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2009 COMPARATIVE EU FINAL QUALITY REPORT

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0. INTRODUCTION

Commission Regulation (EC) No 1177/2003 concerning Community statistics on income and living conditions (EU-SILC) in its Article 16 states the following:

1. Member States shall produce by the end of the year N+1 an intermediate quality report relating to the common cross-sectional EU indicators based on the cross-sectional component of year N.

Member States shall produce by the end of year N+2 final quality reports that cover both cross-sectional and longitudinal components in relation to the year of the survey N, focusing on the internal accuracy. [...]

2. The Commission (Eurostat) shall produce by the end of June N+2 a comparative intermediate quality report relating to the common cross-sectional EU indicators of year N.

The Commission (Eurostat) shall produce by 30 June N+3 a comparative final quality report that covers both cross-sectional and longitudinal components in relation to the year of the survey N. [...]

In 2009 the EU-SILC instrument covered 31 countries, that is, all EU Member States plus Iceland, Norway, Turkey and Switzerland.

The objective of the document is to evaluate the quality of the instrument from a European point of view, by establishing between-country comparisons of some of its key quality dimensions.

The quality aspects described in this document are those specified in the Commission Regulation N° 28/2004 (Annex IV) as regards the detailed content of final quality reports to be produced by Eurostat.

1. RELEVANCE

The relevance of an instrument has to be assessed in the light of the needs of its users. As for EU-SILC the main users are the following:

- Institutional users like DG EMPL of the Commission and the Social Protection Committee, in charge of the monitoring of social protection and social inclusion, or other Commission services;
- Statistical users in Eurostat or in Member States National Statistical Institutes to feed sectorial or transversal publications;
- Researchers having access to microdata; and
- End users – including the media - interested in living conditions and social cohesion in the EU.

The EU-SILC instrument is the main source for comparable indicators for monitoring and reporting on living conditions and social cohesion at the EU level. It has been moreover

recognized by Heads of States and Governments as the data source for the Europe 2020 strategy headline target on poverty¹.

2. ACCURACY

The concept of accuracy refers to the reliability of estimates computed from a sample rather than from the entire population. This section dwells on methodological features of the EU-SILC samples surveyed in each country and intends to draw a picture of their relevance for estimation purposes.

2.1. Sample design

Countries are used to draw their sample with the same sample design for both cross sectional and longitudinal component. The 2009 EU Comparative Intermediate quality report includes a detailed section and an annex on this issue therefore only a summary table is presented here.

Table 1 Sampling design by country (2009)

Sampling unit	Sampling design	Country
Dwellings/ Addresses	Simple random sampling	MT
	Stratified simple random sampling	LU
	Stratified random sampling from former participants of micro census	DE
	Stratified multi-stage sampling	AT, CZ, ES, PL, PT, RO
	Stratified multi-stage systematic sampling	FR, LV, UK, NL
Households	Stratified random sampling	CY, SK, CH
	Stratified multi-stage sampling	IE
	Stratified multi-stage systematic sampling	BE, BG, EL, IT
	Stratified sampling according to different design by rotational group	HU
Individuals	Simple random sampling	DK, IS
	Systematic sampling	SE
	Stratified random sampling	LT
	Stratified and systematic sampling	EE, NO
	Stratified two-phase sampling	FI
	Stratified two-stage systematic sampling	SI

Source: National Intermediate and final Quality Reports 2009

The sampling unit can be the address, the dwelling, the household or the individual according to the design chosen by the country. In the case of a sample of dwellings or addresses, if more than one household share the same dwelling, dwellings must be regarded as clusters of households. All the households and all persons aged 16 and over living in each household are eligible for the survey. As showed by the table above, thirteen out of thirty countries selected a sample of dwellings or addresses. Additional nine countries selected a sample of household for the EU-

¹ See EPSCO Council Conclusions, 7-8 June 2010 (Council document 10560/10)

SILC 2009 operation. Households are clusters of individuals and all the members aged 16 and over at the end of the income reference period of a selected household are eligible for inclusion in the sample. Countries that carry out a sampling of individuals, instead, only select persons of age 16 and over and the household is defined as the household of which the selected person is a member at the beginning of the survey. Nordic countries as well as Estonia, Lithuania and Slovenia are used to select a sample of individuals.

2.2. Sampling errors

This section was largely developed in the 2009 Comparative EU Intermediate Quality Report as well. In addition, annex 2 of the 2006 Comparative EU Final Quality report presents information on the concept of sampling errors, the technical methodology for their estimation and the obtained results for a subset of countries.

2.3. Non-sampling errors

Commission Regulation (EC) No 28/2004 specifies the information on non-sampling errors which should be presented in national quality reports: sampling frame and coverage errors, measurement and processing error and non-response errors. All these sections were largely discussed in the 2009 Comparative EU Intermediate Quality Report. This section focuses on the unit non-response for the EU-SILC longitudinal component.

2.3.1. Non-response errors

Non-response means a failure to obtain a measurement on one or more study variables for one or more sample units. Non-response errors occur when the survey fails to get a response to some or all of the questions. Non-response causes both an increase in variance, due to the decrease in the effective sample size and/or due to the use of imputation and, more importantly, causes bias as the non-respondents and respondents generally differ with respect to the characteristic of interest.

Non-response is a potential source of bias particularly if the missing data mechanism is not what has been termed as ‘missing at random’. For instance, one might expect persons with high incomes to be more reluctant to give income information in an interview, thus rendering the upper income class under-represented in the sample and the estimates downwardly biased.

In particular, this section focuses on the analysis of the achieved sample size. The following tables present the achieved sample size for the longitudinal sample. For the household sample size (table 2), the household identification numbers are taken from the D-file (register file) with the corresponding year of interview. Starting with 2006 the different number of years is counted. The interviewed acceptance is also checked (DB135 should be equal to 1). When this number of years is equal to four, the household is added in the number of households which have been in the sample for four years. Similarly for 2007 the number of households that have been three years in the sample is counted; and idem for 2008.

The achieved sample size in terms of individuals is presented in table 3 and is based on the R-file. The different number of years when an individual is present in the file is counted, similarly as it has been done for the households for constructing table 2. Here the completeness of the information is checked through the variable RB250. Results are given for the total population as well as for the population of 16+. Breakdown according to sample persons and co-residents are also presented in the table.

