annual turnover with 91% of all persons employed. This market is dominated by big enterprises, for instance nearly 9% of all enterprises realised each of them more than one million Euro and together round about 74% of total turnover. Moreover, establishments with at least 100 persons employed covering only 7% of all establishments generated nearly 66% of the total branch turnover.

Cleaning of buildings, rooms and equipment is a growing and labour intensive sector. Between 2001 and 2007, number of enterprises and number of persons employed as well as total revenues increased continuously except for receipts in 2003. In 2007, circa 65% of all enterprises in the industrial cleaning branch operated in the field of cleaning of buildings, rooms and equipment and reached nearly 87% of the entire turnover with roughly 96% of all persons employed – see table 2.

Table 2: Industrial cleaning in Germany in 2007

WZ 2003 ⁷	Kind of business	Enterprises* Turnover		over	Number of persons employed		
		Number	%	Million Euro	%	Number	%
74.7	Industrial cleaning	22,988	100.0	13,326	100.0	808,365	100.0
74.70.1	Cleaning of buildings, rooms and equipment	15,011	65.3	11,551	86.7	773,714	95.7
74.70.2	Chimney sweeping	6,838	29.7	963	7.2	20,161	2.5
74.70.3	Cleaning of means of transport	476	2.1	692	5.2	12,214	1.5
74.70.4	Disinfecting and pest control	663	2.9	121	0.9	2,277	0.3

^{*} Only establishments with an annual turnover of at least 17,500 Euro

Since 1934 cleaning of building is a craft regulated by handicrafts code.⁸ Since the beginning of 2004 a master craftsmen certificate is not any more mandatory to run this handicraft business according to amendment of the Handicraft Regulation Act. Since that time cleaning of building does not require a licence. Depending on whether the cleaning of building business is run in handicraft manner or not registration in the Register of Craftsmen or in the Register of Companies is required.⁹

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⁷ This is the previous German classification of economic activity – see chapter 5.

⁸ Except from so-called cleaning in home made style or in private household quality. It comprises only simple cleaning activities and differs in quality attributes from a craft. Since amendment of the Handicraft Regulation Act controversial viewpoints has been arisen about it whether simple cleaning activities are no craft per definition implying belonging to the Chamber of Commerce and Industry or not.

⁹ Industrie- und Handelskammer Schleswig-Holstein (2005): IHK oder Handwerk ab 2004

Small and medium size enterprises are predominant in the market of cleaning of buildings. In this highly competitive branch some companies expand their range of services by offering fetch and carry services, catering services or combined facilities support activities.

The branch of economic activity with the second lowest rate of concentration in Germany is chimney sweeping. In 2003, the 50 largest enterprises generated less than 2,4% of the whole turnover. In 2007, about 30% of enterprises in industrial cleaning were active on chimney sweeping which realised circa 7% of the total revenues with approximately 3% of number of persons employed referring to total industrial cleaning sector – see table 2.

The German chimney sweeping market is subdivided into nearly 8.000 districts. In accordance with former national legislation each chimney sweeping district was a local monopoly, which was criticised by the European Commission by reasons of freedom of establishment and services.

As consequence vacant chimney sweeping district master posts aren't be longer filled by a list of applicants, but invitation of tenders are carried out since the beginning of 2010. Now, duration of public appointment is limited to seven years. Solely the chimney sweeping district master is responsible for sovereign tasks. For instance, he has to control whether statutory chimney sweeping work is executed everywhere within his district. He has to inspect the state of combustion installations in respect to operational reliability and fire safety as well as to issue certificates about acceptance of construction work. The 16 different fee schedules of the German states (*Länder*) which stipulated pricing for chimney sweeper services were replaced by one national scale of fees laying down only tariffs for sovereign tasks since the beginning of 2010. From 2013 the market of non-sovereign tasks such as maintenance of combustion plants will be opened to all licensed chimney sweeper establishments. At the same time, abolishment of prohibition to additional business will offer new opportunities for chimney sweeping trade.

Moreover, the smaller subclasses cleaning of means of transport and disinfecting and pest control belongs to industrial cleaning sector, for detailed employment and turnover data see table 2.

5. Standard classification structure and product details/ levels

The standard of the German classification of economic activities now in use is the *Wirtschaftszweigklassifikation* 2008 (WZ 2008)¹⁰ – see table 3. It is based on NACE rev. 2 which is derived from the international standard industrial classification ISIC rev. 4. Due to national peculiarities of several sectors the German classification of economic activities comprises an additional hierarchical level of sub-classes (five-digit level) in comparison to NACE rev. 2.

