

## **Quality report of the European Union labour force survey 2007**

2009 edition





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Luxembourg: Office for Official Publications of the European Communities, 2009

ISBN 978-92-79-12396-2 ISSN 1977-0375 doi 10.2785/24747 Cat. No. KS-RA-09-015-EN-N

Theme: Population and social conditions
Collection: Methodologies and working papers

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# Quality Report on the European Union Labour Force Survey 2007

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#### 1 Introduction

The present report is the Quality Report on the European Union Labour Force Survey (EU-LFS) for the year 2007.

The quality concept applied in this report is in conformity with the definition developed by the European Statistical System. In this definition quality consists of six components: relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability and coherence. Each quality component consists also of several sub-components. Each of the quality components is explained shortly at the start of each section in the following report.<sup>1</sup>

The individual country quality reports that were delivered to Eurostat during spring and summer 2008 constitute the main source for the present report. Other sources that have been used or consulted are meta-data information collected by Eurostat, national quality reports from previous years, websites of the individual countries, the LFS datasets for 2007 and the documentation of the public free data set maintained by Eurostat.

The present quality report follows closely the standard Quality Report format that has been developed within Eurostat and was adapted to the Labour Force Survey by a special Task Force in 2000. In many instances, however, it is impossible to present the data exactly as prescribed by the form as it is often geared to homogeneous production processes within each country, rather than the special operation of Eurostat, obtaining national data sets from NSIs. In some cases the information from the individual countries was too scant to provide an exact summary.

The quality reports provide also information on the regional aspects of the labour force statistics, as the reporting of quality has become the joint effort of the units within Eurostat dealing with labour force surveys and with regional employment and unemployment. The last section of the present report covers the regional aspects.

This quality report complements the methodological working paper describing the characteristics of the national surveys in 2007 in the Member States, Candidate Countries and the EFTA countries, also available on the Eurostat website.

The present report has been drafted by Nicola Massarelli (contacts for further information on the report: <a href="mailto:nicola.massarelli@ec.europa.eu">nicola.massarelli@ec.europa.eu</a>. Tel: +352-4301-38525). Eurostat wishes to thank the many experts in the countries participating in the conduct of the EU-LFS, providing the data and descriptions necessary for this report.

#### 2 Review of designs and methods of the EU-LFS in 2007

#### 2.1 Coverage

The EU-LFS in 2007 covers the 27 Member States of the European Union. In addition the survey covers two countries of the EEA, Iceland and Norway, as well as Switzerland by bilateral agreement

<sup>&</sup>lt;sup>1</sup> Most of the introductory texts shortly explaining each quality component are taken from the "ESS Standard for Quality Reports", available at: <a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/ver-1/quality/documents/ESQR\_FINAL.pdf">http://epp.eurostat.ec.europa.eu/portal/page/portal/ver-1/quality/documents/ESQR\_FINAL.pdf</a>.

and the candidate countries, Croatia, Turkey, and the former Yugoslav Republic of Macedonia, for a total of 33 countries providing Eurostat with micro-data from their labour force surveys. However, the 2007 annual quality report for the former Yugoslav Republic of Macedonia is not available. As a consequence, the latter is not covered in the present document, which therefore refers, except when indicated otherwise, to the other 32 countries.

All the territories of participating countries are covered, except for Cyprus which only covers the areas under the control of the government of the Republic of Cyprus<sup>2</sup>.

The EU-LFS covers persons in private households. However, in several countries also members of collective households are sampled, either directly (register based sampling frames) or indirectly through their relationship with the sampled household.

In Eurostat datasets all age groups are represented for all participating countries, with the exception of the EFTA countries, Iceland, Norway and Switzerland, which only provide data respectively for those aged 16-74, 15-74 and 15 and more. Most countries interview all age groups, while some (Denmark, Estonia, Luxembourg, Hungary, Finland and Sweden) only interview working age population and retrieve information on the rest of the population from administrative sources.

#### 2.2 Legal basis

The EU-LFS is regulated by several regulations of the Council, European Parliament and the Commission. The most important regulations are listed in table 2.1. In addition, several participating countries have their own national legislation for the conduct of a labour force survey. Information on the national laws or regulations is not available.

Table 2.1 Major regulations of the EU- LFS relating to 2007 data collection

General regulations	Comments
Council Regulation (EC) No 577/98 of 9 March 1998 on the organisation of a labour force sample survey in the Community (OJ No L 77/3).	This is the main regulation with provisions on design, survey characteristics and decision making processes.
Regulation (EC) No 1991/2002 of the European Parliament and of the Council of 8 October 2002 amending Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community (OJ No L 308/1).	This regulation puts a time limit on the adoption of the continuous LFS.
Regulation (EC) No 2257/2003 of the European Parliament and of the Council of 25 November 2003 amending Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community to adapt the list of survey characteristics (OJ No L 336/6).	This regulation introduces 6 new variables and allows the wave approach for structural variables. It also introduces the module on "atypical working times", until then regulated by a gentlemen agreement.
Implementation regulations	
Commission Regulation (EC) No 1897/2000 of 7 September 2000 implementing Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community concerning the operational definition of unemployment (OJ No L 228/18).	Also contains the 12 principles for constructing the questionnaire
Commission Regulation (EC) No 430/2005 of 15 March 2005 implementing Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community concerning the codification to be used for data transmission from 2006 onwards and the use of a sub-sample for the collection of data on structural variables (OJ No L 71/36)	Codification 2006-2008

<sup>2</sup> The French overseas territories (DOM) only have a partial coverage over time, as data collection only refers to quarter 2. In the present document only data for Metropolitan France are presented.

#### 2.3 Compulsory participation

The participation in the EU-LFS is compulsory in thirteen Participating Countries (Belgium, Germany, Greece, Spain, France, Italy, Cyprus, Malta, Austria, Portugal, Slovakia, Turkey and Norway), and voluntary in the other 19 countries.

#### 2.4 Reference week

The EU-LFS is designed as a continuous survey with interviews spread uniformly over all the weeks of the quarter. The reference week starts on Monday and ends on Sunday. The first week of the year or quarter is the week that includes the first Thursday of the year or the quarter. As Croatia adopted it in 2007, Turkey and Switzerland have remained the only two countries not conducting a continuous survey. Turkey, although producing quarterly results, only covers the first week of each month, whereas Switzerland only has an annual survey carried out in the second quarter.

Among those countries conducting a continuous survey, the first week of 2007 started on Monday 1 January 2007 in all but three countries, Ireland and the United Kingdom, where the year 2007 started respectively in the 49<sup>th</sup>, in the 52<sup>nd</sup> week of 2006, and Iceland, where 2007 started from the 2<sup>nd</sup> week of the year.

The actual sample is spread over the 13 weeks of the quarter in all countries except Bulgaria, where the sample only covers the first 12 weeks of each quarter. The sample is uniformly spread over the weeks in all countries except in Hungary, Luxembourg, Slovenia, Germany, the Netherlands and, as concerns the second quarter, Switzerland.

#### 2.5 Periodicity of the results

With the exception of Switzerland, which only provides estimates relating to the second quarter of the year, the EU-LFS in 2007 produces quarterly estimates.

#### 2.6 Sampling designs

The sampling designs in the EU-LFS are very varied. Most NSIs use some kind of multi-staged stratified random sample design, especially those that do not have central population registers available.

#### Base used for the sample

Population registers and the latest Population Census or list of address used in that Census are the two main sources for the sampling frame. Other sources include lists of addresses from, e.g., the Postal Authorities or Utility databases. The Nordic countries as well as Belgium, Italy, Lithuania, Luxembourg, Austria and Slovenia use the Population Registers as the sole basis while the Netherlands complete this information with postal data. Germany base the sample frame on the 1987 Census in the western part<sup>3</sup> and the Central Population Register in the east, both updated by the Register of new dwellings.

<sup>&</sup>lt;sup>3</sup> The continuous population updating procedure which updates last German census in 1987 by using statistics on births, deaths and migration provides population figures used for calibration. This old updating base which is used also as sample frame for dwellings not built after 1987 may lead to some bias in LFS results.

#### Sampling stages and primary sampling units (PSU)

Denmark, Germany, Luxembourg, Malta, Austria, Finland, Sweden, the United Kingdom, Iceland and Norway use a single stage sampling design. In Estonia, Lithuania and Slovenia all members of the household of the selected individual are selected into the final sample. All other countries use a two or three stage sampling design, usually selecting administrative districts or census enumeration areas in the first stage<sup>4</sup>.

#### Ultimate sampling units

Three types of ultimate sampling units are employed: 1) households, 2) dwellings/addresses and 3) persons. In addition, Norway selects family units<sup>5</sup> in order to achieve a sample of persons. Germany, Ireland, Portugal and Romania sample clusters of dwelling units. In samples of dwellings or addresses, usually all the persons and thus all the household units residing within the dwelling/address are interviewed (Czech Republic, Germany, Spain, France, Cyprus, Hungary, Austria, Poland, Portugal, Slovakia, Romania, United Kingdom and Turkey). The exception is the Netherlands, where a final sampling stage is implemented, i.e. sub-sampling households from multi-household mailing addresses. When persons constitute the primary sampling units, the selected persons constitute either the final sample (the Nordic countries and Switzerland) or the sampled persons lead to a final sample comprised of the sampling units and their household members (Estonia, Lithuania and Slovenia).

#### Overall sampling rate

The theoretical sampling rate per quarter (ultimate sampling units) of the EU-LFS is 0.44% (EU-27: 0.39%). Luxembourg has by far the highest sampling rate per quarter (3.5%), followed by Ireland (3.0%), Malta (2%) and Iceland (1.9%), while other participating countries have sampling rates of 1.5% or less. The achieved sample in the second quarter of 2007 was 1.802 million individuals (EU-27: 1.598 million), of which 1.397 million were in the age group 15-74 years (EU-27: 1.237 million). The achieved sample in the EU-LFS is thus approximately 0.32% of the total population

#### Stratification

All the countries, except Lithuania, Malta and Iceland, stratify the sample frame prior to the sampling. Region, either NUTS 2, NUTS 3, NUTS 4 regions, or nationally defined areas, is the most common stratification variable (all but Denmark). Urbanisation is also a popular stratification variable (Greece, France, Spain, Ireland, Cyprus, Latvia, Poland, Slovenia, Bulgaria and Romania). Other stratification variables include register status of individuals in employment/unemployment registers (Denmark, Sweden) and auxiliary information about the characteristics (size, type) of the primary sampling units (Spain, France, Italy, Hungary).

#### 2.7 Rotation schemes

All the participating countries except Belgium use a rotating panel design for the samples. The number of panels (/waves) ranges from two to eight. All panel designs foresee an overlap between one quarter

<sup>&</sup>lt;sup>4</sup> Ireland is a special case, using a two-stage cluster design. However, theirs is a Master Sample design: the second stage is the allocation of the dwelling units within each PSU over time, so that eventually all of the sub-units within each selected PSU are covered (or would be if the sample was not revised every five years based on the five-year Census of Population) – each PSU divided randomly into 5 clusters of 15 dwelling units, each cluster participating 5 times before being replaced by the next cluster. The third stage in the Portuguese sampling design is similar except that the secondary sampling units (secções) are divided into 6 clusters of 50 dwelling units, each participating 6 times before being replaced by the next cluster.

<sup>&</sup>lt;sup>5</sup> Person + spouse or registered partner + dependent children.

and the successive one, except for Germany and Luxembourg which only have a year-to-year overlap. The most common panel design, in 2007 adopted by 9 participating countries<sup>6</sup>, is 2-(2)-2, where sampled units are interviewed for two consecutive quarters, than stay out of the sample for the next two waves and are included again two more times. Other widespread rotation patterns, each used by six countries, are *in for 5* and *in for 6* waves, where each panel is interviewed consecutively for five or six quarters before permanently leaving the sample. Other seven rotation schemes are used by one or maximum two countries. Depending on the national priorities with regard to desired precision of change estimates, levels or annual averages, the number of waves and skip patterns lead to different outcomes of overlaps between two successive quarters or between the same quarters in two successive years.

All panel designs with a quarter-to-quarter overlap foresee an overlap of 50% or more<sup>7</sup> of the sample between two successive quarters. There is less emphasis on overlap between corresponding quarters in two successive years. Only one country out of 32, Belgium, has no overlap; seven countries have an overlap of 20% or 25% while nineteen countries have an overlap ranging from 33% to 50%. Germany has 75% overlap with the previous year and Switzerland 80%. Luxembourg retained 6,400 households from the 2006 sample for interviewing in 2007.

#### 2.8 Calculation of the weighting factors

The Council Regulation (EC) No 577/98 on the EU-LFS stipulates that weighting factors should take into account "in particular the probability of selection and external data relating to the distribution of the population being surveyed, by sex, age (five-year age groups) and region (NUTS 2 level), where such external data are held to be sufficiently reliable by the Member States concerned" (Article 3(5)).

The methods of calculating the weights differ considerably between countries. Two main methods are used, depending on the detail of the external information and whether or not this external information can be cross-tabulated: 1) inverse of the selection probabilities adjusted *a posteriori* to the population's distribution by sex, age groups and other external (administrative) sources, and 2) different variations of adjusting to marginal totals, including generalised calibration and generalised regression. Most of the countries adjust for non-response either directly in the weighting process or in a preliminary step before adjusting the weights to external sources.

Due to the complexity and number of factors taken into account in some of the weighting calculations, the stipulation of the Regulation to use five-year age groups are not implemented in all of the countries. Almost all countries adjust the weighting factors to regional levels. These regions may, however, not necessarily correspond to the NUTS 2 regional classification.

All the countries with the exception of Croatia use data on sex in the weighting process. Croatia does not use age in calculating the weighting factors while seven countries (Bulgaria, Germany, Greece Luxembourg, Hungary, Malta, and Slovenia) use broader age groups than five-year. All the countries that have NUTS 2 regions defined use at least NUTS 2 regions for calculating the weights, but eighteen countries (Bulgaria, the Czech Republic, Croatia, Estonia, Greece, Spain, Ireland, Italy, Latvia, Lithuania, Hungary, Malta, Slovakia, Slovenia, Portugal, Finland, Sweden and Norway) have a more detailed regional classification (NUTS 3 or NUTS 4; groups of NUTS 3 for Portugal).

<sup>&</sup>lt;sup>6</sup> In 2007 Denmark and Latvia moved to this panel design from rather peculiar rotation schemes.

<sup>&</sup>lt;sup>7</sup> These percentages are only theoretical; the actual overlaps are lower due to non-response and panel attrition.

Denmark, Finland, Sweden and Norway use register statistics on employment/unemployment directly for weighting. In other countries, different external distributions or sources are frequently used both for weighting and stratification, such as urban/rural distinction, nationality, ethnicity, and size classes of regions or local areas.

Eighteen countries, Bulgaria, Belgium, Denmark, Germany, Estonia, Ireland, Latvia, Malta, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom, Iceland, Norway and Switzerland, gross the sample to the total population, i.e. including people living in institutional households, although some of them did not (Belgium, Ireland, Latvia, Malta, Slovenia and Switzerland) or only partially (Bulgaria, Portugal, Romania, Slovakia) cover the institutional population in data collection.

#### 2.9 Data collection methods

Three modes of data collection exist for the EU-LFS, personal visits, telephone interviews and self-administered questionnaires. Half of the participating countries mix the two first modes so that the first wave is always or mainly via personal visit while subsequent waves are interviewed with telephone if available. Germany collects data mainly with face-to-face interviews; persons not available for the interviewer or refusing oral interviews fill in self-administered postal questionnaires. Denmark collects data with telephone interviews, but persons who could not be reached by telephone are interviewed face to face. Belgium conducts the interviews by means of face-to-face; in households of retired persons, interviews can be conducted by telephone. Five countries (Luxembourg, Finland, Sweden, Iceland and Switzerland) rely solely on telephone interviews. Seven countries (Bulgaria, Estonia, Ireland, Portugal, Romania, Croatia and Turkey) collect data using only face-to-face interviews.

Twenty-two of the countries conduct the interview only with computerised questionnaires. Other two use both computerised and paper questionnaires. The rest rely solely on paper questionnaires.

#### 2.10 The cost and burden of the EU-LFS

Of the 32 countries submitting a quality report only 17 reported the total cost of the survey. Weighting by the number of interviews over the year by country and extrapolating from the reported cost, the 32 countries can be expected to have spent 20.98 Euros per interview in the year 2007 or 114.1 million Euros in total<sup>8</sup>.

Twenty-six countries gave some information on how long the interview lasted per person or household. For these countries the interview in the first wave lasted on average about 14 minutes. Subsequent waves, on the other hand, took on average around 10 minutes to complete.

#### 3 Relevance

Relevance is the degree to which statistics meet current and potential user needs. It depends on whether all statistics that are needed are produced and the extent to which concepts used (definitions, classifications etc.) reflect user needs. It can be assessed by analysing the different users, who they are, what needs they have, are they satisfied etc.

Given that most EU statistics are compiled according to regulations containing a defined list of

<sup>&</sup>lt;sup>8</sup> In 2006 the cost per interview was 20.81 Euros. In the estimation method since 2005, account is taken of interview mode, household visitations and whether or not a country is a New Member State or Candidate Country.

variables, the relevance can also be assessed by examining the completeness of the statistics measured against the relevant regulation.