Table 2 Achieved household sample size (longitudinal 2009 dataset)

Country	2008-09	2007-08-09	2006-07-08-09
BE	3877	2510	1149
BG	3175	1540	735
CZ	7212	5383	3029
DK	3326	2020	880
DE	9121	5857	2767
EE	3654	2363	1189
IE	2759	1387	476
EL	4691	2535	1268
ES	9099	5515	2512
FR	8384	6474	4796
IT	14147	8705	4000
CY	2315	1540	761
LV	3812	2162	937
LT	3751	2579	1301
LU	3060	2728	2419
HU	6167	3945	1827
MT	2383	1497	674
NL	6649	3735	1286
AT	3793	2320	1102
PL	9619	6208	3108
PT	3208	1951	853
RO	5743	3844	:
SI	5996	3362	1533
SK	3767	2383	1108
FI	4560	2971	1461
SE	4572	2951	1203
UK	5403	3250	1478
IS	1685	1017	461
NO	2772	2493	2442

Source: Micro-database (April 2012)

Table 3 Achieved individual sample size (longitudinal 2009 dataset)

	2008/2009				2007/2008/2009				2006/2007/2008/2009			
	All present	16+ present	Sample person present	Co-resident present	All present	16+ present	Sample person present	Co-resident present	All present	16+ present	Sample person present	Co-resident present
BE	9281	7368	7404	1877	5961	4699	4846	1115	2703	2125	2212	491
BG	8819	7503	7557	1262	4463	3684	3798	665	2049	1689	1782	267
CZ	17258	14395	14615	2643	12686	10511	10784	1902	7120	5826	6063	1057
DK	8250	6394	3280	4970	4908	3774	1975	2933	2096	1599	880	1216
DE	19525	16338	16634	2891	12539	10402	10709	1830	5873	4873	5076	797
EE	10192	8250	8458	1734	6558	5262	5539	1019	3284	2609	2807	477
IE	6256	5004	5110	1146	3147	2479	2565	582	1064	833	869	195
EL	12064	10012	10260	1804	6464	5337	5470	994	3246	2632	2742	504
ES	25474	20841	21046	4424	15345	12400	12758	2587	6898	5551	5783	1115
FR	20544	15901	19814	730	15800	12139	15393	407	11644	8837	11459	185
IT	35690	29867	30102	5588	21900	18313	18658	3242	9955	8294	8529	1426
CY	6937	5516	5593	1344	4619	3625	3743	876	2251	1765	1839	412
LV	9562	7835	8124	1438	5247	4257	4460	787	2217	1784	1893	324
LT	9408	7995	8282	1126	6306	5343	5560	746	3071	2611	2738	333
LU	8195	5965	7845	350	7167	5264	6936	231	6258	4611	6115	143
HU	15693	12839	13306	2387	9933	8021	8401	1532	4534	3703	3883	651
MT	6665	5491	5538	1127	4186	3382	3450	736	1928	1550	1602	326
NL	16137	12244	6649	9488	9013	6798	3735	5278	3031	2315	1286	1745
AT	8996	7108	7063	1757	5535	4334	4395	1045	2531	2023	2070	426
PL	28686	22967	23585	5101	18648	14679	15423	3225	9246	7219	7700	1546
PT	8423	7164	7285	1138	5137	4315	4448	689	2268	1902	1983	285
RO	14044	12100	12235	1776	9492	8086	8292	1200	.	.	.	.
SI	19217	16112	5996	13221	10596	8840	3362	7234	4727	3935	1533	3194
SK	11322	9652	9912	1410	7082	6004	6175	907	3158	2671	2751	407
FI	11574	8758	4560	7014	7317	5527	2971	4346	3522	2667	1461	2061
SE	11563	8733	4606	6957	7245	5413	2968	4277	2883	2140	1210	1673
UK	12522	9826	10035	2487	7328	5785	5966	1362	3275	2576	2699	576
IS	4878	3524	1685	3193	2812	2040	1017	1795	1211	896	461	750
NO	6954	5055	2772	4182	6086	4394	2493	3593	5738	4150	2442	3296

Source: Micro-database (April 2012)

2.4. Mode of data collection

The EU-SILC Regulation allows some degree of flexibility to countries regarding the mode of data collection. The information can be either extracted from registers or collected from interviews. For the interview, four different ways to collect the data are possible:

- Paper-Assisted Personal Interview (PAPI)
- Computer-Assisted Personal Interview (CAPI)
- Computer-Assisted Telephone Interview (CATI)
- Self-administered questionnaire.

Countries may use only one method or a combination of various methods. In the EU-SILC legal basis, priority is given to face-to-face personal interviews (PAPI or CAPI) over the other modes of data collection. The following graph represents the different modes of data collection used by the countries for each year of the 2009 longitudinal dataset, this means for the years 2006 to 2009, on the basis of the people present in the 2009 longitudinal file². Percentages by country for each mode of data collection as well as for proxy interviews for the 2006, 2007, 2008 and 2009 longitudinal component can be found in annexes 2 and 3.

Table 4 Mode of data collection (EU27³ plus IS, NO; %;) (Longitudinal 2009 dataset)

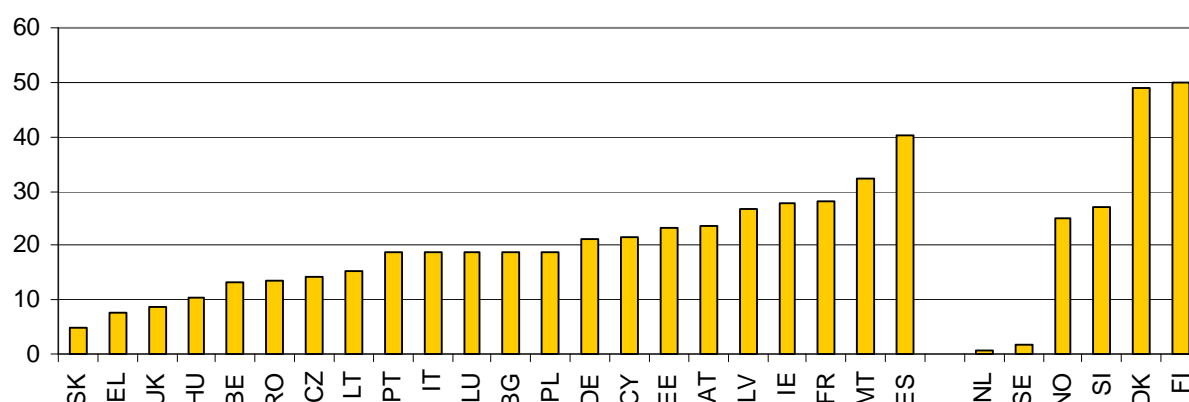
	Mode of data collection			
	1-PAPI	2-CAPI	3-CATI	4-Self-administered
2006	32.61	32.61	23.91	10.87
2007	28	30	26	16
2008	28.3	30.19	26.42	15.09
2009	29.41	31.37	25.49	13.73

Source: Micro-database (April 2012)

Face-to-face interviews remains the most used (either in paper or with a computer) mode of data collection on average over the years. In details, the use of CATI and Self-administered has decreased on average in 2009 and as a counterpart the use of PAPI and CAPI increased after the stability of the previous years.

