# 15. OVERVIEW OF USED DATA SOURCES, METHODS AND DEFINITIONS.

In this chapter general remarks are made about the data sources, the methods used to make the tables and the definitions used. The method used in combining the data sources is discussed in detail in chapter 13. The method used to obtain numerically consistent tables is discussed in chapter 14. A detailed documentation in Dutch of the whole process of compiling the Census-2001 tables is available at Statistics Netherlands.

## 15.1 Used data sources

Many data for the Census 2001 Table Programme were obtained from the Social Statistical Database (SSD). The SSD is a set of micro-linked and micro-integrated data files including demographic and socio-economic data.

Not all of the integrated files in the SSD-set are needed for the Census. A major part of the demanded information, which is information on demographic aspects, is supplied by the **Population Register**, the backbone of the SSD. Data on the part of the economic active population that is employed, are to be extracted from the **Integrated jobs file (employees, employers and self-employed persons without personnel)** in the SSD. Information on the retired population is partly obtained from the **Integrated file of benefits** (pensions and life insurance benefits) in the SSD.

For the remaining part of the Census table programme, information that cannot be found in registers, such as educational attainment, occupation and unemployment, and some details about the current activity of the economic inactive population, the **Labour Force Survey** (LFS) is the main supplier of data. A short description will be given of each of the above mentioned data sources.

## 15.1.1 Population and household data

#### Dutch Population Register data

The Dutch population and household statistics compiled by Statistics Netherlands are based on the automated municipal population registers. This registration system is known as the GBA system, which stands for 'Gemeentelijke Basis Administratie persoonsgegevens', the municipal basic registration of population data. 'Basic' refers to the fact that the GBA serves as the basic register of population data within a system of local registers. These registers include the local registers on social security, the local registers of water and electricity supply, the local registers of the police departments dealing with the foreign population in the Netherlands, and the (national) registers of the old age pension fund system. The GBA system was introduced on 1 October 1994. It is a fully decentralised, comprehensive and cohesive population registration system. Due to legal provisions there is no central counterpart of these municipal registers. In this respect the system is unique in the world. Every municipality in the Netherlands has its own population register containing information on all inhabitants of that municipality. This information is listed per individual inhabitant in a so-called personal list (PL). In the registration system each inhabitant has been given a unique personal identification number (PIN), which enables the municipal authorities to link his or her data to those on the spouse, parents and children. For this reason not only the inhabitant's PIN is stored on each PL, but also those of the parents, the spouse and the offspring.

#### Quality of the data on population

As mentioned before, the population registers are a basic element in national and local government. This is why much attention was paid to the rules with respect to keeping the population register data up-todate. The information needed to update these registers is provided by either the local register (births, deaths, marriages, partnerships), the judicial courts (divorces), the Ministry of Justice (changes of citizenship) or the persons concerned (house moves, immigration, emigration, births / marriages / other events that took place abroad).

In a number of situations the Population Register does not match reality:

- Among young people, students for example, the proportion of wrongly registered seems higher than among other groups. Those who move house should notify the municipality of new residence. This is not always done directly after the move.
- An unknown number of people live in the country without being registered in the Population Register.
- Emigrants should notify the local authorities of their departure. However, they often fail to do so. Some forget, others just do not take the trouble of going to town hall.
- Events that have taken place abroad are usually registered with some delay. Marriages contracted abroad are the most striking example of delayed registration.

*Official number of inhabitants versus number of inhabitants in the population and housing Census* Statistics Netherlands determines the official number of inhabitants per municipality yearly in spring. The number of inhabitants per 1 January is fixed as the number known on 15 February of that year. For the population Census all the information known up to 1 January 2002 is taken into account. The number of inhabitants used in the Census tables therefore differs slightly (ca 1500) from the official number on 1 January 2001.

## 15.1.2 Integrated jobs file (employees, employers and self-employed persons without personnel).

The SSD contains an integrated jobs file of employees and an integrated jobs file of employers and selfemployed persons without personnel.

#### Employees

The integrated jobs file of employees is created in a micro-integration process in which the following sources were used:

- Jobs register, the so-called Employee Insurance Schemes Registration System for Employees (EIS-Employees). Number of records at the end of 2000: 6,5 million records.
- Survey on Employment and Earnings (SEE). The SEE is a large-scale survey among enterprises, in which the data are mainly obtained by electronic data interchange (EDI) from payroll administrations. The survey contains information about earnings and working hours of employees as well as some characteristics of their jobs. The SEE has a complicated sampling design, as for most of the larger enterprises the data are available on register base, whereas for the smaller enterprises a sample is taken. The SEE is needed because the jobs register lacks information on two variables which are needed for the Census Programme, namely 'time usually worked' and 'place of working'. Number of records at the end of 2000: 3 million records.
- FIBASE register. The FIBASE register is a fiscal administration, in which data are stored on labour and social security income, that is subject to advance tax payments. The FIBASE register is also used to complete for missing data on (often small) jobs. Number of records on jobs at the end of 2000: 7,2 million records.