#### 3.1 The users

Eurostat does not carry out any satisfaction survey targeted at users of labour markets statistics. The relevance of the LFS statistics for the users can thus only be assessed by indirect means. These requests are subject to scrutiny by the national experts and representatives of the NSIs. For major topics of interest, the instrument of ad hoc modules has proven to be useful and flexible. For users other than the Commission, anecdotal evidence for relevance can be found in positive feedbacks from individual users, or even in the absence of complaint. Some users, however, seek for more timely data release, at least of a few main indicators. A pre-fixed release calendar of data dissemination, not possible under the present arrangements of data processing and validation, would also better meet users' needs.

The main institutional users, however, are known to the unit F2 Labour Market Statistics. Many of them are frequently consulted on various aspects of development and dissemination of labour force statistics.

Table 3.1 Classification and description of users

Users	Description of user	Needs In term of concepts/statistics
DG Employment	The policy arm of the Commission regarding the labour market	Measurement and monitoring of policy agenda, especially the Lisbon and Stockholm targets
Other Directorates of the Commission	Policy setting	Various, especially in the domains of economic, education and social policy
ECB	The European Central Bank	Short term statistics relating to Euro area
ESTAT - Unit E4	Regional statistics and geographical information	Detailed regional statistics, structural funds
ESTAT - Unit C2	National accounts - production	Accurate estimates of labour input, using both the national and domestic concept
ESTAT - Unit F4	Education, science and culture statistics	Estimates on current education and education levels, higher education and research
Other registered users of the web-data	Including NSIs, international organisations	International comparison of main indicators
The public	Researchers, news agencies and other	Varied, mainly intra EU comparisons

#### 3.2 Completeness

When the Council Regulation on the continuous EU-LFS<sup>9</sup> was launched in 1998 it was anticipated that the transition to the new structure of a continuous survey providing quarterly results would be uneven for the different participating countries. In 2002, however, the Council and Parliament put an end to the transitional period, not allowing it to extend beyond 2002, or by way of derogation beyond 2003 for Italy and 2004 for Germany. Consequently, 2005 was the first year with all Member States of the EU conducting a continuous survey and providing quarterly results. In 2007 the Former Yugoslav Republic of Macedonia started delivering quarterly labour force survey micro data to Eurostat (also including the 2006 datasets), whereas Luxembourg started providing quarterly weights, thus allowing the production of quarterly estimates, and Croatia moved to a continuous survey producing quarterly results. In 2007 Switzerland, conducting a labour force survey only in the spring, thus remained the only country in the European Statistical System which did not supply quarterly data.

<sup>&</sup>lt;sup>9</sup> Council Regulation (EC) No 577/98.

Even if otherwise adhering to the EU-regulations on the EU-LFS, countries do not always provide data for all the variables. This can be for various reasons, such as assessment that the variable in question is irrelevant to the labour market situation in the country or (temporary) inability to implement the variable in the national questionnaire. Some NSIs implement the full set of questions only in the spring or in a certain survey wave.

Country by country and variable by variable analysis of the (in)completeness is provided in the Annex. Tables 3.2 and 3.3 summarise the completeness data.

Table 3.2 Completeness of the EU-LFS variables, 2007

Number of compulsory variables with 100% item non-response <sup>1</sup>	Number of countries	EU-27
0	16	16
1-4	8	7
5-9	3	2
10+	5	2
Total	32	27

<sup>&</sup>lt;sup>1</sup> Not including variables that are empty because the filtering variable excluded any response.

Table 3.3 Compulsory EU-LFS variables having one or more country returning 100% non-response or constant value<sup>1</sup>, 2007

Column number <sup>2</sup>	Brief description	Number of countries	EU-27	
1/2	Sequence number in the household	4	2	
3	Relationship to reference person in the household	7	4	
4/5	Sequence number of spouse or cohabiting partner	7	4	
6/7	Sequence number of father	7	4	
8/9	Sequence number of mother	7	4	
15	Date of birth in relation to the end of reference period	1	1	
16	Marital status	2	2	
17/18	Nationality	3	2	
19/20	Years of residence in this Member State	3	2	
27	Professional status	1	1	
28	Continuing receipt of the wage or salary	5	5	
29/31	Economic activity of the local unit	1	1	
32/35	Occupation	1	1	
36	Supervisory responsibilities	3	2	
39/40	Country of place of work	7	4	
41/42	Region of place of work	8	6	
43/46	Year in which person started working for this employer or as self-employed	2	2	
49	Involvement of the public employment office at any moment in finding the present job	3	2	
50	Full-time/part-time distinction	2	2	
54	Total duration of temporary job or work contract of limited duration	1	1	
55	Contract with a temporary employment agency	5	3	
57	Evening work	3	3	
58	Night work	2	2	
59	Saturday work	2	2	
60	Sunday work	2	2	
61/62	Number of hours per week usually worked in the main job	1	1	
65/66	Paid overtime in the reference week in the main job	4	2	
67/68	Unpaid overtime in the reference week in the main job	7	4	
71	Wish to work usually more than the current number of hours	1	1	

Table 3.3 Compulsory EU-LFS variables having one or more country returning 100% non-response or constant value<sup>1</sup>, 2007

	lumn nber²	Brief description	Number of countries	EU-27
73	3/74	Number of hours that the person would like to work in total	1	1
7	75	Working at home	2	2
7	76	Looking for another job	1	1
7	78	Existence of more than one job or business	1	1
82	2/83	Number of hours actually worked during the reference week in the second job	1	1
9	93	Professional status in last job	1	1
96	6/98	Occupation of last job	2	2
1	00	Reasons for not searching an employment	3	3
±	101	Type of employment sought (non-employed)	3	2
no L	102	Duration of search for employment (non-employed)	1	1
tje tje	109	Took a test, interview or examination (non-employed)	2	1
5 5	110	Looked for land, premises or equipment (non-employed)	5	4
ittes	111	Looked for permits, licences, financial resources (non-employed)	5	4
activities employed	112	Awaiting the results of an application for a job (non-employed)	5	5
ë ë e	113	Waiting for a call from a public employment office (non-employed)	6	5
earc	114	Awaiting the results of a competition for recruitment to the public sector (non-employed)	14	12
Job search activities of the non- employed	115	Other method used (non-employed)	5	5
ר	101	Tupe of employment cought (employed)	3	1
	101	Type of employment sought (employed)  Duration of search for employment (employed)	2	1
	102		3	2
_		Contacted public employment to find work (employed)	3	2
yec	104	Contacted private employment agency to find work (employed)	1	1
oldu	105	Applied to employers directly (employed)	1	1
en	106	Asked friends, relatives, trade unions etc. (employed)	2	2
Job search activities of the employed	107	Inserted or answered advertisements in newspapers or journals (employed)	2	1
S	108	Studied advertisements in newspapers or journals (employed)	4	3
vitie	109	Took a test, interview or examination (employed)	10	9
acti	110	Looked for land, premises or equipment (employed)	11	10
<del>C</del>	111	Looked for permits, licences, financial resources (employed)	5	5
seal	112	Awaiting the results of an application for a job (employed)	10	5 7
qo	113	Waiting for a call from a public employment office (employed)		, 12
7	114	Awaiting the results of a competition for recruitment to the public sector (employed)	16 5	5
	115	Other method used (employed)		
	117	Availability to start working within two weeks (employed)	1	1
1	118 19	Reasons for not being available to start working within 2 weeks  Situation immediately before person started to seek employment (or was waiting for new job to start)	2 2	2 2
1	20	Need for care facilities	2	2
	21	Registration at a public employment office	3	1
	24	Level of this education or training	1	
	/131	Number of hours spent on all taught learning activities within the last four weeks	1	
	/141	Field of highest level of education or training successfully completed	2	1
	2/145	Year when highest level of education or training was successfully completed	2	1
	46	Situation with regard to activity one year before survey	3	2
	/151	Country of residence one year before survey	6	2
	2/153	Region of residence (within Member State) one year before survey	7	3
	3/169	Interview week	1	1
	74	Degree of urbanisation	6	2
	01	Sequence number of the survey wave	6	5

 $<sup>^{\</sup>rm 1}$  Excluding variables which are constant by default such as country, reference year, region (if NUTS 2 is the whole country)  $^{\rm 2}$  According to the Commission Regulation No. 430/2005.

#### 4 Accuracy

The accuracy of statistical outputs in the general statistical sense is the degree of closeness of estimates to the true values. Statistics can be different from the true values because of random variability (the statistics change from implementation to implementation of the survey due to random effects) and/or bias (the average of the possible values of the statistics from implementation to implementation is not equal to the true value due to systematic effects).

Several types of error, stemming from all survey processes, comprise the error of the statistics (their bias and variability). A certain typology of errors has nowadays been adopted in statistics. **Sampling errors** affect only sample surveys; they are simply due to the fact that only a subset of the population, usually randomly selected, is enumerated. **Non-sampling** errors affect sample surveys and complete enumerations alike and comprise: 1. Coverage errors; 2. Measurement errors; 3. Processing errors; 4. Non response errors; and 5. Model assumption errors.

#### 4.1 Sampling errors

**Sampling errors** affect only sample surveys and arise from the fact that not all units of the frame population are enumerated. The statistics produced from a sample survey will differ from the values which would be computed if exactly the same survey operations were applied to the whole frame population.

The Participating Countries provide Eurostat with an estimate of the relative standard error of five main characteristics. These relative standard errors can also be expressed as confidence limits, i.e. the range of values that in 19 out 20 times would capture the true value in the population. It is also relatively straightforward to provide similar statistics on the aggregate level.

Table 4.1 provides the estimates and confidence limits for the 2<sup>nd</sup> quarter 2007, while table 4.2 provides estimates and confidence limits for the annual averages for 2007.

Table 4.1 Confidence limits<sup>1</sup>, 2<sup>nd</sup> quarter 2007

Country	Number of employed	Number of part-time employed	Number of unemployed	Rate of unemployment	Average number of hours actually worked
	x1000	x1000	X1000	%	hrs
EU-27	218,237 ± 656	39,792 ± 341	16,451 ± 202	7.0 ± 0.1	37.3 ± 0.1
EU-25	205,541 ± 587	38,825 ± 322	15,553 ± 191	$7.0 \pm 0.1$	$37.1 \pm 0.1$
EU-15	174,357 ± 562	36,541 ± 311	12,842 ± 172	$6.9 \pm 0.1$	$36.5 \pm 0.1$
EA-15	140,206 ±534	27,682 ±241	10,928 ±159	7.2 ±0.1	36.8 ±0.1
EA-13	$139,673 \pm 544$	$27,638 \pm 290$	$10,903 \pm 161$	$7.2 \pm 0.1$	$36.8 \pm 0.1$
EEA	208,144 ± 587	$39,550 \pm 323$	15,626 ± 191	$7.0 \pm 0.1$	37.1 ± 0.1
BE	$4,345 \pm 58$	$986 \pm 41$	$358 \pm 28$	$7.6 \pm 0.6$	$36.9 \pm 0.6$
BG	$3,253 \pm 82$	$59 \pm 9$	238 ± 22	$6.8 \pm 0.6$	$40.7 \pm 0.2$
CZ	$4,914 \pm 40$	$250 \pm 13$	275 ± 15	$5.3 \pm 0.3$	41.1 ± 0.1
DK	2,816 ± 38	$684 \pm 29$	106 ± 12	$3.6 \pm 0.4$	$34.5 \pm 0.3$
DE	$38,058 \pm 468$	10,002 ± 170	3,557 ± 101	$8.6 \pm 0.2$	$35.8 \pm 0.1$
EE	$659 \pm 19$	$52 \pm 8$	$35 \pm 7$	$5.0 \pm 1.0$	$40.2 \pm 0.4$
IE	$2,095 \pm 16$	$379 \pm 10$	$100 \pm 6$	$4.6 \pm 0.2$	$36.8 \pm 0.2$
EL	$4,520 \pm 88$	262 ± 16	398 ± 21	$8.1 \pm 0.4$	$41.3 \pm 0.3$
ES	$20,367 \pm 88$	$2,440 \pm 68$	$1,760 \pm 53$	$8.0 \pm 0.3$	$38.6 \pm 0.2$
FR	25,613 ± 151	4,435 ± 113	$2,146 \pm 84$	$7.7 \pm 0.3$	$35.9 \pm 0.1$
IT	23,298 ± 123	$3,136 \pm 77$	1,412 ± 53	$5.7 \pm 0.2$	$38.0 \pm 0.1$
CY	378 ± 10	$26 \pm 3$	13 ± 2	$3.4 \pm 0.6$	$38.8 \pm 0.4$
LV	1,108 ± 22	$80 \pm 12$	70 ± 10	$6.0 \pm 0.7$	$41.5 \pm 0.4$
LT	1,544 ± 42	129 ± 12	$66 \pm 9$	$4.1 \pm 0.5$	$39.3 \pm 0.2$
LU	201 ± 4	$35 \pm 3$	8 ± 2	$3.9 \pm 0.9$	$36.7 \pm 0.7$
HU	$3,942 \pm 33$	161 ± 11	297 ± 16	$7.0 \pm 0.4$	$39.8 \pm 0.1$
MT	156 ± 4	17 ± 2	11 ± 1	$6.6 \pm 0.9$	$38.6 \pm 0.5$
NL	8,469 ± 113	3,974 ± 167	279 ± 22	$3.2 \pm 0.3$	$31.6 \pm 0.2$
AT	$4,035 \pm 44$	916 ± 25	187 ± 14	$4.4 \pm 0.3$	$37.9 \pm 0.3$
PL	15,152 ± 148	$1,407 \pm 77$	$1,602 \pm 78$	$9.6 \pm 0.5$	$41.2 \pm 0.3$
PT	$5,155 \pm 56$	$630 \pm 36$	441 ± 28	$7.9 \pm 0.5$	$38.1 \pm 0.3$
RO	$9,443 \pm 281$	908 ± 112	$660 \pm 62$	$6.5 \pm 0.6$	$40.8 \pm 0.3$
SI	994 ± 18	99 ± 8	47 ± 5	$4.5 \pm 0.5$	$39.8 \pm 0.3$
SK	$2,338 \pm 23$	$63 \pm 7$	295 ± 15	$11.2 \pm 0.8$	$39.7 \pm 0.2$
FI	2,524 ± 17	344 ± 13	210 ± 9	$7.7 \pm 0.3$	$36.2 \pm 0.2$
SE	4,543 ± 21	1,107 ± 23	335 ± 12	$6.9 \pm 0.2$	$34.5 \pm 0.2$
UK	28,318 ± 135	7,211 ± 107	1,546 ± 58	$5.2 \pm 0.2$	$35.8 \pm 0.1$
HR	$1,609 \pm 72$	127 ± 20	161 ± 17	$9.1 \pm 0.9$	$40.7 \pm 0.4$
TR	21,843 ± 257	$1,899 \pm 56$	1,814 ± 28	$7.7 \pm 0.3$	$50.8 \pm 0.3$
IS	177 ± 3	$36 \pm 3$	6 ± 1	$3.2 \pm 0.7$	$42.2 \pm 0.7$
NO	2,426 ± 15	688 ± 18	$68 \pm 5$	$2.7 \pm 0.2$	$33.6 \pm 0.3$
CH	4,122 ± 48	1,371 ± 32	156 ± 10	$3.7 \pm 0.2$	$37.3 \pm 0.2$

<sup>&</sup>lt;sup>1</sup> The confidence limits at 95% level of significance. <sup>2</sup> By people who worked at least one hour in the reference week. Note: Estimates in italics are Eurostat's own approximation of the confidence limits.

