



A guide to UKRI competitive funding data

UK Research and Innovation

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1. Introduction

This document provides a comprehensive guide to the UKRI competitive funding data published by UK Research and Innovation.

The key areas covered in this guide are:

- Background to published data
- Definitions and coverage
- Data processing

1.1 Uses and Users

The published data are used frequently in answers to parliamentary questions and public enquiries, including those made under the Freedom of Information Act.

The data are used internally as a base dataset to understand more widely the impact of funding decisions on for example equality, diversity and inclusion. The data are used by the academic research community and by central government, Department for Business, Energy and Industrial Strategy.

2. Background to published data

UKRI brings together the seven Research Councils, Innovate UK, and Research England into one organisation.

These datasets show the competitive funding decisions made by UKRI from the 1 April 2021 to the 31 March 2022. The data publication supported the highlight figures and text in the UKRI Annual Report and Accounts 2021-22.

Our UKRI Investment and Outputs for 2021-22 are published here:

<https://www.ukri.org/what-we-offer/what-we-have-funded/competitive-funding-decisions/>

This standardised approach enables UKRI to incorporate all the councils in a consistent and easily comparable way.

2.1 Historical Publications

Previous publications for 2020-21 and a five-year dataset covering 1 April 2015 to 31 March 2020 are available here: <https://www.ukri.org/what-we-offer/what-we-have-funded/competitive-funding-decisions/>

3. What are the UKRI funding inputs?

This dataset is an overview of activity by UKRI to support research and innovation it provides an indication of the demand from the community, their response to our competitive funding opportunities and our commitment.

Competitive funding is not reflective of all the UKRI budget. It doesn't include strategic funding (such as block grants to institutes), training awards including studentships, or, quality related research funding and other formula funding from Research England. These can be found in the financial statements of the Annual Report.

The released dataset is a breakdown of the data presented in Table 2: Competitively awarded applications in 2021-22 of the UKRI Investment and Outputs 2021-22. The content, definitions and limitations for each of the tables is described below.

Table 1: Applications received in 2021-22

Summary:

Describes the number of applications received during the 2021-2022 financial year, the number of organisations applying for funding and the total amount of funding applied for (in units of million pounds). This information is broken down by the following grant categories: Research and Innovation, Fellowships and UKRI response to COVID.

Definitions:

Applications are defined using the date the application was received.

The number of organisations includes lead organisations for Research Councils and Research England, and lead and partner organisations for Innovate UK.

The total applied for is a sum of the amount requested by the applicants at the point of application, rounded to the nearest million pounds.

Limitations:

Since there is no common organisation identifier common to the Research Councils, Innovate UK and Research England, it was not possible to rule out double counting of organisations.

Table 2: Competitively awarded applications in 2021-22

Summary:

Describes the number and value of competitively assessed and awarded applications during the 2021-2022 financial year, and associated award rate. This information is broken down by grant category.

Competitively assessed applications are defined as decisions to fund or reject applications, based on the date the decision was made and regardless of the application date.

Competitively awarded applications are defined as decisions to fund applications, based on the date the decision was made and regardless of the application date.

The value of competitively assessed applications is a sum of the amount requested by the applicants at the point of application, for all applications with decisions made, rounded to the nearest million pounds,

The value of competitively awarded applications is a sum of the amount committed by UKRI, rounded to the nearest million pounds, and is not reflective of actual expenditure. For information on UKRI expenditure please see the UKRI Annual Report and Accounts.

The award rate by number and by value is the total number/value of decisions to fund as a percentage of the total number/value of competitive funding decisions.

Definitions

Award rate by number

$$= \left(\frac{\text{total number of application awarded}}{\text{total number of applications competitively assessed}} \right) \times 100$$

$$\begin{aligned} & \textit{Award rate by value} \\ & = \left(\frac{\textit{amount awarded}}{\textit{amount applied for}} \right) \times 100 \end{aligned}$$

Limitations

Table 3: Regional Breakdown of competitively assessed awards in 2021-22

Summary:

Describes the number and value of competitively assessed and awarded applications during the 2021-2022 financial year, and associated award rate. This information is broken down by International Territorial Levels (ITL).

Definitions:

The regions and nations are presented according to the Office for National Statistics geocode standard of ITL.

The allocation of award to an ITL is based on the postcode of the lead organisation.

