

Creative Industries Policy & Evidence Centre

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Business R&D in the arts, humanities and social sciences

What R&D in the arts, humanities and social sciences looks like in a business setting, and why it matters

A Policy Briefing

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Introduction

The research on which this briefing is based starts from two premises. First, the government has made strong commitments to increasing investment in research and development (R&D) as a way to addressing the economic, social and global challenges of today and tomorrow.¹ It is unquestionable that investments in research and innovation have made innumerable improvements and contributions to lives and livelihoods. These benefits are a result of research and innovation insights from all disciplines, but this broad-based contribution does not translate into policymakers' R&D definitions, nor does it sit well with R&D statistics.

In particular, the model by which governments understand R&D is structured toward STEM-based research activities and so does not map effectively on to knowledge creation in the arts, humanities and social sciences (AHSS)². There is a risk therefore of a “gulf” between how R&D happens and the policies that support it.^{3,4}

Second, the Government has a target of investing 2.4% of GDP in R&D by 2027,⁵ with the aim of boosting the UK's innovation performance, increasing to 3% thereafter. The UK economy is 80% service based.⁶ This contains within it fast growing, internationally competitive sectors like the creative industries. Understanding and measuring R&D in the services sector in particular, with its origins in AHSS disciplines may have vital significance for the 3% target,⁷ and for the direction of policies to promote innovation and economic growth.

Based on these two starting points, we hypothesise that without the right definitions and tools to measure R&D, and effective policies in place to support it, the Government risks ignoring the full value of R&D in the UK economy, and missing out on incentivising investment in innovation in AHSS-related sectors and activities. Rectifying this could lead to a host of benefits for the UK economy, society, and productivity in the broadest sense.

¹<https://www.gov.uk/government/publications/uk-research-and-development-roadmap>.

² Though these disciplines are beginning to be referred to as the SHAPE subjects, (Social sciences, Humanities and the Arts for People and the Economy), due to the reliance on technical categorisations within international and national frameworks of R&D in this report, we will use the acronym AHSS instead.

³ Bakhshi, H. and Lomas, E. (2017) *Defining R&D for the creative industries*, Nesta. Available at: <https://ahrc.ukri.org/documents/project-reports-and-reviews/policy-briefing-digital-r-d/>

⁴ Nesta (2006) *The Innovation Gap: Why policy needs to reflect the reality of innovation in the UK* and Nesta (2007) *Hidden Innovation: How innovation happens in six 'low innovation' sectors*. Available at https://media.nesta.org.uk/documents/hidden_innovation.pdf.

⁵ HM Government (2020) *UK Research and Development Roadmap*. Available at: <https://www.gov.uk/government/publications/uk-research-and-development-roadmap>.

⁶ This figure pre-dates the Covid-19 pandemic. UK National Accounts, The Blue Book: 2020 <https://www.ons.gov.uk/economy/grossdomesticproductgdp/compendium/unitedkingdomnationalaccounts/bluebook/2020>.

⁷ HM Government (2017) *Industrial Strategy: Building*

This briefing summarises the main findings from a research study which addresses this issue and presents implications for policy. It draws on a detailed literature review, desk research of data sources, and interviews and case studies from thirteen businesses across different sectors.⁸ It is structured around ten headline findings which together tell a story about the broad nature of R&D in the arts, humanities and social sciences, the more selective interpretation of the definition of R&D in UK policymaking, the limits this imposes on accurate data collection, the implications for business understanding, and the opportunities for more effective research and innovation policymaking.

1.0 AHSS R&D makes distinctive contributions to innovation and growth

The AHSS cover a wide range of research disciplines, including archaeology, design, economics, linguistics, history, music, psychology, and philosophy. They contribute to a constantly growing body of knowledge on human experience, agency, identity and expression, helping inspire creative behaviour, as well as novel goods and services.⁹ Alongside providing new ideas that can be applied directly in the generation and adoption of innovations, AHSS research shines a spotlight on the ethical foundations of the innovation system. From creative industries to smart culture to personalised healthcare, to vehicle design, to new forms of services, there is growing recognition that, *“if good ideas are to be picked up by society, then they must be mindful of different systems of culture and governance as well as respecting local structures of motivation and belief”*.¹⁰

The Organization for Economic Cooperation and Development's (OECD) Frascati Manual offers illustrative examples of AHSS R&D.¹¹ In economics, R&D may involve the development of a novel method to manage an investment fund. In history, R&D can help the design of a new museum exhibit that serves as a prototype for other museums. Linguistics R&D can help develop a new tool for diagnosing autism in children based on their language acquisition, retention and use of signs. And in music, R&D can assist in the development of new pedagogical materials based on new discoveries in neuroscience.

