Fifty-Sixth Report of Session 2019–21

Department for Business, Energy and Industrial Strategy

Industrial Strategy Challenge Fund

Introduction from the Committee

Announced in November 2016, and started in April 2017, the Industrial Strategy Challenge Fund (the Fund) is a relatively new approach to promoting innovation, placing its emphasis on working with industry to identify issues, known as challenges, where public funding can make a difference to innovation. The Fund has supported the 2017 Industrial Strategy's aim to raise long-term productivity and living standards and address some of the complex issues the UK faces through supporting four 'grand challenges' set out in the strategy - future mobility; clean growth; artificial intelligence and data; and the ageing society. The Fund invites businesses, universities and other bodies to submit ideas for new 'challenges', linked to the four grand challenges and, if approved, to submit bids for funding for projects that will address those challenges. When inviting bids the Fund encourages businesses and academia to work together, with the intention of encouraging stronger links between the two sectors and fostering innovation. The Fund has a budget of £3 billion earmarked for the period 2017–18 to 2024–25.

UK Research and Innovation (UKRI), established in 2018, is responsible for managing the Fund. It reports to the Department for Business, Energy & Industrial Strategy (the Department), which scrutinises the affordability of challenge-related proposals and approves spending. HM Treasury scrutinises and approves Fund business cases from a value for money perspective.

Based on a report by the National Audit Office, the Committee took evidence on Thursday 4 March 2021 from the Department for Business, Energy & Industrial Strategy (the Department) and UK Research and Innovation (UKRI). The Committee published its report on 30 April 2021. This is the Government's response to the Committee's report.

Relevant reports

- NAO report: management of the Industrial Strategy Challenge Fund – Session 2019-21 (HC 1130)
- PAC report: Industrial Strategy Challenge Fund – Session 2019-21 (HC 941)

Government responses to the Committee

1: PAC conclusion: UKRI's Challenge Fund is insufficiently focused on what it is expected to deliver in terms of benefit to the UK.

1: PAC recommendation: UKRI, working with the Department, should clearly set out, by October 2021, what it expects the Fund to deliver. This should include its impact on jobs and economic impact in the short, medium and long term.

1.1 The government agrees with the Committee's recommendation.

Target implementation date: October 2021

1.2 The Department for Business, Energy & Industrial Strategy (the department) and UK Research and Innovation (UKRI) recognise that demonstration of outcomes and impact are the critical success factors for both individual Challenges and the Industrial Strategy Challenge Fund (the Fund) as a whole. Challenge level objectives are agreed within individual

Challenge business cases and supported by plans setting out when outcomes and impacts are expected to be realised.

1.3 Demonstration of Challenge and Fund impact is also supported by robust, independent evaluation activities which are in place for each of the individual Challenges and the Fund as a whole. Emerging signs of success are starting to be evidenced through interim evaluation reports for those challenges that are later in their delivery lifecycle.

1.4 UKRI is reviewing the future of challenge-based funding following the Spending Review 2020, taking into account the lessons learnt from the National Audit Office's (NAO) review of the Fund in preparation for Spending Review 2021. The department will write to the Committee by the end of October 2021 outlining the impact that the existing Challenges expect to achieve in the short, medium and long term, with a focus on jobs and economic impact.

2: PAC conclusion: We are not convinced that UKRI's and the Department's approach to intellectual property generated by the Fund adequately protects taxpayers' interests.

2: PAC recommendation: UKRI should re-examine its current approach of not holding a claim on intellectual property generated through the Fund. It should write to the Committee by July 2021 setting out the results of its review and explain how it intends to best protect the taxpayers' interests and maximise the value from taxpayer investment in the future.

2.1 The government agrees with the Committee's recommendation.

Target implementation date: July 2021

2.2 The government with UKRI will review the current approach to intellectual property (IP) and consider the issues raised in the Committee's report and will write to the Committee by July 2021. This will include examining the rationale and evidence for the current policy to determine whether any changes are needed.

2.3 More broadly, the government recognises the value and importance of Intellectual Property in the wider economy and the public sector itself. In April 2021, the government published The Mackintosh Report which set out the government's plans to get better value from public sector knowledge assets along with new draft guidance for public sector organisations on how to identify, manage and derive maximum value from public sector knowledge assets (intellectual property, research and development (R&D), data and know-how). This built on the recommendations of a 2018 report[1], which found that public sector knowledge assets were undervalued and that limited support existed to better utilise these assets.

3: PAC conclusion: The Department has not yet made clear how it will make sure the UK will meet the target to spend 2.4% of its GDP on R&D by 2027.

3: PAC recommendation: The Department should develop, and then publish, by October 2021, its plan setting out the steps it will take to meet the 2.4% spending target by 2027.

3.1 The government disagrees with the Committee's recommendation.

1 https://www.gov.uk/government/publications/getting-smart-about-intellectual-property-and-intangible-assets

3.2 The government has committed to increasing UK investment in research and development (R&D) to 2.4% of gross domestic product (GDP). To achieve this target, the government has committed to raising public investment to £22 billion per year: a record increase in spending.

3.3 The R&D Roadmap[2], published in July 2020, sets out our ambitions for science and research and how our commitment to 2.4% will enable the UK to push harder at the frontiers of knowledge, unlocking brilliant new technological breakthroughs and enabling applied research to create transformative benefits for government, businesses and communities right across the UK.

3.4 As announced in the Build Back Better: our plan for growth, published alongside Budget 2021, the department is working across government to develop an innovation strategy, due to be published this summer, which will look closely at how we can leverage private sector investment to achieve the government's target of 2.4% economy-wide spend of GDP by 2027. The strategy will outline how we will look to achieve our ambitions in innovation and where we want to focus our efforts over the next decade. It will aim to set out the strategic objective and create the confidence for increased business investment in R&D and innovation.