For Census purposes out of the integrated jobs file of employees a selection was made of employees that had a job (of at least 1 hour per week) in the period of 22-31 December 2000. The reasons for a slight deviation of the Census reference date are the following. First, information on jobs from the integrated jobs file by the 1<sup>st</sup> of January 2001 was not yet available. Second, every year patterns of jobs show a dip in the last week of December. It is likely that a lot of jobs of flexible workers end before the end of the year. Therefore, the date of 31 December is less appropriate as a choice for a representative reference date.

#### Employers and self-employed persons without personnel (self-employed persons)

Information on the jobs of employers and self-employed persons without personnel, who from now on will together be denoted as self-employed persons, is stored in the integrated jobs file of self-employed persons. The information itself is obtained from the register of final income tax assessments on profits of

self-employed persons (FITAP). This register unfortunately does not possess data on the exact period of income. Therefore, it is assumed that those who were registered somewhere in 2000 were also employers or self-employed persons without personnel on the Census reference date, 1<sup>st</sup> of January 2001. But one cannot rule out that the assumption leads to an overestimation of the number of employers and self-employed persons without personnel on this date. While compiling the Census 2001 table programme, information was still lacking for approximately 40 thousand self-employed persons (5%). Their tax assessment was not yet arranged, probably because of a dispute with the fiscal authorities. These employers are not included in the Census 2001 tables. The number of records in FITAP in 2000: 790 thousand records.

#### **Retired population**

People who go into early retirement are traced by searching for data on life insurances and pensions in the integrated file of benefits. This kind of information was obtained in the micro-integration process from the FIBASE register. The number of records in the FIBASE on pensions and life insurance at the end of 2000: 2,7 million records.

## 15.1.3 Labour Force Survey (LFS)

The Labour Force Survey (LFS) is a household sample survey, and is needed for Census information that is not (yet) available in registers. It concerns Census variables such as occupation and educational attainment. The LFS is also used to define that part of the economically active population that is unemployed or to define those in the economically inactive population who are full-time attendant at educational institutions or whose main current activity is that they are engaged in family duties. The LFS is a survey on private households, in which the survey population is restricted to persons of 15 years and older. It is a continuous survey, meaning that sampling and surveying of persons is spread throughout the year. The sample size is actually relatively small; some 100 thousand persons are sampled, which is approximately 1 percent of the total population of 15 year and older. The consequence is that estimation for small subpopulations on a detailed level, which is often asked for in the Census table programme 2001, might be unreliable or even impossible. For this reason a union was made of two LFS's, 2000 and 2001, to create more mass. In fact, information up to one year in advance of the Census reference date (1<sup>st</sup> of January 2001) and up to one year after reference date has been gathered in this way. It is assumed that the above mentioned LFS Census variables are relatively stable within the period of a year, so that without much error it can be assumed that they also represent the situation at the reference date. In practice, variables as occupation and unemployment may be subject to changes more often than is assumed. The number of records in the LFS 2000-2001 is: 230 thousand records.

## 15.2 Methods

## **15.2.1 Household statistics**

The household statistics of Statistics Netherlands are based on the GBA-information and are derived every year. Household statistics contain the number of households divided into household types, and persons living in households divided into household positions, in the Netherlands on 1 January. Data on households refer to the population in private and institutional households.

#### Directly derived households

The main input for household statistics is integral data on the Dutch population which Statistics Netherlands obtains from municipal population registers.

First, all persons living in an institutional household are classified as such based on address information. After this, persons in private households are derived. For every single identifiable address the persons living on that address are identified together with their (family) relationships. Register information gives information about family ties. Every personal record contains information on parent(s) and of all children born, irrespective of their present residence. There is also information about the partner of the person. Together with the detailed address information it is possible to identify all traditional nuclear families. Obviously, persons living alone at an address form a one person household.

When more than one person lives at an address either:

- 1. all persons at the address are related to each other;
- 2. one or more persons are not related to other persons living at the address.

In the first case the household position and composition is derived directly from the family composition. These are married couples with and without children, single parent households, most other households and some non-married couples with children. (Partners in) registered partnerships are classified as (partners in) married couples.