Table 4.2 Confidence limits<sup>1</sup>, Annual average 2007

Country	Number of employed Number of part-time employed		Number of unemployed	Rate of unemployment	Average number of hours actually worked
	× 1000	× 1000	× 1000	%	hrs
EU-27	218,451 ± 402	39,572 ± 201	16,735 ± 129	7.1 ± 0.05	37.7 ± 0.04
EU-25	205,845 ± 344	38,608 ± 187	15,854 ± 121	$7.2 \pm 0.05$	37.6 ± 0.04
EU-15	174,573 ± 324	36,341 ± 178	13,102 ± 108	$7.0 \pm 0.06$	37.0 ± 0.04
EA-15	140,306 ±304	27,461 ±155	11,194 ±100	7.4 ±0.06	37.3 ±0.05
EA-13	139,772 ± 304	27,416 ± 155	11,168 ± 100	$7.4 \pm 0.06$	37.2 ± 0.05
EEA	208,455 ± 344	39,320 ± 187	15,920 ± 121	$7.1 \pm 0.05$	37.5 ± 0.04
BE	$4,380 \pm 29$	$970 \pm 20$	353 ± 15	$7.5 \pm 0.3$	$37.4 \pm 0.3$
BG	$3,253 \pm 66$	$54 \pm 5$	240 ± 18	$6.9 \pm 0.5$	41.2 ± 0.1
CZ	$4,922 \pm 32$	246 ± 10	277 ± 12	$5.3 \pm 0.2$	41.5 ± 0.1
DK	$2,804 \pm 10$	676 ± 10	111 ± 4	$3.8 \pm 0.2$	$35.5 \pm 0.1$
DE	$38,210 \pm 243$	9,952 ± 86	$3,602 \pm 52$	$8.6 \pm 0.1$	$36.3 \pm 0.1$
EE	655 ± 14	$54 \pm 5$	$32 \pm 4$	$4.7 \pm 0.6$	$40.0 \pm 0.2$
IE	2,112 ± 18	$287 \pm 0$	101 ± 6	$4.6 \pm 0.2$	37.1 ± 0.2
EL	$4,510 \pm 77$	253 ± 14	407 ± 19	$8.3 \pm 0.4$	$41.7 \pm 0.3$
ES	$20,356 \pm 60$	$2,399 \pm 41$	$1,834 \pm 34$	$8.3 \pm 0.1$	$38.8 \pm 0.1$
FR	25,642 ± 101	4,415 ± 95	2,211 ± 61	$7.9 \pm 0.2$	$36.9 \pm 0.1$
IT	$23,222 \pm 80$	$3,163 \pm 52$	$1,506 \pm 32$	6.1 ± 0.1	38.1 ± 0.1
CY	$378 \pm 9$	$27 \pm 3$	15 ± 2	$3.9 \pm 0.6$	$39.5 \pm 0.3$
LV	1,118 ± 12	$72 \pm 6$	71 ± 6	$6.0 \pm 0.5$	$41.5 \pm 0.3$
LT	1,534 ± 31	131 ± 9	$69 \pm 6$	$4.3 \pm 0.4$	$39.4 \pm 0.2$
LU	$203 \pm 2$	$36 \pm 1$	9 ± 1	$4.1 \pm 0.3$	$37.7 \pm 0.2$
HU	$3,926 \pm 28$	162 ± 9	312 ± 14	$7.4 \pm 0.3$	$40.1 \pm 0.1$
MT	156 ± 2	17 ± 1	11 ± 1	$6.5 \pm 0.4$	$39.4 \pm 0.2$
NL	$8,464 \pm 43$	$3,965 \pm 34$	278 ± 9	3.2 ±0.1	$32.2 \pm 0.2$
AT	$4,028 \pm 36$	$909 \pm 20$	186 ± 9	$4.4 \pm 0.2$	$38.5 \pm 0.2$
PL	$15,240 \pm 98$	1,404 ± 51	1,619 ± 51	$9.6 \pm 0.3$	41.2 ± 0.2
PT	$5,170 \pm 54$	$626 \pm 34$	$449 \pm 23$	$8.0 \pm 0.4$	$38.5 \pm 0.4$
RO	$9,353 \pm 196$	911 ± 75	641 ± 39	$6.4 \pm 0.4$	$40.2 \pm 0.2$
SI	985 ± 15	92 ± 5	$50 \pm 4$	$4.8 \pm 0.3$	$40.2 \pm 0.2$
SK	2,358 ± 17	$60 \pm 5$	296 ± 10	11.1 ± 0.5	$40.4 \pm 0.1$
FI	2,492 ± 12	351 ± 9	$183 \pm 5$	$6.9 \pm 0.2$	$37.2 \pm 0.1$
SE	4,541 ± 17	1,104 ± 19	298 ± 7	$6.2 \pm 0.1$	$36.1 \pm 0.2$
UK	28,441 ± 111	$7,237 \pm 85$	1,576 ± 40	$5.3 \pm 0.1$	$36.0 \pm 0.1$
HR	1,614 ± 52	138 ± 15	171 ± 12	$9.6 \pm 0.6$	$40.1 \pm 0.3$
TR	$21,207 \pm 208$	$1,860 \pm 44$	$1,969 \pm 27$	$8.5 \pm 0.2$	$49.5 \pm 0.3$
IS	176 ± 2	$28 \pm 2$	4 ± 1	$2.3 \pm 0.4$	$42.0 \pm 0.6$
NO	2,434 ± 14	685 ± 17	62 ± 4	$2.5 \pm 0.2$	$34.8 \pm 0.3$
CH	$4,122 \pm 48$	1,371 ± 32	156 ± 11	$3.7 \pm 0.3$	$37.3 \pm 0.2$

<sup>&</sup>lt;sup>1</sup> The confidence limits at 95% level of significance. <sup>2</sup> By people who worked at least one hour in the reference week. Note: Estimates in italics are Eurostat's own approximation of the confidence limits.

#### 4.2 Non-sampling errors

#### Coverage errors

The *frame* is a device that permits access to population units, such as a list of households with addresses. *Frame population* is the set of population units which can be accessed through the frame and the survey's conclusions really apply to this population. **Coverage errors** (or frame errors) are due to divergences between the target population and the frame population.

Table 4.3 Frame quality, coverage rates and methodological notes

Country	Under- coverage	Over-coverage	Miscla ssifica tion	Comments
BE	< 0,5%	→0	→ 0	Households, all members of which are 76 years or older, and collective households (about 0.15% of all households) are excluded before draw.  Delay between draw of household (from NPR, kept up to date "permanently") and fieldwork: between 3 and 7 months
BG	-	6.37%	-	Non-occupied dwellings
CZ	-	-	-	The nonexistent or uninhabited flats/estates remain in the Register of Census Areas and cause over-coverage. On the other hand foreigners live predominantly in collective households and therefore data for this population based on the LFS are not representative.
DK	→0	→0	→0	Statistics Denmark applies registers that are expected to have full coverage. In the Danish LFS the main sampling frame is the Population Register supplemented with the Unemployment Register for stratification purposes. The Population Register covers all registered residents in Denmark, and the register is currently updated on a quarterly basis. In terms of both coverage and updating, as such, this is a high quality sampling frame.  However, after selection the monthly LFS sub-samples are transmitted to the Central Office of Civil Registration (CPR) in order to both verify active status (alive and resident) and to add updated information on dwelling address. Recently the Law of CPR was revised giving everybody the potential right to refuse participation in statistical and scientific surveys. Residents who have used this right (mainly people who have recently changed their dwelling place) are guaranteed that they will not be contacted in relation to surveys, thus CPR is not allowed to transmit any information concerning their potential active status or dwelling address. Unfortunately, this results in problems of increasing refusal which is a disturbing trend.
DE	$\rightarrow$ 0	$\rightarrow$ 0	-	Homeless people and other people without registered residence (e.g. people living in huts, caravans) are out of the frame.
EE	-	-	-	In 2007 8,183 households of 12,039 households sampled for the survey, were interviewed. Among the households not interviewed, in 140 cases (1.2% of total number of sampled households) the reason was an error or inaccuracy of the frame (person emigrated or left the county, person deceased, wrong address, etc).
ΙE				
EL	About 1%	-	-	Population living in collective households, or in dwellings outside the borders of built areas is not covered. Frames are compiled at census, and sampling rates are based at census population. Frames are updated at the first time when the primary sampling units are selected but not at subsequent waves.  The under-coverage estimate is based at the percentage of population that was living in collective households at 2001 census
ES	=	18.08%	-	Over-coverage data refers to first interview
FR	-	-	-	-there is a risk of bias for the persons living in collective dwellings: they are not surveyed but their answers are estimated through those of the persons living in private households and the persons living in collective dwellings and attached to private households (controlled by the age and gender) - there is a risk of double counting for students who live in independent housing. They can be counted once in the housing of their parents and once in their own housing. The risk of double counting could lead to an over-coverage of student.
IT	-	1.43%	1.41%	Sample households are selected once a year from the municipalities' general registry offices; they cover the whole reference population. The data might contain errors as for information such as addresses (due for instance to recent change of the address), wrong inclusions (recent emigration) and missed inclusions (recent immigration). As for the survey's management strategies, Istat requires that each non-responding household be replaced with a household having similar characteristics of the first one, in order to maintain as much as possible the sample representativeness and to

Table 4.3 Frame quality, coverage rates and methodological notes

Country	Under- coverage	Over-coverage	Miscla ssifica tion	Comments
			1.011	minimise the impact of unit non-response. No more than 3 replaces are admitted.
CY	2.00%	-	-	In the first stage of the sample design a number of primary sampling units (PSUs) were drawn in 2005 from the Census of Population frame of 2001. In a post enumeration survey conducted after the census an under-coverage of 2,0% was estimated. The selected PSUs were again enumerated completely in 2005. In the 2nd stage of the sample design a number of households were selected from the updated PSUs. Updating to include newly constructed dwellings is carried out on a annual basis. Although the selected PSUs are completely updated annually, the original selection of PSUs was based on the distribution of households as enumerated in the 2001 Census. This assumes that the development of the selected PSUs was the same as in the rest of the areas which were not selected and this might not be completely true.
LV	-	5.6%	-	The shortcoming is that the number of households in counting areas has not been updated from year 2000. In general the list of counting areas covers all territory of Latvia, but there could be some territories not covered by the list. It is due to active building of new dwellings i previously unoccupied areas during the last years. Main reason for overcoverage are, rarely updated register were can be old information. Over-coverage contain list of different non-response. 1) Address contain social institution 2) Flat or house are uninhabited 3) Flat or house are not possible find 4) House is abandoned or burning.
LT	$\rightarrow$ 0	1.3%	→0	In 2007 25,626 households sampled for the survey, were interviewed. Among the households not interviewed, in 203 cases (0,8% of total number of sampled households) the reason was an error or inaccuracy of the frame (person emigrated left the county, person deceased, wrong address, etc).
LU	→ 0	$\rightarrow$ 0	$\rightarrow$ 0	Some households of the sampling frame RGPP were out of scope. They were deleted both from the sample and the sampling frame.
HU	-	-	-	Hard-to-access groups are characterised either by extremely bad traffic conditions get to their place or by collective reluctance usually within a small community towards being interviewed. Though the effect of these factors cannot be estimated, is supposed to be not significant.
MT	-	-	-	The sampling frame being used covers private households. Hence persons living i institutional households are not being covered.
NL	_	-	_	mondational nodes in the not being solvered.
AT	< 1.00%	-	-	From 2004 onwards the sample for the Austrian LFS is drawn from the Austrian population register. This register was set up in 2002, still the composition of the households is not always recorded correctly. However as we are sampling households not persons this does not cause serious problems for the results of the survey. Addresses known as institutional households are excluded. The sample is drawn three months before the start of the quarter. This results in a time lag of three to six months. Therefore dwellings where persons moved in after the due date for the survey are not covered.
PL				•
PT	-	15.66%	-	The sampling frame doesn't cover the individuals living in collective dwellings. This population represents less than approximately 1%.
RO	1.94	Q1: 1.89% Q2: 1.92% Q3: 2.09% Q4: 2.38%	-	Due to the lack of appropriate information, the new dwellings, built after 2002 Censiof the Population and Dwellings, that could possibly constitute a sampling frame of the new dwellings, have not been taken into account.  Nevertheless, some periodic updates have to be done for the PSU included in EMZOT, on the basis of the household surveys conducted, as well as micro-census type surveys.  The micro-census has aimed in particular the updating of the addresses of the dwellings.  Under-coverage rate was estimated as the ratio between number of new dwellings, built in the period end of 2002 year (the year of the census)- end of 2006 year (Source: Romanian Statistical Yearbook, 2007), and number of dwellings at the en of 2006 year (Source: Romanian Statistical Yearbook, 2007). Thus, it was assume that the proportion of the new dwellings in total dwellings should be the same in the master sample.  Over-coverage rates were estimated on the basis of the survey samples, as ratio between number of not-eligible dwellings and number of sampled dwellings. Possible misclassification errors could occur only if a certain locality comprising PS included into master sample would change its area. Changes in the area of the localities (usually from rural to urban) are rare cases. Even if it that would happen,
				the misclassification errors could be corrected by calibration.
SI	→ 0	2%	→ 0	the misolassingation errors sould be somested by calibration.

Table 4.3 Frame quality, coverage rates and methodological notes

Country	Under- coverage	Over-coverage	Miscla ssifica	Comments
			tion _	long period. Errors as for information on addresses of dwellings; missing coverage collective households, persons living in convents, partially student halls of resident (although they are surveyed via other members of the households), members of the Slovak embassies and institutions abroad Under-coverage comprises people born abroad and living in collective houses
				Over-coverage: Mainly young residents working temporarily abroad can stay to live there Misclassification by incorrect identification is negligible
FI	$\rightarrow$ 0	1.5%	→ 0	The sampling frame used is the total population database maintained by Statistics Finland. It is based on the Population Information System of The Population Regist Centre and updated regularly.  Under-coverage fairly small (no large-scale immigration)  Over-coverage: mostly emigration in wave 1, deaths and emigration for later waves
SE	1%	0.2%	-	The LFS sample is drawn once a year and the sampled persons are interviewed eight imes during a two year period. No additional sample selection is made in order to update the sample with immigrants during this two-year period. The average time span between sample selection and the reference week is about 19 months. which means an under-coverage of about 50,000 persons or 1 % of the population. This under-coverage is judged to have marginal effects on the LFS-estimates. There is a certain over coverage in RTB and consequently in the sampling frame. The over coverage consists of people born abroad who left Sweden without reporting this to the Swedish authorities. When these persons are included in the sample there are information that they have moved out from Sweden. They can not be reached for interview and will be classified as non-response.  According to evaluation-studies made this over-coverage is mainly concentrated to non-Nordic immigrants and is of a magnitude of 25,000-50,000 persons in the total population (0.2 %)
UK	~ 1%	~ 1%	=	Just over 1% of the total GB population
HR	-	-	-	Starting from the first half-year 2002, the sample frame for the LFS is based on the Census 2001 data. This sample frame includes addresses of private households or the whole territory of Croatia; hence the LFS results relate to the whole country. As the Census database was not updated since 2001, it is becoming obsolete, and so problems regarding migration and/or newly built dwellings can be foreseen for the coming years.
TR	-	-	-	For 2006 LFS Survey, 2000 Dwelling Enumeration Study is used as the sampling frame. Therefore newly established settlements do not take part in the frame. In the survey, another problem occurs when the frame contains some non-eligible units such as establishments, warehouses, etc. and when these units are selected as if they were households. In order to minimize these frame problems, before selecting households at the second stage, all selected PSU's are listed in the area so that ar updated list of households with newly added addresses is achieved for the second stage. Additionally, the estimates of the survey are adjusted by the use of projecte population values on regional basis and age-sex groups.
IS	-	-	-	No significant problems
NO	-	-	-	No significant problems
СН	-	-	-	Standard-sample: The base used for the standard sample is the registered phone numbers. The coverage rate is not exactly known. We estimate that the coverage rate has achiev less than 90% which will be a big problem next 2-3 years. But with a change in the law the coverage factor will be improved in 2-3 years.  The reasons are there are households that do not register their (fix-) phone numbe and households that can only be contacted by a mobile phone number. But with a change in the law, the coverage factor will be improved in 2-3 years.  Extra-sample of foreign persons: As the extra sample is based on the register of foreign persons, the quality (includir recent immigration) is almost "perfect". The register has a monthly update.

Note: Hyphen "-" indicates that information is not provided.

#### Measurement errors

**Measurement errors** are errors that occur during data collection and cause the recorded values of variables to be different than the true ones. Their causes are commonly categorized as:

- Survey instrument: the form, questionnaire or measuring device used for data collection may lead to the recording of wrong values.
- Respondent: respondents may, consciously or unconsciously, give erroneous information.
- Interviewer: interviewers may influence the answers given by respondents.

No estimates of these errors are available. However, the number of proxy interviews, the average number of interviews per interviewer and statistics on the last updates of the questionnaire, are all related to the error sources listed above.

Table 4.4 Share of proxy interviews, number of interviews per interviewer and last update of the questionnaire

Country	% of proxy interviews¹	Number of interviews <sup>1</sup> per interviewer (per quarter)	Date of the last update of the questionnaire	Date of the last pilot survey in order to test the questionnaire	Number of respondents to the pilot survey
EU-27	35.4	139	=	-	=
BE	19.6	82	2005	Q32006 a CAPI questionnaire was tested	About 1000
BG	41.7	53	Q1 2006	2005	approx. 900
CZ	46.7	437	31 December 2005	2001 Pilots are conducted from time to time to test new	891
DK	1.9	459	September 2007	questions or other adjustments of the questionnaire	N.A.
DE	26.1	88	yearly	2000	11 000 households
EE	21.6	88	January 2007	Oct-Nov 2005	217
ΙE	49.2	-	<u>-</u>	-	-
EL	42.0	94	-	-	-
ES <sup>2</sup>	53.1	357	2005	2004	3 500 households
FR	31.4	98	1st quarter of 2007	2005	around 250
IT	18.1	363	January 2007for Q1, Q3 e Q4 - April 2007 for AHM	December 2004	900 households
CY	31.7	725	January 2005	February 2005	30
LV	38.8	119	October 2005	May 2005 testing of CAP	N.A.
LT	43.0	104	December 2006	October 2006	35
LU	53.0	1009	yearly	N.A.	N.A.
HU	44.4	103	October 2006	August 2006	About 100
MT	50.2	86	2007	-	-
NL	46.5	1,191	-	-	-
AT	23.4	145	Q4 2007	November 2007	20 cognitive interviews, 119 persons interviewed for debriefing
PL	41.2	57	Q1 2007	-	-
PT	46.3	-	2006	No pilot test	N.A.
RO	28.3	64	for the 2007 LFS	June 2006	1000 households
SI	58.0	339	January 2007	No pilot test	N.A.
SK	55.9	447	2007	1992	NA
FI	4.4	229	-	-	-
SE	2.7	342	January 2007	Pilot studies in March and June 2004.	1400
UK²	35.7	109	January 2007	August 2006	807 households sampled for the Dress Rehearsal. Achieved sample = 528 households
HR	42.1	80	2006	<u> </u>	<u> </u>
TR	59.1	465	2007	Before 2004	Around 100 households
IS <sup>2</sup>	1.3	258	-	November and December 2002	-
NO <sup>2</sup>	15.0	105	April 2007	-	-
CH	0.4	100	April 2006	February 2007	154

Notes: N.A. indicates that information is not applicable. *Hyphen* "-" indicates that information is not provided.