⁸ Bakhshi, Hasan, Breckon, Jonathan and Puttick, R. *forthcoming*.

⁹ See for example, Morgan Jones, M., Abrams, D., and Lahiri, A. (2020) *Shape the future: how the social sciences, humanities and the arts can SHAPE a positive, post-pandemic future for people, economies and environments*, British Academy. Available at <https://doi.org/10.5871/jba/008.167>; Bakhshi, H., Schneider, P. and Walker, C. (2008) *Arts and Humanities Research and Innovation*, Arts and Humanities Research Council (AHRC); Walker, D. (2015) *The Business of People*, The Campaign for Social Science; and Bakhshi, H. & Lomas, E. (2017) *Policy Briefing: Defining R&D for the creative industries*, Nesta, UCL and AHRC.

¹⁰ Bakhshi, H. and Lomas, E. (2017) *Policy Briefing: Defining R&D for the creative industries*, Nesta, UCL and AHRC. Available at: <https://ahrc.ukri.org/documents/project-reports-and-reviews/policy-briefing-digital-r-d/>.

¹¹ OECD (2015) *The Measurement of Scientific, Technological and Innovation Activities Frascati Manual 2015 Guidelines for Collecting and Reporting Data on Research and Experimental Development: Guidelines for Collecting and Reporting Data on Research and Experimental Development*, (p. 44).

Empirical research understanding exactly how businesses engage in, understand and utilise AHSS R&D has been limited. However, gaps are starting to be filled. For example, recent research and a set of insightful case studies from the Academy of Social Sciences has identified the central role that knowledge and skills from the social sciences play in UK businesses.¹²

2.0 The OECD 'Frascati Manual' definition of R&D recognises the importance of AHSS research

Now in its seventh edition, the OECD's Frascati Manual is used by policymakers, statisticians, academics, and others to help standardise the data collection guidelines and classifications for compiling statistics on R&D, which is defined as follows: "Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge".¹³ The OECD goes into a good deal of depth when defining R&D, including the distinctions between 'basic research', 'applied research' and 'experimental development'. It also stresses five criteria - novelty; creativity; uncertainty; systematic; and transferability - as being requirements of R&D.

While arguably it needs to go further,¹⁴ over time, in successive revisions, the Frascati Manual has evolved to recognise AHSS R&D. This is something that many policymakers and businesses in the UK may not be aware of as activity deriving from AHSS is not generally recognised as a form of R&D in government fiscal policy (see below). In contrast with previous editions, the most recent Frascati Manual (2015) acknowledges explicitly the importance of R&D in AHSS, saying "R&D is found in the social sciences, humanities and the arts as well as in the natural sciences and engineering. This manual gives greater emphasis than past editions to the social sciences, humanities and the arts. This requires no changes in the definitions and conventions but it does require greater attention to the boundaries that define what is and what is not R&D."¹⁵

¹² Lenihan, A., Witherspoon, S. and Alexander, R. (2020) *Vital Business: The essential role of the social sciences in the UK private sector*, Academy of Social Science and The Campaign for Social Science. Available at: <https://campaignforsocialscience.org.uk/wp-content/uploads/2020/09/CfSS-REPORT-VITAL-BUSINESS-THE-ESSENTIAL-ROLE-OF-THE-SOCIAL-SCIENCES-IN-THE-PRIVATE-SECTOR.pdf>

¹³ OECD (2015) *The Measurement of Scientific, Technological and Innovation Activities Frascati Manual 2015 Guidelines for Collecting and Reporting Data on Research and Experimental Development: Guidelines for Collecting and Reporting Data on Research and Experimental Development*, (p. 44).

¹⁴ Bakhshi, H. and Lomas, E. (2017) *Policy Briefing: Defining R&D for the creative industries*, Nesta, UCL and AHRC. Available at: <https://ahrc.ukri.org/documents/project-reports-and-reviews/policy-briefing-digital-r-d/>.