There are a number of specific cases in which the household composition is derived by taking certain decisions. The most important decisions are:

- Other persons related to the family nucleus, that is brothers/sisters or grandparent(s): if such a
  relationship can be identified such persons become part of the household. As a general rule these
  persons are classified as other members of the household. In the case of two related families the
  youngest couple is considered the family-nucleus. The other family members are classified as
  other members of the household. Thus multifamily households are not identified.
- Addresses where two brothers/sisters live together are classified as other households. Linking these two persons is possible because the information on the parents is the same.
- Persons aged 15 or younger living at an address without an identifiable parent are classified as other household members in case there is one other family living at an address.
- When two non-related persons came to live at an address at the same day these two persons are classified as a two-person household.
- At addresses with more than one family unit, the household composition is the same as for the separate families living at the address. If, for example, a couple with children, grandmother and two non-family persons live at an address, the households at that address are the couple with children with one other household member, and two one-person households.
- Persons aged 15 or younger living at an address without an identifiable parent are classified as child. The household type of these children is classified as 'Household type not stated', even in case there is another family living at the same address.

#### Households derived by imputation

Most of the household information is derived from the population registers. However, these registers do not contain all the information that is required to distinguish all the different types of households. The position in the household and the composition of the household can be established if the relationships between persons living at the same address are clear. This is the case for roughly 93 percent of the inhabitants of the Netherlands. The remaining 7 percent of the population in households is imputed on the basis of a logistic regression model. For this purpose six groups of addresses are made:

- 1. Two 'unattached'<sup>1</sup> persons living at an address;
- 2. Three 'unattached' persons living at an address;
- 3. Four to nine 'unattached' persons living at an address;
- 4. One single-parent family and a 'unattached' person living at an address;
- 5. One couple and one 'unattached' person living at an address;
- 6. Addresses as mentioned above with a postal classification identifying more than one separate postal unit (a kind of substitute for households) at the address.

Overall 11 percent of the households is determined by imputation. Unmarried couples without children are the most difficult group to determine. About half of these couples are based on estimation rather than observation. About three quarters of the unmarried couples with children are based on observation. Most of the remaining quarter comes from addresses containing a single parent and an 'unattached' person.

## 15.2.2 Adjustment of survey and register date to Census reference date

<sup>&</sup>lt;sup>1</sup> 'Unattached' means that no identifiable family ties are present between the persons

Before tabulating, some derivations and adjustments had to be made in the sources used of the SSD data set in order to get table variables defined according to the guidelines of the Census Programme 2001. Suppose that the LFS states a person as being unemployed at the survey date, which in most cases is different from the Census reference data. The LFS does not have any information, whether the person is employed on the Census date or not. If the integrated jobs file indicates that the person has a job on the 1<sup>st</sup> of January 2001, he will be qualified as an employed person. So the information from the integrated jobs files overrules the LFS-information, and prevents that the person is unjustly marked as an unemployed person at the reference date.

## 15.2.3 More than one job

If an employee has more than one job, it has been decided for the purpose of the Census Programme, to refer to the characteristics of his main job. So, if the branch of economic activity and the working hours of an employee have to be tabulated, always those of his main job are taken. The main job is defined as the job with the highest gross wage.

## 15.2.4 Economic status of persons in institutional households

In the Labour Force Survey (LFS) only persons from private households are interviewed. That means that for the population in institutional households some variables (educational attainment, attendance at educational institutions, engagement in family duties, occupation and unemployment) were not available. We have assumed that the distribution of these variables for the persons in institutional households is the same as for the other persons.

## 15.2.5 Construction of place of work

The place of work is constructed on the basis of place of residence and place of branch of the employer, if available. Otherwise, the place of head office is imputed as place of work and in principle, the branch nearest to the place of residence is chosen as the place of work, taking into account the number of employees in that branch. 'Redundant' persons are placed in the second nearest branch and so on to keep consistency with the number of employees per branch. Therefore, the regional data are extended with geographical co-ordinates in kilometres from a fixed position (outside the Netherlands) to calculate the Euclidean (fictive) travel distance between home and work.

## 15.2.6 Tabulating

#### General remarks

In tables where the supplied classification of a variable did not contain all the possible dimensions of the variable, the counts of the missing categories are included in another category (mostly the total). In the concerned tables an annotation is placed. This occurred particularly in cases where for some people no information was available for that particular variable, whereas a category 'unknown' was not supplied. In some other cases the missing category was added to the table.

