

Statistical bulletin

# UK government expenditure on science, engineering and technology: 2014

Science, engineering and technology (SET) expenditure by the UK government includes expenditure by government departments, Research Councils and Higher Education Funding Councils (HEFCs). It also includes the indicative UK contributions to the EU's research and development expenditure.

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## 1. Main points

In 2014, the UK government spent £11.0 billion on science, engineering and technology (SET), an increase of 0.4% in current prices compared with 2013. Allowing for inflation (in constant prices), this was a 1.0% decrease compared with 2013.

The UK Research Councils contributed the most to expenditure on SET in 2014 at £3.4 billion, 31% of all expenditure on SET. This total was a decrease of 3% in current prices compared with 2013.

Between 2003 and 2014, defence expenditure on SET decreased by £1.1 billion in constant prices to £1.7 billion. Over the same period there was an increase in Research Councils' expenditure on SET of £0.5 billion.

The 2014 SET estimate of £11.0 billion consists of expenditure on research and development (R&D) of £10.1 billion, indicative UK contributions to EU R&D expenditure of £0.6 billion and the amount spent on knowledge transfer at £0.3 billion.

## 2. Statistician's quote

"Total UK government expenditure on science, engineering and technology was £11.0 billion in 2014 – that's up 0.4% from 2013. However, the defence component increased by 12% between 2013 and 2014 to £1.7 billion."

Kate Davies, Surveys and Economic Indicators Division, Office for National Statistics

## 3. Things you need to know

Science, engineering and technology (SET) expenditure by the UK government covers expenditure by government departments, Research Councils and Higher Education Funding Councils (HEFCs). It also includes indicative UK contributions to the EU's research and development (R&D) expenditure. This should not be confused with the <a href="UK Gross domestic expenditure on R&D: 2014 (GERD)">UK Gross domestic expenditure on R&D: 2014 (GERD)</a> statistical bulletin published on 18 March 2016, which only includes expenditure on R&D performed "in-house", that is, by organisations themselves, by all sectors of the economy. This is explained in more detail in Section 13 (Quality and methodology).

SET statistics consist of:

- UK government expenditure on R&D plus knowledge transfer (commonly known as SET): <u>Tables 1 and 2</u> in the <u>dataset</u>
- knowledge transfer activities (including technology transfers) that are associated with research and experimental development, and contribute to the dissemination and application of scientific and technical knowledge: separately identified in Tables 5 and 6
- expenditure on R&D (excluding knowledge transfer): Tables 3 and 4
- indicative UK contributions to the EU's R&D expenditure: included in Tables 1 to 4

Estimates of R&D include in-house R&D, purchased R&D or funding provided for R&D, less funding received for R&D, and are therefore on a net expenditure basis. Table 15 shows the breakdown of net expenditure on R&D in the government sector.

There are 2 types of estimates in this release: current and constant prices. Estimates in current prices present the value of expenditure in cash terms. Constant price estimates (available from 2003 in this bulletin) have been adjusted for inflation between years using the gross domestic product (GDP) deflator. This allows changes in government expenditure on SET to be examined on a comparable basis over time.

This SET release also includes data tables on qualified scientists and engineers in the labour force by sex (Tables 16 and 17).

In this statistical bulletin, R&D and related concepts follow internationally agreed standards defined by the <u>Organisation for Economic Cooperation and Development (OECD)</u>, as published in the <u>Frascati Manual (2002)</u>. This manual defines R&D as "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications".

The Frascati Manual was originally written by, and for, the experts in OECD member countries that collect and issue national estimates of R&D. The definitions provided in this manual are internationally accepted and serve as a common language for designing and evaluating science and technology policy.

The estimates in this bulletin and associated data tables relate to financial years. The main source of estimates for this publication is the annual Government Research and Development survey (GovERD).

#### **Notes**

- 1. Please note an updated <u>Frascati Manual (2015)</u> was introduced in October 2015, which improved the definitions and explanations of R&D.
- 2. The GDP measure used is non-seasonally adjusted money GDP from 1955-56 to 2014-15 (1955 to 2014) consistent with UK Economic Accounts Quarter 3 (July to Sept) 2015 published on 23 December 2015.

### 4. SET expenditure 2014

In 2014, £11.0 billion was spent on SET by the UK government, an increase of 0.4% in current prices compared with 2013. In constant prices, SET expenditure decreased by 1% compared with 2013. This value was 2% below the £11.2 billion seen in 2003 (Figure 1).

Figure 1: UK government expenditure on SET, 2003 to 2014

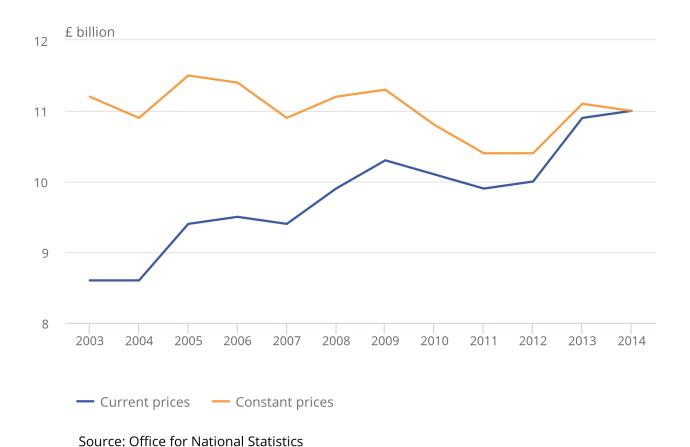
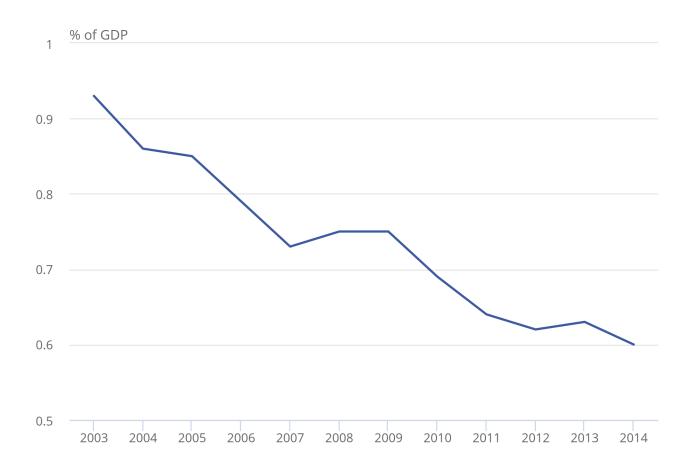


Figure 2 shows UK government expenditure on SET as a percentage of GDP. Total expenditure on SET in 2014 represented 0.6% of GDP. This estimate has seen a downward trend in recent years.

Figure 2: UK government expenditure on SET as a percentage of GDP, 2003 to 2014



**Source: Office for National Statistics** 

### 5. SET expenditure by sectors of the UK government

The UK government's expenditure on SET can be categorised into expenditure by Research Councils, Higher Education Funding Councils (HEFCs), and by civil and defence departments, all of which include elements of knowledge transfer. The indicative UK contributions to EU R&D expenditure provided by HM Treasury are also included in SET expenditure. Figure 3 shows the contribution each of these made to the 2014 total SET estimate. Almost a third (31%) of UK government expenditure on SET was by Research Councils, with civil departments and HEFCs contributing 26% and 22% respectively. The remainder of the SET estimate consisted of defence expenditure (16%) and contributions to EU R&D expenditure (6%).

Figure 3: The components of UK government expenditure on SET, 2014

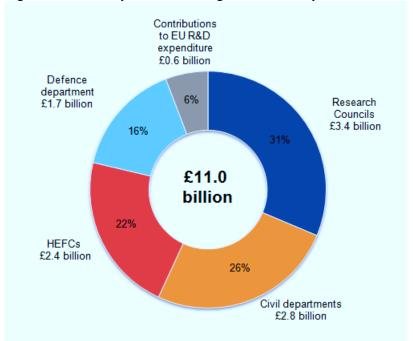
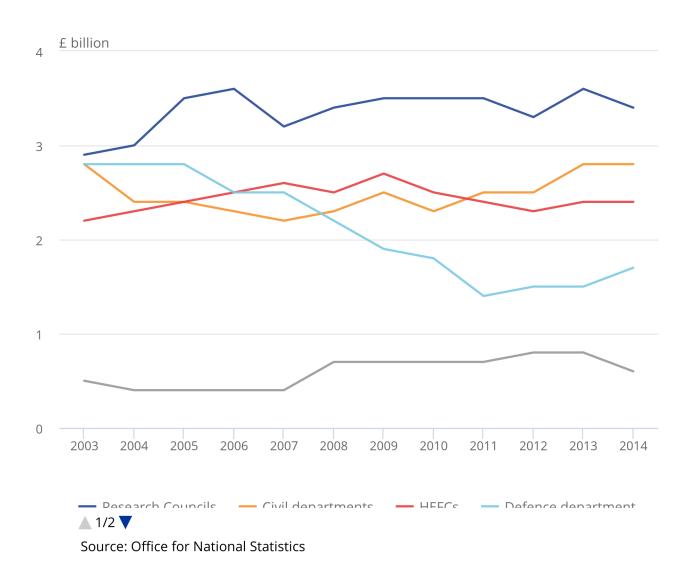


Figure 4 shows changes in SET components between 2003 and 2014 in constant prices. Defence expenditure decreased by £1.1 billion (39%), from £2.8 billion in 2003 to £1.7 billion in 2014. Over the same period there was an increase in Research Councils' expenditure on SET of £0.5 billion.

The defence estimate of £2.8 billion for 2003 was arrived at during a time of change for the Ministry of Defence (MoD), with changing internal structures and the introduction of new accounting systems, as well as a review to ensure that Frascati Manual definitions were being adhered to. Caution is therefore advised when using the SET defence estimate for this period, as it is likely to be overestimated. More information on defence statistics can be found in Note 2 of Section 13 (Quality and methodology).

Figure 4: The components of UK government expenditure on SET in constant prices, 2003 to 2014



## 6. Decrease in Research Councils' expenditure on SET

Research Councils UK (RCUK) is the strategic partnership of the UK's 7 Research Councils. Each year the Research Councils perform research covering the full spectrum of academic disciplines, from the medical and biological sciences to astronomy, physics, chemistry, engineering, social sciences, economics, environmental sciences and the arts and humanities.

In 2014, expenditure on SET by Research Councils was £3.4 billion, a decrease of £0.1 billion (3%) in current prices compared with 2013. Allowing for inflation (in constant prices), this was a decrease of £0.1 billion (4%) compared with 2013.

The research council with the highest expenditure on SET (£0.9 billion in 2014) continued to be the Engineering and Physical Sciences Research Council (EPSRC), representing 26% of Research Councils' SET expenditure. However, this saw a drop of 8% in current prices.

The Research Councils' estimated expenditure on SET includes their pension arrangements. These pension contributions are included separately on the datasets associated with this publication (Figure 5).

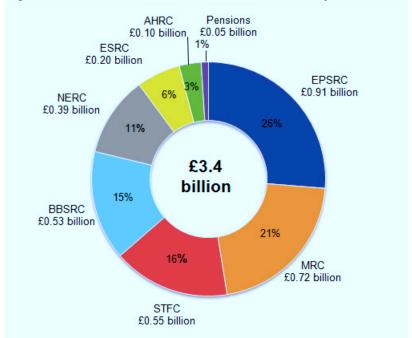


Figure 5: Breakdown of UK Research Councils' expenditure on SET, 2014

## 7. Civil departments' expenditure on SET increases

The UK government owns many research institutes and laboratories that carry out R&D. These are managed by various government departments. It also uses a range of different suppliers with facilities to carry out research, both inside and outside the UK.

In 2014, expenditure by civil departments on SET was £2.8 billion, showing a slight increase of £14 million (0.5%) in current prices compared with 2013. In 2014, 5 departments contributed £2.7 billion (96%) to the 2014 total. The civil department with the largest expenditure on SET was the Department for Health (including the National Health Service) which represented 38% (£1.1 billion) of total civil departments' expenditure on SET (Figure 6).

Department for Environment, Food and Rural Affairs Other Civil Departments £0.10 billion £0.12 billion Scottish Government £0.17 billion Department of Health (including 6% Department for £1.08 billion International Development 11% £0.32 billion £2.8 billion 36% Department for Business, Innovation and Skills £1 02 billion

Figure 6: Breakdown of UK government civil departments' expenditure on SET, 2014

## 8. Increase in Higher Education Funding Councils' (HEFCs) expenditure on SET

HEFCs promote and fund teaching and research in higher education institutions (HEIs).

All HEIs (including universities) provide finance statistics to the <u>Higher Education Statistics Agency (HESA)</u>. Grant income provided by HEFCs is used as a proxy to estimate government-funded R&D expenditure in HEIs. More information can be found in <u>Note 3 of Section 13</u> (Quality and methodology).

In 2014, expenditure on SET by HEFCs was £2.4 billion, an increase of £0.1 billion (3%) in current prices compared with 2013. Allowing for inflation (in constant prices) this was an increase of £34 million (1%) compared with 2013 and an increase of £0.2 billion (10%) since 2003. This was in contrast to the decrease from the peak of £2.7 billion in 2009 (Figure 4).

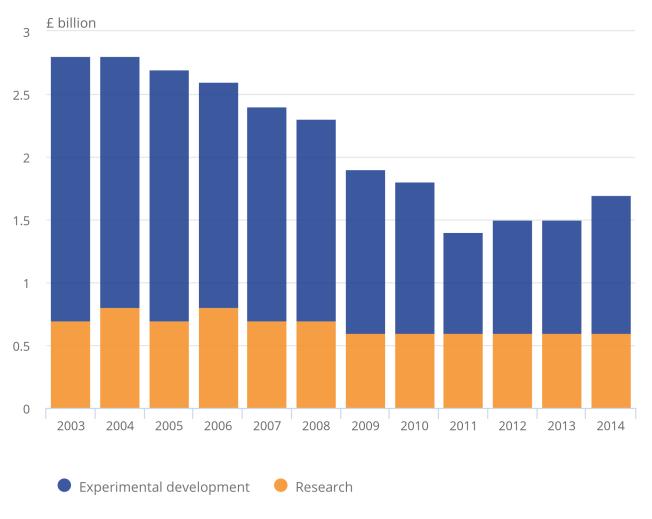
The Higher Education Funding Council for England (HEFCE) provides the most research funding as it has the highest number of HEIs. In 2014, expenditure by HEFCE on SET was  $\mathfrak{L}1.8$  billion. This was 76% of the total HEFCs' expenditure on SET, a similar level to recent years.

## 9. Defence expenditure on R&D increases but down on 2003 peak

In 2014, defence expenditure on SET was £1.7 billion, an increase of £0.2 billion (12%) in current prices compared with 2013. This is attributable to a 17% increase in experimental development. Allowing for inflation (in constant prices) defence expenditure also increased by £0.2 billion (11%) compared with 2013, the third consecutive increase in recent years. This was still a decrease of £1.1 billion (39%) when compared with 2003 (Figure 7).

Figure 7: Defence expenditure on SET by research and experimental development, in constant prices, 2003 to 2014

Figure 7: Defence expenditure on SET by research and experimental development, in constant prices, 2003 to 2014



**Source: Office for National Statistics** 

## 10 . Indicative UK contributions to EU R&D expenditure

In 2014, the indicative contributions that the UK made to EU R&D expenditure totalled £0.6 billion. This is an increase in constant prices of £0.1 billion (25%) since 2003. These figures were provided by HM Treasury and are broad estimates. This is because member states' contributions are not made to individual expenditure programmes, but to the EU budget as a whole. They are therefore referred to as "indicative UK contributions to EU R&D expenditure".

#### 11. Your views matter

We aim to improve this release and its associated commentary. We welcome any feedback you have and are particularly interested to know how you make use of these estimates to inform your work. Please contact us using the details accompanying this release.

## 12. Main issues specific to this bulletin

Please note that, when examining the datasets included in this release, there may be discrepancies between totals and the sum of their independently rounded parts. Caution should also be taken when examining departmental time series.

## 13. Quality and methodology

#### 1. General information

Prior to 2012, the UK science, engineering and technology (SET) estimates were previously published annually by the <u>Department for Business</u>, <u>Innovation and Skills (BIS)</u>, using estimates collected by us. If you have any questions regarding the levels of SET expenditure by government departments, or any other queries related to science and technology policy, please contact BIS at <u>enquiries@bis.gsi.gov.uk</u>

SET statistics are broader than just in-house research and development (R&D) as reported in the <u>UK Gross</u> domestic expenditure on research and development: 2014 (GERD) statistical bulletin. This is because the GERD bulletin only includes estimates of expenditure on R&D performed in-house, that is by organisations themselves, whereas SET estimates also include expenditure on externally purchased or funded R&D, as well as taking account of funding received for R&D. In-house expenditure plus purchased or funding provided to other organisations, less funding received, when aggregated together form the concept of "net expenditure" on R&D, which is the basis for SET estimates.

As a result, the estimate of the R&D component of the UK government's net expenditure on SET in 2014 (£10.1 billion) is more than 4 times larger than the UK government departments' expenditure on performing in-house R&D, as recorded in the 2014 UK GERD (£2.2 billion). Figure 8 and its accompanying table show the amount that each SET contributor spent in 2014 on in-house R&D performed in the UK, and on total SET net expenditure. Please note that HEFCs are only funders of R&D as they do not perform R&D themselves. Therefore the HEFCs' value in Figure 8 is all classed as SET expenditure. It is also unknown where and how UK contributions to EU R&D expenditure are spent, so none of these estimates are regarded as R&D performed in the UK. Table 15 in the dataset shows how the government net expenditure on R&D is calculated.

SET additionally includes the UK's indicative contributions to EU R&D expenditure and expenditure on knowledge transfer. Knowledge transfer (including technology transfers) activities are designed to help the conveyance 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. Examples include developing partnerships, establishing forums for knowledge exchange, specialist training, and licensing.

The main source of the estimates related to UK government departments, Research Councils and Higher Education Funding Councils (HEFCs), is our annual Government Research and Development survey (GovERD).

Launch Investment is a risk-sharing government investment in the design of civil aerospace projects in the UK. The investment is repayable at a real rate of return, usually via levies on sales of the product. Launch Investment is only available to the civil aerospace sector, and is permitted under the <u>Civil Aviation Act 1982</u>, which charges the Secretary of State with "organising, carrying out and encouraging measures for the designing, development and production of civil aircraft". These values have been negative every year since 2004. See the Department for Business, Innovation and Skills' (BIS) <u>Annual Report and Accounts 2013-14</u> for more information. The UK government's commitment to the UK civil aerospace sector is documented in the <u>Aerospace Growth Partnership</u>.

The categories, as presented in Table 7, are defined by the UK government's primary purpose for the R&D activity, and not the intentions of the researchers or the end result. The primary purposes are:

- general research all basic and applied R&D which advances knowledge for its own sake and support for post graduate research studentships (PhDs)
- government services R&D relevant to any aspect of government service provision (all defence expenditure is included here)
- policy research R&D which government funds to create new knowledge which informs policy making (excluding government services and technology research), and for monitoring developments of significance for the welfare of the population
- technology research applied and/or strategic R&D that advances the technology underpinning the UK economy

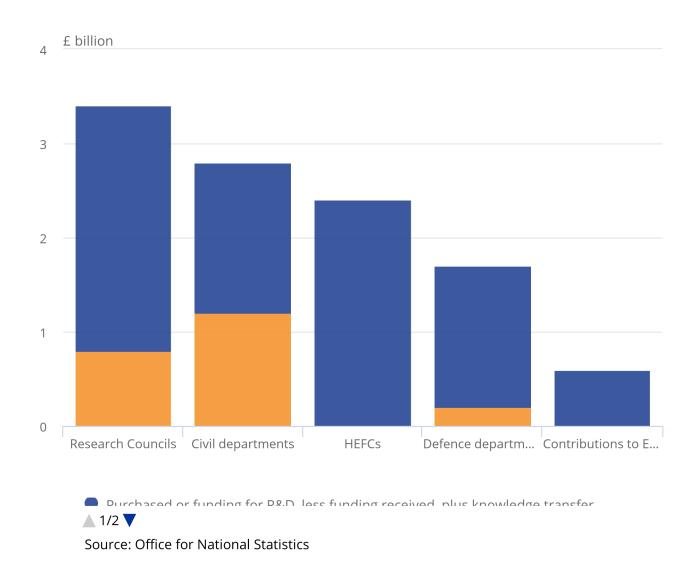
The EU supports R&D programmes in member states. The UK makes a positive net contribution to the EU budget and a proportion of this is estimated to be for R&D; it is included in SET data Tables 1 to 4. However, because no specific information is available on where and how these contributions are spent, they are excluded from the remaining SET tables.

The Organisation for Economic Cooperation and Development (OECD) terminology is used to classify the main sectors of the economy. Government corresponds to the general government sector of the UK national accounts. Prior to 2007, Value Added Tax (VAT) related to these estimates was collected separately, but has been excluded from these estimates. However, it should be noted that various amounts of VAT may have been included by some departments due to difficulties in separating out expenditure subject to VAT. Since the 2007 data collection, the GovERD survey has included additional information throughout, notifying respondents to exclude VAT from the estimates they provide.

Table 1 in the <u>UK GERD: 2014 statistical bulletin</u> included the totals of expenditure on performing in-house R&D by UK government civil and defence departments and Research Councils of £1.4 billion and £0.8 billion respectively. This included funding from other UK sectors and overseas. The breakdowns of these high level estimates are available in this SET publication in Tables 12 and 13.

Figure 8: UK government total expenditure on SET, including expenditure on R&D performed (in-house) in the UK by the government sector, 2014

Figure 8: UK government total expenditure on SET, including expenditure on R&D performed (in-house) in the UK by the government sector, 2014



#### Notes:

1. The amount of expenditure on R&D performed (in-house) by the UK government sector in Figure 8 includes funding from other sources.