¹⁵ Bakhshi, H and Lomas, E. (2017) argue that the Frascati Manual needs to go further in recognising R&D in the AHSS; in particular, in its treatment of uncertainty (which should embrace forms of uncertainty that are not fully resolved through experimentation) and in the need to acknowledge knowledge creation which involves production of experiences and behavioural change as well as that which produces products. Bakhshi, H. and Lomas, E. (2017) *Policy Briefing: Defining R&D for the creative industries*, Nesta, UCL and AHRC. Available at: <https://ahrc.ukri.org/documents/project-reports-and-reviews/policy-briefing-digital-r-d/>.

In some ways, this clarification around the scope of R&D marks a catching up with revisions to the OECD's Oslo Manual, its guidelines for the collection, reporting and use of data on innovation (now in its fourth revision), which since its inception in 2002 has recognised a wider range of innovation-related phenomena, but not R&D, which is the domain of the Frascati Manual.¹⁶ The Frascati Manual's acknowledgement of AHSS R&D is significant because despite policymakers' acceptance that innovation is a broad phenomenon, R&D remains the primary focus of innovation policy.¹⁷

3.0 AHSS disciplines are excluded from some UK R&D definitions, but are included in other countries

Although UK policymakers claim to follow the Frascati Manual's definition of R&D, R&D involving the AHSS is explicitly excluded in some areas of policy, e.g. fiscal policy, by organisations such as the Department for Business, Energy and Industrial Strategy (BEIS), Her Majesty's Revenue and Customs (HMRC), and Her Majesty's Treasury (HMT).¹⁸

For example, BEIS says in its Guidelines on the Meaning of Research and Development for Tax Purposes: "science is the systematic study of the nature and behaviour of the physical and material universe. Work in the arts, humanities and social sciences, including economics, is not science for the purpose of these Guidelines".¹⁹ The application and interpretation of this definition is driven by HMRC, which is explicit about excluding 'work in the arts, humanities and social sciences (including economics)'.^{20,21}

¹⁶ OECD/Eurostat (2019), *Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation, 4th Edition*, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris/Eurostat, Luxembourg, <https://doi.org/10.1787/9789264304604-en>.

¹⁷ HMRC/HM Treasury (2020) *The scope of qualifying expenditures for R&D Tax Credits: consultation*. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902349/200702_RD_tax_credit_draft_consultation_FINAL.pdf

¹⁸ See, for example, Bakhshi, H. and Lomas, E. (2017) *Policy Briefing: Defining R&D for the creative industries*, Nesta, UCL and AHRC. Available at: <https://ahrc.ukri.org/documents/project-reports-and-reviews/policy-briefing-digital-r-d/>.

¹⁹ BEIS (2010) *Guidelines on the Meaning of Research and Development for Tax Purposes*, p.3. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/71260/bis-10-1393-rd-tax-purposes.pdf.

²⁰ HMRC (2015) *Guidance: Research and development tax relief: Making R&D easier for small companies*, p.12. Available at <http://www.hmrc.gov.uk/gds/cird/attachments/rdsimpleguide.pdf#page=28&zoom=100,0,0>.

²¹ Consistent with this, in DCMS's survey of business R&D in the creative industries, only 14% of firms said that they undertook R&D using HMRC's definition but this jumped to 55% when using the Frascati definition. OMB Research (2020), *R&D in the Creative Industries Survey – 2020*, DCMS. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/919052/4565_-_DCMS_RD_in_Creative_Industries_Survey_-_Report_-_D8_PDF.pdf.

Although the UK is by no means alone in excluding work in the arts, humanities and social sciences (see below on the practice in other OECD countries), this feature of the UK's application of the definition of R&D means that UK tax policy does not recognise the role that AHSS R&D plays in delivering innovation, productivity and growth²², and the role that tax relief can play in incentivising R&D which has its origins in the AHSS disciplines.²³

In 2020, HMT and HMRC consulted on the scope of qualifying expenditures for R&D tax relief. There is no indication that this includes AHSS, although there is reference to two broad areas that are relevant for AHSS R&D: data analysis and cloud storage.²⁴ In 2019, the OECD published a compendium of international tax incentives and reported whether R&D in the humanities and social sciences were eligible. In 2018 (the latest data available), the following OECD countries were reported as permitting humanities and social sciences R&D within their R&D Tax Credit programme: Austria, Belgium, Chile, Colombia, Denmark, France, Hungary, Italy, Korea, Mexico, Norway, Portugal, Russia, and Spain.²⁵