Proxy interviewing is permitted if the proxy rate is kept as limited as possible. Some countries that encountered rather high non-response rates chose to use proxies to ensure a certain degree of accuracy in their data. In addition, in countries that use the selected respondent type of survey, the household respondent (in most cases selected respondent) is asked for information about all household members, therefore, these countries have a high percentage of proxy interviews concerning personal interviews. The following graph presents the percentage of proxies in 2009 for the longitudinal component.

Figure 1 Percentage of proxy interviews by country (longitudinal 2009 dataset)



Source: Micro-database (April 2012)

² Figures are obtained adding up the number of interviews carried out by each mode of data collection by all countries and dividing it by the total of interviews carried out in all countries.

³ Countries are included for the years when there is data for the longitudinal operation.

As we can see in the table above, the percentage of proxy interviews varies greatly among countries. In addition, for some countries there are also large year-to-year changes as shown in Annex 3. In the register countries, the percentage of proxies varies from below 2% in Sweden to around 50% in Denmark.

2.5. Imputation procedure

According to EU-SILC Framework Regulation, “Member States shall transmit to the Commission (Eurostat) in the form of micro-data files weighted cross-sectional and longitudinal data which has been checked, edited and imputed in relation to the income”.

Countries should implement imputation procedure for their income variables but flexibility is given to them in order to let them choose the method which is the most appropriate in their case. Next table indicates the types of imputation techniques used by countries, as reported in the national quality reports.

Table 5: Imputation techniques used by country

	Mean/median imputation	Regression model	Hot deck	Cold deck	Other methods
BE	Y	Y	Y	N	Y
BG	N	Y	N	N	Y
CZ	N	N	Y	N	N
DK	No imputation procedure was applied				
DE	Y	Y	N	N	Y
EE	Y	Y	Y	Y	Y
IE	N	N	Y	N	N
EL	No imputation procedure was applied				
ES	N	Y	N	N	N
FR	N	Y	Y	N	Y
IT	N	N	Y	N	N
CY	N	N	N	Y	Y
LV	N	N	Y	N	N
LT	Y	Y	Y	Y	Y
LU	N	Y	Y	Y	N
HU	Y	Y	N	N	Y
MT	Y	Y	Y	N	Y
NL	Y	N	N	N	N
AT	N	Y	Y	Y	Y
PL	N	Y	Y	N	Y
PT	N	Y	N	N	N
RO	N	N	Y	N	Y
SI	N	N	Y	Y	Y
SK	N	Y	N	N	N

	Mean/median imputation	Regression model	Hot deck	Cold deck	Other methods
FI	N	Y	Y	N	Y
SE	Not reported/Not done				
UK	N	N	Y	N	Y
IS	N	Y	N	N	Y
NO	N	N	N	N	Y

Source: National Final Quality Reports 2009

2.6. Imputed rent

The imputed rent (HY030) refers to the value that shall be imputed for all households that do not report paying full rent, either because they are owner-occupiers or they live in accommodation rented at a lower price than the market price or because the accommodation is provided rent free. This variable is mandatory from 2007 onwards.

About the method to use to estimate the imputed rent, Eurostat recommended, for the sake of comparability among countries, to apply a regression/stratification method except for duly justified cases, in particular when the private rental market represents less than 10% of the market or when regression method is statistically unreliable. In these cases, countries are invited to follow the user cost method.

The following table summarizes the information received from countries through their national quality reports 2009 and bilateral exchanges between them and Eurostat.

Table 6: Method used to estimate the imputed rent by country (2009 operation)

	Method
BE	Heckman regression model (correction of selection bias)
BG	Stratification method based on actual rents, with correction of selection bias
CZ	Subjective method
DK	Rental equivalence model
DE	Stratification method
EE	User cost method
IE	Stratification method
EL	Stratification method
ES	Stratification method
FR	Regression method
IT	Regression model with Heckman correction
CY	Heckman regression model, with correction of selection bias
LV	Regression method
LT	1 step: Stratification method; 2 step: Regression method
LU	Heckman regression model, with correction of selection bias
HU	Regression method

MT	Stratification method (using auxiliary information)
NL	Regression model
AT	Rental equivalence model with ten regression models
PL	Regression method
PT	Regression method from 2008 (self assessment method in 2007)
RO	Stratification method
SI	Stratification method
SK	User-cost method
FI	Stratification method
SE	User-cost method
UK	Hedonic regression modelling, incorporating Mill's correction (based on Heckman method)
IS	Market value of dwellings received from housing registers
NO	Stratification method

Source: National Final quality reports 2009 and bilateral exchanges between Eurostat and the countries

From Table 5 it can be concluded that in the 2009 EU-SILC operation Eurostat recommendations have been followed by nearly all countries. Out of the 27 EU Member States plus Iceland and Norway, 24 countries used in the 2009 operation the rental equivalence model (either regression, either stratification approach). BG used a stratification method based on actual rents and RO estimated the imputed rent from the Household Budget Survey using the stratification method. About PT, starting from the 2009 operation, the imputed rent is calculated on the basis of a linear regression. EE, SK and SE have developed a user cost method, which they applied as the share of market rents is very small in their country. This practice is in line with the Eurostat recommendations.

The only EU Member State which did not strictly follow the Eurostat guidelines is the Czech Republic. But, this country investigated deeply the issue and the main problem, which makes the rent imputation difficult, is that there is too low share of households paying market rent in this country. Only 6.0% of tenants pay market rent in the EU-SILC sample. 16.3% of households included in the sample pay rent that is regulated by the Czech government. They tested the 3 following methods: subjective method, stratification method, Heckman model, and finally they decided for subjective method, because it seemed best in the Czech conditions.

Variables taken into account are rather country-specific however some variables like localisation and urbanisation, size of dwelling (in square meter and in number of rooms), amenities (bathroom, balcony, garden, etc.) are common to all models.