<sup>&</sup>lt;sup>1</sup> 15-74 years respondents.

<sup>&</sup>lt;sup>2</sup> 16-74 years respondents

#### **Processing errors**

Between data collection and the beginning of statistical analysis for the production of statistics, data must undergo a certain processing: coding, data entry, data editing, imputation, etc. Errors introduced at these stages are called **processing errors**.

No estimates can be produced indicating the rate of processing errors in the EU-LFS.

#### Non-response errors

Non response is the failure of a survey to collect data on all survey variables, from all the population units designated for data collection in a sample or complete enumeration. The difference between the statistics computed from the collected data and those that would be computed if there were no missing values is the **non response error**.

Tables 4.5 and 4.6 do not show fully comparable non-response rates. All of the countries, except Denmark, Finland, Sweden, Iceland, Norway and Switzerland calculate non-response on the basis of the household unit. The enumerated countries calculate non-response on person basis. The treatment of non-response in the follow-up waves is also different between countries. Some Participating Countries do not take previous non-response into account when calculating the non-response in later waves, whereas others do. Thus the former countries may show lower non-response rates on the average than the latter.

Table 4.5 Rates of non response by wave. Annual average 2007

Country	Waves									
	1	2	3	4	5	6	7	8		
BE	23.6									
BG	25.0	17.5	14.9	13.6						
CZ	22.2	20.1	19.6	19.3	19.7					
DK	29.2	35.6	37.6	37.4						
DE <sup>1</sup>	-	-	-	-						
EE	41.0	33.2	26.6	23.4						
ΙE	-	-	-	-	-					
EL	12.2	11.6	11.2	10.7	11.2	10.9				
ES	18.9	14.6	14.8	14.7	14.7	14.4				
FR	18,1	16,9	16,2	16,5	16,5	15,3				
IT	22.8	7.7	7.6	6.0						
CY	3.7	3.9	3.4	3.0	3.1	3.6				
LV	36.6	33.2								
LT	24.1	19.7	17.4	16.6	11.6					
LU	68.0									
HU	25.6	18.2	10.4	7.9	6.5	5.5				
MT	17.4	17.0								
NL	38.3	18.4	5.5	4.4	4.5					
AT	92.1	91.9	92.3	92.0	91.8					
PL	19.5	16.8	15.7	14.4						
PT	-	-	-	-	-	-				
RO	7.2	5.1	4.1	3.6						
$Sl^2$	26.9	22.0	14.8	12.6	9.7					
SK	12.2	-	-	-	-					
FI	20.34	19.46	19.69	20.82	20.76					
SE	21.5	18.5	17.9	17.5	18.5	18.4	18.0	17.0		

Table 4.5 Rates of non response by wave. Annual average 2007

Country				Wa	ves			_
	1	2	3	4	5	6	7	8
UK	30.4	37.4	41.1	43.7	45.1			
HR	-	-	-	-				
TR	14.6	13.6	14.3	13.8				
IS	19.5	17.3	19.5	19.5	18.3			
NO	16.2	14.0	12.7	12.8	11.7	11.6	10.9	11.5
CH	33.5	20.9	17.4	17.2	14.0			

Note: *Hyphen* "-"indicates that information is not provided. 

<sup>1</sup> Survey waves are on annual, but not quarterly basis.

Table 4.6 Non-response by type of non-response. Annual average 2007

Country		Non-resp	onse (%)	
	Total	Refusals	Non-contacts	Other reasons
BE	23.7	2.7	10.6	10.3
BG	18.9	4.4	13.6	0.9
CZ	20.2	14.8	5.2	0.1
DK	34.2	-	-	-
DE <sup>1</sup>	1.9	=	<u>-</u>	=
EE	31.2	10.7	17.7	2.9
IE	15.4	3.8	4.7	-
EL	-	=	<del>-</del>	=
ES	18.8	7.7	11.2	=
FR	16.8	3.8	9.3	3.7
IT	11.6	3.8	5.8	2.0
CY	3.5	2.9	0.3	0.3
LV	34.0	10.6	15.5	7.9
LT	20.2	8.1	10.6	1.5
LU	68.0	18.0	17.0	33.0
HU	12.4	4.0	8.0	1.1
MT	17.3	1.8	15.5	=
NL	17.8	8.5	4.9	4.3
AT	8.0	0.2	7.8	-
PL	24.3	14.4	8.2	1.7
PT	15.9	2.9	10.4	2.6
RO	5.0	1.1	1.9	2.0
SI	19.0	12.2	1.4	5.4
SK	6.7	4.8	0.4	1.5
FI	20.2	13.2	6.9	0.2
SE	18.4	9.2	8.6	0.6
UK <sup>2</sup>	30.4	21.9	8.5	-
HR	18.1	8.9	4.2	5.0
TR	14.5	0.3	9.8	4.4
IS	18.2	9.2	7.0	2.0
NO <sup>2</sup>	13.6	-	-	-
CH	23.2	6.5	11.9	2.5

Note: Hyphen "-" indicates that information is not provided.

<sup>&</sup>lt;sup>2</sup> Conditional non-response in waves 2-5. The non-respondents from previous waves are excluded from the sample in subsequent waves (waves 2-5)

<sup>&</sup>lt;sup>1</sup> Yearly average, most non-response appears to arise due to non-contact. <sup>2</sup> 1<sup>st</sup> wave only.

#### 5 Timeliness and punctuality

The **timeliness** of statistical outputs is the length of time between the event or phenomenon they describe and their availability.

**Punctuality** is the time lag between the release date of data and the target date on which they were scheduled for release as announced in an official release calendar, laid down by Regulations or previously agreed among partners.

According to Council Regulation (EC) No 577/98 data shall be delivered to Eurostat within twelve weeks from the end of a reference quarter. Table 5.1 shows that data are transmitted to Eurostat for most countries in the third month after the end of the quarter. First releases of data in the majority of the participating countries is in the first two months after the end of the quarter.

Table 5.1 First release nationally, transmission to Eurostat and Eurostat's dissemination of LFS data by number of calendar days from the end of the reference period 2007 – quarterly LFS only<sup>1</sup>

Number of calendar days from end of reference period		Number of	countries	
	2006		2007	
First release nationally	All	All	EU-27	Euro area
<31	1	3	3	2
31-60	4	9	7	2
61-90	17	7	7	4
91+	8	6	5	2
Annual only or no publication <sup>2</sup>	3	3	3	3
Not known	0	3	2	2
Total	30	31	27	15
Average number of calendar days	72	71	69	69
ransmission to Eurostat				
<31	1	1	1	1
31-60	4	4	4	3
61-90	17	18	17	7
91+	9	8	5	4
Total	31	31	27	15
Average number of calendar days	99	88	77	77
Eurostat's dissemination of national data (web site)				
<31	0	0	0	0
31-60	0	2	2	2
61-90	7	14	14	6
91+	23	15	11	7
Total	30	31	27	15
Average number of calendar days	118	103	91	92

<sup>&</sup>lt;sup>1</sup> I.e. not incl. Croatia in 2006 and Switzerland in 2006 and 2007.

The release of EU-LFS data is not bound by an advance release calendar. The Eurostat website is updated continually with new data as they arrive within two or three weeks from final data processing in Eurostat.

<sup>&</sup>lt;sup>2</sup> France, Luxembourg and Germany.

#### 6 Accessibility and clarity

Accessibility and clarity refer to the simplicity and ease with which users can access statistics, with the appropriate user information and assistance: a global context which finally enables them to make optimum use of the statistics.

In 2007 Eurostat published the quarterly and annual results in the series *Data in Focus*.

Eurostat publishes annually a compendium describing the main characteristics of the national surveys.

The Eurostat public website is free of charge and includes main indicators, derived from the Labour Force Survey, as well as a special sub-domain providing detailed, constantly updated main results from the EU-LFS.

All data on the website are attached to meta-data in Euro SDMX Metadata Structure (ESMS), giving basic information on the background and a summary of the methodology. More detailed information can be found at the EU-LFS main page (http://circa.europa.eu/irc/dsis/employment/info/data/eu\_lfs/).

Through direct queries, customised EU-LFS results are available to users in electronic format. These data are also produced free of charge.

Researchers may purchase anonymised datasets containing microdata, if certain conditions are fulfilled. Data from all Member States except Malta and the United Kingdom are available in this format.

#### 7 Comparability

Comparability refers to statistical outputs comprising the same data items (say employment data) but for different reference periods, regions or other domains, where the aim is to combine them to make comparisons over time, or across regions, or across other domains. It can be said that it is the extent to which differences between statistics are attributed to differences between the true values of the statistical characteristics.

#### 7.1 Comparability over time

From 2006 onwards, Commission Regulation (EC) No 430/2005 of 15 March 2005 regulates the codification to be used for data transmission and the use of a sub-sample for the collection of data on structural variables (OJ No L 71/36). As for the participating countries, main changes referred either to the mode of data collection (Belgium, Denmark, Latvia, Lithuania), the rotation scheme (Denmark, Latvia, Croatia), the improvement of the questionnaire towards the EU requirements (Germany, France, Latvia, Slovenia), the streamlining of weighting schemes (Denmark, France, Latvia) and the increase of the sample size (Denmark, Estonia, Latvia, Lithuania, Malta, Croatia).

Table 7.2 shows the main changes in the national LFSs introduced in 2007. The following table 7.1 summarizes instead the situation as regards the availability of quarterly microdata and the uniform spreading of the sample over the whole year.

Table 7.1 Availability of micro-data from the EU-LFS'

Country	Spring quarter micro-data available from:	Quarterly micro-data available from:	Reference week evenly spread over the quarter from:	Remarks
BE	1983	1999	1999	1983-1998: One week in the second quarter
BG	2000	2000	2003	2000-2002: One week per quarter 2003+: Uniformly spread over the first 12 weeks of each quarter
CZ	1998	1998	1997	1997: Seasonal quarters 2 and 4
DK	1983	1999	1994	1992-1993: More than one week spread unevenly over 1st and 2nd quarter
DE	1983	2005	2005	1983-2004: One week in the 2nd quarter
EE	1997	2000	2000	1997-1999: All weeks in 2nd quarter not uniformly spread
EL	1983	1998	1996	1992-1995: All weeks in 2nd quarter not uniformly spread
ES	1986	1996	1999	1996-1998: Evenly spread with the exception of 4 weeks in August (not surveyed due to interviewers' holidays)
FR	1983	2003	2003	1983-2002: Survey conducted in the first quarter of the year. 1992-2002: More than one week, but not uniformly spread in one quarter
IE	1983	1999q2	1998	1992-1997: More than one week, but not uniformly spread in one quarter 1998+: Seasonal quarters
IT	1983	1992q4	2004	1983-2003: One week per quarter
CY	1999	2004q2	1999	' '
LV	1998	2002	2002	1998-2001: All weeks in 2nd and 4th quarter not uniformly spread (semi-annual results)
LT	1998	2002	2002q3	1998-2001: One week in 2nd and 4th quarter each (semi-annual results) 2002q1-q2: One week per quarter
LU	1983	2007q1	2003	1983-2002: One week per quarter 2003+: All weeks of the year, but not uniformly spread, quarterly breakdowns not available.
HU	1996	1999	2003	1999-2002: One week per month 2003-2005: 3 weeks per month not uniformly spread 2006+: All weeks surveyed, nearly uniformly spread
MT	2000	2002	2004	2000-2003: One week per quarter
NL	1987	2000	2000	1987-1999: 1st to 22nd/23rd week surveyed, not uniformly spread
AT	1995	2003	2004	1995-2003: More than one week at the end of the quarter, not uniformly spread
PL	1997	2000	2000	
PT	1986	1996q2	1998	1986-1991: One week in 1 <sup>st</sup> and 2 <sup>nd</sup> quarter. 1992-1997: More than one week per quarter, not uniformly spread
RO	1997	1999	1998	1998-2004: Most or all weeks of the quarter, not uniformly spread 2005: Uniformly spread over any 12 weeks of each quarter 2006+: Uniformly spread over all weeks of each quarter
SI	1996	1999	2002	1996-2001: One week per quarter 2002-2005: All or most weeks surveyed, not uniformly spread 2006+: All weeks surveyed, nearly uniformly spread
SK	1998	1998	1998	1998-1999: Seasonal quarters
FI	1995	1999	2000	1995-1998: "Spring data"=March, April, and May. One reference weel per month. 1999: Quarterly data from 2 <sup>nd</sup> q onwards. One reference week per month 2000+: Quarterly data. Continuous survey. Uniformly spread over the weeks of the month, months of each quarter have 4-4-5 weeks
SE	1995	2001	1999	1995-1998: Uniformly spread over 4 weeks of one month
UK	1983	1999q2	1992	1992-2006: Seasonal quarters
HR	2002	2007q1	2007q1	2002-2006: Half-year results, one reference week per month
TR	-	2006	-	Only one week per month covered
IS	1995	2003	2003	1995-2002: One week per quarter
NO	1995	2000	1996	1995: One week per month
СН	1996			1995+: All or most weeks surveyed, not uniformly spread.

<sup>&</sup>lt;sup>1</sup> The table reflects the actual data availability in the databases of Eurostat in June 2007. National surveys may, e.g., have started producing quarterly results while only spring results were delivered to Eurostat.

Table 7.2 Improvements or changes compared to previous year

Country	Change	Impact of the changes on the statistics.
Belgium	Gradual move from PAPI to CAPI (30% of CAPI in 2007).	
Denmark	Sample size more than doubled, rotation scheme changed to 2-(2)-2, more efficient use of auxiliary variables in weighting procedures, face to face interviewing used as supplementary data collection method.	
Germany	Questionnaire changed to better capture ILO employment.	
Estonia	Sample size increased from 2,500 to 3,000 households each quarter.	
France	Questionnaire changed to fully implement the definition of unemployment. Weighting procedure from NUTS 2. Supplementary non-response survey to collect data from non-respondents.	
Latvia	Sample size more than doubled. Rotation scheme changed to 2-(2)-2, more efficient use of auxiliary variables in weighting procedure and "contact with the public employment office to find work" is asked first in the list of job search methods, CATI interviewing introduced in combination with CAPI.	
Lithuania	Sample (households) increased of about 35%. CAPI used from quarter IV 2007 in combination with PAPI.	
Malta	Quarterly sample size increased from 2500 to 3200 households.	
Poland	Change of criterion of temporary stay/temporary absent length - from 2 to 3 months. Change results from adjustment to the national regulations.	Demographic data present rather unimportant impact of the implemented changes
Slovenia	Question on Main status moved to the end of questionnaire, in line with principle 1.	
	Implementation of NACE Rev. 2	
Finland	First, limited, implementation of the wave approach (full implementation due in 2008)	
Croatia	Move to a continuous survey, data available at NUTS 2 level, quarterly results available, yearly sample size doubled, rotation scheme changed to 2-(2)-2.	
United	Country coding frame	The country coding frame used in the LFS questionnaire was updated in 2007. This coding frame incorporates a more extensive list of countries than previously (for details of the National Statistics country classification see http://www.statistics.gov.uk/statbase/Product.asp?vl nk=14435).
Kingdom	Age thresholds	Age thresholds have been extended to 69 for males and females (from 59 for females and 64 for males) for the question WAIT. WAIT is used in the derivation of Columns 99, 101 and 102. The age threshold has also been extended for ED4WK (used in the derivation of Col 128); FUTUR4 (used in the derivation of Col 128), and TAUT4 (used in the derivation of Col 128)

#### 7.2 Comparability over space

A common Council regulation<sup>10</sup>, common variable definition<sup>11</sup>, common explanatory notes<sup>12</sup> and common regulation<sup>13</sup> regarding the definition of unemployment and the twelve principles of questionnaire construction go a long way to ensure comparability of the statistics between the Participating Countries. This is, however, mainly true for the main characteristics, employment and unemployment where particular definitions and sequence of questions are part of the EU legislation. For other variables, each country has the responsibility to ensure that the national survey provides data that are compatible with the EU definitions and of the same quality.

Eurostat has commissioned several reports in order to examine the degree to which the Participating Countries adhere to the common set of definitions. The last such study was done for 2001. Too many changes have occurred since in the execution of the EU-LFS for the results of this study to be presented here.

As most of the variables are defined in accordance with recommendations of the ILO and other international organisations the statistics from the EU-LFS is in the main directly comparable to those of other industrialised countries, especially those of the other members of the OECD.