4.0 The UK's R&D survey instruments recognise AHSS R&D, but in practice likely under-count it

In the UK, the Office for National Statistics (ONS) uses the Frascati Manual's definition of R&D to collect R&D statistics, and uses this to publish the following R&D datasets:²⁶

- Business Enterprise R&D (BERD). Using the Frascati definition, the ONS asks businesses about their R&D expenditure. The annual Business Enterprise R&D (BERD) survey samples approximately 5,500 businesses in the UK. The types of R&D covered by the BERD survey are presented in the detailed product groups that the ONS makes available alongside the industrial sectors that are covered. The product group AF 'Research and development services' maps across to the Standard Industrial Classification (SIC) code 7220 Research and experimental development on social sciences and humanities (though not the arts) so R&D in AHSS by specialist SSH companies (that is, organisations whose primary activity is

²² Bakhshi, H. and Lomas, E. (2017) *Policy Briefing: Defining R&D for the creative industries*, Nesta, UCL and AHRC. Available at: <https://ahrc.ukri.org/documents/project-reports-and-reviews/policy-briefing-digital-r-d/>.

²³ Creative Industries Council (2020) *Creative Industries Transition and Recovery Plan*. Available at <https://www.thecreativeindustries.co.uk/media/556524/cic-recovery-plan-final-sub.pdf>.

²⁴ HMRC/HM Treasury (2020) *The scope of qualifying expenditures for R&D Tax Credits: consultation*. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902349/200702_RD_tax_credit_draft_consultation_FINAL.pdf

²⁵ OECD (2019) *Compendium of R&D Tax Incentive Schemes: OECD Countries and Selected Economies, 2018*. Available at: <https://www.oecd.org/sti/rd-tax-stats-compendium.pdf>.

²⁶ ONS (2019) *Research and development expenditure*. Available at: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure>.

identified as being within SSH R&D) is covered. The latest available BERD estimates suggest that in 2018 these firms invested £120 million in R&D.²⁷

- UK Innovation Survey. To capture detailed information on business R&D and performance, and on complementary innovation activities (such as skills development, design and investment in absorptive capacity), the ONS conducts the UK Innovation Survey (UKIS) on behalf of BEIS. This voluntary survey is completed by a sample of UK businesses (just over 14,000 in UKIS 2019) with at least ten employees. Businesses report on their internal and external R&D expenditure using the Frascati definition, alongside other metrics, so again some AHSS R&D should in principle be covered. The UKIS contributes to the European-wide Community Innovation Survey (CIS) to allow for international benchmarking and comparisons.²⁸
- Government Expenditure on Science, Engineering and Technology. This looks at science, engineering and technology (SET) annual expenditure by UK government departments, research councils and higher education funding councils.
- Gross Domestic Expenditure on R&D (GERD). Annual aggregate estimates of research and development spending in the UK by business enterprise, higher education, government, research councils and private non-profit organisations.
- Statistical Release on Tax Relief. Beyond R&D data collection, but worth noting here, is the statistical release on tax relief, published each year by HMRC, to detail the costs to the Exchequer of providing R&D tax relief.²⁹

Self-reporting on R&D in some of these statistics is likely to be problematic. If official bodies such as BEIS, HMRC, and HMT are explicit about excluding AHSS from their definitions, as outlined above, it is less likely that firms will record this type of R&D in the collection of statistics. Moreover, our interviews with businesses flagged up that in several cases they did not themselves identify their AHSS work as R&D, which is likely to lead to it being under-counted as such. This would be consistent with the figures implicitly reported for AHSS R&D by non-specialist HSS R&D businesses in the BERD survey being too low - something which cannot readily be established as the BERD questionnaire does not ask businesses to identify separately their AHSS R&D (unlike specialist HSS companies as mentioned earlier).

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<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/adhocs/12211expenditureonresearchanddevelopmentperformedinukbusinessessic722018>

²⁸ ONS (2019) UK Innovation Survey. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700472/ukis_2017_headlines_final.pdf.

²⁹ ONS (2019) Structural tax reliefs. Available at: <https://www.gov.uk/government/statistics/minor-tax-expenditures-and-structural-reliefs>.