3.5 The government recently published allocations following Spending Review 2020[3] and will set out further plans for public funding of R&D in Spending Review 2021 later this year.

4: PAC conclusion: Despite its focus on collaboration between companies of different sizes, the proportion of smaller companies benefiting from the Fund has declined.

4: PAC recommendation: UKRI should, by October 2021, set out how it will increase SMEs involvement in the next wave of support from the Fund.

4.1 The government agrees with the Committee's recommendation.

Target implementation date: October 2021

4.2 UKRI is committed to increasing engagement with small and medium sized enterprises (SMEs) within the research and innovation system. The NAO report notes the Fund has had success in attracting small business involvement (small and micro companies accounted for over 40% of project awards in Waves 1 and 2). Challenges have worked hard to build networks and reach out beyond the 'usual suspects'. For example, 73% of non-academic organisations funded by the Next Generation Services Challenge have not previously participated in a UKRI-funded project.

4.3 High levels of co-investment, with public and private sector funders working in partnership, have helped increase the overall investment, allowing projects to be funded that would otherwise have not happened. However, such a strong emphasis on co-investment targets may have led to a portfolio with a lower risk appetite than first envisaged, and a larger role for established industries which are more able to evidence match funding as part of the challenge commitments. It should though be recognised that large companies are also important for generating critical mass in resilient national supply chains.

4.4 This may help explain why the Fund had a slightly lower level of SME involvement in Wave 3, when the emphasis was on increased match funding. Although as the NAO report

[2] https://www.gov.uk/government/publications/uk-research-and-development-roadmap

[3] https://www.gov.uk/government/publications/beis-research-and-development-rd-budget-allocations-2021-to-2022/beis-research-and-development-rd-budget-allocations-2021-to-2022

made clear, it has not been possible to establish whether there is a causal link between the two.

4.5 Lessons from the approach to SME engagement across the current Challenges are informing the design of future Challenge-led delivery. This will consider the appropriate balance between risk and scale, including a more flexible approach to co-investment requirements for SMEs and emerging industries.

4.6 The department will write to the Committee by October 2021 outlining these learnings and how these will be embedded into future Challenge-based funding.

5: PAC conclusion: UKRI is not doing enough to make sure the Fund is attracting successful bids from across the country.

5: PAC recommendation: The Department and UKRI should, by October 2021, set out: the factors that are inhibiting more widespread participation in the Fund; and the steps they are taking to attract more interest in the Fund from across the UK.

5.1 The government agrees with the Committee's recommendation.

Target implementation date: October 2021

5.2 The department and UKRI recognise that all R&D funding has a key role to play in the levelling-up agenda. As outlined in The Queen's Speech 2021, levelling up opportunities across all parts of the UK is a key government agenda. This is supported by UKRI through its mission to build a research and innovation system in the UK, to which everyone can contribute and from which everyone can benefit.

5.3 The Fund has made significant investments across the whole UK. The NAO report cites investment in all four nations of the UK.

- Scotland £128.5 million[4]
- Northern Ireland £16.2 million
- Wales £87.5 million
- England £1640.9 million

5.4 Data to assess regional investment have been collected throughout the lifecycle of the Fund with continued improvements made to the monitoring and evaluation of regional impacts. As this data set matures, officials in the department will continue to work with UKRI to investigate the drivers behind regional disparity of the ISCF funding distribution to date and will seek to improve participation across all parts of the UK for future Challenge-led funding. .

5.5 The government is due to publish its UK R&D Places Strategy later in 2021, which will also address these issues.

5.6 The department and UKRI will write to the Committee by October 2021 setting out the factors relating to regional participation in the Fund and how learning will be embedded into future Challenge delivery.

6: PAC conclusion: The elongated time taken by the Department and UKRI to provide funding to successful bidder's risks putting off businesses from applying for the programme.

[4] Figures from UKRI performance report, commitments data at May 2021.

6: PAC recommendation: The Department, HM Treasury and UKRI should set out by October 2021 how they intend to speed up the time taken to approve challenges and projects.

6.1 The government agrees with the Committee's recommendation.

Target implementation date: October 2021

6.2 The government recognises the impact that an elongated approvals process can have on the participants to Challenges. A key consideration in the design of the delivery model for future challenges will be to consider a more streamlined approach to selecting and approving Challenges, with a simpler governance structure, while still conforming to Green Book requirements.

6.3 There are established improvement programmes already underway within UKRI to improve business operations and customer experience. These include initiatives seeking to improve the project application and approval processes as well as enhancing the experience of businesses who bid for and receive funding. The department will write to the Committee by October 2021 to set out the plans to improve the speed of future challenge funding approvals and update the Committee on progress in relation to project approval improvements.

7: PAC conclusion: Powers currently delegated by the Department and HM Treasury to UKRI do not strike the right balance between the governance necessary to support efficient decision making and unnecessary bureaucracy.

7: PAC recommendation: The Department and HM Treasury should, by July 2021, review the conditions they place on UKRI to manage the Fund with a view to supporting more efficient decision making. The Department and HM Treasury should write to the Committee to explain the changes they have introduced together with their intended impact.

7.1 The government disagrees with the Committee's recommendation.

7.2 The department and UKRI are working closely together to consider the future design of challenge funding and how it can continue to deliver government priorities, building on lessons learnt from the Fund to date.

7.3 The government accepts that the issues raised in the by the Committee should be addressed during this process, including the conditions placed on UKRI to manage this funding. The government considers that the appropriate timescale and mechanism for working through these issues is the forthcoming Spending Review 2021 and so proposes to address the Committee's concerns as part of the Spending Review.