

# Joint OECD / Eurostat questionnaire on national accounts employment and hours worked

## LUXEMBOURG

### *I. Employment<sup>1</sup>*

**Question 1.0: Describe succinctly the architecture of your estimation method for employment in persons.**

Employment in national accounts is based on social security registration files and business surveys, in turn linked to the business register.

**The business register** covers enterprises and employers ('entreprises et personnes morales'). It is fed by a range of administrative sources (see GNI inventory, section 3.1.4) and updated monthly. The business register also includes public administrations, social security units and non-profit institutions. Units not included in the register are the following: units not subject to VAT, nor employers nor morale person ('personne morale'). This is particularly the case of farmers, doctors, practitioners and other para-medical professionals, independent teachers, certain professionals in arts.

The employment variable is captured in the register broken down by status (functionaries, employee, worker), gender, and type of job (full-time/part-time).

**SBS** is a sampling survey. Only enterprises with 50 employees or more are included. Enterprises below this threshold are estimated on the basis of the business register (see GNI Inventory, section 3.10.1.5). Particularly, the employed workforce is estimated from other enterprises in the same strata in the business register. In the case of self-employment, it is estimated unit-by-unit from average self-employed in other similar units (i.e. same legal form and activity). This calculation is undertaken by labour status and gender.

**Social security statistics of labour and income** are collected by the *Centre commun de la sécurité sociale/Inspection générale de la sécurité sociale*. They are calculated monthly, covering businesses and employers ('employeurs et affiliés (salariés et indépendants)'). The following variables are collected:

- Labour status (ouvrier, employé privé, fonctionnaire, employé communal, agent CFL,
- travailleur indépendant intellectuel, indépendant, aidant agriculteur, agriculteur aidant
- Status (employed, unemployed)
- Mode (trainee, full-time, part-time)

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<sup>1</sup> Main sources used to pre-fill this questionnaire are:

- GNI Inventory. There is some information scattered in several chapters, but no specific section to describe the sources and methods for employment estimates.

- Residence of employed person
- Residence of employer
- Code institutional sector ESA95
- Code activity NACE Rev. 1
- Gender

Information of hours worked and hours lost in strike is also compiled. *Eurostat question: are these contractual hours?*

*Yes these are contractual hours (for workers (ouvriers), the hours lost by sickness or "chômage intempéries" are also known*

The statistic is exhaustive. Some corrections are made to take account of conceptual differences with ESA 95 concepts: recording thresholds and income in kind (see GNI Inventory, chapter 4.7)

**Question 1.1: What is the main original source for employment in the national accounts (e.g. administrative source, Labour Force Survey, business survey, other)? Briefly describe this source, its coverage, its availability and whether it is in terms of jobs or persons.**

Social security records (available monthly with a delay of 4 month), SBS (yearly used especially to break down employment by kind of activity unit) and the business register which contains monthly job data by employer

**If necessary, please specify sources for different parts of employment (in particular if sources differ between employees and self-employed, and/or between economic branches). In this case, please provide answers to the following questions for each of these sources where necessary.**

**Question 1.2: Which calculations are made to pass from persons employed at a specific point-in-time (or several points) to annual averages?**

*Annual averages are calculated as the average of monthly data of the social security records.*

**Question 1.3: Which adjustments are made to pass from jobs to the concept of persons (if the original source is in terms of jobs), or vice versa?**

*Social security records refer to persons , SBS and business register data to jobs: the number of jobs are adjusted to the number of persons by industry (NACE 5 digit level).*

**Question 1.4: Which adjustments are made in terms of coverage (See ESA § 11.17 to 11.19 for details)? This means specifically the exclusion of residents working for non resident producer units and the inclusion of non-residents working with resident producer units. If necessary, also specify adjustments for military (including specifically conscripted forces) and other collective households not covered by the main source.**

*Non residents working for resident producer units are included in social security files, SBS and business registers and are identified by their residence. Local agents of Luxembourg embassies outside Luxembourg are estimated on the basis of budget data. For resident workers working for non resident producers we distinguish 3 categories: Agents of international organisations not affiliated at the national social security system: the data are collected by survey  
Local agents of these organisations and of foreign embassies affiliated at the national social security system are also identified in the social security files.  
Other : these are estimated on the basis of the population census. Data for employees working in Germany are available from German social security files.*

**Question 1.5: Which exhaustiveness adjustments are made (i.e. adjustments to take into account the unobserved economy)?**

*The only exhaustiveness adjustment made concerns employment in domestic services.*

**Question 1.6: Which, if any, other adjustments are made (e.g. inclusion of resident workers below the age threshold considered in source statistics, prisoners at work See ESA § 11.13 to 11.16 and § 11.17 to 11.19 for details)?**

