

Gross domestic expenditure on research and development, UK: 2024

Research and development (R&D) performed in the UK by businesses, higher education, government, and private non-profit organisations, with sources of funds for R&D.

Contact:
Research and Development team
RandD@ons.gov.uk
+44 1633 455718

Release date:
7 August 2026

Next release:
To be announced

Table of contents

1. [Main points](#)
2. [Data on gross domestic expenditure on research and development](#)
3. [Glossary](#)
4. [Data sources and quality](#)
5. [Related links](#)
6. [Cite this statistical bulletin](#)

1 . Main points

- Expenditure on research and development (R&D) performed in the UK was £79.4 billion in 2024; this is an increase of £3.6 billion since 2023, and £7.6 billion since 2022.
- The business sector accounted for the largest share of R&D expenditure, at £55.6 billion (70% of the UK total), followed by the higher education sector, at £17.9 billion (23% of the UK total).
- The government sector performed £4.7 billion of R&D (6% of the UK total); the private non-profit sector performed the least, at £1.2 billion (1% of the UK total).
- Total UK R&D expenditure represented 2.71% of gross domestic product (GDP) in 2024, falling slightly from 2.72% in 2023; this decrease is related to changes in the level of GDP rather than R&D.

From the 2022 reference period onwards, these statistics have been redesignated as accredited official statistics, so periods before 2022 are not included in this release. Read more in [Section 4: Data sources and quality](#).

2 . Data on gross domestic expenditure on research and development

[Gross domestic expenditure on research and development, UK: 2024 \(designated as accredited official statistics\)](#)

Dataset | Released 7 August 2026

Annual estimates of research and development in the UK performed and funded by business enterprise, higher education, government and private non-profit organisations.

3 . Glossary

BERD

Business enterprise research and development (BERD) statistics show R&D performed by businesses in the UK and how this was funded.

Frascati Manual

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

GERD

Gross domestic expenditure on research and development (GERD) statistics show R&D performed by all sectors of the UK economy and how this was funded.

GovERD

The Government expenditure on research and development (GovERD) statistics show R&D performed by government organisations and how this was funded.

HEFBs

These are the Higher Education Funding Bodies (HEFBs), comprising Research England (part of UKRI), Scottish Funding Council (SFC), Commission for Tertiary Education and Research (Medr) and the Department for the Economy in Northern Ireland (DfE).

OECD

The [Organisation for Economic Co-operation and Development \(OECD\)](#) is an intergovernmental organisation that exists to advise governments on social, economic and environmental policies.

PNP

Private non-profit (PNP) R&D statistics show R&D performed by private non-profit organisations in the UK and how this was funded.

Research and development

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

TRAC

The [Transparent Approach to Costing \(TRAC\)](#) is the data source for measuring R&D performed by the higher education sector. TRAC is the methodology developed with the higher education sector to help cost their activities.

UKRI

[UK Research and Innovation \(UKRI\)](#) is a non-departmental public body, which until the Machinery of Government changes in July 2026, was sponsored by the Department for Science, Innovation and Technology (DSIT). It is the national funding agency that invests in science and research in the UK. It brings together the UK's seven research councils, Innovate UK, and Research England. UKRI is part of the government sector.

4 . Data sources and quality

This release provides estimates of research and development (R&D) performed in, and funding received by, four sectors of the UK economy, as defined in the [Organisation for Economic Co-operation and Development \(OECD's\) Frascati Manual](#). These are:

- business enterprise R&D (BERD)
- higher education R&D (HERD)
- government R&D (GovERD)
- private non-profit organisations R&D (PNP)

R&D data from these sectors collectively form the Gross domestic expenditure on R&D (GERD) measure.

In this release, R&D and related concepts follow internationally agreed standards defined by the [OECD](#), as published in the Frascati Manual. GERD is the OECD's preferred measure of R&D activity for use in international comparisons.

R&D can be measured by the expenditure on R&D performed by an organisation, or the funding received by an organisation for R&D work. These are often, but not always, the same. Performance is regarded as a more reliable measure than funding received, as not all funds received may be used as intended. This release reports on R&D expenditure in UK organisations, irrespective of the country of residence of the ultimate owner or users of the R&D produced. All figures quoted are in current prices, unless otherwise stated.

Accredited Official Statistics status

The R&D statistics published in this release have been [redesignated as accredited official statistics](#) for the 2022 period onwards, following a review by the Office for Statistics Regulation (OSR). Therefore, the data tables only contain the periods 2022 to 2024. This is because of the redevelopment of the R&D statistics for the business and higher education sectors, which was fully implemented with effect from the 2022 survey period. More information about the redevelopment of the R&D statistics is available in our [Gross domestic expenditure on research and development, UK: 2023 bulletin](#).

Our [GERD statistics for periods before 2022](#) are still available on the Office for National Statistics (ONS) website but do not have the status of accredited official statistics and are therefore not included in this release.

Changes to presentation of government statistics in this release

We have changed how government sector statistics are presented in this edition of the GERD release. In Table 1 of the 2023 edition, UK Research and Innovation (UKRI) was shown separately from the rest of government as a sector performing R&D. In the 2024 edition, only an overall government total is shown, which includes UKRI. Similarly, the source of funds estimates in this table for 2024 show the overall government total including UKRI and the higher education funding bodies.

Table 1 in 2024 shows that the government sector, including UKRI, performed £4.7 billion of R&D. The equivalent of this figure for 2023, originally published in the 2023 release, comprised government, excluding UKRI, of £2.8 billion and UKRI of £1.5 billion, totalling £4.3 billion.

Similar changes have been made in Tables 2, 3 and 4 to include overall government sector totals rather than just the individual components.

The previous format showing the detailed components from Table 1 of the 2023 release is recreated in Table 6 in this release. However, this table does not include the business and private non-profit sectors as these sectors do not collect full breakdowns of their sources of funding from government.

Higher education sector

The source for the measurement of R&D performed in the higher education sector is the [Transparent Approach to Costing \(TRAC\)](#). Results from TRAC were not available in time for inclusion in the GERD 2024 release. Therefore, the 2024 values for the higher education sector have been estimated in this release. These values will be revised as necessary when the GERD 2025 release is published in 2027.

Deflator for constant price estimates

Estimates in our GERD data tables are presented in current and constant prices. Historically, the gross domestic product (GDP) expenditure deflator has been used to create the constant price series. However, an R&D deflator has been developed for compiling constant price estimates of R&D in the National Accounts. We have introduced the use of the R&D deflator to calculate the constant price estimates in this release, replacing the use of the GDP expenditure deflator. The R&D deflator version we have used is consistent with Blue Book 2025. More information about the R&D deflator is available in our [Deflator improvements to the UK National Accounts: Blue Book 2025 article](#).

Other changes to data tables

Estimates of funding breakdowns for civil and defence R&D are not available for R&D performed by the higher education sector from TRAC. Therefore, the table showing expenditure on civil and defence R&D by sector of funding is no longer included in this release.

Breakdowns of expenditure on civil and defence R&D by the business and government sectors have already been published as usual in our [Business enterprise research and development, UK: 2024](#) bulletin and our [Research and development expenditure by the UK government: 2024 bulletin](#).

5 . Related links

[Research and development expenditure by the UK government, UK: 2024](#)

Bulletin | Released 17 April 2026

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

[Business enterprise research and development, UK: 2024](#)

Bulletin | Released 28 November 2025

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

6 . Cite this statistical bulletin

Office for National Statistics (ONS), released 7 August 2026, ONS website, statistical bulletin, [Gross domestic expenditure on research and development, UK: 2024](#)