Table 1: UK government total expenditure on SET, including expenditure on R&D performed (in-house) in the UK by the government sector, 2014

£ billion

|                                     | R&D performed (in-house) by UK government sector (Included in GERD) | Purchased or funding for R&D, less funding received, plus knowledge transfer |
|-------------------------------------|---|--|
| Research Councils                   | 0.8   | 2.6  |
| Civil departments                   | 1.2   | 1.6  |
| HEFCs                               | 0.0   | 2.4  |
| Defence department                  | 0.2   | 1.5  |
| Contributions to EU R&D expenditure | 0.0   | 0.6  |
| Total                               | 2.2   | 8.8  |

Source: Office for National Statistics

SET also includes data tables on qualified scientists and engineers in the labour force by sex. These estimates are from our Labour Force Survey and are categorised by type of qualification and occupation from the population of Great Britain aged 16 to 64. Occupation is based on the <a href="Standard Occupational Classification 2010">Standard Occupational Classification 2010</a> (SOC2010)

. See Tables 16 and 17 in the data section of this publication.

#### 2. Coherence

UK government departments' R&D expenditure in the UK is included in the UK GERD statistical bulletin.

The Ministry of Defence (MoD) publishes extensive defence statistics. Their expenditure on defence R&D is published as part of the <u>UK defence statistics compendium</u>.

#### 3. Completeness of coverage

The GovERD survey is conducted annually as a census survey. UK government departments, including Research Councils and HEFCs, are contacted to establish their department's structure and whether they carried out and/or funded R&D activities in the survey period. This ensures that the correct respondents receive the survey. Approximately 140 government departments and Research Councils are sent the questionnaire. Government departments are asked to include the R&D they performed as part of their estimates. Estimates for R&D performed by local authorities and NHS trusts are also included (Tables 12 and 13).

To estimate government funded R&D expenditure in higher education institutions (HEIs), grant income is used as a proxy for expenditure. The grants are classified into 3 groups:

- research-oriented grants these include the block research grant, plus other grants which are all deemed to be used for research
- teaching-oriented grants these are considered to be for teaching only activities, and are not included in the research expenditure estimate
- other grants these are not allocated specifically for research or teaching, but may contain elements of both to varying degrees; these are reviewed annually and an estimate is made of the research expenditure elements within each grant

The estimates of R&D expenditure were collected from the HEFCs for England, Scotland, Wales and the Department for Employment and Learning in Northern Ireland (DELNI).

A quality report for this specific output is not yet available, but should be available by the end of August 2016. However, one is available for the <u>UK GERD statistical bulletin</u>. This contains relevant information as the majority of the SET estimates were collected via the GovERD survey, the same source as the government sector part of the UK GERD statistical bulletin.

#### 4. Users and uses of SET estimates

There are users inside and outside government who use these estimates to produce various analyses and to inform policy decisions. These include:

- the <u>Department for Business, Innovation and Skills (BIS)</u>, that use SET and R&D estimates to assess
  policy impact and inform debate
- the Welsh government (WG), Scottish government (SG) and the Department for Employment and Learning, Northern Ireland (DELNI), that use SET and GERD estimates as main indicators for measuring the performance of their respective economies within the UK, as well as to monitor and develop R&D policies which s eek to increase R&D investment
- the Research and Development Society, is a UK-based organisation formed to promote and improve the
  understanding of R&D in all its forms. Its members include representatives from industry, government
  departments and agencies, universities and consultants. The Research and Development Society uses
  SET estimates for understanding R&D investment and to inform wider debates about R&D

#### 5. Official statistics

The <u>UK Statistics Authority</u> has not yet reviewed this publication and these statistics are still designated as <u>official</u> statistics.

#### 6. Timeliness and punctuality

These official statistics were previously published by the <u>Department for Business</u>, <u>Innovation and Skills</u> (BIS) in September each year. By publishing the SET statistical bulletin in July, we have enabled access to these estimates 2 months earlier.

#### 7. Revisions

Revisions have been made to a small number of the estimates for 2011, 2012 and 2013. These were mainly due to a combination of late returns and misreporting, which had little impact on the SET estimates.

#### 8. Sampling variability

As the GovERD survey is a census survey, the estimates are not subject to sampling error. They may still have non-sampling errors, including factors such as population coverage, misreporting and non-response bias. These errors are generally hard to quantify because of the difficulty in identifying the population of actual or likely R&D performers, and because of problems ensuring departments adhere to Frascati R&D definitions.

The 2014 response rate was 95% and included all the departments with the highest SET expenditure. Forecast data were used to estimate for the non-responding departments, which accounted for approximately 3% of the total SET estimate.

#### 9. Discontinuities in estimates

UK government departments and Research Councils change their reporting structures as governments and policy requirements change. These may have an impact on the comparability of individual departments' estimates over time, as responsibilities move between departments for specific projects.



## UK government expenditure on science, engineering and technology, 2014 Published 15 July 2016

Notes to be used in conjunction with the datasets below.

#### Please click on the links below to access the datasets:

- 1 UK government net expenditure on science, engineering and technology (SET) by department: current prices, 2003 to 2014
- 2 UK government net expenditure on science, engineering and technology (SET) by department: constant prices (2014 prices), 2003 to 2014
- 3 UK government net expenditure on R&D by department: current prices, 2003 to 2014
- 4 UK government net expenditure on R&D by department: constant prices (2014 prices), 2003 to 2014
- 5 UK government expenditure on knowledge transfer by department: current prices, 2003 to 2014
- 6 UK government expenditure on knowledge transfer by department: constant prices (2014 prices), 2003 to 2014
- 7 Analysis of UK government net expenditure on R&D by primary purpose and department: 2014
- 8 UK government net expenditure on R&D by socio-economic objective, percentage share: 2007 to 2014
- 9 Aggregate destination of UK government gross expenditure on R&D: current prices, 2003 to 2014
- 10 Analysis of UK government net expenditure on R&D by Frascati type of research activity: current prices, 2003 to 2014
- 11 Analysis of UK government net expenditure on R&D by Frascati type of research activity: constant prices (2014 prices), 2003 to 2014
- 12 Expenditure on R&D performed in UK government by department: current prices, 2008 to 2014
- 13 Expenditure on R&D performed in UK government by department: constant prices (2014 prices), 2008 to 2014
- 14 Analysis of UK government purchased or funding provided for R&D by funding and receiving organisations: 2014
- 15 Analysis of UK government net expenditure on R&D by flow of funds and department: 2014
- 16 Qualified scientists and engineers in the labour force, three months ending December 2014: Great Britain, not seasonally adjusted
- 17 Qualified scientists and engineers in the labour force by gender, three months ending December 2014: Great Britain, not seasonally adjusted

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The following symbols and abbreviations are used throughout these reference tables;

- denotes nil, figures unavailable or too small to display.
- <sup>†</sup> denotes earliest data revision.

There may be discrepancies between totals and the sum of their independently rounded parts.

#### Notes:

- 1. The data in these tables and the associated statistical bulletin relate to financial years.
- 2. There are 2 types of estimates in this release, current and constant prices. Estimates in current prices present the value of expenditure in cash terms.

  Constant price (real terms) estimates have been adjusted for inflation between years using the Gross Domestic Product (GDP) deflator. This allows changes in government expenditure on SET to be examined on a comparable basis over time.
- 3. UK government expenditure on R&D plus knowledge transfer (commonly known as SET): Tables 1 and 2.
- 4. Expenditure on R&D (excluding knowledge transfer): Tables 3 and 4.
- 5. Indicative UK contributions to the EU's R&D expenditure are included in Tables 1 to 4. The EU supports R&D programmes in member states. The UK makes a positive net contribution to the EU budget, and a proportion of this is assumed to be for R&D. However, because no specific information is available on where and how these contributions are spent, they are excluded from the remaining SET tables.
- 6. Knowledge transfer (including technology transfers) activities are designed to help the conveyance 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. For example developing partnerships, establishing forums for knowledge exchange, specialist training, and licensing. Knowledge transfer estimates which are included in the SET totals in Tables 1 and 2 are separately identified in Tables 5 and 6.

|  | 4 |
|--|---|
|  |   |
|  |   |

| Current prices   |       |       |       |       |          |       |       |       |                 |                  |                     | £ millio |
|--|-------|-------|-------|-------|----------|-------|-------|-------|-----------------|------------------|---------------------|----------|
|  | 2003  | 2004  | 2005  | 2006  | 2007     | 2008  | 2009  | 2010  | 2011            | 2012             | 2013                | 201      |
| Research Councils:   |       |       |       |       |          |       |       |       |                 |                  |                     |          |
| Engineering and Physical Sciences (EPSRC)  | 425   | 489   | 555   | 643   | 694      | 734   | 756   | 845   | 854             | 920              | 991                 | 91       |
| Medical (MRC)  | 367   | 379   | 416   | 471   | 494      | 581   | 634   | 679   | 672             | 600              | 790                 | 7        |
| Science and Technology Facilities (STFC) <sup>1</sup>  | -     | -     | -     | -     | 552      | 590   | 607   | 563   | 542             | 467              | 511                 | 5        |
| Biotechnology and Biological Sciences (BBSRC)  | 268   | 277   | 322   | 366   | 373      | 393   | 444   | 435   | 488             | 496              | 509                 | 5        |
| Natural Environment (NERC)   | 295   | 317   | 373   | 361   | 364      | 396   | 454   | 449   | 417             | 392              | 408                 | 3        |
| Economic and Social (ESRC)   | 89    | 105   | 125   | 144   | 151      | 162   | 174   | 182   | 174             | 170 <sup>†</sup> | 194                 | 1        |
| Arts and Humanities (AHRC) <sup>2</sup>  | -     | -     | 69    | 82    | 88       | 94    | 89    | 92    | 99              | 97               | 100                 | 1        |
| Pensions <sup>12</sup>   | 30    | 42    | 15    | 17    | 25       | 74    | 38    | 35    | 35              | 40               | 38                  | •        |
| OST / DTI <sup>3</sup>   | 452   | 440   | 578   | 508   | -        | -     | -     | -     | -               | -                | -                   |          |
| Particle Physics and Astronomy (PPARC) <sup>1</sup>  | 272   | 295   | 334   | 329   | _        | _     | _     | _     | _               | _                | _                   |          |
| Council for the Central Laboratory (CCLRC) <sup>1</sup>                                      | 62    | 64    | 84    | 92    | -        | -     | -     | -     | -               | _                | _                   |          |
|  |       |       |       |       |          |       |       |       |                 | - · +            |                     |          |
| TOTAL  | 2,259 | 2,408 | 2,871 | 3,014 | 2,742    | 3,024 | 3,196 | 3,280 | 3,280           | 3,183 †          | 3,543               | 3,4      |
| Higher Education Funding Councils (HEFCs):   |       |       |       |       |          |       |       |       |                 |                  |                     |          |
| England (HEFCE)  | 1,332 | 1,453 | 1,551 | 1,642 | 1,781    | 1,795 | 1,939 | 1,840 | 1,821           | 1,736            | 1,803               | 1,8      |
| Scotland (SFC)   | 194   | 210   | 228   | 283   | 320      | 296   | 289   | 324   | 324             | 339              | 373                 | .,.      |
| Wales (HEFCW)  | 83    | 84    | 84    | 87    | 88       | 91    | 94    | 90    | 82              | 80               | 86                  |          |
| Northern Ireland (DELNI)   | 56    | 57    | 66    | 74    | 63       | 65    | 81    | 75    | 59              | 57               | 65                  |          |
| Northern Heland (DELINI)   | 30    | 37    | 00    | 74    | 00       | 03    | 01    | 73    | 33              | 31               | 05                  |          |
| TOTAL  | 1,665 | 1,804 | 1,928 | 2,085 | 2,252    | 2,247 | 2,403 | 2,328 | 2,285           | 2,212            | 2,328               | 2,3      |
| Civil Departments:   |       |       |       |       |          |       |       |       |                 |                  |                     |          |
| Health (DH including NHS)  | 593   | 629   | 628   | 673   | 712      | 787   | 846   | 883   | 904             | 980 <sup>†</sup> | 1,020               | 1,0      |
| of which: National Health Service (NHS)  | 533   | 575   | 583   | 623   | 661      | 730   | 796   | 847   | 866             | 948 <sup>†</sup> | 984                 | 1,0      |
| Business, Innovation and Skills (BIS) <sup>1,3</sup>   | -     | -     | -     | -     | -        | -     | 308   | 464   | 696             | 771              | 1,021               | 1,0      |
| International Development (DFID)   | 215   | 215   | 265   | 247   | 151      | 169   | 237   | 220   | 236             | 238              | 272                 | ,,,      |
| Scottish Government (SG)   | 157   | 176   | 209   | 214   | 221      | 218   | 219   | 177   | 169             | 177              | 178                 |          |
| Environment, Food and Rural Affairs (DEFRA) <sup>3</sup>                                     | 257   | 273   | 288   | 299   | 202      | 198   | 185   | 157   | 161             | 144              | 129 <sup>†</sup>    |          |
| Culture, Media and Sport (DCMS)  | 15    | 16    | 23    | 36    | 44       | 64    | 64    | 53    | 48              | 47               | 88 <sup>†</sup>     |          |
| Transport (DfT) <sup>3</sup>   | 70    | 59    | 61    | 59    | 66       | 64    | 80    | 54    | 35              | 38               | 44                  |          |
| Energy and Climate Change (DECC) <sup>7</sup>  | 70    | 39    | 01    | 39    | -        | 27    | 25    | 36    | 39              | 37               | 44                  |          |
| Other Departments <sup>8</sup>   | 43    | 41    | 38    | 42    | 38       | 38    | 34    | 31    | 31              | 26               | 26                  |          |
| Home Office (HO)   | 43    | 58    | 73    | 51    | 43       | 46    | 45    | 48    | 25              | 20               | 23                  |          |
| Northern Ireland Departments (NI) <sup>5</sup>   | 21    | 21    | 21    | 22    | 23       | 22    | 22    | 21    | 20              | 22               | 22                  |          |
| Work and Pensions (DWP)  | 18    | 18    | 18    | 18    | 23<br>17 | 19    | 35    | 29    | 20              | 21               | 20                  |          |
| Welsh Government (WG) <sup>4</sup>   | 31    | 32    | 33    | 10    | 12       | 11    | 11    | 10    | 10 <sup>†</sup> | 12               | 12                  |          |
| Education (DfE) <sup>6</sup>   | 31    | 32    | 33    | 10    |          |       |       |       |                 |                  |                     |          |
|  | -     | -     | -     | -     | 35       | 33    | 31    | 27    | 13              | 14               | 14                  |          |
| Food Standards Agency (FSA)  | 22    | 20    | 17    | 15    | 14       | 12    | 11    | 6     | 7<br>7          | /                | 8<br>7 <sup>†</sup> |          |
| Ministry of Justice (MoJ) <sup>8</sup>   | -     | -     | -     | 2     | 11       | 14    | 11    | 8     |                 | 9                |                     |          |
| Health and Safety Executive (HSE)  | 17    | 28    | 22    | 17    | 12       | 12    | 13    | 12    | 10              | 8                | 8                   |          |
| Communities and Local Government (DCLG)  | 30    | 29    | 27    | 30    | 25       | 28    | 29    | 16    | 7               | 9                | /                   |          |
| Foreign and Commonwealth Office (FCO) <sup>11</sup> Education and Skills (DfES) <sup>6</sup> |       | -     | -     |       | -        | -     | 6     | 3     | -               | -                | -                   |          |
| Education and Skills (DtES)*   | 52    | 59    | 100   | 73    | -        | -     | _     | _     | _               | _                | _                   |          |

| Current prices                        |  |       |       |       |       |       |       |        |        |         |        |                  | £ million |
|---------------------------------------|--|-------|-------|-------|-------|-------|-------|--------|--------|---------|--------|------------------|-----------|
|                                       |  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009   | 2010   | 2011    | 2012   | 2013             | 2014      |
| Business Enterprise and               | Regulatory Reform (BERR) <sup>3</sup>  | -     | -     | -     | -     | 2     | 2     | _      | _      | -       | -      | -                | -         |
| Trade and Industry (DTI) <sup>3</sup> | 3                                      | 334   | 322   | 300   | 265   | -     | -     | -      | -      | -       | -      | -                | -         |
| BIS Science <sup>3</sup>              |  | -     | -     | -     | -     | 420   | 438   | 83     | -      | -       | -      | -                | -         |
| Net Launch Investment                 |  | 215   | -127  | -158  | -154  | -154  | -128  | -57    | -91    | -108    | -150   | -153             | -179      |
| TOTAL                                 |  | 2,140 | 1,866 | 1,965 | 1,918 | 1,896 | 2,073 | 2,236  | 2,161  | 2,331   | 2,430  | 2,791            | 2,805     |
| Ministry of Defence (MoD              | )) <sup>9</sup>                        |       |       |       |       |       |       |        |        |         |        |                  |           |
| of which:                             | Research                               | 524   | 639   | 598   | 632   | 635   | 584   | 575    | 534    | 553     | 565    | 586              | 616       |
|                                       | Experimental Development               | 1,609 | 1,552 | 1,645 | 1,492 | 1,505 | 1,406 | 1,177  | 1,159  | 753     | 895    | 931              | 1,088     |
| TOTAL                                 |  | 2,133 | 2,191 | 2,243 | 2,124 | 2,139 | 1,991 | 1,752  | 1,693  | 1,306   | 1,460  | 1,516            | 1,704     |
| DEPARTMENTAL SET T                    | TOTAL                                  | 8,196 | 8,270 | 9,008 | 9,141 | 9,029 | 9,334 | 9,586  | 9,461  | 9,202 † | 9,286  | 10,178           | 10,353    |
| Indicative UK contribution            | ns to EU R&D expenditure <sup>10</sup> | 390   | 325   | 365   | 374   | 374   | 593   | 668    | 647    | 661     | 751    | 768 <sup>†</sup> | 638       |
| GRAND SET TOTAL                       |  | 8,586 | 8,595 | 9,373 | 9,515 | 9,403 | 9,927 | 10,255 | 10,108 | 9,863 † | 10,036 | 10,947           | 10,991    |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> In April 2007, CCLRC and PPARC merged to form Science and Technology Facilities Council (STFC). In 2011, STFCs subscription for European Space Agency (ESA) transferred to BIS Space.

<sup>2</sup> AHRC was established in April 2005.

<sup>3</sup> From July 2007, the Department for Trade and Industry (DTI) and the Office for Science and Technology (OST) were renamed Business Enterprise and Regulatory Reform (BERR) and the Department of Innovation, Universities and Skills (DIUS) respectively. In 2009, DIUS and BERR merged to form BIS. DIUS was renamed as BIS Science and BERR renamed as BIS. A number of departments previously reporting under DIUS transferred to BIS. From 2010, BIS Science reported under BIS. From 2011 includes all UK subscriptions to the European Space Agency (ESA), and some budget transfers from DEFRA and DfT.

<sup>4</sup> NHS Wales was included from 2010 and Museum Wales included from 2011.

<sup>5</sup> In 2011, Department of the Environment was included for the first time. This will be used as a base year going forward. No back data available.

<sup>6</sup> From June 2007 DfES was renamed Department for Children, Schools and Families (DCSF). From May 2010 DCSF was replaced with Department for Education (DfE). In 2011, expenditure fell due to a move to drive down spend across all budgets, and reflects Ministerial priorities.

<sup>7</sup> DECC was created in October 2008.

<sup>8</sup> Prior to 2006, Ministry of Justice figures were included under "Other departments".

<sup>9</sup> These data comprise elements from both the operating cost statement and the balance sheet in the Departmental Resource Accounts (DRAc). The funding received by MoD and its trading funds for expenditure on R&D are not necessarily spent on defence related R&D. The fall in 2011 net development expenditure was reported by the MoD's Defence Equipment and Support (DE&S) as a number of project teams moved from the development phase to manufacturing.

<sup>10</sup> These indicative contributions are provided by HM Treasury.

<sup>11</sup> Department was not surveyed prior to 2009.

<sup>12</sup> Research Councils' pension contributions are included separately.