#### Tabulating register information

The micro data set from the SSD has a register part and a sample survey part. When in the Census Table Programme it comes to tabulating of SSD register variables only, it is just a matter of straightforward counting from the register data in the SSD. The Census 2001 tables 1, 3, 4, 5, 12, 13, 17, 18, 20, 23, 30, 33, 35 and 40 are based on complete information. The tables 14, 24, 25, 26, 27, 28, 37 and 39 are housing tables and are based on housing registers and the housing survey. The remaining tables in the Population Census table set need SSD information in combination with sample survey information from the SEE and LFS.

Register counts from the SSD will always be numerically consistent in all Census tables. This is guaranteed because the SSD-database consists of micro-integrated files in which conflicting information is harmonized.

#### Tabulating sample survey (and register) information

Estimating (sub) totals from survey samples, such as the SEE or LFS, that are consistent with register totals is a complex issue. Estimates from a survey will always be numerically consistent as long as they are based on the same micro data, and the same sample weights are used. However, they are generally not numerically consistent with all register counts, except for the few register variables used as auxiliary information in the weighting model. One should realize that it is fairly impossible to take into account all the register information, because that would imply too many restrictions and it would certainly lead to estimation problems. Therefore, with the traditional way of weighting one can never realize numerical consistency between sample estimates and register counts in all respects.

For the Census overall numerical consistency is demanded between all tables in this table set. The need for overall numerical consistency stimulated methodologists at Statistics Netherlands to develop a new estimation method that ensures numerically consistent table sets, even if the data are obtained from different data sources. The method is called 'repeated weighting' (RW); it is based on the repeated application of the regression method to eliminate numerical inconsistencies between table estimates from different sources. More information about the principles of the RW-method is to be found in chapter 14 and in '*Estimating consistent table sets: position paper on repeated weighting*' of Houbiers, Knottnerus, Kroese, Renssen and Snijders (2003). It can found at the following internet address:

http://www.cbs.nl/en/publications/articles/general/discussion-papers/discussion-paper-03005.pdf Roughly speaking, the RW-method works as follows. Each table is estimated using as many records as possible: depending on the variables of interest, the table may be counted from register data, or estimated from survey data from one or more surveys. Then for each table one determines which margins the present table has in common with the tables in the set that are already estimated. The next step is to estimate the table while calibrating on these common margins. The estimates, apart from being consistent, will also be more accurate, particularly if the margins can be estimated from larger data sets or counted from register data, and as such serve as auxiliary information. Whereas with traditional weighting one fixed set of weights is calculated per sample survey, with the RW-method one derives a new set of weights (based on the survey weights) per table in order to get consistency with tables that are already estimated.

Statistics Netherlands has developed a software package to automate the process of repeated weighting. It is called VRD (<u>V</u>ullen <u>Reference Database</u> in Dutch, or Filling the Reference Database in English). From simulation studies it is known that the method of repeated weighting lowers the variances of the estimates (compared to traditional weighting), as long as cell sizes are sufficiently large.

Table cells with little or no survey data may cause estimation problems. In this case the estimates were often considered too unreliable to publish, and in the zero-cell case, it was even impossible to estimate. It applies in particular to Census tables that demand detailed information for small subpopulations. For example in Census tables that are specified at a detailed regional level, such as the level of municipalities, low cell sizes caused a lot of estimation problems.

Area, peri-urban	Area surrounding a city. A city and its surrounding area or peri-urban area together are called a larger urban zone.
Area, surrounding	The surrounding area is the area within a radius of one kilometre. A city and its surrounding area or peri-urban area together are called a larger urban zone.
Cohabitational status	Persons living in consensual union, of which single married divorced widowed not stated
Dependency ratio	Number of people of working age (16-65) divided by dependants, defined as people aged 0-15 or 65 and over
Disposable	The disposable income consists of the income from primary sources (wages and salaries