*Employees affiliated to the national social security system but working in fact in branch offices outside Luxembourg are excluded (especially in water transport (“Pavillon maritime” and “Bateliers Rhénans”) but also in other industries.*

**Question 1.7: In cases where for some part of employment, Labour Force Survey data has neither been used as the main source nor for major adjustments, please explain why? Are LFS data used for cross-checking? Are differences monitored?**

LFS provides information on the national concept of employment. The economy of Luxembourg is so open that it is very difficult to transform estimates of national employment into domestic employment by the traditional methods. Therefore, alternative sources are used providing information directly on the domestic concept. In fact the national concept of employment in national accounts is also calculated from the domestic concept and not on the basis of LFS.

## **II. Actual hours worked**

*Note: Eurostat is not aware of estimates for hours worked. If these estimates are produced, or there are plans to produce them, Luxembourg is invited to fill this part of the questionnaire.*

**Question 2.0: Describe succinctly the architecture of your estimation method for hours worked.**

*Hours worked are estimated in combining data from the short term activity survey in industry and construction (STS), the triannual Labour Cost Survey (both surveys including data on hours payed, hours worked, holydays sickness leaves, payed and unpayed overtime etc. ) with the social security files (including information on the hours payed, sickness leaves and “chômage intempéries”.*

**Question 2.1: What is the main original source for hours worked in the national accounts (e.g. administrative source such as official working hours, Labour Force Survey, other)? Briefly describe this source, its coverage and its ability to reflect the ILO definition of hours worked (see paragraphs 17.11 of the SNA).**

**If necessary, please specify sources for different parts of the employed population (in particular if sources differ between employees and self-employed, and/or between economic branches). In this case, please provide answers to the following questions for each of these sources.**

**If you do not compile national accounts employment data in terms of hours worked for the total economy, please indicate when you intend to do so.**

*The main sources are Social security files (hours payed) combined with short term activity survey and Labour Cost survey (see above)*

**Question 2.2: Which adjustments are made to transform the original source to adapt it to the concept of working hours as defined in the national accounts? Please specify adjustments:**

**to take into account holidays and annual leaves,  
for sickness leaves,  
for strikes and temporary lay-offs,  
for paid but unreported overtime,  
for unpaid overtime.**

*The adjustments mentioned above are made on the basis of the monthly term activity survey (for industry and construction) and on the basis of the triannual Labour cost surveys for most service branches . In services, the adjustments are estimated between to labour cost surveys.*

**Question 2.3: Is a specific adjustment made for unreported overtime of self-employed? On the contrary, if LFS data is used, do you introduce a downward adjustment to reported actual hours by self-employed?**

*For selfemployed the data recorded in the SBS survey are used.*

**Question 2.4: What assumption is made regarding the hours worked by persons included in the context of exhaustiveness adjustments?**

*The hours worked for domestic services are adjusted to the results of the family budget survey.*

**Question 2.5: Which, if any, other adjustments are made**

*No.*

**Question 2.6: If necessary, describe any additional calculations needed to derive total hours worked and average hours worked from the sources and adjustments specified above.**

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## Annex: bridge table between LFS and national accounts

This is a standard annex that may or may not fit with the sources and methods used in your country. The annex aims to reconcile the results of LFS with national accounts, both for estimates of persons (annual and quarterly) and annual hours worked. This information is most valuable to quantify the adjustments explained in sections I and II of the questionnaire.

If you use LFS for the national accounts employment estimates, please quantify the adjustments in place for the periods indicated below (the figures included here are the latest estimates available at Eurostat). Complete at least one column for one of the periods; the information for several columns is welcome.

If you do not use LFS for these employment estimates, but you use it for control or verification, please give your interpretation of the figures.

### Persons employed (annual data)

	2001	2002	2003	2004
LFS <sup>2</sup>	185	188	188	186
Resident concept (national accounts)	189.5	192.4	194.3	196.1
Cross border worker outgoing	8.6	8.7	9.1	9.4
Cross border worker ingoing	97.6	102.8	106.7	111.8
National accounts (domestic concept) revised data	278.5	286.5	291.8	298.4

### Persons employed (quarterly data)

	2004Q1	2004Q2	2004Q3	2004Q4
LFS	186	186	186	186
(Insert here rows for your adjustments)				
...				
National accounts (domestic concept)	Revised date not yet available			

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<sup>2</sup> The annual LFS results indicated here are actually the average of the quarters in the year.

**Annual hours worked**

	2001	2002	2003	2004
LFS	358,660	364,548	327,943	321,076
(Insert here rows for your adjustments)				
National accounts (domestic concept)	450,979	462,330	470,410	484,762

*In NA hours worked are only estimated for the domestic concept*