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| Constant prices (2014)  | 2003  | 2004   | 2005   | 2006  | 2007   | 2002  | 2009   | 2010  | 2011   | 2012   | 2013  |
|---|---|--|--|---|--|---|--|---|--|--|---|
|   | 2003  | 2004   | 2005   | 2006  | 2007   | 2008  | 2009   | 2010  | 2011   | 2012   | 2013  |
| Research Councils:  |   |  |  |   |  |   |  |   |  |  |   |
| Engineering and Physical Sciences (EPSRC)   | 554 <sup>†</sup>  | 618  | 681  | 768   | 805  | 829   | 834  | 906   | 901  | 954  | 1,006   |
| Medical (MRC)   | 478 <sup>†</sup>  | 480  | 511  | 562   | 574  | 657   | 700  | 727   | 709  | 622  | 802   |
| Science and Technology Facilities (STFC) <sup>1</sup>   | _   | _  | -  | _   | 641 <sup>†</sup>   | 667   | 670  | 604   | 572  | 484  | 519   |
| Biotechnology and Biological Sciences (BBSRC)   | 349 <sup>†</sup>  | 350  | 395  | 436   | 433  | 444   | 491  | 466   | 515  | 514  | 517   |
| Natural Environment (NERC)  | 384 <sup>†</sup>  | 401  | 458  | 431   | 422  | 447   | 501  | 481   | 440  | 407  | 415   |
| Economic and Social (ESRC)  | 116 <sup>†</sup>  | 132  | 153  | 172   | 176  | 183   | 192  | 195   | 184  | 176  | 197   |
| Arts and Humanities (AHRC) <sup>2</sup>   | -   | -  | 85 <sup>†</sup>  | 98  | 102  | 106   | 99   | 99  | 104  | 101  | 102   |
| Pensions <sup>12</sup>  | 39 <sup>†</sup>   | 54   | 19   | 21  | 29   | 83  | 42   | 37  | 37   | 41   | 39  |
| OST / DTI <sup>3</sup>  | 590 <sup>†</sup>  | 556  | 710  | 606   | -  | 00  | 72   | -   | -  | 71   | -   |
| Particle Physics and Astronomy (PPARC) <sup>1</sup>   | 355 <sup>†</sup>  | 373  | 411  | 392   | -  | -   | -  | -   | -  | -  | -   |
|   | 81 <sup>†</sup>   |  |  |   | -  | -   | -  | -   | -  | -  | -   |
| Council for the Central Laboratory (CCLRC) <sup>1</sup>   | 81 .  | 81   | 103  | 110   | -  | -   | -  | -   | -  | -  | -   |
| TOTAL   | 2,945 †   | 3,045  | 3,527  | 3,595   | 3,181  | 3,417   | 3,528  | 3,515   | 3,462  | 3,299  | 3,597   |
| Higher Education Funding Councils (HEFCs):  |   |  |  |   |  |   |  |   |  |  |   |
| England (HEFCE)   | 1,736 <sup>†</sup>  | 1,837  | 1,905  | 1,959   | 2,066  | 2,028   | 2,140  | 1,972   | 1,922  | 1,799  | 1,830   |
| Scotland (SFC)  | 253 <sup>†</sup>  | 266  | 280  | 338   | 371  | 335   | 319  | 347   | 342  | 352  | 379   |
| Wales (HEFCW)   | 108 <sup>†</sup>  | 106  | 103  | 103   | 102  | 103   | 103  | 96  | 86   | 83   | 88  |
| Northern Ireland (DELNI)  | 73 <sup>†</sup>   | 72   | 81   | 88  | 73   | 73  | 89   | 80  | 62   | 59   | 66  |
| TOTAL   | 2,170 <sup>†</sup>  | 2,281  | 2,369  | 2,487   | 2,612  | 2,539   | 2,653  | 2,495   | 2,412  | 2,293  | 2,363   |
|   |   |  |  |   |  |   |  |   |  |  |   |
| Civil Departments:  |   |  |  |   |  |   |  |   |  |  |   |
| Civil Departments: Health (DH including NHS)  | 773 <sup>†</sup>  | 795  | 772  | 802   | 826  | 889   | 934  | 946   | 955  | 1.016  | 1.036   |
| Health (DH including NHS)   | 773 <sup>†</sup><br>694 <sup>†</sup>  | 795<br>726   | 772<br>716   | 802<br>743  | 826<br>767   | 889<br>825  | 934<br>878   | 946<br>908  | 955<br>914   | 1,016<br>983   | 1,036   |
| Health (DH including NHS) of which: National Health Service (NHS)   | 773 <sup>†</sup><br>694 <sup>†</sup>  | 795<br>726   | 772<br>716   | 802<br>743  | 826<br>767   | 889<br>825  | 878  | 908   | 914  | 983  | 999   |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup>  | 694 <sup>†</sup>  | 726<br>-   | 716  | 743<br>-  | 767<br>-   | 825<br>-  | 878<br>340 <sup>†</sup>  | 908<br>497  | 914<br>735   | 983<br>799   | 999<br>1,036  |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID)   | 694 <sup>†</sup><br>-<br>280 <sup>†</sup>   | 726<br>-<br>272  | 716<br>-<br>325  | 743<br>-<br>295   | 767<br>-<br>175  | 825<br>-<br>191   | 878<br>340 <sup>†</sup><br>262   | 908<br>497<br>235   | 914<br>735<br>249  | 983<br>799<br>246  | 999<br>1,036<br>276   |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG)  | 694 <sup>†</sup><br>-<br>280 <sup>†</sup><br>205 <sup>†</sup>                       | 726<br>-<br>272<br>223   | 716<br>-<br>325<br>257   | 743<br>-<br>295<br>255  | 767<br>-<br>175<br>257   | 825<br>-<br>191<br>247  | 878<br>340 <sup>†</sup><br>262<br>241  | 908<br>497<br>235<br>190  | 914<br>735<br>249<br>179   | 983<br>799<br>246<br>183   | 999<br>1,036<br>276<br>180  |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup>   | 694 <sup>†</sup>  | 726<br>-<br>272<br>223<br>345  | 716<br>-<br>325<br>257<br>354  | 743<br>-<br>295<br>255<br>357   | 767<br>-<br>175<br>257<br>234  | 825<br>-<br>191<br>247<br>224   | 878<br>340 <sup>†</sup><br>262<br>241<br>205                                     | 908<br>497<br>235<br>190<br>168   | 914<br>735<br>249<br>179<br>169  | 983<br>799<br>246<br>183<br>150  | 999<br>1,036<br>276<br>180<br>131                                     |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS)   | 694 <sup>†</sup> 280 <sup>†</sup> 205 <sup>†</sup> 335 <sup>†</sup> 20 <sup>†</sup> | 726<br>-<br>272<br>223<br>345<br>20  | 716<br>-<br>325<br>257<br>354<br>28  | 743<br>-<br>295<br>255<br>357<br>43   | 767<br>-<br>175<br>257<br>234<br>51  | 825<br>-<br>191<br>247<br>224<br>73   | 878<br>340 <sup>†</sup><br>262<br>241<br>205<br>71                               | 908<br>497<br>235<br>190<br>168<br>57   | 914<br>735<br>249<br>179<br>169<br>50  | 983<br>799<br>246<br>183<br>150<br>49  | 999<br>1,036<br>276<br>180<br>131<br>90                               |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup>  | 694 <sup>†</sup>  | 726<br>-<br>272<br>223<br>345  | 716<br>-<br>325<br>257<br>354  | 743<br>-<br>295<br>255<br>357   | 767<br>-<br>175<br>257<br>234<br>51<br>77  | 825<br>-<br>191<br>247<br>224<br>73<br>72   | 878<br>340 <sup>†</sup><br>262<br>241<br>205<br>71<br>88                         | 908<br>497<br>235<br>190<br>168<br>57<br>57   | 914<br>735<br>249<br>179<br>169<br>50<br>37  | 983<br>799<br>246<br>183<br>150<br>49  | 999<br>1,036<br>276<br>180<br>131<br>90<br>45                         |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup>  | 694 † 280 † 205 † 335 † 20 † 91 †   | 726<br>-<br>272<br>223<br>345<br>20<br>74  | 716<br>-<br>325<br>257<br>354<br>28<br>74  | 743<br>-<br>295<br>255<br>357<br>43<br>70   | 767<br>-<br>175<br>257<br>234<br>51<br>77  | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †   | 878<br>340 <sup>†</sup><br>262<br>241<br>205<br>71<br>88<br>27                   | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38   | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41                                    | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38  | 999<br>1,036<br>276<br>180<br>131<br>90<br>45<br>45                   |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup>   | 694 † 280 † 205 † 335 † 20 † 91 †   | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52   | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-  | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-   | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42   | 878<br>340 <sup>†</sup><br>262<br>241<br>205<br>71<br>88<br>27<br>38             | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33   | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32                              | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27                                    | 999<br>1,036<br>276<br>180<br>131<br>90<br>45<br>45                   |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 †                                       | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73   | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60  | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-<br>44<br>50                                 | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52   | 878<br>340 <sup>†</sup><br>262<br>241<br>205<br>71<br>88<br>27<br>38<br>49       | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51   | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27                        | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27<br>21                              | 999<br>1,036<br>276<br>180<br>131<br>90<br>45<br>45<br>26<br>24       |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup>   | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 †                                  | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27   | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26  | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-<br>44<br>50<br>26                           | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25   | 878<br>340 <sup>†</sup><br>262<br>241<br>205<br>71<br>88<br>27<br>38<br>49<br>24 | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22                                   | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21                  | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27<br>21<br>22                        | 999<br>1,036<br>276<br>180<br>131<br>90<br>45<br>45<br>26<br>24<br>22 |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)   | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 † 24 †                             | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22                                   | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22  | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-<br>44<br>50<br>26<br>19                     | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21                                     | 878 340 † 262 241 205 71 88 27 38 49 24 38                                       | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22                                   | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21                  | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27<br>21<br>22                        | 999 1,036 276 180 131 90 45 45 26 24 22 20                            |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup>  | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 †                                  | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27   | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26  | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-<br>44<br>50<br>26<br>19                     | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13                               | 878 340 † 262 241 205 71 88 27 38 49 24 38 12                                    | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31                             | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>21            | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27<br>21<br>22<br>22                  | 999 1,036 276 180 131 90 45 45 26 24 22 20 13                         |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup>   | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 † 24 † 40 †                        | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22<br>40                             | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12  | 767 - 175 257 234 51 77 - 44 50 26 19 14 41 †  | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37                         | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34                                 | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11                       | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21                  | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27<br>21<br>22<br>22<br>13<br>15      | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14                      |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA)   | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 † 24 †                             | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22<br>40                             | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-                                     | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-<br>44<br>50<br>26<br>19<br>14<br>41 †       | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13                   | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12                              | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6            | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>21            | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27<br>21<br>22<br>22<br>13<br>15<br>7 | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8                    |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup>  | 694 † 280 † 205 † 335 † 20 † 91 † 56 † 63 † 27 † 24 † 40 † - 29 †                   | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22<br>40<br>-<br>25<br>-             | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41<br>-<br>21                              | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-<br>44<br>50<br>26<br>19<br>14<br>41 †<br>17 | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13<br>15             | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12 12                           | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6            | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>21            | 983<br>799<br>246<br>183<br>150<br>49<br>40<br>38<br>27<br>21<br>22<br>22<br>13<br>15      | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8 7                  |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE)  | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 † 24 † 40 † - 29 † - 22 †          | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22<br>40<br>-<br>25<br>-<br>35       | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41<br>-<br>21<br>-<br>26                   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 767 - 175 257 234 51 77 - 44 50 26 19 14 41 17 13 14                                       | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13                   | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12                              | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6            | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>21            | 983 799 246 183 150 49 40 38 27 21 22 22 13 15 7 9 8                                       | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8 7                  |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) Communities and Local Government (DCLG)  | 694 † 280 † 205 † 335 † 20 † 91 † 56 † 63 † 27 † 24 † 40 † - 29 †                   | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22<br>40<br>-<br>25<br>-             | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41<br>-<br>21                              | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 767<br>-<br>175<br>257<br>234<br>51<br>77<br>-<br>44<br>50<br>26<br>19<br>14<br>41 †<br>17 | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13<br>15             | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12 12                           | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6            | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>10<br>14<br>7 | 983 799 246 183 150 49 40 38 27 21 22 22 13 15 7 9   | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8 7                  |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE)  | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 † 24 † 40 † - 29 † - 22 †          | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22<br>40<br>-<br>25<br>-<br>35       | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41<br>-<br>21<br>-<br>26                   | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 767 - 175 257 234 51 77 - 44 50 26 19 14 41 17 13 14                                       | 825<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13<br>15<br>14            | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12 14                           | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6<br>8<br>13 | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>10<br>14<br>7 | 983 799 246 183 150 49 40 38 27 21 22 22 13 15 7 9 8                                       | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8 7 8                |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) Communities and Local Government (DCLG)  | 694 † 280 † 205 † 335 † 20 † 91 † - 56 † 63 † 27 † 24 † 40 † - 29 † - 22 †          | 726<br>-<br>272<br>223<br>345<br>20<br>74<br>-<br>52<br>73<br>27<br>22<br>40<br>-<br>25<br>-<br>35<br>36 | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41<br>-<br>21<br>-<br>26<br>33             | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 767 - 175 257 234 51 77 - 44 50 26 19 14 41 17 13 14 30                                    | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13<br>15<br>14<br>31 | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12 14 32                        | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6<br>8<br>13 | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>10<br>14<br>7 | 983 799 246 183 150 49 40 38 27 21 22 22 13 15 7 9 8                                       | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8 7 8                |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) Communities and Local Government (DCLG) Foreign and Commonwealth Office (FCO) <sup>11</sup>  | 694 † 280 † 205 † 335 † 20 † 91 † 56 † 63 † 27 † 24 † 40 † - 29 † - 22 † 40 †       | 726  | 716 - 325 257 354 28 74 - 47 90 26 22 41 - 21 - 26 33  | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †<br>20<br>35            | 767 - 175 257 234 51 77 - 44 50 26 19 14 41 17 13 14 30 -                                  | 825<br>-<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13<br>15<br>14<br>31 | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12 14 32                        | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6<br>8<br>13 | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>10<br>14<br>7 | 983 799 246 183 150 49 40 38 27 21 22 22 13 15 7 9 8                                       | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8 7 8                |
| Health (DH including NHS) of which: National Health Service (NHS) Business, Innovation and Skills (BIS) <sup>1,3</sup> International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) Communities and Local Government (DCLG) Foreign and Commonwealth Office (FCO) <sup>11</sup> Education and Skills (DfES) <sup>6</sup> | 694 † 280 † 205 † 335 † 20 † 91 † 56 † 63 † 27 † 24 † 40 † - 29 † - 22 † 40 †       | 726  | 716<br>-<br>325<br>257<br>354<br>28<br>74<br>-<br>47<br>90<br>26<br>22<br>41<br>-<br>21<br>-<br>26<br>33<br>-<br>123 | 743<br>-<br>295<br>255<br>357<br>43<br>70<br>-<br>51<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †<br>20<br>35<br>-<br>87 | 767 - 175 257 234 51 77 - 44 50 26 19 14 41 17 13 14 30 -                                  | 825<br>191<br>247<br>224<br>73<br>72<br>30 †<br>42<br>52<br>25<br>21<br>13<br>37<br>13<br>15<br>14<br>31      | 878 340 † 262 241 205 71 88 27 38 49 24 38 12 34 12 14 32                        | 908<br>497<br>235<br>190<br>168<br>57<br>57<br>38<br>33<br>51<br>22<br>31<br>11<br>29<br>6<br>8<br>13 | 914<br>735<br>249<br>179<br>169<br>50<br>37<br>41<br>32<br>27<br>21<br>10<br>14<br>7 | 983 799 246 183 150 49 40 38 27 21 22 22 13 15 7 9 8                                       | 999 1,036 276 180 131 90 45 45 26 24 22 20 13 14 8 7 8                |

| Constant prices (2014)                 |                                 |                     |        |        |        |        |        |        |        |        |              |             | £ million  |
|--|---------------------------------|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|-------------|------------|
|  |                                 | 2003                | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012         | 2013        | 2014       |
| Net Launch Investment                  |                                 | 281 <sup>†</sup>    | -161   | -194   | -184   | -178   | -145   | -63    | -98    | -113   | -156         | -156        | -179       |
| TOTAL                                  |                                 | 2,789 †             | 2,359  | 2,413  | 2,288  | 2,199  | 2,342  | 2,468  | 2,316  | 2,460  | 2,518        | 2,834       | 2,805      |
| Ministry of Defence (MoD) <sup>9</sup> |                                 |                     |        |        |        |        |        |        |        |        |              |             |            |
| of which:                              | Research                        | 683 <sup>†</sup>    | 808    | 735    | 754    | 736    | 660    | 635    | 572    | 584    | 586          | 594         | 616        |
|  | Experimental Development        | 2,097 †             | 1,963  | 2,021  | 1,780  | 1,745  | 1,589  | 1,299  | 1,242  | 794    | 928          | 945         | 1,088      |
| TOTAL                                  |                                 | 2,780 †             | 2,770  | 2,755  | 2,534  | 2,481  | 2,249  | 1,934  | 1,815  | 1,378  | 1,513        | 1,539       | 1,704      |
| DEPARTMENTAL SET TOTAL                 |                                 | 10,684 <sup>†</sup> | 10,455 | 11,064 | 10,905 | 10,473 | 10,547 | 10,582 | 10,140 | 9,711  | 9,623        | 10,332      | 10,353     |
| Indicative UK contributions to EU      | J R&D expenditure <sup>10</sup> | 509 <sup>†</sup>    | 411    | 448    | 446    | 434    | 670    | 738    | 693    | 698    | 778          | 780         | 638        |
| GRAND SET TOTAL                        |                                 | 11,192 †            | 10,866 | 11,512 | 11,351 | 10,907 | 11,217 | 11,320 | 10,833 | 10,409 | 10,401       | 11,112      | 10,991     |
| 2014 = 100                             |                                 |                     |        |        |        |        |        |        |        | Sour   | ce: Office f | or National | Statistics |
|  |                                 | 2003                | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012         | 2013        | 2014       |
| GDP deflator used to convert cu        | rrent prices to constant prices | 76.711 <sup>†</sup> | 79.103 | 81.417 | 83.823 | 86.213 | 88.497 | 90.589 | 93.309 | 94.757 | 96.494       | 98.510      | 100        |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> In April 2007, CCLRC and PPARC merged to form Science and Technology Facilities Council (STFC). In 2011, STFCs subscription for European Space Agency (ESA) transferred to BIS Space.

<sup>2</sup> AHRC was established in April 2005.

<sup>3</sup> From July 2007, the Department for Trade and Industry (DTI) and the Office for Science and Technology (OST) were renamed Business Enterprise and Regulatory Reform (BERR) and the Department of Innovation, Universities and Skills (DIUS) respectively. In 2009, DIUS and BERR merged to form BIS. DIUS was renamed as BIS Science and BERR renamed as BIS. A number of departments previously reporting under DIUS transferred to BIS. From 2010, BIS Science reported under BIS. From 2011 includes all UK subscriptions to the European Space Agency (ESA), and some budget transfers from DEFRA and DfT.

<sup>4</sup> NHS Wales was included from 2010 and Museum Wales included from 2011.

<sup>5</sup> In 2011, Department of the Environment was included for the first time. This will be used as a base year going forward. No back data available.

<sup>6</sup> From June 2007 DfES was renamed Department for Children, Schools and Families (DCSF). From May 2010 DCSF was replaced with Department for Education (DfE). In 2011, expenditure fell due to a move to drive down spend across all budgets, and reflects Ministerial priorities.

<sup>7</sup> DECC was created in October 2008.

<sup>8</sup> Prior to 2006, Ministry of Justice figures were included under "Other departments".

<sup>9</sup> These data comprise elements from both the operating cost statement and the balance sheet in the Departmental Resource Accounts (DRAc). The funding received by MoD and its trading funds for expenditure on R&D are not necessarily spent on defence related R&D. The fall in 2011 net development expenditure was reported by the MoD's Defence Equipment and Support (DE&S) as a number of project teams moved from the development phase to manufacturing.

<sup>10</sup> These indicative contributions are provided by HM Treasury.

<sup>11</sup> Department was not surveyed prior to 2009.