#### 8 Coherence

The coherence of two or more statistical outputs refers to the degree to which the statistical processes by which they were generated used the same concepts - classifications, definitions, and target populations – and harmonised methods. Coherent statistical outputs have the potential to be validly combined and used jointly. It is, however, generally easier to show cases of incoherence than to prove coherence. The following sections show comparable data from other sources, the population and employment data from national accounts. Other comparisons are possible, such as with employment data from the Structural Business Survey and the Labour Cost Survey.

#### 8.1 Coherence with population statistics

The coherence with population statistics is of importance for the users, as often the most recent population estimates are available from the EU-LFS statistics. These two statistics are, however, not fully comparable.

Most of the participating countries carried out a population census in the 2001 round. New censuses often result in new weights, new sample frames or new sample designs. By 2004 all of the participating countries had revised the weights to reflect new population estimates. Re-weighting of previous data series have, however, not always been implemented.

There are other differences that need to be considered:

- The EU-LFS statistics cover only the population in private households, while population statistics cover the whole population.

<sup>11</sup> Commission Regulation (EC) No 430/2005.

<sup>&</sup>lt;sup>10</sup> Council Regulation (EC) No 577/98.

<sup>&</sup>lt;sup>12</sup> The European Union Labour Force Survey. Methods and definitions – 2001.

<sup>&</sup>lt;sup>13</sup> Commission Regulation (EC) No 1897/2000.

- Sometimes the rules for defining the usual resident population differ in the LFS from the rule in population statistics.
- Population statistics usually refer to particular dates, e.g. 1<sup>st</sup> January or mid-year for population level and characteristics. The EU-LFS statistics generally refer to the average quarterly or annual situation.

Table 8.1 Coherence with population statistics 2007

Country	Popula	ation 15-64 1/1/	2007	LFS annu	ıal average 15-	64 2007	Relative o	difference [(L-	P)/P*1001
,	Total	Men	Women	Total	Men	Women	Total	Men	Women
EU-27 <sup>1</sup>	333,085.4	166,840.7	166,255.5	329,163.9	164,336.0	164,827.8	-1.2	-1.5	-0.9
BE	6,976.7	3,508.3	3,468.4	7,007.8	3,524.1	3,483.7	0.4	0.4	0.4
BG	5,322.6	2,645.6	2,677.0	5,198.2	2,577.6	2,620.6	-2.3	-2.6	-2.1
CZ	7,325.2	3,683.2	3,642.0	7,346.7	3,696.0	3,650.7	0.3	0.3	0.2
DK	3,598.2	1,815.8	1,782.4	3,573.1	1,802.8	1,770.3	-0.7	-0.7	-0.7
DE	54,574.3	27,629.3	26,944.9	54,225.9	27,296.8	26,929.1	-0.6	-1.2	-0.1
EE	913.3	439.4	473.9	909.0	436.1	472.9	-0.5	-0.8	-0.2
IE	2,964.9	1,500.6	1,466.8	2,992.7	1,511.3	1,481.5	0.9	0.7	1.0
EL	7,501.2	3,791.1	3,710.1	7,208.0	3,602.7	3,605.4	-3.9	-5.0	-2.8
ES	30,608.6	15,485.9	15,122.7	30,807.6	15,595.5	15,212.0	0.7	0.7	0.6
FR¹	41,351.4	20,550.8	20,800.6	39,493.0	19,531.8	19,961.1	-4.5	-5.0	-4.0
IT	39,016.6	19,520.5	19,501.3	38,945.6	19,466.8	19,478.8	-0.2	-0.3	-0.1
CY	543.2	268.5	274.7	518.4	252.0	266.4	-4.6	-6.1	-3.0
LV	1,572.9	760.6	812.3	1,573.4	761.2	812.2	0.0	0.1	0.0
LT	2,319.5	1,121.0	1,198.5	2,319.3	1,120.9	1,198.4	0.0	0.0	0.0
LU	322.1	163.2	158.9	315.7	156.9	158.8	-2.0	-3.9	-0.1
HU	6,931.4	3,408.5	3,522.9	6,799.7	3,318.9	3,480.7	-1.9	-2.6	-1.2
MT	283.4	143.8	139.6	284.7	144.8	139.8	0.4	0.7	0.1
NL	11,031.0	5,562.7	5,468.3	10,985.7	5,528.5	5,457.3	-0.4	-0.6	-0.2
AT	5,602.4	2,807.4	2,798.2	5,550.8	2,763.1	2,787.8	-0.9	-1.6	-0.4
PL	26,986.6	13,406.3	13,580.3	26,298.7	12,976.3	13,322.4	-2.5	-3.2	-1.9
PT	7,132.8	3,526.2	3,606.7	7,135.0	3,526.9	3,608.0	0.0	0.0	0.0
RO	15,043.2	7,499.6	7,543.6	15,046.3	7,501.6	7,544.6	0.0	0.0	0.0
SI	1,409.7	719.1	690.5	1,412.1	721.4	690.7	0.2	0.3	0.0
SK	3,883.4	1,933.6	1,949.7	3,873.0	1,927.6	1,945.5	-0.3	-0.3	-0.2
FI	3,507.1	1,772.6	1,734.5	3,496.7	1,757.5	1,739.2	-0.3	-0.9	0.3
SE	5,982.2	3,039.7	2,942.6	6,002.0	3,047.7	2,954.3	0.3	0.3	0.4
UK	40,381.5	20,137.4	20,244.1	39,844.8	19,789.2	20,055.6	-1.3	-1.7	-0.9
HR	2,976.9	1,485.2	1,494.1	2,743.0	1,358.5	1,384.5	-7.9	-8.5	-7.3
TR	0.0	0.0	0.0	45,134.1	22,508.5	22,625.6	:	:	:
IS <sup>2</sup>	206.6	107.0	99.5	199.2	103.7	95.4	-3.6	-3.1	-4.2
NO	3,089.6	1,569.8	1,519.8	3,103.2	1,573.7	1,529.4	0.4	0.2	0.6
СН	5,109.4	2,562.7	2,546.7	5,109.4	2,562.7	2,546.7	0.0	0.0	0.0

<sup>&</sup>lt;sup>1</sup> Not including the overseas departments of France.

Source: Eurostat website, 24/3/2009

<sup>&</sup>lt;sup>2</sup> The age group 16-64 years for LFS Data.

#### 8.2 Coherence with other employment estimates

Key concepts used in National Accounts, such as domestic employment, have no correspondence in the EU-LFS, which uses instead number of persons employed based on residency within the national border (national employment). There are also differences in coverage, where the EU-LFS covers the age groups 15 and older in private households only, while the national accounts cover all persons regardless of age or residence. In addition, the EU-LFS doesn't consider conscripts and unpaid trainees as employed whereas these are explicitly or implicitly accounted for in the National Accounts. The reference period for the measurement could also contribute to some differences. The LFS represent one average week in the year with all the weeks of the year measured. When data are derived from administrative sources or establishment surveys the reference period is usually different, the month, the whole year or a single day within the year or month.

As expected, the employment estimates based on the LFS data usually lie somewhat below the estimates of employment as estimated by National Accounts, as shown by table 8.2. For four countries, however, the opposite is true.

Table 8.2 Employment (national concept) 2007 in two different datasets on the Eurostat website

Country	National accounts <sup>1</sup> (x1000)	Absolute difference LFS-NA (x1000)	Relative difference % of NA	Labour force survey² (x1000)
EU-27 <sup>3</sup>	223,042.0	-3,913.4	-1.8	219,128.6
BE	4,422.0	-41.7	-0.9	4,380.3
BG	3,714.0	-461.4	-12.4	3,252.6
CZ	5,096.0	-174.0	-3.4	4,922.0
DK	2,838.0	-34.2	-1.2	2,803.8
DE	39,694.0	-1,484.5	-3.7	38,209.5
EE	657.0	-1.7	-0.3	655.3
IE	2,115.0	-3.0	-0.1	2,112.0
EL	4,702.0	-192.2	-4.1	4,509.8
ES	20,593.0	-237.0	-1.2	20,356.0
FR³	25,696.0	-54.0	-0.2	25,642.0
IT	24,979.0	-1,757.2	-7.0	23,221.8
CY	385.0	-7.1	-1.8	377.9
LV	1,119.0	-1.0	-0.1	1,118.0
LT	1,539.0	-4.8	-0.3	1,534.2
LU	208.0	-5.1	-2.5	202.9
HU	3,899.0	27.2	0.7	3,926.2
MT	159.0	-2.7	-1.7	156.3
NL	8,596.0	-132.5	-1.5	8,463.5
AT	<u>:</u>	:	:	4,027.8
PL	15,241.0	-0.5	0.0	15,240.5
PT	5178.0 (e)	-8.3	-0.2	5,169.7
RO	:	:	:	9,353.3
SI	963.0	22.2	2.3	985.2
SK	2,357.0	0.7	0.0	2,357.7
FI	2,495.0	-3.4	-0.1	2,491.6
SE	4,518.0	22.7	0.5	4,540.7
UK	29,233.0	-115.2	-0.4	29,117.8
HR	1,618.0	-3.6	-0.2	1,614.4

Table 8.2 Employment (national concept) 2007 in two different datasets on the Eurostat website

Country	National accounts¹ (x1000)	Absolute difference LFS-NA (x1000)	Relative difference % of NA	Labour force survey² (x1000)
TR	:	:	:	21,207.1
IS	177.0	-1.5	-0.8	175.5
NO	2,538.0	-103.8	-4.1	2,434.2
CH	4,122.0	0.0	0.0	4,122.0

Source: Eurostat Website, 24 March 2009

Notes: The LFS estimates are the average of the quarterly totals.

Employment - LFS adjusted series/Employment (main characteristics and rates) - Annual averages

It should, however, be recognised that the coverage, measurement and conceptual differences mentioned above only account for a relatively small part of the difference between the two estimates. As a rule of thumb, relative differences of more than 1.5% need to be explained by other reasons. This would concern 11 participating countries shown in table 8.2. Germany and Italy are responsible for the bulk of the absolute difference between the National Accounts estimates and the LFS, with Bulgaria showing the highest relative discrepancies. Two countries have discrepancies of more than 5%.

When comparing LFS data and National Account statistics, users are also interested in whether or not the two approaches show the same trend, i.e. change from one period to another.

Table 8.3 compares the data on employment growth until 2007. The data sources are the EU-LFS and national accounts (ESA95) data. The data are analysed in terms of the importance of the LFS in the production of the National accounts data on employment growth.

The results show that both sources are broadly comparable with relation to the direction of the employment growth for the EU-27 and that the differences are mostly marked in the levels of the growth figures.

The reasons for the disparities, either in levels or in the direction of the employment growth are not fully known. In general, the actual sources of incoherence are quite diverse across countries. The issue of incoherence between the LFS and national accounts employment estimates has recently been addressed by a Eurostat-coordinated Task Force on the Quality of the Labour Force Survey. By the use of reconciliation tables, a range of potential sources of incoherence on the LFS side was identified, either related to a biased measurement of specific areas of employment, such as marginal employment, employment in black labour market activities, employment in private households, illegal immigrants, or emerging from data collection, as in the case of non-response and proxy interviews. In addition, it can be pointed out that LFS estimates are subject to sampling error, both with regard to levels and changes between periods (cf. tables 4.1 and 4.2). Thus, when there are relatively small changes between periods, these could easily be shown numerically differently in the different estimates, just because the changes are within the margin of error. As regards national accounts, some indicative reasons for incoherence can be mentioned: national accounts may use sources different than LFS (or LFS combined with other sources) to estimate employment; national accounts may introduce adjustments to reach consistency between the employment reported by its sources and other related variables, like salaries or production; national accounts approach, by comparing and combining different sources, is also more prone than LFS to identify underreporting or systematic biases.

<sup>&</sup>lt;sup>1</sup> Economy and finance/National accounts (including GDP)/Annual national accounts/Auxiliary indicators (Population, employment and conversion rates)/Auxiliary indicators (Population and employment)

<sup>&</sup>lt;sup>2</sup> Population and social conditions/Labour market/Employment and unemployment (LFS)/LFS main indicators/

<sup>&</sup>lt;sup>3</sup> The National Accounts estimates include the overseas departments, whereas the LFS only covers the mainland territory of France

Table 8.3: Employment growth in LFS and National Accounts data (national concept) by method used - 2005 to 2007 annual averages

		LFS (%)	NA (%)	LFS-NA (p.p.)	LFS (%)	NA (%)	LFS-NA (p.p.)	LFS (%)	NA (%)	LFS-NA (p.p.)
			2005			2006			2007	
1		using LFS as t to ESA95	s their only s	source for em	ployment in	national ac	counts. LFS	is only adju	sted for con	ceptual
	UK	1.4	1.0	0.4	0.9	0.9	0.0	0.6	0.7	-0.1
	LT	2.6	2.6	0.0	1.7	1.7	0.0	2.3	2.3	0.0
	HU	0.2	0.0	0.2	0.7	0.7	0.0	-0.1	-0.1	0.0
	ΙE	6.3	4.7	1.6	4.4	4.3	0.1	3.6	3.6	0.0
	EE	2.0	1.9	0.1	6.4	6.2	0.2	1.4	1.4	0.0
	CY	3.4	3.6	-0.2	2.7	1.8	0.9	5.8	3.2	2.6
2	Countries	s using mainly	/ LFS, but re	placing it in a	a few industr	ies (or labo	ur status), on	a case-by-c	ase basis	
	LV	1.2	1.7	-0.5	5.2	4.9	0.3	2.8	2.8	0.0
	GR	0.9	1.0	-0.1	1.9	2.1	-0.2	1.3	1.3	0.0
	BG	0.4	2.7	-2.3	4.3	3.3	1.0	4.6	2.8	1.8
	RO	-1.8	-0.3	-1.5	1.9	1.4	0.5	0.7		-
3		s combining s neous and ca				l, LFS being	one source a	among othe	rs. This grou	up is rather
	3a	Countries	giving prece	edence to labo	our supply s	ources (i.e.	LFS)			
	NO	0.4	1.2	-0.8	3.1	3.6	-0.5	3.5	4.1	-0.6
	IT	0.6	0.3	0.3	1.9	1.6	0.3	1.0	1.2	-0.2
	FI	0.7	1.3	-0.6	1.8	1.8	0.0	2.0	2.1	-0.1
	PT	0.0	-0.2	0.2	0.7	0.7	0.0	0.2	0.2	0.0
	SK	3.1	2.1	1.0	3.9	3.8	0.1	2.4	2.4	0.0
	ES	6.2	4.1	2.1	4.1	3.9	0.2	3.1	3.0	0.1
	SE	0.8	0.3	0.5	1.9	1.7	0.2	2.5	2.2	0.3
	3b	Countries	not giving p	recedence to	any labour s	side				
	DE	3.4	-0.1	3.5	2.0	0.7	1.3	2.2	1.7	0.5
	AT	2.1		-	2.7		-	2.5		-
	3c	Countries surveys)	giving prece	edence to labo	our demand	sources (i.e	. employmen	t registers a	nd/or enterp	orise
	DK	0.4	0.6	-0.2	1.9	1.2	0.7	-0.1	2.0	-2.1
	MT	1.7	1.3	0.4	2.2	1.3	0.9	3.0	3.1	-0.1
	NL	0.1	0.5	-0.4	1.8	1.7	0.1	2.5	2.6	-0.1
4	Countries	s not using LF	S, or makin	g minimal use	e of it					
	SI	0.4	-0.1	0.5	1.3	1.5	-0.2	2.5	3.0	-0.5
	CZ	1.7	2.2	-0.5	1.3	2.6	-1.3	1.9	2.3	-0.4
	PL	3.2	2.3	0.9	3.4	3.4	0.0	4.4	4.4	0.0
	FR	1.6	0.6	1.0	0.6	1.0	-0.4	1.9	1.4	0.5
	BE	2.2	1.3	0.9	0.7	1.4	-0.7	2.7	1.8	0.9
	LU	2.8	1.2	1.6	0.9	1.9	-1.0	3.9	2.3	1.6

Countries within the groups are sorted by 2007 ascending difference between LFS and NA employment growth.

#### 9 Regional unemployment

#### 9.1 Introduction

The quality report for the EU-LFS has been combined with the regional labour market statistics into a joint standard quality report as a combined effort of the Eurostat units F2-Labour market statistics and E4 - Regional statistics and geographical information.

The EU-LFS is only designed to give accurate annual information on NUTS 2 level. For the purposes of regional statistics, as well as monitoring for the Structural Funds, unit E4 needs not only NUTS 2 data but may also require NUTS 3 data.

Depending on the available information in the participating countries, the NUTS 3 unemployment compilations methods differ for the different countries. Some countries use the annual average of the LFS-data, three countries use a 3-year average from the LFS-data and some countries use combined information of the LFS and registered unemployment. The base benchmark for NUTS 3 labour market figures is the EU-LFS NUTS 2 results. The EU-LFS NUTS 2 data (economically active population and unemployed persons) are distributed to NUTS 3 either according to the distribution of LFS NUTS 3 figures or to the distribution of register data. Because of the non-sampling errors and because of the (combined) use of registered unemployment, it is nearly impossible to assess the accuracy for NUTS 3 level according to scientific standards. Because of that, some countries were not able to provide coefficients of variation (CV) at NUTS 3 level.

The first eight sections have been devoted to the national part of the quality assessment of LFS. This ninth and last section is devoted to the regional labour market statistics.