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¹⁰ The German standard classification before was WZ 2003.

Table 3: Combined facilities support activities and cleaning activities in the German classification of economic activities – WZ 2008

WZ 2008	WZ 2008 – Description	NACE	ISIC
Code	(n.e.c. = not elsewhere classified)	Rev. 2	Rev. 4
81.1	Combined facilities support activities	81.1	
81.10	Combined facilities support activities	81.10	8110
81.11.0	Combined facilities support activities		
81.2	Cleaning activities	81.2	
81.21	General cleaning of buildings	81.21	8121
81.21.0	General cleaning of buildings		
81.22	Other building and industrial cleaning activities	81.22	8129*
81.22.1	Chimney sweeping		
81.22.9	Other building and industrial cleaning activities n.e.c.		
81.29	Other cleaning activities	81.29	8129*
81.29.1	Cleaning of means of transport		
81.29.2	Disinfecting and pest control		
81.29.9	Other cleaning activities n.e.c.		

The requirements for an implementation of WZ 2008 for statistical purposes arise from Regulation (EC) No 1893/2006 of the European Parliament and the Council. Statistics referring to economic activities performed from 1 January 2008 onwards (reference period) shall be produced using NACE rev. 2. Therefore, WZ 2008 is being implemented in structural business statistics with reference period 2008.

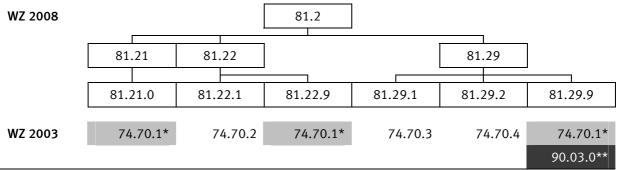
By way of derogation, short-term statistics governed by Council Regulation (EC) No 1165/98 shall be produced using NACE rev. 2 from 1 January 2009. The rule on usage from 2008/2009 onwards shall not apply for the production of several statistics such as national accounts statistics under Council Regulation (EC) No 2223/96. WZ 2008 will be implemented in this statistic from reference period 2011 onwards. Until then WZ 2003 is used – see table 4. It is based on NACE rev. 1.1 which is derived from ISIC rev. 3.1.

Table 4: Cleaning activities in the German classification of economic activities – WZ 2003

WZ 2003	WZ 2003 – Description	NACE	ISIC
Code		Rev. 1.1	Rev. 3.1
74.7	Industrial cleaning	74.7	749x
74.70	Industrial cleaning	74.70	7493
74.70.1	Cleaning of buildings, rooms and equipment		
74.70.2	Chimney sweeping		
74.70.3	Cleaning of means of transport		
74.70.4	Disinfecting and pest control		

The reorganisation of the German classification of economic activity concerning **cleaning activities** is shown in figure 1. Several WZ 2003 codes are simply listed with a new WZ 2008 code for instance chimney sweeping, cleaning of means of transport as well as disinfecting and pest control. In contrast, cleaning of buildings, rooms and equipment doesn't belong together anymore in WZ 2008. This economic activity was split up into general cleaning of buildings, other building and industrial cleaning activities as well as other cleaning activities. The latter includes sanitation, remediation and similar activities (90.03.3) of WZ 2003. The sanitation, remediation and similar activities that were added to other cleaning activities represent approximately 3.3% of turnover in other cleaning activities.

Figure 1: Reorganisation of the German classification of economic activities in cleaning activities



^{*} Split present economic activity; ** New added economic activity

The **combined facility support activities** of WZ 2008 are composed of several activities of management of real estate on a fee or contract basis (70.32.0) of WZ 2003 and by activities derived from supporting service activities for the government as a whole (75.14.0) of WZ 2003.

Enterprises that are active in more than one economic activity will be classified under their principal activity, normally the one that generates the largest amount of turnover. Turnover is taken as a substitute for the value added which should to be the basis for classification according to the NACE regulation but it is in most times not available.

Table 5: Facility and cleaning services in EU classification of products by activity – CPA 2008

CPA 2008	CPA 2008 – Description
Code	(n.e.c. = not elsewhere classified)
81.10.10	Combined facility support services
81.21.10	General cleaning services of buildings
81.22.11	Window cleaning services
81.22.12	Specialised cleaning services
81.22.13	Furnace and chimney cleaning services
81.29.11	Disinfection and extermination services
81.29.12	Sweeping and snow removal services
81.29.13	Other sanitation services
81.29.19	Other cleaning services n.e.c.

