

**QUALITY REPORT FOR STATISTICAL SURVEY**  
**Government Budget Allocations for Research and Development,**  
**2020-2021**

Organisational unit: Innovations, Science and Technologies Unit  
Prepared by: Matija Škegro Vdović and Blanka Munjin

June 2025

## 0. Basic information

- Purpose, goal, and subject of the survey

The purpose of the Government Budget Allocations for Research and Development (GBARD) survey is to collect data on allocations for research and development from the state budget according to socio-economic objectives, including all grants to the international R&D programmes or institutions abroad.

The objective of the survey is to enable the monitoring of the state R&D policy through its financing of the R&D activities. As opposed to the research on organisations engaged in the R&D activities, this survey focuses on organisations that finance the R&D activity.

- Reference period

Calendar year.

- Legal acts and other agreements

Act on Scientific Activity and Higher Education (OG, Nos 123/03, 198/03, 105/04, 174/04, 2/07, 46/07, 45/09, 63/11, 94/13, 139/13, 101/14, 60/15 and 131/17)

Act on State Aid for Research and Development Projects (OG No. 64/18)

Ordinance on State Aid for Research and Development Projects (OG, No. 9/19)

Ordinance on Scientific and Artistic Areas, Fields and Branches (OG, Nos 118/09, 82/12 and 32/13 and 34/16)

Decision on the National Classification of Activities – NKD 2007. (OG, Nos 58/07 and 72/07)

Ordinance on Register of Spatial Units (OG, No. 37/20)

Decision No. 1608/2003/EC of the European Parliament and of the Council of 22 July 2003 concerning the production and development of Community statistics on science and technology

Commission Implementing Regulation (EU) No. 995/2012 of 26 October 2012 laying down detailed rules for the implementation of Decision No. 1608/2003/EC of the European Parliament and of the Council concerning the production and development of Community statistics on science and technology.

Other international standards

Frascati Manual 2015 – Guidelines for Collecting and Reporting Data on Research and Experimental Development, OECD, 2015

Measurement of Research and Development in Developed Countries, Annex to the Frascati Manual, OECD, 2012

Nomenclature for the analysis and comparison of scientific programmes and budgets – NABS 2007, Eurostat, 2007

Fields of Research and Development (FORD) Classification, OECD, 2015

- Classification system

Classification of scientific and artistic areas and fields  
Codebook of socio-economic objectives

- Concepts and definitions

Definitions of the R&D field are based on the international methodology – the Frascati Manual 2015 (Frascati Manual, 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities, publisher: OECD, Paris, 2015).

The Nomenclature for the Analysis and Comparison of Scientific Programmes and Budgets – NABS 2007 was used in monitoring of the allocation of the Government Budget appropriations or outlays according to the socio-economic objectives, which is correlated with the Frascati Manual. This Nomenclature explains the socio-economic objectives, that is, the purpose of the spent appropriations or outlays for the R&D in 13 categories.

Research and development (R&D) comprise systematic creative work aimed at increasing knowledge about man, culture and society and its application in practice. For an activity to be an R&D activity, it must satisfy five criteria. The activity must be novel, creative, uncertain, systematic and transferable and/or reproducible. There are three types of research and development: basic research, applied research and experimental development.

Business enterprise sector comprises enterprises the main activity of which is production of goods and services intended for market at commercial price. The business enterprise sector includes public enterprises as well as non-profit institutions that are market producers of goods or services.

Government sector comprises all units of central and local government, including social security funds, except institutions of higher education, as well as all non-profit institutions that are controlled by government units and are not market-orientated, and that are not part of the higher education sector.

Private non-profit sector comprises non-market, non-profit institutions serving households (that is, the general public), except those mainly controlled and financed by the government, their main characteristic being that they should not be the source of revenue or profit to the institutions controlling them.

Higher education includes all institutions providing formal tertiary education programmes, regardless of their source of finance or legal status, and all research institutes and centres that have their R&D activities under the direct control of, or administered by, tertiary education institutions.

Abroad includes all institutions and individuals located outside the political borders of a country as well as all international organisations (except business enterprises) including facilities and operations within the country borders.

Socio-economic objective represents the basic allocation of funds for R&D set up by the OECD and expressed in 13 categories.

- Statistical units

Observed statistical units are budgetary and extra-budgetary users of the state budget in the Republic of Croatia.

- Statistical population

Statistical population consists of budgetary and extra-budgetary users of the state budget in the Republic of Croatia.

## 1. Relevance

### 1.1. Data users

Data users on government budget allocations on R&D include:

- External national users
  - Ministry of Science and Education
  - media
  - researchers and students
- External international users
  - Directorates-General of the European Commission
  - researchers and students

#### 1.1.1. User needs

The European Commission's Directorates-General use survey data for a systematic and user-oriented presentation of internationally comparable GBARD indicators (for all EU member states) for data analysis and publication.

The Ministry of Science and Education uses survey data for analysis, adoption of policies and strategies, and evaluation of progress.

Media use survey data for analysis and publication.