## 15.3 Definitions used

annual income	including benefits paid by the employer for sickness, unemployment and disablement, profits, received transfers and income from property) minus contributions to social security and other paid transfers (taxes on wage, salary, income and property included). Excluded are the folloing components: From the <i>employee income</i> : profit sharing including stock options, allowances payable for working in remote locations etc, where part of conditions of employment, and (partly) goods and services provided to employee as part of employment package. From the <i>self-employment income</i> : goods and services produced for barter, less costs of inputs and goods produced for home consumption, less costs of inputs. From the <i>current transfers received</i> : (partly) regular inter-household cash transfers received and regular support received from non-profit making institutions, employees' social insurance contributions (7.2), (partly) regular inter-household cash transfers and regular cash transfers and regular cash
	transfers to charities.
Economic Activity	<ul> <li>The census variable 'economic activity of a person' is defined in the following way:</li> <li>0. Register information has priority over sample information.</li> <li>1. People from 0 to 3 years old are by definition 'other economically inactive';</li> <li>2. People from 4 to 15 years old are by definition 'attending full-time education', even if they have a job;</li> <li>3. People over 75 years old are by definition 'retired'. This also applies to the few persons aged over 75 who are still working;</li> </ul>
	4. People in the ages 65-74 without a job are by definition 'retired';
	5. People in the ages 55-64 with an income exclusively from pension or insurance
	benefits for retirement purposes are by definition 'retired'; We know from experience that
	the number of people aged under 55 with a pension or insurance benefit for retirement purposes is very limited;
	6. People in the ages 16-74 who have an employee's job (of at least 1 hour a week) are 'economically active' and have the employment status 'employee', even if the LFS states their main activity otherwise (e.g. students with a job on the side);
	7. People in the ages 16-74 who have a job as a self-employed person and no employee's job are 'economically active' and have the employment status 'self-employed person'. A person who is self-employed and who also has an employee job is by
	definition classified as an employee for the Census 2001.
	8. For the remaining population in the ages 16-74 no register information is available. The information about their economic status comes from the (sample based) LFS and their numbers are estimations. They are either economically active and unemployed, or economically inactive and attending full-time education (restricted to persons of at most 30 years old) or engaged in family duties or other economically inactive.
Economic status	→ Economic activity. The economic status of a person can be economic active or inactive. Economic active is subdivided into employed (as employee or otherwise) and unemployed. Economic inactive is subdivided into attending full-time education, retired, engaged in family duties and other economically inactive.
Education	$\rightarrow$ Educational attainment; $\rightarrow$ ISCED; $\rightarrow$ Economic activity
Educational	$\rightarrow$ ISCED; $\rightarrow$ Economic activity
attainment	The information is derived from the Labour Force Survey. In this survey the questions
	about educational attainment are not asked for children under the age of 15. For these children we used their age in October 2000 to determine what category of educational
	attainment they would have had on 1 January 2001. In the Dutch educational system
	children start primary education at the first schoolday of the month following the month in
	which they reach the age of five years. They have to complete 6 classes before they can
	go to secondary education. The children who were in the age group 6-11 on 1 October
	2000 were set to have completed pre-primary education. Children between the age of 12
	and 15 on 1 October 2000 were set to have completed primary education. And children below the age of 6 on 1 October 2000 were classified in the category 'no education at
	all'. ISCED-level 3b does not occur in the educational system of the Netherlands and ISCED-

	level 3c includes those cases for which it is not known whether level 3a or 3c was		
	completed. The number of persons for whom the educational attainment is unknown was very limited		
	and the number of persons with an educational attainment at pre-primary level or no		
	education at all was limited for persons aged 15 and over. Therefore, these three		
	categories were taken together in all tables.		
Employee			
Employee	$ \rightarrow \text{Economic activity} $ $ \rightarrow \text{Economic activity} $		
Foreigner	Someone has a foreign background when at least one of the parents is born outside the		
Foreignei	Netherlands; they themselves may be born in the Netherlands.		
Full-time work	At least 35 hours a week $\rightarrow$ Part-time work		
Household	Private households consist of one or more persons sharing the same address and		
position	providing for their own daily needs. A person in a one-person household is referred to as single. The members of multi-person households can be classified according to their position with respect to the so-called reference person <sup>2</sup> . The following positions for those members can be distinguished: - child(ren) living at parental home; - living together; - other. Children may be blood-related, stepchildren or adopted children living with (one of) the		
	parent(s) and not having any children of their own living at home. If two persons are living together, it is assumed that they have a steady relationship. 'Other members' of the household are for example boarders, foster children and parent(s) of the reference person or of the partner. Persons living with their children but without a partner at the same address are included in the category 'single parents'. The population in <i>institutional households</i> consists of persons whose accommodation and daily needs are provided for by a third party on a professional basis. It includes persons living in homes for the elderly, nursing homes and mental hospitals. Whether a person is living in an institutional household is determined by the address. In service personnel as well as their children are therefore counted as living in institutional households.		
Household	$\rightarrow$ Household position		
status			
Household type	→ Household position Households are divided into private households and institutional households. Private households consist of one or more persons sharing the same address and providing for their own daily needs. Private households can be one person, family or non-family households. The type of private household depends on the relation of its members to the reference person, marital status and offspring. If the reference person is the only person at an address, it is clear that this is a one-person household. Households may also consist of unmarried couples with or without children, and of married couples with or without children. The presence of an 'other member' in these households does not affect the classification by type of household. A household consisting of more than one person, where the reference person neither has a partner nor children, is included in the category 'other household'. If the reference person is not cohabiting but has children living at home, the category 'single parent household' applies. ' <b>Two or more families households'</b> are not identified. See the general information on household statisics in this chapter for further information. Institutional households consist of persons whose accommodation and daily needs are provided for by a third party on a professional basis. Institutional household are determined by the address of the institution.		
Household,	→ Household type		
institutional	→ Household position		