5.0 Businesses should recognise AHSS R&D as R&D, and measure it

Our interviews suggested that the Frascati definition of R&D did resonate with businesses and was applicable to their work. However, as noted above, they did not always use the language of the Frascati Manual, and in several cases the businesses did not themselves describe their AHSS work as R&D at all – but might label it ‘innovation’ or ‘experimentation’ instead. These businesses were more familiar with other definitions and terms relating to the use of knowledge rather than the creation of it - partly reflecting funding sources and universities, including concepts like ‘knowledge exchange’ or ‘evidence-based management’. The outcomes of AHSS R&D when it was described included generating new knowledge, new systems, and new processes.

An implication is that these businesses do not include investment in AHSS R&D in their R&D budgets. And businesses whose R&D activities are dominated by AHSS may not have an R&D budget at all. In this context, it is striking that in a Department for Digital, Culture, Media and Sport (DCMS) survey of R&D in the creative industries, only 8% of respondents said they had a formal R&D budget despite 55% of firms claiming to undertake it when presented with the Frascati definition.³⁰

As well as making it difficult to fully account for AHSS R&D in company accounts - and in official survey statistics - the omission of AHSS R&D from dedicated R&D budgets risks its potential long-term importance to the innovation performance of a firm being neglected.

6.0 Many businesses perceive R&D in AHSS and STEM as interconnected

R&D, including both STEM and AHSS, was described by many interviewees as central to their innovation processes. Interviewees emphasised that we should avoid viewing R&D as a “nice to have” or a “vanity project”. Instead, it needs to be normalised into business practices.

A sustained theme was the interconnectedness of AHSS and STEM R&D. For example, Sandy Smith at Pearson Plc, said that in their R&D efforts there is not a clear difference between R&D from AHSS and from other areas. He warned against setting up AHSS R&D and STEM R&D as distinct and different activities; he compared this with research debates surrounding the value of quantitative research compared with qualitative research, when what was needed were mixed methodologies. This was echoed by other companies which did not differentiate between different sources of knowledge in

³⁰ OMB Research (2020), R&D in the Creative Industries Survey - 2020 , DCMS. Available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/919052/4565 - DC MS RD in Creative Industries Survey - Report - D8 PDF.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/919052/4565_-_DC_MS_RD_in_Creative_Industries_Survey_-_Report_-_D8_PDF.pdf).

their R&D efforts, with STEM and AHSS R&D co-existing, and often in a symbiotic relationship.

This is just one example of how companies are using disciplines like behavioural science, language and linguistics research, AI, data science, cybersecurity, design research, and creative digital R&D. These are all interdisciplinary in nature and bridge AHSS with technology and science. They are vital areas of business innovation that can provide the UK with competitive advantage.

Even in firms which might be regarded as having an emphasis on life sciences or engineering, there are overlaps with AHSS. Keith Rutherford, Vice-President R&D Home and Hygiene at Unilever told us that both AHSS and STEM are equally important to them: "I would go so far to say that a lot of our research into sustainable products is 50:50, seeking to understand macro-trends, societal and consumer needs in addition to all the evident technical challenges. You may think it's obvious, but unless you solve the real consumer tension then products will end up sitting on shelves. The shift to sustainable consumption, is that psychology, art and design or chemistry? It is all of these and we must never underestimate the 'theatre' of the consumer experience, the 'Click' of the Eco-Refill when it attaches to the bottle is crucially important in driving adoption".

7.0 R&D definitions should recognise scientific forms of market research

The research suggests that there are important boundaries between R&D and market research which are worth exploring, and these have particular implications for AHSS R&D. Some of the examples of the work we found through our interviews can be conventionally classified as related to market research – such as understanding consumer behaviour and the climate that businesses operate in. Market research firms are themselves part of the services sector,³¹ and R&D can feed into business development through understanding wider social trends that impact on markets, and the businesses we spoke to recognised this explicitly.³² "Understanding of cultures ... all that goes behind the customer transaction with a company, has much greater recognition in our clients", according to Chris Loxley, Head of Research at the start-up consultancy LovedBy who apply behavioural science and 'nudge theory' with businesses like Lloyds Bank, Cambridge Assessment OCR examination body, and AXA insurance. "There is more awareness of R&D that is sensitive to the value of social scientific insight, and ... a lot of our clients need it to get beyond traditional market research."

³¹ ONS (2019), ONS Services sector, UK: 2008 – 2018. Available at: <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/articles/servicessectoruk/2008to2018#appendix>.