Limitations:

The location of the lead organisation may not be where the research takes place.

There are a number of funded organisations that are based outside the UK, they have an unknown ITL.

Table 4: Project partner contributions on competitively awarded applications in 2021-22

Summary:

Describes the number of project partners, the number of awards with project partners and the total financial contribution made by project partners, rounded to the nearest million pounds. These figures are summarised for all competitively awarded applications (see Table 2) made during the 2021-2022 financial year and are broken down by the project partner organisation sector.

Definitions:

Project partners are organisations providing specific contributions (either direct or indirect) to the research project.

Project partner sectors are categorised as academic / university / learned society (includes universities, academic institutes, independent and public research organisations), charity/non-profit, private (includes private businesses, industrial organisations, trade associations and RTOs) and public (including NHS trusts) organisations.

The number of awards is a count of the awards granted during the financial year (competitively awarded applications, see Table 2) that have financial contributions from project partners.

The number of partnerships is a distinct count of specific project partners being associated with specific awards. Each project partner may contribute to more than one award and each award may have more than one contributing partner.

The number of organisations is a count of the project partner organisations contributing financially to awards granted during the financial year.

The total contribution is a sum of the financial contribution (in cash or in kind) made by project partners within each sector to awards granted during the financial year, rounded to the nearest million pounds.

Limitations:

Since there is no organisation identifier common to the Research Council, Innovate UK and Research England data, it has not been possible to rule out the double counting of organisations.

Research England do not attribute co-investment to specific project partners. The count of project partner organisations therefore does not include partners on Research England awards; however, these awards are reflected in the count of awards, partnerships, and contributions

Since one award can involve many project partners from different sectors, and Research England awards are only included in the ‘overall total across sectors’, the sum of awards across sectors will not equal the overall total.

Table 5: Who our funding actively supported in 2021-22

Summary:

The number of grants active during the 2021-2022 financial year and the number of individuals and organisations supported by those active grants.

Definitions:

Active grants are defined using the start and end date of funded grants and fellowships.

Individuals supported include Principal Investigators, Co-Investigators, Fellows (Research and Innovation Grants and Fellowships) and Students (Studentships).

The count of organisations includes lead organisations only.

Limitations:

Research England and Innovate UK only track the organisations they fund and not the individuals involved. For this reason, the number of people (individuals) supported excludes Innovate UK and Research England data.

Since there is no common organisation identifier common to the Research Councils, Innovate UK and Research England, it was not possible to rule out double counting of organisations.

Table 6: Organisations supported in 2021-22

Summary:

The number of lead organisations supported by grants active during the 2021-2022 financial year, broken down by organisation type.

Definitions:

Organisations are categorised as academic / university / learned society (includes universities, academic institutes, independent and public research organisations),

charity/non-profit, private (includes SMEs) and public (including NHS trusts) organisations.

Limitations:

Since there is no organisation identifier common to the Research Council, Innovate UK and Research England data, it has not been possible to rule out the double counting of organisations.

Table 7: Number of Research Council funded PhDs submitted by calendar year

Summary:

The number of PhDs submitted during each calendar year, for 2017-2021. The data in this table is summarised by calendar rather than by financial year.

Definitions:

The number of PhDs submitted is summarised using the calendar year of the recorded PhD submission date.

Table 8: Applications from 2019-20 to 2021-22

Summary:

Describes the number of applications received by financial year, the number of organisations applying for funding and the total amount of funding applied for (in units of million pounds)

Definitions:

Applications are defined using the date the application was received.

The number of organisations includes lead organisations for Research Councils and Research England, and lead and partner organisations for Innovate UK.

The total applied for is a sum of the amount requested by the applicants at the point of application, rounded to the nearest million pounds.

Table 9: Competitively assessed applications from 2019-20 to 2021-22

Summary:

Describes the number and value of competitively assessed and awarded applications by financial year, and associated award rate. This information is broken down by grant category.

Competitively assessed applications are defined as decisions to fund or reject applications, based on the date the decision was made and regardless of the application date.

Competitively awarded applications are defined as decisions to fund applications, based on the date the decision was made and regardless of the application date.

The value of competitively assessed applications is a sum of the amount requested by the applicants at the point of application, for all applications with decisions made, rounded to the nearest million pounds,

The value of competitively awarded applications is a sum of the amount committed by UKRI, rounded to the nearest million pounds, and is not reflective of actual expenditure. For information on UKRI expenditure please see the UKRI Annual Report and Accounts.