2.7. Company cars and non-cash employee income

From 2007 on, PY020 refers to “Other non-cash employee income” and PY021 to “Income from private use of company car”. For the employee non-cash income (PY020) divergences are found only in France and it was not collected in the Netherlands; while for company car (PY021) France and Portugal did not fill in this variable.

3. TIMELINESS AND PUNCTUALITY

3.1. Cross-sectional data

Regulation (EC) No 1177/2003 states that: "...The extreme deadline for the transmission of micro-data to Eurostat shall be 30 November (N+1) for Member States where data are collected at the end of year N or through a continuous survey or through registers and 1 October (N+1) for other Member States".

The information by country on the deadline established by the Regulation as well as information on the date of first data transmission, the number of transmissions and the date of last transmission - can be found in annex 4 of this report.

The main conclusions from the annexed table are the following:

The first cross-sectional micro-data for the 2009 operation were received in Eurostat on 26 January 2010 (Latvia). Fourteen countries had clean and accepted micro-data files by September 2010 and additional six countries by October 2010. With five more countries having clean micro-data by end November 2010, twenty five countries kept the deadline of Regulation n°1177/2003. But, five countries did not meet this deadline, out of which 1 country could not implement the finalisation of the micro-dataset before the end of 2010.

About the timeliness of the cross-sectional indicators, all indicators were uploaded on the Eurostat Website as soon as they were validated and revised on the Eurostat Website every month around the 15th of the month, if needed.

The 2009 cross-sectional Users' database was released in March 2010 and 29 countries were included on it.

3.2. Longitudinal data

For the longitudinal component, the Regulation (EC) No 1177/2003 states the following: "...The mandatory deadline for the transmission of micro-data to Eurostat shall be the end of March (N+2), each year starting from the second year of EU-SILC". Grants to Member States had different deadlines but all of them were earlier than the one in the Regulation.

As for the cross-sectional component, Annex 4 gives information by country on the deadline established by the Regulation, the date of first data transmission, the number of transmissions and the date of last transmission.

The 2009 longitudinal micro-data files include the 2006 - 2009 individual trajectories of 26 EU Member States plus Iceland and Norway, the 2007 – 2009 trajectories for Romania. The main conclusions from the annexed table are the following:

The first longitudinal microdata for the 2009 operation were received by Eurostat in September 2010 (Slovenia). 22 out of 29 countries managed to provide Eurostat with a first data transmission by 31 March 2011 (mandatory deadline). Nevertheless, the deadline of end-March according to the SILC Regulation refers to the transmission of the final and fully clean datasets and not to a first transmission. Following strictly the Regulation, only twelve countries met the deadline. Despite the progress in comparison to the previous year, this is still the critical point for the longitudinal operation.

The indicator “persistent at risk of poverty rate” was computed and uploaded on the Eurostat website in mid April 2011 for the 2009 operation, after consultation with the concerned countries. As for other indicators the update of this indicator occurs monthly around mid month.

The 2009 longitudinal Users' database was released for the first time in August 2011 and then revised in March 2012. It includes 28 countries.

3.3. Quality reports

The deadline established in the Regulation (EC) No 1177/2003 for the transmission of the national final quality reports is end of year N+2 and almost all countries met the deadline.

4. ACCESSIBILITY AND CLARITY

In accordance with Commission Regulation 831/2002, the Commission has released SILC anonymized micro-data via CD-ROM to researchers. The UDB (User database) with the cross-sectional 2009 micro-data was sent to countries and contractors⁴ in March 2011, while the UDB containing the longitudinal 2009 micro-data was released for the first time in August 2011 and an update was disseminated in March 2011 with the cross-sectional 2009 micro-data. Indicator values in the form of predefined tables or of multidimensional tables are available free of charge on Eurostat website and can be explored via the data navigation tree.

Public information on data coding as well as methodological description of EU-SILC is available at <http://circa.europa.eu/Public/irc/dsis/eusilc/home>. Moreover, there is a dedicated section on the website of Eurostat containing key information on Income, Social Inclusion and Living conditions as well as on the EU2020 poverty target.

In addition, EU-SILC data were used in the last months in the following publications⁵:

a. Statistical books

- Income and living condition in Europe
- The social situation in the European Union 2009
- Combating poverty and social exclusion

b. Statistics in focus

- 23 % of EU citizens were at risk of poverty or social exclusion in 2010 - Issue number 9/2012
- The 9 poorest countries catching up on income per capita - Issue number 16/2011
- Housing conditions in Europe in 2009 – Issue number 4/2011
- Over-indebtedness of European households in 2008 - Issue number 61/2010
- 51 million young EU adults lived with their parent(s) in 2008 - Issue number 50/2010
- 17 % of EU citizens were at-risk-of-poverty in 2008 - Issue number 9/2010

c. New releases

⁴ The term "contractors" includes universities, research institutes and some other bodies.

⁵ Available on Eurostat website.

- In 2010, 23% of the population were at risk of poverty or social exclusion
- In the EU27, 116 million people were at risk of poverty or social exclusion in 2008
- One in three men and one in five women aged 25 to 34 live with their parents
- 17% of EU27 population at risk of poverty

d. Methodologies and working papers

- Inequality, growth and mobility: the inter-temporal distribution of income in European countries 2003-2007
- The distribution of employees' labour earnings in the EU - data, concepts and first results
- Income poverty and material deprivation in European countries
- Towards an inclusion balance - accounting for gross change in Europeans' living conditions
- Household structure in the EU
- Robustness of some EU-SILC based indicators at regional level
- An assessment of survey errors in EU-SILC
- The comparability of imputed rent
- The distributional impact of imputed rent in EU-SILC
- Social participation and social isolation
- Macro determinants of individual income poverty in 93 regions of Europe
- Economic downturn and stress testing European welfare system
- Analysing the socioeconomic determinants of health in Europe: new evidence from the EU-SILC
- Methodological issues in the analysis of the socioeconomic determinants of health using EU-SILC data
- In-work poverty in the EU
- Educational intensity of employment and polarisation in Europe and the US

5. COMPARABILITY

Comparability refers to a common set of concepts and definitions that shall be applied by the countries when designing the survey and collecting the data. It encompasses both basic definitions (reference population, private household, household membership...) and income concepts (employee income, self-employment income...).

Commission Regulation 1980/2003 establishes the framework for comparability, which has set out standard definitions as accurately as possible to cover most of the cases that might be encountered in practice. Some degree of flexibility is allowed regarding the definitions but countries have to report on deviations and their estimated impact in the national quality report.