³² Bakhshi, H. and Lomas, E. (2017) Policy Briefing: Defining R&D for the creative industries, Nesta, UCL and AHRC. Available at: <https://ahrc.ukri.org/documents/project-reports-and-reviews/policy-briefing-digital-r-d/>.

But, according to the OECD's Frascati definition, market research should specifically be excluded from R&D even if it is part of the innovation process.³³ For example, in the UK, BEIS guidelines on R&D explicitly exclude software development for market research – unless it can show that it advances the whole field of software and computer science.³⁴ But some market research we reviewed in this study which might fall foul of this definition is experimental and methodologically sophisticated and seemed to satisfy the five OECD R&D criteria of novelty; creativity; uncertainty; systematic; and transferability/reproducibility³⁵.

8.0 AHSS R&D has value but is often perceived as less tangible

Many interviewees highlighted the need for there to be greater awareness of what is distinctive about AHSS R&D, and the value it brings. As Sarah Ellis at the Royal Shakespeare Company noted, "There is a lot of misunderstanding. R&D is generally not aligned to arts and creative models. So there needs to be a wider understanding of the many ways R&D can be approached to deliver a diverse range of outcomes for R&D, that it can bring greater value to UK Plc. Currently, there needs to be a lot of manufactured certainty, which is not the only aspect of R&D; it is also about new systems and models achieved through exploration and collaboration, so not about just one output, but a range of wider, broader impacts as well as specific outcomes or deliverables. It is important and very complex. It needs systems and people thinking as well as product thinking."

One reason why measuring value from AHSS R&D is challenging is because it is perceived to be less tangible than STEM R&D, and it has different applications. As one interviewee noted in the context of using R&D, "Often [there is] a tangible difference between businesses utilising R&D from AHSS and the way they do from hard science. Hard science is more concrete. Whereas arts and humanities is a more creative process, the innovation process itself, and the process is just as important as the end goal".

Part of the value comes from the creation of tacit expertise and uncodified knowledge. Rachel Carey, Chief Scientist at Zinc told us: "In the social sciences, the value tends to be less in 'an idea', and more in a set of skills and methodologies that can be iteratively applied. The innovation system from the life sciences, and the models that were

³³ OECD (2015) The Measurement of Scientific, Technological and Innovation Activities Frascati Manual 2015 Guidelines for Collecting and Reporting Data on Research and Experimental Development: Guidelines for Collecting and Reporting Data on Research and Experimental Development, (p. 60).

³⁴ BEIS (2010) Guidelines on the Meaning of Research and Development for Tax Purposes, Section D2. Available at <https://www.gov.uk/government/publications/guidelines-on-the-meaning-of-research-and-development-for-tax-purposes>.

³⁵ See discussion in Section 2.0, above.

developed for 'pills and widgets', cannot be easily translated to the social sciences. R&D in the AHSS has the potential to be vibrant and dynamic, but we need to approach it fundamentally differently."

9.0 Businesses engaged in AHSS R&D can help achieve social and environmental impact

Some of our interviewees communicated the value of R&D in helping to address big social and environmental changes. They explained that they were using AHSS to pursue social missions, such as using research insights to reduce inequality or environmental impact.

Companies – and the UK economy – cannot keep still and must have an eye on the future, both in terms of technology, but also disruptive social change. AHSS research can help businesses understand social trends - such as the #MeToo movement or Black Lives Matter - so that their products are socially responsible. Our interviewee from Unilever said that AHSS R&D is needed because there are "enormous societal changes and you have to be in tune with those trends and seek to anticipate all that lies ahead."

10.0 Businesses working with AHSS R&D need government support

At the time the interviews were conducted the UK was in the middle of its first Covid-19 'lockdown'. Unsurprisingly, the crisis was having a big impact on many companies and their future plans for R&D. Some interviewees said that their plans were likely to be curtailed or stopped completely, in the short and medium term, because of the economic uncertainty, although others were still growing their R&D budgets, particularly in the digital area.

The UK businesses we spoke to were clear that government support for AHSS R&D was essential, both through R&D tax relief, and by other policy interventions. It was recognised that the UK needed to 'innovate out' of the economic crisis, with R&D more generally ever more important, but that R&D was at risk of being cut by businesses without public support. Government should explore whether and in what ways an expanded definition of R&D might help with the economic recovery and other government priorities as we rebuild from the pandemic.