The award rate by number and by value is the total number/value of decisions to fund as a percentage of the total number/value of competitive funding decisions.

4. What are the UKRI competitive funding decisions?

The data summarised in Table 2 is also broken down further and published alongside the annual report in a separate excel file. This excel file includes Research and Innovation Grants, Fellowships and UKRI response to COVID-19.

The following additional information is summarised:



Grant Category: The number and value of decisions made in 2021-22 aggregated by UKRI Council and Grant Category.

Organisation: The number and value of decisions made in 2021-22 aggregated by Lead organisation.

Organisation by Council and Pan UKRI Fund: The number and value of decisions made in 2021-22 aggregated by UKRI Research Council and Lead Organisation.

Organisation by lead and collaborating: The number of decisions made in 2021-22 aggregated by lead and collaborating organisations.

Awards: Details of the awards offered in 2021-22 including UKRI Council, Grant Reference, Amount awarded, Project title, Lead Organisation Flag, Organisation and amount awarded. Some awards may have been declined by the Organisation after the award offer. This data is a subset of the data available in Gateway to Research, which provides more detail about the award, collaborating organisations and reported impact.

Awards collaborating details: Details of the awards offered in 2021-22 including Collaborating and Lead Organisations, Principal Investigators, Co-Investigators and Fellows.

The fields in the competitive funding decisions file are defined as follows:

Number of applications: This is the number of applications that were considered for funding between 1 April 2021 and 31 March 2022, defined using the date on which a funding decision was made and regardless of when the application was received.

Number of decisions: A decision to fund an application is made based on the research, knowledge exchange and/or innovation quality of the proposal assessed by peer review. This is the number of applications where there was a successful decision to fund.

Applied value: the amount requested by the applicant at the point of application, rounded to the nearest thousand pounds.

Awarded value: the amount committed by UKRI and is the total value committed to spend over the duration of the grant, rounded to the nearest thousand pounds. It is not

reflective of actual expenditure. For information on UKRI expenditure please see the UKRI Annual Report and Accounts.

The award rate: by number and by value is the total number/value of positive decisions taken to fund applications as a percentage of the total number/value of applications that were considered for funding.

$$\begin{aligned} & \text{Award rate by number} \\ &= \left(\frac{\text{total number of application awarded}}{\text{total number of applications competitively assessed}} \right) \times 100 \end{aligned}$$

$$\begin{aligned} & \text{Award rate by value} \\ &= \left(\frac{\text{amount awarded}}{\text{amount applied for}} \right) \times 100 \end{aligned}$$

Research Organisation: The organisations who applied for UKRI funding. This list contains Universities, Academic organisations, Independent Research Organisations, Research Institutes and businesses. Detail for organisations funded by Innovate UK and Research England are not included due to commercial sensitivity.

Grant Category: Research and Innovation Grants and Fellowships are included. This dataset excludes Studentships, Outline Grants, and directed strategic funding to Centres, Institutes and Units.

5. Data Processing

The sections below outline how the UKRI funding data goes from operational data to a finalised data set for release and reuse.

5.1 Data Sources

The data are collected from:

- Joint electronic Submission system (Je-S) for the Research Councils (50.4% of awards in the competitive funding decisions dataset).
- Innovation Funding Service for Innovate UK (49.3% of awards in the competitive funding decisions dataset).

- Research England’s application process (>1% of awards in the competitive funding decisions dataset).
- Additional funding decisions captured outside the above systems such as rapid response funding (including ‘UKRI response to COVID’), opportunities administered by funders outside of UKRI and grants awarded to MRC Institutes, Units and Centres (>1% of awards in the competitive funding decisions dataset).

5.2 Data Union

The data from the different systems have been brought together with a singular methodology using similar data fields. The table below demonstrates the fields used in the publication for each data source.