 $<sup>\</sup>frac{1}{2}$  The reference person is a statistical entity. The reference person in a heterosexual relationship is always the man. In homosexual and lesbian relationships, the reference person is the elder of the two.

Inductor	NACE		
Industry	$\rightarrow$ NACE		
	Industry is derived for the employees and employers in the age group 16-74. The 15 year		
	old have to visit compulsory education and the persons aged 75 and over are by		
	definition retired and thus not employed. Employed persons of whom the major branch		
	economic activity is unknown are attributed proportionally to NACE 01-93. The number of		
	employed persons in NACE 95 and NACE 99 is very limited. Employed persons who		
	work in these NACE-branches are therefore also attributed proportionally to NACE 01-		
Institutional	93.		
Institutional	$\rightarrow$ Household type		
household	→ Household position International Standard Classification of Education.		
ISCED			
	Below the Dutch educational system is listed according to the ISCED categories.		
	International Standard Classiscifation of Education – ISCED		
	level label to compare with Dutch education		
	0/1 (pre)primary 'basisschool'		
	2 lower secondary 'vmbo'; 'vbo'; 'mavo'; 'lbo'		
	3 upper secondary		
	3c 'vakopleiding bol/bbl'; 'mbo< 3jaar'		
	3b not in Dutch education		
	3a 'havo/vwo'; 'mbo 3/4 jaar';		
	'middenkaderopleiding bol/bbl'		
	4 post secondary 'specialistenopleiding bol/bbl';		
	'hbo < 2 jaar'		
	5/6 tertiary		
	5b 'hbo 2-<4 jaar'		
	5a 'hbo ≥ 4 jaar'; 'wo'; 'post-hbo'		
	6 'opleiding tot graad van doctor'		
10.0.0			
ISCO	International Standard Classification of Occupations		
	Detailed occupation (ISCO-COM 3 digit level)		
	1 Legislators, senior officials and managers		
	11 Legislators and senior officials		
	111 Legislators		
	112 Senior government officials		
	113     Traditional chiefs and heads of villages		
	114 Senior officials of special-interest organisations		
	12 Corporate managers		
	121 Directors and chief executives		
	122 Production and operations department managers		
	123 Other department managers		
	13 General managers		
	131 General managers		
	2 Professionals		
	21 Physical, mathematical and engineering science professionals		
	211 Physicists, chemists and related professionals		
	212 Mathematicians, statisticians and related professionals		
	213 Computing professionals		
	214 Architects, engineers and related professionals		
	214 Thomasolo, origineers and related processionals		

22	Life estance and health references
22	Life science and health professionals
221	Life science professionals
222	Health professionals (except nursing)
223	Nursing and midwifery professionals
23	Teaching professionals
231	College, university and higher education teaching professionals
232	Secondary education teaching professionals
233	Primary and pre-primary education teaching professionals
234	Special education teaching professionals
235	Other teaching professionals
24	Other professionals
241	Business professionals
242	Legal professionals
243	Archivists, librarians and related information professionals
244	Social science and related professionals
245	Writers and creative or performing artists
246	Religious professionals
3	Technicians and associate professionals
31	Physical and engineering science associate professionals
311	Physical and engineering science technicians
312	Computer associate professionals
313	Optical and electronic equipment operators
314	Ship and aircraft controllers and technicians
315	Safety and quality inspectors
32	Life science and health associate professionals
321	Life science technicians and related associate professionals
322	Modern health associate professionals (except nursing)
323	Nursing and midwifery associate professionals
324	Traditional medicine practitioners and faith healers
33	Teaching associate professionals
331	Primary education teaching associate professionals
332	Pre-primary education teaching associate professionals
333	Special education teaching associate professionals
334	Other teaching associate professionals
34	Other associate professionals
341	Finance and sales associate professionals
342	Business services agents and trade brokers
343	Administrative associate professionals
344	Customs, tax and related government associate professionals
345	Police inspectors and detectives
346	Social work associate professionals
347	Artistic, entertainment and sports associate professionals
348	Religious associate professionals
4	Clerks
41	Office clerks
411	Secretaries and keyboard-operating clerks
412	Numerical clerks
413	Material-recording and transport clerks

