

## **PROJECT ‘PROVISION OF BASIC INFORMATION FOR CALCULATING PURCHASING POWER PARITIES /PPPS/ FOR 2022’**

In February 2023, the National Statistical Institute completed successfully the work on the project ‘Provision of basic information for calculating purchasing power parities (PPP)’ according to the Grant Agreement with the European Commission № 101051339-21-BG-PPP.

The provision of basic statistical information for the calculation of PPPs is part of the activities of the Current Statistics Program of the European Commission: ‘Measuring the differences in price levels of goods and services between countries and between individual settlements’. The PPP programme is a multilateral activity that is led and coordinated by Eurostat together with OECD, is part of the Community legislation (acquis communautaire), and generally contributes to improving the database of price statistics and national accounts. This is done through the annual calculations of purchasing power parities (PPP).

As a result of the implementation of the project’s activities, the main goals set in it were achieved, as follows:

### **1. Data collection and provision of information about consumer goods:**

- The data were validated and a final survey report of the E21-2 ‘Personal appearance’ survey was prepared;
- Prices for E22-1 ‘House and Garden’ survey were collected; a report was prepared, spatial adjustment factors (SAFs) were calculated, the collected data were validated.
- E22-2 ‘Transport, Restaurants and Hotels’ survey - pre-survey was carried out, final EU list was prepared, data was collected, a report was prepared, spatial adjustment factors (SAFs) were calculated and data were validated.
- E23-1 ‘Services’ survey- a preview questionnaire was completed, a pre-survey was carried out and the survey was prepared for price collection.
- E23-2 ‘Furniture and health’ survey - a preview questionnaire was completed for the survey.

### **2. Collection of consumer prices for residential rents in Sofia.**

The purpose of the survey was to obtain a reliable estimate of the level of rents for good quality housing in the capitals of the EU member states, with Brussels used as a base. In Sofia, the survey was conducted in the period June 8 - 9, 2022, data was collected and a report was prepared.

### **3. Collection and provision of information on investment goods:**

- Construction - Data validation was conducted and a final report was prepared for the 2021 survey. Data was collected, a report was prepared and data was validated for the 2022 survey.
- Machinery and equipment - the collected data was validated and a final report was prepared for the survey carried out in 2021. A preview questionnaire was completed and the survey for 2023 was prepared.



#### 4. Hospital services survey.

To conduct the survey of health services in hospitals, in accordance with the methodological requirements of Eurostat and OECD, the main source of information was the National Health Insurance Fund, which participates annually. The following tables were prepared for the needs of the PPPs:

- tables of correspondence of the lists of hospital services (hospitalizations and performed procedures) proposed by Eurostat/OECD and the scope of the relevant clinical care pathways when using ICD-10 and ICD-9-KM and the National Framework Agreement for the respective year;
- standard tables according to a set template - application of the approach for valuation of the provided hospital services by means of 'quasi prices'.

#### 5. Carrying out the survey of compensation of employees in the public sector

Bulgaria provides data on the compensation of employees including social contributions for a sample of occupations in collective services provided by the government. The cost data is national annual averages for each sample occupation, and are calculated based on the data of annual gross salaries by occupations for 2018. Data come from statistical survey which is conducted by the Labour Statistics Unit of NSI every 4 years. Last available data is for year 2018. The annual gross salaries by occupations for 2021 are calculated by extrapolating the annual salaries by occupations for 2020 with the index of corresponding annual salaries by economic activity between 2020 and 2021. The employers actual social contributions for officials and the rest of government employees are the same as in 2020.

#### 6. Provision of additional PPP input data:

- Consumer price indices and weights for 2021 were provided;
- Actual and imputed rents - data for 2019 and 2020 were validated and updated data for 2021 were provided;
- Expenditure weights by GDP components - data for 2019 and 2020 were validated and updated data for 2021 were provided;
- Non-deductible VAT - data for 2019 and 2020 were validated and updated data for 2021 were provided;
- Tips - data for 2019 and 2020 were validated and updated data for 2021 were provided;
- Education and energy data for 2021 were provided.