Field Name	Je-S (Research Councils)	Innovation Funding Service (Innovate UK)	Application process for Research England	Additional funding decisions
Grant Category	Grant Category (Research Grant, Fellowship)	Assigned “Research and Innovation Grant”	Assigned “Research and Innovation Grant”	Grant Category (Research Grant, Fellowship)
Reference	Grant Reference	Application Number	Grant Reference	Grant Reference
Lead Organisation Flag	Primary Flag	Is Lead Participant	N/A	N/A
Organisation	Research Organisation	Organisation	Organisation	Research Organisation
UKRI Council	Research Council	Innovate UK	Research England	Research Council
Amount Applied For	Amount Applied For (80% fEC ¹)	Amount Applied For	Amount Applied For	Amount Applied For
Amount Awarded	Amount Awarded (80% fEC)	Amount Awarded	Amount Awarded	Amount Awarded

TABLE 1 – COMMON DATA FIELDS ACROSS THE DATA SOURCES USED IN THE UNION

¹ Full Economic Cost

5.3 Data Removed

Awards that are commercially sensitive have been removed from the following tabs in the competitive funding decisions excel file: 'Awards' and 'Awards Collaboration Details'. This includes:

- Commercial organisations applying for Research Council funding.
- Organisations applying for Innovate UK funding.
- Organisations applying for Research England competitive funding.
- Applications that have been administered by Research England for UKRI funding.

5.4 Data Quality

The following should be considered when reviewing the UKRI funding data.

The data represents the commitment made to support research and innovate not actual expenditure.

This dataset is not comprehensive of all UKRI funding. It represents the delivery of competitive funding through funding opportunities.

There has been no consideration of Council demand management policies impact on the number of applications received.

Additional funding decisions captured outside of Je-S, Innovation Funding Service and Research England's application process may not include decisions on the unsuccessful application data. For example, where UKRI is working with another funder who leads on the application process, we would only record the successful grant applications.

The applied for and award values have been rounded to the nearest million for Tables 1-6, and to the nearest thousand for the competitive funding decisions excel file. award values are available on Gateway to Research.

In the case of the Research Councils the lead organisation is based on the Research Organisation that led on the grant application. The collaborating organisation is based on the Je-S account of the Co-Investigator as of 1 April 2022, not the grant application details, and may be incorrect as researchers change organisations.

For Research Council data the region of an organisation is based on the postcode contained in the organisation's Je-S account.

6. Dashboard

Alongside the data release are two dashboards showing a visual representation of:

- UKRI Competitive Funding Decisions in 2021-22
- Lead and Collaborating Organisations in 2021-22

6.1 UKRI funding decisions in 2021-22

The dashboard can be filtered by measure: number of awards; value of awards; award rate by number; award rate by value; Grant category; and UKRI council. The circles at the top of the dashboard show the selected measures for each council, with the UKRI total shown on the left.

The map on the bottom left shows the selected Measure by the UK Region of the lead Research Organisation on the award. Only includes lead organisations where the region is known.

The scatter graph on the middle right shows the number of applications against the number of awards for each Research Organisation. Each point represents a Research Organisation.

The box plots on the bottom right show the selected Measure by Council and Research Organisation. Each column represents a council. Each circle represents a Research Organisation.

6.2 Lead and Collaborating Organisations in 2021-22

Research and Innovation Grants only. Research Councils only.

The dashboard can be filtered by:

- Organisation

Select the organisation that you wish to view data for.

- Relationship

Lead to Collab: The selected organisation is the lead organisation on the research, and the other organisations are collaborating.

Collab to Lead: The selected organisation is a collaborating organisation, and the other organisations are the lead.

Collab to Collab: The selected organisation and the other organisations are all collaborating organisations and are not leading.

- UKRI Council

Choose a specific Research Council.

Applications, Awards and Award Rates for <selected organisation>

Shows the number of applications, awards and the award rate for the selected organisation. Broken down by the role of the selected organisation: Lead and Collab. Includes a total across the roles.

Number of organisations collaborating with <selected organisation>

The distinct count of organisations collaborating with the selected organisation broken down by relationship. Includes a total across the relationship types.

Location of <selected organisation>

Two maps showing the location of the selected organisation; one of the world based on the country of the organisation, and one of the UK based on the postcode of the organisation.

Location of the organisations collaborating with <selected organisation>

Two maps showing the location of the organisations collaborating with the selected organisation. Tooltips show the relationship between the organisations. The world map is based on the country of the organisation. The UK map is based on the postcode of the organisation.



7. Contacts

Data questions:

Contact UKRI Data Team: data@ukri.org

General enquiries:

Contact: communications@ukri.org