

Statistical bulletin

Research and development expenditure by the UK government: 2023

Research and development and related expenditure by UK government departments and devolved administrations.

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1 . Main points

- The UK government's net expenditure on research and development (R&D) rose to £17.4 billion in 2023 from £16.1 billion in 2022, an increase of 8.2%.
- UK Research and Innovation (UKRI), excluding Research England, contributed the most to net expenditure on R&D, at £6.3 billion in 2023 (36.2% of total net expenditure on R&D).
- Total civil net R&D expenditure, comprising UKRI, higher education funding bodies and government departments, but excluding EU budget contributions of £375 million, rose by 7% (£943 million) to £14.4 billion in 2023. Ministry of Defence expenditure on R&D rose by 29% (£594 million) to £2.6 billion.
- In constant prices (adjusted for inflation), total civil net expenditure on R&D, excluding EU budget contributions, increased by 38.4% over the long term from £10.4 billion in 2012 to £14.4 billion in 2023.
- UK government expenditure on knowledge transfer activities related to R&D was £284 million in 2023, a decrease of £10 million (3.4%) since 2022.

2 . Data on research and development expenditure by the UK government

[Research and development expenditure by the UK government](#)

Dataset | Released 09 April 2025

Research and development and related expenditure by UK government departments and devolved administrations.

3 . Glossary

Research and development

Research and development (R&D) is defined as creative and systematic work undertaken to increase the stock of knowledge (including knowledge of humankind, culture, and society) and to devise new applications of available knowledge.

UKRI

[UK Research and Innovation \(UKRI\)](#) is a non-departmental public body sponsored by the Department for Science, Innovation and Technology (DSIT). It is the national funding agency investing in science and research in the UK. It brings together the UK's seven research councils, Innovate UK, and Research England.

OECD

The [Organisation for Economic Co-operation and Development \(OECD\)](#) is an international organisation of governments that exists to find solutions to social, economic, and environmental challenges.

Frascati Manual

The internationally recognised [Frascati Manual](#) sets out the methodology for collecting and using R&D statistics. It is published by the OECD and includes definitions of basic concepts, data collection guidelines, and classifications for compiling R&D statistics.

Knowledge transfer

Knowledge transfer (including technology transfer) activities are designed to help the sharing of ideas, research, results, and skills between researchers, businesses, and wider communities. These actions contribute to the dissemination and application of scientific and technical knowledge, including consultancy services, demonstration projects, and sharing information.

4 . Data sources and quality

This release provides estimates of research and development (R&D) performed in and funded by UK government departments and the devolved administrations.

The main source of estimates for this publication is the annual Government Research and Development Survey (GovERD). This is an annual census survey of UK government departments, the devolved administrations, UK Research and Innovation (UKRI), and higher education funding bodies.

In this release, R&D-related concepts follow internationally agreed standards defined by the Organisation for Economic Co-operation and Development (OECD), as published in the [Frascati Manual](#) (2015).

Estimates should not be confused with those in our [UK gross domestic expenditure on research and development \(GERD\) statistical bulletin](#), which was last published on 8 August 2024. GERD only includes expenditure on R&D performed "in-house", that is, by organisations themselves, in all sectors of the economy.

Most estimates in our [Research and development expenditure by the UK government statistical bulletins](#) are on a net expenditure basis. This is defined as in-house R&D performed, plus purchased or funding provided for R&D, less funding received for R&D.

The datasets also include estimates of expenditure on knowledge transfer activities related to R&D and the UK's contribution to the EU's R&D budget.

The periods referred to in this release relate to financial years, therefore references to 2023 relate to the April 2023 to April 2024 financial year.

All figures quoted are in current prices unless otherwise stated.

During work to improve the Producer Price Index (PPI) and the Services Producer Price Indices (SPPI), a problem was identified with the methods used to calculate these indices. Work is underway to address this problem, however no notable changes in recent economic trends are expected to result from this issue.

Users should be aware that the problem affects gross domestic product (GDP) deflator values going back several years. These are used to calculate R&D in constant prices and once the problem has been addressed there may be some revisions to R&D constant price estimates.

For further information see our statement about the [Pausing of Producer Prices publications](#).

Time series comparisons

Estimates for 2019 for total government research and development (R&D) expenditure and those specifically for defence are not strictly comparable with previous periods. This is because a methodological review of the Ministry of Defence's R&D statistics resulted in a decrease in R&D reported for 2019 and changes to the statistics following the review were not applied to previous periods.

Estimates in this release, for total civil net R&D expenditure, by UK government departments, the devolved administrations, UKRI, and higher education funding bodies, from 2019 onwards, are still comparable with previous periods. Therefore, time series comparisons for civil R&D are still possible.

Further details about changes to the defence statistics which affected comparability over time are available in our [2021 bulletin](#).

Quality

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in our [Research and development expenditure by the UK government quality and methodology information \(QMI\)](#).

5 . Related links

[Gross domestic expenditure on research and development, UK: 2022](#)

Bulletin | Released 8 August 2024

Estimates of research and development performed and funded by businesses, higher education, government, UK Research and Innovation, and non-profit organisations.

[Business enterprise research and development, UK: 2023](#)

Bulletin | Released 11 December 2024

Research and development (R&D) undertaken by businesses in the UK, including data on the type of R&D, sources of funds and regional distribution.

6 . Cite this statistical bulletin

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