#### 9.2 Sources for NUTS 3 compilation of unemployment

For a limited number of countries the NUTS 3 compilation of unemployment is based on registers, or a combination of registers and LFS. These are Belgium, Bulgaria, Denmark, France, Germany, Austria, Portugal, Slovenia and Sweden. For all other participating countries the NUTS 3 data are derived from the national LFS.

Estonia, Cyprus, Luxembourg, Malta, Latvia, Lithuania, Slovenia and Iceland comprise a single NUTS 2 region, i.e. national data represent NUTS 2 results (as well as NUTS 1 results).

Luxembourg and Cyprus comprise a single NUTS 3 region, i.e. national data represent NUTS 3 results (as well as NUTS 1 and NUTS 2 results).

Norway provides Eurostat with labour force data on NUTS 3 level but no other EFTA country does.

There are no unemployment and economically active population data divided by sex and age (15-24, 25 and over) available at NUTS 3 level for France (only the totals for unemployment and economically population by age are available).

Unemployment data (absolute levels) for Portugal at NUTS 3 were for the first time published by Eurostat in 2004. Data on the economically active population and unemployment rates at NUTS 3 level are available since September 2006.

The annual average of unemployment by NUTS 3 regions from the national LFS is compiled by the Czech Republic, Greece, Spain, Ireland, Italy, Hungary, Malta, Latvia, Lithuania, the Netherlands,

Slovakia, Finland, UK and Bulgaria. Poland and Romania provide a three year average that is based on the LFS. Estonia provides annual average labour force data and 3-year average unemployment data.

### 9.3 Coefficient of variation at NUTS 2 and NUTS 3 for the rate of unemployment

Table 9.1 gives a summary of the coefficients of variation for the rate of unemployment. Only the lowest and the highest coefficients are shown.

Table 9.1 Coefficient of variation (CV) for the rate of unemployment, 2007

Countries	CV of regional (NUTS in perc	2) annual aggregates entage		3) annual aggregates centage
	Lowest	Highest	Lowest	Highest
BE	3.8	9.9	N.A.	N.A.
BG	5.9	10.3	7.5	38.4
CZ	5.2	11.2	5.2	11.7
DK	-	-	N.A.	N.A.
DE	2.4	10.2	N.A.	N.A.
EE	N.A.	N.A.	11.3	17.4
IE	3.4	6.5	6.7	11.2
EL	3.9	14.5	3.9	68.1
ES	2.0	14.5	3.6	17.1
FR	4.1	13.7	N.A.	N.A.
IT	2.7	10.6	3.4	16.7
CY	N.A.	N.A.	N.A.	N.A.
LV	N.A.	N.A.	6.9	11.0
LT	N.A.	N.A.	12.1	32.3
LU	N.A.	N.A.	N.A.	N.A.
HU	5.0	6.6	7.0	15.1
MT	N.A.	N.A.	3.7	11.6
NL	4.1	15.7	6.2	31.2
AT	4.8	8.8	N.A.	N.A.
PL	5.4	8.3	6.2	31.6
PT	3.7	12.2	N.A.	N.A.
RO	6.0	10.9	-	-
SI	N.A.	N.A.	N.A.	N.A.
SK	2.4	7.5	2.6	7.4
FI	2.7	22.4	3.8	22.4
SE	2.9	6.3	3.2	15.0
UK	4.7	17.3	-	-
HR	4.9	6.7	-	-
TR	-	-	-	-
IS	N.A.	N.A.	-	-
NO	-	-	-	-
CH	6.3	11.6	-	-

Note: N.A. indicates that CV at the regional level is not applicable, either because the regional level does not differ from the higher NUTS level, the country is not required to deliver NUTS 3 employment and unemployment data, or the source is not the LFS. Hyphen "-" indicates that no information on the regional CV is supplied.

The EU-LFS is designed to give reliable estimates on the NUTS 2 level of aggregation, provide the population of the region in question exceeds 300,000 inhabitants. The coefficients of variations given in table 9.1 are nevertheless provided for regions which have small populations and hence small sample sizes. In the EU-27, 13 out of 252 NUTS 2 regions have a population less than 300,000. This will tend to inflate the CVs and the range of CVs.

As expected, the CVs for the NUTS 3 regions are bigger and have higher range than for the NUTS 2 regions. Of the fifteen countries providing data and CVs on NUTS 3 level, six have CVs up to 15% and further three countries with all the regional CVs up to 20%. When counting the regions, 67.9% of the 330 NUTS 3 regions for which data are available, have CV less than 15% and 82.7% less than 20%.

Annex: Item non-response compared to the variables defined by the Commission Regulation (EC) No 430/2005 and clarifications provided by Member States

(Source: Joint Standard Quality Report for Labour Force Survey and Regional Labour Market Statistics – Annual quality reports 2007)

## Quarterly data

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non- available statistics and prospects for future solutions
BE	compulsory	Col_073/74	HWWISH	90.9	91.6	92.2	91.2	HWWISH is only asked to persons who declared to wish to work more.
		Col_116	WANTWORK	42.1	41.0	43.2		We don't ask 'wantwork' to all persons with seekwork =3. We have no info about 'wantwork' for persons with statbit=2 & seekwork=3 neither for persons with seekwork = 3 but who are (early) retired. 99% or more of the item non-response concerns (early) retired persons. We can consider them as not willing to work anymore since they don't seek work.
		Col_124	EDUCLEVL					There was a problem with the format of some codes for educlevl and as a consequence there were too many missings for this variable. The 7the of May, we've sent a new file for Q4 2007 so the problem was solved.
		Col_201		С	С		С	only one wave in 2007
BG	compulsory	Col_082/83	HWACTUA2	18.4	22.5	17.8		Respondents meet difficulties to answer on the corresponding question.
		Col_110 - Employed	METHODH				С	
		Col_111 - Employed	METHODI			С		Generally the number of person looking for job as self employed is very low.
		Col_114 - Employed	METHODL			С		Generally the number of person looking for job as self employed is very low.
ı.		Col_115 - Employed		С	С		С	Only methods A to I are considered as active methods
		Col_115 - Not employed		С			С	Only methods A to I are considered as active methods
CZ	compulsory	Col_071	WISHMORE	80.9		81.3		We ask only persons who usually work in the main job less than 40 hours or persons who work in the main job part-time
		Col_123	EDUCSTAT	14.0				only persons aged 15-69
DK	compulsory	Col_001/2	HHSEQNUM	100.0				The household variables are not available on the standard quarterly LFS-files as the Danish LFS is a sample of individuals not households. However from 1st quarter 2002 and onwards some selected proxy questions to the current respondents about the other household members were implemented in the Danish LFS third (last) wave to derive information on household composition for estimates of annual averages, and special annual files from 2002 an onwards have been transmitted to Eurostat
		Col_023	PROXY	11.3	10.3	10.3	11.3	In the Danish LFS the variable covers only population 15-74. Non-response rate for this age group is 0 for all quarters.
		Col_047/48	MSTARTWK			13.0	18.5	
		Col_054	TEMPDUR	12.0				
		Col_084	EXISTPR	30.3	29.1	28.8		In the Danish LFS the variable covers only population 15-74. Non-response rate for this age group is 0 for all quarters.

	Variable status	Column	Identifier	Q1	Q2	Q3	Q <i>4</i>	Short comments on reasons for non- available statistics and prospects for future solutions
		Col_101 - Employed	SEEKTYPE	41.5				Solutions
		Col_114 - Not employed	METHODL				С	
		Col_123	EDUCSTAT	11.3	10.3	10.3		In the Danish LFS the variable covers only population 15-74. Non-response rate for this age group is 0 for all quarters.
		Col_137/138	HATLEVEL	12.8				In the Danish LFS the variable covers only population 15-74. Non-response rate for this age group is 1.7 (q1 and q2); 2.3 (q3).
		Col_168/169	INTWEEK	31.0	28.9	28.8		In the Danish LFS the variable covers only population 15-74. Non-response rate for this age group is 0.1 (q1); 0 (q2, q3 and q4).
DE	compulsory	Col_073/74	HWWISH	91.5	91.6			HWWISH was only answered by persons who would like to work more hours. Persons who do not want to work more hours are coded blank. In 2008 HWWISH will also be answered by these persons.
		Col_114 - Employed	METHODL	-	С	С		No error; values are correct.
		Col_114 - Not employed		С	С	С		No error; values are correct.
		Col_201	INTWAVE	100.0	100.0	100.0	100.0	Rotation system does not work with waves within a year.
	optional	Col_021/22_	COUNTRYB	100.0	100.0			Not allowed to survey this variable in Germany
EE	compulsory	Col_028	SIGNISAL		•	С		In 2007, no respondents of corresponding category (employees who where absent from employment in the reference week for other reasons than own illness or maternity leave, or persons who were not employed but on lay-off) was absent for longer than three months. In case other possible situations appear (due to small absolute numbers very few cases are expected, if any) they are properly coded.
		Col_103 - Employed	METHODA				С	Due to small absolute numbers very few
		Col_110 - Employed	METHODH			С	С	cases, if any
		Col_110 - Not employed	METHODH	С	С	С	С	
		Col_111 - Employed	METHODI		С	С	С	
		Col_111 - Not employed	METHODI		С	С	С	
		Col_112 - Not employed	METHODJ		С		С	
		Col_113 - Employed			С	С	С	
		Col_113 - Not employed		С			С	
		Col_114 - Employed	METHODL			С		
		Col_114 - Not employed	METHODL	С		С	С	
		Col_115 - Employed				С	С	
		Col_115 - Not employed	METHODM	С	С	С	С	
EL	compulsory	Col_039/40	COUNTRYW	С	С	С	С	Probably it is quite rare the incidence of persons residing in Greece and working abroad. Usually there is a labour force "input" from bordering countries.
ES	compulsory	Col_054	TEMPDUR	15.4	16.6	14.3	14.3	It's 'doesn't know' category
	, ,	 Col_073/74	HWWISH	83.9				We put 'blank' when the person doesn't wish to work more hours. It is intended to code the usual hours, for example, in these cases?. Last year we proposed to change the filter because we think it could be a good solution
		Col_115 - Employed	METHODM	С	С		С	There are no active 'other method'
		Col_115 - Not employed	METHODM			С	С	There are no active 'other method'
		Col_124	EDUCLEVL	13.4	13.5	15.1		The information about this variable is only available for people aged 16 and more
		Col_129/131	COURLEN	29.6	30.8	43.3		The information about this variable is only available for people aged 16 and more. Apart from this, there is a high level of 'doesn't know' in this variable

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non- available statistics and prospects for future solutions
FR	compulsory	Col_028	SIGNISAL	С	С	С	С	see note 2084/F230, September 11 2007
		Col_073/74	HWWISH	79.7				The question on the number of hours wished is only asked to persons who wish to work more or less than they actually do. We plan to change the way this variable is computed: we will impute usual hours worked for persons who do not declare that they wish to work more or less.
		Col_080/81	NA112J2D	•	10.0			
		Col_082/83	HWACTUA2		27.6	30.5	26.7	
		Col_112 - Employed		С	С	С	С	
		Col_112 - Not employed	METHODJ	С	С	С	С	
		Col_113 - Employed	METHODK	С	С	С	С	
		Col_113 - Not employed	METHODK	С	С	С	С	
		Col_114 - Employed	METHODL	С	С	С	С	
		Col_114 - Not employed	_	С	С	С	С	
		Col_116	WANTWORK	31.4	30.7	31.2	29.6	
IT	compulsory	Col_073/74	HWWISH	•		18.7		Please note that our questions on WISHMORE-HWWISH are referred to the wish of working more than the actual number of hours. Most of the item non-responses are due to persons that did not want to work at all in the reference week (code "0" is not available); they are mainly concentrated in the 3rd quarter in which there are summer holidays. A little percentage of item non-responses is due to "don't know" answers. Finally, a very little percentage of item non-responses is due to a transcoding problem: persons that did not work in the reference week and that would have worked are coded as blank. For the future these last cases could be coded according the hours that they would have worked.
		Col_101 - Employed	SEEKTYPE	22.3				Item non-responses are due to persons that do not have preferences about an employment as self-employed or employee
0) (		Col_101 - Not employed	SEEKTYPE	23.0				See above
CY	compulsory	Col_039/40	COUNTRYW		С	С	С	Country is always CY
		Col_041/42		С	С	С	С	NUTS 2 is the whole of CY
		Col_104 - Employed		С	-	•		•
		Col_110 - Employed		С	-		С	?
		Col_111 - Employed		С		С	С	?
LV	compulsory	Col_111 - Not employed Col_041/42	METHODI REGIONW	C	C C	C C		therefore there is used code 00 for whole country.
		Col_065/66	HWOVERP	97.7	98.3	98.8		Mistake in coding. Coding will be improved.
		Col_067/68	HWOVERPU	99.6	99.8	99.9		Mistake in coding. Coding will be improved.
		Col_080/81	NA112J2D		<u>.                                    </u>			Mistake on transmission.
		Col_084 Col_110 - Not employed	EXISTPR METHODH	13.3 C		16.2	16.6 C	found.
		Col_111 - Not employed	METHODH		-			Numbers are constant due to concurrence.
		Col_201	INTWAVE		100.0			Mistake on transmission.
LT	compulsory	Col_041/42	REGIONW	C	С	С	C	All records have two values:00 or 99 because NUTS2 level is all country. We have statistics on NUTS 3 level for this variable
		Col_047/48	MSTARTWK	35.5				Statistics is available, everything is included into questionnaire. Sample size is increased from 2007.
		Col_089/90	MONTHPR	28.0	30.0	24.9	22.9	Statistics is available, everything is included into questionnaire. Sample size is increased from 2007.

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non- available statistics and prospects for future solutions
		Col_101 - Employed	SEEKTYPE		10.1		21.5	Statistics is available, everything is included into questionnaire. Sample size is increased from 2007.
		Col_110 - Employed	METHODH	С	С	С		Statistics is available, everything is included into questionnaire; This is not popular answer and small sample for employed looking for another job.
		Col_110 - Not employed	METHODH		С	С		Statistics is available, everything is included into questionnaire; This is not popular answer, responders say 'No' here.
		Col_111 - Employed	METHODI	С	-			Statistics is available, everything is included into questionnaire; This is not popular answer and small sample for employed looking for another job.
		Col_113 - Employed	METHODK		С	С		Statistics is available, everything is included into questionnaire; This is not popular answer and small sample for employed looking for another job.
		Col_114 - Employed	METHODL		•	С		Statistics is available, everything is included into questionnaire; This is not popular answer and small sample for employed looking for another job.
		Col_114 - Not employed	METHODL	С	С			Statistics is available, everything is included into questionnaire; This is not popular answer.
LU	compulsory	Col_104 - Not employed	METHODB			С		due to the small size of sample
		Col_107 - Employed	METHODE		С		С	and because these methods
		Col_107 - Not employed	METHODE					are not so typical (often used)
		Col_109 - Employed	METHODG		-	С	С	in Luxembourg
		Col_110 - Employed	METHODH		С	С	С	
		Col_110 - Not employed	METHODH			С		
		Col_111 - Employed	METHODI	С				
		Col_111 - Not employed	METHODI			С		
		Col_201	INTWAVE	100.0	100.0	100.0	С	we don't have waves
HU	compulsory	Col_047/48	MSTARTWK		11.1	16.9		EU Filter: REFYEAR – YSTARTWK<=2 <u>HU-</u> <u>Filter:</u> SUM (REFYEAR-YSTARTWK<2) or (SUM(REFYEAR-YSTARTWK=2) and (REFMONTH<=MSTARTWK))
		Col_084	EXISTPR	14.6	14.9	14.9		EU Filter: WSTATOR 3-5 HU Questionnaire: Persons on lay-off are not asked about existence of previous employment experience. Number of persons on lay-off is much lower, then in EU-calculation.
NAT.		Col_089/90	MONTHPR		10.9			EU-Filter: REFYEAR – YEARPR<=2 <u>HU</u> Questionnaire: *
MT	compulsory	Col_028	SIGNISAL	46.5	51.4	50.0		Changed the routing of the questionnaire for 2008 to solve this problem
		Col_039/40	COUNTRYW	С				Mistake in data transmission which is was addressed in the next quarter
		Col_041/42	REGIONW	C		С		All records have the same value by coincidence
		Col_054	TEMPDUR	21.9	21.0	20.0		Item non response
		Col_065/66	HWOVERP		С	-		Mistake in data transmission which is was addressed in the next quarter
		Col_067/68	HWOVERPU		С			Mistake in data transmission which is was addressed in the next quarter
		Col_073/74	HWWISH			89.4		Mistake in data transmission, which is corrected for in 2008
		Col. 101 Not ampleyed	HWACTUA2		C			All records have the same value by coincidence
		Col_101 - Not employed	SEEKTYPE	27.0	22.1	27.0		Changed the routing of the questionnaire for 2008 to solve this problem
		Col_102 - Not employed	SEEKDUR	17.4	18.7	21.0		Changed the routing of the questionnaire for 2008 to solve this problem