414	Library, mail and related clerks
419	Other office clerks
42	Customer services clerks
421	Cashiers, tellers and related clerks
422	Client information clerks
5	Service workers and shop and market sales workers
51	Personal and protective services workers
511	Travel attendants and related workers
512	Housekeeping and restaurant services workers
513	Personal care and related workers
514	Other personal services workers
515	Astrologers, fortune-tellers and related workers
516	Protective services workers
52	Models, salespersons and demonstrators
521	Fashion and other models
522	Shop salespersons and demonstrators
523	Stall and market salespersons
6	Skilled agricultural and fishery workers
61	Market-oriented skilled agricultural and fishery workers
611	Market gardeners and crop growers
612	Market-oriented animal producers and related workers
613	Market-oriented crop and animal producers
614	Forestry and related workers
615	Fishery workers, hunters and trappers
62	Subsistence agricultural and fishery workers
621	Subsistence agricultural and fishery workers
7	Craft and related trades workers
71	Extraction and building trades workers
711	Miners, shotfirers, stone cutters and carvers
712	Building frame and related trades workers
713	Building finishers and related trades workers
714	Painters, building structure cleaners and related trades workers
72	Metal, machinery and related trades workers
721	Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers
722	Blacksmiths, tool-makers and related trades workers
723	Machinery mechanics and fitters
724	Electrical and electronic equipment mechanics and fitters
73	Precision, handicraft, printing and related trades workers
731	Precision workers in metal and related materials
732	Potters, glass-makers and related trades workers
733	Handicraft workers in wood, textile, leather and related materials
734	Printing and related trades workers
74	Other craft and related trades workers
741	Food processing and related trades workers
742	Wood treaters, cabinet-makers and related trades workers
743	Textile, garment and related trades workers
744	Pelt, leather and shoemaking trades workers
8	Plant and machine operators and assemblers

	81	Stationary-plant and related operators
	811	Mining- and mineral-processing-plant operators
	812	Metal-processing-plant operators
	813	Glass, ceramics and related plant operators
	814	Wood-processing- and papermaking-plant operators
	815	Chemical-processing-plant operators
	816	Power-production and related plant operators
	817	Automated-assembly-line and industrial-robot operators
	82	Machine operators and assemblers
	821	Metal- and mineral-products machine operators
	822	Chemical-products machine operators
	823	Rubber- and plastic-products machine operators
	824	Wood-products machine operators
	825	Printing-, binding- and paper-products machine operators
	826	Textile-, fur- and leather-products machine operators
	827	Food and related products machine operators
	828	Assemblers
	829	Other machine operators and assemblers
	83	Drivers and mobile-plant operators
	831	Locomotive-engine drivers and related workers
	832	Motor-vehicle drivers
	833	Agricultural and other mobile-plant operators
	834	Ships' deck crews and related workers
	9	Elementary occupations
	91	Sales and services elementary occupations
	911	Street vendors and related workers
	912	Shoe cleaning and other street services elementary occupations
	913	Domestic and related helpers, cleaners and launderers
	914	Building caretakers, window and related cleaners
	915	Messengers, porters, doorkeepers and related workers
	916	Garbage collectors and related labourers
	92	Agricultural, fishery and related labourers
	921	Agricultural, fishery and related labourers
	93	Labourers in mining, construction, manufacturing and transport
	931	Mining and construction labourers
	932	Manufacturing labourers
	933	Transport labourers and freight handlers
	0	Armed forces
Labour Force	2. Pe 3. Pe	ersons working at least 12 hours a week. ersons having accepted work for at least 12 hours a week. ersons willing and able to and actively searching for work for at least 12 hours a
		c. e Census tables the persons working at least one hour a week are classified as nomic active. $\rightarrow$ Part-time work; $\rightarrow$ Full time work.
Labour Force Survey (LFS)	The perso surve	LFS is a survey on private households, in which the survey population is restricted to ons aged 15 years and older. It is a continuous survey, meaning that sampling and eying of persons is spread throughout the year. The sample size is approximately percent of the total population of 15 years and older.
L		

