

Statistical bulletin

Research and development expenditure by the UK government: 2022

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) (excluding EU R&D budget contributions) rose to £15.5 billion in 2022, from £14.0 billion in 2021, an increase of 10.5%.
- Total net expenditure on R&D, including EU R&D budget contributions and knowledge transfer activities was £16.4 billion in 2022, an increase of 8.9% from 15.0 billion in 2021.
- UK Research and Innovation (UKRI), which includes the UK's seven research councils, contributed the most to net expenditure on R&D (including EU R&D budget contributions plus knowledge transfer activities) at £6.2 billion in 2022, 37.9% of the total.
- Civil R&D expenditure rose by £1.3 billion to a total of £13.4 billion in 2022; this is a larger increase than the rise seen in defence R&D of £217 million which rose to a total of £2.1 billion in 2022.
- In constant prices (adjusted for inflation), total civil net expenditure on R&D and knowledge transfer activities increased by 32.6% over the long term, from £10.4 billion in 2011 to £13.7 billion in 2022.

2 . Research and development expenditure by the UK government data

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

Dataset | Released 30 April 2024

Research and development and related expenditure by UK government departments, UK Research and Innovation (UKRI) and higher education funding bodies; by current and constant prices. Formerly released as UK government expenditure on science, engineering and technology (SET).

3 . Measuring the data

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 \(2015\)](#) on OECD.org.

Estimates should not be confused with the [Gross domestic expenditure on research and development \(GERD\), UK](#) statistical bulletin, which was last published on 17 July 2023. GERD only includes expenditure on R&D performed "in house", that is, by organisations themselves, by 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, that is, 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 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 2022 relate to the financial year 2022 to 2023.

All figures quoted are in current prices unless otherwise stated.

Changes in defence R&D

A methodological review of the Ministry of Defence's R&D statistics resulted in a decrease in R&D reported for 2019. Therefore, defence statistics between 2018 and 2019 are not strictly comparable. Overall government expenditure totals for 2019 as well as those specifically for defence are therefore not strictly comparable with previous periods. Other values in this release from 2019 onwards, where defence is not a component, are comparable with previous periods.

Further details about defence changes 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 the [Research and development expenditure by the UK government QMI](#).

4 . Related links

[Gross domestic expenditure on research and development, UK: 2021](#)

Bulletin | Released 17 July 2023

Annual estimates of research and development performed and funded by business enterprise, higher education, government, UK Research and Innovation (UKRI), and private non-profit organisations.

[Business enterprise research and development, UK: 2022](#)

Bulletin | Released 27 February 2024

Spending and numbers employed on research and development by businesses in the UK, including data on sources of funds and regional spread, broken down by product sector, and civil and defence type of research.

5 . Cite this statistical bulletin

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