Recommendations

1. Government policy should more explicitly recognise AHSS R&D, both in R&D tax incentives, and in public investment such as in Innovate UK and other UK Research & Innovation (UKRI) bodies. The interconnectedness of AHSS and STEM R&D calls for greater coordination across different parts of the research funding landscape.
2. While BEIS, HMT and HMRC naturally have their own perspectives on R&D, there is need also for a coordinated strategic approach to how the definition of R&D is implemented in the UK. This definition should acknowledge the role of AHSS in the research and innovation system. There may be a role here for the Industrial Strategy Council.
3. The ONS should work with the British Academy and other key stakeholders to conduct a thorough review of the different ways in which it collects R&D statistics to ensure the scope is fully inclusive of AHSS R&D, as consistent with the internationally agreed Frascati Manual. This should include ensuring that its survey guidance encourages businesses to give an accurate and inclusive account of their AHSS R&D expenditures.
4. The UK should learn from international differences in implementation of the OECD's Frascati Manual R&D definition in tax incentives schemes. For example, some countries like France, Italy, Russia, and South Korea recognise Social Science and Humanities R&D within their R&D definitions for Tax Relief.
5. There needs to be a greater recognition and awareness of the breadth of activities and disciplines captured under R&D by policymakers, funders and industry, including AHSS. This system change will require a coordinated response and will not happen overnight, but it is essential if the UK is to maximise the contribution that R&D can make to innovation and productivity growth.

About this briefing

The British Academy is the UK's national body for the humanities and social sciences. Its purpose is to deepen understanding of people, societies, and cultures, enabling everyone to learn, progress and prosper. Nesta is an innovation foundation bringing bold ideas to life to change the world for good. The Creative Industries Policy & Evidence Centre (PEC) is funded by the Arts and Humanities Research Council as part of the UK's Industrial Strategy, to undertake research to inform policies for the creative industries.

In late 2019, the British Academy commissioned Nesta and the PEC to undertake a project to explore how UK businesses invest in R&D in the AHSS and how this R&D is recognised by UK policymakers and in R&D statistics.

The research on which this policy briefing is based involved a review of the literature and policy reports to understand how the UK, and other countries, define, measure, and value R&D involving the AHSS disciplines, alongside qualitative interviews with 14 practitioners in UK businesses, and 14 other experts such as in the OECD, universities, charities, and business support organisations (see Annex A).

Annex A: Interviewees

- Richard Broughton, Executive Director, Ampere Analysis
- Colin Campbell, CEO and Founder, Unlocking Potential
- Rachel Carey, Chief Scientist, Zinc
- Ben Hookway, Chief Executive, Relative Insight
- Mike Hughes, Behavioural Strategist, Ogilvy Consultancy
- Phil Jones, Managing Director, Wired Sussex
- Chris Loxley, Head of Research, LovedBy
- Sandy Smith, Vice President, Efficacy & Research, Global Product, Pearson
- Keith Rutherford, Vice-President R&D Home and Hygiene at Unilever
- Sam Gallagher, Principal Consultant, Oxentia
- Stefanie Nickel, Head of Diversity and Inclusion, Novartis
- Andrew Mawson, Founding Director; Karen Plumb, Director of R&D, Advanced Workplace Associates (interviewed together)
- Michael Tougher, CEO, SoundBops

As well as these interviews with businesses, we would also like to thank the following for their time for being interviewed or speaking to us:

- Silvia Appelt, Economist, S&T indicators unit, OECD
- Eric Barends, Managing Director, Centre for Evidence-Based Management

- Professor Julia Black, Strategic Director of Innovation, LSE
- James Byford, Lead Enterprise Tutor, Chelsea Football Club Foundation
- Nida Broughton, Director of Economic Policy, Behavioural Insights Team
- Sarah Ellis, Director of Digital Development, Royal Shakespeare Company
- Anne Fraser, Enterprise Manager, Royal Society of Edinburgh
- Fernando Galindo-Rueda, Senior Economist, Economic Analysis and Statistics Division, OECD
- Jonny Gifford, Senior Advisor for Organisational Behaviour, Chartered Institute for Professional Development
- Mark Mann, Principal Licensing & Ventures Manager, Oxford University Innovation
- Jon Page, Head of Operations, BBC R&D
- Jenny Tragner, Director, ForrestBrown R&D Tax consultants
- Sharon Witherspoon, Head of Policy, Academy of Social Sciences
- Nicole Yershon, Consultant, The NY Collective