The standard of product classification is the European version of the central product classification (CPC) called statistical classification of products by activity within the European Economic Community 2008 (CPA 2008) whose elements are related to activities as defined by NACE rev. 2. In cleaning services there are eight items at detailed product level. In facility services there is only one – see table 5.

Up to now in structural business statistics turnover in combined facility support services as well as in cleaning activities has not been surveyed by products yet unlike in some other areas of "other services" such as advertising or employment activities. Also in short-term statistics turnover by products has not been survey by now.

6. Evaluation of standard definition and market conditions

In terms of standard classification of cleaning services there is a new discussion in Germany about the so called household related services which include cleaning services. Household-related services are services close to home such as household chores, home and child care that are offered by non-family members and are charged. It is crucial that this kind of work is traditionally done on their own by family members. These include the following activities:

- 1. Household chores like cleaning, laundry service, shopping, tidy-up and gardening
- 2. Home and child care like child care, homework assistance, driving services, care of elderly, sick persons and people in need of care
- 3. Simple repair and maintenance work

The latter comprises only renovations and simple handicraft activities. Those activities that are provided outside of the household (for example in institutions like schools, hospitals or nursing homes) are generally excluded of the definition of household-related services.¹¹

In our ageing society the demand for household-related services is increasing. Furthermore, the growing of women's employment is raising the demand for it. In Germany, there is a growing political interest in information about household-related services with regard to the demographic trend in our society, the increase of female labour market participation and the creation of new jobs. Little statistical information of household-related services exists to describe its economic significance. It is suspected that Germany might be behind on it in comparison with other countries.

In Germany, besides illegal employment household-related services are mainly provided on the basis of mini-jobs in private households¹² and only in a small scale by commercial services provider. If household-related services are carried out by a commercial supplier

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¹¹ Bundesministerium für Familien, Senioren, Frauen und Jugend (2008): Familienunterstützende Dienstleistungen – Förderung haushaltsnaher Infrastruktur

¹² The employer is a private household who engages a household cleaner. This special form of marginal employment is tax-deductible and private employers pay reduced lump sum contributions to social security. It aims to shift demand away from black economy for the benefit of legal market supply. Due to the lack of special tax incentives other types of employment in private household (for example so-called midi-jobs or employment subject to social insurance contribution) are of minor interest.

data will be collected by short-term statistics and structural business statistics as described in chapter 3. If household-related services are provided by private individuals turnover will not be systematically gathered. In national accounts household-related services that are provided by private people belong to activities of households as employers of domestic personal (WZ 95 of NACE rev. 1.1., WZ 97 of NACE rev. 2).¹³

In terms of statistical classification there is no chance to classify all household-related services in a single branch — as often demanded by policy makers — because the classification concept is organized by economic activities and does not differentiate between institutions.

7. National accounts concepts and measurement issues for the area related to GDP measurement

In national accounts, the results are broken down and systemised using a variety of classifications, most of them are internationally harmonised. Particularly important is the breakdown by economic activities. It is based on the national classification of economic activity. Generally, the most detailed breakdown of economic activities available in national accounts is the so called A60 by 60 industries which corresponds to the two-digit items of the classification of economic activity, actually WZ 2003/ NACE rev. 1.1. Price indices have been used to deflate output.

Value-added tax statistics are the main basis to calculate **output** in business services not classified elsewhere (WZ 74) in spite of the existence of service statistics since reference period 2000. The reasons for this lie on the one hand in the inadequate time base of service statistics data and on the other hand in the business register which has not yet fully functioning but is meant to serve service statistics as sampling frame and extrapolation base. For national accounts purposes quality of business register has not yet been satisfying. Turnover data in business register are derived form data of fiscal authority focusing on its needs. First there are difficulties with VAT groups. Secondly, movements among economic activities since the birth of enterprise are often not represented in fiscal data. Irrespective of described constraints the calculation of national accounts is performed in comparison with business register data.

Since national account revision 2005 information of service statistics is used to calculate **intermediate consumption**. In doing so ratios based on the relationship between turnover and surveyed material expenses are used. The content of material expenses surveyed, how ever, does not match intermediate consumption according to national accounting demarcation. Material expenses surveyed comprises items not affecting intermediate consumption such as travel costs, provision etc. For this reason, the source value is reduced by 10%. Orientation was assisted by further results and conclusions drawn by analogy from earlier cost-structure statistics which contain a considerably

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¹³ Statistisches Bundesamt (2009): National accounts – Gross domestic products in Germany in accordance with ESA 1995 – Methods and sources – New version following revision 2005, Subject-matter series 18, Series 22

greater level of detail. Intermediate consumption ratio results from reduced material expenses of service statistics divided by gross turnover of service statistics.¹⁴

Table 6: Output, intermediate consumption and gross value added in industrial cleaning in 2007

WZ 2003 Code	Output	Intermediate consumption	Intermediate consumption ratio	Gross value added
	Million Euro	Million Euro	%	Million Euro
74.7	Turnover VAT statistics:12,257 National accounting value:12,624	2,852	22.6	9,773

The table above shows output, intermediate consumption and gross value added in industrial cleaning in 2007.

