



**Assessment of sources and methods used in the
provision of basic information for Purchasing Power
Parities (PPPs)**

COUNTRY: Luxembourg

2021



CONTEXT

1. This report is written in the context of the implementation of article 7 (on quality criteria and control) of Regulation (EC) No 1445/2007 of the European Parliament and of the Council of 11 December 2007 establishing common rules for the provision of basic information on Purchasing Power Parities and for their calculation and dissemination (the "PPP Regulation").
2. The PPP Regulation requires all Member States to maintain documentation which gives a full description of the manner in which the Regulation has been implemented (the "PPP Inventory"). It requires Eurostat to assess each Member States' compliance with the PPP Regulation at least once every six years and to publish a report, based on the assessment, on its website.
3. The current assessment report is based on the information presented by the National Institute of Statistics and Economic Studies (STATEC) in the "PPP Inventory of sources and methods", version January 2021, as well as on other data and reports prepared in the context of the PPP programme. In addition, information provided during a videoconference on 22 November 2021 is taken into account.

ORGANISATIONAL ISSUES

4. The PPP work at STATEC belongs to the Price Statistics Unit and to the Division of Social Statistics. In addition to PPPs, the Price Statistics Unit compiles statistics on consumer prices, producer prices and housing prices. The PPP coordinator works 90 percent on PPPs. HICP price collectors assist in gathering information for presurveys and collecting prices for consumer and equipment goods. The rents questionnaire is filled in by the PPP coordinator in close cooperation with the National Accounts Unit.
5. The National Accounts Unit provides the GDP expenditure breakdown, as well as data on tips and VAT. The survey on the compensation of government employees ("the salary survey") is dealt with by another government administration, the *Centre de gestion du personnel et de l'organisation de l'Etat (CGPO)*, which is responsible for the salaries of all civil servants in Luxembourg. The hospitals survey is carried out by the *Inspection Générale de la Sécurité Sociale*, while the construction survey is subcontracted to an external expert. The total amount of work allocated to the PPP surveys and other data requirements is estimated at just under six months of full-time work per year, not including administrative tasks and the outsourced construction survey.



FINDINGS BY PPP SURVEY

Consumer goods and services

6. The surveys on consumer goods and services are carried out by the PPP coordinator and a dedicated group of experienced HICP and PPP price collectors. Due to the small size of the country and of the national market, data collection is mostly focused on Luxembourg City and the immediate surroundings. Information about the availability and importance of products is preferably collected directly from the shops, either by visiting or by calling. For the price collection, outlets are selected based on experience from previous surveys but with a view to the HICP outlet sample. For certain basic headings, notably telecommunication services, air travel and pharmaceuticals, prices are collected centrally.
7. Transaction data was implemented for the first time in the E21-1 survey on food, beverages and tobacco. This turned out to be a resource demanding exercise, especially because the transaction data had to be combined with data collected manually. However, the amount of price data and the availability of weights represent an important potential for quality improvement. STATEC is encouraged to further explore the opportunities in this area.

Housing services

8. The main data sources are the HICP rents survey and expenditure data from National Accounts, the latter based on extrapolated data from the 2011 census. New census data will be implemented when available. The HICP rents survey is based on a sample of 1700 units drawn from the population register. Compliance with the stratification used in the PPP rents questionnaire is achieved through the information in the HICP rents questionnaire. In order to achieve consistency with National Accounts, the rents are rescaled to the sum of housing expenditure. This practice is not recommended since any deviation should be shown in the PPP questionnaire.

Compensation of government employees

9. The work relating to this annual survey is carried out exclusively by the *Centre de gestion du personnel et de l'organisation de l'Etat* (CGPO), which belongs to the Ministry of Civil Service. The CGPO has data on all public sector employees in Luxembourg and is hence a complete data source for public sector salaries. STATEC is only involved in the transmission of the data file to Eurostat and acts as an intermediary on validation issues. However, according to the survey guidelines, social contributions should be extracted from National Accounts (D121 and D122) and not from an administrative source. STATEC is recommended to take a more active role on this point in order to ensure that data are compiled in line with the survey guidelines.

Hospitals

10. Administrative prices for surgical cases are provided by the *Inspection générale de la Sécurité Sociale* based on data for all hospitals in the country. Data on medical cases are



currently not provided. STATEC should work with the data provider to ensure that medical cases can be included in the future. This is especially important since these data are also used for nursing and residential care facilities.

Education

11. No particular findings. Volume indices and PPPs for education are calculated by Eurostat based on in-house data. Countries only need to check if there are imputations, gaps or apparently implausible results.

Equipment goods

12. The equipment goods survey is carried out by staff of the Price Statistics Unit, including price collectors. While information from the Internet is valuable at the general level, interviews with importers and retailers are the preferred source of information, in particular for complex products. This applies both in the presurvey and price collection phase. The unit has a good overview of importers and retailers in Luxembourg, based on experience from previous surveys supplemented by data from the national business register and webpages, leaflets and other ad hoc market information.

Construction

13. The construction survey is outsourced to a commercial company with long experience in planning, executing and managing building projects. The data comes mainly from tenders sent out by their execution and project management team in collaboration with their engineering partners, thus providing a realistic overview of the prevailing prices. For civil engineering works, the contractor collects data from other companies – further information on this would be desirable. The contractor takes an active role in the validation of the data.

VAT on capital goods

14. STATEC confirms that only non-deductible VAT is included.

Expenditure weights

15. The detailed expenditure breakdown is compiled by the National Accounts Unit. Data at the level of expenditure classes are taken directly from National Accounts, while the underlying expenditures for household final consumption expenditure at basic heading level are in most cases based on data from the Household Budget Survey (HBS). For the other main aggregates, detailed expenditures are applied directly from National Accounts or estimated from supply-use tables.

CONCLUSIONS AND SUMMARY OF ACTION POINTS FOR STATEC

Luxembourg complies well with the PPP Regulation. The data are generally of good quality and the resulting PPPs are plausible. Some potential improvement points raised during the discussions are summarised in the table below.

Topic	Action points
1 Organisation	To improve the visibility of PPP statistics, consider disseminating selected PPP data with a special focus on Luxembourg.
2.1 Consumer goods and services	Continue efforts to explore and implement new data sources (transaction data, webscraping) wherever possible. Consider collecting prices from foreign platforms and websites for cross-border internet purchases when these are relevant to HFCE as estimated by National Accounts.
2.2 Housing	Implement data from the 2021 census when these become available. Analyse any discrepancies between National Accounts expenditures and the data in the PPP rents questionnaire, and avoid rescaling to “force” consistence.
3.1 Compensation of government employees	Extract the social contributions (D121 and D122) directly from National Accounts, in line with the survey guidelines.
3.2 Education	None.
3.3 Hospitals	Liaise with the data provider to ensure that data on the medical cases are provided. Liaise with the data provider to complete the background information in tables 1 and 2 of the inventory.
4.1 Equipment goods	None.
4.2 Construction	Liaise with the national subcontractor to obtain more information about data sources and methods used for the civil engineering projects.
4.3 VAT on capital goods	None.
5. Expenditure weights	None.