5.1. Basic concepts and definitions

To ensure comparability of data similar definitions should be used by countries. This section summarizes the deviations from the standard definitions reported by countries. In the 2009 EU Comparative Intermediate Quality Report there is detailed information on this aspect, one table on the adherence/deviation to the standard definition on the reference population, the private household and the household membership and a second table on the reference period for income, for taxes on income and social insurance contributions and for taxes on wealth. This section presents a summary of the conclusions by item.

Table 7: Basic concepts and definitions: are the standard EU-SILC definitions used?

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
Reference population	F	F	F	F	F	L	:	F	F	F
Private household definition	F	F	F	F	F	F	:	F	F	F
Household membership	F	F	F	F	F	F	:	F	L	F

	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
Reference population	F	F	F	F	F	F	F	F	F	F
Private household definition	L	F	F	F	F	F	F	F	F	F
Household membership	L	F	F	F	F	F	F	F	F	F

	PT	RO	SI	SK	FI	SE	UK	IS	NO	CH
Reference population	F	L	F	F	F	F	F	F	F	F
Private household definition	F	F	F	F	F	F	L	F	F	F
Household membership	L	F	F	F	F	L	L	F	F	F

F: fully comparable; L: largely comparable

Source: National Intermediate Quality Reports 2009

Most countries follow the standard definitions with only some exceptions:

- Reference population: Romania and Estonia.
- Private household definition: Italy and the United Kingdom.
- Household membership: Spain, Italy, Portugal, Sweden and the United Kingdom.

Table 8: Reference period by country (2009)

Country	Income reference period (year)	The reference period for taxes on income and social insurance	Taxes on wealth	Lag between income ref. period and current variable (month)
BE	2008	2008	na	4-12
BG	2008	2008	2008	4-7
CZ	2008	2008	2008	3-4
DK	2008	2008	2008	4-6
DE	2008	2008	2008	4-8
EE	2008	2008	2008	3-7

IE	Na	Na	Na	na
EL	2008	2008	2008	3-6
ES	2008	2008	2008	2-6
FR	2008	2007	1/01/2008	5-6
IT	2008	2008	2008	10
CY	2008	2008	2008	3-7
LV	2008	2008	2008	3-7
LT	2008	2008	2008	4-8
LU	2008	2008	na	1-7
HU	2008	2008	2008	3
MT	2008	2008	na	6-10
NL	2008		na	5-9
AT	2008	2008	na	4-10
PL	2008	2008	2008	5
PT	2008	2008	2008	4-7
RO	2008	2008	2008	NA
SI	2008	2008	2008	2-6
SK	2008	2008	2008	4
FI	2008	2008	2008	0-5
SE	2008	2008	na	12
UK	Centred around interview date	Centred around interview date	Financial years April08-March09 April09-March10	0
IS	2008	2008	2008	4 and half
NO	2008	2008	2008	0-6
CH	2008	2008	2008	3-7

Source: National Intermediate Quality Reports 2009

NA: Not applicable - this tax does not exist in the country

The reference period for the majority of countries is the previous calendar year with only one exception:

- Income reference period and reference period for taxes on income and social insurance contributions: the United Kingdom (centred around the interview date⁶).
- Reference period for taxes on wealth: the United Kingdom (based on data provided for the financial years April 2007 – March 2008 and April 2008 – March 2009).

Time lag

The lag in months between income reference period and current variables differs from country to country, from the United Kingdom with no time lag to Sweden and Belgium with up to 12 months lag.

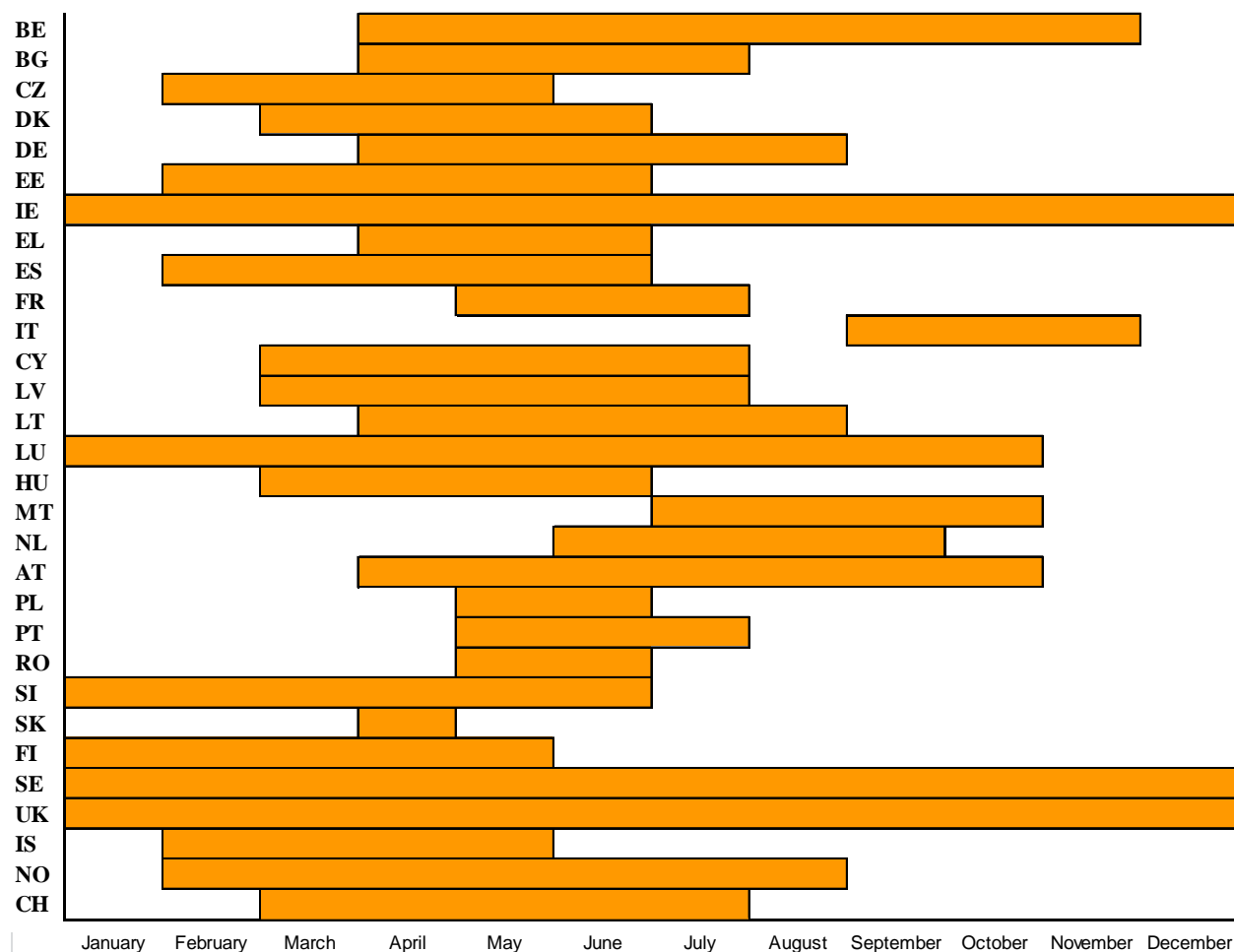
⁶ Comment from the United Kingdom: "...The survey measures current income. So for example, for income from earnings and benefits, respondents will provide figures which relate most commonly to the last week, two weeks, or month. With earnings in particular, respondents are asked for usual earnings. These figures, which represent current (and usual) incomes are then annualised (weekly estimates multiplied by 52, monthly by 12 etc). Income from self-employment can be reported for a variety of periods, but it is always up-rated (using the UK's average earnings index) to the interview date. For income from investment and employee non-cash income respondents are most likely provide their most recent annual or half-yearly income that they received from this source. This income would be annualised, although there is no up-rating..."