<sup>12</sup> Research Councils' pension contributions are included separately.

| Current prices   |  |   |   |   |   |   |  |  |  |  |   | £ millio   |
|--|--|---|---|---|---|---|--|--|--|--|---|--|
|  | 2003   | 2004  | 2005  | 2006  | 2007  | 2008  | 2009   | 2010   | 2011   | 2012   | 2013  | 2014   |
| Research Councils:   |  |   |   |   |   |   |  |  |  |  |   |  |
| Engineering and Physical Sciences (EPSRC)  | 405  | 480   | 553   | 643   | 694   | 734   | 754  | 802  | 807  | 793  | 870   | 808  |
| Medical (MRC)  | 361  | 376   | 416   | 471   | 494   | 581   | 634  | 679  | 672  | 600  | 790   | 716  |
| Science and Technology Facilities (STFC) <sup>1</sup>  | -  | -   | -   | -   | 548   | 583   | 599  | 556  | 535  | 456  | 502   | 54   |
| Biotechnology and Biological Sciences (BBSRC)  | 267  | 275   | 320   | 364   | 369   | 383   | 432  | 421  | 472  | 478  | 489   | 513  |
| Natural Environment (NERC)   | 278  | 296   | 363   | 351   | 350   | 381   | 435  | 442  | 407  | 378  | 393   | 37   |
| Economic and Social (ESRC)   | 83   | 98  | 116   | 133   | 147   | 158   | 170  | 177  | 168  | 161 <sup>†</sup>   | 187   | 18   |
| Arts and Humanities (AHRC) <sup>2</sup>  | -  | -   | 58  | 70  | 86  | 91  | 87   | 89   | 95   | 90   | 92  | 9  |
| Pensions <sup>12</sup>   | 28   | 40  | 15  | 17  | 24  | 72  | 37   | 34   | 34   | 37   | 36  | 4  |
| OST / DTI <sup>3</sup>   | 388  | 356   | 503   | 413   | -   | -   | -  | -  | -  | -  | -   |  |
| Particle Physics and Astronomy (PPARC) <sup>1</sup>  | 272  | 295   | 334   | 329   | _   | _   | _  | _  | _  | -  | -   |  |
| Council for the Central Laboratory (CCLRC) <sup>1</sup>  | 62   | 64  | 84  | 92  | -   | -   | -  | -  | -  | -  | -   |  |
| TOTAL  | 2,143  | 2,281   | 2,763   | 2,883   | 2,714   | 2,984   | 3,148  | 3,201  | 3,189  | 2,993 <sup>†</sup>   | 3,359   | 3,279  |
| Higher Education Funding Councils (HEFCs):   |  |   |   |   |   |   |  |  |  |  |   |  |
| England (HEFCE)  | 1,332  | 1,453   | 1,551   | 1,642   | 1,781   | 1,795   | 1,939  | 1,840  | 1,821  | 1,736  | 1,803   | 1,829  |
| Scotland (SFC)   | 194  | 210   | 228   | 283   | 302   | 276   | 281  | 299  | 296  | 312  | 342   | 37   |
| Wales (HEFCW)  | 83   | 84  | 84  | 87  | 88  | 91  | 94   | 90   | 82   | 80   | 86  | 8  |
| Northern Ireland (DELNI)   | 56   | 57  | 66  | 74  | 63  | 65  | 81   | 75   | 59   | 57   | 65  | 5  |
| TOTAL  | 1,665  | 1,804   | 1,928   | 2,085   | 2,234   | 2,227   | 2,395  | 2,303  | 2,257  | 2,185  | 2,297   | 2,34   |
| Civil Departments:   |  |   |   |   |   |   |  |  |  |  |   |  |
| Health (DH including NHS)  | 593  | 629   | 628   | 673   | 712   | 786   | 845  | 883  | 904  | 980 <sup>†</sup>   | 1,020   | 1,070  |
| of which: National Health Service (NHS)  | 533  | 575   | 583   | 623   | 661   | 730   | 796  | 847  | 866  | 948 <sup>†</sup>   | 984   | 1,03   |
| Business, Innovation and Skills (BIS) <sup>1,3</sup>   | _  |   |   |   |   |   | 000  | 440  |  |  |   | ,  |
| ,  |  | -   | -   | -   | -   | -   | 266  | 410  | 646  | 729  |   | 98   |
| International Development (DFID)   | 215  | -<br>215  | -<br>265  | -<br>247  | -<br>134  |   | 266<br>225   | 410<br>209   |  | 729<br>229   | 981   |  |
|  | 215<br>129   | -<br>215<br>131   | -<br>265<br>137   | -<br>247<br>132   | -<br>134<br>137   | -<br>149<br>141   | 225  | 209  | 226  | 729<br>229<br>163  |   | 30   |
| International Development (DFID) Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup>   | 129  | 131   | 137   | 132   | 137   | 149<br>141  | 225<br>154   | 209<br>167   | 226<br>158   | 229<br>163   | 981<br>262<br>164   | 30<br>16   |
| Scottish Government (SG)<br>Environment, Food and Rural Affairs (DEFRA) <sup>3</sup>   |  |   |   |   | 137<br>190  | 149   | 225  | 209<br>167<br>153  | 226<br>158<br>157  | 229  | 981<br>262<br>164<br>128  | 30<br>16<br>10   |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS)  | 129<br>181<br>15   | 131<br>191  | 137<br>201  | 132<br>194  | 137<br>190<br>39  | 149<br>141<br>187<br>47   | 225<br>154<br>181<br>46  | 209<br>167<br>153<br>47  | 226<br>158<br>157<br>42  | 229<br>163<br>141 <sup>†</sup>                                     | 981<br>262<br>164<br>128<br>79  | 30<br>16<br>10<br>5  |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup>   | 129<br>181   | 131<br>191<br>16  | 137<br>201<br>23  | 132<br>194<br>36  | 137<br>190  | 149<br>141<br>187<br>47<br>60   | 225<br>154<br>181<br>46<br>68  | 209<br>167<br>153<br>47<br>53  | 226<br>158<br>157<br>42<br>34  | 229<br>163<br>141 <sup>†</sup><br>45<br>38                         | 981<br>262<br>164<br>128<br>79<br>43  | 30<br>16<br>10<br>5  |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup>   | 129<br>181<br>15<br>59   | 131<br>191<br>16<br>48  | 137<br>201<br>23<br>51  | 132<br>194<br>36<br>57  | 137<br>190<br>39<br>62  | 149<br>141<br>187<br>47<br>60<br>27   | 225<br>154<br>181<br>46<br>68<br>25  | 209<br>167<br>153<br>47<br>53<br>35  | 226<br>158<br>157<br>42<br>34<br>39  | 229<br>163<br>141 <sup>†</sup><br>45<br>38<br>37                   | 981<br>262<br>164<br>128<br>79<br>43<br>44  | 30<br>16<br>10<br>5<br>5   |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup>  | 129<br>181<br>15<br>59<br>-<br>30                                    | 131<br>191<br>16<br>48<br>-<br>28   | 137<br>201<br>23<br>51<br>-   | 132<br>194<br>36<br>57<br>-<br>30   | 137<br>190<br>39<br>62<br>-<br>36   | 149<br>141<br>187<br>47<br>60<br>27<br>37   | 225<br>154<br>181<br>46<br>68<br>25<br>33  | 209<br>167<br>153<br>47<br>53<br>35<br>29  | 226<br>158<br>157<br>42<br>34<br>39  | 229<br>163<br>141 <sup>†</sup><br>45<br>38<br>37<br>26             | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25                                    | 30<br>16<br>10<br>5<br>5<br>4<br>2   |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)   | 129<br>181<br>15<br>59<br>-<br>30<br>48                              | 131<br>191<br>16<br>48<br>-<br>28<br>58                                   | 137<br>201<br>23<br>51<br>-<br>25<br>73                                   | 132<br>194<br>36<br>57<br>-<br>30<br>50                                   | 137<br>190<br>39<br>62<br>-<br>36<br>42   | 149<br>141<br>187<br>47<br>60<br>27<br>37   | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43                                    | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42                                  | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24                                  | 229<br>163<br>141 <sup>†</sup><br>45<br>38<br>37<br>26<br>19       | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25                                    | 30<br>16<br>10<br>5<br>5<br>4<br>2   |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup>  | 129<br>181<br>15<br>59<br>-<br>30<br>48<br>21                        | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21                             | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21                             | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22                             | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22                                     | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22                               | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21                              | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20                            | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24                                  | 229<br>163<br>141 <sup>†</sup><br>45<br>38<br>37<br>26<br>19       | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22                              | 30<br>16<br>10<br>5<br>5<br>4<br>2<br>2  |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)  | 129<br>181<br>15<br>59<br>-<br>30<br>48<br>21<br>18                  | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21                             | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21<br>18                       | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22<br>18                       | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22                                     | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22                               | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21                              | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20<br>28                      | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24<br>19                            | 229<br>163<br>141 <sup>†</sup><br>45<br>38<br>37<br>26<br>19<br>21 | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22<br>21<br>20                  | 30<br>16<br>10<br>5<br>4<br>2<br>2<br>1  |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup>   | 129<br>181<br>15<br>59<br>-<br>30<br>48<br>21                        | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21                             | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21                             | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22                             | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22<br>17                               | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22<br>19                         | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21<br>35                        | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20<br>28<br>9                 | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24<br>19<br>20<br>8                 | 229 163 141 45 38 37 26 19 21 21                                   | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22<br>21<br>20                  | 30<br>16<br>10<br>5<br>4<br>2<br>2<br>1<br>1                                       |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup>  | 129<br>181<br>15<br>59<br>-<br>30<br>48<br>21<br>18<br>31            | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21<br>18<br>32                 | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21<br>18<br>33                 | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22<br>18<br>10                 | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22<br>17<br>12<br>35                   | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22<br>19<br>10<br>33             | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21<br>35<br>10                  | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20<br>28<br>9                 | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24<br>19<br>20<br>8                 | 229<br>163<br>141 <sup>†</sup><br>45<br>38<br>37<br>26<br>19<br>21 | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22<br>21<br>20                  | 30<br>16<br>10<br>5<br>4<br>2<br>2<br>1<br>1                                       |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA)  | 129<br>181<br>15<br>59<br>-<br>30<br>48<br>21<br>18                  | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21                             | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21<br>18                       | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22<br>18<br>10<br>-            | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22<br>17<br>12<br>35                   | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22<br>19<br>10<br>33<br>11       | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21<br>35<br>10<br>31            | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20<br>28<br>9<br>27<br>5      | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24<br>19<br>20<br>8                 | 229 163 141 45 38 37 26 19 21 21 11 14 7                           | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22<br>21<br>20                  | 30<br>16<br>10<br>5<br>5<br>4<br>2<br>2<br>1<br>1                                  |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup>                                   | 129<br>181<br>15<br>59<br>-<br>30<br>48<br>21<br>18<br>31<br>-<br>22 | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21<br>18<br>32<br>-<br>20      | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21<br>18<br>33<br>-<br>17      | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22<br>18<br>10<br>-<br>15<br>2 | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22<br>17<br>12<br>35<br>14             | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22<br>19<br>10<br>33<br>11       | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21<br>35<br>10<br>31<br>11      | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20<br>28<br>9<br>27<br>5      | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24<br>19<br>20<br>8<br>13<br>6<br>7 | 229 163 141 45 38 37 26 19 21 21                                   | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22<br>21<br>20                  | 30<br>16<br>10<br>5<br>5<br>4<br>2<br>2<br>1<br>1                                  |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) | 129 181 15 59 - 30 48 21 18 31 - 22 - 14                             | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21<br>18<br>32<br>-<br>20<br>- | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21<br>18<br>33<br>-<br>17<br>- | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22<br>18<br>10<br>-<br>15<br>2 | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22<br>17<br>12<br>35<br>14<br>10<br>12 | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22<br>19<br>10<br>33<br>11<br>12 | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21<br>35<br>10<br>31<br>11<br>9 | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20<br>28<br>9<br>27<br>5<br>7 | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24<br>19<br>20<br>8<br>13<br>6<br>7 | 229 163 141 45 38 37 26 19 21 11 14 7 8                            | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22<br>21<br>20<br>11<br>14<br>7 | 303<br>16-<br>100<br>55<br>4<br>2-<br>20<br>16<br>11-<br>14<br>14                  |
| Scottish Government (SG) Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup>                                   | 129<br>181<br>15<br>59<br>-<br>30<br>48<br>21<br>18<br>31<br>-<br>22 | 131<br>191<br>16<br>48<br>-<br>28<br>58<br>21<br>18<br>32<br>-<br>20      | 137<br>201<br>23<br>51<br>-<br>25<br>73<br>21<br>18<br>33<br>-<br>17      | 132<br>194<br>36<br>57<br>-<br>30<br>50<br>22<br>18<br>10<br>-<br>15<br>2 | 137<br>190<br>39<br>62<br>-<br>36<br>42<br>22<br>17<br>12<br>35<br>14             | 149<br>141<br>187<br>47<br>60<br>27<br>37<br>44<br>22<br>19<br>10<br>33<br>11       | 225<br>154<br>181<br>46<br>68<br>25<br>33<br>43<br>21<br>35<br>10<br>31<br>11      | 209<br>167<br>153<br>47<br>53<br>35<br>29<br>42<br>20<br>28<br>9<br>27<br>5      | 226<br>158<br>157<br>42<br>34<br>39<br>30<br>24<br>19<br>20<br>8<br>13<br>6<br>7 | 229 163 141 45 38 37 26 19 21 21 11 14 7                           | 981<br>262<br>164<br>128<br>79<br>43<br>44<br>25<br>22<br>21<br>20<br>11<br>14<br>7 | 982<br>308<br>162<br>100<br>50<br>51<br>4<br>22<br>20<br>18<br>18<br>15<br>12<br>8 |

| Current prices                         |  |   |  |   |   |   |   |   |   |   |   |   | £ million   |
|--|--|---|--|---|---|---|---|---|---|---|---|---|---|
|  |  | 2003  | 2004   | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |
| Business Enterprise and Regulato       | ry Reform (BERR) <sup>3</sup>  | _   | _  | _   | _   | 1   | 1   | _   | _   | -   | -   | -   | -   |
|  | ,  | 255   | 275  | 243   | 204   | -   | -   | _   | -   | -   | -   | -   | -   |
| BIS Science <sup>3</sup>               |  | -   | -  | -   | -   | 393   | 408   | 83  | -   | -   | -   | -   | -   |
| Net Launch Investment                  |  | 215   | -127   | -158  | -154  | -154  | -128  | -57   | -91   | -108  | -150  | -153  | -179  |
| TOTAL                                  |  | 1,929   | 1,666  | 1,721   | 1,652   | 1,738   | 1,905   | 2,076   | 2,064   | 2,244   | 2,353 †   | 2,711   | 2,738   |
| Ministry of Defence (MoD) <sup>9</sup> |  |   |  |   |   |   |   |   |   |   |   |   |   |
| of which:                              | Research   | 524   | 639  | 598   | 632   | 635   | 584   | 575   | 534   | 553   | 565   | 586   | 616   |
|  | Experimental Development   | 1,609   | 1,552  | 1,645   | 1,492   | 1,505   | 1,406   | 1,177   | 1,159   | 753   | 895   | 931   | 1,088   |
| TOTAL                                  |  | 2,133   | 2,191  | 2,243   | 2,124   | 2,139   | 1,991   | 1,752   | 1,693   | 1,306   | 1,460   | 1,516   | 1,704   |
| DEPARTMENTAL R&D TOTAL                 |  | 7,869   | 7,942  | 8,656   | 8,745   | 8,825   | 9,107   | 9,371   | 9,260   | 8,995   | 8,990 <sup>†</sup>                                | 9,883   | 10,063  |
| Indicative UK contributions to EU I    | R&D expenditure <sup>10</sup>  | 390   | 325  | 365   | 374   | 374   | 593   | 668   | 647   | 661   | 751   | 768 <sup>†</sup>  | 638   |
| GRAND R&D TOTAL                        |  | 8,260   | 8,267  | 9,021   | 9,119   | 9,199   | 9,699   | 10,039  | 9,907   | 9,657   | 9,741 †   | 10,652  | 10,701  |
|  | Business Enterprise and Regulato Trade and Industry (DTI) <sup>3</sup> BIS Science <sup>3</sup> Net Launch Investment  TOTAL  Ministry of Defence (MoD) <sup>9</sup> of which:  TOTAL  DEPARTMENTAL R&D TOTAL  Indicative UK contributions to EU I | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> Trade and Industry (DTI) <sup>3</sup> BIS Science <sup>3</sup> Net Launch Investment  TOTAL  Ministry of Defence (MoD) <sup>9</sup> of which: Research Experimental Development  TOTAL  DEPARTMENTAL R&D TOTAL  Indicative UK contributions to EU R&D expenditure <sup>10</sup> | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> - Trade and Industry (DTI) <sup>3</sup> BIS Science <sup>3</sup> Net Launch Investment 215  TOTAL 1,929  Ministry of Defence (MoD) <sup>9</sup> of which: Research Experimental Development 1,609  TOTAL 2,133  DEPARTMENTAL R&D TOTAL 7,869 | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> | Business Enterprise and Regulatory Reform (BERR)3 | Business Enterprise and Regulatory Reform (BERR)3 | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup>   - | Business Enterprise and Regulatory Reform (BERR)3 | Business Enterprise and Regulatory Reform (BERR)3 | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> 1 1 1 | Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> 1 1 1 |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> In April 2007, CCLRC and PPARC merged to form Science and Technology Facilities Council (STFC). In 2011, STFCs subscription for European Space Agency (ESA) transferred to BIS Space.

<sup>2</sup> AHRC was established in April 2005.

<sup>3</sup> From July 2007, the Department for Trade and Industry (DTI) and the Office for Science and Technology (OST) were renamed Business Enterprise and Regulatory Reform (BERR) and the Department of Innovation, Universities and Skills (DIUS) respectively. In 2009, DIUS and BERR merged to form BIS. DIUS was renamed as BIS Science and BERR renamed as BIS. A number of departments previously reporting under DIUS transferred to BIS. From 2010, BIS Science reported under BIS. From 2011 includes all UK subscriptions to the European Space Agency (ESA), and some budget transfers from DEFRA and DfT.

<sup>4</sup> NHS Wales was included from 2010 and Museum Wales included from 2011.

<sup>5</sup> In 2011, Department of the Environment was included for the first time. This will be used as a base year going forward. No back data available.

<sup>6</sup> From June 2007 DfES was renamed Department for Children, Schools and Families (DCSF). From May 2010 DCSF was replaced with Department for Education (DfE). In 2011, expenditure fell due to a move to drive down spend across all budgets, and reflects Ministerial priorities.

<sup>7</sup> DECC was created in October 2008.

<sup>8</sup> Prior to 2006, Ministry of Justice figures were included under "Other departments".

<sup>9</sup> These data comprise elements from both the operating cost statement and the balance sheet in the Departmental Resource Accounts (DRAc). The funding received by MoD and its trading funds for expenditure on R&D are not necessarily spent on defence related R&D. The fall in 2011 net development expenditure was reported by the MoD's Defence Equipment and Support (DE&S) as a number of project teams moved from the development phase to manufacturing.

<sup>10</sup> These indicative contributions are provided by HM Treasury.

<sup>11</sup> Department was not surveyed prior to 2009.

<sup>12</sup> Research Councils' pension contributions are included separately.