Larger urban zone	A city and its $\rightarrow$ Surrounding area or $\rightarrow$ Peri-urban area		
LFS	$\rightarrow$ Labour Force Survey		
Marital status	Single		
	Married		
	Divorced		
	Widowed		
	not stated		
NACE	Nomenclature statistique des Activités économiques dans la Communauté Européenne		
NACE	Industry (NACE major groups)		
	A Agriculture, hunting and forestry (NACE 01-02)		
	B Fishing (NACE 05)		
	C Mining and quarrying (NACE 10-14)		
	D Manufacturing (NACE 15-37)		
	E Electricity, gas and water supply (NACE 40-41)		
	F Construction (NACE 45)		
	Wholesale and retail trade; repair of moter vehicles, motor cycles and personal and household goods (NACE 50-52)		
	H Hotels and restaurants (NACE 55)		
	I Transport, storage and communication (NACE 60-64)		
	J Financial intermediation (NACE 65-67)		
	K Real estate, renting and business activities (NACE 70-74)		
	L Public administration and defence; compulsory social security (NACE 75)		
	M Education (NACE 80)		
	N Health and social work (NACE 85)		
	O Other community, social and personal service activities (NACR 90-93)		
	P Private households with employed persons (NACE 95)		
	Q Extra-territorial organizations and bodies (NACE 99)		
NUTS	Nomenclature of Territorial Units for Statistics (Nomenclature des Unités		
	Territoriales Statistiques)		
	The NUTS is a five-level hierarchical classification (three regional levels and two local		
	levels).		
	Since this is a hierarchical classification, the NUTS subdivides each Member State into a		
	whole number of NUTS 1 regions, each of which is in turn subdivided into a whole		
<u> </u>	number of NUTS 2 regions and so on.		
Occupation	$\rightarrow$ ISCO		
	'Occupation' is derived for employees and employers in the age group 16-74. The 15		
	year old have to visit compulsory education and the persons aged 75 and over are by definition retired and thus not employed. In the table layouts supplied by Eurostat there		
	was no category 'occupation unknown'. We added the counts of the employed people of		
	whom we did not have a score on occupation to the total. In those tables the total		
	comprises more than the sum of the separate components.		
Part-time	Less than 15 hours, but at least 1 hour a week		
work, short			
Part-time	Less than 35 hours, but at least 15 hours a week		
work, long			
Pension	$\rightarrow$ Economic activity		
Population	The Population Register (PR) contains demographic information on every inhabitant of		
Register (PR)	the Netherlands. The Population Register is built from the municipal population registers.		
	It registers the population at the usual place of residence and encompasses (nearly) all		
	homeless people. The PR also provides household information, such as household size,		
	household composition, household type and household status.		

PR	$\rightarrow$ Population Register
Private	$\rightarrow$ Household type
household	$\rightarrow$ Household position
Repeated	Statistical technique to make new table estimates consistent with all earlier counts and
weighting	estimates
Retired	$\rightarrow$ Economic activity
Self employed	$\rightarrow$ Economic activity; $\rightarrow$ Economic status
SHC	$\rightarrow$ Survey on Housing Conditions
Senior	Persons of age 50-74 years
population	
Social	The SSD is a set of micro-linked and micro-integrated data files including demographic
Statistical	and socio-economic data. The SSD contains coherent and detailed information on
Database	persons, households, jobs and (social) benefits.
(SSD)	
Sub-city	Internally homogeneous district between five thousand and forty thousand inhabitants
district	
Survey on	The SEE is a large-scale survey among enterprises, in which the data are mainly
Employment	obtained by electronic data interchange (EDI) from payroll administrations. The survey
and Earnings	contains information about earnings and working hours of employees as well as some
(SEE)	characteristics of their jobs. The SEE has a complicated sampling design: the data of
	most large enterprises are available on a register basis, whereas a sample is taken for
	the smaller enterprises.
Survey on	Survey among persons in private households, every 4 years with at least 60 000
Housing	respondents, in intervening years with at least 15 000 respondents, on the actual and
Conditions	desired housing situation of persons and families. Results are on different $\rightarrow$ NUTS
(SHC)	levels.
Urban Audit II	A data collection on three spatial levels by the National Statistical Offices and Eurostat.
	In the Netherlands the following cities participated: Amsterdam, Rotterdam, The Hague,
	Utrecht, Eindhoven, Tilburg, Groningen, Enschede, Arnhem and Heerlen.
Virtual Census	Collecting and combining available register and survey data in a way that results are
	comparable to a traditional census (complete enumeration)
VRD	Software package developed by Statistics Netherlands for applying the technique of $\rightarrow$
	Repeated weighting