Fieldwork duration

The fieldwork in most of the countries lasted between three and five months. There were only two countries with a shorter (Poland and Slovakia) and six countries with longer fieldwork duration (Belgium, Ireland, Luxembourg, Sweden, the United Kingdom and Norway).

The following chart summarizes the fieldwork period by country; figures correspond to the information on the month of the household interview (HB050). The coloured cells correspond to the month when the interviews took place.

Figure 2 Fieldwork period for the 2009 L component by country



Source: Micro-database (March 2010)

It can be concluded that in 2009 most of the countries (17) finished the fieldwork period by July, with the following exceptions: Germany, Norway and Lithuania (in August), the Netherlands (in September), Austria, Luxembourg and Malta (in October), Italy (in November) and Sweden Ireland and the United Kingdom (in December).

5.2. Components of income

Regarding the components of income some flexibility has been allowed to the definitions, particularly for taking into account national constraints. Countries report on any differences between the national definitions and the standard EU-SILC definition. Two summary tables by country and income component can be found in the annex of the 2009 EU Comparative

Intermediate Quality Report, one on household income components and one on personal income components, plus all the comments received by countries.

5.3. Tracing rules

Tracing rules are defined in Commission Regulation EC 1982/2003. Most of the countries follow the common rules, and some of them report in detail the procedure. The following table summarizes the information in the national quality reports.

Table 9: Tracing rules by country

Country	Code	Comments from countries
BE	L	Although the 'tracing rules' from Eurostat say that sample households non enumerated the first year of the panel 'may be dropped', some households who did not participate in 2004 were contacted in 2005. These cases concern households who were not interviewed in 2004 because they were temporarily away, unable to respond due to illness or due to other reason (DB130=22 to 24).
BG	F	Standard EU-SILC tracing rules are applied.
CZ	F	Standard EU-SILC tracing rules are applied.
DK	F	"Tracing was conducted using the personal number in the population register. In principle there is no difference from national rules and the standard EU-rules."
DE	F	For the second year of the longitudinal component, the tracing rules as laid down in the document EU-SILC 065 were applied.
EE	F	Standard EU-SILC tracing rules are applied.
IE	N	No quality report delivered
EL	F	Standard EU-SILC tracing rules are applied.
ES	F	Standard EU-SILC tracing rules are applied.
FR		No quality report delivered
IT	F	Standard EU-SILC tracing rules are applied
CY	F	No quality report delivered
LV	F	For the second, third and the fourth waves tracing rules were applied for a longitudinal component according to the description of the document EU-SILC 065. To identify the residence of a person moving from one address to another address, the information from the Household List (an additional document to record personal data about the household member for tracing purposes) of the previous wave and the Population Register was used. There were no divergences from common standards.
LT	F	Standard EU-SILC tracing rules are applied
LU	F	Standard EU-SILC tracing rules are applied
HU	F	Standard EU-SILC tracing rules are applied.
MT	F	The EU-SILC tracing rules have been implemented in the tracing procedure. In an attempt to facilitate this procedure the questionnaire incorporates a question that asks about the intention or expectation to move house in the 12 months following the interview.
NL	F	Standard EU-SILC tracing rules are applied.
AT	F	For all four waves of the longitudinal component of EU-SILC, the tracing rules as laid down in the document EU-SILC 065 were applied. To identify the residence of persons moving from one address to another address, Statistics Austria made use of the ZMR.
PL	F	Standard EU-SILC tracing rules are applied.
PT	F	:
RO	F	Standard EU-SILC tracing rules are applied.
SI	F	Due to the fact that in Slovenia we use sample of persons and each household has only one selected person, we traced only the selected person. These persons are at least 16 years old .We trace to such person, if he/she moves in the territory of Slovenia. If the sample person moved permanently into institution or collective household, such household was excluded from survey. We excluded from survey also households where the sampled person died. In the case that sampled person moved interviewers (CAPI) had to fill in special form, where they wrote new address, if they found it from persons who live in the address or from neighbours. They sent to the office these forms with new addresses and in the office we prepared additional list of sampled persons which we sent to appropriate interviewer. In the case that move person who was interviewed by phone, interviewer wrote the new address into the computer program and after the CATI interviewing period was finished, we sent all lists to the appropriate interviewers. In the case that interviewer could not get a new address, in the Statistical office we tried to find new address