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|   |
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|   | 2003  | 2004  | 2005  | 2006   | 2007   | 2008  | 2009   | 2010   | 2011  | 2012   | 2013   |
|---|---|---|---|--|--|---|--|--|---|--|--|
|   |   |   |   |  |  |   |  |  |   |  |  |
| Research Councils:  |   |   |   |  |  |   |  |  |   |  |  |
| Engineering and Physical Sciences (EPSRC)   | 528 <sup>†</sup>  | 607   | 679   | 767  | 805  | 829   | 833  | 860  | 851   | 821  | 883  |
| Medical (MRC)   | 470 <sup>†</sup>  | 475   | 511   | 562  | 574  | 657   | 700  | 727  | 709   | 622  | 802  |
| Science and Technology Facilities (STFC) <sup>1</sup>   | -   | -   | -   | -  | 636 <sup>†</sup>   | 659   | 662  | 595  | 564   | 472  | 509  |
| Biotechnology and Biological Sciences (BBSRC)   | 348 <sup>†</sup>  | 348   | 394   | 434  | 428  | 433   | 477  | 452  | 498   | 495  | 497  |
| Natural Environment (NERC)  | 362 <sup>†</sup>  | 375   | 446   | 418  | 406  | 430   | 480  | 474  | 430   | 392  | 399  |
| Economic and Social (ESRC)  | 109 <sup>†</sup>  | 124   | 143   | 159  | 171  | 179   | 187  | 190  | 177   | 167  | 190  |
| Arts and Humanities (AHRC) <sup>2</sup>   | -   | -   | 71 <sup>†</sup>   | 84   | 100  | 103   | 96   | 95   | 100   | 94   | 93   |
| Pensions <sup>12</sup>  | 37 <sup>†</sup>   | 50  | 18  | 20   | 28   | 82  | 41   | 37   | 36  | 38   | 36   |
| OST / DTI <sup>3</sup>  | 505 <sup>†</sup>  | 450   | 618   | 493  | -  | -   | -  | -  | -   | -  | -  |
| Particle Physics and Astronomy (PPARC) <sup>1</sup>   | 355 <sup>†</sup>  | 373   | 411   | 392  | _  | _   | _  | _  | _   | _  | _  |
| Council for the Central Laboratory (CCLRC) <sup>1</sup>   | 81 <sup>†</sup>   | 81  | 103   | 110  | _  | _   | _  | _  | _   | _  | _  |
| Council for the Gentral Eaboratory (GGENG)  | 01  | 01  | 100   | 110  |  |   |  |  |   |  |  |
| TOTAL   | 2,794 <sup>†</sup>  | 2,883   | 3,394   | 3,440  | 3,148  | 3,372   | 3,475  | 3,430  | 3,365   | 3,101  | 3,409  |
| Higher Education Funding Councils (HEFCs):  |   |   |   |  |  |   |  |  |   |  |  |
| England (HEFCE)   | 1,736 †   | 1,837   | 1,905   | 1,959  | 2,066  | 2,028   | 2,140  | 1,972  | 1,922   | 1,799  | 1,830  |
| Scotland (SFC)  | 253 <sup>†</sup>  | 266   | 280   | 338  | 350  | 311   | 310  | 320  | 312   | 323  | 348  |
| Wales (HEFCW)   | 108 <sup>†</sup>  | 106   | 103   | 103  | 102  | 103   | 103  | 96   | 86  | 83   | 88   |
| Northern Ireland (DELNI)  | 73 <sup>†</sup>   | 72  | 81  | 88   | 73   | 73  | 89   | 80   | 62  | 59   | 66   |
| TOTAL   | 2,170 <sup>†</sup>  | 2,281   | 2,369   | 2,487  | 2,591  | 2,516   | 2,644  | 2,468  | 2,382   | 2,264  | 2,332  |
| Civil Departments:  |   |   |   |  |  |   |  |  |   |  |  |
| Health (DH including NHS)   | 773 <sup>†</sup>  | 795   | 772   | 802  | 826  | 889   | 933  | 946  | 954   | 1,016  | 1,036  |
| of which: National Health Service (NHS)   | 694 <sup>†</sup>  | 726   | 716   | 743  | 767  | 824   | 878  | 908  | 914   | 983  | 999  |
| Business, Innovation and Skills (BIS) <sup>1,3</sup>  | -   | 720   | 710   | -  | 707  | -   | 293 <sup>†</sup>   | 439  | 682   | 755  | 995  |
| International Development (DFID)  | 280 <sup>†</sup>  | 272   | 325   | 295  | 155  | 169   | 249  | 224  | 238   | 237  | 266  |
| Scottish Government (SG)  | 168 <sup>†</sup>  | 166   |   |  | 159  | 159   | 170  | 179  | 236<br>167  | 168  | 167  |
| , ,   | 236 <sup>†</sup>  | 242   | 168<br>246  | 158<br>232   |  |   |  |  |   |  |  |
| Environment Food and Direct Affairs (DEEDA)3  |   | 242   | 24h   | シャン  | 220  | 211   | 200  | 164  | 166   | 146  | 130  |
| Environment, Food and Rural Affairs (DEFRA) <sup>3</sup>  |   |   |   |  |  | EO  |  |  | // //   | 46   | 81   |
| Culture, Media and Sport (DCMS)   | 20 †  | 20  | 28  | 43   | 45   | 53  | 51   | 50<br>57   | 44  |  |  |
| Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup>  | 20 <sup>†</sup><br>77 <sup>†</sup>  |   |   |  |  | 68  | 75   | 57   | 36  | 39   | 44   |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup>   | 20 <sup>†</sup> 77 <sup>†</sup>   | 20<br>61<br>-   | 28<br>62<br>-   | 43<br>68<br>-  | 45<br>72<br>-  | 68<br>30 <sup>†</sup>   | 75<br>27   | 57<br>38   | 36<br>41  | 38   | 45   |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup>  | 20 <sup>†</sup><br>77 <sup>†</sup><br>-<br>39 <sup>†</sup>  | 20<br>61<br>-<br>36   | 28<br>62<br>-<br>31   | 43<br>68<br>-<br>35  | 45<br>72<br>-<br>42  | 68<br>30 <sup>†</sup><br>41   | 75<br>27<br>37   | 57<br>38<br>32   | 36<br>41<br>31  | 38<br>26   | 45<br>26   |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)   | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup>   | 20<br>61<br>-<br>36<br>73   | 28<br>62<br>-<br>31<br>89   | 43<br>68<br>-<br>35<br>60  | 45<br>72<br>-<br>42<br>49  | 68<br>30 <sup>†</sup><br>41<br>50                                     | 75<br>27<br>37<br>48   | 57<br>38<br>32<br>46   | 36<br>41<br>31<br>25                                  | 38<br>26<br>19                                   | 45<br>26<br>22                                   |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup>   | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup>   | 20<br>61<br>-<br>36<br>73<br>26   | 28<br>62<br>-<br>31<br>89<br>25   | 43<br>68<br>-<br>35<br>60<br>26  | 45<br>72<br>-<br>42<br>49<br>25  | 68<br>30 <sup>†</sup><br>41<br>50<br>25                               | 75<br>27<br>37<br>48<br>24                                     | 57<br>38<br>32<br>46<br>21                                   | 36<br>41<br>31<br>25<br>20                            | 38<br>26<br>19<br>22                             | 45<br>26<br>22<br>21                             |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)   | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup> 24 <sup>†</sup>   | 20<br>61<br>-<br>36<br>73<br>26<br>22                                   | 28<br>62<br>-<br>31<br>89<br>25<br>22                                   | 43<br>68<br>-<br>35<br>60<br>26<br>22  | 45<br>72<br>-<br>42<br>49  | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21                         | 75<br>27<br>37<br>48   | 57<br>38<br>32<br>46<br>21<br>30                             | 36<br>41<br>31<br>25                                  | 38<br>26<br>19<br>22<br>22                       | 45<br>26<br>22<br>21<br>20                       |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)  Welsh Government (WG) <sup>4</sup>   | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup>   | 20<br>61<br>-<br>36<br>73<br>26   | 28<br>62<br>-<br>31<br>89<br>25   | 43<br>68<br>-<br>35<br>60<br>26  | 45<br>72<br>-<br>42<br>49<br>25  | 68<br>30 <sup>†</sup><br>41<br>50<br>25                               | 75<br>27<br>37<br>48<br>24<br>38                               | 57<br>38<br>32<br>46<br>21                                   | 36<br>41<br>31<br>25<br>20                            | 38<br>26<br>19<br>22<br>22                       | 45<br>26<br>22<br>21                             |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)  Welsh Government (WG) <sup>4</sup>   | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup> 24 <sup>†</sup>   | 20<br>61<br>-<br>36<br>73<br>26<br>22                                   | 28<br>62<br>-<br>31<br>89<br>25<br>22                                   | 43<br>68<br>-<br>35<br>60<br>26<br>22  | 45<br>72<br>-<br>42<br>49<br>25<br>19  | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21                         | 75<br>27<br>37<br>48<br>24<br>38                               | 57<br>38<br>32<br>46<br>21<br>30                             | 36<br>41<br>31<br>25<br>20<br>21                      | 38<br>26<br>19<br>22<br>22                       | 45<br>26<br>22<br>21<br>20                       |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)   | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup> 24 <sup>†</sup>   | 20<br>61<br>-<br>36<br>73<br>26<br>22                                   | 28<br>62<br>-<br>31<br>89<br>25<br>22                                   | 43<br>68<br>-<br>35<br>60<br>26<br>22  | 45<br>72<br>-<br>42<br>49<br>25<br>19  | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12                   | 75<br>27<br>37<br>48<br>24<br>38                               | 57<br>38<br>32<br>46<br>21<br>30                             | 36<br>41<br>31<br>25<br>20<br>21<br>9                 | 38<br>26<br>19<br>22<br>22                       | 45<br>26<br>22<br>21<br>20<br>12                 |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)  Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup>  | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup> 24 <sup>†</sup> 40 <sup>†</sup>                                     | 20<br>61<br>-<br>36<br>73<br>26<br>22<br>40                             | 28<br>62<br>-<br>31<br>89<br>25<br>22<br>41                             | 43<br>68<br>-<br>35<br>60<br>26<br>22<br>12  | 45<br>72<br>-<br>42<br>49<br>25<br>19<br>14<br>41 <sup>†</sup>                   | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12<br>37             | 75<br>27<br>37<br>48<br>24<br>38<br>11                         | 57<br>38<br>32<br>46<br>21<br>30<br>10<br>29                 | 36<br>41<br>31<br>25<br>20<br>21<br>9                 | 38<br>26<br>19<br>22<br>22                       | 45<br>26<br>22<br>21<br>20<br>12                 |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)  Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA)  Ministry of Justice (MoJ) <sup>8</sup>  | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup> 24 <sup>†</sup> 40 <sup>†</sup>                                     | 20<br>61<br>-<br>36<br>73<br>26<br>22<br>40                             | 28<br>62<br>-<br>31<br>89<br>25<br>22<br>41                             | 43<br>68<br>-<br>35<br>60<br>26<br>22<br>12<br>-<br>18                               | 45<br>72<br>-<br>42<br>49<br>25<br>19<br>14<br>41 <sup>†</sup>                   | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12<br>37<br>13       | 75<br>27<br>37<br>48<br>24<br>38<br>11<br>34                   | 57<br>38<br>32<br>46<br>21<br>30<br>10<br>29<br>6            | 36<br>41<br>31<br>25<br>20<br>21<br>9                 | 38<br>26<br>19<br>22<br>22<br>11<br>15<br>7      | 45<br>26<br>22<br>21<br>20<br>12                 |
| Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE)  | 20 † 77 † - 39 † 63 † 27 † 24 † 40 † - 29 †   | 20<br>61<br>-<br>36<br>73<br>26<br>22<br>40<br>-<br>25                  | 28<br>62<br>-<br>31<br>89<br>25<br>22<br>41<br>-<br>21                  | 43<br>68<br>-<br>35<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 45<br>72<br>-<br>42<br>49<br>25<br>19<br>14<br>41 <sup>†</sup><br>17             | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12<br>37<br>13       | 75<br>27<br>37<br>48<br>24<br>38<br>11<br>34<br>12             | 57<br>38<br>32<br>46<br>21<br>30<br>10<br>29<br>6<br>7       | 36<br>41<br>31<br>25<br>20<br>21<br>9<br>14<br>6<br>7 | 38<br>26<br>19<br>22<br>22<br>11<br>15<br>7<br>8 | 45<br>26<br>22<br>21<br>20<br>12<br>14<br>7      |
| Culture, Media and Sport (DCMS)  Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO)  Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP)  Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA)  Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE)  Communities and Local Government (DCLG)   | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup> 24 <sup>†</sup> 40 <sup>†</sup> - 29 <sup>†</sup> - 18 <sup>†</sup> | 20<br>61<br>-<br>36<br>73<br>26<br>22<br>40<br>-<br>25<br>-             | 28<br>62<br>-<br>31<br>89<br>25<br>22<br>41<br>-<br>21<br>-<br>23       | 43<br>68<br>-<br>35<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 45<br>72<br>-<br>42<br>49<br>25<br>19<br>14<br>41 <sup>†</sup><br>17<br>12       | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12<br>37<br>13<br>14 | 75<br>27<br>37<br>48<br>24<br>38<br>11<br>34<br>12<br>10<br>14 | 57<br>38<br>32<br>46<br>21<br>30<br>10<br>29<br>6<br>7<br>13 | 36<br>41<br>31<br>25<br>20<br>21<br>9<br>14<br>6<br>7 | 38<br>26<br>19<br>22<br>22<br>11<br>15<br>7<br>8 | 45<br>26<br>22<br>21<br>20<br>12<br>14<br>7<br>7 |
| Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) Communities and Local Government (DCLG) Foreign and Commonwealth Office (FCO) <sup>11</sup>  | 20 † 77 † - 39 † 63 † 27 † 24 † 40 † - 29 † - 18 † 40 †   | 20<br>61<br>-<br>36<br>73<br>26<br>22<br>40<br>-<br>25<br>-<br>31<br>36 | 28<br>62<br>-<br>31<br>89<br>25<br>22<br>41<br>-<br>21<br>-<br>23<br>33 | 43<br>68<br>-<br>35<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †<br>17<br>35            | 45<br>72<br>-<br>42<br>49<br>25<br>19<br>14<br>41 <sup>†</sup><br>17<br>12       | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12<br>37<br>13<br>14 | 75<br>27<br>37<br>48<br>24<br>38<br>11<br>34<br>12             | 57<br>38<br>32<br>46<br>21<br>30<br>10<br>29<br>6<br>7       | 36<br>41<br>31<br>25<br>20<br>21<br>9<br>14<br>6<br>7 | 38<br>26<br>19<br>22<br>22<br>11<br>15<br>7<br>8 | 45<br>26<br>22<br>21<br>20<br>12<br>14<br>7<br>7 |
| Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) Communities and Local Government (DCLG) Foreign and Commonwealth Office (FCO) <sup>11</sup> Education and Skills (DfES) <sup>6</sup> | 20 <sup>†</sup> 77 <sup>†</sup> - 39 <sup>†</sup> 63 <sup>†</sup> 27 <sup>†</sup> 24 <sup>†</sup> 40 <sup>†</sup> - 29 <sup>†</sup> - 18 <sup>†</sup> | 20<br>61<br>-<br>36<br>73<br>26<br>22<br>40<br>-<br>25<br>-             | 28<br>62<br>-<br>31<br>89<br>25<br>22<br>41<br>-<br>21<br>-<br>23       | 43<br>68<br>-<br>35<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †                        | 45<br>72<br>-<br>42<br>49<br>25<br>19<br>14<br>41 †<br>17<br>12<br>14<br>29<br>- | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12<br>37<br>13<br>14 | 75<br>27<br>37<br>48<br>24<br>38<br>11<br>34<br>12<br>10<br>14 | 57<br>38<br>32<br>46<br>21<br>30<br>10<br>29<br>6<br>7<br>13 | 36<br>41<br>31<br>25<br>20<br>21<br>9<br>14<br>6<br>7 | 38<br>26<br>19<br>22<br>22<br>11<br>15<br>7<br>8 | 45<br>26<br>22<br>21<br>20<br>12<br>14<br>7<br>7 |
| Culture, Media and Sport (DCMS) Transport (DfT) <sup>3</sup> Energy and Climate Change (DECC) <sup>7</sup> Other Departments <sup>8</sup> Home Office (HO) Northern Ireland Departments (NI) <sup>5</sup> Work and Pensions (DWP) Welsh Government (WG) <sup>4</sup> Education (DfE) <sup>6</sup> Food Standards Agency (FSA) Ministry of Justice (MoJ) <sup>8</sup> Health and Safety Executive (HSE) Communities and Local Government (DCLG) Foreign and Commonwealth Office (FCO) <sup>11</sup>  | 20 † 77 † - 39 † 63 † 27 † 24 † 40 † - 29 † - 18 † 40 †   | 20<br>61<br>-<br>36<br>73<br>26<br>22<br>40<br>-<br>25<br>-<br>31<br>36 | 28<br>62<br>-<br>31<br>89<br>25<br>22<br>41<br>-<br>21<br>-<br>23<br>33 | 43<br>68<br>-<br>35<br>60<br>26<br>22<br>12<br>-<br>18<br>2 †<br>17<br>35<br>-<br>87 | 45<br>72<br>-<br>42<br>49<br>25<br>19<br>14<br>41 <sup>†</sup><br>17<br>12       | 68<br>30 <sup>†</sup><br>41<br>50<br>25<br>21<br>12<br>37<br>13<br>14 | 75<br>27<br>37<br>48<br>24<br>38<br>11<br>34<br>12<br>10<br>14 | 57<br>38<br>32<br>46<br>21<br>30<br>10<br>29<br>6<br>7<br>13 | 36<br>41<br>31<br>25<br>20<br>21<br>9<br>14<br>6<br>7 | 38<br>26<br>19<br>22<br>22<br>11<br>15<br>7<br>8 | 45<br>26<br>22<br>21<br>20<br>12<br>14<br>7<br>7 |

| Constant prices (2014)                 |                               |                           |        |        |        |        |        |        |        |        |               |             | £ million  |
|--|-------------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|-------------|------------|
|  |                               | 2003                      | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012          | 2013        | 2014       |
| Net Launch Investment                  |                               | 281 <sup>†</sup>          | -161   | -194   | -184   | -178   | -145   | -63    | -98    | -113   | -156          | -156        | -179       |
| TOTAL                                  |                               | 2,515 †                   | 2,106  | 2,114  | 1,971  | 2,016  | 2,153  | 2,292  | 2,212  | 2,368  | 2,438         | 2,752       | 2,738      |
| Ministry of Defence (MoD) <sup>9</sup> |                               |                           |        |        |        |        |        |        |        |        |               |             |            |
| of which:                              | Research                      | 683 <sup>†</sup>          | 808    | 735    | 754    | 736    | 660    | 635    | 572    | 584    | 586           | 594         | 616        |
|  | Experimental Development      | 2,097 †                   | 1,962  | 2,021  | 1,780  | 1,745  | 1,589  | 1,299  | 1,242  | 794    | 928           | 945         | 1,088      |
| TOTAL                                  |                               | <b>2,780</b> <sup>†</sup> | 2,770  | 2,755  | 2,534  | 2,481  | 2,249  | 1,934  | 1,815  | 1,378  | 1,513         | 1,539       | 1,704      |
| DEPARTMENTAL R&D TOTAL                 |                               | 10,259 <sup>†</sup>       | 10,040 | 10,632 | 10,433 | 10,236 | 10,290 | 10,344 | 9,924  | 9,493  | 9,317         | 10,033      | 10,063     |
| Indicative UK contributions to EU      | R&D expenditure <sup>10</sup> | 509 <sup>†</sup>          | 411    | 448    | 446    | 434    | 670    | 738    | 693    | 698    | 778           | 780         | 638        |
| GRAND R&D TOTAL                        |                               | 10,767 †                  | 10,451 | 11,080 | 10,879 | 10,670 | 10,960 | 11,082 | 10,617 | 10,191 | 10,095        | 10,813      | 10,701     |
| 2014 = 100                             |                               |                           |        |        |        |        |        |        |        | Sour   | ce: Office fo | or National | Statistics |
|  |                               | 2003                      | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012          | 2013        | 2014       |
| GDP deflator used to convert curr      | ent prices to constant prices | 76.711 <sup>†</sup>       | 79.103 | 81.417 | 83.823 | 86.213 | 88.497 | 90.589 | 93.309 | 94.757 | 96.494        | 98.510      | 100        |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

- 2 AHRC was established in April 2005.
- 3 From July 2007, the Department for Trade and Industry (DTI) and the Office for Science and Technology (OST) were renamed Business Enterprise and Regulatory Reform (BERR) and the Department of Innovation, Universities and Skills (DIUS) respectively. In 2009, DIUS and BERR merged to form BIS. DIUS was renamed as BIS Science and BERR renamed as BIS. A number of departments previously reporting under DIUS transferred to BIS. From 2010, BIS Science reported under BIS. From 2011 includes all UK subscriptions to the European Space Agency (ESA), and some budget transfers from DEFRA and DfT.
- 4 NHS Wales was included from 2010 and Museum Wales included from 2011.
- 5 In 2011, Department of the Environment was included for the first time. This will be used as a base year going forward. No back data available.
- 6 From June 2007 DfES was renamed Department for Children, Schools and Families (DCSF). From May 2010 DCSF was replaced with Department for Education (DfE). In 2011, expenditure fell due to a move to drive down spend across all budgets, and reflects Ministerial priorities.
- 7 DECC was created in October 2008.
- 8 Prior to 2006, Ministry of Justice figures were included under "Other departments".
- 9 These data comprise elements from both the operating cost statement and the balance sheet in the Departmental Resource Accounts (DRAc). The funding received by MoD and its trading funds for expenditure on R&D are not necessarily spent on defence related R&D. The fall in 2011 net development expenditure was reported by the MoD's Defence Equipment and Support (DE&S) as a number of project teams moved from the development phase to manufacturing.
- 10 These indicative contributions are provided by HM Treasury.
- 11 Department was not surveyed prior to 2009.
- 12 Research Councils' pension contributions are included separately.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> In April 2007, CCLRC and PPARC merged to form Science and Technology Facilities Council (STFC). In 2011, STFCs subscription for European Space Agency (ESA) transferred to BIS Space.

| Current prices   | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013           | £ million<br>2014 |
|--|------|------|------|------|------|------|------|------|------|------|----------------|-------------------|
|  | 2000 | 2004 | 2000 | 2000 | 2001 | 2000 | 2000 | 2010 | 2011 | 2012 | 2010           | 2015              |
| Research Councils:                                       |      |      |      |      |      |      |      |      |      |      |                |                   |
| Engineering and Physical Sciences (EPSRC)                | 19   | 9    | 2    | 1    | 1    | -    | 1    | 43   | 47   | 128  | 121            | 105               |
| Medical (MRC)  | 6    | 4    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Science and Technology Facilities (STFC) <sup>1</sup>    | -    | -    | -    | -    | 4    | 7    | 7    | 8    | 7    | 12   | 9              | 12                |
| Biotechnology and Biological Sciences (BBSRC)            | 1    | 1    | 1    | 2    | 4    | 10   | 13   | 13   | 16   | 18   | 20             | 1                 |
| Natural Environment (NERC)                               | 17   | 21   | 10   | 11   | 14   | 15   | 19   | 7    | 9    | 14   | 15             | 1                 |
| Economic and Social (ESRC)                               | 5    | 7    | 9    | 10   | 4    | 4    | 4    | 5    | 6    | 9    | 8              |                   |
| Arts and Humanities (AHRC) <sup>2</sup>                  | -    | -    | 11   | 11   | 2    | 3    | 3    | 3    | 4    | 7    | 8              |                   |
| Pensions <sup>11</sup>                                   | 2    | 3    | -    | -    | -    | 1    | 1    | -    | 1    | 3    | 3              |                   |
| OST / DTI <sup>3</sup>                                   | 65   | 84   | 75   | 95   | -    | -    | -    | -    | -    | -    | -              |                   |
| Particle Physics and Astronomy (PPARC) <sup>1</sup>      | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Council for the Central Laboratory (CCLRC) <sup>1</sup>  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| TOTAL  | 116  | 128  | 108  | 130  | 29   | 40   | 47   | 79   | 91   | 191  | 184            | 16                |
| Higher Education Funding Councils (HEFCs):               |      |      |      |      |      |      |      |      |      |      |                |                   |
| England (HEFCE)  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Scotland (SFC)   | -    | -    | -    | -    | 18   | 21   | 8    | 25   | 28   | 28   | 31             | 5                 |
| Wales (HEFCW)  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Northern Ireland (DELNI)                                 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| TOTAL  | -    | -    | -    | -    | 18   | 21   | 8    | 25   | 28   | 28   | 31             | 5                 |
| Civil Departments:                                       |      |      |      |      |      |      |      |      |      |      |                |                   |
| Health (DH including NHS)                                | -    | -    | -    | -    | 1    | 1    | 1    | _    | -    | 1    | -              |                   |
| of which: National Health Service (NHS)                  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Business, Innovation and Skills (BIS) <sup>1,3</sup>     | -    | -    | -    | -    | -    | -    | 42   | 54   | 50   | 42   | 40             | 3                 |
| International Development (DFID)                         | -    | -    | -    | -    | 18   | 19   | 12   | 11   | 10   | 9    | 10             |                   |
| Scottish Government (SG)                                 | 29   | 45   | 72   | 81   | 84   | 77   | 65   | 11   | 11   | 14   | 13             |                   |
| Environment, Food and Rural Affairs (DEFRA) <sup>3</sup> | 76   | 81   | 88   | 105  | 12   | 11   | 4    | 4    | 3    | 3    | 1 <sup>†</sup> |                   |
| Culture, Media and Sport (DCMS)                          | -    | -    | -    | -    | 5    | 18   | 18   | 6    | 6    | 2    | 9 <sup>†</sup> |                   |
| Transport (DfT) <sup>3</sup>                             | 11   | 11   | 10   | 2    | 5    | 4    | 12   | 1    | 1    | 1    | 1              |                   |
| Energy and Climate Change (DECC) <sup>7</sup>            | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Other Departments <sup>8</sup>                           | 13   | 13   | 13   | 13   | 1    | 1    | 1    | 1    | 1    | 1    | 1              |                   |
| Home Office (HO)   | -    | -    | -    | -    | 1    | 2    | 1    | 5    | 1    | 1    | 1              |                   |
| Northern Ireland Departments (NI) <sup>5</sup>           | -    | -    | -    | -    | 1    | 1    | 1    | 1    | 1    | 1    | 1              |                   |
| Work and Pensions (DWP)                                  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Welsh Government (WG) <sup>4</sup>                       | -    | -    | -    | -    | -    | 1    | 1    | 1    | 1 †  | 1    | 1              |                   |
| Education (DfE) <sup>6</sup>                             | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
| Food Standards Agency (FSA)                              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 1              |                   |
| Ministry of Justice (MoJ) <sup>8</sup>                   | -    | -    | -    | -    | 1    | 1    | 2    | 1    | -    | -    | -              |                   |
| Health and Safety Executive (HSE)                        | 3    | 3    | 3    | 3    | -    | -    | -    | -    | -    | -    | -              |                   |
| Communities and Local Government (DCLG)                  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -              |                   |
|  | _    | _    | _    | _    | _    | _    | _    | _    | _    | _    | -              |                   |
| Foreign and Commonwealth Office (FCO) <sup>10</sup>      |      |      |      |      |      |      |      |      |      |      |                |                   |

| Current prices  |      |      |      |      |      |      |      |      |                  |      |      | £ million |
|---|------|------|------|------|------|------|------|------|------------------|------|------|-----------|
|   | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011             | 2012 | 2013 | 2014      |
| Business Enterprise and Regulatory Reform (BERR) <sup>3</sup> | -    | -    | -    | -    | 1    | 1    | _    | _    | -                | -    | -    | -         |
| Trade and Industry (DTI) <sup>3</sup>                         | 79   | 47   | 57   | 61   | -    | -    | -    | -    | -                | -    | -    | -         |
| BIS Science <sup>3</sup>                                      | -    | -    | -    | -    | 27   | 30   | -    | -    | -                | -    | -    | -         |
| Net Launch Investment   | -    | -    | -    | -    | -    | -    | -    | -    | -                | -    | -    | -         |
| TOTAL   | 211  | 200  | 243  | 266  | 158  | 167  | 160  | 97   | 87 <sup>†</sup>  | 77   | 80   | 67        |
| Ministry of Defence (MoD) <sup>9</sup>                        | -    | -    | -    | -    | -    | -    | -    | -    | -                | -    | -    | -         |
| TOTAL   | -    | -    | -    | -    | -    | -    | -    | -    | -                | -    | -    | -         |
| GRAND TOTAL   | 326  | 328  | 352  | 396  | 205  | 228  | 215  | 201  | 206 <sup>†</sup> | 296  | 295  | 290       |