								Short comments on reasons for non-
	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	available statistics and prospects for future solutions
		Col_110 - Employed	METHODH	С	-		С	All records have the same value by coincidence
		Col_112 - Employed	METHODJ	С	С		С	This variable is not covered
		Col_112 - Not employed	METHODJ	С	С	С	С	This variable is not covered
		Col_113 - Employed	METHODK	С	С		С	This variable is not covered
		Col_113 - Not employed	METHODK	С	С	С	С	This variable is not covered
		Col_114 - Employed	METHODL	С	С		С	This variable is not covered
	ĺ	Col_114 - Not employed	METHODL	С	С	С	С	This variable is not covered
NL	compulsory	Col_039/40	COUNTRYW	10.5	10.7	10.8	10.9	
		Col_041/42	REGIONW	10.5	10.7	10.8	10.9	
		Col_043/46	YSTARTWK	19.4	19.5	19.3	19.4	
		Col_054	TEMPDUR	71.8	71.6	69.7	73.1	
		Col_080/81	NACE2J2D	12.2	11.6	11.8	12.3	
		Col_102 - Not employed	SEEKDUR			13.4		
		Col_111 - Employed	METHODI				С	
		Col_112 - Employed	METHODJ	С		С	С	
		Col_112 - Not employed	METHODJ	C	С	С	C	
		Col_114 - Employed	METHODL	C	,	C	C	
		Col_114 - Not employed	METHODL	С	С	С	С	
		Col_124	EDUCLEVL	_	_	11.3		
	optional	Col_021/22_	COUNTRYB	16.2	14.9	15.2	15.9	
AT	optional	001_02 1/22_	COCITITIE	10.2	1 1.0	10.2	10.0	
PL	compulsory	Col_123	EDUCSTAT	17.7	17.9	18.3	18.3	We don`t ask persons aged 65 years and more
		Col_128	COURATT	17.7	17.9	18.3	18.3	We don't ask persons aged 65 years and more
PT	compulsory	Col_054	TEMPDUR	43.5	43.9	42.7	42.8	NC
		Col_101 - Employed	SEEKTYPE	33.7	28.0	30.4	32.7	The Portuguese questionnaire does not
		Col_102 - Employed	SEEKDUR	35.9	30.8	33.8	35.5	collect this information for the individuals who
		Col_110 - Employed	METHODH		С	С	С	were not seeking but wanted a job.
		Col_111 - Employed	METHODI			С	С	
		Col_112 - Not employed	METHODJ	С	С	С		The Portuguese questionnaire does not
		Col_113 - Not employed	METHODK	С	С	С	С	collect this information for the individuals who were seeking a job.
		Col_114 - Not employed	METHODL	С	С	С	С	were seeking a job.
		Col_115 - Not employed	METHODM	С	С	С		
		Col_168/169	INTWEEK				15.6	The weeks that passed the reference weeks of 2007 were not codified.
RO	compulsory	Col_054	TEMPDUR	19.1	15.4			For variable TEMPDUR, in Romanian questionnaire, respondents were allowed to answer "Not able to specify". Since there is no code for a situation like this according to CR 430/2006, TEMPDUR for persons who provided such an answer was left blank.
		Col_069/70	HOURREAS	15.6	15.6		16.3	
		Col_101 - Employed	SEEKTYPE	43.0	41.7	34.3	41.4	For variable SEEKTYPE, in Romanian questionnaire, respondents were allowed to answer "Any type of employment". Since there is no code for a situation like this according to CR 430/2006, SEEKTYPE for persons who provided such an answer was left blank.
		Col_101 - Not employed	SEEKTYPE	55.2	56.3	58.3	57.3	For variable SEEKTYPE, in Romanian questionnaire, respondents were allowed to answer "Any type of employment". Since there is no copy of a situation like this
								according to CR 430/2006 , SEEKTYPE for persons who provided such an answer was left blank.
		Col_111 - Employed	METHODI	С				persons who provided such an answer was left blank.
		Col_111 - Employed	METHODI WANTWORK DEGURBA	C		17.0 C	17.3 C	persons who provided such an answer was left blank.

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non- available statistics and prospects for future solutions
SI	compulsory	Col_041/42	REGIONW	С	С	С		available 2008 onwards
		Col_047/48	MSTARTWK	10.8	10.8			the filters will be checked
		 Col_065/66	HWOVERP	87.6	89.3	90.0	86.6	the filters will be checked
		Col_067/68	HWOVERPU	87.6	89.3	90.0		the filters will be checked
		Col_073/74	HWWISH	95.7	96.9	96.3		the filters will be checked
		Col_114 - Employed	METHODL	C	00.0	C		not applicable in Slovenia
		Col_114 - Not employed	METHODL	C	C	C		not applicable in Slovenia
		Col_124	EDUCLEVL			28.6		the filters will be checked
SK	compulsory	Col_124 Col_101 - Not employed	SEEKTYPE	11.4		20.0		Missing of appropriate code for those who
SK	Compusory			11.4				are looking for any job causes higher value of the non-response rate in the 1st quarter. In dataset sent to Eurostat there is the very similar non-response rate for rest of the quarters 2007, so we do not understand why there are missing values in quality report.
		Col_110 - Employed	METHODH			С	_	M?
		Col_111 - Employed	METHODI			C		M?
		Col_116	WANTWORK	18.8	18.7	15.1	16.9	
FI	compulsory	Col_028	SIGNISAL	С	С	С	С	to be implemented in 2008
		Col_054	TEMPDUR	10.0				
		Col_067/68	HWOVERPU	100.0	100.0	100.0		Variable collected but problems in data transmission. Data will be sent again
		Col_102 - Employed	SEEKDUR			10.8	10.2	
		Col_112 - Employed	METHODJ	С		С	С	Only asked if there is no "yes" answer to
		Col_113 - Employed	METHODK			С	)	methods A to H
		Col_114 - Employed	METHODL	С	С	С		Not applicable in Finland
		Col_114 - Not employed	METHODL	С	C	С		Not applicable in Finland
SE	compulsory	Col_001/2 Col_054	HHSEQNUM	12.2	10.8	10.3		No household data has been send for Sweden. Sampling unit is individuals, therefore normally only 1 person/household in the data.  Respondents do not always remember start and end of work
		Col_102 - Not employed	SEEKDUR	23.1	38.5	14.5	15.9	High item non response. People tend to forget how long they have been looking for work.
		Col_114 - Employed	METHODL		С	С	•	Not a relevant variable in Sweden
		Col_114 - Not employed	METHODL			С		Not a relevant variable in Sweden
UK	compulsory	Col_054	TEMPDUR	100.0	49.0	100.0	100.0	Col_54 is currently only produced in AJ. It will be produced quarterly from 2008 onwards.
		Col_065/66	HWOVERP	89.3	88.4	88.4		There is a high level of non-response due to a relatively small proportion of the employed sample working overtime in the reference week
		Col_067/68	HWOVERPU	85.2	84.5	85.7		There is a high level of non-response due to a relatively small proportion of the employed sample working overtime in the reference week
		Col_073/74	HWWISH	92.0	92.4	91.8	92.0	This variable is only computed for those who wish to work more hours. The high level of non-response is due to only 4% of the sample wishing to work more hours
		Col_101 - Employed	SEEKTYPE	100.0	13.1	100.0		This variable is currently only produced in AJ. It will be produced for all quarters from 2008 onwards
		Col_101 - Not employed	SEEKTYPE	100.0	14.1	100.0		This variable is currently only produced in AJ. It will be produced for all quarters from 2008 onwards
		Col_109 - Employed	METHODG	С	С			The UK-LFS does not collect information on whether respondents took a test, interview or examination. Only "no" responses can be computed.

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non- available statistics and prospects for future solutions
		Col_109 - Not employed	METHODG	С	С	С	С	The UK-LFS does not collect information on whether respondents took a test, interview or examination. Only "no" responses can be computed.
		Col_113 - Employed	METHODK	С	C			The UK-LFS does not collect information on whether respondents are waiting for a call from a public employment office
		Col_113 - Not employed	METHODK	С	С	С	С	The UK-LFS does not collect information on whether respondents are waiting for a call from a public employment office
		Col_114 - Employed	METHODL	С	С			The UK-LFS does not collect information on whether respondents are awaiting results of a competition for recruitment to the public sector
		Col_114 - Not employed	METHODL	С	С	С	С	The UK-LFS does not collect information on whether respondents are awaiting results of a competition for recruitment to the public sector
		Col_124	EDUCLEVL			13.6		According to our datasets, the level of non- response was not significantly higher in JS07 than in other quarters
		Col_129/131	COURLEN	77.7	77.8	77.9	75.8	The high level of non-response is due to the fact that not all people who have completed a course in the last 4 weeks are asked how many hours of instruction that have attended in total
		Col_137/138	HATLEVEL	24.3	24.5	24.6		The highest level of qualification is not asked of women aged 60-99 who are not working. Men aged 65-99 who are not working are also not asked to give their highest level of qualification. These cases appear as blanks rather than non-applicables
HR	compulsory	Col_065/66	HWOVERP	94.7	95.0	95.1		ташет шан пон-аррисамез
	, ,	Col_101 - Employed	SEEKTYPE	100.0	100.0	100.0		
		Col_101 - Not employed	SEEKTYPE	100.0	100.0	100.0		
		Col_201	INTWAVE	100.0	100.0	100.0		
	optional	Col_073/74	HWWISH	93.1	94.0	93.8		
TR	compulsory	Col_017/18	NATIONAL	100.0	100.0	100.0		According to the 2000 Population Census 99,6 % of population has Turkish Nationality. Thus, this variable does not make much sence and not that easy to cover nonnationals with a sample survey.
		Col_039/40	COUNTRYW	100.0				This variable is not available in the questionnaire since there are very few people who are working abroad and considered as household member because Turkey is a very broad country. This may only occur in border cities, but not common.
		Col_067/68	HWOVERPU	100.0	100.0	100.0		Only total overtime is asked in the questionnaire (paid+unpaid). Since it is not possible to distinguish paid and unpaid overtime, total overtime is given in HWOVERP and this variable is coded as blank.
		Col_104 - Employed	METHODB	С	С	С	С	For employed people we're not asking all the
		Col_108 - Employed	METHODF	С	С	С	С	methods in same detail, we've grouped some of the methods looking at the frequency (for
		Col_111 - Employed	METHODI	С	С	С	С	examle, we combined Public Employment
		Col_113 - Employed	METHODK	С	С	С		Office and Private Employment Offices in
		Col_114 - Employed	METHODL	С	С	С		one code). Thus when constitute the METHOD variables we had some blank codes in some of these that are not available for employed people. Now, we coded as "9" in case the related METHOD are not asked for employed people.
		Col_174	DEGURBA	100.0	100.0	100.0		For the current moment there is not an external source to be used for this variable. Studies are going on.

Compulsory		Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non- available statistics and prospects for future solutions
Col_039/40   COUNTRYW   C		optional	Col_021/22_	COUNTRYB	100.0	100.0	100.0		(although asked) since 98.5 % of total population was born in Turkey. The rest (1,5%) does not make any statistical sense (not reliable) especially when tabulated by other variables considering "the sample size is too small for reliable estimates for figures less than two thousand persons in each cell". (Total number is less than 2000). This variable may be coded in the future using
Col_041/42   REGIONW   C	IS	compulsory	Col_001/2	HHSEQNUM	С				55 5
Col_050			Col_039/40	COUNTRYW	С				
Col_055/66			Col_041/42	REGIONW	С				
Col_065/66			Col_050	FTPT					
Col_067/68			Col_054	TEMPDUR	24.2				
Col_069/70			Col_065/66	HWOVERP	100.0				
Col_073/74									
Col_101 - Not employed   SEEKTYPE   18.8				HOURREAS	20.0				
Col_102 - Not employed						•		•	
Col_109 - Not employed   METHODG   C									
Col_113 - Not employed   METHODK   C									
Col_114 - Not employed			_ , ,						
Col_116									
Col_124			, ,						
Col_174									
NO   Compulsory   Col_039/40   COUNTRYW   C   C   C   C   C   No coding in 2007									
Col_043/46									
Col_047/48   MSTARTWK   24.5   28.2   28.8   31.8   NC	NO	compulsory					C		_
Col_054									
Col_071									
Col_076									
Col_079									
Col_082/83									
Col_114 - Employed   METHODL   C   C   C   NC						33.9		34.3	
Col_114 - Not employed   METHODL   C   C   NC								•	
Col_174					<u> </u>	C	U		
CH compulsory					100.0	100.0	100.0		
Col_065/66         HWOVERP         100.0         . will be available from 2010           Col_067/68         HWOVERPU         100.0         . will be available from 2010           Col_101 - Employed         SEEKTYPE         100.0         .?           Col_101 - Not employed         SEEKTYPE         25.5         .?           Col_102 - Employed         SEEKDUR         100.0         .?           Col_102 - Not employed         SEEKDUR         22.7         .?           Col_113 - Employed         METHODK         C         . not pertinent in Switzerland           Col_114 - Employed         METHODL         C         .?           Col_129/131         COURLEN         100.0         . will be available from 2010	CH	compulsory			100.0		100.0	100.0	2
Col_067/68         HWOVERPU         . 100.0         . will be available from 2010           Col_101 - Employed         SEEKTYPE         . 100.0         . ?           Col_101 - Not employed         SEEKTYPE         . 25.5         . ?           Col_102 - Employed         SEEKDUR         . 100.0         . ?           Col_102 - Not employed         SEEKDUR         . 22.7         . ?           Col_113 - Employed         METHODK         . C         . not pertinent in Switzerland           Col_114 - Employed         METHODL         . C         . ?           Col_129/131         COURLEN         . 100.0         . will be available from 2010	011	compaisory			•				will be available from 2010
Col_101 - Employed         SEEKTYPE         . 100.0         . ?           Col_101 - Not employed         SEEKTYPE         . 25.5         . ?           Col_102 - Employed         SEEKDUR         . 100.0         . ?           Col_102 - Not employed         SEEKDUR         . 22.7         . ?           Col_113 - Employed         METHODK         . C         . not pertinent in Switzerland           Col_114 - Employed         METHODL         . C         . ?           Col_129/131         COURLEN         . 100.0         . will be available from 2010									
Col_101 - Not employed         SEEKTYPE         . 25.5         . ?           Col_102 - Employed         SEEKDUR         . 100.0         . ?           Col_102 - Not employed         SEEKDUR         . 22.7         . ?           Col_113 - Employed         METHODK         . C         . not pertinent in Switzerland           Col_114 - Employed         METHODL         . C         . ?           Col_129/131         COURLEN         . 100.0         . will be available from 2010									?
Col_102 - Employed         SEEKDUR         . 100.0         . ?           Col_102 - Not employed         SEEKDUR         . 22.7         . ?           Col_113 - Employed         METHODK         . C         . not pertinent in Switzerland           Col_114 - Employed         METHODL         . C         . ?           Col_129/131         COURLEN         . 100.0         . will be available from 2010									?
Col_102 - Not employed         SEEKDUR         . 22.7         . ?           Col_113 - Employed         METHODK         . C         . not pertinent in Switzerland           Col_114 - Employed         METHODL         . C         . ?           Col_129/131         COURLEN         . 100.0         . will be available from 2010									
Col_113 - Employed         METHODK         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         . <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>?</td>									?
Col_114 - Employed         METHODL         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         . <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>not pertinent in Switzerland</td>									not pertinent in Switzerland
Col_129/131									?
						100.0			will be available from 2010
			Col_174	DEGURBA		100.0			not yet available, study by experts planed

<sup>(\*)</sup> C: All records have the same value

## **Annual data**

Country	Variable status	Column	Identifier	2007	Short comments on reasons for non-available statistics and prospects for future solutions
BE	compulsory	Col_049	WAYJFOUN	13.5	Because of a adaptation in the program (CAPI: computer assisted version) some persons didn't answer the necessary question while they had to. This was only the case for the persons who had a computer assisted interview.
		Col_053	TEMPREAS		It concerns persons who answered 'other reason', but since Eurostat doesn't allow 'other reason', they were seen as 'blanco'. Maybe we can change the questionnaire in the future but in 2007 and also in 2008 the possibility "other reason" is not removed.
		Col_055	TEMPAGCY	75.5	It concerns persons who answered that they have a permanent job. So all these missings can have code 0. For 2007 there was a problem in the program to give the code 0 in these cases. In 2008 the problem will be solved.
		Col_056	SHIFTWK	16.5	There was a problem in the program for the blanco but it is solved from 3/2007 on. Some persons with STAPRO= 3 had unjust code 9 for shiftwk. They must be coded shiftwk 3.
		Col_118 - Employed	AVAIREAS	94.1	Most of the persons concerned don't pass the question about 'avaireas'. A big part of the persons are (pre)retired so it seems not suitable to ask them why they are not available. We suppose the reasons are other reasons. Also the persons with wishmore=1 but not seeking and wishing another job, we can suppose they are not available because of other reasons.
		Col_139/141	HATFIELD	15.2	No real item non-response. The biggest part of the missings must be coded '000', they have a diploma of general upper secondary. This will be changed for the future.
	optional	Col_125/127	EDUCFILD	16.5	i i
		Col_154/161	INCMON	40.6	In 2006 the non-response is 40.2. In 2008 interviewers received specific instructions on paper to ameliorate the response.
BG	compulsory	Col_037/38	SIZEFIRM	26.8	Respondents meet difficulties to answer on the corresponding question. In 2008 questionnaire the code 'Doesn't know' is removed and this item non-response is expected to decrease
		Col_094/95	NA11PR2D	28.2	An error in the transmitted data for the first quarter of 2007 was occurred. The item non-response is small.
		Col_120	NEEDCARE	17.7	The question is not asked for persons on leave for carrying a child up to 2 years of age. This will be changed for 2008.
		Col_146	WSTAT1Y	100.0	Will be available in 2008
	optional	Col_122	MAINSTAT	100.0	Will be available in 2008
		Col_136	COURWORH	100.0	
		Col_154/161	INCMON	100.0	Wage variable will be included in 2009
CZ	optional	Col_125/127	EDUCFILD	100.0	Czech LFS does not survey this indicator
		Col_132	COURPURP		Czech LFS does not survey this indicator
		Col_133/134	COURFILD		Czech LFS does not survey this indicator
		Col_136	COURWORH		Czech LFS does not survey this indicator
		Col_154/161	INCMON		Czech LFS does not survey this indicator
DK	compulsory	Col_118 - Not employed	AVAIREAS	17.4	
		Col_118 - Employed	AVAIREAS	73.2	
		Col_142/145	HATYEAR	33.6	
		Col_146	WSTAT1Y	12.1	
	optional	Col_154/161	INCMON	100.0	
DE	compulsory	Col_036	SUPVISOR		Provision of information is voluntary. Normal non-response rate
		Col_049 Col_053	WAYJFOUN TEMPREAS		Rate must be about 17%! In this rate respondents are included who answered "other
		O0I_000	I LIVIF NEAS	21.3	reasons". Obviously the reasons stipulated for LFS are not complete. The real non-response-rate is less than 1%.