8. Evaluation of comparability of turnover/ output data with price index practices¹⁵

According to Regulation (EC) No 1158/2005 of the European Parliament and of the Council that amends regulations concerning short-term statistics Federal Statistical Office of Germany is obliged to supply, on a quarterly basis, producer price indices of NACE rev. 1.1 group 74.7 industrial cleaning at three digits. Now, NACE rev. 2 is used to produce producer price indices.

The producer price index for industrial cleaning reflects the price trend of the most significant sub-areas cleaning of buildings and chimney sweeping which represent more than 90% of entire turnover of this branch. In contrast, the two sub-classes cleaning of means of transport and disinfection and pest control that generate minor revenues are not incorporated into this index by reason of survey techniques. Differences in market conditions of cleaning of buildings and chimney sweeping described above lead to different approaches of price trend observation.

Producer price indices are calculated according to the Laspeyres formula. A weighting pattern is derived from the turnover shares of the selected services in the current base year 2006 and necessary price data are regularly collected from reporting units. The price collection, processing and index calculation are performed centrally by the Federal Statistical Office.

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¹⁴ Statistisches Bundesamt (2009): National accounts – Gross domestic products in Germany in accordance with ESA 1995 – Methods and sources – New version following revision 2005, Subject-matter series 18, Series 22

¹⁵ Statistisches Bundesamt (2008): Der neue Erzeugerpreisindex für die Reinigung von Gebäuden und Schornsteinen, Wirtschaft und Statistik 6/2008; Statistisches Bundesamt (2009): Erzeugerpreise für Dienstleistungen: Informationen zum Teilindex Reinigung von Gebäuden, Inventar und Schornsteinen (WZ2003: 74.7/ WZ2008: 81.2)

8.1. Price data collection for cleaning of buildings, rooms and equipment

To determine weighting pattern and content of price data collection for cleaning of buildings, rooms and equipment a pilot study was carried out. Only enterprises with an annual turnover of more than one million Euro were contacted to reduce response burden for small and medium-sized enterprises. The field of activity with the highest turnover is general cleaning generating 75% of turnover, followed by glass and window cleaning with 8% of turnover. Different object types (e.g. office building, whole and retail sale, hospitals, nursing home, industry and handicraft, schools and nursery schools, hotels) can be distinguished in general cleaning. Regularly statistical price observation takes place for general cleaning and glass and window cleaning. In other activity fields of little relevance or of heterogeneous services no price monitoring is effected.

Enterprises are solely questioned about concrete general and glass cleaning contracts. The number of contracts observed depends primarily on the size of enterprise. Furthermore, general cleaning contracts are chosen by object types with the highest turnover, this is done individually for each enterprise. Price survey is carried out quarterly or in case of price changes. Price index for cleaning of buildings, rooms and equipment are calculated on the basis of the weighting pattern obtained via preliminary survey and price changes in time.

8.2. Price trend observation for chimney sweeping

At present one fee schedule stipulate pricing for chimney sweeper services. The six biggest German states (*Länder*), selected by density of establishments, are used to monitor prices. Up to ten representative cases for chimney sweeping activities in different building types (e.g. industrial building, crafts and office building, one single family house and one multiple dwelling) are chosen for each of the six *Länder*. Price change may arise by reason of a change in the evaluation of work unit or performance description that occurs if regular cycle or scope is modified. There is no direct survey of business, but model-like calculations are carried out on the basis of scales of fees.

The three elementary indices for general cleaning, glass cleaning and chimney sweeping are compiled to form the total producer price index for cleaning sector. Data are available from reporting period 2006. Producer price indices are coherent with service statistics due to a matching of large enterprises being in the sample and a well defined and surveyed turnover.

9. Summary

In Germany, cleaning services are a heterogeneous branch with historically developed structures and national particularities. The detailed level of the German classification of economic activity has already taken this into account with NACE rev. 1.1. In political focus are household-related services. Due to present statistical classification it is not possible to collect statistical information of all household-related services in a single branch.

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