- 2 AHRC was established in April 2005.
- 3 From July 2007, the Department for Trade and Industry (DTI) and the Office for Science and Technology (OST) were renamed Business Enterprise and Regulatory Reform (BERR) and the Department of Innovation, Universities and Skills (DIUS) respectively. In 2009, DIUS and BERR merged to form BIS. DIUS was renamed as BIS Science and BERR renamed as BIS. A number of departments previously reporting under DIUS transferred to BIS. From 2010, BIS Science reported under BIS. From 2011 includes all UK subscriptions to the European Space Agency (ESA), and some budget transfers from DEFRA and DfT.
- 4 NHS Wales was included from 2010 and Museum Wales included from 2011.
- 5 In 2011, Department of the Environment was included for the first time. This will be used as a base year going forward. No back data available.
- 6 From June 2007 DfES was renamed Department for Children, Schools and Families (DCSF). From May 2010 DCSF was replaced with Department for Education (DfE). In 2011, expenditure fell due to a move to drive down spend across all budgets, and reflects Ministerial priorities.
- 7 DECC was created in October 2008.
- 8 Prior to 2006, Ministry of Justice figures were included under "Other departments".
- 9 These data comprise elements from both the operating cost statement and the balance sheet in the Departmental Resource Accounts (DRAc). The funding received by MoD and its trading funds for expenditure on R&D are not necessarily spent on defence related R&D. The fall in 2011 net development expenditure was reported by the MoD's Defence Equipment and Support (DE&S) as a number of project teams moved from the development phase to manufacturing.
- 10 Department was not surveyed prior to 2009.
- 11 Research Councils' pension contributions are included separately.

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> In April 2007, CCLRC and PPARC merged to form Science and Technology Facilities Council (STFC). In 2011, STFCs subscription for European Space Agency (ESA) transferred to BIS Space.

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| Constant prices (2014)   | 0000             | 0004 | 0005            | 0000 | 0007            | 0000 | 0000            | 0010 | 0011 | 0010 |      | £m |
|--|------------------|------|-----------------|------|-----------------|------|-----------------|------|------|------|------|----|
|  | 2003             | 2004 | 2005            | 2006 | 2007            | 2008 | 2009            | 2010 | 2011 | 2012 | 2013 |    |
| Research Councils:   |                  |      |                 |      |                 |      |                 |      |      |      |      |    |
| Engineering and Physical Sciences (EPSRC)  | 25 <sup>†</sup>  | 11   | 3               | 1    | 1               | -    | 1               | 46   | 50   | 132  | 123  |    |
| Medical (MRC)  | 8 †              | 5    | -               | -    | -               | -    | -               | -    | -    | -    | -    |    |
| Science and Technology Facilities (STFC) <sup>1</sup>  | -                | -    | -               | -    | 5 <sup>†</sup>  | 8    | 8               | 8    | 8    | 12   | 9    |    |
| Biotechnology and Biological Sciences (BBSRC)  | 2 †              | 2    | 2               | 3    | 5               | 11   | 14              | 14   | 17   | 19   | 20   |    |
| Natural Environment (NERC)   | 22 †             | 27   | 12              | 13   | 16              | 17   | 21              | 8    | 10   | 15   | 15   |    |
| Economic and Social (ESRC)   | 7 †              | 8    | 11              | 12   | 5               | 4    | 5               | 5    | 7    | 9    | 8    |    |
| Arts and Humanities (AHRC) <sup>2</sup>  | -                | -    | 14 <sup>†</sup> | 14   | 2               | 3    | 3               | 3    | 4    | 7    | 8    |    |
| Pensions <sup>11</sup>   | 2 †              | 3    | -               | -    | -               | 1    | 1               | 1    | 1    | 3    | 3    |    |
| OST / DTI <sup>3</sup>   | 85 <sup>†</sup>  | 106  | 92              | 113  | -               | -    | -               | -    | -    | -    | -    |    |
| Particle Physics and Astronomy (PPARC) <sup>1</sup>  | -                | -    | -               | -    | -               | -    | -               | -    | -    | -    | -    |    |
| Council for the Central Laboratory (CCLRC) <sup>1</sup>                                      | -                | -    | -               | -    | -               | -    | -               | -    | -    | -    | -    |    |
| TOTAL  | 151 <sup>†</sup> | 162  | 133             | 155  | 33              | 45   | 52              | 85   | 96   | 198  | 187  |    |
| Higher Education Funding Councils (HEFCs):   |                  |      |                 |      |                 |      |                 |      |      |      |      |    |
| England (HEFCE)  | -                | -    | -               | -    | -               | -    | -               | -    | -    | -    | -    |    |
| Scotland (SFC)   | -                | -    | -               | -    | 21 <sup>†</sup> | 23   | 9               | 27   | 29   | 29   | 31   |    |
| Wales (HEFCW)  | -                | -    | -               | -    | -               | -    | -               | -    | -    | -    | _    |    |
| Northern Ireland (DELNI)   | -                | -    | -               | -    | -               | -    | -               | -    | -    | -    | -    |    |
| TOTAL  | -                | -    | -               | -    | 21 <sup>†</sup> | 23   | 9               | 27   | 29   | 29   | 31   |    |
| Civil Departments:   |                  |      |                 |      |                 |      |                 |      |      |      |      | _  |
| Health (DH including NHS)  | _ †              | -    | -               | -    | 1               | 1    | 1               | 1    | -    | 1    | -    |    |
| of which: National Health Service (NHS)  | -                | -    | -               | -    | -               | -    | -               | -    | -    | -    | _    |    |
| Business, Innovation and Skills (BIS) <sup>1,3</sup>   | -                | -    | -               | -    | -               | -    | 47 <sup>†</sup> | 58   | 53   | 44   | 41   |    |
| International Development (DFID)   | -                | -    | -               | -    | 20 <sup>†</sup> | 22   | 13              | 12   | 11   | 9    | 10   |    |
| Scottish Government (SG)   | 37 <sup>†</sup>  | 57   | 89              | 97   | 98              | 88   | 71              | 11   | 12   | 15   | 13   |    |
| Environment, Food and Rural Affairs (DEFRA) <sup>3</sup>                                     | 99 <sup>†</sup>  | 103  | 108             | 126  | 14              | 13   | 4               | 4    | 3    | 4    | 1    |    |
| Culture, Media and Sport (DCMS)  | _ †              | -    | -               | -    | 6               | 20   | 20              | 7    | 6    | 3    | 9    |    |
| Transport (DfT) <sup>3</sup>   | 14 <sup>†</sup>  | 13   | 12              | 2    | 5               | 4    | 13              | 1    | 1    | 1    | 1    |    |
| Energy and Climate Change (DECC) <sup>7</sup>  | -                | -    | -               | -    | -               | _ †  | -               | -    | -    | -    | -    |    |
| Other Departments <sup>8</sup>   | 16 <sup>†</sup>  | 16   | 16              | 15   | 1               | 1    | 1               | 1    | 1    | 1    | 1    |    |
| Home Office (HO)   | _ †              | -    | -               | -    | 1               | 2    | 1               | 6    | 1    | 1    | 1    |    |
| Northern Ireland Departments (NI) <sup>5</sup>   | _ †              | -    | -               | -    | 1               | 1    | 1               | 1    | 1    | 1    | 1    |    |
| Work and Pensions (DWP)  | -                | -    | -               | -    | -               | -    | -               | _ †  | -    | -    | -    |    |
| Welsh Government (WG) <sup>4</sup>   | -                | -    | -               | -    | _ †             | 1    | 1               | 1    | 1    | 1    | 1    |    |
| Education (DfE) <sup>6</sup>   | -                | -    | -               | -    | -               | -    | _ †             | -    | -    | -    | -    |    |
| Food Standards Agency (FSA)  | -                | -    | -               | -    | -               | 1 †  | -               | -    | 1    | -    | 1    |    |
| Ministry of Justice (MoJ) <sup>8</sup>   | -                | -    | -               | -    | 1 †             | 1    | 2               | 1    | -    | -    | -    |    |
| Health and Safety Executive (HSE)  | 4 †              | 4    | 4               | 4    | -               | 0    | -               | -    | -    | -    | -    |    |
|  | _                | _    | _               | -    | 1 †             | 1    | -               | -    | -    | -    | -    |    |
| Communities and Local Government (DCLG)  |                  |      |                 |      |                 |      |                 |      |      |      |      |    |
| Communities and Local Government (DCLG)  Foreign and Commonwealth Office (FCO) <sup>10</sup> | -                | -    | -               | -    | -               | -    | -               | -    | -    | -    | -    |    |

| Constant prices (2014)   |                     |        |        |        |        |        |        |        |        |               |             | £ million  |
|--|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|-------------|------------|
|  | 2003                | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012          | 2013        | 2014       |
| Business Enterprise and Regulatory Reform (BERR) <sup>3</sup>  | -                   | _      | _      | _      | 1 †    | 1      | _      | _      | _      | -             | _           | -          |
| Trade and Industry (DTI) <sup>3</sup>                          | 103 <sup>†</sup>    | 59     | 70     | 73     | _ †    | _      | -      | -      | -      | -             | -           | -          |
| BIS Science <sup>3</sup>                                       | -                   | -      | -      | -      | 31     | 33     | -      | -      | -      | -             | -           | -          |
| Net Launch Investment  | -                   | -      | -      | -      | -      | -      | -      | -      | -      | -             | -           | -          |
| TOTAL  | 275 <sup>†</sup>    | 253    | 299    | 317    | 183    | 189    | 176    | 104    | 92     | 80            | 81          | 67         |
| Ministry of Defence (MoD) <sup>9</sup>                         | -                   | -      | -      | -      | -      | -      | -      | -      | -      | -             | -           | -          |
| TOTAL  | -                   | -      | -      | -      | -      | -      | -      | -      | -      | -             | -           | -          |
| GRAND TOTAL  | 425 <sup>†</sup>    | 415    | 432    | 472    | 237    | 257    | 238    | 215    | 218    | 306           | 299         | 290        |
| 2014 = 100   |                     |        |        |        |        |        |        |        | Sour   | ce: Office fo | or National | Statistics |
|  | 2003                | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012          | 2013        | 2014       |
| GDP deflator used to convert current prices to constant prices | 76.711 <sup>†</sup> | 79.103 | 81.417 | 83.823 | 86.213 | 88.497 | 90.589 | 93.309 | 94.757 | 96.494        | 98.510      | 100        |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

- 2 AHRC was established in April 2005.
- 3 From July 2007, the Department for Trade and Industry (DTI) and the Office for Science and Technology (OST) were renamed Business Enterprise and Regulatory Reform (BERR) and the Department of Innovation, Universities and Skills (DIUS) respectively. In 2009, DIUS and BERR merged to form BIS. DIUS was renamed as BIS Science and BERR renamed as BIS. A number of departments previously reporting under DIUS transferred to BIS. From 2010, BIS Science reported under BIS. From 2011 includes all UK subscriptions to the European Space Agency (ESA), and some budget transfers from DEFRA and DfT.
- 4 NHS Wales was included from 2010 and Museum Wales included from 2011.
- 5 In 2011, Department of the Environment was included for the first time. This will be used as a base year going forward. No back data available.
- 6 From June 2007 DfES was renamed Department for Children, Schools and Families (DCSF). From May 2010 DCSF was replaced with Department for Education (DfE). In 2011, expenditure fell due to a move to drive down spend across all budgets, and reflects Ministerial priorities.
- 7 DECC was created in October 2008.
- 8 Prior to 2006, Ministry of Justice figures were included under "Other departments".
- 9 These data comprise elements from both the operating cost statement and the balance sheet in the Departmental Resource Accounts (DRAc). The funding received by MoD and its trading funds for expenditure on R&D are not necessarily spent on defence related R&D. The fall in 2011 net development expenditure was reported by the MoD's Defence Equipment and Support (DE&S) as a number of project teams moved from the development phase to manufacturing.
- 10 Department was not surveyed prior to 2009.
- 11 Research Councils' pension contributions are included separately.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> In April 2007, CCLRC and PPARC merged to form Science and Technology Facilities Council (STFC). In 2011, STFCs subscription for European Space Agency (ESA) transferred to BIS Space.

|  | General      | Government | Policy   | Technology   | Tota |
|--|--------------|------------|----------|--------------|------|
|  | Research     | Services   | Research | Research     | R&   |
|  |              |            |          |              |      |
| Research Councils:                                 |              |            |          |              |      |
| Engineering and Physical Sciences (EPSRC)          | 204          | -          | -        | 604          | 80   |
| Medical (MRC)                                      | 532          | 95         | 21       | 68           | 71   |
| Science and Technology Facilities (STFC)           | 467          | -          | -        | 73           | 54   |
| Biotechnology and Biological Sciences (BBSRC)      | 494          | -          | -        | 19           | 51   |
| Natural Environment (NERC)                         | 267          | 7          | 69       | 28           | 37   |
| Economic and Social (ESRC)                         | 90           | -          | 96       | -            | 18   |
| Arts and Humanities (AHRC)                         | 96           | -          | -        | -            | 9    |
| TOTAL <sup>1</sup>                                 | 2,151        | 102        | 186      | 793          | 3,23 |
| Higher Education Funding Councils (HEFCs):         |              |            |          |              |      |
| England (HEFCE)                                    | 1,829        | -          | -        | =            | 1,82 |
| Scotland (SFC)                                     | 371          | -          | -        | -            | 3    |
| Wales (HEFCW)                                      | 86           | _          | _        | _            | {    |
| Northern Ireland (DELNI)                           | 55           | _          | _        | _            |      |
| Notificial and (BELIN)                             | 00           |            |          |              |      |
| TOTAL  | 2,341        | -          | -        | •            | 2,3  |
| Civil Departments:                                 |              |            |          |              |      |
| Health (DH including NHS)                          | 1,036        | 9          | 31       | _            | 1,0  |
| of which: National Health Service (NHS)            | 1,036        | -          | -        | _            | 1,0  |
| Business, Innovation and Skills (BIS) <sup>2</sup> | 85           | _          | 10       | 708          | 8    |
| International Development (DFID)                   | -            |            | 308      | 700          | 3    |
| Scottish Government (SG)                           | 72           | -          | 53       | 34           | 1    |
| , ,  |              | 5          |          |              |      |
| Environment, Food and Rural Affairs (DEFRA)        | 12           | 27         | 60       | 1            | 1    |
| Culture, Media and Sport (DCMS)                    | 31           | 3          | 19       | 1            |      |
| Transport (DfT)                                    | -            | 2          | 18       | 31           |      |
| Energy and Climate Change (DECC)                   | 20           | 7          | 5        | 8            |      |
| Other Departments                                  | -            | 5          | 6        | 12           |      |
| Home Office (HO)                                   | <del>-</del> | 9          | 11       | <del>-</del> |      |
| Northern Ireland Departments (NI)                  | 11           | 2          | 4        | 1            |      |
| Work and Pensions (DWP)                            | -            | -          | 18       | -            |      |
| Welsh Government (WG)                              | -            | 8          | 6        | 1            |      |
| Education (DfE)                                    | -            | -          | 14       | -            |      |
| Food Standards Agency (FSA)                        | -            | -          | 9        | -            |      |
| Ministry of Justice (MoJ)                          | -            | 5          | 3        | -            |      |
| Health and Safety Executive (HSE)                  | -            | -          | 8        | -            |      |
| Communities and Local Government (DCLG)            | -            | -          | 7        | -            |      |
| Foreign and Commonwealth Office (FCO)              | -            | -          | 2        | -            |      |
| TOTAL  | 1,267        | 82         | 592      | 797          | 2,7  |

|                           | General<br>Research | Government<br>Services | Policy<br>Research | Technology<br>Research | £ million<br>Total<br>R&D |
|---------------------------|---------------------|------------------------|--------------------|------------------------|---------------------------|
| Ministry of Defence (MoD) | -                   | 1,704                  | -                  | -                      | 1,704                     |
| TOTAL                     | -                   | 1,704                  | -                  | -                      | 1,704                     |
| GRAND TOTAL               | 5,759               | 1,888                  | 778                | 1,589                  | 10,015                    |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>1</sup> For the purpose of this analysis Research Councils expenditure for Pensions have been excluded as they cannot be attributed to type of research.

<sup>2</sup> Please note for the purpose of this analysis Launch Investment is not shown separately.

## UK government net expenditure on R&D by socio-economic objective, percentage share: 2007 to 2014

| Current prices   | 2007  | 2008  | 2009  | 2010  | 2011  | 2012           | 2013            | £ |
|--|-------|-------|-------|-------|-------|----------------|-----------------|---|
|  | 2007  | 2000  | 2000  | 2010  | 2011  | 2012           | 2010            |   |
| TOTAL  | 8,825 | 9,107 | 9,371 | 9,260 | 8,995 | 8,990 †        | 9,883           |   |
|  |       |       |       |       |       |                |                 |   |
|  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012           | 2013            |   |
| Per cent   |       |       |       |       |       |                |                 |   |
| TOTAL  | 100   | 100   | 100   | 100   | 100   | 100            | 100             |   |
| Agriculture  | 3     | 3     | 4     | 3     | 4     | 4              | 4               |   |
| Industrial production and technology   | -     | 1     | 2     | 1     | 2     | 1              | 2               |   |
| Energy   | 1     | 1     | 1     | 1     | 2     | 2              | 2               |   |
| Transport, telecommunication, other infrastructure                           | 1     | 1     | 1     | 1     | 3     | 3              | 3               |   |
| Environment  | 2     | 3     | 3     | 3     | 3     | 3              | 3               |   |
| Health   | 17    | 18    | 19    | 21    | 22    | 22             | 23 †            |   |
| Education  | 1     | 1     | 1     | 1     | -     | -              | -               |   |
| Exploration and exploitation of the earth                                    | 3     | 3     | 3     | 3     | 3     | 3              | 3               |   |
| General advancement of knowledge: R&D financed from General University Funds | 25    | 24    | 26    | 25    | 25    | 24             | 23              |   |
| Exploration and exploitation of space  | 2     | 2     | 2     | 2     | 3     | 3 †            | 4               |   |
| Defence  | 24    | 22    | 19    | 18    | 15    | 16             | 15 <sup>†</sup> |   |
| Culture, recreation, religion and mass media                                 | 2     | 2     | 2     | 2     | 2     | 1 <sup>†</sup> | 1               |   |
| Political and social systems, structures and processes                       | 1     | 2     | 2     | 2     | 1     | 3 †            | 3               |   |
| General advancement of knowledge: R&D financed from other sources            | 18    | 18    | 17    | 18    | 13    | 13             | 13              |   |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>†</sup> denotes earliest data revision.