Country	Variable status	Column	Identifier	2007	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_055	TEMPAGCY	16.2	Provision of information is voluntary. Normal non-response rate
		Col_118 - Employed	AVAIREAS	68.6	Respondents with ABAILBLE=2: Almost no non-response!
		Col_118 - Not employed	AVAIREAS	17	Respondents with ABAILBLE=2: Almost no non-response!
		Col_120	NEEDCARE	74.1	Variable not surveyed for SEEKREAS=3 (but from 2008 onwards).
		Col_142/145	HATYEAR		Code blank also includes persons who do not have a formal education. The filter of this variable should be changed.
	optional	Col_021/22	COUNTRYB	100.0	Not surveyed.
		Col_122	MAINSTAT	100.0	Not surveyed.
		Col_125/127	EDUCFILD	100.0	Not surveyed.
		Col_136	COURWORH	100.0	Not surveyed.
		Col_154/161	INCMON	100.0	Not surveyed.
EE	optional	Col_154/161	INCMON	12.7	It will be improved since 2009. From persons who refuse to say exact sum of income, additional question about income deciles is asked
ΙE	compulsory	Col_003	HHLINK	79.5	
		Col_004/5	HHSPOU	79.5	
		Col_006/7	HHFATH	79.5	
		Col_008/9	HHMOTH	79.5	
		Col_036	SUPVISOR	80.2	
		Col_037/38	SIZEFIRM	81.0	
		Col_049	WAYJFOUN	82.5	
		Col_051	FTPTREAS	79.7	
		Col_053	TEMPREAS	93.1	
		Col_055	TEMPAGCY	100.0	
		Col_056	SHIFTWK	80.0	
		Col_057	EVENWK	79.6	
		Col_058	NIGHTWK	79.6	
		Col_059	SATWK	79.6	
		Col_060	SUNWK	79.6	
		Col_072	WAYMORE	82.1	
		Col_075	HOMEWK	79.6	
		Col_077	LOOKREAS	82.8	
		Col_091/92	LEAVREAS	84.0	
		Col_093	STAPROPR	100.0	
		Col_094/95	NA11PR2D	28.2	
		Col_096/98	ISCOPR3D	27.4	
		Col_100	SEEKREAS	98.5	
		Col_118 - Employed	AVAIREAS	100.0	
		Col_118 - Not employed	AVAIREAS	78.2	
		Col_119	PRESEEK	100.0	
		Col_121	REGISTER	100.0	
		Col_139/141	HATFIELD	100.0	
		Col. 146	HATYEAR	80.0	
		Col. 150/151	WSTAT1Y	100.0	
		Col_150/151	COUNTR1Y	83.1	
	ontional	Col_021/22	REGION1Y	83.1	
	optional	Col_021/22	COUNTRYB	100.0	
		Col_122	MAINSTAT	79.7	

		Col_125/127			prospects for future solutions
		OUI_120/121	EDUCFILD	92.8	
		Col_132	COURPURP	88.5	
		Col_133/134	COURFILD	100.0	
		Col_136	COURWORH	84.3	
		Col_154/161	INCMON	100.0	
EL	compulsory	Col_053	TEMPREAS	12.9	There is indeed high non response. In 2009 we are going to redesign the questionnaire (there going to be 2 separate questions on the subject and not one (as it is now) and we hope that this will have a positive effect.
		Col_118 - Not employed	AVAIREAS	11.1	Non response is less than 10% , for all quarters
	optional	Col_154/161	INCMON		As mentioned in the previous report, is a highly sensitive questions, which always have problems (high non response and quality concerns also!
ES	compulsory	Col_037/38	SIZEFIRM	11.2	'Don't Know' responses
		Col_053	TEMPREAS	19.7	'Don't Know' responses
		Col_118 - Employed	AVAIREAS	11.4	'Don't Know' responses
		Col_118 - Not employed	AVAIREAS	24.3	•
	optional	Col_132	COURPURP		No information for people aged 15
		Col_133/134	COURFILD	13.2	No information for people aged 15
		Col_136	COURWORH	100.0	Not surveyed
		Col_154/161	INCMON		Not surveyed. It is planned to obtain the information from administrative sources, in the future.
FR	compulsory	Col_016	MARSTAT	18.3	We don't have the status for the people under 15 years, we will affect the value '1' to people under 15
		Col_049	WAYJFOUN	98.3	The non-response rate is around 4% for us
		Col_051	FTPTREAS	12.8	The non response rate is around 1% for us
		Col_055	TEMPAGCY	21.1	The non-response rate is 7% for us
		Col_072	WAYMORE	18.3	The non-response rate is around 1%
		Col_096/98	ISCOPR3D	100.0	The activity code of the last occupied job is only in 2 digits, so it's not possible to convert into ISCO 88
		Col_100	SEEKREAS	64.8	The non-response rate is around 22%
		Col_119	PRESEEK	100.0	The question is not asked
		Col_121	REGISTER	10.7	95% of the non respondents are aged between 65 and 74, because the question of the registration at a public employment office is asked only for the people under 65
		Col_150/151	COUNTR1Y	11.7	We have a real problem with this variable which is badly answered (people who lived abroad) We have 53% non-response rate
		Col_152/153	REGION1Y	11.7	Same problem: we have 79% non response rate
ΙΤ	compulsory	Col_150/151	COUNTR1Y	13.1	Item non-response are due to people aged less than 15 years old, for which this information has not been collected
		Col_152/153	REGION1Y	13.1	Item non-response are due to people aged less than 15 years old, for which this information has not been collected
	optional	Col_136	COURWORH	25.6	Item non-response are due to people who were not employed in the 4 weeks period ending with the reference week; for them this information has not been collected. For the future we could evaluate if it is possible to assign them code for this variable.
CY	compulsory	Col_055	TEMPAGCY	С	We have not found any temporary agency in Cyprus
	optional	Col_154/161	INCMON	100.0	We have not started to collect the income variable yet since it is optional
LV	compulsory	Col_121	REGISTER	65.1	
		Col_139/141	HATFIELD	36.5	
	optional	Col_154/161	INCMON	12.7	
LT	compulsory	Col_152/153	REGION1Y	С	NUTS 2 level is all country. Statistics on NUTS 3 is available.

Country	Variable status	Column	Identifier	2007	Short comments on reasons for non-available statistics and prospects for future solutions
	optional	Col_154/161	INCMON		The respondents do no want to unveil their true income. If there is a possibility to hide personal information, the respondents very often choose that way. It is planed to use administrative source
LU	compulsory	Col_094/95	NACEPR2D	100.0	For firms outside the country we do not always have a Nace code if the description is not precise enough or some people refuse to give an answer
		Col_148/149	NACE1Y2D	100.0	For firms outside the country we do not always have a Nace code if the description is not precise enough or some people refuse to give an answer
	optional	Col_154/161	INCMON		Many people refuse to give answer; as from 2009 this variable is compulsory we are conscious that we have to make efforts
HU	compulsory	Col_118 - Employed	AVAIREAS	36.9	They are people, who wish to work more than the current number of hours is, but are not seeking for another job
	optional	Col_154/161	INCMON	33.1	
MT	compulsory	Col_049	WAYJFOUN		Started collecting this variable in 2007. Item non response
		Col_119	PRESEEK	24.8	Changed the routing of the questionnaire for 2008 to solve this problem
		Col_150/151	COUNTR1Y	12.3	Item non response
		Col_152/153	REGION1Y	12.3	Item non response
	optional	Col_125/127	EDUCFILD	100.0	Optional variable – Not addressed in LFS
		Col_132	COURPURP	100.0	Optional variable – Not addressed in LFS
		Col_133/134	COURFILD	100.0	Optional variable – Not addressed in LFS
		Col_136	COURWORH	100.0	Optional variable – Not addressed in LFS
NL	compulsory	Col_051	FTPTREAS	10.7	
		Col_053	TEMPREAS	27.9	
		Col_091/92	LEAVREAS	10.2	
		Col_093	STAPROPR	81.7	
		Col_094/95	NA11PR2D	82.3	
		Col_096/98	ISCOPR3D	100	
		Col_118 - Not employed	AVAIREAS	26.3	
		Col_119	PRESEEK	64.9	
		Col_146	WSTAT1Y	18.6	
	optional	Col_154/161	INCMON	100.0	
AT	compulsory	Col_053	TEMPREAS	18,5	In our national questionnaire we have also a code 5 "Other reasons", in tempreas these cases coded sysmis. In 2008 we changed this question and we will be able to send complete variables to Eurostat.
	optional	Col_154/161	INCMON	100.0	we will provide this information as soon as it is compulsory
PL	compulsory	Col_139/141	HATFIELD	10.4	We do not ask persons over 65 years old
		Col_142/145	HATYEAR	17.1	We do not ask persons over 65 years old
	optional	Col_154/161	INCMON	30.4	The question is rather sensitive, therefore since the first quarter of 2008 we have introduced an additional question with earnings intervals (bands) in order to improve response rate.
PT	compulsory	Col_055	TEMPAGCY		Due to a mistake in the conversion conditions. This situation was corrected in databases for Q1, Q2, Q3 and Q4 of 2007.
		Col_057	EVENWK		This variable does not exist in Portuguese questionnaire.
		Col_118 - Employed	AVAIREAS		Due to a mistake in the conversion conditions. This situation was corrected databases of 2006 and 1Q2007.
		Col_118 - Not employed	AVAIREAS	11.2	
	optional	Col_125/127	EDUCFILD	100.0	This variable does not exist in Portuguese questionnaire.
		Col_133/134	COURFILD	100.0	This variable does not exist in Portuguese questionnaire.
		Col_136	COURWORH	100.0	This variable does not exist in Portuguese questionnaire.
		Col_154/161	INCMON	26.9	This variable does not exist in Portuguese questionnaire.

Country	Variable status	Column	Identifier	2007	Short comments on reasons for non-available statistics and prospects for future solutions
RO					
SI	compulsory	Col_016	MARSTAT	12.0	Children under 15 have no answer
		Col_049	WAYJFOUN		filter has to be checked
		Col_150/151	COUNTRY1Y	100.0	data will be available 2008 onwards
		Col_152/153	REGION1Y	100.0	data will be available 2008 onwards
	optional	Col_125/127	EDUCFILD		it is optional
		Col_133/134	COURFILD	100.0	it is optional
		Col_154/161	INCMON	100.0	data will be available 2009 onwards
SK	compulsory	Col_091/92	LEAVREAS		given value do not correspond to our data that were delivered to Eurostat quarterly.
	optional	Col_154/161	INCMON	100.0	Data on income are optional and they are not surveyed
FI	compulsory	Col_036	SUPVISOR	100.0	
		Col_049	WAYJFOUN	100.0	
		Col_055	TEMPAGCY	100.0	
		Col_120	NEEDCARE	100.0	
		Col_142/145	HATYEAR	11.6	
		Col_146	WSTAT1Y	13.4	
		Col_150/151	COUNTR1Y	38.3	
		Col_152/153	REGION1Y	38.3	
	optional	Col_125/127	EDUCFILD	79.0	
		Col_133/134	COURFILD	100.0	
		Col_154/161	INCMON	100.0	
SE	compulsory	Col_003	HHLINK	100.0	Problem with household data. Will be improved during data collection 2009.
		Col_004/5	HHSPOU	100.0	Problem with household data. Will be improved during data collection 2009.
		Col_006/7	HHFATH	100.0	Problem with household data. Will be improved during data collection 2009.
		Col_008/9	ННМОТН	100.0	Problem with household data. Will be improved during data collection 2009.
		Col_118 - Employed	AVAIREAS	12.8	
		Col_118 - Not employed	AVAIREAS	14.1	NR
		Col_121	REGISTER	18.0	NR
		Col_142/145	HATYEAR	29.2	Register variable. Register quality
		Col_146	WSTAT1Y	44.0	A new solution of collecting the data was used during 2007. Some smaller improvements has been done since then.
		Col_150/151	COUNTR1Y	25.8	A new solution of collecting the data was used during 2007. Some smaller improvements have been done since then.
		Col_152/153	REGION1Y	25.8	A new solution of collecting the data was used during 2007. Some smaller improvements has been done since then.
	optional	Col_125/127	EDUCFILD	100.0	Optional. Will not be collected
		Col_132	COURPURP		Optional. Will not be collected
		Col_133/134	COURFILD		Optional. Will not be collected
		 Col_136	COURWORH		Optional. Will not be collected
		Col_154/161	INCMON		Optional. Will not be collected
UK	Compulsory	Col_100	SEEKREAS	100.0	
		Col_120	NEEDCARE	100.0	
HR					
TR	compulsory	Col_055	TEMPAGCY	100.0	This variable is not asked since temporary working agencies have not yet started into operation in Turkey for the moment.
		Col_118 - Employed	AVAIREAS	37.3	, , , , , , , , , , , , , , , , , , , ,

Country	Variable status	Column	Identifier	2007	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_118 - Not employed	AVAIREAS	12.4	
		Col_121	REGISTER	100.0	This variable is not asked since the coverage of unemployment benefits is very limited in Turkey. (around 10% of registered unemployed are receiving unemployment benefit at the current situation).
		Col_150/151	COUNTR1Y		This variable could not be given since 98 % of total population had lived in Turkey in their previous settlements (without using year threshold, if one year criterion is used this number obviously will be lower). The rest (2 %) does not make any statistical sense (not reliable) especially when tabulated by other variables considering "the sample size is too small for reliable estimates for figures less than two thousand persons in each cell". This variable may be coded in the future using different aggregation criteria.
		Col_152/153	REGION1Y	100.0	
	optional	Col_021/22	COUNTRYB		This variable could not be given in the data set (although asked) since 98.6 % of total population was born in Turkey. The rest (1,4 %) does not make any statistical sense (not reliable) especially when tabulated by other variables considering "the sample size is too small for reliable estimates for figures less than two thousand persons in each cell". This variable may be coded in the future using different aggregation criteria.
		Col_122	MAINSTAT	100.0	These optional variables are not asked for the moment since these are not critical at national level.
		Col_125/127	EDUCFILD		
		Col_133/134	COURFILD	100.0	
		Col_136	COURWORH	100.0	
IS					
NO					-
CH	compulsory	Col_003	HHLINK	100.0	
		Col_004/5	HHSPOU	100.0	Not possible to fill in this variable because only one person per household is interviewed in Switzerland.
		Col_006/7	HHFATH	100.0	Not possible to fill in this variable because only one person per household is interviewed in Switzerland.
		Col_008/9	ННМОТН	100.0	Not possible to fill in this variable because only one person per household is interviewed in Switzerland.
		Col_049	WAYJFOUN	100.0	will be available from 2010
		Col_053	TEMPREAS	56.7	no explanation for non-response
		Col_094/95	NA11PR2D	20.9	
		Col_096/98	ISCOPR3D	10.2	
		Col_118 - Employed	AVAIREAS	61	?
		Col_118 - Not	AVAIREAS	20.5	?
		employed Col_120	NEEDCARE	13.9	?
		Col_142/145	HATYEAR	28.4	
		Col_146	WSTAT1Y		will be available from 2010
		Col_150/151	COUNTR1Y		will be available from 2010
		Col_152/153	REGION1Y	100.0	will be available from 2010
	optional	Col_072	WAYMORE	45.5	?
		Col_122	MAINSTAT	100.0	will be available from 2010
		Col_125/127	EDUCFILD	100.0	Not asked.
		Col_132	COURPURP	100.0	will be available from 2010
		Col_133/134	COURFILD	100.0	Not asked.

 $<sup>^{(*)}</sup>$  C: All records have the same value

## European Commission

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Luxembourg: Office for Official Publications of the European Communities

2009 - 46 pp. - 21 x 29.7 cm

ISBN 978-92-79-12396-2 ISSN 1977-0375