Researchers and students use survey data for research purposes, papers writing, analysis.

#### 1.1.2. User satisfaction

User satisfaction, targeted specifically at the Survey on GBARD data, is not measured.

The first user satisfaction survey of the Croatian Bureau of Statistics was conducted in 2013, the second one in 2015. The survey results can be checked on the website of the Croatian Bureau of Statistics <https://dzs.gov.hr/highlighted-themes/quality/user-satisfaction-surveys/686>

### 1.2. Completeness

The survey is conducted on the basis of the Annual Implementation Plan for Statistical Activities of the Republic of Croatia in 2020 (NN, No. 12/20) and the Official Statistics Act (NN, No. 25/20). Legal basis of the European Union for this survey is Decision No. 1608/2003/EC of the European Parliament and of the Council of 22 July 2003 concerning the production and development of Community statistics on science and technology (OJ L 230, 16 September 2003), and Commission Implementing Regulation (EU) No. 995/2012 of 26 October 2012 laying down detailed rules for the implementation of Decision No. 1608/2003/EC (OJ L 299, 27 October 2012).

The survey results are submitted to Eurostat in a specified manner.

#### 1.2.1. Data completeness rate

The indicator is not computed.

## 2. Accuracy and reliability

### 2.1. Sampling error

Not applicable.

#### 2.1.1. Sampling error indicators

The indicator is not applicable.

### 2.2. Non-sampling error

Not applicable.

#### 2.2.1. Coverage error

The survey is conducted in all units that are budgetary and extra-budgetary users of the state budget in the Republic of Croatia.

#### 2.2.2. Overcoverage rate

The indicator is not computed.

#### 2.2.3. Measurement errors

Not applicable.

#### 2.2.4. Non-response errors

Not applicable.

#### 2.2.5. Unit non-response rate

The unit non-response rate is 0%.

#### 2.2.6. Item non-response rate

The non-response rate for a particular variable is 0%, all variables are answered.

#### 2.2.7. Processing errors

The survey is carried out on Excel forms (PIIR-1 for the Ministry of Science and Education, and PIIR-2 for other state bodies) which contain certain built-in data verification procedures. A part of data verification procedures is built in the Excel questionnaire, while other rules are defined in the expert unit, which also corrects existing errors found on the material and, if necessary, contacts reporting units to get complete and accurate data.

#### 2.2.8. Imputation rate

The indicator is not applicable.

#### 2.2.9. Model assumption error

Not applicable.

### 2.3. Data revision

#### 2.3.1. Data revision – policy

In case of data revision, users of statistical data will be informed about the revision on the website of the Croatian Bureau of Statistics.

#### 2.3.2. Data revision – practice

There has been no data revision so far. The 2021 data are comparable to data for the previous years, including data for 2009-2010.

#### 2.3.3. Data revision – average size

Not applicable.

### 2.4. Seasonal adjustment

The indicator is not applicable for the survey.

## 3. Timeliness and punctuality

### 3.1. Timeliness

Timeliness of statistics relates to the length of time between data availability and reference period the phenomenon refers to.

#### 3.1.1. Timeliness – first results

Not applicable.

#### 3.1.2. Timeliness – final results

Timeliness of final results is T + 12 months.

### 3.2. Punctuality

Timeliness of final results is T + 12 months.

#### 3.2.1. Punctuality – delivery and publication

Data are published within the planned deadline, in accordance with the [Calendar of Statistical Data Issues 2021](#).

## **4. Accessibility and clarity**

- website of the Croatian Bureau of Statistics – electronic version of the Press Release
- website of the Croatian Bureau of Statistics – database

### **4.1. News release**

Survey data are released in the First Release [ZTI-2021-2-2 “Government Budget Allocations for Research and Development, 2020-2021”](#)

### **4.2. Online database**

Government Budget Allocations for R&D in PC-Axis.

### **4.3. Microdata access**

Conditions under which certain users can have access to microdata are regulated by the Ordinance on conditions and terms of using confidential statistical data for scientific purposes.

### **4.4. Documentation on methodology**

- website of the Croatian Bureau of Statistics – electronic version of the Press Release
- website of the Croatian Bureau of Statistics – database
- intranet pages of the Croatian Bureau of Statistics - map of the Innovation, Science and Technologies Unit

## **5. Coherence and comparability**

### **5.1. Asymmetry for mirror flows statistics**

The indicator is not applicable for the survey.

### **5.2. Comparability over time**

The 2021 data are comparable to data for the previous years, including data for 2009-2010.

#### **5.2.1. Length of comparable time series**

Length of comparable time series is 11.

#### **5.2.2. Reasons for break in time series**

Not applicable.

### **5.3. Coherence – short-term and structural data**

The indicator is not computed.

### **5.4. Coherence – national accounts**

The indicator is not computed.

### **5.5. Coherence – administrative sources**

The indicator is not applicable.

## **6. Cost and burden**

### **6.1. Cost**

It is not possible to estimate data collection costs.

### **6.2. Burden**

An analysis of the burden on reporting units has not been carried out.