REPUBLIC OF CROATIA
CROATIAN BUREAU OF STATISTICS

QUALITY REPORT FOR STATISTICAL SURVEY

Government Budget Allocations for Research and Development 2022 – 2023

Organisational unit: Innovation, Science and Technology Unit

Prepared by: Matija Škegro Vdović and Blanka Munjin

June 2025

0. Basic information

- Purpose and subject of the survey

The purpose of the survey is collecting data on the government budget allocations for R&D according to the 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 Higher Education and Scientific Activity (NN, No. 119/22)

Act on State Subsidies for Research and Development Projects (NN, No 64/18)

Ordinance on State Subsidies for Research and Development Projects (NN, No 9/19)

Ordinance on Scientific and Artistic Areas, Fields and Branches (NN, Nos 118/09, 82/12, 32/13, 34/16 and 56/22)

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

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

Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics (OJ L 327, 17 December 2019)

Commission Implementing Regulation 2020/1197 of 30 July 2020 laying down technical specifications and arrangements pursuant to Regulation (EU) 2019/2152 of the European Parliament and of the Council on European business statistics repealing 10 legal acts in the field of business statistics (OJ L 271, 18 August 2020).

Relevant international standards

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

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

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

- Classification system

Classification of scientific and artistic areas and fields

Codebook of Socio-Economic Objectives

- Concepts and definitions

    Definitions in the field of research and development 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 comprise creative and systematic work undertaken in order to increase the stock of knowledge, including knowledge of man, culture and society, as well as considering how to devise new applications of available knowledge. There are three types of research and development: basic research, applied research and experimental development.

    Business enterprise sector comprises enterprises and institutions 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 that are not themselves 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 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, whatever 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 unit

    The observed statistical units are budgetary and extra-budgetary users of the government budget in the Repoublic of Croatia.

- Statistical population

    The statistical population comprises of budgetary and extra-budgetary users of the government budget in the Repoublic of Croatia.

1. Relevance

1.1. Data users

Users of data on government budget allocations for research and development are:

- external national users:
  - Ministry of Science and Education
  - the media
  - researchers and students

- external international users:
  - Directorates-General of the European Commission
  - researchers and students.

1.1.1. User needs

Directorate-generals for policies of the European Commission use survey data for a systematic and user-oriented presentation of internationally comparable indicators of state budget allocations for R&D (for all EU Member States) for analyses and publishing of data.

The Ministry of Science and Education uses suvey data for analysis, making of policies and strategies and for progress assessement.

The media use survey data for analyses and publishing.

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

1.1.2. User satisfaction

Targeted user satisfaction with data on state budget allocations for R&D is not measured.

The first survey on satisfaction of users of the Croatian Bureau of Statistics was carried out in 2013, then in 2015, and the most recent one at the end of 2022. The results can be checked out 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 was carried out in the Croatian Bureau of Statistics pursuant to the Annual Implementation Plan of Statistical Activities of the Republic of Croatia 2023 (NN, No. 35/23) and the Official Statistics Act (NN, No. 25/20). The EU legal basis for the implementation of the survey is Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics (OJ L 327, 17 December 2019) and Commission Implementing Regulation (EU) 2020/1197 of 30 July 2020 laying down technical specifications and arrangements pursuant to Regulation (EU) 2019/2152 of the European Parliament and of the Council on European business statistics repealing 10 legal acts in the field of business statistics (OJ l 271, 18 August 2020).

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 statistical population is carried out on all units that are budgetary and extra-budgetary users of the government budget in the Repoublic of Croatia.

2.2.2. Overcoverage rate

The indicator is not computed.

2.2.3. Measurement errors

Not applicable.

2.2.4. Nonresponse errors

Not applicable.

2.2.5. Unit nonresponse rate

Unit nonresponse rate is 6.3%.

2.2.6. Item nonresponse rate

Item nonresponse rate is 0%.

2.2.7. Processing errors

The survey is carried out on the Excel form (PIIR-1 form for the Ministry of Science and Education and PIIR-2 form for other state bodies) that contains 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 and, if necessary, contacts reporting units to get complete and accurate data.

2.2.8. Imputation rate

The indicator is not applicable. Imputatons are not implemented.

2.2.9. Model assumption error

Not applicable.

2.3. Data revision

2.3.1. Data revision – policy

The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics, on the link https://dzs.gov.hr/General Revision Policy of the CBS.

2.3.2. Data revision – practice

Revisions have not been done so far. The data are comparable with data for the previous years, including those for the period from 2009 to 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. Time lag – first results

Not applicable.

3.1.2. Timeliness – final results

Timeliness of final results is T + 12 months.

3.2. Punctuality

Timeliness of the release of results is T + 12 months.

3.2.1. Punctuality − delivery and publication

Results have been released on time, in line with the Calendar of Statistical Data Issues 2023.

4. Accessibility and clarity

- Website of the Croatian Bureau of Statistics – electronic versions of the First Release
- Website of the Croatian Bureau of Statistics – STS databases

4.1. News release

Survey data were released in the First Release ZTI-2023-2-2 Government Budget Allocations for Research and Development, 2022 – 2023.

4.2. Online database

Government budget allocations forR&D in PC-Axis

4.3. Microdata access

The conditions under which certain users can access microdata are regulated by the Ordinance on conditions and terms of access and use of confidential statistical data of the Croatian Bureau of Statistics for scientific purposes (NN, No 5/23).

4.4. Documentation on methodology

- Website of the Croatian Bureau of Statistics – electronic versions of the First Release
- Website of the Croatian Bureau of Statistics – STS databases
- Website of the Croatian Bureau of Statistics – Innovation, Science and Technology file.

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 data are comparable with data for the previous years, including those for the period from 2009 to 2010.

5.2.1. Length of comparable time series
Length of comparable time series is 13.

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.