| Current prices    |  | 0000  | 0004  | 0005  | 0000  | 0007  | 0000  | 0000   | 0010   | 0011  | 0010               | 0010             | £ |
|-------------------|--|-------|-------|-------|-------|-------|-------|--------|--------|-------|--------------------|------------------|---|
|                   |  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009   | 2010   | 2011  | 2012               | 2013             |   |
| GROSS EXPENDITU   | RE <sup>1</sup>                            | 8,476 | 8,598 | 9,353 | 9,465 | 9,584 | 9,852 | 10,263 | 10,141 | 9,800 | 9,836 †            | 10,760           |   |
| of which:         |  |       |       |       |       |       |       |        |        |       |                    |                  |   |
|                   | Within government departments <sup>2</sup> | 2,213 | 2,322 | 2,448 | 2,467 | 2,452 | 2,530 | 2,668  | 2,660  | 2,562 | 2,478 <sup>†</sup> | 2,602            |   |
|                   | Higher Education Institutions              | 3,224 | 3,400 | 3,868 | 4,146 | 4,136 | 4,366 | 4,661  | 4,608  | 4,631 | 4,472 <sup>†</sup> | 4,795            |   |
|                   | Private Industry/Public corporations       | 2,327 | 2,058 | 2,225 | 2,124 | 2,080 | 1,783 | 1,727  | 1,935  | 1,535 | 1,841 <sup>†</sup> | 2,081            |   |
|                   | Overseas                                   | 575   | 648   | 609   | 531   | 705   | 946   | 916    | 676    | 720   | 688                | 750 <sup>†</sup> |   |
|                   | Others                                     | 137   | 170   | 203   | 197   | 211   | 228   | 290    | 262    | 353   | 357 <sup>†</sup>   | 532              |   |
|                   | _  | 107   |       |       |       |       | 220   | 200    | 202    | 000   |                    | 002              |   |
|                   | Less funding received <sup>3</sup>         | 606   | 656   | 697   | 720   | 759   | 746   | 892    | 881    | 805   | 846 <sup>†</sup>   | 876              |   |
|                   | TOTAL NET EXPENDITURE                      | 7,869 | 7,942 | 8,656 | 8,745 | 8,825 | 9,107 | 9,371  | 9,260  | 8,995 | 8,990 †            | 9,883            |   |
| GROSS CIVIL EXPEN | NDITURE <sup>1</sup>                       |       |       |       |       |       |       |        |        |       |                    |                  | _ |
| of which:         |  | 6,276 | 6,338 | 7,035 | 7,253 | 7,363 | 7,779 | 8,424  | 8,360  | 8,452 | 8,332 †            | 9,200            |   |
|                   | Within government departments <sup>2</sup> | 1,833 | 1,960 | 2,077 | 2,106 | 2,173 | 2,260 | 2,376  | 2,433  | 2,399 | 2,325 †            | 2,433            |   |
|                   | Higher Education Institutions              | 3,214 | 3,384 | 3,863 | 4,132 | 4,131 | 4,361 | 4,657  | 4,604  | 4,628 | 4,472 <sup>†</sup> | 4,794            |   |
|                   | Private Industry/Public corporations       | 737   | 427   | 416   | 372   | 428   | 430   | 609    | 576    | 493   | 595 <sup>†</sup>   | 772              |   |
|                   | Overseas                                   | 356   | 397   | 476   | 446   | 429   | 500   | 493    | 485    | 580   | 584                | 669 <sup>†</sup> |   |
|                   | Others                                     | 137   | 169   | 203   | 197   | 203   | 228   | 290    | 261    | 353   | 357 <sup>†</sup>   | 532              |   |
|                   | Less funding received <sup>3</sup>         | 539   | 587   | 623   | 632   | 678   | 663   | 805    | 793    | 763   | 802 <sup>†</sup>   | 833              |   |
|                   | CIVIL NET EXPENDITURE                      | 5,737 | 5,751 | 6,413 | 6,621 | 6,686 | 7,116 | 7,619  | 7,567  | 7,690 | 7,530 <sup>†</sup> | 8,367            |   |
| GROSS DEFENCE E   | XPENDITURE <sup>1</sup>                    |       |       |       |       |       |       |        |        |       |                    |                  |   |
| of which:         |  | 2,200 | 2,260 | 2,318 | 2,212 | 2,220 | 2,074 | 1,839  | 1,782  | 1,348 | 1,504              | 1,560            |   |
|                   | Within government departments <sup>2</sup> | 380   | 362   | 371   | 361   | 279   | 269   | 293    | 227    | 163   | 154                | 169              |   |
|                   | Higher Education Institutions              | 10    | 16    | 5     | 13    | 5     | 5     | 5      | 4      | 3     | -                  | 1                |   |
|                   | Private Industry/Public corporations       | 1,590 | 1,631 | 1,809 | 1,752 | 1,652 | 1,353 | 1,118  | 1,359  | 1,042 | 1,246              | 1,309            |   |
|                   | Overseas                                   | 219   | 251   | 132   | 85    | 276   | 446   | 423    | 191    | 140   | 104                | 81               |   |
|                   | Others                                     | -     | -     | -     | -     | 8     | 1     | -      | 1      | -     | -                  | -                |   |
|                   | Less funding received <sup>3</sup>         | 68    | 69    | 75    | 88    | 81    | 83    | 87     | 89     | 42    | 44                 | 44               |   |
|                   |  |       |       |       |       |       |       |        |        |       |                    |                  |   |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> Gross expenditure is the amount of R&D expenditure within and outside government departments, which includes Research Council Institutes and Local Authorities.

<sup>2</sup> Includes Research Council Institutes and Local Authorities.

<sup>3</sup> Funding received for R&D from outside the reporting department.

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## Analysis of UK government net expenditure on R&D by Frascati<sup>3</sup> type of research activity: 2003 to 2014

| •                      |                         | 2003  | 2004  | 2005  | 2006  | 2007       | 2008  | 2009  | 2010  | 2011  | 2012               | 2013             |
|------------------------|-------------------------|-------|-------|-------|-------|------------|-------|-------|-------|-------|--------------------|------------------|
|                        |                         |       |       |       |       |            |       |       |       |       |                    |                  |
| RESEARCH COUNCIL       | .S R&D <sup>1</sup>     |       |       |       |       |            |       |       |       |       |                    |                  |
| Basic                  | - pure                  | 756   | 766   | 1,019 | 953   | 739        | 817   | 808   | 790   | 746   | 718 <sup>†</sup>   | 755              |
| Dasic                  | - orientated            | 689   | 747   | 853   | 980   | 1,010      | 1,114 | 1,206 | 1,218 | 1,209 | 1,167 <sup>†</sup> | 1,304            |
| Applied                |                         | 554   | 594   | 686   | 755   | 733        | 754   | 838   | 896   | 890   | 767 <sup>†</sup>   | 906              |
| Applied                | - strategic             |       | 116   | 166   | 157   | 733<br>167 |       |       | 213   |       | 255 <sup>†</sup>   | 302              |
|                        | - specific              | 89    | 110   | 100   | 157   | 167        | 186   | 206   | 213   | 255   | 200                | 302              |
| Experiment             | al Development          | 26    | 19    | 24    | 21    | 40         | 41    | 53    | 50    | 54    | 49                 | 57               |
|                        | TOTAL NET EXPENDITURE   | 2,115 | 2,241 | 2,748 | 2,866 | 2,689      | 2,912 | 3,111 | 3,166 | 3,155 | <b>2,956</b> †     | 3,323            |
| CIVIL R&D <sup>2</sup> |                         |       |       |       |       |            |       |       |       |       |                    |                  |
| Basic                  | - pure                  | 66    | 69    | 43    | 46    | 105        | 100   | 123   | 122   | 109   | 116                | 120              |
| Daoio                  | - orientated            | 76    | 77    | 46    | 39    | 82         | 216   | 138   | 101   | 129   | 90                 | 99               |
| Applied                | - strategic             | 760   | 787   | 890   | 831   | 670        | 620   | 669   | 697   | 681   | 768 <sup>†</sup>   | 814              |
| Арріїси                | - specific              | 937   | 629   | 616   | 641   | 794        | 896   | 1,084 | 801   | 997   | 965 <sup>†</sup>   | 1,092            |
|                        | эрсоно                  | 307   | 023   | 010   | 041   | 754        | 030   | 1,004 | 001   | 331   | 303                | 1,002            |
| Experiment             | al Development          | 89    | 104   | 126   | 95    | 87         | 73    | 61    | 344   | 328   | 413                | 586 <sup>†</sup> |
|                        | CIVIL NET EXPENDITURE   | 1,929 | 1,666 | 1,721 | 1,652 | 1,738      | 1,905 | 2,076 | 2,064 | 2,244 | <b>2,353</b> †     | 2,711            |
| DEFENCE R&D            |                         |       |       |       |       |            |       |       |       |       |                    |                  |
| Basic                  | - pure                  | _     | _     | _     | _     | _          | _     | _     | -     | _     | -                  | -                |
|                        | - orientated            | -     | -     | -     | -     | -          | -     | -     | -     | -     | -                  | -                |
| Applied                | - strategic             | 129   | 75    | 30    | 35    | 21         | 13    | 29    | 21    | 17    | 59                 | 89               |
|                        | - specific              | 395   | 564   | 568   | 598   | 614        | 571   | 546   | 513   | 536   | 506                | 497              |
| Experiment             | al Development          | 1,609 | 1,552 | 1,645 | 1,492 | 1,505      | 1,406 | 1,177 | 1,159 | 753   | 895                | 931              |
|                        | DEFENCE NET EXPENDITURE | 2,133 | 2,191 | 2,243 | 2,124 | 2,139      | 1,991 | 1,752 | 1,693 | 1,306 | 1,460              | 1,516            |
|                        |                         |       |       |       |       |            |       |       |       |       |                    |                  |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>†</sup> denotes earliest data revision.

<sup>1</sup> For the purpose of this analysis Research Councils expenditure for Pensions have been excluded.

<sup>2</sup> For the purpose of this analysis Higher Education Funding Councils are excluded.

<sup>3</sup> R&D and related concepts follow internationally agreed standards as published in the Frascati Manual.

Analysis of UK government net expenditure on R&D by Frascati<sup>3</sup> type of research activity: 2003 to 2014

| Constant prices (2014) |                         | 0000               | 0004  | 0005  | 0000  | 0007  | 2000  | 0000  | 0010  | 0011  | 0010          | 0010        | £ mill |
|------------------------|-------------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------------|--------|
|                        |                         | 2003               | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012          | 2013        | 20     |
| RESEARCH COUNCILS      | S R&D <sup>1</sup>      |                    |       |       |       |       |       |       |       |       |               |             |        |
| Basic                  | - pure                  | 986 <sup>†</sup>   | 968   | 1,252 | 1,137 | 858   | 923   | 892   | 846   | 787   | 744           | 766         | -      |
|                        | - orientated            | 899 <sup>†</sup>   | 944   | 1,047 | 1,169 | 1,172 | 1,258 | 1,331 | 1,305 | 1,276 | 1,209         | 1,323       | 1,     |
| Applied                | - strategic             | 723 <sup>†</sup>   | 751   | 843   | 901   | 851   | 852   | 926   | 960   | 940   | 795           | 919         |        |
|                        | - specific              | 116 †              | 146   | 204   | 188   | 193   | 211   | 227   | 228   | 270   | 264           | 306         | 2      |
| Experimenta            | l Development           | 34 <sup>†</sup>    | 24    | 30    | 24    | 46    | 46    | 58    | 54    | 57    | 51            | 58          |        |
|                        | TOTAL NET EXPENDITURE   | 2,757 †            | 2,833 | 3,375 | 3,420 | 3,119 | 3,290 | 3,434 | 3,394 | 3,329 | 3,063         | 3,373       | 3,2    |
| CIVIL R&D <sup>2</sup> |                         |                    |       |       |       |       |       |       |       |       |               |             |        |
| Basic                  | - pure                  | 86 <sup>†</sup>    | 88    | 53    | 55    | 121   | 114   | 136   | 130   | 115   | 121           | 122         | 1      |
| 240.0                  | - orientated            | 100 <sup>†</sup>   | 97    | 56    | 47    | 95    | 244   | 152   | 109   | 136   | 94            | 101         |        |
| Applied                | - strategic             | 991 <sup>†</sup>   | 994   | 1,093 | 991   | 778   | 700   | 739   | 747   | 719   | 796           | 826         | 8      |
| PP                     | - specific              | 1,222 †            | 795   | 757   | 764   | 921   | 1,012 | 1,197 | 858   | 1,052 | 1,000         | 1,109       | 1,1    |
| Experimenta            | I Development           | 116 <sup>†</sup>   | 131   | 155   | 113   | 101   | 83    | 68    | 368   | 346   | 428           | 595         | 6      |
|                        | CIVIL NET EXPENDITURE   | 2,515 <sup>†</sup> | 2,106 | 2,114 | 1,971 | 2,016 | 2,153 | 2,292 | 2,212 | 2,368 | 2,438         | 2,752       | 2,7    |
| DEFENCE R&D            |                         |                    |       |       |       |       |       |       |       |       |               |             |        |
| Basic                  | - pure                  | -                  | -     | -     | _     | -     | -     | -     | -     | -     | -             | -           |        |
|                        | - orientated            | -                  | -     | -     | -     | -     | -     | -     | -     | -     | -             | -           |        |
| Applied                | - strategic             | 168 †              | 95    | 37    | 41    | 24    | 15    | 32    | 23    | 18    | 61            | 90          | 1      |
|                        | - specific              | 515 <sup>†</sup>   | 713   | 698   | 713   | 712   | 646   | 603   | 550   | 566   | 525           | 505         | 5      |
| Experimenta            | I Development           | 2,097 †            | 1,962 | 2,021 | 1,780 | 1,745 | 1,589 | 1,299 | 1,242 | 794   | 928           | 945         | 1,0    |
|                        | DEFENCE NET EXPENDITURE | 2,780 †            | 2,770 | 2,755 | 2,534 | 2,481 | 2,249 | 1,934 | 1,815 | 1,378 | 1,513         | 1,539       | 1,7    |
| 2014 = 100             |                         |                    |       |       |       |       |       |       |       | Sour  | ce: Office fo | or National | Statis |
|                        |                         | 2003               | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012          | 2013        | 20     |
|                        |                         |                    |       |       |       |       |       |       |       |       |               |             |        |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

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<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> For the purpose of this analysis Research Councils expenditure for Pensions have been excluded.

<sup>2</sup> For the purpose of this analysis Higher Education Funding Councils are excluded.

<sup>3</sup> R&D and related concepts follow internationally agreed standards as published in the Frascati Manual.

| Current prices  |       |       |       |       |                    |                 | £ millio |
|---|-------|-------|-------|-------|--------------------|-----------------|----------|
|   | 2008  | 2009  | 2010  | 2011  | 2012               | 2013            | 201      |
| Research Councils:  |       |       |       |       |                    |                 |          |
| Engineering and Physical Sciences (EPSRC)                     | _     | _     | _     | _     | _                  | _               |          |
| Medical (MRC)   | 320   | 340   | 394   | 348   | 278                | 246             | 23       |
| Science and Technology Facilities (STFC)                      | 304   | 275   | 228   | 304   | 254                | 297             | 31       |
| Biotechnology and Biological Sciences (BBSRC) <sup>1</sup>    | 173   | 202   | 219   | 87    | 254                | 231             | 31       |
| Natural Environment (NERC)                                    | 214   | 261   | 283   | 285   | 263                | 262             | 26       |
| Economic and Social (ESRC)                                    | 8     | 7     | 6     | 205   | 203                | 202             | 20       |
| Arts and Humanities (AHRC)                                    | O     | 1     | O     | _     | _                  | _               |          |
| Pensions <sup>4</sup>   | 23    | 11    | 10    | 10    | 8 †                | 8               |          |
| rensions  | 23    | 11    | 10    | 10    | 0                  | 0               | •        |
| TOTAL   | 1,041 | 1,097 | 1,141 | 1,035 | 804 †              | 814             | 82       |
| Civil Departments:  |       |       |       |       |                    |                 |          |
| Health (DH including NHS)                                     | 36    | 24    | 30    | 26    | 28                 | 36              | ;        |
| Business, Innovation and Skills (BIS) <sup>2,5,6</sup>        | -     | 83    | 85    | 112   | 123                | 134             |          |
| International Development (DFID)                              | 4     | 5     | 6     | 6     | 7                  | 8               |          |
| Scottish Government (SG)                                      | 55    | 57    | 55    | 51    | 58                 | 57              |          |
| Environment, Food and Rural Affairs (DEFRA)                   | 107   | 109   | 91    | 91    | 86                 | 93 <sup>†</sup> |          |
| Culture, Media and Sport (DCMS)                               | 37    | 39    | 39    | 38    | 54                 | 93              |          |
| Transport (DfT)   | 4     | 3     | 3     | 2     | 3                  | 3               |          |
| Energy and Climate Change (DECC)                              | -     | -     | 1     | 1     | 1                  | 2               |          |
| Other Departments   | 39    | 40    | 39    | 47    | 41                 | 43              |          |
| Home Office (HO)  | 16    | 16    | 18    | 13    | 9                  | 12              |          |
| Northern Ireland Departments (NI)                             | 9     | 8     | 7     | 8     | 8                  | 8               |          |
| Work and Pensions (DWP)                                       | 5     | 15    | 6     | 5     | 5                  | 5               |          |
| Welsh Government (WG)   | 3     | 2     | 2     | 2     | 2                  | 3               |          |
| Education (DfE)   | 4     | 4     | 3     | 2     | 3                  | 3               |          |
| Food Standards Agency (FSA)                                   | -     | -     | -     | -     | -                  | -               |          |
| Ministry of Justice (MoJ)                                     | 7     | 4     | 4     | 5     | 6                  | 5               |          |
| Health and Safety Executive (HSE)                             | 8     | 8     | 8     | 9     | 7                  | 7               |          |
| Communities and Local Government (DCLG)                       | 3     | 3     | 3     | 1     | 1                  | 1               |          |
| Foreign and Commonwealth Office (FCO) <sup>3</sup>            | -     | 2     | 1     | -     | -                  | -               |          |
| Business Enterprise and Regulatory Reform (BERR) <sup>2</sup> | 83    | -     | -     | -     | -                  | -               |          |
| BIS Science <sup>5</sup>                                      | -     | -     | -     | -     | -                  | -               |          |
| Local Authorities (including NHS Trusts)                      | 667   | 697   | 746   | 745   | 797 <sup>†</sup>   | 838             | 8        |
| TOTAL   | 1,087 | 1,119 | 1,146 | 1,164 | 1,241 <sup>†</sup> | 1,349           | 1,2      |

| Current prices            |       |       |       |       |                    |       | £ million |
|---------------------------|-------|-------|-------|-------|--------------------|-------|-----------|
|                           | 2008  | 2009  | 2010  | 2011  | 2012               | 2013  | 2014      |
|                           |       |       |       |       |                    |       |           |
| Ministry of Defence (MoD) | 262   | 288   | 226   | 158   | 150                | 164   | 158       |
| TOTAL                     | 262   | 288   | 226   | 158   | 150                | 164   | 158       |
|                           |       |       |       |       |                    |       |           |
| GRAND TOTAL               | 2,390 | 2,504 | 2,513 | 2,356 | 2,195 <sup>†</sup> | 2,327 | 2,222     |

Please note, no R&D data appears on this table for HEFCs as they are R&D funders and not performers.

- denotes nil, figures unavailable or too small to display.
- <sup>†</sup> denotes earliest data revision.
- 1 From 2011, the research institutes that BBSRC funded, were reclassified from general government to either the higher education or non profit organisation sectors.
- 2 In 2009, BERR was renamed BIS.
- 3 Department was not surveyed prior to 2009.
- 4 Research Councils' pension contributions are included separately.
- 5 From 2010, BIS Science reported under BIS.
- 6 Please note for the purpose of this analysis Launch Investment is not shown separately.

| Constant prices (2014)   |                                  |                     |        |        |       |       | £ million |
|--|----------------------------------|---------------------|--------|--------|-------|-------|-----------|
|  | 2008                             | 2009                | 2010   | 2011   | 2012  | 2013  | 2014      |
| Research Councils:   |                                  |                     |        |        |       |       |           |
|  |                                  |                     |        |        |       |       |           |
| Engineering and Physical Sciences (EPSRC)  | 362 <sup>†</sup>                 | 375                 | 422    | 368    | 288   | 249   | 232       |
| Medical (MRC)  | 343 <sup>†</sup>                 | 373                 | 244    | 321    | 264   |       |           |
| Science and Technology Facilities (STFC)   | 195 <sup>†</sup>                 |                     |        |        | 204   | 302   | 314       |
| Biotechnology and Biological Sciences (BBSRC) <sup>1</sup>                             | 242 <sup>†</sup>                 | 223                 | 234    | 92     | -     | -     | -         |
| Natural Environment (NERC)   | 9 <sup>†</sup>                   | 289                 | 304    | 301    | 273   | 266   | 263       |
| Economic and Social (ESRC)   | 9 '                              | 8                   | 7      | -      | -     | -     | -         |
| Arts and Humanities (AHRC)   | - 00 †                           | -                   | -      | -      | -     | -     | -         |
| Pensions <sup>4</sup>  | 26 <sup>†</sup>                  | 12                  | 11     | 10     | 9     | 8     | 11        |
| TOTAL  | 1,177 †                          | 1,211               | 1,223  | 1,092  | 833   | 826   | 821       |
| Civil Departments:   |                                  |                     |        |        |       |       |           |
| Health (DH including NHS)  | 40 <sup>†</sup>                  | 26                  | 32     | 28     | 29    | 36    | 30        |
| Business, Innovation and Skills (BIS) <sup>2,5,6</sup>                                 | -                                | 91 <sup>†</sup>     | 91     | 118    | 127   | 136   | 92        |
| International Development (DFID)   | 4 †                              | 5                   | 6      | 6      | 8     | 8     | 7         |
| Scottish Government (SG)   | 62 <sup>†</sup>                  | 63                  | 59     | 54     | 60    | 58    | 57        |
| Environment, Food and Rural Affairs (DEFRA)  | 121 <sup>†</sup>                 | 120                 | 98     | 96     | 89    | 95    | 80        |
| Culture, Media and Sport (DCMS)  | 42 †                             | 43                  | 42     | 40     | 56    | 95    | 68        |
| Transport (DfT)  | 4 †                              | 4                   | 3      | 2      | 3     | 3     | 3         |
| Energy and Climate Change (DECC)   |                                  |                     | 1 †    | 1      | 2     | 2     | 2         |
| Other Departments  | 44 †                             | 44                  | 41     | 49     | 43    | 43    | 43        |
| Home Office (HO)   | 18 <sup>†</sup>                  | 17                  | 19     | 13     | 10    | 12    | 15        |
| Northern Ireland Departments (NI)  | 10 <sup>†</sup>                  | 9                   | 8      | 8      | 8     | 8     | 7         |
| Work and Pensions (DWP)  | 6 <sup>†</sup>                   | 17                  | 6      | 6      | 5     | 5     | 6         |
| Welsh Government (WG)  | 3 <sup>†</sup>                   | 3                   | 2      | 2      | 2     | 3     | 2         |
| Education (DfE)  | 5 <sup>†</sup>                   | 4                   | 3      | 2      | 3     | 3     | 3         |
| Food Standards Agency (FSA)  | J                                | 4                   | 3      | ۷      | 3     | 3     | 3         |
|  | o †                              | -                   | -      | -      | -     | -     | -         |
| Ministry of Justice (MoJ)  | 8 <sup>†</sup><br>9 <sup>†</sup> | 4<br>9              | 4<br>9 | 5<br>9 | 6     | 5     | 6         |
| Health and Safety Executive (HSE) Communities and Local Government (DCLG)              | 4 †                              |                     | 9      | 9      | /     | ,     | 1         |
| ` /  | 4                                | 3<br>2 <sup>†</sup> | 4      | ı      | ı     | ı     | ı         |
| Foreign and Commonwealth Office (FCO) <sup>3</sup>                                     | -<br>04 <sup>†</sup>             | 2 .                 | ı      | -      | -     | -     | -         |
| Business Enterprise and Regulatory Reform (BERR) <sup>2</sup> BIS Science <sup>5</sup> | 94 †                             | -                   | -      | -      | -     | -     | -         |
| BIS Science  | -                                | -                   | -      | -      | -     | -     | -         |
| Local Authorities (including NHS Trusts)   | 754 <sup>†</sup>                 | 770                 | 800    | 787    | 826   | 851   | 816       |
| TOTAL  | 1,228 †                          | 1,235               | 1,228  | 1,228  | 1,286 | 1,370 | 1,244     |

| Constant prices (2014)   |                     |        |        |        |                |                | £ million    |
|--|---------------------|--------|--------|--------|----------------|----------------|--------------|
|  | 2008                | 2009   | 2010   | 2011   | 2012           | 2013           | 2014         |
| Ministry of Defence (MoD)                                      | 296 <sup>†</sup>    | 318    | 242    | 167    | 156            | 166            | 158          |
| TOTAL  | 296 <sup>†</sup>    | 318    | 242    | 167    | 156            | 166            | 158          |
| GRAND TOTAL  | 2,701 <sup>†</sup>  | 2,764  | 2,693  | 2,487  | 2,275          | 2,362          | 2,222        |
| 2014 = 100   |                     |        |        |        | Source: Office | ce for Nationa | l Statistics |
|  | 2008                | 2009   | 2010   | 2011   | 2012           | 2013           | 2014         |
| GDP deflator used to convert current prices to constant prices | 88.497 <sup>†</sup> | 90.589 | 93.309 | 94.757 | 96.494         | 98.510         | 100          |

Please note, no R&D data appears on this table for HEFCs as they are R&D funders and not performers.