		from other sources. This way all selected persons and their households who moved are interviewed face to face under condition that we got new address.
SK	F	<p>Procedure of tracing of households and persons:</p> <p>1. If whole household moved out, interviewer had to find out its new address by all available sources. This information could be obtained from neighbours or relatives, municipal/communal office and others. Interviewer provide new address of household, name and surname of the head of the household in relevant form and also filled ID number of household and this form gave to coordinator of the Regional Office in period at least 3 days. Consequently coordinator decided on another procedure to continue in this circumstance.</p> <p>2. Similarly interviewer proceeded in the case of one or more selected persons moved out. Basic source of information on place of moving of selected person/persons was information received from other household members. For each person moved out interviewer completed relevant form, where was listed new address of this person again, his/her name and surname, household ID and personal ID.</p> <p>3. In the case if interviewer was entrusted to collect data for household or person moved out, needed information was received from coordinator of the relevant Regional Office.</p>
FI	F	The tracing rules for the follow-up of sample persons, sample households and co-residents have been followed in the longitudinal survey according to the EU-SILC requirements framework. Because of the sampling design and the sampling unit definition used (the selected individuals); only the initial sample persons of the first wave are followed over the survey years/waves. Acceptance of household interview for database (DB135=1) from the previous wave is provided for continuing in the wave of the survey year. Households of the survey year are constructed and household members are defined (mostly co-residents, see the household membership definition) around these sample persons. Household members include the ones who are currently (end of the income reference period, 31 December) living in the households containing the initial sample person, the persons who are temporarily absent, and the persons who have moved and born into the household since the previous wave. Membership status is checked in each wave.
SE	F	The sampling unit is individual, and we include all household-members at the time when the sample is drawn the first year. During the following three year the sampled individuals are included in the panel wave, and there household-situation is examined. If there original household from the first year has been split, we only follow the sampled individual. The household-situation for not sampled household-members is not examined if they no longer belong to the household of the sampled individuals.
UK	L	For UK EU-SILC 2007, persons aged 14 and above who could not be contacted in 2006 where not always re-contacted in 2006. Furthermore, information on former residents was not collected. A similar process was followed between 2007 and 2008, and 2008 and 2009.
IS	F	We only trace the selected respondent and if he or she has new household-partners they will be included in the survey. The information used for tracing are received from the national register, information on phone numbers are received from the largest phone company in Iceland. Information from former household members is also used to help locate selected respondents if the selected respondent has moved.
NO	L	They only trace the selected respondent. Tracing is done by using updated data from the population register, data from the previous data collection and by searching for phone numbers.

Source: National Final Quality Reports 2009

F (fully), L (largely), P (partly), N (not comparable), (No information).

We can conclude that the large majority of countries follow the standard rules.

6. COHERENCE

In each survey or administrative data variables similar to those in EU-SILC can be found and then the definitions and data can be compared taking as starting point EU-SILC variables.

There is a variety of sources to analyse the coherence of EU-SILC. The sources mostly used by the countries to compare EU-SILC data are: previous operations of EU-SILC (considered as an

analysis of the comparability of the data), Household Budget Survey (HBS), Labour Force Survey (LFS), National Accounts (NA) and administrative sources.

The information presented on this section of the national quality report varies greatly among countries. Some countries only explain that they did coherence studies but do not present the results in the national quality report. The table below presents a summary of which coherence studies were carried out with 2009 data by country.

Table 10: Comparison between EU-SILC and other datasets (2009)

	Comparison with:					
	Labour Force Survey	Household Budget Survey	National Accounts	Administrative sources	Previous EU-SILC 2008	Other sources
BE	:	:	:	:	:	X
BG	X	X	:	X	X	X
CZ	:	:	X	X	:	:
DK						
DE	:	X	:	:	X	:
EE	X	:	X	X	X	X
IE	:	:	:	:	:	:
EL	X	X	:	X	X	X
ES	X	:	X	X	X	:
FR	:	:	:	:	:	X
IT	X	:	X	X	:	:
CY	X	:	:	:	X	X
LV	X	X	:	X	:	X
LT	X	X	:	X	:	X
LU	:	:	:	:	:	:
HU	X	:	:	:	X	
MT	X	:	X	X	X	X
NL	:	:	:	:	X	X
AT	:	:	X	:	X	X
PL	:	X	X	:	X	:
PT	:	X	:	:	:	:
RO	:	X	:	:	:	:
SI	X	X	X	:	X	X
SK	X	X	:	X	X	X
FI	X	:	X	X	X	X
SE	:	:	:	:	:	:
UK	:	:	:	:	X	X
IS	:	:	:	:	:	:
NO	:	:	:	:	:	:
CH		X	:	:	:	:

Source: National Intermediate Quality Reports 2009

The majority of countries performed coherence studies based on 2009 SILC data. The only exceptions are: on the one hand, Luxembourg because of the difficulties to gather income information on ‘cross-border’ workers and international officials; and on the other hand, some

register countries (Sweden, Norway and Iceland) because EU-SILC data already come from registers.

The main conclusions from this table are the following:

- Ten countries compared data with HBS, thirteen with LFS and nine with National Accounts.
- Nine Member States did comparison with administrative sources.
- Eleven countries compared 2009 data with previous years, mainly with 2008 data.
- Fifteen countries carried out coherence studies with other national sources.

Annex 1: Mode of data collection

Table 11: Mode of data collection* (longitudinal 2009)

	Wave 2006				Wave 2007				Wave 2008				Wave 2009			
	PAPI	CAPI	CATI	S. A.	PAPI	CAPI	CATI	S. A.	PAPI	CAPI	CATI	S. A.	PAPI	CAPI	CATI	S. A.
AT		100	.	.	.	94.54	5.46	.	.	77.05	22.95	.	.	35.12	64.88	.
BE	.	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.
BG	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.	.
CY	.	100	.	.	0.03	99.97	.	.	0.2	99.8	.	.	0.07	99.93	.	.
CZ	99.41	.	.	0.59	99.73	.	.	0.27	78.81	21.1	.	0.09	82.3	17.63	.	0.06
DE	100	.	.	.	.	.	.	100	.	.	.	100	.	.	.	100
DK	.	.	94.56	5.44	.	.	95.09	4.91	.	.	96	4	.	.	94.49	5.51
EE	1.7	98.21	0.09	.	2.88	96.85	0.25	0.02	3.27	96.41	0.3	0.01	1.81	97.95	0.21	0.03
EL	74.77	24.32	0.9	.	82.01	13.66	1.53	2.81	85.1	11.16	3.66	0.08	83.89	11.79	4.32	.
ES	.	94.27	5.73	.	.	93.32	6.68	.	.	92.57	7.43	.	.	91.92	8.08	.
FI	.	3.66	96.34	.	.	3.79	96.21	.	.	2.39	97.61	.	.	1.27	98.73	.
FR	.	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.
HU	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.	.
IE	.	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.
IS	.	.	100	.	.	.	100	.	.	.	100	.	.	.	100	.
IT	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.	.
LT	96.38	.	2.15	1.47	95.59	.	3.6	0.81	80.68	.	18.86	0.45	61.36	.	38.37	0.27
LU	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.	.
LV	12.27	84.7	2.78	0.25	12.33	81.16	6.43	0.07	8.63	76.07	15.2	0.1	4.44	40.93	54.54	0.08
MT	.	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.
NL	.	.	100	.	.	.	100	.	.	.	100	.	.	.	100	.
NO	.	0.54	99.46	.	.	0.64	99.36	.	.	0.31	99.69	.	.	0.86	99.14	.
PL	100	.	.	.	100	.	.	.	100	.	.	.	100	.	.	.
PT	7.52	92.48	.	.	7.19	92.81	.	.	5	95	.	.	3.77	96.23	.	.
RO	.	.	.	.	100	.	.	.	100	.	.	.	100	.	.	.
SE	0.09	.	99.91	.	.	.	100	.	0.18	.	99.82	.	0.12	.	99.88	.