#### 7. Report on the sources and methods for calculating purchasing power parities for 2022 (PPP Inventory)

- This is an annual report and was prepared in accordance with the structure defined by Eurostat. It contains a description of all activities carried out in the calendar year 2022 regarding the collection, validation and transmission to Eurostat of the basic information for the calculation of purchasing power parities.

***Results achieved within the scope of the 'Provision of basic information for calculating purchasing power parities /PPPs/ for 2022' project:***



As a result of the European comparisons carried out in the 36 participating countries, Eurostat calculates and disseminates the following indicators:

- **Purchasing Power Parities (EU=1)** - rates of currency conversion that convert value indicators from national into a common currency. The original PPPs are expressed in a standardized form to the base (EU=1), so-called Purchasing Power Standard (PPS) i.e. EURO in real terms (artificial 'average' currency);
- **Price level indices (EU=100)** - calculated as a ratio between PPPs and the respective exchange rates (national currency/EUR) for each country, in relation to the EU average;
- **GDP at market prices** in Purchasing Power Standards (PPS) - total and per inhabitant;
- **Volume indices of real GDP** (total and per inhabitant).

After national statistical data is validated and the results obtained for year **T** are approved by all ECP partner countries, the latter are published according to schedule:

**By Eurostat:**

- **T+ 3 months** - flash estimates;
- **T+ 6 months** - nowcast;
- **T+12 months** - preliminary results based on preliminary data on prices and weights;
- **T+24 months** - final results (based on final prices from observations and final weights from national accounts).

**By Eurostat and OECD:**

- Results for a wider range of countries after the completion of each 3-year survey cycle.

Purchasing power parities and related indicators are used for:

- **Economic analyses** - international comparisons of economic development, volumes of GDP and price levels, productivity, poverty;
- **Economic and social policy of the EU** - allocating the Structural Funds to Member States. The principal indicator determining the eligibility of a region is PPP-deflated intra-country regional GDP per capita;
- **Administrative purposes** - establishing correction coefficients used to ensure equality of purchasing power of salaries of the international civil servants in the different duty stations other than that of Brussels, the base city.

***A brief history of the European Comparison Program (ECP)***

In June 1979, the XXVII Plenary Session of the Conference of European Statisticians (CES) approved the idea of European comparisons within the framework of the 1968 International Comparison Programme (ICP). Countries were grouped on a continental basis, and 1980 was chosen as the base year.

At the beginning of the 1980s, Eurostat and the OECD developed a joint program for the calculation of purchasing power parities, aiming at the regular and timely comparison of GDP and price levels in EU Member States and OECD member countries. This is how the stand-alone Program for European Comparisons (CEP) was created. Subsequently, its scope was expanded to include countries not members of either organization and after 1990, most countries with centrally planned economies also joined it.



The Republic of Bulgaria joined the ECP in 1993 as a partner of the other countries with economies in transition and Austria, playing the role of a bridge when comparing them with developed market economies in Europe.

Since 1999, as an element of the EU accession policy, the countries applying for EU membership, including the Republic of Bulgaria, have been fully involved in the work on ECP under the auspices of Eurostat.

The European Comparisons Programme (ECP) is a natural extension of the National Accounts, where the analysis of GDP and key value indicators is carried out in a spatial rather than a dynamic context. Its main purpose is to measure the differences both in the price levels of goods and services, as well as in economic development, between countries in Europe.

### ***Legal basis of the European Comparisons Programme***

According to the decision of the Working Group on PPP in Eurostat, of which the Republic of Bulgaria is also a full member, specific legislation has been developed, including a Methodological Manual for calculating PPPs:

- The common rules for the provision of basic information (input data), the calculation and dissemination of PPPs are laid down in Regulation (EC) No 1445/2007 of the European Parliament and of the Council of 11 December 2007;
- Commission Regulation (EU) No 193/2011 of 28 February 2011 defines common quality criteria and the structure of the quality reports;
- Commission Regulation (EU) No 2015/1163 of 15 July 2015 provide a new classification of basic headings that has been implemented in December 2015.

Currently, within the framework of the European Comparison Programme (ECP), there are annual calculations of PPPs for 27 EU member states, 6 candidates for EU membership countries and 3 European Free Trade Association (EFTA) member countries.