- 2 In 2009, BERR was renamed BIS.
- 3 Department was not surveyed prior to 2009.
- 4 Research Councils' pension contributions are included separately.
- 5 From 2010, BIS Science reported under BIS.
- 6 Please note for the purpose of this analysis Launch Investment is not shown separately.

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>&</sup>lt;sup>†</sup> denotes earliest data revision.

<sup>1</sup> From 2011, the research institutes that BBSRC funded, were reclassified from general government to either the higher education or non profit organisation sectors.

£ million

|  | Organisations receiving funds for R&D |    |   |                         |                        |             |          |        |      |
|--|---------------------------------------|----|---|-------------------------|------------------------|-------------|----------|--------|------|
|  | UK Research<br>Councils               |    | Elsewhere<br>within UK<br>Central<br>Government | UK Local<br>Authorities | UK Higher<br>Education | UK Business | UK Other | Abroad | То   |
| Department providing the funds for R&D             |                                       |    |   |                         |                        |             |          |        |      |
| Research Councils:                                 |                                       |    |   |                         |                        |             |          |        |      |
| Engineering and Physical Sciences (EPSRC)          | 17                                    | -  | 25  | -                       | 778                    | -           | 14       | 1      | 8    |
| Medical (MRC)                                      | 7                                     | -  | 13  | 1                       | 458                    | -           | 70       | 20     | 5    |
| Science and Technology Facilities (STFC)           | -                                     | -  | -   | -                       | 127                    | -           | -        | 170    | 2    |
| Biotechnology and Biological Sciences (BBSRC)      | -                                     | -  | -   | -                       | 307                    | -           | 218      | 6      | 5    |
| Natural Environment (NERC)                         | 13                                    | -  | -   | -                       | 165                    | 1           | 1        | 3      | 18   |
| Economic and Social (ESRC)                         | 13                                    | -  | 1   | -                       | 181                    | -           | 3        | 5      | 2    |
| Arts and Humanities (AHRC)                         | 3                                     | -  | -   | -                       | 95                     | -           | -        | -      | 9    |
| TOTAL <sup>1</sup>                                 | 54                                    | -  | 40  | 1                       | 2,112                  | 2           | 305      | 205    | 2,7  |
| Higher Education Funding Councils (HEFCs):         |                                       |    |   |                         |                        |             |          |        |      |
| England (HEFCE)                                    | -                                     | -  | -   | -                       | 1,829                  | -           | -        | -      | 1,82 |
| Scotland (SFC)                                     | -                                     | -  | -   | -                       | 371                    | -           | -        | -      | 3    |
| Wales (HEFCW)                                      | -                                     | -  | -   | -                       | 86                     | -           | -        | -      | ;    |
| Northern Ireland (DELNI)                           | -                                     | -  | -   | -                       | 55                     | -           | -        | -      | ;    |
| TOTAL  | -                                     | -  | -   | -                       | 2,341                  | -           | -        | -      | 2,34 |
| Civil Departments:                                 |                                       |    |   |                         |                        |             |          |        |      |
| Health (DH including NHS)                          | 8                                     | 6  | 1   | 758                     | 245                    | 70          | 11       | -      | 1,10 |
| of which: National Health Service (NHS)            | 7                                     | -  | 1   | 757                     | 221                    | 70          | 10       | -      | 1,00 |
| Business, Innovation and Skills (BIS) <sup>2</sup> | 38                                    | -  | 12  | 4                       | 78                     | 603         | 110      | 268    | 1,1  |
| International Development (DFID)                   | 30                                    | -  | -   | -                       | -                      | -           | 45       | 226    | 3    |
| Scottish Government (SG)                           | 2                                     | 1  | 2   | 45                      | 32                     | 26          | 2        | -      | 1    |
| Environment, Food and Rural Affairs (DEFRA)        | 13                                    | 2  | 5   | -                       | 11                     | 21          | 3        | 2      |      |
| Culture, Media and Sport (DCMS)                    | -                                     | -  | 1   | 1                       | 2                      | 10          | 1        | -      |      |
| Transport (DfT)                                    | -                                     | -  | 5   | -                       | 1                      | 33          | 9        | 1      | 4    |
| Energy and Climate Change (DECC)                   | 1                                     | 1  | -   | -                       | 3                      | 35          | 5        | 1      |      |
| Other Departments                                  | -                                     | -  | 1   | -                       | 1                      | 5           | 1        | -      |      |
| Home Office (HO)                                   | -                                     | -  | 4   | -                       | 1                      | 2           | -        | 1      |      |
| Northern Ireland Departments (NI)                  | -                                     | -  | 3   | 6                       | 7                      | 1           | 1        | -      | :    |
| Work and Pensions (DWP)                            | 1                                     | -  | 7   | -                       | -                      | 5           | -        | -      |      |
| Welsh Government (WG)                              | -                                     | 13 | 7   | 1                       | 46                     | 6           | -        | -      | •    |
| Education (DfE)                                    | -                                     | -  | -   | -                       | 1                      | 9           | -        | 1      | 1    |
| Food Standards Agency (FSA)                        | 1                                     | -  | 2   | -                       | 4                      | 2           | -        | -      |      |
| Ministry of Justice (MoJ)                          | _                                     | _  | 1   | _                       | 1                      | 1           | _        | _      |      |

|   | Organisations receiving funds for R&D |   |   |                         |                        |             |          |        |       |
|---|---------------------------------------|---|---|-------------------------|------------------------|-------------|----------|--------|-------|
|   | UK Research<br>Councils               | Elsewhere<br>within Own<br>Organisation | Elsewhere<br>within UK<br>Central<br>Government | UK Local<br>Authorities | UK Higher<br>Education | UK Business | UK Other | Abroad | Total |
| Department providing the funds for R&D  |                                       |   |   |                         |                        |             |          |        |       |
| Health and Safety Executive (HSE)       | -                                     | -                                       | -   | -                       | 1                      | -           | -        | -      | 1     |
| Communities and Local Government (DCLG) | -                                     | -                                       | -   | -                       | -                      | 2           | 4        | -      | 7     |
| Foreign and Commonwealth Office (FCO)   | -                                     | -                                       | -   | -                       | -                      | 2           | -        | -      | 2     |
| TOTAL                                   | 95                                    | 24                                      | 50  | 815                     | 434                    | 833         | 193      | 500    | 2,945 |
| Ministry of Defence (MoD)               | -                                     | -                                       | 9   | -                       | 2                      | 1,464       | -        | 116    | 1,591 |
| TOTAL                                   | -                                     | -                                       | 9   | -                       | 2                      | 1,464       | -        | 116    | 1,591 |
| GRAND TOTAL                             | 149                                   | 24                                      | 100   | 816                     | 4,889                  | 2,299       | 499      | 822    | 9,596 |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>1</sup> For the purpose of this analysis Research Councils expenditure for Pensions have been excluded as they cannot be attributed to type of research.

<sup>2</sup> Please note for the purpose of this analysis Launch Investment is not shown separately.

|  |                      |                      |                      | £ million           |
|--|----------------------|----------------------|----------------------|---------------------|
|  | In-House Expenditure | Purchased or Funding | Funding Received     | Net Expenditure     |
|  | on R&D               | provided for R&D     | for R&D <sup>1</sup> | on R&D <sup>2</sup> |
| Research Councils:                                 |                      |                      |                      |                     |
| Engineering and Physical Sciences (EPSRC)          | -                    | 835                  | 27                   | 808                 |
| Medical (MRC)                                      | 232                  | 570                  | 85                   | 716                 |
| Science and Technology Facilities (STFC)           | 314                  | 298                  | 72                   | 541                 |
| Biotechnology and Biological Sciences (BBSRC)      | -                    | 531                  | 18                   | 513                 |
| Natural Environment (NERC)                         | 263                  | 183                  | 75                   | 371                 |
| Economic and Social (ESRC)                         |                      | 204                  | 18                   | 186                 |
| Arts and Humanities (AHRC)                         | _                    | 98                   | 2                    | 96                  |
| Pensions   | 11                   | 41                   | 4                    | 48                  |
| TOTAL  | 821                  | 2,759                | 301                  | 3,279               |
| Higher Education Funding Councils (HEFCs):         |                      |                      |                      |                     |
| England (HEFCE)                                    | -                    | 1,829                | -                    | 1,829               |
| Scotland (SFC)                                     | -                    | 371                  | _                    | 371                 |
| Wales (HEFCW)                                      | -                    | 86                   | -                    | 86                  |
| Northern Ireland (DELNI)                           | -                    | 55                   | -                    | 55                  |
| TOTAL  | -                    | 2,341                | -                    | 2,341               |
| Civil Departments:                                 |                      |                      |                      |                     |
| Health (DH including NHS)                          | 30                   | 1,100                | 54                   | 1,076               |
| of which: National Health Service (NHS)            | -                    | 1,067                | 32                   | 1,036               |
| Business, Innovation and Skills (BIS) <sup>3</sup> | 92                   | 1,112                | 402                  | 803                 |
| International Development (DFID)                   | 7                    | 301                  | -                    | 308                 |
| Scottish Government (SG)                           | 57                   | 110                  | 3                    | 164                 |
| Environment, Food and Rural Affairs (DEFRA)        | 80                   | 57                   | 37                   | 100                 |
| Culture, Media and Sport (DCMS)                    | 68                   | 15                   | 30                   | 53                  |
| Transport (DfT)                                    | 3                    | 49                   | 1                    | 51                  |
| Energy and Climate Change (DECC)                   | 2                    | 45                   | 6                    | 41                  |
| Other Departments                                  | 43                   | 7                    | 27                   | 23                  |
| Home Office (HO)                                   | 15                   | 8                    | 3                    | 20                  |
| Northern Ireland Departments (NI)                  | 7                    | 20                   | 9                    | 18                  |
| Work and Pensions (DWP)                            | 6                    | 13                   | 1                    | 18                  |
| Welsh Government (WG)                              | 2                    | 73                   | 60                   | 15                  |
| Education (DfE)                                    | 3                    | 11                   | 1                    | 14                  |
| Food Standards Agency (FSA)                        | -                    | 9                    | -                    | g                   |
| Ministry of Justice (MoJ)                          | 6                    | 2                    |                      | 8                   |

|   | In-House Expenditure on R&D | Purchased or Funding<br>provided for R&D | Funding Received<br>for R&D <sup>1</sup> | Net Expenditur<br>on R&D |
|---|-----------------------------|--|--|--------------------------|
| Health and Safety Executive (HSE)                     | 7                           | 1  | -  |                          |
| Communities and Local Government (DCLG)               | 1                           | 7  | 1  |                          |
| Foreign and Commonwealth Office (FCO)                 | -                           | 2  | -  |                          |
| Local Authorities (including NHS Trusts) <sup>4</sup> | 816                         | -  | 816                                      |                          |
| TOTAL   | 1,244                       | 2,945                                    | 1,452                                    | 2,73                     |
| Ministry of Defence (MoD)                             | 158                         | 1,591                                    | 45                                       | 1,70                     |
| GRAND TOTAL   | 2,222                       | 9,637                                    | 1,798                                    | 10,06                    |

<sup>-</sup> denotes nil, figures unavailable or too small to display.

<sup>1</sup> Funding received for R&D excluding grant in aid (also referred to as own funds).

<sup>2</sup> Net expenditure is calculated as in-house R&D plus purchased R&D or funding provided for R&D less funding received for R&D.

<sup>3</sup> Please note for the purpose of this analysis Launch Investment is not shown separately.

<sup>4</sup> Departmental estimates of funding provided to Local Authorities/NHS Trusts' are used as a proxy for Local Authorities/NHS Trusts' performed (in-house) R&D expenditure.

|   |  | Thousands   |                                       | Percentage Holding                   |                                 |                          |  |  |
|---|--|---|---------------------------------------|--------------------------------------|---------------------------------|--------------------------|--|--|
|   |  | With Higher Sci                                       | ence or Engineering                   | No Higher With Higher Science or Eng |                                 |                          |  |  |
|   |  | Education   | <b>Higher Education</b>               | Education                            | Education                       | Higher Education         |  |  |
|   | All  | Qualification <sup>1</sup>                            | Qualification <sup>2</sup>            | Qualification <sup>3</sup>           | Qualification <sup>1</sup>      | Qualification            |  |  |
| Persons   |  |   |                                       |                                      |                                 |                          |  |  |
| GB Population aged 16-64  | 39,500   | 10,843  | 4,729                                 | 73                                   | 27                              | 12                       |  |  |
| Inactive  | 8,691  | 1,255   | 620                                   | 86                                   | 14                              | 7                        |  |  |
| Economically active   | 30,809   | 9,588   | 4,109                                 | 69                                   | 31                              | 13                       |  |  |
| Employed  | 29,052   | 9,301   | 4,017                                 | 68                                   | 32                              | 14                       |  |  |
| Unemployed <sup>4</sup>   | 1,758  | 287   | 92                                    | 84                                   | 16                              | Į.                       |  |  |
|   | 1,700  |   |                                       |                                      |                                 |                          |  |  |
|   | 29,052   | 9,301   | 4,017                                 | 68                                   | 32                              | 14                       |  |  |
| ccupation of those employed <sup>5</sup>  |  |   |                                       | <b>68</b><br>59                      | <b>32</b><br>41                 |                          |  |  |
| Occupation of those employed <sup>5</sup> All occupations <sup>6</sup>  | 29,052   | 9,301   | 4,017                                 |                                      |                                 | 14                       |  |  |
| Occupation of those employed <sup>5</sup> All occupations <sup>6</sup> Managers and senior officials  | <b>29,052</b><br>2,893                                       | <b>9,301</b><br>1,175                                 | <b>4,017</b><br>396                   | 59                                   | 41                              | 14<br>45                 |  |  |
| All occupations <sup>6</sup> Managers and senior officials Professional occupations   | <b>29,052</b> 2,893 5,677                                    | <b>9,301</b> 1,175 4,260                              | <b>4,017</b> 396 2,531                | 59<br>25                             | 41<br>75                        | 14<br>45<br>12           |  |  |
| ccupation of those employed <sup>5</sup> All occupations <sup>6</sup> Managers and senior officials Professional occupations Associate professional and technical   | <b>29,052</b> 2,893 5,677 4,068                              | <b>9,301</b> 1,175 4,260 1,803                        | <b>4,017</b> 396 2,531 502            | 59<br>25<br>56                       | 41<br>75<br>44                  | 14<br>4!<br>12           |  |  |
| All occupations <sup>6</sup> Managers and senior officials Professional occupations Associate professional and technical Administrative and secretarial   | 29,052<br>2,893<br>5,677<br>4,068<br>3,088                   | <b>9,301</b> 1,175 4,260 1,803 699                    | <b>4,017</b> 396 2,531 502 187        | 59<br>25<br>56<br>77                 | 41<br>75<br>44<br>23            | 14<br>4<br>12<br>6       |  |  |
| All occupations <sup>6</sup> Managers and senior officials Professional occupations Associate professional and technical Administrative and secretarial Skilled trades occupations                              | 29,052<br>2,893<br>5,677<br>4,068<br>3,088<br>3,130          | 9,301<br>1,175<br>4,260<br>1,803<br>699<br>203        | <b>4,017</b> 396 2,531 502 187 73     | 59<br>25<br>56<br>77<br>94           | 41<br>75<br>44<br>23<br>6       | 14<br>45<br>12<br>6<br>2 |  |  |
| All occupations <sup>6</sup> Managers and senior officials Professional occupations Associate professional and technical Administrative and secretarial Skilled trades occupations Personal service occupations | 29,052<br>2,893<br>5,677<br>4,068<br>3,088<br>3,130<br>2,724 | 9,301<br>1,175<br>4,260<br>1,803<br>699<br>203<br>397 | <b>4,017</b> 396 2,531 502 187 73 160 | 59<br>25<br>56<br>77<br>94<br>85     | 41<br>75<br>44<br>23<br>6<br>15 | 14<br>45<br>12<br>6<br>2 |  |  |

Source: Office for National Statistics, Labour Force Survey

<sup>1</sup> People who have obtained a higher, first or other degree, National Vocational Qualification (NVQ) level 5, level 8 diploma, certificate or award, level 7 diploma or certificate.

<sup>2</sup> People who have obtained a higher education qualification in a science or engineering subject. These subjects broadly consist of medicine, medical related subjects, biological sciences, agricultural sciences, physical/environmental sciences, mathematical science and computing, engineering, technology, architecture and related studies and social sciences. People with multiple degrees with at least one of the subjects listed are included in the table, with those holding multiple degrees in these subjects included only once.

<sup>3</sup> Nil returns have been included in the 'No Higher Education Qualification' category.

<sup>4</sup> Unemployed as defined by the International Labour Organisation.

<sup>5</sup> Occupation is based on SOC 2010. As a result there may be some inconsistencies with estimates from previous years which used SOC 2000.

<sup>6</sup> Includes people who did not state their occupations.

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## Qualified scientists and engineers in the labour force by gender, three months ending December 2014: Great Britain, not seasonally adjusted

|                          |        | Thousands   |  | Percentage Holding                                   |   |  |  |
|--------------------------|--------|---|--|--|---|--|--|
|                          | All    | With Higher Sc<br>Education<br>Qualification <sup>1</sup> | ience or Engineering<br>Higher Education<br>Qualification <sup>2</sup> | No Higher<br>Education<br>Qualification <sup>3</sup> | With Higher So<br>Education<br>Qualification <sup>1</sup> | cience or Engineering<br>Higher Education<br>Qualification |  |
| Men                      |        |   |  |  |   |  |  |
| GB Population aged 16-64 | 19,611 | 5,277   | 2,375  | 73   | 27  | 12   |  |
| Inactive                 | 3,277  | 449   | 247  | 86   | 14  | 8  |  |
| Economically active      | 16,334 | 4,827   | 2,128  | 70   | 30  | 13   |  |
| Employed                 | 15,362 | 4,675   | 2,077  | 70   | 30  | 14   |  |
| Unemployed <sup>4</sup>  | 972    | 153   | 51   | 84   | 16  | 5  |  |
| Women                    |        |   |  |  |   |  |  |
| GB Population aged 16-64 | 19,889 | 5,566   | 2,354  | 72   | 28  | 12   |  |
| Inactive                 | 5,414  | 805   | 373  | 85   | 15  | 7  |  |
| Economically active      | 14,475 | 4,761   | 1,981  | 67   | 33  | 14   |  |
| Employed                 | 13,689 | 4,626   | 1,940  | 66   | 34  | 14   |  |
| Unemployed <sup>4</sup>  | 786    | 134   | 42   | 83   | 17  | 5  |  |

Source: Office for National Statistics, Labour Force Survey

<sup>1</sup> People who have obtained a higher, first or other degree, National Vocational Qualification (NVQ) level 5, level 8 diploma, certificate or award, level 7 diploma or certificate.

<sup>2</sup> People who have obtained a higher education qualification in a science or engineering subject. These subjects broadly consist of medicine, medical related subjects, biological sciences, agricultural sciences, physical/environmental sciences, mathematical science and computing, engineering, technology, architecture and related studies and social sciences. People with multiple degrees with at least one of the subjects listed are included in the table, with those holding multiple degrees in these subjects included only once.

<sup>3</sup> Nil returns have been included in the 'No Higher Education Qualification' category.

<sup>4</sup> Unemployed as defined by the International Labour Organisation.