SI	.	100	.	.	.	66.82	33.18	.	.	58.59	41.41	.	.	15.62	84.38	.
SK	99.61	.	.	0.39	99.38	.	.	0.62	99.54	.	.	0.46	99.66	.	.	0.34
UK	75.45	24.55	.	.	.	100	.	.	.	99.89	0.11	.	.	100	.	.

Source: Micro-database (April 2011)

* PAPI: Paper Assisted Personal Interview; CAPI: Computer Assisted Personal Interview; CATI: Computer Assisted Telephone Interview; S.A.: Self-administrated questionnaire

Annex 2: Proxy interview

Table 12: Proxy interviews (longitudinal), %

	2006	2007	2008	2009
AT	19.91	19.95	26.24	23.63
BE	12.05	13.32	15.66	13.03
BG	20.14	30.12	19.28	18.83
CY	12.07	16.99	17.59	21.47
CZ	7.62	8.67	13.69	14.28
DE	18.03	19.82	21.07	21.16
DK	48.44	49.29	48.99	48.75
EE	4.91	11.15	13.42	23.3
EL	2.96	5.22	6.86	7.46
ES	40.62	40.87	39.62	40.38
FI	51.08	43.76	50.9	49.8
FR	26.87	28.09	28	28.1
HU	13.82	21.33	17.16	10.37
IE	32.33	29.64	30.89	27.9
IT	14.87	15.97	18.76	18.69
LT	15.39	20.56	16.46	15.11
LU	25.39	23.01	24.01	18.69
LV	5.84	4.72	13.69	26.82
MT	28.69	30.53	20.06	32.16
NL	40.23	7.06	0.89	0.66
NO	28.84	27.31	28.77	24.88
PL	17.78	17.33	17.81	18.87
PT	13.71	15.64	17.98	18.61
RO	.	19.49	19.93	13.42
SE	3.62	4.41	2.75	1.87
SI	21.34	25.62	22.56	27.13
SK	5.94	6.79	4.44	4.77
UK	9.67	10.25	11.03	8.82

Source: Micro-database (April 2011)

Annex 3: Timeliness and punctuality

Table 13: Follow-up cross-sectional data (2009)

	First transmission	Number of transmissions	Last transmission
AT	09/07/2010	2	20/07/2010
BE	04/10/2010	5	09/12/2010
BG	19/10/2010	2	01/12/2010
CY	27/10/2010	1	27/10/2010
CZ	08/09/2010	2	29/09/2010
DE	29/09/2010	3	30/09/2010
DK	24/11/2010	8	28/01/2011
EE	31/08/2010	2	02/09/2010
ES	23/09/2010	2	19/01/2011
FI	23/06/2010	2	17/08/2010
FR	20/10/2010	3	22/11/2010
EL	10/11/2010	2	19/01/2011
HU	03/06/2010	2	30/06/2010
IE	29/10/2010	7	30/03/2011
IT	09/12/2010	2	09/12/2010
LT	30/07/2010	2	13/09/2010
LU	20/09/2010	1	20/09/2010
LV	26/01/2010	3	09/06/2010
MT	01/10/2010	5	04/11/2010
NL	29/09/2010	4	18/10/2010
PL	29/07/2010	3	29/10/2010
PT	29/09/2010	1	29/09/2010
RO	10/05/2010	4	07/10/2010
SE	09/09/2010	1	09/09/2010
SI	29/09/2010	2	14/10/2010
SK	27/05/2010	3	21/07/2010
UK	11/11/2010	4	27/01/2011
IS	27/10/2010	8	31/01/2011
NO	20/09/2010	2	30/09/2010
CH	30/09/2010	3	25/11/2010

Source: eDamis (May 2012) and Regulation (EC) No 1177/2003

Table 14: Follow-up longitudinal data (2009)

	Regulation deadline	First transmission	Number of transmissions	Last transmission
AT	31/03/2011	``	2	07/03/2011
DE	31/03/2011	30/03/2011	3	09/05/2011
DK	31/03/2011	24/03/2011	13	20/12/2011
EL	31/03/2011	16/05/2011	5	10/02/2012
IT	31/03/2011	01/04/2011	2	31/05/2011
LV	31/03/2011	31/01/2011	5	28/04/2012
MT	31/03/2011	28/02/2011	5	27/05/2011
SE	31/03/2011	14/02/2011	3	03/05/2011
SK	31/03/2011	01/06/2011	2	06/06/2011
BE	31/03/2011	21/03/2011	2	24/03/2011
BG	31/03/2011	29/04/2011	3	21/07/2011
CY	31/03/2011	07/04/2011	4	20/04/2011
CZ	31/03/2011	13/04/2011	6	09/11/2011
EE	31/03/2011	21/12/2010	1	21/10/2010
ES	31/03/2011	10/01/2011	1	10/01/2011
FI	31/03/2011	18/01/2011	1	18/01/2011
FR	31/03/2011	13/04/2011	3	30/05/2011
HU	31/03/2011	25/02/2011	3	24/03/2011
IE	31/03/2011	21/07/2011	4	02/09/2011
LT	31/03/2011	17/02/2011	1	17/02/2011
LU	31/03/2011	21/03/2011	2	29/04/11
NL	31/03/2011	31/03/2011	4	27/03/2012
PL	31/03/2011	04/11/2010	1	04/11/2010
PT	31/03/2011	31/03/2011	2	01/06/2011
RO	31/03/2011	24/03/2011	2	16/06/2011
SI	31/03/2011	29/09/2010	3	10/01/2012
UK	31/03/2011	31/03/2011	4	02/06/2011
IS	31/03/2011	16/03/2011	3	16/03/2011
NO	31/03/2011	09/03/2011	1	09/03/2011

Source: eDamis (May 2012) and Regulation (EC) No 1177/2003.